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Parcels E and E-2 Shoreline Characterization Technical Memorandum

Hunters Point Shipyard
San Francisco, California

June 29, 2007

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Base Realignment and Closure
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PREPARED FOR:

DEPARTMENT OF THE NAVY

REVIEW AND APPROVAL

Project Manager: Leslie Lundgren Date: June 29, 2007

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ACRONYMS AND ABBREVIATIONS

bgs	Below ground surface
COPEC	Chemical of potential ecological concern
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
DQO	Data quality objective
ECD	Electron capture detector
EPA	U.S. Environmental Protection Agency
ER-M	Effects range–median
FS	Feasibility study
GC	Gas chromatography
HPS	Hunters Point Shipyard
HQ	Hazard quotient
ICP-AES	Inductively coupled plasma atomic emissions spectroscopy
IR	Installation Restoration
LFR	Levine-Fricke-Recon
mg/kg	Milligram per kilogram
NOAA	National Oceanic and Atmospheric Administration
PCB	Polychlorinated biphenyl
SAP	Sampling and analysis plan
SDGI	Standard data gaps investigation
SLERA	Screening-level ecological risk assessment
SPAWAR	Space and Naval Warfare Systems Command
Tetra Tech	Tetra Tech EM Inc.
TRV	Toxicity reference value
Water Board	San Francisco Bay Regional Water Quality Control Board
XRF	X-ray fluorescence

1.0 INTRODUCTION

This technical memorandum was prepared for the U.S. Department of the Navy, Base Realignment and Closure Program Management Office West, to document the results of the shoreline investigation conducted at Hunters Point Shipyard (HPS) as part of the Parcel E standard data gaps investigation (SDGI). Figure 1 shows the location of HPS. The shoreline portion of the SDGI was conducted from August 2002 to September 2002 and included collection of sediment samples from the shoreline areas of Parcels E and E-2 for chemical analysis. The shoreline investigation was conducted in accordance with the Parcel E SDGI sampling and analysis plan (SAP) (Tetra Tech EM Inc. [Tetra Tech] 2002b).

1.1 DOCUMENT PURPOSE AND ORGANIZATION

The purpose of the shoreline investigation was to evaluate if contamination in the Parcels E and E-2 shoreline migrated, or has the potential to migrate, to sediments in adjacent Parcel F (offshore) and to identify areas within the shoreline that pose an unacceptable ecological risk. The purpose of this technical memorandum is to document the data analysis and results of the shoreline investigation.

According to U.S. Environmental Protection Agency (EPA) guidance, site managers should try to identify all direct and indirect continuing sources of significant contamination to the offshore sediments as early as possible (EPA 2002a, 2002b). This assessment should be followed by an evaluation of which continuing sources can be controlled and by what mechanisms. Chemicals generally migrate to surface water and sediment by surface water runoff and transport of particulate and dissolved materials. Direct discharges are usually related to storm water outfalls or overland flow during storm events. Dissolved chemicals may also reach surface water and sediment by groundwater discharge. Chemical data evaluated for the shoreline investigation were from potentially contaminated shoreline sediments that may migrate by overland flow to Parcel F sediments. Results of the evaluation will help the Navy to prioritize shoreline actions by identifying the areas along the shoreline that pose the greatest potential for contaminating offshore sediments in Parcel F.

The Parcel F validation study identified copper, lead, and polychlorinated biphenyls (PCB) as chemicals of concern in offshore sediments; therefore, emphasis was placed on characterizing the distribution and extent of these chemicals along the Parcels E and E-2 shoreline (Battelle, Entrix, Inc., and Neptune and Company 2002). The following study questions were addressed to achieve the purpose of the shoreline investigation. These study questions were derived from the data quality objectives (DQO) identified in the SAP (Tetra Tech 2002b) and were refined for purposes of this technical memorandum during the initial data evaluation per EPA guidance (EPA 2000).

1. Are concentrations of copper, lead, and PCBs in shoreline sediment present at sufficient concentrations to be considered a potential source of contamination to offshore sediments?

2. Do contaminated sediments in Parcel F show a distinct chemistry that can be linked to source areas along the Parcel E shoreline? That is, can contaminants in offshore sediments be associated with potential source areas using the chemical characteristics and associations of metals and Aroclors?

3. Does contamination at suspected source areas along the shoreline pose an unacceptable risk to ecological receptors exposed to sediment in the shoreline area?

The first step in addressing the study objectives was to evaluate if distributions and concentrations of contaminants in the Parcels E and E-2 shoreline are sufficient to be considered a potential source of contamination to Parcel F. For the purposes of this technical memorandum, chemical concentrations exceeding San Francisco Bay ambient values (San Francisco Bay Regional Water Quality Control Board [Water Board] 1998) were used to define shoreline areas as a potential source of contamination to Parcel F.

Shoreline and offshore sediment data were evaluated to look for specific chemical characteristics that would indicate contaminants in both areas were derived from the same source. Data for metals, PCB congeners, and total Aroclors were evaluated for distinctive chemical signatures that could be used to establish a link between onshore sources and offshore sinks. In addition, chemical distribution patterns and contaminant transport mechanisms were considered during this part of the evaluation.

Additionally, a screening-level ecological risk assessment (SLERA) was conducted as part of the investigation of the Parcels E and E-2 shoreline. The purpose of the SLERA was to determine if chemicals detected along the shoreline pose an ecological risk to those receptors exposed to the narrow intertidal zone of Parcels E and E-2. The SLERA of the shoreline habitat does not attempt to characterize the entire spectrum of risk to ecological receptors in the vicinity, but only to those receptors exposed to the narrow intertidal zone of Parcels E and E-2. It focused on benthic invertebrates and on birds and mammals in the shoreline area of Parcels E and E-2.

This technical memorandum is presented in seven sections, as summarized below.

- Section 1.0, Introduction—summarizes the document purpose and organization and the background of the Parcels E and E-2 shoreline.

- Section 2.0, Previous Investigations at the Parcels E and E-2 Shoreline—discusses investigations and evaluations at the Parcels E and E-2 shoreline.

- Section 3.0, Study Design—presents the design of the study and summarizes the approach used to address the study questions.

- Section 4.0, Sample Collection and Analysis—summarizes the methodology used to collect samples and evaluate data collected during the SDGI at the Parcels E and E-2 shoreline.

- Section 5.0, Data Evaluation—summarizes the results of the data evaluation for the Parcels E and E-2 shoreline.

- Section 6.0, Conclusions and Recommendations—presents conclusions based on results of the data evaluation and makes recommendations for the feasibility studies (FS) at Parcels E, E-2, and F.

- Section 7.0, References—provides the references used to prepare this technical memorandum.

Figures and tables are presented after Section 7.0. This document also contains the seven appendices and one attachment listed below.

- Appendix A, Analytical Results for the Parcels E and E-2 Shoreline (*provided on compact disc*).

- Appendix B, Boring Logs for the Parcels E and E-2 Shoreline (*provided on compact disc*).

- Appendix C, Aerial Photographs of the Filling History of the Parcels E and E-2 Shoreline (*provided on compact disc*).

- Appendix D, Analysis of Analytical Methods and Quality Control

- Appendix E, Quality Control Summary Report—presents the assessment of data quality collected for the Parcels E and E-2 shoreline during the SDGI

- Appendix F, Evaluation of Data for PCBs and Metals in Sediment Samples Collected from the Parcels E and E-2 Shoreline

- Appendix G, Screening-Level Ecological Risk Assessment for the Parcels E and E-2 Shoreline

- Attachment 1, Analytical Data for Parcel F—contains analytical data for sediment samples collected by Battelle from Parcel F. This attachment was prepared by Battelle.

1.2 HUNTERS POINT BACKGROUND

HPS is located in southeast San Francisco on a peninsula that extends east into San Francisco Bay (see Figure 1). HPS was divided into seven parcels, Parcels A through F and E-2, to aid in

environmental investigation and cleanup activities. Parcel A was transferred to the San Francisco Redevelopment Agency in December 2004 and is no longer Navy property.

Parcel E was established in 1992. In September 2004, Parcel E was divided into two parcels (Parcels E and E-2) to facilitate closure of the landfill and adjacent areas. As a result, Parcel E now occupies approximately 138 acres of shoreline and lowland coast along the southwestern portion of HPS. Parcel E consists of numerous installation restoration (IR) sites, of which only IR-02 and IR-03 border the shoreline (see Figure 2).

Parcel E-2 consists of approximately 48 acres where the industrial landfill and adjacent areas are located, including IR-01/21 and the Panhandle Area, a small portion of IR-02 Northwest, and the area east of IR-01/21 that does not have an IR site designation (see Figure 2).

1.3 DESCRIPTION OF THE PARCELS E AND E-2 SHORELINE

The Parcels E and E-2 shoreline area extends the full length (8,140 feet) of the southern boundary of Parcels E and E-2, from the western edge at Yosemite Creek to the eastern edge at Berth 38, just past the metal debris reef. Figure 2 shows the Parcels E and E-2 shoreline sampling locations and offshore sampling locations. In 2003, debris was identified along the Parcels E and E-2 shoreline and removed. The debris consisted of concrete pieces of various sizes, metal rebar, metal wiring, other metal parts, brick, and wood. Riprap that consists of large pieces of concrete, rebar, and wood remains along a large portion of the shoreline to prevent erosion.

The shoreline area is the intertidal area between the low- and high-tide watermarks. Most of the shoreline is bounded by the onshore area, which is where the upper riprap begins or where the ridge was formed where the shore abruptly drops to the water. However, the Panhandle Area in Parcel E-2 is bounded by the high-tide line where no ridge or riprap is present.

Suspected source areas of contamination were identified in the SAP for the SDGI (Tetra Tech 2002b) and in the Parcel F Validation Study (Battelle, Entrix, Inc., and Neptune and Company 2002). The source areas included four major areas: (1) the area bayward of the landfill sheet-pile wall (2) the black sand area (3) the kiln brick area, and (4) the metal debris reef area. The suspected source areas are shown on Figures 2 and 3.

- **Area Bayward of the Landfill Sheet-Pile Wall**. In 1994, a sheet-pile wall was installed on the bayward side of the landfill, which is located in IR-01/21. The landfill was used from 1958 to 1974 for disposal of materials, including industrial and construction debris, domestic refuse, sandblast waste, paint sludge, solvents, waste oils, transformers, and electrical and other materials. No records exist that document disposal practices.

- **Black Sand (Sandblast Waste) Area.** Sandblast waste is present along the IR-02 Northwest shoreline (hereafter referred to as black sand). A gully was formed in the same vicinity, and it was found to carry overland storm water flow to the offshore during rain events. In April 2002, the gully was filled to stop further drainage and minimize overland flow.

- **Kiln Brick Area.** Kiln bricks were found in one small area of IR-02 Northwest, close to the black sand area described above. The former gully was also in close proximity to the kiln bricks.

- **Metal Debris Reef**. The metal debris reef is located on the shoreline in the southeastern tip of Parcel E in IR-02 Southeast. From 1945 to 1948, the Navy operated an open 1-acre burn disposal area at IR-02 Southeast near the metal debris reef. While the relationship between the burn area and the metal reef is not documented, the metal debris reef contains metal objects that have been melted at high temperatures.

Additionally, three offshore areas (Areas VIII, IX, and X) were identified in Parcel F (see Figure 2). As shown on the figure, Areas VIII and X are adjacent to the four suspected source areas along the Parcels E and E-2 shoreline. Area IX was formerly chosen as an offshore study area due to its proximity to the former Triple A Site 18, which contained empty drums, paint cans, and waste asphalt. The sections below summarize the ecology, geology, and hydrogeology of the Parcels E and E-2 shoreline.

1.3.1 Ecology of the Parcels E and E-2 Shoreline

About 3 acres of intertidal wetlands are located along the Parcels E and E-2 shoreline (Tetra Tech 2002c). Vegetation observed in the tidal wetlands includes halophytic plant species typically associated with tidal salt or nontidal salt marshes. The dominant plant species in all salt marshes are the common pickleweed (*Salicornia virginica*) and saltgrass (*Distichlis spicata*). Except for the ice plant (*Carpobrotis edulis*), little vegetation was observed along the Parcels E and E-2 shoreline (Tetra Tech 2002c).

During sampling along the shoreline as part of the SDGI, invertebrates, birds, and mammals were observed to live or forage along the Parcels E and E-2 shoreline. Invertebrates included crustacean crabs and isopods that hide under rocks and feed on other small invertebrates. Mussels (*Bivalvia*), mainly *Mytilus edulis*, and barnacles are visible on the rocks at low tide.

Intertidal and saline emergent wetlands may be used by shorebirds and wading birds such as the willet (*Catoptrophorus semipalmatus*), killdeer (*Charadrius vociferous*), great blue heron (*Ardea herodias*), and double-crested cormorant (*Phalacrocorax auritus*) (Harding Lawson Associates 1991). In addition, other bird species were reported to be or are present along the shoreline, including the black-bellied plover (*Pluvialis squatarola*), black turnstone (*Arenaria melanocephala*), sanderling (*Calidris alba*), long-billed curlew (*Numenius americanus*), dunlin (*Calidris alpina*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), and

peregrine falcon (*Falco peregrinus*) (PRC Environmental Management, Inc. 1996; Tetra Tech and Levine-Frick-Recon [LFR] 2000).

Mammals observed along the shoreline include California ground squirrels (*Spermophilus beecheyi*), which use the riprap areas for burrows. In October 2001, an almost complete skeleton of a large male raccoon (*Procyon lotor*) was found along the shoreline of the Parcel E-2 Panhandle Area. In addition, the house mouse (*Mus musculus*) is expected to use the shoreline, especially in the Panhandle Area (Tetra Tech and LFR 2000).

1.3.2 Geology of the Parcels E and E-2 Shoreline

Based on cores collected along the Parcels E and E-2 shoreline, the shallow geology consists of artificial fill, similar to the adjacent onshore areas. Aerial photographs indicated that filling of San Francisco Bay began in the late 1930s and that artificial fill was placed on native bay sediments (see Appendix C). The artificial fill used to fill in San Francisco Bay may contain serpentinite bedrock, excavated Bay Mud, sands, gravels, construction debris, industrial debris, and sandblast waste (Tetra Tech, Uribe & Associates, and LFR 1997). Figure 4 illustrates the filling history over time from 1935 to 1965. The fill activities left an inlet that extended from the south basin to the north corner of IR-01/21 (see Figure 5). The inlet was later filled with shipyard wastes, including construction and industrial debris and waste, domestic refuse, sandblast waste, paint sludge, solvents and waste oils (Tetra Tech, Uribe & Associates, and LFR 1997). This inlet is referred to as the former slough.

1.3.3 Hydrogeology of the Parcels E and E-2 Shoreline

Groundwater is present in the A-aquifer, B-aquifer, and bedrock water-bearing zone at Parcels E and E-2 (Tetra Tech, Uribe & Associates, and LFR 1997). The A-aquifer consists primarily of saturated artificial fill. Groundwater is present in the A-aquifer from 1 to 15 feet below ground surface (bgs), and water levels are generally higher during the wet season (winter and spring). The A-aquifer does not appear to surface anywhere along the Parcels E and E-2 shoreline. Detailed information about groundwater in Parcels E and E-2 is presented in the "Final Parcel E Groundwater Summary Report for the Phase III Groundwater Data Gaps Investigation" (Tetra Tech 2003).

2.0 PREVIOUS INVESTIGATIONS AT THE PARCELS E AND E-2 SHORELINE

This section discusses the previous investigations conducted in Parcels E and E-2 that were used to guide the Parcel E and E-2 shoreline investigation and this technical memorandum.

2.1 PARCEL E REMEDIAL INVESTIGATION

The remedial investigation report identified onshore and shoreline areas of contamination (Tetra Tech, Uribe & Associates, and LFR 1997). This information was used to identify the suspected sources areas (area bayward of the landfill sheet-pile wall, black sand area, kiln brick area, and metal debris reef) that were sampled during the SDGI, as described in Section 1.3.

2.2 PARCEL E ECOLOGICAL RISK ASSESSMENT

In 1997, the Navy prepared a baseline ecological risk assessment for terrestrial habitats that expanded a previously completed Phase 1 ecological risk assessment (Tetra Tech, Uribe & Associates, and LFR 1997). The baseline ecological risk assessment evaluated risk to birds and mammals (Tetra Tech, Uribe & Associates, and LFR 1997). Information on the potential ecological receptors and bioaccumulation factors were used to conduct the shoreline SLERA as part of this technical memorandum (see Appendix G).

2.3 PARCEL F VALIDATION STUDY

The Parcel F validation study was conducted to more accurately define the offshore areas that require evaluation in an FS. The validation study identified copper, lead, and PCBs as the primary ecological risk drivers in the South Basin (Battelle, Entrix, Inc., and Neptune and Company 2002). The validation study hypothesized that metals and PCBs along the shoreline were a source of contamination to Parcel F sediments. Due to these results, the Navy decided to evaluate the shoreline as a potential source of copper, lead, and PCBs contamination to Parcel F.

3.0 STUDY DESIGN

The study design was developed to address the three study questions described in Section 1.1. Chemistry data collected during the SDGI of the Parcels E and E-2 shoreline and the Parcel F validation study were used in the study design. The sections below address each study question.

3.1 STUDY DESIGN TO ADDRESS STUDY QUESTION 1

Study Question 1 is as follows: Are concentrations of copper, lead, and PCBs in shoreline sediments present at sufficient concentrations to be considered a potential source of contamination to offshore sediments?

Analytical data for copper, lead, and PCBs in shoreline samples provided information to address Study Question 1. Section 4.0 presents the detailed sampling design and chemical analysis. The primary purpose of the systematic sampling was to evaluate if concentrations of copper, lead, and PCBs present in shoreline sediments could be a potential source of contamination to the offshore sediments. The systematic approach provided dense coverage along the length of the entire Parcels E and E-2 shoreline. Additionally, results of biased samples were used to better characterize source areas for copper, lead and PCBs. Although the field XRF test kits included analysis for zinc, only the analytical results for copper and lead, along with immunoassay data for PCBs as total Aroclors, were used to address this Study Question 1. Likewise, data collected from the biased sampling included laboratory data for a broad set of analytes, but only data for copper, lead, and PCBs (as total Aroclors) were used to address Study Question 1.

In this technical memorandum, data for copper and lead were compared to San Francisco Bay ambient sediment concentrations (68.1 mg/kg for copper and 43.2 mg/kg for lead) to identify potential source areas (Water Board 1998). Data for PCBs were compared with the nearshore ambient sediment concentration for PCBs (0.200 mg/kg) (Water Board 2003). This evaluation considered any sampling location where copper, lead, or PCBs were detected at concentrations above the ambient sediment concentrations as a potential source of contamination to the offshore. This step refined the original DQOs, which relied on ER-M values to identify potential sources of contamination along the Parcels E and E-2 shoreline (EPA 2000).

Data were grouped and evaluated by areas along the shoreline. Table 1 lists each shoreline area and their related sampling locations. The seven areas of the shoreline are as follows:

- IR-01/21 Panhandle Area
- IR-01/21 Metal Slag Area (within Panhandle Area)
- IR-01/21 Landfill Area
- IR-02 Northwest Area
- IR-02 Central Area
- IR-02 Southeast Area
- IR-03 Former Oil Reclamation Ponds Area

3.2 STUDY DESIGN TO ADDRESS STUDY QUESTION 2

Study Question 2 is as follows: Do contaminated sediments in Parcel F show a distinct chemistry that can be linked to source areas within the Parcel E shoreline? That is, can contaminants in offshore sediments be associated with potential source areas using the chemical characteristics and association of metals and Aroclors?

Data collected from both systematic and biased samples were used to address Study Question 2. In addition, data from sediment collected offshore during the Parcel F validation study were used in conjunction with the shoreline data to evaluate if a relationship exists between shoreline and offshore contamination (Battelle, Entrix, Inc., and Neptune and Company 2002). The paragraphs below describe the approach for analyzing metals and PCBs used to address Study Question 2.

Metals Analysis: Data for metals collected for field and laboratory analysis were compiled for sediment samples collected from the Parcel E and E-2 shoreline. Laboratory data for sediment samples collected for the Parcel F validation study (Battelle, Entrix, Inc., and Neptune and Company 2002) were also included in the overall data set for metals.

The areas offshore of Parcels E and E-2 are designated as Area X (offshore of the Landfill and Panhandle Area in Parcel E-2 and a portion of IR-02 Northwest), Area IX (offshore of IR-02 Northwest, IR-02 Central, and IR-03), and Area VIII (offshore of the metal debris reef area in IR-02 Southeast) (see Figure 2).

Inter-element relationships of metals in shoreline samples from Parcels E and E-2 and sediment samples from Parcel F were evaluated to better understand the contributions of shoreline contamination to offshore sediments. Inter-element relationships refer to the tendency for certain metals to co-occur or to associate with one another (resulting in a positive correlation among metals concentrations) because of similar geochemical behavior. An association can also occur when associated metals are present in the same contaminant source. To determine if such relationships are present, scatter plots and regression analysis were used to evaluate possible associations between metals and several other parameters (texture, total organic carbon, and total Aroclors). Relationships among selected metals were also evaluated using trilinear diagrams, which depict data as the relative proportions of three variables (see Appendix F).

PCB Congener Analysis: The selected surface samples from the Landfill Area were analyzed by the commercial laboratory for PCB congeners. Twenty common PCB congeners were selected for the evaluation. The laboratory data for PCB congeners were used to create congener "fingerprints" of PCBs in sediment samples collected from the Parcels E and E-2 shoreline. These congener fingerprints were then compared with congener fingerprints for offshore (Parcel F) samples collected during the Parcel F validation study (Battelle, Entrix, Inc., and Neptune and Company 2002). The patterns were visually compared to evaluate relationships between shoreline and offshore data. Appendix F provides a detailed description of the approach to evaluating PCBs.

Data for the congeners can be analyzed in statistically rigorous ways such as principal component analysis. However, the evaluation presented in this technical memorandum is based on pattern recognition, which can provide a cursory level of PCB characterization. Visual analysis of congener patterns is especially useful in cases such as this where the patterns are relatively simple and straightforward.

A more detailed evaluation was subsequently conducted by Battelle based on the PCB concentration and composition data. The primarily objective of the data analysis was to determine if PCB data had compositional differences that may be attributable to different sources of the PCB at HPS (Battelle 2005). The similarities and differences in the PCB congener composition were assessed by PCB congener concentrations and composition in the field samples and by using hierarchical cluster analysis and principal component analysis, which are two types of exploratory data analysis techniques.

Chemical Distribution and Transport: Chemical distribution patterns (primarily copper, lead, and PCBs) and contaminant transport mechanisms were used to evaluate the possible transport of contaminants to offshore sediments in Parcel F. Chemical concentration gradients between the shoreline and offshore areas were compared using box and whisker plots to delineate possible contaminant sources in shoreline areas. This evaluation was supplemented by a qualitative

evaluation of the fate and transport of these chemicals by overland transport and groundwater discharge.

3.3 STUDY DESIGN TO ADDRESS STUDY QUESTION 3

Study Question 3 is as follows: Does contamination at suspected source areas along the shoreline pose an unacceptable risk to ecological receptors exposed to sediment at the shoreline area?

To address the third study question, the Navy conducted a SLERA. A toxicity-based approach was used to identify site-related chemicals that may pose risks to sensitive ecological receptors, including benthic invertebrates, birds, and mammals. Both inorganic and organic chemicals were screened against toxicity benchmarks for the selected receptor groups, as recommended in EPA (1997). Effects on birds and mammals from ingested chemicals were evaluated using food-chain models. As part of the risk characterization, COPECs were subsequently compared to Hunters Point ambient levels and ambient sediment concentrations of chemicals in San Francisco Bay (Water Board 1998).

The site-specific data set used in the SLERA includes (1) laboratory chemical analysis of surface (0 to 0.5 foot bgs) and subsurface (2.0 to 2.5 feet bgs) sediment samples and (2) ecological surveys (see Appendix A). Sediment samples were analyzed for metals, volatile organic compounds, semivolatile organic compounds, pesticides, PCBs, total petroleum hydrocarbons, dioxins and furans, and organotins. In addition, the evaluation of risk to birds and mammals used the data listed below.

- Wildlife surveys in Parcel E
- Bioaccumulation factors derived from tissue collected in Parcels E and F
- San Francisco Bay ambient sediment data

The SLERA characterized risk to only the receptors exposed to the area between the high-tide line and the low-tide line (referred to as the "intertidal zone"). Specifically, the SLERA focused on benthic invertebrates, birds, and mammals that live and forage along the shoreline area of Parcels E and E-2. Appendix G presents the complete SLERA.

4.0 SAMPLE COLLECTION AND ANALYSIS

This section summarizes the sample collection and field screening and laboratory analytical methods used during the SDGI of the Parcels E and E-2 shoreline. Detailed descriptions of field procedures, laboratory analytical methods, quality control procedures and data analysis are included in the Parcel E SDGI SAP (Tetra Tech 2002b).

4.1 SAMPLE COLLECTION

Shoreline samples were collected using hydraulic direct-push, manual direct-push, and hand auger sampling methods. Two types of sampling methods were used to characterize the shoreline: systematic and biased. The systematic sampling approach provided uniform coverage over an extensive sampling area, and biased sampling was used to target known or suspected contaminated areas and objects (such as bricks, debris, riprap, and other waste materials).

4.1.1 Systematic Samples

Systematic samples were collected every 100 linear feet from 0 to 0.5 and 2 to 2.5 feet bgs along the entire 8,140 linear feet of shoreline. These samples were initially screened for copper, lead, and zinc using x-ray fluorescence (XRF) techniques and for PCBs using immunoassay techniques (Tetra Tech 2002b).

If XRF results for two adjacent systematic shoreline sample exceeded the screening criteria for copper, lead, or zinc or PCBs, then the sampling location was further evaluated as a potential source area through step-out sampling . Step-out samples were collected only if (1) results exceeded one or more screening criteria (2) the sampling location was free of debris and above the tide line. The step-out samples were analyzed using XRF and immunoassay techniques in the same manner as the original samples.

The systematic sample was then split into as many as three sample portions, as follows:

- One for shipment to the Space and Naval Warfare Systems Command (SPAWAR) laboratory for confirmatory PCB analysis using the immunoassay method
- One for shipment to the analytical laboratory (Curtis & Tompkins, Ltd.)
- One for shipment to a laboratory for potential PCB congener analysis (only surface samples from the landfill and former oil reclamation ponds areas)

The sample portion shipped to the analytical laboratory was again split into two portions at the laboratory. One sample portion was sieved through a 60-mesh screen and shipped to the SPAWAR laboratory for XRF analysis, and the other was archived. Of the archived samples, 10 percent (16 samples) were analyzed for the full suite of analytes, which includes total metals, semivolatile organic compounds, pesticides, and PCBs.

4.1.2 Biased Samples

Biased samples were collected from four potential source areas along the shoreline: area bayward of the landfill sheet-pile wall, black sand area, the kiln brick area, and metal debris reef area. For biased sampling locations, samples were sent to the analytical laboratory and analyzed for total metals (including hexavalent chromium), semivolatile organic compounds, pesticides,

and PCBs, as appropriate. Kiln brick samples were analyzed for dioxins and furans, and black sand samples were analyzed for tributyltin. In addition, sediment samples collected from locations adjacent to kiln bricks were analyzed for dioxins and furans.

4.2 ANALYTICAL METHODS

This section summarizes field and laboratory analytical methods used for both systematic and biased samples. Details of the analytical methods and lists of analytes are included in Appendix E, Quality Control Summary Report.

The SPAWAR laboratory analyzed all systematic shoreline sediment samples for copper, lead, zinc, and PCBs using portable instrumentation and field-type analytical techniques. Copper, lead, and zinc were analyzed using XRF techniques in accordance with Battelle's "Guide for Using Rapid Sediment Characterization Methods in Ecological Risk Assessments" (Battelle 2001). This technique measures the characteristic fluorescence emitted when metal atoms absorb energy from X-ray radiation in a nondestructive manner. PCB concentrations were measured using immunoassay test kits in accordance with EPA Method 4020 (EPA 1996). Immunoassay is a quantitative technique that measures concentrations of total PCBs. Sediment samples submitted for immunoassay analysis were placed in methanol, an organic solvent used to remove target analytes from the sample matrix and as a medium to support antibody and colorimetric reactions. Immunoassay test kits for analysis of PCBs are designed for a specific Aroclor; therefore, Aroclor-1254 was used as the calibration standard when the analysis was set up.

For QC purposes, 16 (10 percent) of these samples were analyzed by the contract laboratory (Curtis & Tompkins, Ltd.) for metals and PCBs to confirm the XRF and immunoassay screening results. These samples are referred to as "confirmation" samples. Confirmation samples also were analyzed for semivolatile organic compounds and pesticides to provide additional characterization data.

Curtis & Tompkins, Ltd. analyzed the metals using inductively coupled plasma atomic emissions spectroscopy (ICP-AES) to confirm the XRF results. The sample split portions were prepared from dried, ground, sieved, and homogenized sediment to ensure the best possible precision between data sets. Sediment samples were digested for ICP-AES analysis using a mixture of nitric and hydrochloric acids to dissolve metal compounds into solution. The solution was analyzed using ICP-AES techniques in accordance with the SDGI SAP and analytical method requirements (Tetra Tech 2002b).

Curtis & Tompkins, Ltd. analyzed total PCBs using a gas chromatography (GC) with an electron capture detector (ECD) technique to confirm results obtained using the immunoassay test kit. The split portions were prepared from homogenized sediment to ensure the best possible precision between data sets. Unlike the procedure for analysis of metals, these samples were not dried, ground, and sieved because of the potential for organic analytes to be lost during these processes. Instead, a mixture of hexane and acetone was added to the samples to extract PCBs into solution. The resulting extract was concentrated to provide a higher degree of sensitivity for

the analysis. Sediment sample extracts were analyzed using GC/ECD in accordance with the SAP and analytical method requirements (Tetra Tech 2002b).

All biased sediment samples were analyzed by a laboratory (Curtis & Tompkins, Ltd.) for metals (including hexavalent chromium), semivolatile organic compounds, organochlorine pesticides, and PCBs (as Aroclors). In addition, selected samples were analyzed for volatile organic compounds, total petroleum hydrocarbons as purgeables and extractables, dioxins and furans, and organotins. Standard EPA methods were used for the sample analyses, which were detailed in the SDGI SAP (Tetra Tech 2002b).

In addition, twelve surface samples from the Landfill Area were selected for PCB congener analysis. PCB congener analysis was conducted in accordance with the National Oceanic and Atmospheric Administration's (1993) "Sampling and Analytical Methods of the National Status and Trends Program, National Benthic Surveillance and Mussel Watch Projects, 1984-1992." Results from PCB congener analyses were used to create a PCB "fingerprint." PCB fingerprinting, or pattern recognition, is a technique used to understand complex congener-specific analyses. PCB fingerprints were compared with known PCB sources with similar fingerprints.

4.3 DATA VALIDATION

Data validation was conducted to identify data limitations based on specific quality control criteria. Quality control data obtained for each analytical test method were reviewed against criteria established in the Parcel E SDGI SAP (Tetra Tech 2002b). Appendix E describes the data validation process for each laboratory analytical method. Unqualified data and data qualified as estimated ("UJ" or "J") were deemed suitable for their intended purpose. Data qualified as rejected ("R") were not considered suitable for their intended purpose and were not used for the assessment. Based on the data validation results presented in Appendix E, only 0.3 percent of the data was rejected, and the overall data set was considered of good quality.

All data not qualified as rejected are usable in meeting DQOs based on the quality control requirements. The SLERA was conducted using only validated laboratory data; no XRF or immunoassay PCB data were used.

4.4 COMPARISON OF FIELD-SCREENING AND LABORATORY DATA

Data obtained from XRF and immunoassay PCB analyses were compared with confirmation sampling data (10 percent) obtained from laboratory analyses. Data for copper, lead, and zinc from XRF analysis were directly compared with data obtained from split samples analyzed using ICP-AES. PCB data from immunoassay analysis were directly compared with PCB data obtained from split samples analyzed using GC (EPA Method 8082).

The ICP-AES and GC data sets for metals and PCBs were found to be of sufficient quality to meet the DQOs (see Appendix E). However, analytical data collected by field and laboratory methods are not always directly comparable. For example, XRF analysis measures a "whole rock" composition, whereas standard EPA analytical methods (SW-846, EPA 1996) employ a digestion of the sample, followed by analysis of the liquid. Digestion is not complete; therefore, metals contained in recalcitrant mineral phases are not reported. As a result, XRF analysis may find a higher concentration compared with standard ICP-AES analysis on the digested sample. In addition, high concentrations of metals such as iron can cause an additive interference with the XRF analysis for certain metals, leading to high bias in the analytical results for the screening-level data. Therefore, the XRF data must be calibrated to make a valid assessment and comparison with laboratory data.

Linear regression analysis was used to evaluate the subset of 16 samples (or 10 percent) analyzed by both rapid screening (XRF or immunoassay) and laboratory methods. Equations that describe the best linear fit between the rapid screening (independent variable) and laboratory (dependent variable) measurements were then used to calibrate results at locations where only rapid screening analysis was conducted. That is, calibration was used to convert rapid screening measurements to laboratory-equivalent concentrations.

Calibration of the rapid screening data employed a stepwise process that was used to identify and remove statistical "outliers" (see Appendix F). Elimination of outliers is a commonly employed technique for improving the linear fit between two groups of variables in regression analysis. The calibrated XRF data and immunoassay data were then used in the analysis.

5.0 DATA EVALUATION

This section presents the results of the Parcels E and E-2 shoreline investigation and addresses the study questions described in Section 3.0. Table 2 presents the laboratory data used in the SLERA and compares the metals and total Aroclor results with different screening criteria. Table 3 summarizes the field and calibrated data and if calibrated data exceeded selected screening criteria. The complete analytical results are provided in Appendix A on compact disc only.

5.1 EVALUATION OF STUDY QUESTION 1

The first study question focuses on the shoreline and if copper, lead, and PCBs are present at concentrations considered to be a potential source of contamination to Parcel F. Data for metals collected from shoreline areas of Parcels E and E-2 were screened against sediment ambient concentrations for San Francisco Bay (Water Board 1998, 2003) to define the areas of elevated concentrations that may contribute to offshore contamination. The laboratory and calibrated XRF data for copper and lead and immunoassay data for PCBs were used to address this study question. Table 3 presents the calibrated field data and identifies field sampling data that exceeded selected screening criteria. These data were used in a graphical analysis in the form of box and whisker plots (see Figure 6).

The concentrations of metals and total Aroclors were grouped by areas, as described in Section 3.0, to provide a graphical comparison of sediment contaminant concentrations in relation to the shoreline. Metals concentrations at most locations along the shoreline exceeded ambient concentrations for San Francisco Bay sediments. As a result, the locations are considered to be a potential source of contamination to Parcel F. Specifically, concentrations of copper exceeded the ambient sediment concentration in all areas except the Panhandle Area (excluding the metal slag area) and IR-02 Central. Concentrations of lead exceeded the ambient concentration in all areas except IR-02 Central (see Figure 6).

Concentrations of PCBs were screened against the nearshore ambient concentration for PCBs (Water Board 2003). Figure 6 shows that concentrations of PCBs exceeded the ambient concentration in most locations of the Parcel E and E-2 shoreline. The highest concentrations of PCBs were found in the Landfill Area, and the lowest concentrations were found in the metal slag area of the Panhandle Area. Table 3 lists the PCBs (as total Aroclor) results.

Figure 6 clearly shows distinct areas of the shoreline where concentrations of copper, lead and PCBs in sediment are elevated with respect to ambient concentrations. Figure 6 also shows that two areas, the Panhandle Area (excluding the metal slag area) and IR-02 Central, do not exhibit elevated concentrations of metals compared with ambient concentrations. The highest concentrations of copper and PCBs were found in the landfill area, and the highest concentrations of lead were detected in samples collected from the Landfill Area and the metal slag area. These results suggest that these shoreline areas have the greatest potential for contaminating Parcel F sediments.

5.2 EVALUATION OF STUDY QUESTION 2

The second study question addressed whether copper, lead, or PCB contamination along the shoreline was migrating to the offshore Parcel F sediments and if a distinct chemical signature or link exists between the two areas (shoreline source and offshore sink).

5.2.1 Metals and Total Aroclors

Data for metals and total Aroclors in samples collected from the shoreline of Parcels E and E-2 were evaluated to identify potential shoreline source areas that may be related to elevated concentrations of metals in sediment samples collected from offshore areas (Parcel F). Inter-element associations were evaluated for a relationship or link between onshore and offshore contamination. If such a relationship was found, it would be evidence that the metals in offshore sediment originated from metals in shoreline sediment. Tables 2 and 3 present the analytical results for metals and total Aroclors in sediment samples collected along the Parcels E and E-2 shoreline. Appendix F includes a detailed analysis of the evaluation of data for metals and PCBs. The full data set for metals and Aroclor concentrations in offshore sediments is included in Attachment 1.

Regression analysis indicated that copper, lead, and total Aroclors showed a strong positive correlation in samples collected in the shoreline areas from IR-02 Northwest and offshore Areas IX and X. In other words, copper, lead, and PCBs co-occur in IR-02 Northwest and in offshore Areas IX and X. This co-occurrence could indicate that copper, lead, and PCBs in the offshore areas originated from the shoreline areas in IR-02 Northwest, although this is not considered likely. Another explanation is that the metals and PCBs co-occur in the offshore Areas IX and X because of the high concentrations of total organic carbon in sediments from these two areas. Area VIII has much lower concentrations of total organic carbon than Areas IX and X. (The relationship between total organic carbon, grain size, and contaminant load is discussed in Appendix F.) The positive correlation of metals and PCBs does not exist for samples collected in other areas of the Parcels E and E-2 shoreline or in offshore Area VIII.

Trilinear diagrams were used to evaluate possible mixing and the resulting trends in composition (see Figures F-32 and F-33 in Appendix F). Trilinear plots allow analytical results for three components to be expressed as a single point on the plot; data plotted on a trilinear diagram represent the relative abundances of the three constituents or measurements. Several different combinations or groupings of data were evaluated to find those that were most distinctive and that expressed potential contaminant sources and sinks. Three sets of groupings were chosen for the trilinear plots: (1) copper, lead, and zinc; (2) copper, lead, and mercury; and (3) copper, lead, and total Aroclors. The plots were also categorized in two different ways: (1) by area within Parcels E and E-2, and (2) by parcel for Parcels E and F.

Although interesting, none of these grouping of data plotted on the trilinear diagrams was particularly useful for distinguishing among the groups of data. Therefore, only two examples of the trilinear diagrams are included in Appendix F (see Figures F-32 and F-33). As seen on both Figures F-32 and F-33, the concentrations of major heavy metals such as copper, lead, and zinc in the Landfill Area, metal slag area of the Panhandle and part of IR -03 are sufficiently high in ambient sediments and soils that the addition of a different source composition is largely indistinguishable by the ambient proportions. Trace metals, such as rare earth elements, or stable isotopes, such as lead-206, -207, and -208, typically provide a more diagnostic “fingerprint” of contaminant sources. However, the practical knowledge to be gained from isotopic analysis is probably not sufficient to justify the cost.

Examination of the relative concentrations between shoreline and associated offshore areas were evaluated using box and whisker plots. These plots (see Figures 7 through 10) illustrate that concentrations of copper and lead in offshore sediments are significantly lower than in shoreline areas of Parcels E and E-2. Bubble plots also illustrate the trend in concentrations of copper and lead from the shoreline areas to the offshore. This trend is of particular interest because the concentrations are lower despite the occurrence of finer-grained materials offshore. Concentrations of metals are generally higher in finer-grained materials because of the larger surface area per unit volume compared with coarser-grained materials. The number of sorption sites is higher because of the larger surface area; therefore, a greater mass of sorbed metals, PCBs, and other contaminants may be present in finer-grained materials when compared with an equal volume of coarser-grained materials.

Despite the elevated concentrations of copper along the Parcel E-2 shoreline, most of the offshore sediment samples contained concentrations of copper near the ambient concentration of 68.1 mg/kg, with concentrations in only three samples slightly exceeding the ER-M value (see Figures 7 and 8). All sediment samples from Areas VIII and IX contained concentrations of copper less than the ER-M value. Therefore, although copper in Parcel E sediments should be considered a potential source of contamination to Parcel F (based on criteria set forth in evaluating Study Question 1), there does not appear to be a significant transport of copper in sediment moving from the shoreline to the offshore.

Concentrations of lead in sediment samples from shoreline and offshore areas showed a pattern similar to copper. Lead concentrations exceeded the ER-M value in samples from only three stations in offshore Area X. Similar to copper, all concentrations of lead in sediment samples from Areas VIII and IX were below the ER-M value (see Figures 6 though 10 and 12).

The Former Oil Reclamation Ponds Area (IR-03) contained elevated concentrations of copper and lead along the shoreline at several locations (see Figure 9 and Figure F-16 in Appendix F). Again, the concentrations of copper and lead in nearby offshore sediments (Areas VIII and IX) were below ER-M values.

Similar to the evaluation of copper and lead, the relative concentrations of PCBs (as total Aroclors) in sediment between shoreline and associated offshore areas were evaluated. Figure 6 shows concentrations of total Aroclors exceeded the ambient concentration in all areas of Parcels E and E-2, except the metal slag area in the Panhandle Area and in IR-02 Southeast. The highest concentrations of total Aroclors were found in shoreline samples collected along the Landfill Area and IR-02 Northwest (see Figure 6). The highest concentrations of PCBs in the offshore areas (Parcel F) were found along the eastern shoreline of Area X within the South Basin, which is adjacent to the Landfill Area and IR-02 Northwest (see Figures 7 and 13).

5.2.2 PCB Congener Evaluation

Data for Aroclors and PCB congeners in sediment samples collected from the Parcels E and E-2 shoreline and offshore Area X were evaluated for possible relationships between onshore and offshore contamination. The primary goal was to determine if contaminants in the offshore sediments are derived from shoreline sources in Parcels E and E-2. Appendix F presents the results of the PCB congener analysis. Results of the data evaluation are briefly summarized below. The analytical results are found in Tables F-1 and F-2 in Appendix F.

PCB congener patterns for 12 surface sediment samples collected from the Parcels E and E-2 shoreline and for 23 sediment samples collected from offshore Parcel F were evaluated visually for congener distribution and relative concentrations of congeners. Results for Aroclors and PCB congeners show that only Aroclor-1260 and Aroclor-1254, two of the three most common Aroclors (the third is Aroclor-1242), were detected in the shoreline samples (see Table F-1 in Appendix F). Aroclor-1260 was detected in all of the 46 samples collected along the study area of the shoreline of Parcels E and E-2, at concentrations ranging from 0.09 to 1,900 mg/kg. Aroclor-1254 was detected in only seven of the shoreline samples, at concentrations ranging

from 0.06 mg/kg to a maximum of 13 mg/kg in a sample from location IR01SH028. Only Aroclor-1260 was detected in offshore sediment samples collected from Area X, at concentrations ranging from below detection limits to 5.4 mg/kg, indicating one Aroclor formation in the area. The highest concentrations of PCBs in the offshore samples were detected in samples collected from locations in the eastern portion of Area X (SB-16, SB-19, SB-20, SB-21, and SB-22), within 100 feet of the shoreline along Parcels E and E-2 (see Figure 2).

Congener plots for selected shoreline and offshore samples, including two samples (SB-1 and SB-2) collected at the mouth of Yosemite Creek, are shown on Figures F-3 through F-9 in Appendix F. The patterns for onshore and offshore samples generally appear similar, both in terms of the distribution of congeners and the relative concentrations of congeners. Aroclor-1260 congeners are present in all of the samples collected in Parcels E, E-2, and F. Aroclor-1254 congeners are also present in the samples, but at lower concentrations—about one-third or less of the Aroclor-1260 concentrations. Samples SB-1 and SB-2, collected from the mouth of Yosemite Creek (see Figure F-1), are enhanced in PCB-101 and PCB-118, a pattern that may indicate a contribution from Aroclor-1254. Overall, the ratio of Aroclor-1254 to Aroclor-1260 is approximately 1:3.

Although the presence of a pattern similar to Aroclor-1254 in an environmental sample could be from a source of Aroclor-1254, it may also be caused by the dechlorination of Aroclor-1260 during weathering or other degradation processes (such as enhanced PCB-101 could be dechlorinated from PCB-180, a signature congener of Aroclor-1260). If dechlorination is the primary factor, it appears to be occurring at approximately equal rates in the shoreline and offshore environment because the congener patterns are similar in both areas.

Offshore samples were grouped into categories (designated as Groups A through D on Figure F-2) to evaluate if a relationship exists between PCB congener patterns and distance from the eastern shoreline of Area X. A slight increase occurred in low-molecular-weight congeners (PCB-52, -101, -105, -118, and -128) and a slight decrease occurred in high-molecular-weight congeners (PCB-153, -170, -180, -187, and -195) from the shoreline outward, which may indicate weathering or variations in fate and transport of individual congeners. However, the slight differences observed may not be significant because the patterns for each category were generally similar.

In summary, congener patterns in data from samples collected from Area X are consistent with samples collected from the shoreline of Parcels E and E-2 to the east, in that Aroclor-1260 appears to be the main Aroclor present in both sets of samples, with some smaller contribution from Aroclor-1254. The similarities in Aroclor composition and congener patterns between the shoreline and offshore samples suggest that PCBs in offshore sediments could have originated from the shoreline area. However, with the absence of distinctive characteristics, such as presence of other lower-weight Aroclors (for example, Aroclor-1242) or odd congener patterns, a definitive conclusion cannot be made.

5.2.3 Erosion and Overland Storm Water Flow as a Transport Mechanism

Erosion potential and solids delivery by storm water flow to Parcel F was evaluated to determine if erosion from HPS is a significant contributor to solids in Parcel F (Tetra Tech 2002a). Between 70 and 80 percent of HPS consists of relatively low lands that were constructed by excavating portions of surrounding hills and placing nonengineered fill material along the margin of the San Francisco Bay. Surface water at Parcel E-2 drains primarily in a sheet flow pattern from the lowlands to Parcel F because Parcel E-2 is not underlain by storm sewers.

Based on a topographic map with a 1-foot contour interval, digital elevation model was used to digitally generate flow direction grids and develop potential watercourses. The model results indicated a low potential for erosion. The solids yield from HPS appears to be less than sediment accretion rates in the bay (Tetra Tech 2002a). Figure 14 shows the general flow patterns along the Parcels E and E-2 shoreline. These results are consistent with the results of the Parcel F FS data gaps investigation (Battelle, Neptune & Company, and Sea Engineering 2005), which reported that the primary source of sediment to the South Basin appears to be suspended sediment from the San Francisco Bay.

The distribution of contaminants within the sediments of the South Basin shows higher concentrations near the shoreline and decreasing concentrations farther offshore. This distribution of contaminants is consistent with wave-influenced and tidally influenced sediment transport. The Parcel F FS data gaps investigation concluded that tidal transport is the primary transport mechanism of surficial sediments to the offshore (Battelle, Neptune & Company, and Sea Engineering 2005). Storm waves breaking along the shoreline suspend fine sediments in the nearshore region, which is followed by a return flow near the bottom of the water column transporting these sediments away from the shore into South Basin

Erosion and storm water transport from Parcels E and E-2 may be minor compared to the sediment load derived from other areas of the San Francisco Bay; however, the influx of metals from the shoreline to the offshore is likely from suspended materials transported into the bay by overland flow. Metals present beneath the soil surface in Parcels E and E-2 are effectively immobile because they are not subject to overland transport as particulate materials. Despite the overall shoreline's low potential for erosion, isolated areas along the shoreline can still erode and have an impact on Parcel F in isolated areas. For example, in 2002 a gully was found that transported storm water and suspended sediments from an area southeast of the landfill and next to a source of PCB contamination. The gully is discussed in Section 1.3. This gully was filled and regraded to prevent future transport of contaminants to the offshore, as shown in the picture below.

5.2.4 Groundwater Pathway to Parcel F

Groundwater discharge was evaluated as a potential pathway for migration of metals and PCBs to Parcel F. Under atmospheric (oxidizing) conditions and a normal range of pH (6 to 9), copper, lead, zinc, and other metals will not be dissolved in groundwater at more than a few tens of micrograms per liter, based on the mineral phases that control solubility. The dissolved concentration for copper in groundwater is maintained at about 10 micrograms per liter by copper hydroxy carbonates. Likewise, the dissolved concentration of lead in oxygenated groundwater is also maintained at low levels (less than 10 micrograms per liter) by the low solubility of lead hydroxy carbonates. Therefore, groundwater in contact with contaminated soils at depth in Parcels E and E-2 is unlikely to contribute to metals contamination in offshore sediments.

Likewise, transport of PCBs by the groundwater pathway is severely limited by the chemical and physical properties of PCBs. PCBs are highly immobile in groundwater because of the low aqueous solubility of PCBs under normal pH and Eh conditions. The solubility of PCBs is controlled by partitioning between water and soil (EPA 1990). The distribution of PCBs in sediments in Parcel F also indicates that the groundwater pathway has not contributed PCBs to offshore areas. Currently, concentrations of PCBs are highest within a discrete sediment layer less than 1 meter from the surface, and concentrations decrease toward the surface and with depth below this layer. If the groundwater pathway were transporting PCBs to sediments in the South Basin, PCBs would be expected to be found at higher concentrations with increasing depth to be consistent with the groundwater flow path (Battelle, Neptune & Company, and Sea Engineering 2005).

PCBs are more soluble in oils and other organic solvents than in water, and could migrate at higher dissolved concentrations in these media. However, in this case, the mobility of the PCBs would be limited to the mobility of the free-phase oils or solvents. Free-phase transport of oils or

solvents from the onshore area to South Basin is not consistent with the widespread distribution of PCBs in the shallow South Bay sediments.

In summary, sampling and analysis conducted for the shoreline investigation successfully defined general areas and specific locations of higher concentrations for copper, lead, and PCBs. The evaluation of data for metals was also useful for identifying areas and locations of higher concentrations, but found no distinctive chemistry that could be used to definitively link onshore sources and offshore sinks. However, the chemical distribution patterns between the Parcels E and E-2 shoreline suggest that shoreline areas along the eastern shore of Area X within the South Basin is a source of chemical contamination to Parcel F.

5.3 EVALUATION OF STUDY QUESTION 3

Study Question 3 asked if contamination at suspected source areas along the shoreline posed an unacceptable risk to ecological receptors exposed to sediment in the shoreline area. This question was addressed by conducting a SLERA, the results of which are presented in Appendix G and summarized in this section.

A toxicity-based approach was used to identify site-related chemicals that may pose risks to sensitive ecological receptors in the intertidal zone, including benthic invertebrates, birds, and mammals. Inorganic and organic chemicals were screened against toxicity benchmarks for each ecological receptor, as recommended by EPA (1997).

The process and rationale for identifying COPECs was similar for all areas and ecological receptors. COPECs for benthic invertebrates were identified as those chemicals with concentrations in sediment exceeding ER-M values (Long and Morgan 1991; NOAA 1993). In the evaluation of birds and mammals, chemicals were screened using food-chain modeling against toxicity reference values (TRV). COPECs were then refined by comparing site concentrations with Hunters Point ambient levels (PRC Environmental Management, Inc. 1995) and ambient sediment concentrations of selected chemicals in San Francisco Bay (Water Board 1998, 2003).

Sediment samples were evaluated in two spatial groups:

1. *Surface* shoreline samples: 0 to 0.5 feet bgs
2. *Subsurface* shoreline samples: 2.0 to 2.5 feet bgs

The complete SLERA is included as Appendix G to this technical memorandum. The following subsections summarize the risk characterization for benthic invertebrates and birds and mammals.

5.3.1 Summary of Risk Characterization for Benthic Invertebrates

The characterization of risk posed to benthic invertebrates from surface and subsurface sediment is summarized below.

Surface Sediment: All detected inorganic and organic chemicals in sediment were evaluated in the toxicological screen by evaluating the hazard quotient (HQ) (ratio of exposure point concentrations in surface sediment to ER-M values). Chemicals with HQs greater than 1.0 were considered COPECs for benthic invertebrates. Table G-6 in Appendix G presents the HQs.

HQs ranged from 1.30 for zinc to 3.19 for nickel for benthic invertebrates. No ER-M value is available for molybdenum, so it was considered a COPEC by default. The HQ for cadmium was less than 1.0; therefore, it was eliminated as a COPEC for benthic invertebrates.

Exposure concentrations for 4,4'-dichlorodiphenyldichloroethane (DDD), 4,4'-dichloro-diphenyldichloroethene (DDE), 4,4'-DDT, total DDTs, and PCBs exceeded their respective ER-M values; therefore, they were retained as primary COPECs for benthic invertebrates. HQs for these COPECs ranged from 1.19 (DDE) to 356.67 (total PCBs) (see Table G-6 in Appendix G).

Subsurface Sediment: Risk to benthic invertebrates from subsurface sediment was evaluated exactly as described above for surface sediment. Chemicals with HQs greater than 1.0 were considered COPECs for benthic invertebrates. Table G-7 in Appendix G presents HQs based on the ratio of exposure point concentrations in subsurface sediment to ER-M values. HQs ranged from 1.12 for antimony to 65.46 for copper.

Exposure concentrations for 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, total DDTs, dieldrin, endrin, and PCBs exceeded their respective ER-M values; therefore, they were retained as primary COPECs for benthic invertebrates. HQs for these COPECs ranged from 2.9 (DDD) to 1,500 (total PCBs).

In summary, copper, lead, zinc, and PCBs were measured at concentrations that pose a potential risk to benthic invertebrates in surface and subsurface sediment from the Parcels E and E-2 shoreline. For all of these metals, exposure point concentrations are higher in the subsurface samples. Several HQs for pesticides in sediment indicated potential risk, especially DDT and dieldrin in the subsurface samples.

5.3.2 Summary of Risk Characterization for Birds and Mammals

Food chain models were used to assess the exposure of birds and mammals to ingested contaminants. Ingested doses were estimated for three birds (willet, surf scoter, and red tailed-hawk) and one mammal (house mouse). Details of the values used in the dose equation and the assumptions of the exposure assessment are provided in Appendix G.

The characterization of risk posed to birds and mammals from surface and subsurface sediment is summarized in the subsections below.

5.3.2.1 Risk to Birds

Based on life history and foraging habits, daily doses were estimated for the surf scoter, willet, and red-tailed hawk feeding in the Parcels E and E-2 shoreline. Site-specific daily dose estimates were compared with high and low TRVs to evaluate the potential adverse biological effects on each receptor (see Table 4). Based on this comparison, the risk to representative receptors was characterized; this comparison was performed in a manner consistent with EPA's HQ methodology (EPA 1998), as follows:

$$HQ = \frac{Dose}{TRV} = \frac{(mg/kg-day)}{(mg/kg-day)}$$

where:

HQ	=	Hazard quotient (unitless)
Dose	=	Chemical-, receptor-, and site-specific daily dose estimate (mg/kg per day)
TRV	=	Chemical- and receptor-specific toxicity reference value (mg/kg per day)

A receptor is considered to exhibit potential significant risk if the HQ is greater than 1 using the high TRV. In contrast, the receptor is considered to exhibit only a potential risk if the HQ is greater than 1 using the low TRV.

Significant risk to birds is indicated only for the willet exposed to PCBs. No significant risk to either the surf scoter or the red-tailed hawk was indicated by the food-chain modeling. Other chemicals for which potential risk to birds is suggested include cadmium, copper, lead, mercury, PCBs, total DDTs, and dieldrin.

5.3.2.2 Risk to Mammals

Based on life history and foraging habits, daily dose estimates were calculated for the omnivorous house mouse feeding at the Parcels E and E-2 shoreline. HQs were calculated using the high and low TRVs. Doses for aluminum, antimony, molybdenum, and PCBs indicated significant risk in both surface and subsurface sediment. Doses based on surface samples also exceeded the high TRV for cadmium and vanadium. Subsurface doses exceeded the high TRV for copper and zinc (see Table 5). A complete set of HQs is provided in Table G-18 in Appendix G.

The greatest significant risk (high TRV HQ) was indicated for PCBs ingested by the house mouse. Because PCBs bioaccumulate and are known to occur in several areas of the Parcel E shoreline, risk to the house mouse warrants its inclusion in an FS for evaluation of remedial

alternatives. A complete discussion of the chemicals posing risk and the chemicals that pose no significant risk to the house mouse are presented in Appendix G.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of the shoreline investigation was to evaluate if contamination along the Parcels E and E-2 shoreline has migrated (or has the potential to migrate) to sediments in adjacent Parcel F (offshore) and to identify areas within the shoreline that pose an unacceptable ecological risk.

Concentrations of copper and lead in sediments along the Parcels E and E-2 shoreline are a potential source of contamination to Parcel F in all areas except the Panhandle Area and IR-02 Southeast. Aroclors should be evaluated as a potential source of contamination in the Landfill Area and IR-02-Northwest, where the average concentrations of Aroclors exceeded the ambient concentration for nearshore sediment in San Francisco Bay (Water Board 2003).

Evaluation of PCB data showed that a definitive connection between onshore sources and offshore sediments could not be established, even though the congener patterns in onshore and offshore sediments were consistent. The geochemical assessment to evaluate the inter-element correlations between metals located in sediments of the shoreline and offshore area was not particularly diagnostic for linking contaminant sources and sinks, although contaminant distribution patterns in Parcel F are highly suggestive of contaminants originating from the shoreline along Area X of the South Basin. Additionally, although erosion and overland transport of contaminants from Parcels E and E-2 may be minor compared with the sediment load from San Francisco Bay, some influx of metals from the Parcels E and E-2 shoreline to Parcel F is likely.

Groundwater discharge was evaluated as a potential pathway for migration of metals and PCBs from Parcels E and E-2 to Parcel F. However, groundwater in contact with contaminated soils at depth in Parcels E and E-2 is unlikely to contribute to metals contamination in offshore sediments because of the limited solubility of metals in site groundwater. Review of metals data for groundwater samples collected from nearshore wells confirmed the low concentrations (10 micrograms per liter) of dissolved metals in site groundwater. Likewise, transport of PCBs by the groundwater pathway is severely limited by their chemical and physical properties.

Benthic invertebrates, birds, and mammals are at risk from exposure to PCBs in surface and subsurface sediment along the Parcels E and E-2 shoreline. Benthic invertebrates in surface and subsurface sediment may be adversely affected by exposure to copper, lead, zinc, and DDTs. In subsurface sediment, mercury may pose an additional risk to benthic invertebrates. Ingestion of sediment and prey that contain cadmium, copper, molybdenum, zinc, and PCBs may pose a risk to the house mouse.

Based on the results of the technical memorandum, the following recommendations are made for the Parcels E and E-2 shoreline:

- Source control measures are warranted along the Parcels E and E-2 shoreline, particularly in the metal slag area of the Panhandle Area, the Landfill Area, and IR-02 Northwest.

- Ecological risk to invertebrates, birds, and mammals in the shoreline warrants the evaluation of remedial alternatives for the intertidal sediments along the entire Parcels E and E-2 shoreline.

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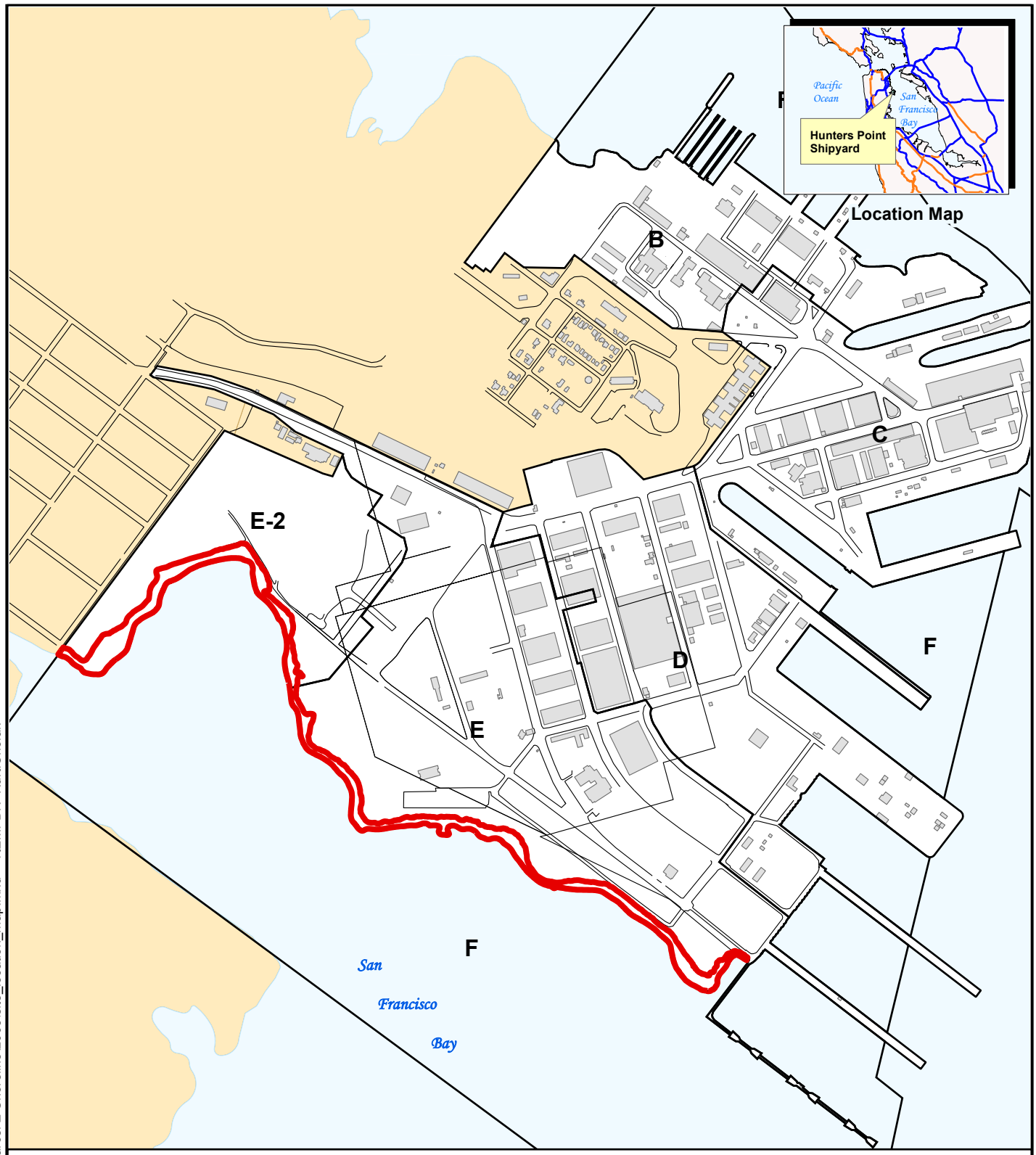
FIGURES



Legend

- Parcel E and E-2 Shoreline Remedial Unit
- Other Parcel Boundary
- Building
- Non-Navy Property

N

1,000 0 1,000

Scale in Feet

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U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 1
PARCELS E AND E-2 SHORELINE LOCATION MAP

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum

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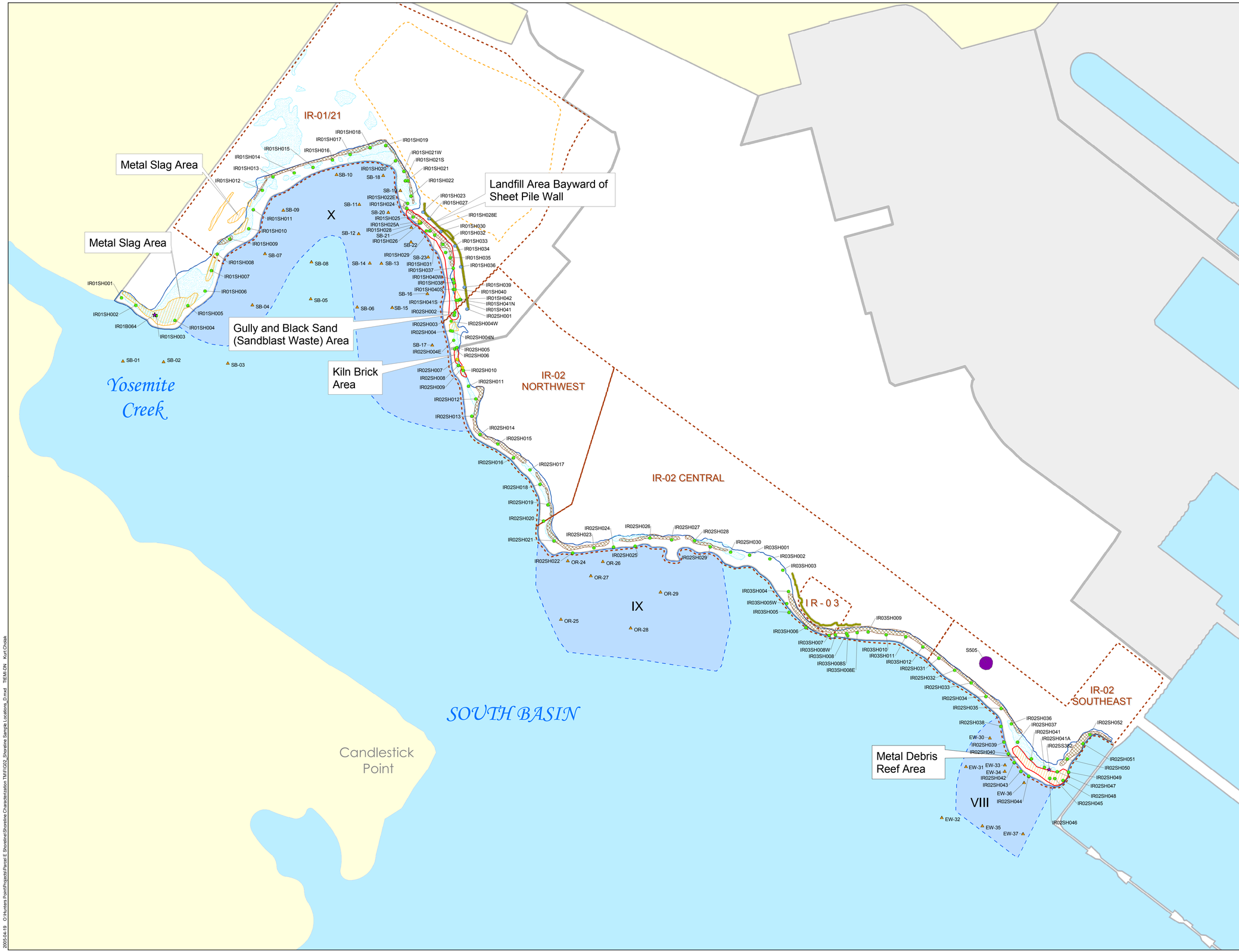

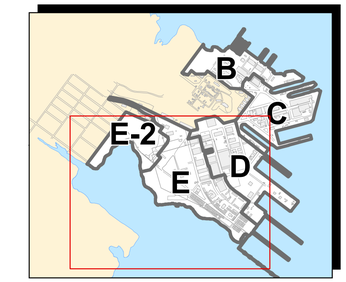

Location Map

- Shoreline Sampling Location (Tetra Tech EM Inc.)
- Offshore Sampling Location (Battelle)
- Onshore Sampling Location (Tetra Tech EM Inc.)
- Brick Sampling Location
- Location Sampled during Previous RI
- Drainage Channel
- Sheet Pile Wall
- Biased Sample Area
- Debris Area
- Riprap
- Wetland
- Former Aboveground Storage Tank
- Edge of Landfill Cap Geomembrane
- Low-Volume Footprint - Parcel F VS
- Sub-IR Site Boundary
- Shoreline Remedial Unit
- Parcel Boundary
- Non-Navy Property
- Parcels C and D

Notes:

IR	Installation Restoration
RI	Remedial Investigation
VS	Validation Study

400 200 0 400

Scale in Feet

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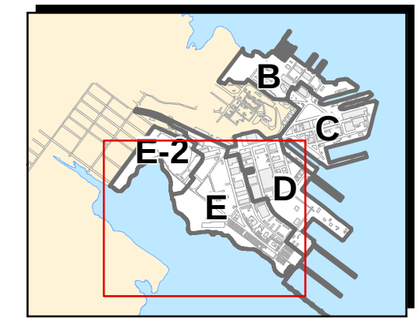
FIGURE 2
SHORELINE AND OFFSHORE SAMPLING LOCATIONS AND SITE FEATURES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum

2005-04-19 O:\Hunters Point\Projects\Parcel E Shoreline\Shoreline Characterization TM\FIG\2_Shoreline Sample Locations_D.mxd TEMI-DN Kurt Chubak



Location Map

Aerial Photo Source: USGS, February 2004

400 200 0 400

Scale in Feet

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U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 3
SUSPECTED SOURCE LOCATIONS AND AERIAL PHOTOGRAPH

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum

06/27/2007 O:\Hunters Point\Projects\Parcel E Shoreline\2005\F-3_Shoreline Sample Locations_Aerial.mxd TtEMI-DN Kurt.Cholak

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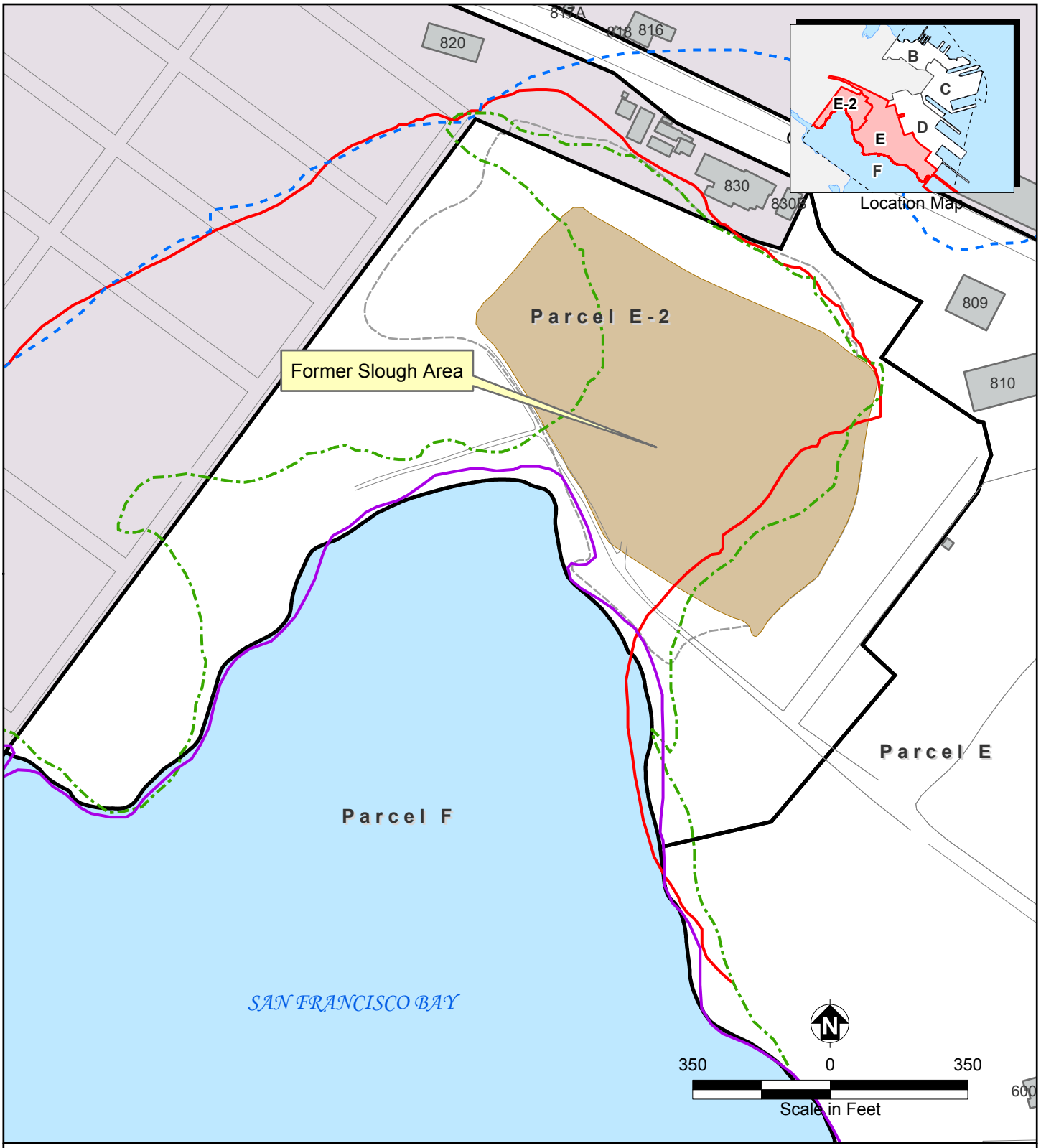

Year of Shoreline

- 1935
- 1946
- 1955
- 1969

- Parcel Boundary
- Parcel F Boundary
- Landfill Cap Extent
- Extent of Solid Waste
- Non-Navy Property
- Building
- Road

Source: Digitized from 1969 aerial photograph

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U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 4

HISTORY OF SHORELINE FILLING

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum

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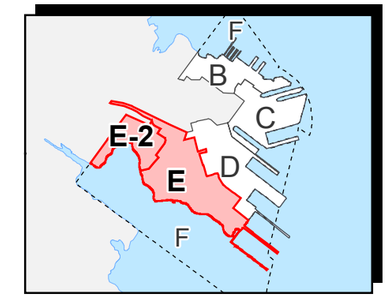

Location Map

Parcel Boundary

Parcel F Boundary

400 0 400

Scale in Feet

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U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 5

1965 AERIAL PHOTOGRAPH

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum

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Figure 6 Concentrations of Copper, Lead, and Total Aroclors in Parcels E and E-2 Shoreline

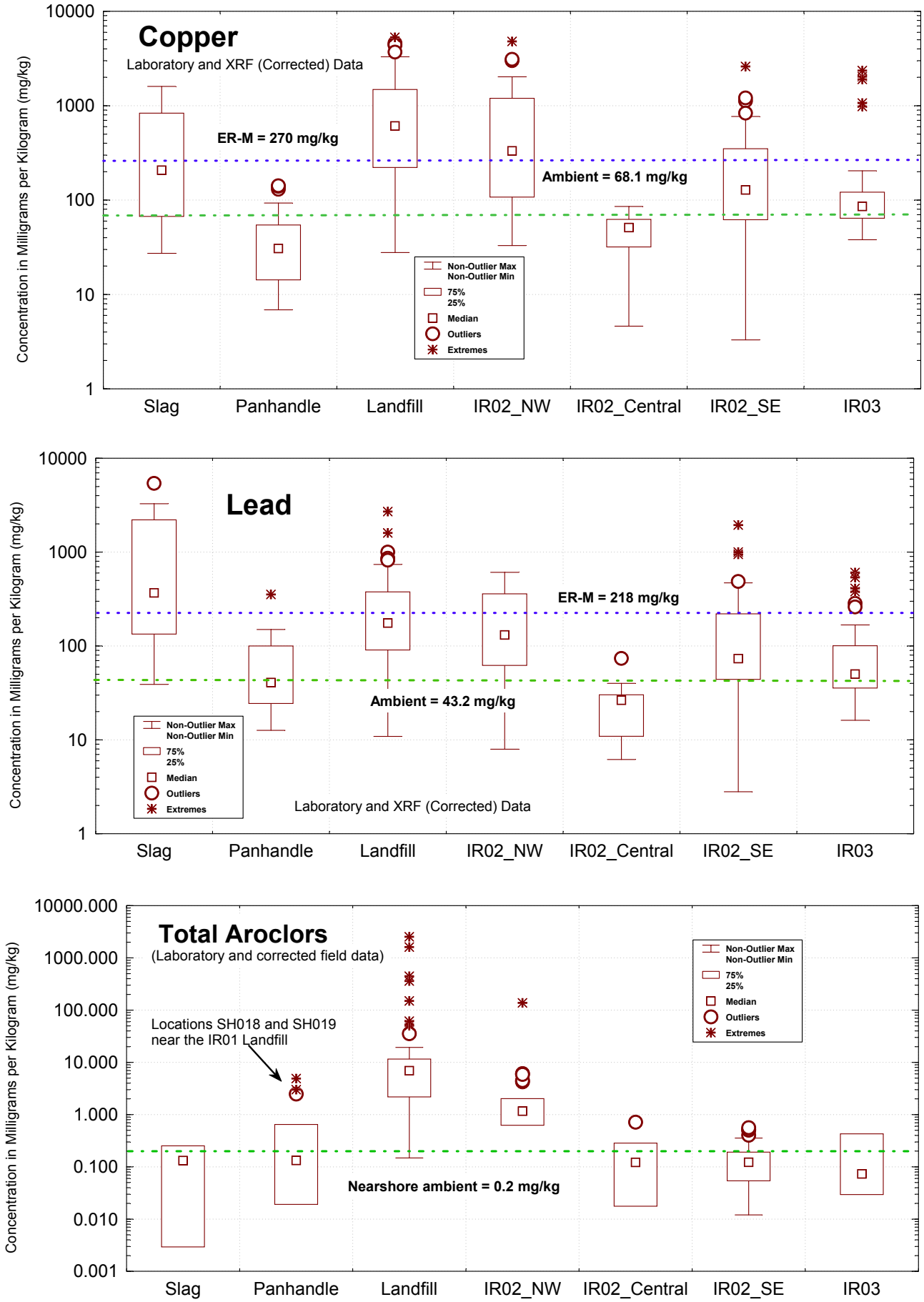


Figure 7 Concentrations of Copper, Lead, and Total Aroclors in Panhandle/Slag Area of Parcel E and in Area X of Parcel F

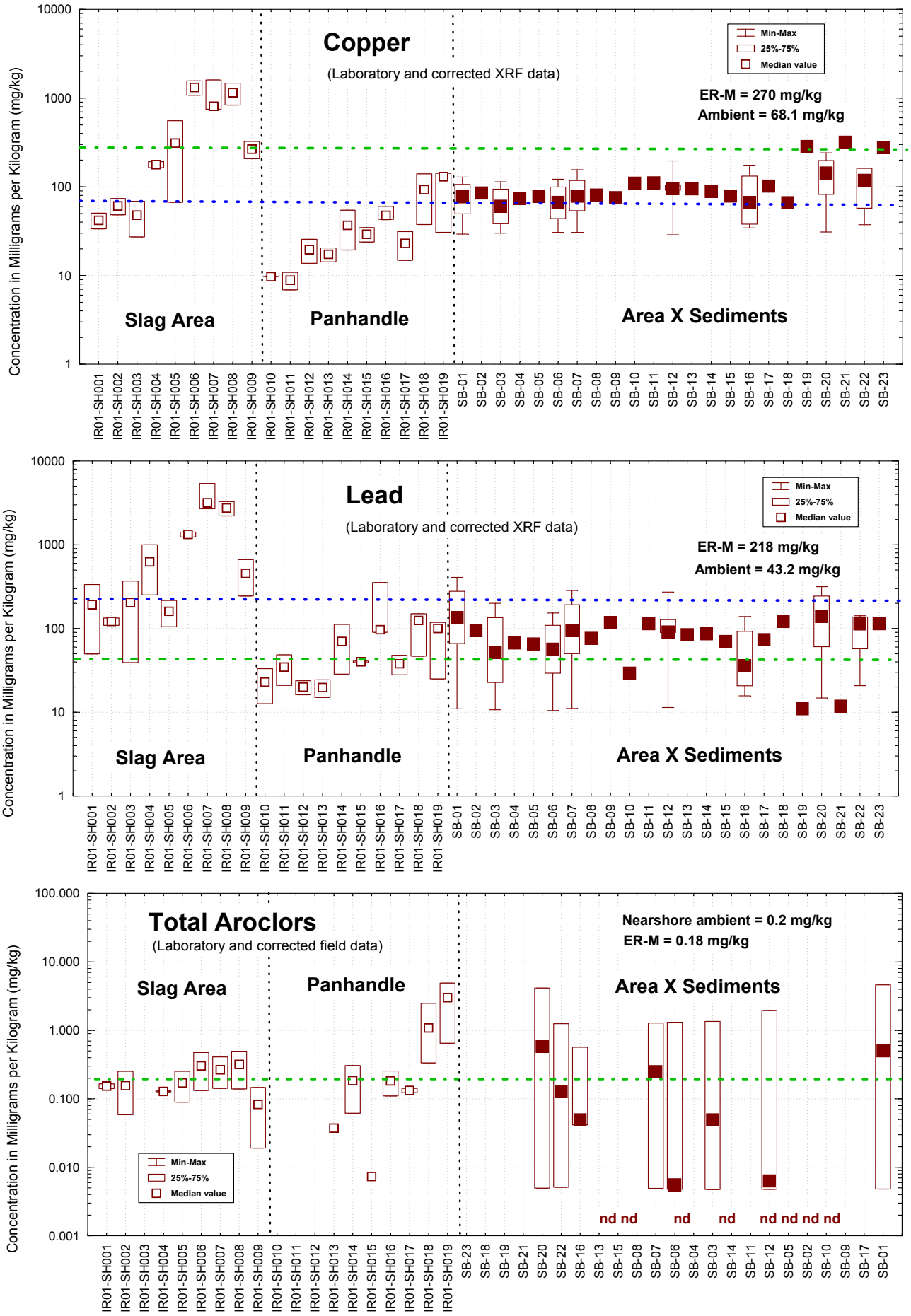


Figure 8 Concentrations of Copper, Lead, and Total Aroclors in Parcel E-2 (Landfill) and Area X of Parcel F

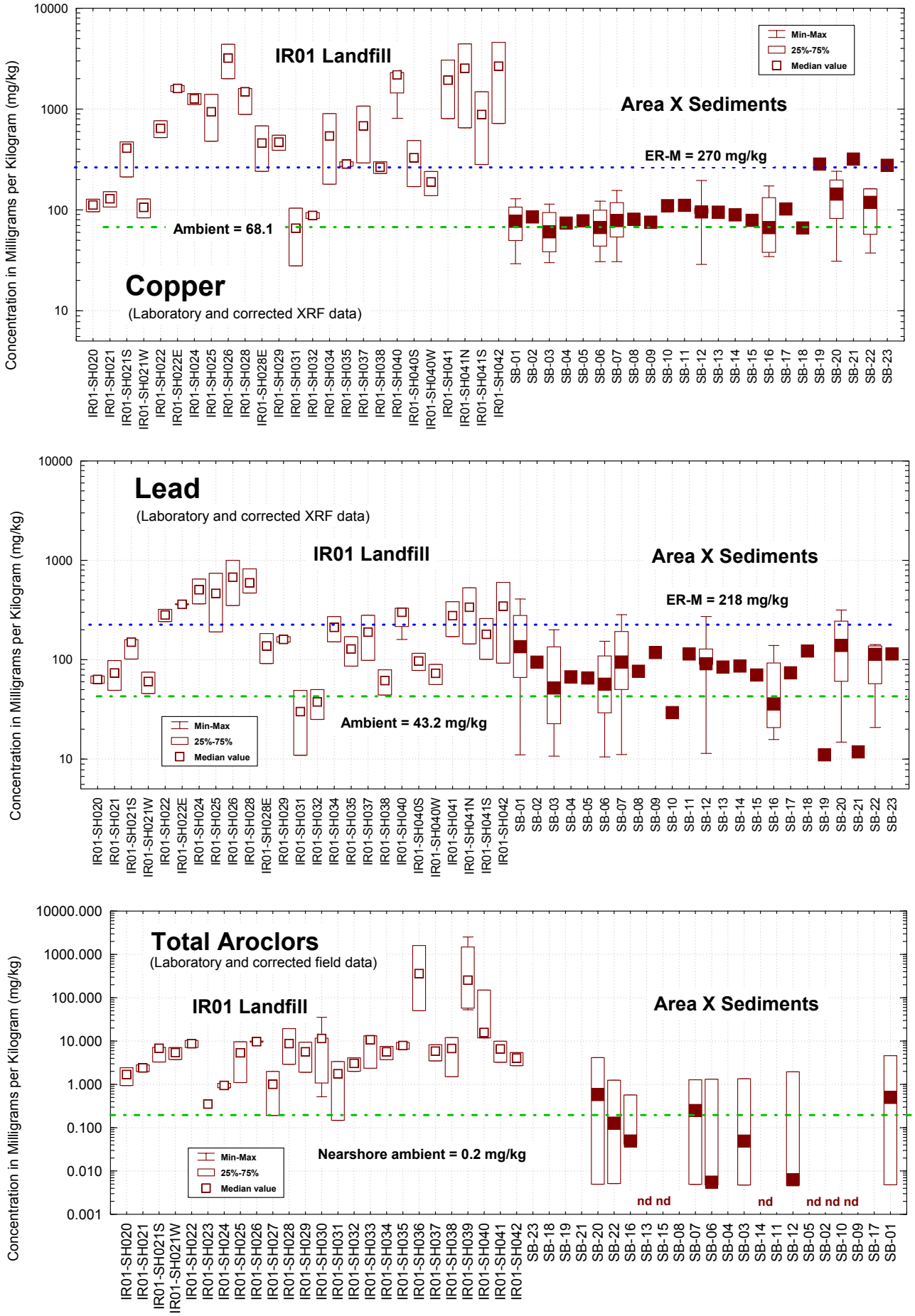
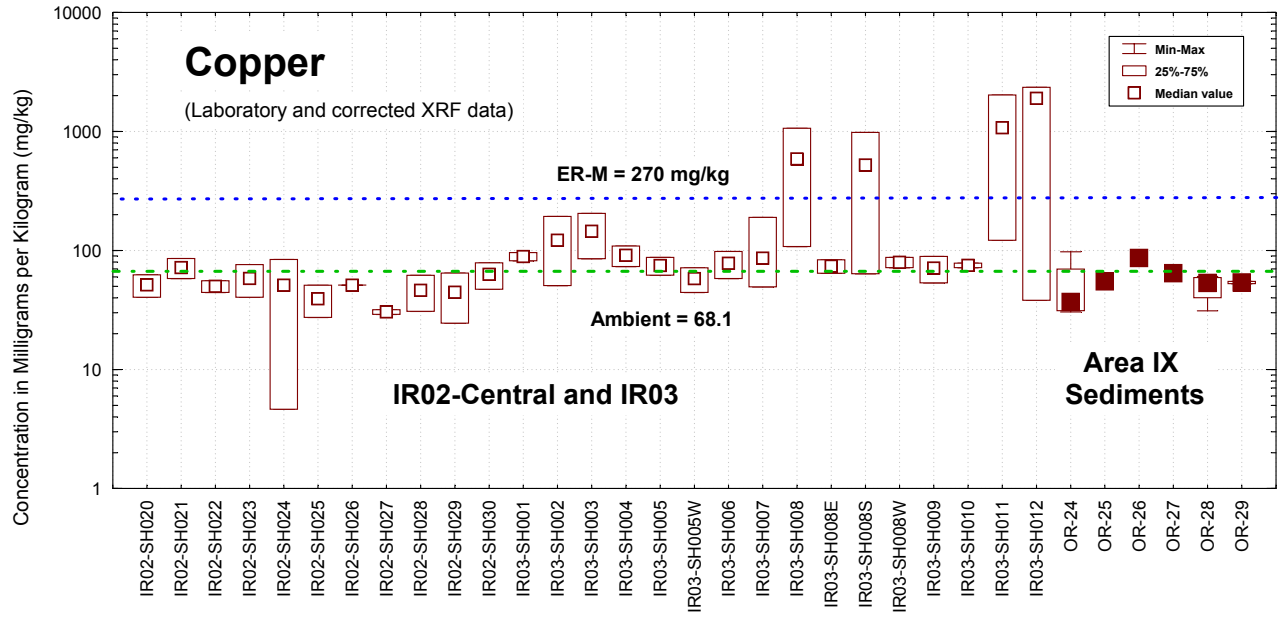
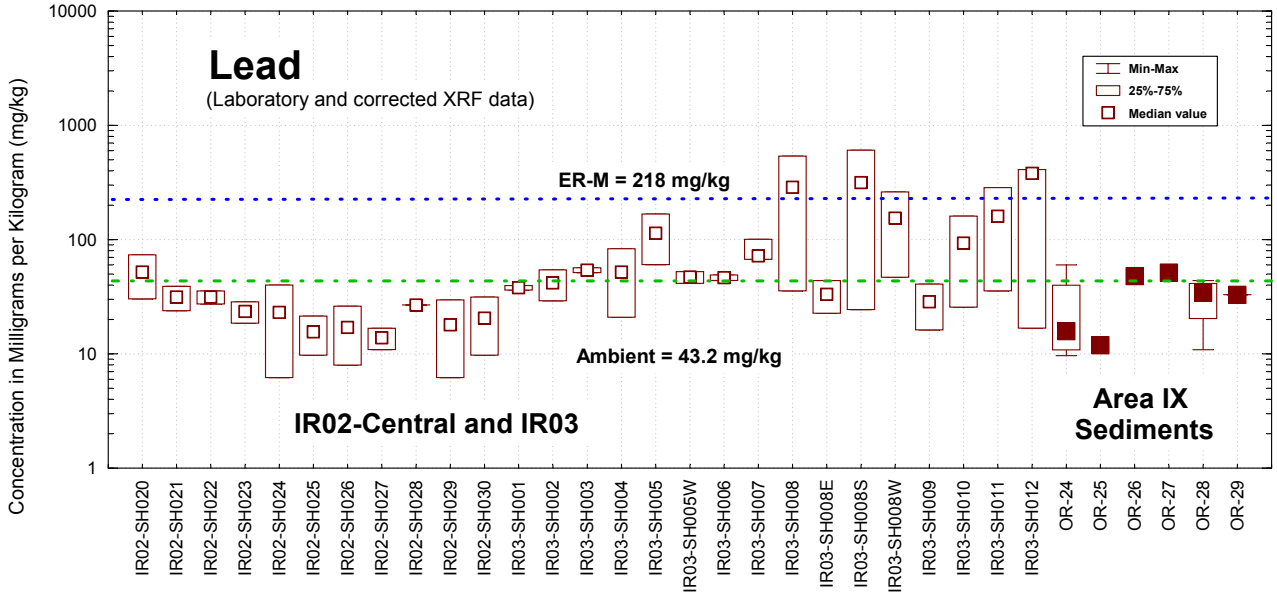


Figure 9 Concentrations of Copper, Lead, and Total Aroclors in IR-02 Central and IR-03 of Parcel E and Area IX of Parcel F





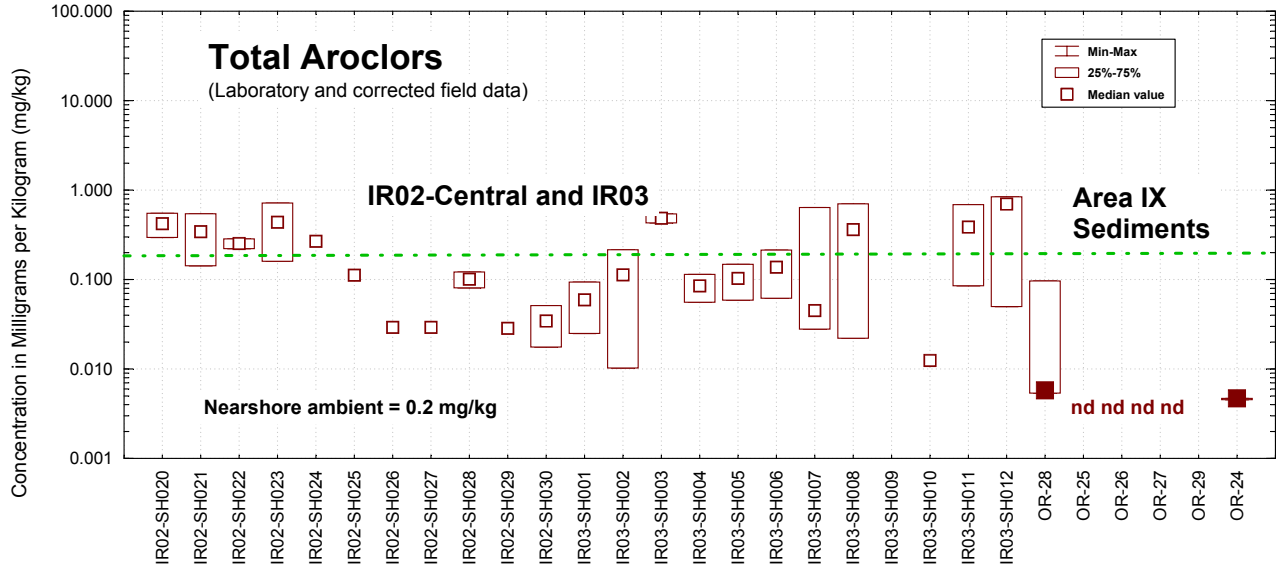
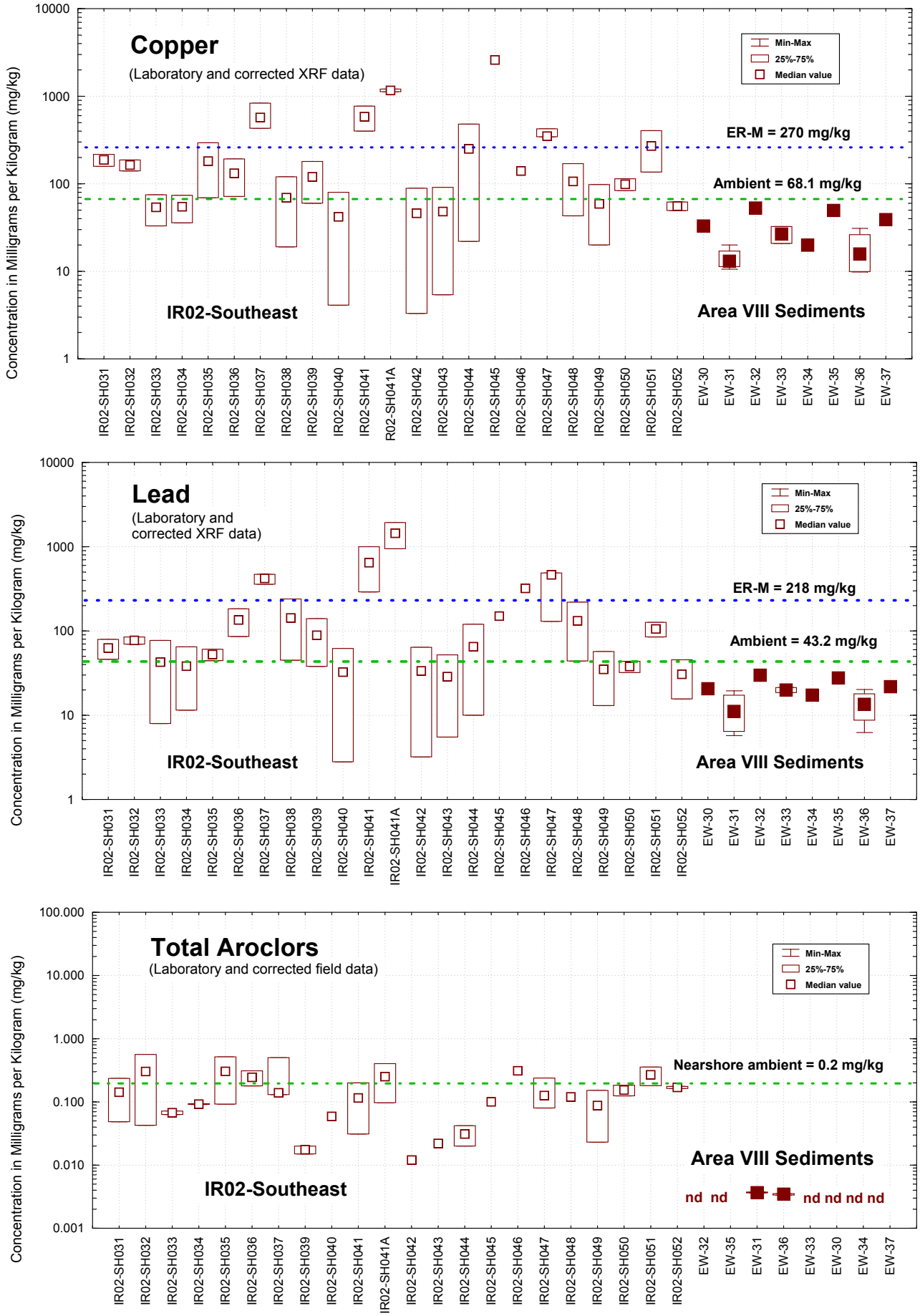
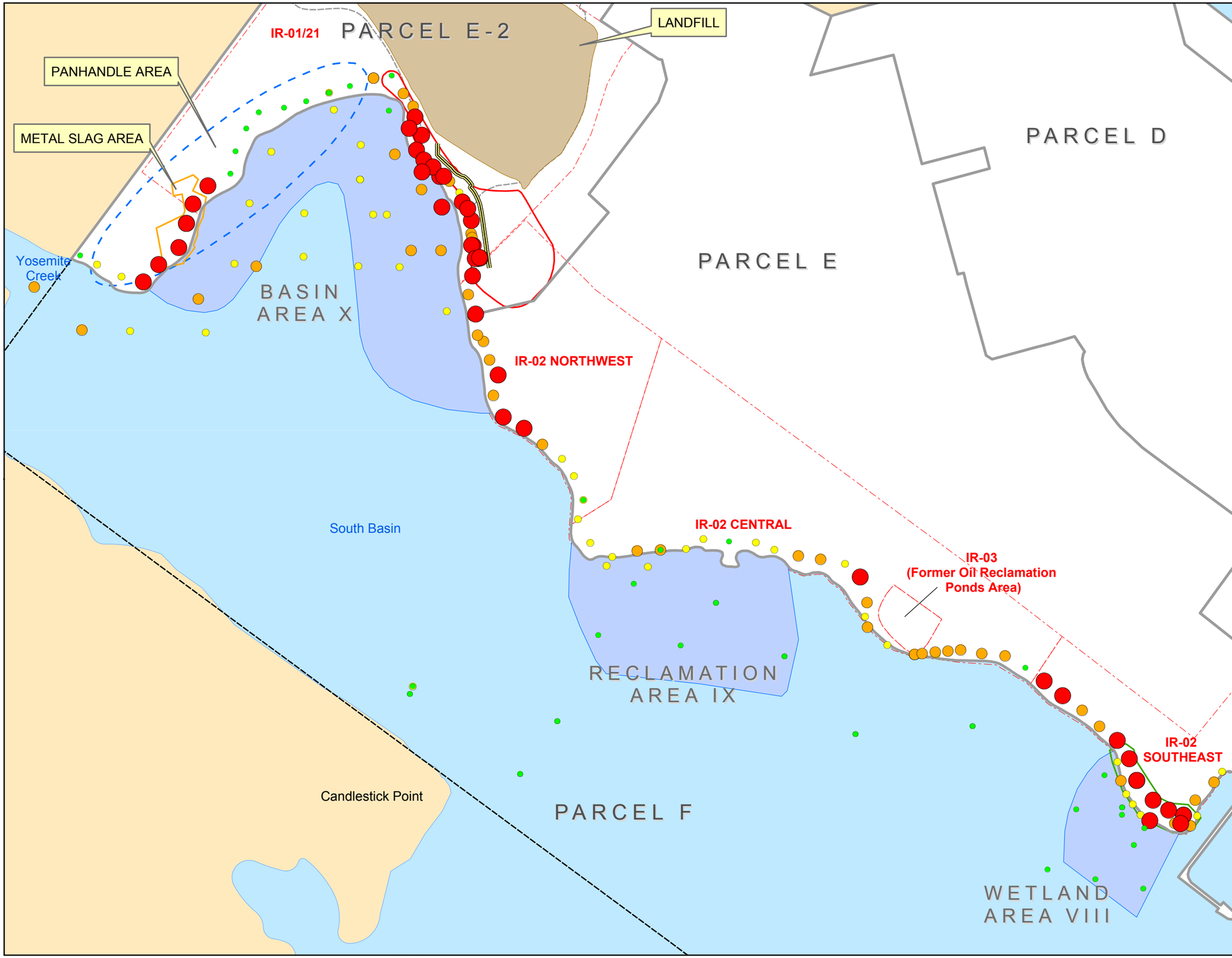
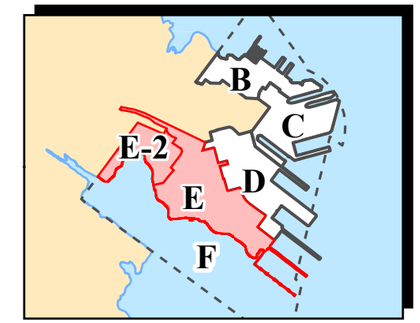


Figure 10 Concentrations of Copper, Lead, and Total Aroclors in IR-02 Southeast of Parcel E and Area VIII of Parcel F







Location Map

Copper Results: 0-2 ft bgs

- Results Above ER-M
- Results Above HPAL but Below ER-M (≤270 mg/kg)
- Results Above SF Bay Ambient but Below HPAL (≤124.0 mg/kg)
- Results Below SF Bay Ambient (≤ 68.0 mg/kg)
- PCB Hotspot
- Metal Slag Area
- Panhandle Area
- Metal Debris Reef Area
- Offshore Areas
- Landfill Cap Extent
- Extent of Solid Waste
- Parcel Boundary
- Parcel F Boundary
- IR Site
- Non-Navy Property
- Sheet-Pile Wall

N

400 0 400

Scale in Feet

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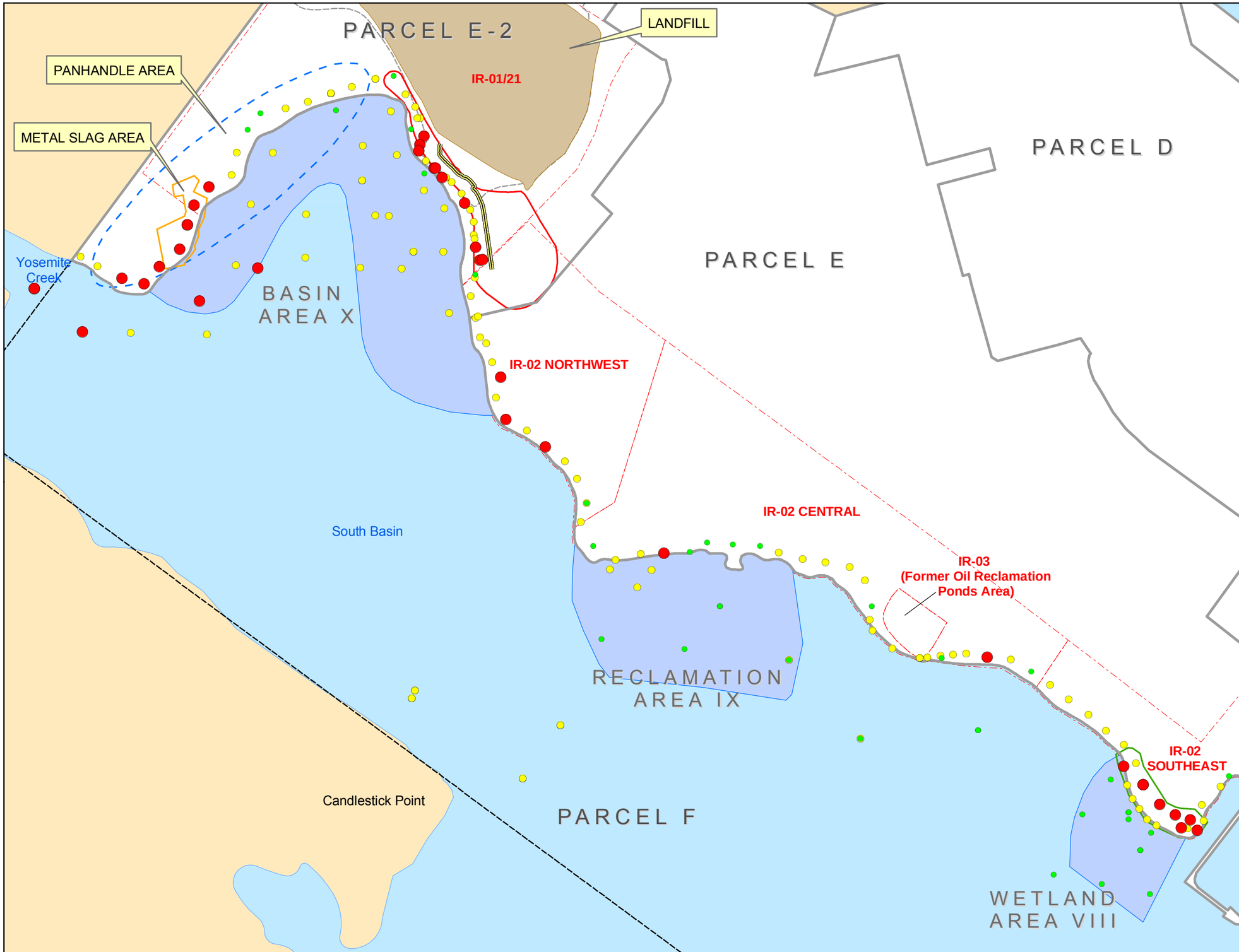
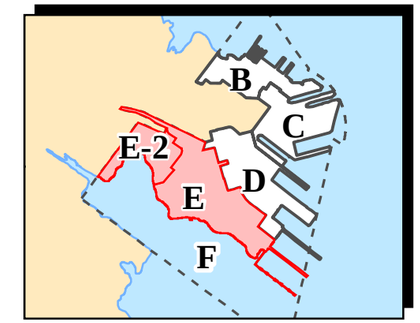
FIGURE 11

SHORELINE AND OFFSHORE COPPER RESULTS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum

2005-10-27 V:\Hunters Point\Projects\Parcel E Shoreline TM\Contaminant_Modeling\Cu_bubbleplot.mxd TtEMI-SF Michelle Angeles





Location Map

Lead Results: 0-2 ft bgs

- Results Above ER-M
- Results Above SF Bay Ambient but Below ER-M (≤218.0 mg/kg)
- Results Below SF Bay Ambient (≤43.0 mg/kg)
- PCB Hotspot
- Metal Slag Area
- Panhandle Area
- Metal Debris Reef Area
- IR Site
- Offshore Areas
- Landfill Cap Extent
- Extent of Solid Waste
- Parcel Boundary
- Parcel F Boundary
- Non-Navy Property
- Sheet-Pile Wall

N

400 0 400

Scale in Feet

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U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 12

SHORELINE AND OFFSHORE LEAD RESULTS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum

2007-06-27 V:\Hunters Point\Projects\Parcel E Shoreline TM\Contaminant_Modeling\Pb_bubbleplot.mxd TtEMI-SF Kevin Ernst

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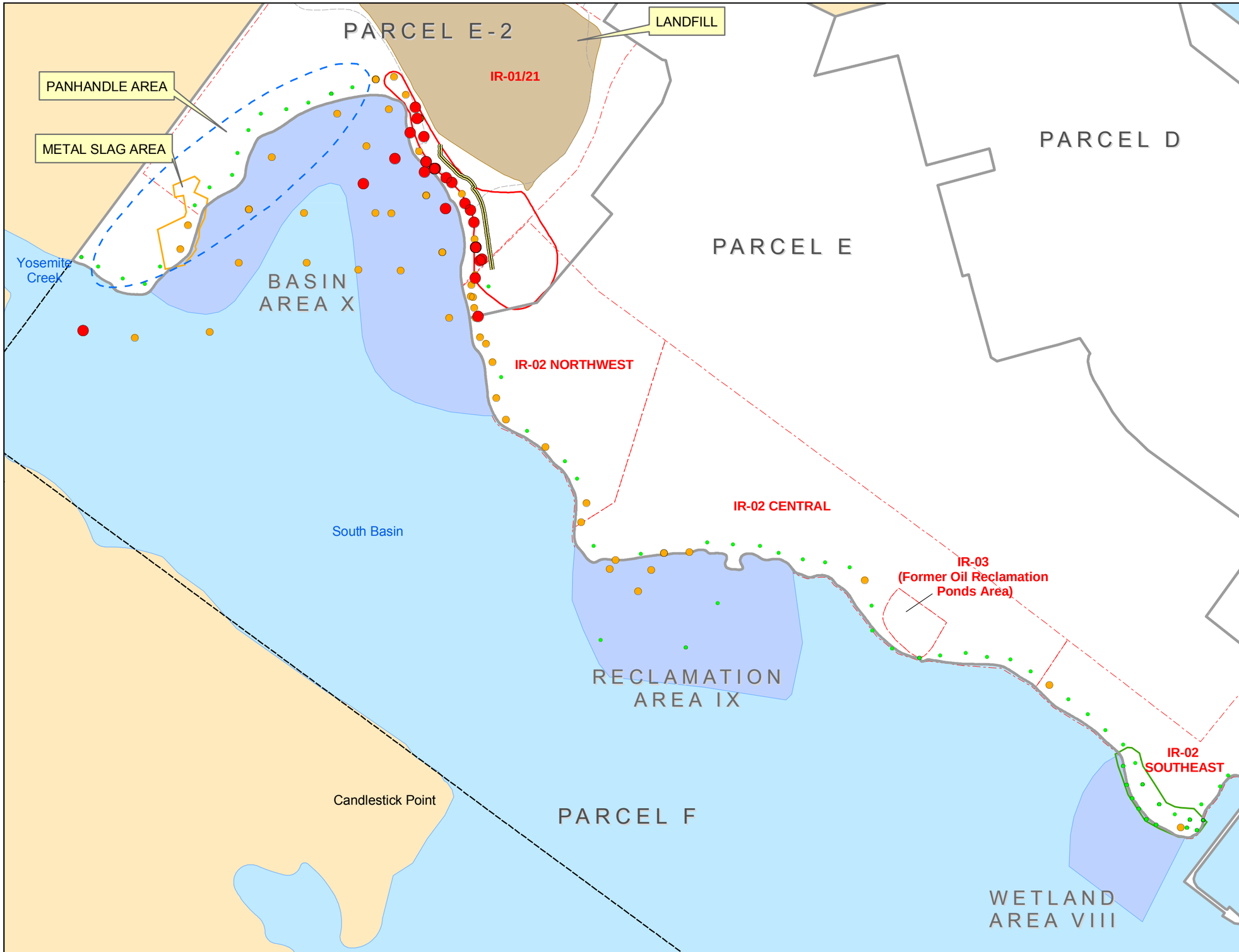

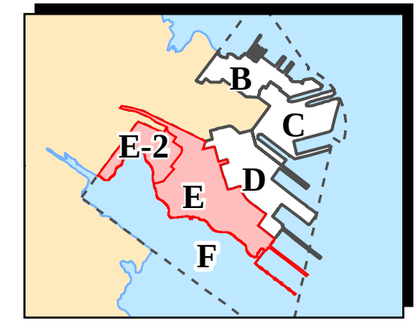

Location Map

PCB Results: 0-2 ft bgs

Result

- Result ≤0.2 mg/kg or Non-detect
- 0.2 mg/kg < Result ≤2.0 mg/kg
- Result >2.0 mg/kg
- PCB Hotspot
- Metal Slag Area
- Panhandle Area
- Metal Debris Reef Area
- Offshore Areas
- Landfill Cap Extent
- Extent of Solid Waste
- Parcel Boundary
- Parcel F Boundary
- IR Sites
- Non-Navy Property
- Sheet-Pile Wall

N

400 0 400

Scale in Feet

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FIGURE 13

SHORELINE AND OFFSHORE PCB RESULTS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum

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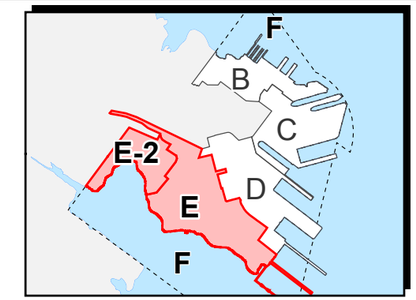

Parcel E-2 Location Map

- Approximated Surface Flow
- Ground Surface Elevation (1-Foot Interval)
- Fiber Roll
- Surface Vegetation
- Wetland Area
- Paved Surfaces
- Unpaved Surfaces
- Parcel Boundary
- Parcel F Boundary
- Non-Navy Property

Note: background digital elevation model (DEM) has a vertical exaggeration of 2x.

400 0 400

Scale in Feet

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FIGURE 14

DRAINAGE PATTERNS ALONG E AND E-2 SHORELINE

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum

2004-12-10 o:\hunters point\projects\Parcel E Landfill RI-FS\Drainage_Patterns_BMP.mxd TtEMI-DN Paul.Rogalla

TABLES

TABLE 1: SAMPLING LOCATIONS IN PARCELS E AND E-2 SUBAREAS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Area	SDGI Sampling Location	Data Analysis	
		Field[a]	Laboratory
Panhandle	IR01-SH010	X	
	IR01-SH011	X	
	IR01-SH012	X	
	IR01-SH013	X	
	IR01-SH014	X	
	IR01-SH015	X	
	IR01-SH016	X	X
	IR01-SH017	X	
	IR01-SH018	X	X
	IR01-SH019	X	X
Metal Slag (within panhandle)	IR01-SH001	X	
	IR01-SH002	X	
	IR01-SH003	X	
	IR01-SH004	X	
	IR01-SH005	X	
	IR01-SH006	X	
	IR01-SH007	X	X
	IR01-SH008	X	
	IR01-SH009	X	
Landfill	IR01-SH020	X	X
	IR01-SH021	X	X
	IR01-SH021S	X	X
	IR01-SH021W	X	
	IR01-SH022	X	X
	IR01-SH022E	X	
	IR01-SH023		X
	IR01-SH024	X	X
	IR01-SH025		X
	IR01-SH026		X
	IR01-SH027		X
	IR01-SH028	X	X
	IR01-SH028E	X	
	IR01-SH029		X
	IR01-SH030		X
	IR01-SH031	X	
	IR01-SH032		X
	IR01-SH033		X
	IR01-SH034	X	X
	IR01-SH035		X
	IR01-SH036		X
	IR01-SH037	X	X
	IR01-SH038		X
	IR01-SH039		X

TABLE 1: SAMPLING LOCATIONS IN PARCELS E AND E-2 SUBAREAS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Area	SDGI Sampling Location	Data Analysis	
		Field[a]	Laboratory
Landfill (continued)	IR01-SH040	X	X
	IR01-SH040S	X	
	IR01-SH040W	X	
	IR01-SH041	X	X
	IR01-SH041N	X	
	IR01-SH041S	X	
	IR01-SH042		X
IR-02 Northwest	IR02-SH001		X
	IR02-SH002		X
	IR02-SH003		X
	IR02-SH004	X	X
	IR02-SH004E	X	
	IR02-SH004N	X	
	IR02-SH004W	X	
	IR02-SH005		X
	IR02-SH006	X	X
	IR02-SH008		X
	IR02-SH010	X	X
	IR02-SH011		X
	IR02-SH012		X
	IR02-SH013		X
	IR02-SH014	X	X
	IR02-SH015	X	
	IR02-SH016	X	X
	IR02-SH017	X	
	IR02-SH018	X	X
	IR02-SH019	X	X
IR-02 Central	IR03-SH001	X	
	IR03-SH002	X	
	IR03-SH003	X	
	IR03-SH010	X	
	IR03-SH011	X	X
	IR03-SH012	X	X
	IR02-SH020	X	
	IR02-SH021	X	
	IR02-SH022	X	
	IR02-SH023	X	
	IR02-SH024	X	X
	IR02-SH025	X	
	IR02-SH026	X	
	IR02-SH027	X	
	IR02-SH028	X	
	IR02-SH029	X	
	IR02-SH030	X	

TABLE 1: SAMPLING LOCATIONS IN PARCELS E AND E-2 SUBAREAS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Area	SDGI Sampling Location	Data Analysis	
		Field[a]	Laboratory
IR-02 Southeast	IR02-SH031	X	
	IR02-SH032	X	
	IR02-SH033	X	
	IR02-SH034	X	
	IR02-SH035	X	
	IR02-SH036	X	
	IR02-SH037	X	X
	IR02-SH038		X
	IR02-SH039		X
	IR02-SH040		X
	IR02-SH041		X
	IR02-SH041A	X	X
	IR02-SH042		X
	IR02-SH043		X
	IR02-SH044		X
	IR02-SH045		X
	IR02-SH046		X
	IR02-SH047	X	X
	IR02-SH048		X
	IR02-SH049		X
	IR02-SH050	X	
	IR02-SH051	X	
	IR02-SH052	X	
Former Oil Reclamation Ponds (IR-03)	IR03-SH004	X	
	IR03-SH005	X	
	IR03-SH005W	X	
	IR03-SH006	X	
	IR03-SH007	X	X
	IR03-SH008	X	
	IR03-SH008E	X	
	IR03-SH008S	X	
	IR03-SH008W	X	
	IR03-SH009	X	

Notes:

a Field data: XRF: Copper, lead, and zinc; Immunoassay: polychlorinated biphenyls

SDGI Standard data gaps investigation

X Analysis performed

TABLE 2: LABORATORY DATA FOR METALS AND TOTAL AROCLORS IN PARCELS E AND E-2 SHORELINE SAMPLES COMPARED WITH DIFFERENT SCREENING CRITERIA

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Subarea	Sample ID	Location ID	Depth (feet bgs)	Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	Tl	V	Zn	TotalAr
E-2	IR-01/21	Slag - Panhandle	Shoreline	IR01_01	IR01SH007005	IR01SH007	0 - 0.5	0.65	7500	10	280	0.087	6300	17	12	88	1600	48000	0.18	1500	6500	740	6.5	3800	120	5400	15	1.8	0.15	55	1300	0.142
E-2	IR-01/21	Panhandle	Shoreline	IR01_02	IR01SH016005	IR01SH016	0 - 0.5	0.16	4100	2.8	21	0.086	4200	2.7	5.2	31	43	12000	0.11	950	3900	93	0.435	3700	33	90	1.4	0.22	0.11	18	110	
E-2	IR-01/21	Panhandle	Shoreline	IR01_03	IR01SH018005	IR01SH018	0 - 0.5	0.35		8.6	80	0.2	9600	6.1	10	91	140	25000	0.51	2100	14000	220	1	14000	81	150	4	0.66	0.25	52	370	2.48
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH019025	IR01SH019	2 - 2.5	0.25	5200	7.9	110	0.11	3600	4.5	8.6	67	130	19000	0.52	830	13000	140	0.5	3800	87	100	12	0.125	0.125	28	180	4.9
E-2	IR-01/21	Landfill	Shoreline	IR01_03	S	IR01SH021S	2 - 2.5	0.23	3100	2.9	67	0.055	77000	3.5	5.4	220	410	14000	1.4	810	23000	180	0.55	4900	110	150	11	0.14	0.14	19	220	6.8
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	P	IR01SH023	2 - 2.5	0.13	13000	3.3	160	0.44	6300	1.5	17	89	850	26000	1.2	1100	16000	730	0.5	110	140	690	1.55	0.65	1.8	47	200	0.26
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH025005	IR01SH025	0 - 0.5	1.2	1900	3.1	30	0.065	56000	0.13	3.5	71	480	14000	1.9	560	5400	160	0.65	3700	59	190	1.9	0.63	0.155	30	340	9.6
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH025025	IR01SH025	2 - 2.5	0.135	1500	3.7	51	0.055	4800	1.4	2.8	61	1400	14000	4.9	370	1700	80	0.55	1400	29	740	1.65	0.61	0.135	12	1000	1.1
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH026005	IR01SH026	0 - 0.5	0.3	1600	3.9	120	0.055	25000	2.3	6.2	99	2000	20000	2.8	400	3600	150	6.7	2800	92	350	27	0.7	0.14	13	1000	9.4
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH026025	IR01SH026	2 - 2.5	0.13	990	2.6	45	0.05	18000	2.3	3.8	110	4400	12000	8	480	2000	110	3.6	2300	36	1000	19	0.46	0.13	11	3000	10
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	T	IR01SH027	10 - 10.5	0.135	4800	1.1	24	0.16	2500	1.1	4.9	51	920	13000	5.3	450	3700	170	0.55	270	33	180	1.65	0.66	0.135	24	560	0.1
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	IR01SH027MID	IR01SH027	6 - 6.5	0.29	3500	2.9	36	0.72	4400	1.8	8.5	170	3300	24000	5.9	280	6000	200	14	94	220	1600	28	0.57	0.49	210	750	1.59
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	P	IR01SH027	2 - 2.5	0.5	3500	0.165	27	0.15	1700	3.2	67	400	900	57000	2.5	440	110000	690	5.8	95	2200	520	270	0.78	0.74	27	1200	0.9
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH028025	IR01SH028	2 - 2.5	0.17	3200	3.7	60	0.046	3100	6.9	4.9	120	1600	26000	1.8	55	3100	180	4.5	1600	61	820	13	0.115	0.115	88	940	19.4
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH029005	IR01SH029	0 - 0.5	0.16	2100	5.9	1300	0.065	44000	1.9	5.8	120	550	31000	1.3	630	27000	160	0.65	3600	200	170	1.9	0.65	0.16	40	690	9.4
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH029025	IR01SH029	2 - 2.5	0.18	11000	8.2	48	0.38	22000	2.3	11	77	390	40000	0.51	3500	9400	280	0.75	6900	78	150	2.2	1.3	0.18	42	230	1.9
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	IR01SH030B16	IR01SH030	14 - 14.5	0.12	3300	1.7	70	0.23	100000	1.5	5.7	30	100	15000	0.79	510	5100	200	0.48	990	46	47	1.45	0.24	0.12	34	150	0.9
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	IR01SH030B20	IR01SH030	18 - 18.5	0.19	3300	2.2	97	0.26	200000	1.9	4.5	42	380	11000	17	520	3100	240	0.75	680	35	92	14	0.33	0.19	39	400	8.6
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	T	IR01SH030	10 - 10.5	0.18	2300	3.5	25	0.23	2500	1.1	3.7	210	5300	11000	23	370	2400	180	2.7	130	30	620	37	0.13	0.24	45	1300	9.3
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	IR01SH030MID	IR01SH030	6 - 6.5	0.12	1700	2	11	0.099	1200	0.98	2.2	26	76	14000	0.82	230	1500	88	0.48	46	19	36	1.45	0.12	0.12	9.5	310	0.43
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	P	IR01SH030	2 - 2.5	0.21	1400	4	21	0.13	2900	1.9	3	140	3700	12000	20	270	790	120	7	71	73	860	16	0.77	0.13	16	1300	31
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH032005	IR01SH032	0 - 0.5	0.12	5200	2.1	68	0.049	5200	1.1	19	160	94	25000	0.38	1300	58000	880	0.49	3300	350	50	1.45	0.87	2.3	26	310	2
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH032025	IR01SH032	2 - 2.5	0.16	14000	6.4	23	0.34	3800	1.7	10	51	82	29000	0.23	2700	8400	240	0.65	4900	69	25	1.95	0.68	0.16	35	91	4.1
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	T	IR01SH033	10 - 10.5	0.21	3400	3.2	54	0.055	6200	2.1	14	110	970	20000	9.4	520	5600	270	3.3	190	130	840	1.7	0.21	0.145	55	790	8
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	IR01SH033MID	IR01SH033	6 - 6.5	0.29	3700	3	65	0.26	54000	3.6	6.5	120	1100	20000	6.4	320	4100	200	0.55	99	96	560	25	0.4	0.135	61	750	1.9
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	P	IR01SH033	2 - 2.5	0.61	6600	3.9	58	0.4	6500	1.6	7.4	65	380	14000	4.6	540	3800	290	0.5	140	68	2700	14	0.61	0.125	150	370	11
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH035005	IR01SH035	0 - 0.5	0.12	2200	3.3	19	0.0485	12000	0.68	3.7	33	300	13000	0.52	430	3400	170	0.485	250	36	86	1.45	0.26	0.12	13	180	6.5
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH035025	IR01SH035	2 - 2.5	0.14	900	2.9	7.7	0.055	2900	0.38	1.3	30	270	3900	4.4	230	1900	43	0.55	1300	20	170	1.65	0.14	0.14	7.3	210	9.3
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	T	IR01SH036	10 - 10.5	0.15	8300	6.5	34	0.39	4300	1.6	10	49	190	29000	2.3	2300	7600	280	0.6	2800	61	52		0.86	0.15	31	150	1300
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	IR01SH036MID	IR01SH036	6 - 6.5	0.14	2300	3.4	130	0.05	6400	1.9	4.4	100	2000	21000	18	340	2300	230	0.5	94	37	370	1.55	0.78	0.13	15	940	41
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	P	IR01SH036	2 - 2.5	0.21	4000	4.3	93	0.05	18000	1.9	6.9	92	1600	29000	8.5	750	3400	330	0.5	150	44	500	1.5	0.59	0.125	23	840	270
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH038005	IR01SH038	0 - 0.5	0.12	4700	5.2	40	0.0475	66000	1.2	9.7	71	230	25000	0.17	790	18000	450	0.475	560	120	44	1.45	0.45	0.12	36	170	1.5
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH038025	IR01SH038	2 - 2.5	0.11	3500	5	36	0.044	110000	1.1	7.4	65	300	22000	0.71	760	15000	470	0.44	1900	80	79	1.35	0.11	0.11	20	520	12
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	T	IR01SH039	10 - 10.5	0.16	8900	7	160	0.47	20000	3.9	13	72	570	46000	1.7	2200	7300	650	2.4	2700	65	200	1.95	0.83	1.2	37	470	1900
E-2	IR-01/21	Landfill	Sheet-Pile Wall	IR01_SP	IR01SH039MID	IR01SH039	6 - 6.5	0.16	7900	5.1	62	0.4	66000	1.7	8.4	46	38	77000	0.2	6900	6900	210	0.65	7900	60	92		0.16	0.16	29	110	320
E-2	IR-01/21	Landfill	Shoreline	IR01_03	P	IR01SH039	2 - 2.5	0.31	14000	7.8	170	0.41	48000	2.4	15	61	3000	52000	2.7	1500	5400	740	2.5	430	38	260	1.35	0.87	1.9	32	980	53
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH040025	IR01SH040	2 - 2.5	0.15	2100	3.6	21	0.053	15000	4.3	4	66	2300	16000	6	400	3700	180	0.43	730	41	330	4.6	0.105	0.105	11	700	150
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH042005	IR01SH042	0 - 0.5	0.125	5600	6.5	78	0.0495	59000	1.7	11	75	720	36000	1.1	1100	15000	560	0.495	490	81	92	1.5	0.56	1.3	28	470	5.4
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH042025	IR01SH042	2 - 2.5	0.13	1700	4.8	23	0.05	6600	1.2	3.4	160	4600	11000	14	350	2000	150	0.5	160	31	600	1.55	0.33	0.13	13	990	2.7
E-2	IR-02	IR02 Northwest	Sheet-Pile Wall	IR02_SP	T	IR02SH001	10 - 10.5	0.165	8600	10	79	0.43	51000	2.2	12	69	460	42000	1.2	2700	8100	520	0.65	5100	66	72	2	0.31	1.5	38	510	2.1
E-2	IR-02	IR02 Northwest	Sheet-Pile Wall	IR02_SP	IR02SH001MID	IR02SH001	6 - 6.5	0.13	1900	3.4	42	0.31	6900	1.4	4.3	74	1800	6500	9.7	350	1200	270	0.55	290	15	360	16	0.3	0.13	5	1700	1.68
E-2	IR-02	IR02 Northwest	Sheet-Pile Wall	IR02_SP	P	IR02SH001	2 - 2.5	0.3	4400	5.5	88	0.26	26000	1.8	7	87	3100	30000	5.8	690	3400	430	0.5	170	36	510	1.5	0.52	0.125	23	760	120
E-2	IR-02	IR02 Northwest	Shoreline	IR02_01	IR02SH002005	IR02SH002	0 - 0.5	0.125	3400	4.4	31	0.18	140000	0.97	9.1	59	190	18000	0.19	690	13000	600	0.5	2500	150	34		0.125	1.6	21	190	1.2
E-2	IR-02	IR02 Northwest	Shoreline	IR02_01	IR02SH002025	IR02SH002	2 - 2.5	0.105	930	4.6	12	0.0415	810	0.76	1.4	97	4800	5300	19	270	940	47	2.8	1600	17	510	1.25	0.105	0.105	6.7	530	0.7
E-2	IR-02	IR02 Northwest	Shoreline	IR02_01	IR02SH003005	IR02SH003	0 - 0.5	0.115	2200	3.6	33	0.14	220000	0.84	7.1	180	1200	17000	0.48	560	20000	550	0.465	3600	140	130	1.4	0.115	1.2	17	240	4.5
E-2	IR-02	IR02 Northwest	Shoreline	IR02_01	IR02SH003025	IR02SH003	2 - 2.5	0.11	1500	3.4	19	0.0445	11000	0.85	2.4	77	3000	8900	12	400	2100	110	0.445	2500	23	610	1.35	0.11	0.11	9.4	540	1.4
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH005005	IR02SH005	0 - 0.5	0.135	2500	2.7	14	0.16	48000	1.1	7	94	330	22000	0.6	370	24000	260	0.55	1400	190	110	1.6	0.135	0.135	22	500	5.9
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH005025	IR02SH005	2 - 2.5	0.26	2400	3.6	110	0.18	49000	1.7	16	130	410	23000	0.89	460	45000	280	2.6	2700	290	200	1.9	0.16	0.16	33	490	1.6
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH008005	IR02SH008	0 - 0.5	0.125	2400	4.2	11	0.17	100000	2.1	9.7	55	230	46000	0.76	460	7100	480	0.495	2000	93	68	1.5	0.125	0.125	30	140	0.66
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH008025	IR02SH008	2 - 2.5	0.15	2800	11	64	0.3	12000	4.4	16	290	1700	70000	24	690	3900	520	8.1	3400	150	600	29	2.2	0.15	91	950	6.1
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH010025	IR02SH010	2 - 2.5	0.115	2500	2.7	11	0.047	32000	1.8	3.8	46	310	9500	0.59	370	5300	210	0.47	1800	51	470	1.4	0.115	0.115	57	160	1.2
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH014025	IR02SH014	2 - 2.5	0.28	3200	3.3	26	0.042	39000	4.2	5.3	83	1600	13000	8.6	55	4400	240	0.42	2500	64	300	18	0.105	0.105	36	820	0.84
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH016025	IR02SH016	2 - 2.5	1.3	3000	8.3	21	0.0425	78000	13	11	140	1900	55000	4.7	55	9900	400	5.7	2800	210	260	15	0.105	0.105	24	1100	0.91
E	IR-02	IR02 Northwest	Shoreline	IR02_04	IR02SH019005	IR02SH019	0 - 0.5	0.1	4000	5.7	21	0.057	91000	8.6	15	100	41	38000	0.075	530	42000	430	0.39	2100	270	25	2.4	0.095	0.095	18	63	0.2
E	IR-02	IR02 Central	Shoreline	IR02C_02	IR02SH024005	IR02SH024	0 - 0.5	0.13	4900	2.7	17	0.07	88000	4.8	13	130	51	21000	0.1	850	50000	290	0.5	2800	230	40	2.7	0.13	0.13	20	67	0.35
E	IR-02	IR02 Southeast	Shoreline	IR02_1A	IR02SH037005	IR02SH037	0 - 0.5	0.31	12000	8.9	56	0.13	26000	12	13	130	430	51000	0.47	1400	20000	390	4.4	10000	220	420	16	0.155	0.155	46	1000	0.13
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH038005	IR02SH038	0 - 0.5	0.46	2700	6.2	15	0.12	150000	4.3	5.5	36	120	20000	0.096	560	5700	400	0.55	5000	43	240	1.65	0.135	0.135	15	210	
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH038025	IR02SH038	2 - 2.5	0.45	1900	4.3	9.3	0.16	210000	2.1	4.9	31	19	5900	0.098	570	4500	620	0.65	6300	35	45	2	0.165	0.165	10	75	
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH039005	IR02SH039	0 - 0.5	0.14	2400	4.8	26	0.12	120000	3.6	4.8	27	180	16000	0.095	440	4400	380	0.55	2800	46	140	1.7	0.14	0.14	16	190	0.02
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH039025	IR02SH039	2 - 2.5	0.145	2300	3.6	9.2	0.15	210000	2	4.5	22	60	6000	0.084	630	4200	500	0.55	5200	35	38	1.7	0.145	0.145	8.2	21	0.015
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH040005	IR02SH040	0 - 0.5	0.21	2900	3.9	25	0.085	110000	3.6	5.3	35	80	16000	0.097	420	5000	270	0.55	2600	58	62	1.6	0.135	0.135	30	180	0.059
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH040025	IR02SH040	2 - 2.5	0.55	940	3.3	9.6	0.13	230000	2	3.5	18	4.1	5200	0.092	440	3300	800	0.6	6500	25	2.8	1.8	0.15	0.15	4.8	23	

TABLE 2: LABORATORY DATA FOR METALS AND TOTAL AROCLORS IN PARCELS E AND E-2 SHORELINE SAMPLES COMPARED WITH DIFFERENT SCREENING CRITERIA

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Subarea	Sample ID	Location ID	Depth (feet bgs)	Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	Tl	V	Zn	TotalAr
E-2	IR-01/21	Slag - Panhandle	Shoreline	IR01_01	IR01SH007005	IR01SH007	0 - 0.5	0.65	7500	10	280	0.087	6300	17	12	88	1600	48000	0.18	1500	6500	740	6.5	3800	120	5400	15	1.8	0.15	55	1300	0.142
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH041005	IR02SH041	0 - 0.5	0.21	8200	13	81	0.3	9100	0.21	17	78	400	31000	0.77	1800	15000	510	31	12000	120	290	4.4	0.21	0.21	68	560	0.031
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH041025	IR02SH041	2 - 2.5	2.3	8100	9	270	0.097	37000	4.8	18	110	770	52000	0.87	780	25000	640	0.55	3900	180	1000	39	0.135	0.135	69	4700	0.2
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH042005	IR02SH042	0 - 0.5	0.22	2700	5.3	21	0.12	110000	1.3	5.7	31	89	16000	0.11	570	5500	370	0.55	2800	44	64	1.7	0.14	0.67	17	210	0.012
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH042025	IR02SH042	2 - 2.5	0.145	2200	3.2	7.5	0.13	130000	1.9	4.3	21	3.3	5800	0.11	570	3700	520	0.6	4600	24	3.2	1.75	0.145	0.145	9.7	13	
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH043005	IR02SH043	0 - 0.5	0.35	2500	5.5	16	0.1	93000	3.9	4.7	32	91	17000	0.084	510	4700	330	0.55	4300	44	52	1.7	0.14	0.14	16	300	0.022
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH043025	IR02SH043	2 - 2.5	0.17	3600	2.7	10	0.15	68000	2.5	5.7	27	5.4	8600	0.014	790	4500	330	0.7	3400	34	5.5	2.05	0.17	0.17	14	23	
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH044005	IR02SH044	0 - 0.5	0.44	3400	4.9	21	0.077	120000	4.6	6.3	54	480	18000	0.17	670	6300	320	0.7	5100	65	120	2.1	0.175	0.175	36	350	0.042
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH044025	IR02SH044	2 - 2.5	0.14	5100	5.2	14	0.12	47000	3.4	7.2	30	22	14000	0.1	980	5600	260	0.55	3600	41	10	1.7	0.14	0.14	21	29	0.02
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH045005	IR02SH045	0 - 0.5	0.55	9700	12	52	0.12	32000	11	15	190	2600	46000	0.31	1000	32000	450	0.7	4800	200	150	17	0.175	0.175	51	470	0.1
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH046005	IR02SH046	0 - 0.5	5.4	6100	4	28	0.1	54000	4.5	7.7	53	140	18000	0.25	800	7500	280	0.55	4700	56	320	1.7	0.14	0.14	33	230	0.31
E	IR02	IR02 Southeast	Shoreline	IR02_1A	IR02SH047005	IR02SH047	0 - 0.5	0.51	6700	4.8	31	0.06	73000	12	14	100	350	58000	0.2	1200	23000	410	0.6	3900	340	130	6.4	0.145	0.145	130	510	0.08
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH048005	IR02SH048	0 - 0.5	0.4	7800	7.4	51	0.11	64000	7.6	11	72	170	30000	0.67	1200	18000	280	0.7	5500	130	220	2.1	0.175	0.175	55	640	0.12
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH048025	IR02SH048	2 - 2.5	0.18	2800	3.7	61	0.12	110000	2.5	5.8	24	43	7300	0.24	550	4100	640	0.65	3900	29	44	1.9	0.16	0.16	19	150	
E	IR-02	IR02 Southeast	Shoreline	IR02_1B	IR02SH049005	IR02SH049	0 - 0.5	0.42	6500	6.8	33	0.36	54000	2.2	8.5	47	98	43000	0.19	1300	7700	300	2.2	3900	76	57	1.6	0.81	0.25	53	320	0.152
E	IR-02	IR02 Southeast	Shoreline	IR02_1B	IR02SH049025	IR02SH049	2 - 2.5	0.135	3000	2.3	15	0.18	64000	0.75	5.7	29	20	12000	0.07	135	4300	250	0.55	3500	41	13	1.6	0.37	0.24	26	64	0.023
E	IR-03	IR03 Oil Ponds	Shoreline	IR03_03	IR03SH007005	IR03SH007	0 - 0.5	0.15	3500	4.6	15	0.073	69000	5.9	6.3	49	190	24000	0.18	430	10000	270	0.4	1900	59	67	2.3	0.1	0.1	17	82	0.045
E	IR-03	IR03 Oil Ponds	Shoreline	IR03_03	IR03SH012025	IR03SH012	2 - 2.5	0.25	2100	4.1	30	0.05	6400	2.8	3.5	180	1900	6400	9.8	65	4200	82	0.5	1800	41	410	4.4	1.1	0.125	13	1100	0.7
	Exceeds Hunters Point ambient level (HPAL) for soil							1.43	NA	11.1	314	0.71	NA	3.14	R	R	124	NA	2.28	NA	NA	1431	2.7	NA	R	9	9.05	1.95	0.81	117	110	NA
	Exceeds protective soil concentration (PSC)							NA	NA	NA	NA	NA	NA	4.24	NA	NA	1084	NA	NA	NA	NA	NA	NA	NA	1941	442	NA	1.95	NA	NA	719	NA
	Exceeds effects-range median (ER-M) for sediment							3.7	NA	70	NA	NA	NA	9.6	NA	370	270	NA	0.71	NA	NA	NA	NA	NA	51.6	218	25	NA	NA	NA	410	0.18
	Exceeds ambient concentration for sediment							0.58	NA	15.3	NA	NA	NA	0.33	NA	114	68.1	NA	0.43	NA	NA	NA	NA	NA	112	43.2	NA	0.65	NA	NA	158	0.0148

Notes: All results in mg/kg.

bgs Below ground surface

NA Not available, no screening level available

R Screening level based on a regression equation with magnesium

TABLE 3: COMPARISON OF CORRECTED FIELD DATA TO SCREENING LEVELS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR01	Slag	IR01SH001	IR01SH001005	11-Sep-02	0	0.5	SPAWAR	Copper	59		18	mg/kg	34		
Parcel_E	IR01	Slag	IR01SH001	IR01SH001025	11-Sep-02	2	2.5	SPAWAR	Copper	89		18	mg/kg	51		
Parcel_E	IR01	Slag	IR01SH002	IR01SH002005	11-Sep-02	0	0.5	SPAWAR	Copper	85		18	mg/kg	48		
Parcel_E	IR01	Slag	IR01SH002	IR01SH002025	11-Sep-02	2	2.5	SPAWAR	Copper	130		18	mg/kg	74	YES	
Parcel_E	IR01	Slag	IR01SH003	IR01SH003005	11-Sep-02	0	0.5	SPAWAR	Copper	121		18	mg/kg	69	YES	
Parcel_E	IR01	Slag	IR01SH003	IR01SH003025	11-Sep-02	2	2.5	SPAWAR	Copper	48		18	mg/kg	27		
Parcel_E	IR01	Slag	IR01SH004	IR01SH004005	12-Sep-02	0	0.5	SPAWAR	Copper	339		18	mg/kg	192	YES	
Parcel_E	IR01	Slag	IR01SH004	IR01SH004025	12-Sep-02	2	2.5	SPAWAR	Copper	289		18	mg/kg	164	YES	
Parcel_E	IR01	Slag	IR01SH005	IR01SH005005	12-Sep-02	0	0.5	SPAWAR	Copper	982		18	mg/kg	557	YES	YES
Parcel_E	IR01	Slag	IR01SH005	IR01SH005025	12-Sep-02	2	2.5	SPAWAR	Copper	118		18	mg/kg	67		
Parcel_E	IR01	Slag	IR01SH006	IR01SH006005	12-Sep-02	0	0.5	SPAWAR	Copper	1900		18	mg/kg	1,077	YES	YES
Parcel_E	IR01	Slag	IR01SH006	IR01SH006025	12-Sep-02	2	2.5	SPAWAR	Copper	2760		18	mg/kg	1,565	YES	YES
Parcel_E	IR01	Slag	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	SPAWAR	Copper	1320		18	mg/kg	749	YES	YES
Parcel_E	IR01	Slag	IR01SH007	IR01SH007025	12-Sep-02	2	2.5	SPAWAR	Copper	1430		18	mg/kg	811	YES	YES
Parcel_E	IR01	Slag	IR01SH008	IR01SH008005	12-Sep-02	0	0.5	SPAWAR	Copper	2600		18	mg/kg	1,474	YES	YES
Parcel_E	IR01	Slag	IR01SH008	IR01SH008025	12-Sep-02	2	2.5	SPAWAR	Copper	1470		18	mg/kg	834	YES	YES
Parcel_E	IR01	Slag	IR01SH009	IR01SH009005	28-Aug-02	0	0.5	SPAWAR	Copper	366		18	mg/kg	208	YES	
Parcel_E	IR01	Slag	IR01SH009	IR01SH009025	28-Aug-02	2	2.5	SPAWAR	Copper	574		18	mg/kg	326	YES	YES
Parcel_E	IR01	Panhandle	IR01SH010	IR01SH010005	28-Aug-02	0	0.5	SPAWAR	Copper	17	J	18	mg/kg	10		
Parcel_E	IR01	Panhandle	IR01SH010	IR01SH010025	28-Aug-02	2	2.5	SPAWAR	Copper	17	J	18	mg/kg	10		
Parcel_E	IR01	Panhandle	IR01SH011	IR01SH011005	28-Aug-02	0	0.5	SPAWAR	Copper	12	J	18	mg/kg	7		
Parcel_E	IR01	Panhandle	IR01SH011	IR01SH011025	28-Aug-02	2	2.5	SPAWAR	Copper	19		18	mg/kg	11		
Parcel_E	IR01	Panhandle	IR01SH012	IR01SH012005	28-Aug-02	0	0.5	SPAWAR	Copper	45		18	mg/kg	26		
Parcel_E	IR01	Panhandle	IR01SH012	IR01SH012025	28-Aug-02	2	2.5	SPAWAR	Copper	24		18	mg/kg	14		
Parcel_E	IR01	Panhandle	IR01SH013	IR01SH013005	29-Aug-02	0	0.5	SPAWAR	Copper	25		18	mg/kg	14		
Parcel_E	IR01	Panhandle	IR01SH013	IR01SH013025	29-Aug-02	2	2.5	SPAWAR	Copper	36		18	mg/kg	20		
Parcel_E	IR01	Panhandle	IR01SH014	IR01SH014005	29-Aug-02	0	0.5	SPAWAR	Copper	34		18	mg/kg	19		
Parcel_E	IR01	Panhandle	IR01SH014	IR01SH014025	29-Aug-02	2	2.5	SPAWAR	Copper	96		18	mg/kg	55		
Parcel_E	IR01	Panhandle	IR01SH015	IR01SH015005	29-Aug-02	0	0.5	SPAWAR	Copper	42		18	mg/kg	24		
Parcel_E	IR01	Panhandle	IR01SH015	IR01SH015025	29-Aug-02	2	2.5	SPAWAR	Copper	61		18	mg/kg	35		
Parcel_E	IR01	Panhandle	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	SPAWAR	Copper	84		18	mg/kg	48		
Parcel_E	IR01	Panhandle	IR01SH016	IR01SH016025	29-Aug-02	2	2.5	SPAWAR	Copper	106		18	mg/kg	60		
Parcel_E	IR01	Panhandle	IR01SH017	IR01SH017005	29-Aug-02	0	0.5	SPAWAR	Copper	26		18	mg/kg	15		
Parcel_E	IR01	Panhandle	IR01SH017	IR01SH017025	29-Aug-02	2	2.5	SPAWAR	Copper	55		18	mg/kg	31		
Parcel_E	IR01	Panhandle	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	SPAWAR	Copper	164		18	mg/kg	93	YES	
Parcel_E	IR01	Panhandle	IR01SH018	IR01SH018025	29-Aug-02	2	2.5	SPAWAR	Copper	66		18	mg/kg	38		
Parcel_E	IR01	Panhandle	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	SPAWAR	Copper	54		18	mg/kg	31		
Parcel_E	IR01	Panhandle	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	SPAWAR	Copper	250		18	mg/kg	142	YES	
Parcel_E	IR01	Landfill	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	SPAWAR	Copper	169		18	mg/kg	96	YES	
Parcel_E	IR01	Landfill	IR01SH020	IR01SH020025	29-Aug-02	2	2.5	SPAWAR	Copper	225		18	mg/kg	128	YES	
Parcel_E	IR01	Landfill	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	SPAWAR	Copper	267		18	mg/kg	151	YES	
Parcel_E	IR01	Landfill	IR01SH021S	IR01SH021005S	12-Sep-02	0	0.5	SPAWAR	Copper	374		18	mg/kg	212	YES	
Parcel_E	IR01	Landfill	IR01SH021W	IR01SH021005W	12-Sep-02	0	0.5	SPAWAR	Copper	147		18	mg/kg	83	YES	

TABLE 3: COMPARISON OF CORRECTED FIELD DATA TO SCREENING LEVELS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR01	Landfill	IR01SH021	IR01SH021025	29-Aug-02	2	2.5	SPAWAR	Copper	188		18	mg/kg	107	YES	
Parcel_E	IR01	Landfill	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	SPAWAR	Copper	833		18	mg/kg	472	YES	YES
Parcel_E	IR01	Landfill	IR01SH021W	IR01SH021025W	12-Sep-02	2	2.5	SPAWAR	Copper	226		18	mg/kg	128	YES	
Parcel_E	IR01	Landfill	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	SPAWAR	Copper	919		18	mg/kg	521	YES	YES
Parcel_E	IR01	Landfill	IR01SH022E	IR01SH022005E	12-Sep-02	0	0.5	SPAWAR	Copper	2630		18	mg/kg	1,491	YES	YES
Parcel_E	IR01	Landfill	IR01SH022	IR01SH022025	28-Aug-02	2	2.5	SPAWAR	Copper	1350		18	mg/kg	766	YES	YES
Parcel_E	IR01	Landfill	IR01SH022E	IR01SH022025E	12-Sep-02	2	2.5	SPAWAR	Copper	3020		18	mg/kg	1,712	YES	YES
Parcel_E	IR01	Landfill	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	SPAWAR	Copper	1950		18	mg/kg	1,106	YES	YES
Parcel_E	IR01	Landfill	IR01SH024	IR01SH024025	28-Aug-02	2	2.5	SPAWAR	Copper	2510		18	mg/kg	1,423	YES	YES
Parcel_E	IR01	Landfill	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	SPAWAR	Copper	1560		18	mg/kg	885	YES	YES
Parcel_E	IR01	Landfill	IR01SH028E	IR01SH028005E	12-Sep-02	0	0.5	SPAWAR	Copper	425		18	mg/kg	241	YES	
Parcel_E	IR01	Landfill	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	SPAWAR	Copper	2620		18	mg/kg	1,486	YES	YES
Parcel_E	IR01	Landfill	IR01SH028E	IR01SH028025E	12-Sep-02	2	2.5	SPAWAR	Copper	1200		18	mg/kg	680	YES	YES
Parcel_E	IR01	Landfill	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	SPAWAR	Copper	183		18	mg/kg	104	YES	
Parcel_E	IR01	Landfill	IR01SH031	IR01SH031025	28-Aug-02	2	2.5	SPAWAR	Copper	49		18	mg/kg	28		
Parcel_E	IR01	Landfill	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	SPAWAR	Copper	317		18	mg/kg	180	YES	
Parcel_E	IR01	Landfill	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	SPAWAR	Copper	1590		18	mg/kg	902	YES	YES
Parcel_E	IR01	Landfill	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	SPAWAR	Copper	515		18	mg/kg	292	YES	YES
Parcel_E	IR01	Landfill	IR01SH037	IR01SH037025	28-Aug-02	2	2.5	SPAWAR	Copper	1890		18	mg/kg	1,072	YES	YES
Parcel_E	IR01	Landfill	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	SPAWAR	Copper	1430		18	mg/kg	811	YES	YES
Parcel_E	IR01	Landfill	IR01SH040S	IR01SH040005S	12-Sep-02	0	0.5	SPAWAR	Copper	300		18	mg/kg	170	YES	
Parcel_E	IR01	Landfill	IR01SH040W	IR01SH040005W	12-Sep-02	0	0.5	SPAWAR	Copper	244		18	mg/kg	138	YES	
Parcel_E	IR01	Landfill	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	SPAWAR	Copper	3660		18	mg/kg	2,075	YES	YES
Parcel_E	IR01	Landfill	IR01SH040S	IR01SH040025S	12-Sep-02	2	2.5	SPAWAR	Copper	860		18	mg/kg	488	YES	YES
Parcel_E	IR01	Landfill	IR01SH040W	IR01SH040025W	12-Sep-02	2	2.5	SPAWAR	Copper	424		18	mg/kg	240	YES	
Parcel_E	IR01	Landfill	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	SPAWAR	Copper	1420		18	mg/kg	805	YES	YES
Parcel_E	IR01	Landfill	IR01SH041N	IR01SH041005N	12-Sep-02	0	0.5	SPAWAR	Copper	1150		18	mg/kg	652	YES	YES
Parcel_E	IR01	Landfill	IR01SH041S	IR01SH041005S	12-Sep-02	0	0.5	SPAWAR	Copper	497		18	mg/kg	282	YES	YES
Parcel_E	IR01	Landfill	IR01SH041	IR01SH041025	27-Aug-02	2	2.5	SPAWAR	Copper	5400		18	mg/kg	3,062	YES	YES
Parcel_E	IR01	Landfill	IR01SH041N	IR01SH041025N	12-Sep-02	2	2.5	SPAWAR	Copper	7810		18	mg/kg	4,428	YES	YES
Parcel_E	IR01	Landfill	IR01SH041S	IR01SH041025S	12-Sep-02	2	2.5	SPAWAR	Copper	2620		18	mg/kg	1,486	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	SPAWAR	Copper	185		18	mg/kg	105	YES	
Parcel_E	IR02	IR02_NW	IR02SH004	IR02SH004025	28-Aug-02	2	2.5	SPAWAR	Copper	838		18	mg/kg	475	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH006	IR02SH006005	5-Sep-02	0	0.5	SPAWAR	Copper	160		18	mg/kg	91	YES	
Parcel_E	IR02	IR02_NW	IR02SH006	IR02SH006025	5-Sep-02	2	2.5	SPAWAR	Copper	876		18	mg/kg	497	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH010	IR02SH010005	5-Sep-02	0	0.5	SPAWAR	Copper	178		18	mg/kg	101	YES	
Parcel_E	IR02	IR02_NW	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	SPAWAR	Copper	751		18	mg/kg	426	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH011	IR02SH011005	3-Sep-02	0	0.5	SPAWAR	Copper	189		18	mg/kg	107	YES	
Parcel_E	IR02	IR02_NW	IR02SH011	IR02SH011025	3-Sep-02	2	2.5	SPAWAR	Copper	745		18	mg/kg	423	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH012	IR02SH012005	3-Sep-02	0	0.5	SPAWAR	Copper	449		18	mg/kg	255	YES	
Parcel_E	IR02	IR02_NW	IR02SH012	IR02SH012025	3-Sep-02	2	2.5	SPAWAR	Copper	590		18	mg/kg	335	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH013	IR02SH013005	3-Sep-02	0	0.5	SPAWAR	Copper	246		18	mg/kg	140	YES	
Parcel_E	IR02	IR02_NW	IR02SH013	IR02SH013025	3-Sep-02	2	2.5	SPAWAR	Copper	810		18	mg/kg	459	YES	YES

TABLE 3: COMPARISON OF CORRECTED FIELD DATA TO SCREENING LEVELS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR02	IR02_NW	IR02SH014	IR02SH014005	3-Sep-02	0	0.5	SPAWAR	Copper	320		18	mg/kg	182	YES	
Parcel_E	IR02	IR02_NW	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	SPAWAR	Copper	6250		18	mg/kg	3,544	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH015	IR02SH015005	3-Sep-02	0	0.5	SPAWAR	Copper	438		18	mg/kg	248	YES	
Parcel_E	IR02	IR02_NW	IR02SH015	IR02SH015025	3-Sep-02	2	2.5	SPAWAR	Copper	3570		18	mg/kg	2,024	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH016	IR02SH016005	3-Sep-02	0	0.5	SPAWAR	Copper	266		18	mg/kg	151	YES	
Parcel_E	IR02	IR02_NW	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	SPAWAR	Copper	2630		18	mg/kg	1,491	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH017	IR02SH017005	3-Sep-02	0	0.5	SPAWAR	Copper	85		18	mg/kg	48		
Parcel_E	IR02	IR02_NW	IR02SH017	IR02SH017025	3-Sep-02	2	2.5	SPAWAR	Copper	58		18	mg/kg	33		
Parcel_E	IR02	IR02_NW	IR02SH018	IR02SH018005	3-Sep-02	0	0.5	SPAWAR	Copper	112		18	mg/kg	64		
Parcel_E	IR02	IR02_NW	IR02SH018	IR02SH018025	3-Sep-02	2	2.5	SPAWAR	Copper	96		18	mg/kg	55		
Parcel_E	IR02	IR02_NW	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	SPAWAR	Copper	77		18	mg/kg	44		
Parcel_E	IR02	IR02_NW	IR02SH019	IR02SH019025	3-Sep-02	2	2.5	SPAWAR	Copper	736		18	mg/kg	417	YES	YES
Parcel_E	IR02	IR02_Central	IR02SH020	IR02SH020005	27-Aug-02	0	0.5	SPAWAR	Copper	71		18	mg/kg	40		
Parcel_E	IR02	IR02_Central	IR02SH020	IR02SH020025	27-Aug-02	2	2.5	SPAWAR	Copper	110		18	mg/kg	62		
Parcel_E	IR02	IR02_Central	IR02SH021	IR02SH021005	27-Aug-02	0	0.5	SPAWAR	Copper	102		18	mg/kg	58		
Parcel_E	IR02	IR02_Central	IR02SH021	IR02SH021025	27-Aug-02	2	2.5	SPAWAR	Copper	151		18	mg/kg	86	YES	
Parcel_E	IR02	IR02_Central	IR02SH022	IR02SH022005	27-Aug-02	0	0.5	SPAWAR	Copper	98		18	mg/kg	56		
Parcel_E	IR02	IR02_Central	IR02SH022	IR02SH022025	27-Aug-02	2	2.5	SPAWAR	Copper	78		18	mg/kg	44		
Parcel_E	IR02	IR02_Central	IR02SH023	IR02SH023005	27-Aug-02	0	0.5	SPAWAR	Copper	134		18	mg/kg	76	YES	
Parcel_E	IR02	IR02_Central	IR02SH023	IR02SH023025	27-Aug-02	2	2.5	SPAWAR	Copper	71		18	mg/kg	40		
Parcel_E	IR02	IR02_Central	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	SPAWAR	Copper	148		18	mg/kg	84	YES	
Parcel_E	IR02	IR02_Central	IR02SH024	IR02SH024025	27-Aug-02	2	2.5	SPAWAR	Copper	8	J	18	mg/kg	5		
Parcel_E	IR02	IR02_Central	IR02SH025	IR02SH025005	27-Aug-02	0	0.5	SPAWAR	Copper	90		18	mg/kg	51		
Parcel_E	IR02	IR02_Central	IR02SH025	IR02SH025025	27-Aug-02	2	2.5	SPAWAR	Copper	48		18	mg/kg	27		
Parcel_E	IR02	IR02_Central	IR02SH026	IR02SH026005	11-Sep-02	0	0.5	SPAWAR	Copper	90		18	mg/kg	51		
Parcel_E	IR02	IR02_Central	IR02SH026	IR02SH026025	11-Sep-02	2	2.5	SPAWAR	Copper	90		18	mg/kg	51		
Parcel_E	IR02	IR02_Central	IR02SH027	IR02SH027005	11-Sep-02	0	0.5	SPAWAR	Copper	51		18	mg/kg	29		
Parcel_E	IR02	IR02_Central	IR02SH027	IR02SH027025	11-Sep-02	2	2.5	SPAWAR	Copper	56		18	mg/kg	32		
Parcel_E	IR02	IR02_Central	IR02SH028	IR02SH028005	11-Sep-02	0	0.5	SPAWAR	Copper	109		18	mg/kg	62		
Parcel_E	IR02	IR02_Central	IR02SH028	IR02SH028025	11-Sep-02	2	2.5	SPAWAR	Copper	54		18	mg/kg	31		
Parcel_E	IR02	IR02_Central	IR02SH029	IR02SH029005	11-Sep-02	0	0.5	SPAWAR	Copper	114		18	mg/kg	65		
Parcel_E	IR02	IR02_Central	IR02SH029	IR02SH029025	11-Sep-02	2	2.5	SPAWAR	Copper	43		18	mg/kg	24		
Parcel_E	IR02	IR02_Central	IR02SH030	IR02SH030005	11-Sep-02	0	0.5	SPAWAR	Copper	139		18	mg/kg	79	YES	
Parcel_E	IR02	IR02_Central	IR02SH030	IR02SH030025	11-Sep-02	2	2.5	SPAWAR	Copper	83		18	mg/kg	47		
Parcel_E	IR02	IR02_SE	IR02SH031	IR02SH031005	10-Sep-02	0	0.5	SPAWAR	Copper	279		18	mg/kg	158	YES	
Parcel_E	IR02	IR02_SE	IR02SH031	IR02SH031025	10-Sep-02	2	2.5	SPAWAR	Copper	382		18	mg/kg	217	YES	
Parcel_E	IR02	IR02_SE	IR02SH032	IR02SH032005	10-Sep-02	0	0.5	SPAWAR	Copper	330		18	mg/kg	187	YES	
Parcel_E	IR02	IR02_SE	IR02SH032	IR02SH032025	10-Sep-02	2	2.5	SPAWAR	Copper	247		18	mg/kg	140	YES	
Parcel_E	IR02	IR02_SE	IR02SH033	IR02SH033005	10-Sep-02	0	0.5	SPAWAR	Copper	132		18	mg/kg	75	YES	
Parcel_E	IR02	IR02_SE	IR02SH033	IR02SH033025	10-Sep-02	2	2.5	SPAWAR	Copper	58		18	mg/kg	33		
Parcel_E	IR02	IR02_SE	IR02SH034	IR02SH034005	10-Sep-02	0	0.5	SPAWAR	Copper	130		18	mg/kg	74	YES	
Parcel_E	IR02	IR02_SE	IR02SH034	IR02SH034025	10-Sep-02	2	2.5	SPAWAR	Copper	63		18	mg/kg	36		
Parcel_E	IR02	IR02_SE	IR02SH035	IR02SH035005	10-Sep-02	0	0.5	SPAWAR	Copper	519		18	mg/kg	294	YES	YES

TABLE 3: COMPARISON OF CORRECTED FIELD DATA TO SCREENING LEVELS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR02	IR02_SE	IR02SH035	IR02SH035025	10-Sep-02	2	2.5	SPAWAR	Copper	122		18	mg/kg	69	YES	
Parcel_E	IR02	IR02_SE	IR02SH036	IR02SH036005	10-Sep-02	0	0.5	SPAWAR	Copper	339		18	mg/kg	192	YES	
Parcel_E	IR02	IR02_SE	IR02SH036	IR02SH036025	10-Sep-02	2	2.5	SPAWAR	Copper	126		18	mg/kg	72	YES	
Parcel_E	IR02	IR02_SE	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	SPAWAR	Copper	1010		18	mg/kg	573	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH037	IR02SH037025	9-Sep-02	2	2.5	SPAWAR	Copper	1470		18	mg/kg	834	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH041A	IR02SH041A005	10-Sep-02	0	0.5	SPAWAR	Copper	2130		18	mg/kg	1,208	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH041A	IR02SH041A025	10-Sep-02	2	2.5	SPAWAR	Copper	1980		18	mg/kg	1,123	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	SPAWAR	Copper	749		18	mg/kg	425	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH047	IR02SH047025	10-Sep-02	2	2.5	SPAWAR	Copper	606		18	mg/kg	344	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH050	IR02SH050005	6-Sep-02	0	0.5	SPAWAR	Copper	147		18	mg/kg	83	YES	
Parcel_E	IR02	IR02_SE	IR02SH050	IR02SH050025	6-Sep-02	2	2.5	SPAWAR	Copper	201		18	mg/kg	114	YES	
Parcel_E	IR02	IR02_SE	IR02SH051	IR02SH051005	6-Sep-02	0	0.5	SPAWAR	Copper	240		18	mg/kg	136	YES	
Parcel_E	IR02	IR02_SE	IR02SH051	IR02SH051025	6-Sep-02	2	2.5	SPAWAR	Copper	713		18	mg/kg	404	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH052	IR02SH052005	6-Sep-02	0	0.5	SPAWAR	Copper	87		18	mg/kg	49		
Parcel_E	IR02	IR02_SE	IR02SH052	IR02SH052025	6-Sep-02	2	2.5	SPAWAR	Copper	109		18	mg/kg	62		
Parcel_E	IR03	IR03	IR03SH001	IR03SH001005	11-Sep-02	0	0.5	SPAWAR	Copper	169		18	mg/kg	96	YES	
Parcel_E	IR03	IR03	IR03SH001	IR03SH001025	11-Sep-02	2	2.5	SPAWAR	Copper	144		18	mg/kg	82	YES	
Parcel_E	IR03	IR03	IR03SH002	IR03SH002005	11-Sep-02	0	0.5	SPAWAR	Copper	89		18	mg/kg	51		
Parcel_E	IR03	IR03	IR03SH002	IR03SH002025	11-Sep-02	2	2.5	SPAWAR	Copper	341		18	mg/kg	193	YES	
Parcel_E	IR03	IR03	IR03SH003	IR03SH003005	11-Sep-02	0	0.5	SPAWAR	Copper	361		18	mg/kg	205	YES	
Parcel_E	IR03	IR03	IR03SH003	IR03SH003025	11-Sep-02	2	2.5	SPAWAR	Copper	150		18	mg/kg	85	YES	
Parcel_E	IR03	IR03	IR03SH004	IR03SH004005	26-Aug-02	0	0.5	SPAWAR	Copper	192		18	mg/kg	109	YES	
Parcel_E	IR03	IR03	IR03SH004	IR03SH004025	26-Aug-02	2	2.5	SPAWAR	Copper	129		18	mg/kg	73	YES	
Parcel_E	IR03	IR03	IR03SH005	IR03SH005005	27-Aug-02	0	0.5	SPAWAR	Copper	154		18	mg/kg	87	YES	
Parcel_E	IR03	IR03	IR03SH005W	IR03SH005005W	13-Sep-02	0	0.5	SPAWAR	Copper	78		18	mg/kg	44		
Parcel_E	IR03	IR03	IR03SH005	IR03SH005025	27-Aug-02	2	2.5	SPAWAR	Copper	109		18	mg/kg	62		
Parcel_E	IR03	IR03	IR03SH005W	IR03SH005025W	13-Sep-02	2	2.5	SPAWAR	Copper	126		18	mg/kg	72	YES	
Parcel_E	IR03	IR03	IR03SH006	IR03SH006005	26-Aug-02	0	0.5	SPAWAR	Copper	102		18	mg/kg	58		
Parcel_E	IR03	IR03	IR03SH006	IR03SH006025	26-Aug-02	2	2.5	SPAWAR	Copper	173		18	mg/kg	98	YES	
Parcel_E	IR03	IR03	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	SPAWAR	Copper	152		18	mg/kg	86	YES	
Parcel_E	IR03	IR03	IR03SH007	IR03SH007025	26-Aug-02	2	2.5	SPAWAR	Copper	87		18	mg/kg	49		
Parcel_E	IR03	IR03	IR03SH008	IR03SH008005	26-Aug-02	0	0.5	SPAWAR	Copper	190		18	mg/kg	108	YES	
Parcel_E	IR03	IR03	IR03SH008E	IR03SH008005E	13-Sep-02	0	0.5	SPAWAR	Copper	147		18	mg/kg	83	YES	
Parcel_E	IR03	IR03	IR03SH008S	IR03SH008005S	13-Sep-02	0	0.5	SPAWAR	Copper	112		18	mg/kg	64		
Parcel_E	IR03	IR03	IR03SH008W	IR03SH008005W	13-Sep-02	0	0.5	SPAWAR	Copper	126		18	mg/kg	72	YES	
Parcel_E	IR03	IR03	IR03SH008	IR03SH008025	26-Aug-02	2	2.5	SPAWAR	Copper	1880		18	mg/kg	1,066	YES	YES
Parcel_E	IR03	IR03	IR03SH008E	IR03SH008025E	13-Sep-02	2	2.5	SPAWAR	Copper	113		18	mg/kg	64		
Parcel_E	IR03	IR03	IR03SH008S	IR03SH008025S	13-Sep-02	2	2.5	SPAWAR	Copper	1730		18	mg/kg	981	YES	YES
Parcel_E	IR03	IR03	IR03SH008W	IR03SH008025W	13-Sep-02	2	2.5	SPAWAR	Copper	154		18	mg/kg	87	YES	
Parcel_E	IR03	IR03	IR03SH009	IR03SH009005	26-Aug-02	0	0.5	SPAWAR	Copper	157		18	mg/kg	89	YES	
Parcel_E	IR03	IR03	IR03SH009	IR03SH009025	26-Aug-02	2	2.5	SPAWAR	Copper	94		18	mg/kg	53		
Parcel_E	IR03	IR03	IR03SH010	IR03SH010005	10-Sep-02	0	0.5	SPAWAR	Copper	138		18	mg/kg	78	YES	
Parcel_E	IR03	IR03	IR03SH010	IR03SH010025	10-Sep-02	2	2.5	SPAWAR	Copper	126		18	mg/kg	72	YES	

TABLE 3: COMPARISON OF CORRECTED FIELD DATA TO SCREENING LEVELS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR03	IR03	IR03SH011	IR03SH011005	10-Sep-02	0	0.5	SPAWAR	Copper	214		18	mg/kg	121	YES	
Parcel_E	IR03	IR03	IR03SH011	IR03SH011025	10-Sep-02	2	2.5	SPAWAR	Copper	3580		18	mg/kg	2,030	YES	YES
Parcel_E	IR03	IR03	IR03SH012	IR03SH012005	10-Sep-02	0	0.5	SPAWAR	Copper	67		18	mg/kg	38		
Parcel_E	IR03	IR03	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	SPAWAR	Copper	4150		18	mg/kg	2,353	YES	YES
Parcel_E	IR01	Slag	IR01SH001	IR01SH001005	11-Sep-02	0	0.5	SPAWAR	Lead	82		8	mg/kg	50	YES	
Parcel_E	IR01	Slag	IR01SH001	IR01SH001025	11-Sep-02	2	2.5	SPAWAR	Lead	569		8	mg/kg	335	YES	YES
Parcel_E	IR01	Slag	IR01SH002	IR01SH002005	11-Sep-02	0	0.5	SPAWAR	Lead	183		8	mg/kg	109	YES	
Parcel_E	IR01	Slag	IR01SH002	IR01SH002025	11-Sep-02	2	2.5	SPAWAR	Lead	225		8	mg/kg	134	YES	
Parcel_E	IR01	Slag	IR01SH003	IR01SH003005	11-Sep-02	0	0.5	SPAWAR	Lead	625		8	mg/kg	368	YES	YES
Parcel_E	IR01	Slag	IR01SH003	IR01SH003025	11-Sep-02	2	2.5	SPAWAR	Lead	64		8	mg/kg	39		
Parcel_E	IR01	Slag	IR01SH004	IR01SH004005	12-Sep-02	0	0.5	SPAWAR	Lead	425		8	mg/kg	251	YES	YES
Parcel_E	IR01	Slag	IR01SH004	IR01SH004025	12-Sep-02	2	2.5	SPAWAR	Lead	1700		8	mg/kg	999	YES	YES
Parcel_E	IR01	Slag	IR01SH005	IR01SH005005	12-Sep-02	0	0.5	SPAWAR	Lead	366		8	mg/kg	216	YES	
Parcel_E	IR01	Slag	IR01SH005	IR01SH005025	12-Sep-02	2	2.5	SPAWAR	Lead	176		8	mg/kg	105	YES	
Parcel_E	IR01	Slag	IR01SH006	IR01SH006005	12-Sep-02	0	0.5	SPAWAR	Lead	2410		8	mg/kg	1,416	YES	YES
Parcel_E	IR01	Slag	IR01SH006	IR01SH006025	12-Sep-02	2	2.5	SPAWAR	Lead	2100		8	mg/kg	1,234	YES	YES
Parcel_E	IR01	Slag	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	SPAWAR	Lead	4580		8	mg/kg	2,690	YES	YES
Parcel_E	IR01	Slag	IR01SH007	IR01SH007025	12-Sep-02	2	2.5	SPAWAR	Lead	5390		8	mg/kg	3,165	YES	YES
Parcel_E	IR01	Slag	IR01SH008	IR01SH008005	12-Sep-02	0	0.5	SPAWAR	Lead	3760		8	mg/kg	2,209	YES	YES
Parcel_E	IR01	Slag	IR01SH008	IR01SH008025	12-Sep-02	2	2.5	SPAWAR	Lead	5590		8	mg/kg	3,283	YES	YES
Parcel_E	IR01	Slag	IR01SH009	IR01SH009005	28-Aug-02	0	0.5	SPAWAR	Lead	414		8	mg/kg	245	YES	YES
Parcel_E	IR01	Slag	IR01SH009	IR01SH009025	28-Aug-02	2	2.5	SPAWAR	Lead	1130		8	mg/kg	665	YES	YES
Parcel_E	IR01	Panhandle	IR01SH010	IR01SH010005	28-Aug-02	0	0.5	SPAWAR	Lead	54		8	mg/kg	33		
Parcel_E	IR01	Panhandle	IR01SH010	IR01SH010025	28-Aug-02	2	2.5	SPAWAR	Lead	19		8	mg/kg	13		
Parcel_E	IR01	Panhandle	IR01SH011	IR01SH011005	28-Aug-02	0	0.5	SPAWAR	Lead	80		8	mg/kg	48	YES	
Parcel_E	IR01	Panhandle	IR01SH011	IR01SH011025	28-Aug-02	2	2.5	SPAWAR	Lead	33		8	mg/kg	21		
Parcel_E	IR01	Panhandle	IR01SH012	IR01SH012005	28-Aug-02	0	0.5	SPAWAR	Lead	38		8	mg/kg	24		
Parcel_E	IR01	Panhandle	IR01SH012	IR01SH012025	28-Aug-02	2	2.5	SPAWAR	Lead	25		8	mg/kg	16		
Parcel_E	IR01	Panhandle	IR01SH013	IR01SH013005	29-Aug-02	0	0.5	SPAWAR	Lead	23		8	mg/kg	15		
Parcel_E	IR01	Panhandle	IR01SH013	IR01SH013025	29-Aug-02	2	2.5	SPAWAR	Lead	39		8	mg/kg	24		
Parcel_E	IR01	Panhandle	IR01SH014	IR01SH014005	29-Aug-02	0	0.5	SPAWAR	Lead	46		8	mg/kg	28		
Parcel_E	IR01	Panhandle	IR01SH014	IR01SH014025	29-Aug-02	2	2.5	SPAWAR	Lead	188		8	mg/kg	112	YES	
Parcel_E	IR01	Panhandle	IR01SH015	IR01SH015005	29-Aug-02	0	0.5	SPAWAR	Lead	67		8	mg/kg	41		
Parcel_E	IR01	Panhandle	IR01SH015	IR01SH015025	29-Aug-02	2	2.5	SPAWAR	Lead	64		8	mg/kg	39		
Parcel_E	IR01	Panhandle	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	SPAWAR	Lead	162		8	mg/kg	97	YES	
Parcel_E	IR01	Panhandle	IR01SH016	IR01SH016025	29-Aug-02	2	2.5	SPAWAR	Lead	600		8	mg/kg	354	YES	YES
Parcel_E	IR01	Panhandle	IR01SH017	IR01SH017005	29-Aug-02	0	0.5	SPAWAR	Lead	45		8	mg/kg	28		
Parcel_E	IR01	Panhandle	IR01SH017	IR01SH017025	29-Aug-02	2	2.5	SPAWAR	Lead	79		8	mg/kg	48	YES	
Parcel_E	IR01	Panhandle	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	SPAWAR	Lead	210		8	mg/kg	125	YES	
Parcel_E	IR01	Panhandle	IR01SH018	IR01SH018025	29-Aug-02	2	2.5	SPAWAR	Lead	77		8	mg/kg	47	YES	
Parcel_E	IR01	Panhandle	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	SPAWAR	Lead	40		8	mg/kg	25		
Parcel_E	IR01	Panhandle	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	SPAWAR	Lead	199		8	mg/kg	118	YES	
Parcel_E	IR01	Landfill	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	SPAWAR	Lead	114		8	mg/kg	68	YES	

TABLE 3: COMPARISON OF CORRECTED FIELD DATA TO SCREENING LEVELS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR01	Landfill	IR01SH020	IR01SH020025	29-Aug-02	2	2.5	SPAWAR	Lead	96		8	mg/kg	58	YES	
Parcel_E	IR01	Landfill	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	SPAWAR	Lead	164		8	mg/kg	98	YES	
Parcel_E	IR01	Landfill	IR01SH021S	IR01SH021005S	12-Sep-02	0	0.5	SPAWAR	Lead	170		8	mg/kg	101	YES	
Parcel_E	IR01	Landfill	IR01SH021W	IR01SH021005W	12-Sep-02	0	0.5	SPAWAR	Lead	125		8	mg/kg	75	YES	
Parcel_E	IR01	Landfill	IR01SH021	IR01SH021025	29-Aug-02	2	2.5	SPAWAR	Lead	81		8	mg/kg	49	YES	
Parcel_E	IR01	Landfill	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	SPAWAR	Lead	268		8	mg/kg	159	YES	
Parcel_E	IR01	Landfill	IR01SH021W	IR01SH021025W	12-Sep-02	2	2.5	SPAWAR	Lead	75		8	mg/kg	46	YES	
Parcel_E	IR01	Landfill	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	SPAWAR	Lead	409		8	mg/kg	242	YES	YES
Parcel_E	IR01	Landfill	IR01SH022E	IR01SH022005E	12-Sep-02	0	0.5	SPAWAR	Lead	607		8	mg/kg	358	YES	YES
Parcel_E	IR01	Landfill	IR01SH022	IR01SH022025	28-Aug-02	2	2.5	SPAWAR	Lead	545		8	mg/kg	321	YES	YES
Parcel_E	IR01	Landfill	IR01SH022E	IR01SH022025E	12-Sep-02	2	2.5	SPAWAR	Lead	618		8	mg/kg	364	YES	YES
Parcel_E	IR01	Landfill	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	SPAWAR	Lead	1100		8	mg/kg	647	YES	YES
Parcel_E	IR01	Landfill	IR01SH024	IR01SH024025	28-Aug-02	2	2.5	SPAWAR	Lead	618		8	mg/kg	364	YES	YES
Parcel_E	IR01	Landfill	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	SPAWAR	Lead	796		8	mg/kg	469	YES	YES
Parcel_E	IR01	Landfill	IR01SH028E	IR01SH028005E	12-Sep-02	0	0.5	SPAWAR	Lead	310		8	mg/kg	183	YES	
Parcel_E	IR01	Landfill	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	SPAWAR	Lead	1010		8	mg/kg	594	YES	YES
Parcel_E	IR01	Landfill	IR01SH028E	IR01SH028025E	12-Sep-02	2	2.5	SPAWAR	Lead	153		8	mg/kg	91	YES	
Parcel_E	IR01	Landfill	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	SPAWAR	Lead	81		8	mg/kg	49	YES	
Parcel_E	IR01	Landfill	IR01SH031	IR01SH031025	28-Aug-02	2	2.5	SPAWAR	Lead	16		8	mg/kg	11		
Parcel_E	IR01	Landfill	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	SPAWAR	Lead	255		8	mg/kg	151	YES	
Parcel_E	IR01	Landfill	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	SPAWAR	Lead	460		8	mg/kg	272	YES	YES
Parcel_E	IR01	Landfill	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	SPAWAR	Lead	165		8	mg/kg	98	YES	
Parcel_E	IR01	Landfill	IR01SH037	IR01SH037025	28-Aug-02	2	2.5	SPAWAR	Lead	474		8	mg/kg	280	YES	YES
Parcel_E	IR01	Landfill	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	SPAWAR	Lead	270		8	mg/kg	160	YES	
Parcel_E	IR01	Landfill	IR01SH040S	IR01SH040005S	12-Sep-02	0	0.5	SPAWAR	Lead	130		8	mg/kg	78	YES	
Parcel_E	IR01	Landfill	IR01SH040W	IR01SH040005W	12-Sep-02	0	0.5	SPAWAR	Lead	93		8	mg/kg	56	YES	
Parcel_E	IR01	Landfill	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	SPAWAR	Lead	458		8	mg/kg	270	YES	YES
Parcel_E	IR01	Landfill	IR01SH040S	IR01SH040025S	12-Sep-02	2	2.5	SPAWAR	Lead	195		8	mg/kg	116	YES	
Parcel_E	IR01	Landfill	IR01SH040W	IR01SH040025W	12-Sep-02	2	2.5	SPAWAR	Lead	150		8	mg/kg	90	YES	
Parcel_E	IR01	Landfill	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	SPAWAR	Lead	288		8	mg/kg	171	YES	
Parcel_E	IR01	Landfill	IR01SH041N	IR01SH041005N	12-Sep-02	0	0.5	SPAWAR	Lead	243		8	mg/kg	144	YES	
Parcel_E	IR01	Landfill	IR01SH041S	IR01SH041005S	12-Sep-02	0	0.5	SPAWAR	Lead	169		8	mg/kg	101	YES	
Parcel_E	IR01	Landfill	IR01SH041	IR01SH041025	27-Aug-02	2	2.5	SPAWAR	Lead	651		8	mg/kg	384	YES	YES
Parcel_E	IR01	Landfill	IR01SH041N	IR01SH041025N	12-Sep-02	2	2.5	SPAWAR	Lead	899		8	mg/kg	529	YES	YES
Parcel_E	IR01	Landfill	IR01SH041S	IR01SH041025S	12-Sep-02	2	2.5	SPAWAR	Lead	439		8	mg/kg	259	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	SPAWAR	Lead	103		8	mg/kg	62	YES	
Parcel_E	IR02	IR02_NW	IR02SH004	IR02SH004025	28-Aug-02	2	2.5	SPAWAR	Lead	278		8	mg/kg	165	YES	
Parcel_E	IR02	IR02_NW	IR02SH006	IR02SH006005	5-Sep-02	0	0.5	SPAWAR	Lead	114		8	mg/kg	68	YES	
Parcel_E	IR02	IR02_NW	IR02SH006	IR02SH006025	5-Sep-02	2	2.5	SPAWAR	Lead	538		8	mg/kg	317	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH010	IR02SH010005	5-Sep-02	0	0.5	SPAWAR	Lead	98		8	mg/kg	59	YES	
Parcel_E	IR02	IR02_NW	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	SPAWAR	Lead	698		8	mg/kg	411	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH011	IR02SH011005	3-Sep-02	0	0.5	SPAWAR	Lead	127		8	mg/kg	76	YES	
Parcel_E	IR02	IR02_NW	IR02SH011	IR02SH011025	3-Sep-02	2	2.5	SPAWAR	Lead	156		8	mg/kg	93	YES	

TABLE 3: COMPARISON OF CORRECTED FIELD DATA TO SCREENING LEVELS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR02	IR02_NW	IR02SH012	IR02SH012005	3-Sep-02	0	0.5	SPAWAR	Lead	272		8	mg/kg	161	YES	
Parcel_E	IR02	IR02_NW	IR02SH012	IR02SH012025	3-Sep-02	2	2.5	SPAWAR	Lead	350		8	mg/kg	207	YES	
Parcel_E	IR02	IR02_NW	IR02SH013	IR02SH013005	3-Sep-02	0	0.5	SPAWAR	Lead	80		8	mg/kg	48	YES	
Parcel_E	IR02	IR02_NW	IR02SH013	IR02SH013025	3-Sep-02	2	2.5	SPAWAR	Lead	416		8	mg/kg	246	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH014	IR02SH014005	3-Sep-02	0	0.5	SPAWAR	Lead	221		8	mg/kg	131	YES	
Parcel_E	IR02	IR02_NW	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	SPAWAR	Lead	642		8	mg/kg	378	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH015	IR02SH015005	3-Sep-02	0	0.5	SPAWAR	Lead	185		8	mg/kg	110	YES	
Parcel_E	IR02	IR02_NW	IR02SH015	IR02SH015025	3-Sep-02	2	2.5	SPAWAR	Lead	913		8	mg/kg	537	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH016	IR02SH016005	3-Sep-02	0	0.5	SPAWAR	Lead	826		8	mg/kg	486	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	SPAWAR	Lead	393		8	mg/kg	232	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH017	IR02SH017005	3-Sep-02	0	0.5	SPAWAR	Lead	48		8	mg/kg	30		
Parcel_E	IR02	IR02_NW	IR02SH017	IR02SH017025	3-Sep-02	2	2.5	SPAWAR	Lead	11		8	mg/kg	8		
Parcel_E	IR02	IR02_NW	IR02SH018	IR02SH018005	3-Sep-02	0	0.5	SPAWAR	Lead	55		8	mg/kg	34		
Parcel_E	IR02	IR02_NW	IR02SH018	IR02SH018025	3-Sep-02	2	2.5	SPAWAR	Lead	48		8	mg/kg	30		
Parcel_E	IR02	IR02_NW	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	SPAWAR	Lead	48		8	mg/kg	30		
Parcel_E	IR02	IR02_NW	IR02SH019	IR02SH019025	3-Sep-02	2	2.5	SPAWAR	Lead	157		8	mg/kg	94	YES	
Parcel_E	IR02	IR02_C	IR02SH020	IR02SH020005	27-Aug-02	0	0.5	SPAWAR	Lead	49		8	mg/kg	30		
Parcel_E	IR02	IR02_C	IR02SH020	IR02SH020025	27-Aug-02	2	2.5	SPAWAR	Lead	123		8	mg/kg	74	YES	
Parcel_E	IR02	IR02_C	IR02SH021	IR02SH021005	27-Aug-02	0	0.5	SPAWAR	Lead	38		8	mg/kg	24		
Parcel_E	IR02	IR02_C	IR02SH021	IR02SH021025	27-Aug-02	2	2.5	SPAWAR	Lead	64		8	mg/kg	39		
Parcel_E	IR02	IR02_C	IR02SH022	IR02SH022005	27-Aug-02	0	0.5	SPAWAR	Lead	58		8	mg/kg	36		
Parcel_E	IR02	IR02_C	IR02SH022	IR02SH022025	27-Aug-02	2	2.5	SPAWAR	Lead	44		8	mg/kg	27		
Parcel_E	IR02	IR02_C	IR02SH023	IR02SH023005	27-Aug-02	0	0.5	SPAWAR	Lead	46		8	mg/kg	28		
Parcel_E	IR02	IR02_C	IR02SH023	IR02SH023025	27-Aug-02	2	2.5	SPAWAR	Lead	29		8	mg/kg	19		
Parcel_E	IR02	IR02_C	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	SPAWAR	Lead	6050		8	mg/kg	3,553	YES	YES
Parcel_E	IR02	IR02_C	IR02SH024	IR02SH024025	27-Aug-02	2	2.5	SPAWAR	Lead	8	J	8	mg/kg	6		
Parcel_E	IR02	IR02_C	IR02SH025	IR02SH025005	27-Aug-02	0	0.5	SPAWAR	Lead	34		8	mg/kg	21		
Parcel_E	IR02	IR02_C	IR02SH025	IR02SH025025	27-Aug-02	2	2.5	SPAWAR	Lead	14		8	mg/kg	10		
Parcel_E	IR02	IR02_C	IR02SH026	IR02SH026005	11-Sep-02	0	0.5	SPAWAR	Lead	42		8	mg/kg	26		
Parcel_E	IR02	IR02_C	IR02SH026	IR02SH026025	11-Sep-02	2	2.5	SPAWAR	Lead	11		8	mg/kg	8		
Parcel_E	IR02	IR02_C	IR02SH027	IR02SH027005	11-Sep-02	0	0.5	SPAWAR	Lead	26		8	mg/kg	17		
Parcel_E	IR02	IR02_C	IR02SH027	IR02SH027025	11-Sep-02	2	2.5	SPAWAR	Lead	16		8	mg/kg	11		
Parcel_E	IR02	IR02_C	IR02SH028	IR02SH028005	11-Sep-02	0	0.5	SPAWAR	Lead	43		8	mg/kg	27		
Parcel_E	IR02	IR02_C	IR02SH028	IR02SH028025	11-Sep-02	2	2.5	SPAWAR	Lead	43		8	mg/kg	27		
Parcel_E	IR02	IR02_C	IR02SH029	IR02SH029005	11-Sep-02	0	0.5	SPAWAR	Lead	48		8	mg/kg	30		
Parcel_E	IR02	IR02_C	IR02SH029	IR02SH029025	11-Sep-02	2	2.5	SPAWAR	Lead	8		8	mg/kg	6		
Parcel_E	IR02	IR02_C	IR02SH030	IR02SH030005	11-Sep-02	0	0.5	SPAWAR	Lead	51		8	mg/kg	31		
Parcel_E	IR02	IR02_C	IR02SH030	IR02SH030025	11-Sep-02	2	2.5	SPAWAR	Lead	14		8	mg/kg	10		
Parcel_E	IR02	IR02_SE	IR02SH031	IR02SH031005	10-Sep-02	0	0.5	SPAWAR	Lead	133		8	mg/kg	80	YES	
Parcel_E	IR02	IR02_SE	IR02SH031	IR02SH031025	10-Sep-02	2	2.5	SPAWAR	Lead	76		8	mg/kg	46	YES	
Parcel_E	IR02	IR02_SE	IR02SH032	IR02SH032005	10-Sep-02	0	0.5	SPAWAR	Lead	116		8	mg/kg	70	YES	
Parcel_E	IR02	IR02_SE	IR02SH032	IR02SH032025	10-Sep-02	2	2.5	SPAWAR	Lead	142		8	mg/kg	85	YES	
Parcel_E	IR02	IR02_SE	IR02SH033	IR02SH033005	10-Sep-02	0	0.5	SPAWAR	Lead	129		8	mg/kg	77	YES	

TABLE 3: COMPARISON OF CORRECTED FIELD DATA TO SCREENING LEVELS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR02	IR02_SE	IR02SH033	IR02SH033025	10-Sep-02	2	2.5	SPAWAR	Lead	11		8	mg/kg	8		
Parcel_E	IR02	IR02_SE	IR02SH034	IR02SH034005	10-Sep-02	0	0.5	SPAWAR	Lead	108		8	mg/kg	65	YES	
Parcel_E	IR02	IR02_SE	IR02SH034	IR02SH034025	10-Sep-02	2	2.5	SPAWAR	Lead	17		8	mg/kg	11		
Parcel_E	IR02	IR02_SE	IR02SH035	IR02SH035005	10-Sep-02	0	0.5	SPAWAR	Lead	101		8	mg/kg	61	YES	
Parcel_E	IR02	IR02_SE	IR02SH035	IR02SH035025	10-Sep-02	2	2.5	SPAWAR	Lead	73		8	mg/kg	44	YES	
Parcel_E	IR02	IR02_SE	IR02SH036	IR02SH036005	10-Sep-02	0	0.5	SPAWAR	Lead	144		8	mg/kg	86	YES	
Parcel_E	IR02	IR02_SE	IR02SH036	IR02SH036025	10-Sep-02	2	2.5	SPAWAR	Lead	310		8	mg/kg	183	YES	
Parcel_E	IR02	IR02_SE	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	SPAWAR	Lead	799		8	mg/kg	471	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH037	IR02SH037025	9-Sep-02	2	2.5	SPAWAR	Lead	607		8	mg/kg	358	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH041A	IR02SH041A005	10-Sep-02	0	0.5	SPAWAR	Lead	3300		8	mg/kg	1,939	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH041A	IR02SH041A025	10-Sep-02	2	2.5	SPAWAR	Lead	1610		8	mg/kg	947	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	SPAWAR	Lead	828		8	mg/kg	488	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH047	IR02SH047025	10-Sep-02	2	2.5	SPAWAR	Lead	785		8	mg/kg	462	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH050	IR02SH050005	6-Sep-02	0	0.5	SPAWAR	Lead	52		8	mg/kg	32		
Parcel_E	IR02	IR02_SE	IR02SH050	IR02SH050025	6-Sep-02	2	2.5	SPAWAR	Lead	72		8	mg/kg	44	YES	
Parcel_E	IR02	IR02_SE	IR02SH051	IR02SH051005	6-Sep-02	0	0.5	SPAWAR	Lead	142		8	mg/kg	85	YES	
Parcel_E	IR02	IR02_SE	IR02SH051	IR02SH051025	6-Sep-02	2	2.5	SPAWAR	Lead	213		8	mg/kg	127	YES	
Parcel_E	IR02	IR02_SE	IR02SH052	IR02SH052005	6-Sep-02	0	0.5	SPAWAR	Lead	24		8	mg/kg	16		
Parcel_E	IR02	IR02_SE	IR02SH052	IR02SH052025	6-Sep-02	2	2.5	SPAWAR	Lead	75		8	mg/kg	46	YES	
Parcel_E	IR03	IR03	IR03SH001	IR03SH001005	11-Sep-02	0	0.5	SPAWAR	Lead	59		8	mg/kg	36		
Parcel_E	IR03	IR03	IR03SH001	IR03SH001025	11-Sep-02	2	2.5	SPAWAR	Lead	65		8	mg/kg	40		
Parcel_E	IR03	IR03	IR03SH002	IR03SH002005	11-Sep-02	0	0.5	SPAWAR	Lead	47		8	mg/kg	29		
Parcel_E	IR03	IR03	IR03SH002	IR03SH002025	11-Sep-02	2	2.5	SPAWAR	Lead	90		8	mg/kg	54	YES	
Parcel_E	IR03	IR03	IR03SH003	IR03SH003005	11-Sep-02	0	0.5	SPAWAR	Lead	85		8	mg/kg	51	YES	
Parcel_E	IR03	IR03	IR03SH003	IR03SH003025	11-Sep-02	2	2.5	SPAWAR	Lead	94		8	mg/kg	57	YES	
Parcel_E	IR03	IR03	IR03SH004	IR03SH004005	26-Aug-02	0	0.5	SPAWAR	Lead	33		8	mg/kg	21		
Parcel_E	IR03	IR03	IR03SH004	IR03SH004025	26-Aug-02	2	2.5	SPAWAR	Lead	139		8	mg/kg	83	YES	
Parcel_E	IR03	IR03	IR03SH005	IR03SH005005	27-Aug-02	0	0.5	SPAWAR	Lead	100		8	mg/kg	60	YES	
Parcel_E	IR03	IR03	IR03SH005W	IR03SH005005W	13-Sep-02	0	0.5	SPAWAR	Lead	87		8	mg/kg	53	YES	
Parcel_E	IR03	IR03	IR03SH005	IR03SH005025	27-Aug-02	2	2.5	SPAWAR	Lead	283		8	mg/kg	168	YES	
Parcel_E	IR03	IR03	IR03SH005W	IR03SH005025W	13-Sep-02	2	2.5	SPAWAR	Lead	68		8	mg/kg	41		
Parcel_E	IR03	IR03	IR03SH006	IR03SH006005	26-Aug-02	0	0.5	SPAWAR	Lead	81		8	mg/kg	49	YES	
Parcel_E	IR03	IR03	IR03SH006	IR03SH006025	26-Aug-02	2	2.5	SPAWAR	Lead	72		8	mg/kg	44	YES	
Parcel_E	IR03	IR03	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	SPAWAR	Lead	169		8	mg/kg	101	YES	
Parcel_E	IR03	IR03	IR03SH007	IR03SH007025	26-Aug-02	2	2.5	SPAWAR	Lead	120		8	mg/kg	72	YES	
Parcel_E	IR03	IR03	IR03SH008	IR03SH008005	26-Aug-02	0	0.5	SPAWAR	Lead	58		8	mg/kg	36		
Parcel_E	IR03	IR03	IR03SH008E	IR03SH008005E	13-Sep-02	0	0.5	SPAWAR	Lead	72		8	mg/kg	44	YES	
Parcel_E	IR03	IR03	IR03SH008S	IR03SH008005S	13-Sep-02	0	0.5	SPAWAR	Lead	39		8	mg/kg	24		
Parcel_E	IR03	IR03	IR03SH008W	IR03SH008005W	13-Sep-02	0	0.5	SPAWAR	Lead	77		8	mg/kg	47	YES	
Parcel_E	IR03	IR03	IR03SH008	IR03SH008025	26-Aug-02	2	2.5	SPAWAR	Lead	914		8	mg/kg	538	YES	YES
Parcel_E	IR03	IR03	IR03SH008E	IR03SH008025E	13-Sep-02	2	2.5	SPAWAR	Lead	36		8	mg/kg	23		
Parcel_E	IR03	IR03	IR03SH008S	IR03SH008025S	13-Sep-02	2	2.5	SPAWAR	Lead	1030		8	mg/kg	606	YES	YES
Parcel_E	IR03	IR03	IR03SH008W	IR03SH008025W	13-Sep-02	2	2.5	SPAWAR	Lead	442		8	mg/kg	261	YES	YES

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Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR03	IR03	IR03SH009	IR03SH009005	26-Aug-02	0	0.5	SPAWAR	Lead	67		8	mg/kg	41		
Parcel_E	IR03	IR03	IR03SH009	IR03SH009025	26-Aug-02	2	2.5	SPAWAR	Lead	25		8	mg/kg	16		
Parcel_E	IR03	IR03	IR03SH010	IR03SH010005	10-Sep-02	0	0.5	SPAWAR	Lead	271		8	mg/kg	161	YES	
Parcel_E	IR03	IR03	IR03SH010	IR03SH010025	10-Sep-02	2	2.5	SPAWAR	Lead	41		8	mg/kg	26		
Parcel_E	IR03	IR03	IR03SH011	IR03SH011005	10-Sep-02	0	0.5	SPAWAR	Lead	58		8	mg/kg	36		
Parcel_E	IR03	IR03	IR03SH011	IR03SH011025	10-Sep-02	2	2.5	SPAWAR	Lead	483		8	mg/kg	285	YES	YES
Parcel_E	IR03	IR03	IR03SH012	IR03SH012005	10-Sep-02	0	0.5	SPAWAR	Lead	26		8	mg/kg	17		
Parcel_E	IR03	IR03	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	SPAWAR	Lead	644		8	mg/kg	380	YES	YES
Parcel_E	IR01	Slag	IR01SH001	IR01SH001005	11-Sep-02	0	0.5	SPAWAR	Total_Ar	0.156		0.1	mg/kg	0.1655		
Parcel_E	IR01	Slag	IR01SH001	IR01SH001225	11-Sep-02	2	2.5	SPAWAR	Total_Ar	0.139		0.1	mg/kg	0.1406		
Parcel_E	IR01	Slag	IR01SH002	IR01SH002005	11-Sep-02	0	0.5	SPAWAR	Total_Ar	0.083	J	0.1	mg/kg	0.0586		
Parcel_E	IR01	Slag	IR01SH002	IR01SH002225	11-Sep-02	2	2.5	SPAWAR	Total_Ar	0.215		0.1	mg/kg	0.2520	YES	YES
Parcel_E	IR01	Slag	IR01SH003	IR01SH003005	11-Sep-02	0	0.5	SPAWAR	Total_Ar	0.041	J	0.1	mg/kg	-0.0029		
Parcel_E	IR01	Slag	IR01SH003	IR01SH003225	11-Sep-02	2	2.5	SPAWAR	Total_Ar	0.045	J	0.1	mg/kg	0.0029		
Parcel_E	IR01	Slag	IR01SH004	IR01SH004005	12-Sep-02	0	0.5	SPAWAR	Total_Ar	0.132		0.1	mg/kg	0.1304		
Parcel_E	IR01	Slag	IR01SH004	IR01SH004225	12-Sep-02	2	2.5	SPAWAR	Total_Ar	0.129		0.1	mg/kg	0.1260		
Parcel_E	IR01	Slag	IR01SH005	IR01SH005005	12-Sep-02	0	0.5	SPAWAR	Total_Ar	0.104		0.1	mg/kg	0.0894		
Parcel_E	IR01	Slag	IR01SH005	IR01SH005225	12-Sep-02	2	2.5	SPAWAR	Total_Ar	0.215		0.1	mg/kg	0.2520	YES	YES
Parcel_E	IR01	Slag	IR01SH006	IR01SH006005	12-Sep-02	0	0.5	SPAWAR	Total_Ar	0.367		0.1	mg/kg	0.4747	YES	YES
Parcel_E	IR01	Slag	IR01SH006	IR01SH006225	12-Sep-02	2	2.5	SPAWAR	Total_Ar	0.133		0.1	mg/kg	0.1318		
Parcel_E	IR01	Slag	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	SPAWAR	Total_Ar	0.224		0.1	mg/kg	0.2652	YES	YES
Parcel_E	IR01	Slag	IR01SH007	IR01SH007225	12-Sep-02	2	2.5	SPAWAR	Total_Ar	0.322		0.1	mg/kg	0.4087	YES	YES
Parcel_E	IR01	Slag	IR01SH008	IR01SH008005	12-Sep-02	0	0.5	SPAWAR	Total_Ar	0.138		0.1	mg/kg	0.1392		
Parcel_E	IR01	Slag	IR01SH008	IR01SH008225	12-Sep-02	2	2.5	SPAWAR	Total_Ar	0.382		0.1	mg/kg	0.4966	YES	YES
Parcel_E	IR01	Slag	IR01SH009	IR01SH009005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	0.056	J	0.1	mg/kg	0.0190		
Parcel_E	IR01	Slag	IR01SH009	IR01SH009225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	0.143		0.1	mg/kg	0.1465		
Parcel_E	IR01	Panhandle	IR01SH010	IR01SH010005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	0.007	J	0.1	mg/kg	-0.0527		
Parcel_E	IR01	Panhandle	IR01SH010	IR01SH010225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	0.012	J	0.1	mg/kg	-0.0454		
Parcel_E	IR01	Panhandle	IR01SH011	IR01SH011005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	0.021	J	0.1	mg/kg	-0.0322		
Parcel_E	IR01	Panhandle	IR01SH011	IR01SH011225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	0.022	J	0.1	mg/kg	-0.0308		
Parcel_E	IR01	Panhandle	IR01SH012	IR01SH012005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	0.018	J	0.1	mg/kg	-0.0366		
Parcel_E	IR01	Panhandle	IR01SH012	IR01SH012225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	0.01	J	0.1	mg/kg	-0.0484		
Parcel_E	IR01	Panhandle	IR01SH013	IR01SH013005	29-Aug-02	0	0.5	SPAWAR	Total_Ar	0.021	J	0.1	mg/kg	-0.0322		
Parcel_E	IR01	Panhandle	IR01SH013	IR01SH013225	29-Aug-02	2	2.5	SPAWAR	Total_Ar	0.116		0.1	mg/kg	0.1069		
Parcel_E	IR01	Panhandle	IR01SH014	IR01SH014005	29-Aug-02	0	0.5	SPAWAR	Total_Ar	0.085	J	0.1	mg/kg	0.0615		
Parcel_E	IR01	Panhandle	IR01SH014	IR01SH014225	29-Aug-02	2	2.5	SPAWAR	Total_Ar	0.252		0.1	mg/kg	0.3062	YES	YES
Parcel_E	IR01	Panhandle	IR01SH015	IR01SH015005	29-Aug-02	0	0.5	SPAWAR	Total_Ar	0.056	J	0.1	mg/kg	0.0190		
Parcel_E	IR01	Panhandle	IR01SH015	IR01SH015225	29-Aug-02	2	2.5	SPAWAR	Total_Ar	0.04	J	0.1	mg/kg	-0.0044		
Parcel_E	IR01	Panhandle	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	SPAWAR	Total_Ar	0.118		0.1	mg/kg	0.1099		
Parcel_E	IR01	Panhandle	IR01SH016	IR01SH016225	29-Aug-02	2	2.5	SPAWAR	Total_Ar	0.217		0.1	mg/kg	0.2549	YES	YES
Parcel_E	IR01	Panhandle	IR01SH017	IR01SH017005	29-Aug-02	0	0.5	SPAWAR	Total_Ar	0.127		0.1	mg/kg	0.1231		
Parcel_E	IR01	Panhandle	IR01SH017	IR01SH017225	29-Aug-02	2	2.5	SPAWAR	Total_Ar	0.14		0.1	mg/kg	0.1421		
Parcel_E	IR01	Panhandle	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	SPAWAR	Total_Ar	0.782		0.1	mg/kg	1.0826	YES	YES

TABLE 3: COMPARISON OF CORRECTED FIELD DATA TO SCREENING LEVELS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR01	Panhandle	IR01SH018	IR01SH018225	29-Aug-02	2	2.5	SPAWAR	Total_Ar	0.271		0.1	mg/kg	0.3340	YES	YES
Parcel_E	IR01	Panhandle	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	0.486		0.1	mg/kg	0.6490	YES	YES
Parcel_E	IR01	Panhandle	IR01SH019	IR01SH019225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	2.091		0.1	mg/kg	3.0003	YES	YES
Parcel_E	IR01	Landfill	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	SPAWAR	Total_Ar	0.682		0.1	mg/kg	0.9361	YES	YES
Parcel_E	IR01	Landfill	IR01SH020	IR01SH020225	29-Aug-02	2	2.5	SPAWAR	Total_Ar	1.701		0.1	mg/kg	2.4290	YES	YES
Parcel_E	IR01	Landfill	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	SPAWAR	Total_Ar	1.967		0.1	mg/kg	2.8187	YES	YES
Parcel_E	IR01	Landfill	IR01SH021	IR01SH021225	29-Aug-02	2	2.5	SPAWAR	Total_Ar	1.379		0.1	mg/kg	1.9572	YES	YES
Parcel_E	IR01	Landfill	IR01SH021S	IR01SH021S005	12-Sep-02	0	0.5	SPAWAR	Total_Ar	2.281		0.1	mg/kg	3.2787	YES	YES
Parcel_E	IR01	Landfill	IR01SH021S	IR01SH021S225	12-Sep-02	2	2.5	SPAWAR	Total_Ar	4.921		0.1	mg/kg	7.1463	YES	YES
Parcel_E	IR01	Landfill	IR01SH021W	IR01SH021W005	12-Sep-02	0	0.5	SPAWAR	Total_Ar	2.596		0.1	mg/kg	3.7401	YES	YES
Parcel_E	IR01	Landfill	IR01SH021W	IR01SH021W225	12-Sep-02	2	2.5	SPAWAR	Total_Ar	4.869		0.1	mg/kg	7.0701	YES	YES
Parcel_E	IR01	Landfill	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	4.869		0.1	mg/kg	7.0701	YES	YES
Parcel_E	IR01	Landfill	IR01SH022	IR01SH022225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	7.082		0.1	mg/kg	10.3121	YES	YES
Parcel_E	IR01	Landfill	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	0.767		0.1	mg/kg	1.0607	YES	YES
Parcel_E	IR01	Landfill	IR01SH024	IR01SH024225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	0.61		0.1	mg/kg	0.8307	YES	YES
Parcel_E	IR01	Landfill	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	6.017		0.1	mg/kg	8.7519	YES	YES
Parcel_E	IR01	Landfill	IR01SH028	IR01SH028225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	2.025		0.1	mg/kg	2.9036	YES	YES
Parcel_E	IR01	Landfill	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	2.338		0.1	mg/kg	3.3622	YES	YES
Parcel_E	IR01	Landfill	IR01SH031	IR01SH031225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	0.144		0.1	mg/kg	0.1480		
Parcel_E	IR01	Landfill	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	5.209		0.1	mg/kg	7.5682	YES	YES
Parcel_E	IR01	Landfill	IR01SH034	IR01SH034225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	2.572		0.1	mg/kg	3.7050	YES	YES
Parcel_E	IR01	Landfill	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	2.425		0.1	mg/kg	3.4896	YES	YES
Parcel_E	IR01	Landfill	IR01SH037	IR01SH037225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	5.654		0.1	mg/kg	8.2201	YES	YES
Parcel_E	IR01	Landfill	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	SPAWAR	Total_Ar	8.109		0.1	mg/kg	11.8167	YES	YES
Parcel_E	IR01	Landfill	IR01SH040	IR01SH040225	27-Aug-02	2	2.5	SPAWAR	Total_Ar	10.794		0.1	mg/kg	15.7502	YES	YES
Parcel_E	IR01	Landfill	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	SPAWAR	Total_Ar	2.249		0.1	mg/kg	3.2318	YES	YES
Parcel_E	IR01	Landfill	IR01SH041	IR01SH041225	27-Aug-02	2	2.5	SPAWAR	Total_Ar	6.823		0.1	mg/kg	9.9327	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	SPAWAR	Total_Ar	1.13		0.1	mg/kg	1.5925	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH004	IR02SH004225	28-Aug-02	2	2.5	SPAWAR	Total_Ar	1.534		0.1	mg/kg	2.1843	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH004E	IR02SH004E005	13-Sep-02	0	0.5	SPAWAR	Total_Ar	1.127		0.1	mg/kg	1.5881	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH004E	IR02SH004E225	13-Sep-02	2	2.5	SPAWAR	Total_Ar	2.453		0.1	mg/kg	3.5306	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH004N	IR02SH004N005	13-Sep-02	0	0.5	SPAWAR	Total_Ar	1.714		0.1	mg/kg	2.4480	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH004N	IR02SH004N225	13-Sep-02	2	2.5	SPAWAR	Total_Ar	1.992		0.1	mg/kg	2.8553	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH004W	IR02SH004W005	13-Sep-02	0	0.5	SPAWAR	Total_Ar	1.428		0.1	mg/kg	2.0290	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH004W	IR02SH004W225	13-Sep-02	2	2.5	SPAWAR	Total_Ar	2.945		0.1	mg/kg	4.2514	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH006	IR02SH006005	5-Sep-02	0	0.5	SPAWAR	Total_Ar	0.957		0.1	mg/kg	1.3390	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH006	IR02SH006225	5-Sep-02	2	2.5	SPAWAR	Total_Ar	1.938		0.1	mg/kg	2.7762	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH010	IR02SH010005	5-Sep-02	0	0.5	SPAWAR	Total_Ar	0.277		0.1	mg/kg	0.3428	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH010	IR02SH010225	5-Sep-02	2	2.5	SPAWAR	Total_Ar	0.832		0.1	mg/kg	1.1559	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH011	IR02SH011005	3-Sep-02	0	0.5	SPAWAR	Total_Ar	0.271		0.1	mg/kg	0.3340	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH011	IR02SH011225	3-Sep-02	2	2.5	SPAWAR	Total_Ar	0.648		0.1	mg/kg	0.8863	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH012	IR02SH012005	3-Sep-02	0	0.5	SPAWAR	Total_Ar	0.168		0.1	mg/kg	0.1831		YES
Parcel_E	IR02	IR02_NW	IR02SH012	IR02SH012225	3-Sep-02	2	2.5	SPAWAR	Total_Ar	0.599		0.1	mg/kg	0.8145	YES	YES

TABLE 3: COMPARISON OF CORRECTED FIELD DATA TO SCREENING LEVELS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR02	IR02_NW	IR02SH013	IR02SH013005	3-Sep-02	0	0.5	SPAWAR	Total_Ar	0.883		0.1	mg/kg	1.2306	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH013	IR02SH013225	3-Sep-02	2	2.5	SPAWAR	Total_Ar	0.468		0.1	mg/kg	0.6226	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH014	IR02SH014005	3-Sep-02	0	0.5	SPAWAR	Total_Ar	0.577		0.1	mg/kg	0.7823	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH014	IR02SH014225	3-Sep-02	2	2.5	SPAWAR	Total_Ar	0.51		0.1	mg/kg	0.6842	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH015	IR02SH015005	3-Sep-02	0	0.5	SPAWAR	Total_Ar	0.152		0.1	mg/kg	0.1597		
Parcel_E	IR02	IR02_NW	IR02SH015	IR02SH015225	3-Sep-02	2	2.5	SPAWAR	Total_Ar	0.836		0.1	mg/kg	1.1617	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH016	IR02SH016005	3-Sep-02	0	0.5	SPAWAR	Total_Ar	0.298		0.1	mg/kg	0.3736	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH016	IR02SH016225	3-Sep-02	2	2.5	SPAWAR	Total_Ar	1.105		0.1	mg/kg	1.5558	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH017	IR02SH017005	3-Sep-02	0	0.5	SPAWAR	Total_Ar	0.143		0.1	mg/kg	0.1465		
Parcel_E	IR02	IR02_NW	IR02SH017	IR02SH017225	3-Sep-02	2	2.5	SPAWAR	Total_Ar	0.003	J	0.1	mg/kg	-0.0586		
Parcel_E	IR02	IR02_NW	IR02SH018	IR02SH018005	3-Sep-02	0	0.5	SPAWAR	Total_Ar	0.105		0.1	mg/kg	0.0908		
Parcel_E	IR02	IR02_NW	IR02SH018	IR02SH018225	3-Sep-02	2	2.5	SPAWAR	Total_Ar	0.555		0.1	mg/kg	0.7501	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	SPAWAR	Total_Ar	0.286		0.1	mg/kg	0.3560	YES	YES
Parcel_E	IR02	IR02_NW	IR02SH019	IR02SH019225	3-Sep-02	2	2.5	SPAWAR	Total_Ar	0.429		0.1	mg/kg	0.5655	YES	YES
Parcel_E	IR02	IR02_Central	IR02SH020	IR02SH020005	27-Aug-02	0	0.5	SPAWAR	Total_Ar	0.244		0.1	mg/kg	0.2945	YES	YES
Parcel_E	IR02	IR02_Central	IR02SH020	IR02SH020225	27-Aug-02	2	2.5	SPAWAR	Total_Ar	0.419		0.1	mg/kg	0.5508	YES	YES
Parcel_E	IR02	IR02_Central	IR02SH021	IR02SH021005	27-Aug-02	0	0.5	SPAWAR	Total_Ar	0.14		0.1	mg/kg	0.1421		
Parcel_E	IR02	IR02_Central	IR02SH021	IR02SH021225	27-Aug-02	2	2.5	SPAWAR	Total_Ar	0.415		0.1	mg/kg	0.5450	YES	YES
Parcel_E	IR02	IR02_Central	IR02SH022	IR02SH022005	27-Aug-02	0	0.5	SPAWAR	Total_Ar	0.238		0.1	mg/kg	0.2857	YES	YES
Parcel_E	IR02	IR02_Central	IR02SH022	IR02SH022225	27-Aug-02	2	2.5	SPAWAR	Total_Ar	0.194		0.1	mg/kg	0.2212	YES	YES
Parcel_E	IR02	IR02_Central	IR02SH023	IR02SH023005	27-Aug-02	0	0.5	SPAWAR	Total_Ar	0.152		0.1	mg/kg	0.1597		
Parcel_E	IR02	IR02_Central	IR02SH023	IR02SH023225	27-Aug-02	2	2.5	SPAWAR	Total_Ar	0.532		0.1	mg/kg	0.7164	YES	YES
Parcel_E	IR02	IR02_Central	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	SPAWAR	Total_Ar	0.226		0.1	mg/kg	0.2681	YES	YES
Parcel_E	IR02	IR02_Central	IR02SH024	IR02SH024225	27-Aug-02	2	2.5	SPAWAR	Total_Ar	0.008	J	0.1	mg/kg	-0.0513		
Parcel_E	IR02	IR02_Central	IR02SH025	IR02SH025005	27-Aug-02	0	0.5	SPAWAR	Total_Ar	0.237		0.1	mg/kg	0.2842	YES	YES
Parcel_E	IR02	IR02_Central	IR02SH025	IR02SH025225	27-Aug-02	2	2.5	SPAWAR	Total_Ar	0.002	J	0.1	mg/kg	-0.0601		
Parcel_E	IR02	IR02_Central	IR02SH026	IR02SH026005	11-Sep-02	0	0.5	SPAWAR	Total_Ar	0.087	J	0.1	mg/kg	0.0645		
Parcel_E	IR02	IR02_Central	IR02SH026	IR02SH026225	11-Sep-02	2	2.5	SPAWAR	Total_Ar	0.039	J	0.1	mg/kg	-0.0059		
Parcel_E	IR02	IR02_Central	IR02SH027	IR02SH027005	11-Sep-02	0	0.5	SPAWAR	Total_Ar	0.088	J	0.1	mg/kg	0.0659		
Parcel_E	IR02	IR02_Central	IR02SH027	IR02SH027225	11-Sep-02	2	2.5	SPAWAR	Total_Ar	0.038	J	0.1	mg/kg	-0.0073		
Parcel_E	IR02	IR02_Central	IR02SH028	IR02SH028005	11-Sep-02	0	0.5	SPAWAR	Total_Ar	0.126		0.1	mg/kg	0.1216		
Parcel_E	IR02	IR02_Central	IR02SH028	IR02SH028225	11-Sep-02	2	2.5	SPAWAR	Total_Ar	0.098	J	0.1	mg/kg	0.0806		
Parcel_E	IR02	IR02_Central	IR02SH029	IR02SH029005	11-Sep-02	0	0.5	SPAWAR	Total_Ar	0.101		0.1	mg/kg	0.0850		
Parcel_E	IR02	IR02_Central	IR02SH029	IR02SH029225	11-Sep-02	2	2.5	SPAWAR	Total_Ar	0.024	J	0.1	mg/kg	-0.0278		
Parcel_E	IR02	IR02_Central	IR02SH030	IR02SH030005	11-Sep-02	0	0.5	SPAWAR	Total_Ar	0.078	J	0.1	mg/kg	0.0513		
Parcel_E	IR02	IR02_Central	IR02SH030	IR02SH030225	11-Sep-02	2	2.5	SPAWAR	Total_Ar	0.055	J	0.1	mg/kg	0.0176		
Parcel_E	IR02	IR02_SE	IR02SH031	IR02SH031005	10-Sep-02	0	0.5	SPAWAR	Total_Ar	0.204		0.1	mg/kg	0.2359	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH031	IR02SH031225	10-Sep-02	2	2.5	SPAWAR	Total_Ar	0.076	J	0.1	mg/kg	0.0483		
Parcel_E	IR02	IR02_SE	IR02SH032	IR02SH032005	10-Sep-02	0	0.5	SPAWAR	Total_Ar	0.072	J	0.1	mg/kg	0.0425		
Parcel_E	IR02	IR02_SE	IR02SH032	IR02SH032225	10-Sep-02	2	2.5	SPAWAR	Total_Ar	0.428		0.1	mg/kg	0.5640	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH033	IR02SH033005	10-Sep-02	0	0.5	SPAWAR	Total_Ar	0.086	J	0.1	mg/kg	0.0630		
Parcel_E	IR02	IR02_SE	IR02SH033	IR02SH033225	10-Sep-02	2	2.5	SPAWAR	Total_Ar	0.092	J	0.1	mg/kg	0.0718		
Parcel_E	IR02	IR02_SE	IR02SH034	IR02SH034005	10-Sep-02	0	0.5	SPAWAR	Total_Ar	0.107		0.1	mg/kg	0.0938		

TABLE 3: COMPARISON OF CORRECTED FIELD DATA TO SCREENING LEVELS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Smp_ID	Smp_Date	Top_Ft	Bot_Ft	LAB	Analyte	Field Data	Qual	RepLim	Units	Corrected Field Data	Near Shore Ambient Bay	Exceeds ER-M?
Parcel_E	IR02	IR02_SE	IR02SH034	IR02SH034225	10-Sep-02	2	2.5	SPAWAR	Total_Ar	0.105		0.1	mg/kg	0.0908		
Parcel_E	IR02	IR02_SE	IR02SH035	IR02SH035005	10-Sep-02	0	0.5	SPAWAR	Total_Ar	0.106		0.1	mg/kg	0.0923		
Parcel_E	IR02	IR02_SE	IR02SH035	IR02SH035225	10-Sep-02	2	2.5	SPAWAR	Total_Ar	0.395		0.1	mg/kg	0.5157	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH036	IR02SH036005	10-Sep-02	0	0.5	SPAWAR	Total_Ar	0.165		0.1	mg/kg	0.1787		
Parcel_E	IR02	IR02_SE	IR02SH036	IR02SH036225	10-Sep-02	2	2.5	SPAWAR	Total_Ar	0.255		0.1	mg/kg	0.3106	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	SPAWAR	Total_Ar	0.138		0.1	mg/kg	0.1392		
Parcel_E	IR02	IR02_SE	IR02SH037	IR02SH037225	9-Sep-02	2	2.5	SPAWAR	Total_Ar	0.386		0.1	mg/kg	0.5025	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH041A	IR02SH041A005	10-Sep-02	0	0.5	SPAWAR	Total_Ar	0.109		0.1	mg/kg	0.0967		
Parcel_E	IR02	IR02_SE	IR02SH041A	IR02SH041A225	10-Sep-02	2	2.5	SPAWAR	Total_Ar	0.319		0.1	mg/kg	0.4043	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	SPAWAR	Total_Ar	0.129		0.1	mg/kg	0.1260		
Parcel_E	IR02	IR02_SE	IR02SH047	IR02SH047225	10-Sep-02	2	2.5	SPAWAR	Total_Ar	0.206		0.1	mg/kg	0.2388	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH050	IR02SH050005	6-Sep-02	0	0.5	SPAWAR	Total_Ar	0.128		0.1	mg/kg	0.1245		
Parcel_E	IR02	IR02_SE	IR02SH050	IR02SH050225	6-Sep-02	2	2.5	SPAWAR	Total_Ar	0.168		0.1	mg/kg	0.1831		YES
Parcel_E	IR02	IR02_SE	IR02SH051	IR02SH051005	6-Sep-02	0	0.5	SPAWAR	Total_Ar	0.166		0.1	mg/kg	0.1802		YES
Parcel_E	IR02	IR02_SE	IR02SH051	IR02SH051225	6-Sep-02	2	2.5	SPAWAR	Total_Ar	0.286		0.1	mg/kg	0.3560	YES	YES
Parcel_E	IR02	IR02_SE	IR02SH052	IR02SH052005	6-Sep-02	0	0.5	SPAWAR	Total_Ar	0.154		0.1	mg/kg	0.1626		
Parcel_E	IR02	IR02_SE	IR02SH052	IR02SH052225	6-Sep-02	2	2.5	SPAWAR	Total_Ar	0.163		0.1	mg/kg	0.1758		
Parcel_E	IR03	IR03	IR03SH001	IR03SH001005	11-Sep-02	0	0.5	SPAWAR	Total_Ar	0.06	J	0.1	mg/kg	0.0249		
Parcel_E	IR03	IR03	IR03SH001	IR03SH001225	11-Sep-02	2	2.5	SPAWAR	Total_Ar	0.107		0.1	mg/kg	0.0938		
Parcel_E	IR03	IR03	IR03SH002	IR03SH002005	11-Sep-02	0	0.5	SPAWAR	Total_Ar	0.05	J	0.1	mg/kg	0.0103		
Parcel_E	IR03	IR03	IR03SH002	IR03SH002225	11-Sep-02	2	2.5	SPAWAR	Total_Ar	0.19		0.1	mg/kg	0.2154	YES	YES
Parcel_E	IR03	IR03	IR03SH003	IR03SH003005	11-Sep-02	0	0.5	SPAWAR	Total_Ar	0.413		0.1	mg/kg	0.5420	YES	YES
Parcel_E	IR03	IR03	IR03SH003	IR03SH003225	11-Sep-02	2	2.5	SPAWAR	Total_Ar	0.336		0.1	mg/kg	0.4292	YES	YES
Parcel_E	IR03	IR03	IR03SH004	IR03SH004005	26-Aug-02	0	0.5	SPAWAR	Total_Ar	0.081	J	0.1	mg/kg	0.0557		
Parcel_E	IR03	IR03	IR03SH004	IR03SH004225	26-Aug-02	2	2.5	SPAWAR	Total_Ar	0.121		0.1	mg/kg	0.1143		
Parcel_E	IR03	IR03	IR03SH005	IR03SH005005	27-Aug-02	0	0.5	SPAWAR	Total_Ar	0.083	J	0.1	mg/kg	0.0586		
Parcel_E	IR03	IR03	IR03SH005	IR03SH005225	27-Aug-02	2	2.5	SPAWAR	Total_Ar	0.144		0.1	mg/kg	0.1480		
Parcel_E	IR03	IR03	IR03SH006	IR03SH006005	26-Aug-02	0	0.5	SPAWAR	Total_Ar	0.085	J	0.1	mg/kg	0.0615		
Parcel_E	IR03	IR03	IR03SH006	IR03SH006225	26-Aug-02	2	2.5	SPAWAR	Total_Ar	0.189		0.1	mg/kg	0.2139	YES	YES
Parcel_E	IR03	IR03	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	SPAWAR	Total_Ar	0.062	J	0.1	mg/kg	0.0278		
Parcel_E	IR03	IR03	IR03SH007	IR03SH007225	26-Aug-02	2	2.5	SPAWAR	Total_Ar	0.48		0.1	mg/kg	0.6402	YES	YES
Parcel_E	IR03	IR03	IR03SH008	IR03SH008005	26-Aug-02	0	0.5	SPAWAR	Total_Ar	0.058	J	0.1	mg/kg	0.0220		
Parcel_E	IR03	IR03	IR03SH008	IR03SH008225	26-Aug-02	2	2.5	SPAWAR	Total_Ar	0.522		0.1	mg/kg	0.7017	YES	YES
Parcel_E	IR03	IR03	IR03SH009	IR03SH009005	26-Aug-02	0	0.5	SPAWAR	Total_Ar	0.063	J	0.1	mg/kg	0.0293		
Parcel_E	IR03	IR03	IR03SH009	IR03SH009225	26-Aug-02	2	2.5	SPAWAR	Total_Ar	0.02	J	0.1	mg/kg	-0.0337		
Parcel_E	IR03	IR03	IR03SH010	IR03SH010005	10-Sep-02	0	0.5	SPAWAR	Total_Ar	0.064	J	0.1	mg/kg	0.0308		
Parcel_E	IR03	IR03	IR03SH010	IR03SH010225	10-Sep-02	2	2.5	SPAWAR	Total_Ar	0.039	J	0.1	mg/kg	-0.0059		
Parcel_E	IR03	IR03	IR03SH011	IR03SH011005	10-Sep-02	0	0.5	SPAWAR	Total_Ar	0.101		0.1	mg/kg	0.0850		
Parcel_E	IR03	IR03	IR03SH011	IR03SH011225	10-Sep-02	2	2.5	SPAWAR	Total_Ar	0.514		0.1	mg/kg	0.6900	YES	YES
Parcel_E	IR03	IR03	IR03SH012	IR03SH012005	10-Sep-02	0	0.5	SPAWAR	Total_Ar	0.077	J	0.1	mg/kg	0.0498		
Parcel_E	IR03	IR03	IR03SH012	IR03SH012225	10-Sep-02	2	2.5	SPAWAR	Total_Ar	0.619		0.1	mg/kg	0.8438	YES	YES

Notes:

Copper: Lab =0.567*RSC + 0.0867

Lead: Lab= 0.587•RSC + 1.491

PCB: Lab= 1.465•RSC - 0.063

TABLE 4: HQS FOR WILLET, SURF SCOTER, AND RED-TAILED HAWK

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

	Surf Scoter				Willet*Macoma*				Willet*sbi*				Red-tailed Hawk			
	0 to 0.5 foot bgs		2 to 2.5 feet bgs		0 to 0.5 foot bgs		2 to 2.5 feet bgs		0 to 0.5 foot bgs		2 to 2.5 feet bgs		0 to 0.5 foot bgs		2 to 2.5 feet bgs	
	HQ (dose/high TRV)	HQ (dose/low TRV)	HQ (dose/high TRV)	HQ (dose/low TRV)	HQ (dose/high TRV)	HQ (dose/low TRV)	HQ (dose/high TRV)	HQ (dose/low TRV)	HQ (dose/high TRV)	HQ (dose/low TRV)	HQ (dose/high TRV)	HQ (dose/low TRV)	HQ (dose/high TRV)	HQ (dose/low TRV)	HQ (dose/high TRV)	HQ (dose/low TRV)
Cadmium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.23**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.66**	<1.0	**1.16**	<1.0	**7.46**	<1.0	<1.0	<1.0	**1.09**
Lead	<1.0	**2.91**	<1.0	**8.96**	<1.0	**9.02**	<1.0	**28.8**	<1.0	**33**	<1.0	**102**	<1.0	**3.63**	<1.0	**1.12**
Mercury	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.09**	<1.0	<1.0	<1.0	**2.18**	<1.0	<1.0	<1.0	<1.0
PCBs (congeners)	<1.0	<1.0	NA	NA	<1.0	**6.78**	NA	NA	**1.93**	**23.3**	NA	NA	<1.0	**1.30**	NA	NA
PCBs (Aroclors)	<1.0	<1.0	<1.0	**9.22**	<1.0	**1.02**	**2.36**	**28.6**	<1.0	**3.50**	**8.12**	**98.4**	<1.0	<1.0	<1.0	<1.0
Total DDTs	<1.0	<1.0	<1.0	**2.14**	<1.0	<1.0	<1.0	**6.64**	<1.0	**2.07**	<1.0	**27**	<1.0	<1.0	<1.0	<1.0
Dieldrin	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.08**	<1.0	<1.0	<1.0	<1.0

Notes: Highlighted cells show $HQ_{(dose/high\ TRV)}$ values that exceed 1.0.

bgs Below ground surface
DDT Dichlorodiphenyltrichloroethane
HQ Hazard quotient
NA Not available
PCB Polychlorinated biphenyls

TABLE 5: HQS FOR THE HOUSE MOUSE

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Chemical of Potential Ecological Concern	House Mouse			
	0 to 0.5 foot bgs		2 to 2.5 feet bgs	
	HQ (dose/high TRV)	HQ (dose/low TRV)	HQ (dose/high TRV)	HQ (dose/low TRV)
Aluminum	3.06	87.5	7.72	77.2
Antimony	1.34	13.4	5.39	53.9
Cadmium	1.18	51.9	<1.0	20.9
Copper	<1.0	43.2	1.18	277
Lead	<1.0	5.89	<1.0	18.2
Manganese	<1.0	1.66	<1.0	1.76
Molybdenum	2.91	29.1	1.80	1.80
Nickel	<1.0	18.3	<1.0	15.1
Selenium	<1.0	2.74	<1.0	3.02
Vanadium	1.30	13.0	<1.0	8.31
Zinc	<1.0	12.3	1.04	50.0
Total PCBs (congeners)	155	555	NA	NA
Total Aroclors	23.3	83.2	584	2,009
Total DDTs	<1.0	<1.0	<1.0	8.44
Alpha-Chlordane	<1.0	<1.0	<1.0	2.12
Gamma-Chlordane	<1.0	1.13	<1.0	3.81
High-Molecular-Weight PAH	<1.0	<1.0	<1.0	1.14

Notes: Highlighted cells show $HQ_{(dose/high)}$ values that exceed 1.0.

bgs Below ground surface
DDT Dichlorodiphenyltrichloroethane
HQ Hazard quotient
NA Not available
PCB Polychlorinated biphenyls

APPENDIX A
ANALYTICAL RESULTS FOR THE PARCELS E AND E-2 SHORELINE
(PROVIDED ON COMPACT DISC ONLY)

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-1	IR01SH001	IR01SH001005	11-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.156	
	IR01SH001	IR01SH001005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	59	
	IR01SH001	IR01SH001005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	82	
	IR01SH001	IR01SH001005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	201	
	IR01SH001	IR01SH001025	11-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.139	
	IR01SH001	IR01SH001025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	89	
	IR01SH001	IR01SH001025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	569	
	IR01SH001	IR01SH001025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	377	
	IR01SH002	IR01SH002005	11-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.083	J
	IR01SH002	IR01SH002005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	85	
	IR01SH002	IR01SH002005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	183	
	IR01SH002	IR01SH002005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	238	
	IR01SH002	IR01SH002025	11-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.215	
	IR01SH002	IR01SH002025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	130	
	IR01SH002	IR01SH002025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	225	
	IR01SH002	IR01SH002025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	291	
	IR01SH003	IR01SH003005	11-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.041	J
	IR01SH003	IR01SH003005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	121	
	IR01SH003	IR01SH003005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	625	
	IR01SH003	IR01SH003005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	234	
	IR01SH003	IR01SH003025	11-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.045	J
	IR01SH003	IR01SH003025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	48	
	IR01SH003	IR01SH003025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	64	
	IR01SH003	IR01SH003025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	111	
	IR01SH004	IR01SH004005	12-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.132	
	IR01SH004	IR01SH004005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	339	
	IR01SH004	IR01SH004005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	425	
	IR01SH004	IR01SH004005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	331	
	IR01SH004	IR01SH004025	12-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.129	
	IR01SH004	IR01SH004025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	289	
	IR01SH004	IR01SH004025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	1700	
	IR01SH004	IR01SH004025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	711	
	IR01SH005	IR01SH005005	12-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.104	
	IR01SH005	IR01SH005005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	982	
	IR01SH005	IR01SH005005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	366	
	IR01SH005	IR01SH005005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	395	
	IR01SH005	IR01SH005025	12-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.215	
	IR01SH005	IR01SH005025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	118	
	IR01SH005	IR01SH005025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	176	
	IR01SH005	IR01SH005025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	340	
	IR01SH006	IR01SH006005	12-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.367	
	IR01SH006	IR01SH006005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	1900	
	IR01SH006	IR01SH006005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	2410	
	IR01SH006	IR01SH006005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	1210	
	IR01SH006	IR01SH006025	12-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.133	
	IR01SH006	IR01SH006025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	2760	
	IR01SH006	IR01SH006025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	2100	
	IR01SH006	IR01SH006025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	6240	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDI-1 (Continued)	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.224	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	1320	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	4580	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	6630	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PCB	Aroclor-1016	0.015	0.015	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PCB	Aroclor-1221	0.03	0.03	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PCB	Aroclor-1232	0.015	0.015	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PCB	Aroclor-1242	0.015	0.015	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PCB	Aroclor-1248	0.015	0.015	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PCB	Aroclor-1254	0.015	0.056	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PCB	Aroclor-1260	0.015	0.086	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	4,4'-DDD	0.042	0.042	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	4,4'-DDE	0.042	0.042	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	4,4'-DDT	0.042	0.042	UJ7
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Aldrin	0.021	0.021	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Alpha-BHC	0.021	0.021	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Alpha-Chlordane	0.021	0.021	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Beta-BHC	0.021	0.021	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Delta-BHC	0.021	0.021	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Dieldrin	0.042	0.042	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Endosulfan I	0.021	0.021	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Endosulfan II	0.042	0.042	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Endosulfan Sulfate	0.042	0.042	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Endrin	0.042	0.042	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Endrin Aldehyde	0.042	0.042	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Gamma-BHC (Lindane)	0.021	0.021	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Gamma-Chlordane	0.021	0.021	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Heptachlor	0.021	0.021	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Heptachlor Epoxide	0.021	0.021	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Methoxychlor	0.21	0.21	UJ7
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	PEST	Toxaphene	0.76	0.76	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.2	4.2	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-1 (Continued)	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.2	4.2	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Anthracene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Azobenzene	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	0.23	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Benzoic Acid	4.2	4.2	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Benzyl Alcohol	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Carbazole	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Chrysene	0.17	0.091	J
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Di-N-Butylphthalate	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Di-N-Octylphthalate	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Fluoranthene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Fluorene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.2	4.2	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Isophorone	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Naphthalene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.84	0.84	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-1 (Continued)	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Phenanthrene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Phenol	0.84	0.84	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	SVOA8270	Pyrene	0.17	0.17	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Aluminum	6.1	7500	J3
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Antimony	3.7	15	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Arsenic	0.3	10	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Barium	0.61	280	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Beryllium	0.12	0.087	J
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Cadmium	0.3	17	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Calcium	30	6300	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Chromium	0.61	88	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Cobalt	1.2	12	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Copper	3	1600	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Iron	61	48000	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Lead	91	5400	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Magnesium	30	6500	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Manganese	0.61	740	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Mercury	0.025	0.18	J3
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Molybdenum	1.2	6.5	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Nickel	1.2	120	J34
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Potassium	150	1500	J3
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Selenium	0.3	1.8	J3
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Silver	0.3	0.65	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Sodium	150	3800	J3
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Thallium	0.3	0.3	U
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Vanadium	0.61	55	
	IR01SH007	IR01SH007005	12-Sep-02	0	0.5	C&T	TMETAL	Zinc	6.1	1300	
	IR01SH007	IR01SH007025	12-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.322	
	IR01SH007	IR01SH007025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	1430	
	IR01SH007	IR01SH007025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	5390	
	IR01SH007	IR01SH007025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	7460	
	IR01SH008	IR01SH008005	12-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.138	
	IR01SH008	IR01SH008005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	2600	
	IR01SH008	IR01SH008005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	3760	
	IR01SH008	IR01SH008005	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	5110	
	IR01SH008	IR01SH008025	12-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.382	
	IR01SH008	IR01SH008025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	1470	
	IR01SH008	IR01SH008025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	5590	
	IR01SH008	IR01SH008025	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	11300	
	IR01SH009	IR01SH009005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.056	J
	IR01SH009	IR01SH009005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	366	
	IR01SH009	IR01SH009005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	414	
	IR01SH009	IR01SH009005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	665	
	IR01SH009	IR01SH009025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.143	
	IR01SH009	IR01SH009025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	574	
	IR01SH009	IR01SH009025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	1130	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-1 (Continued)	IR01SH009	IR01SH009025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1900	
	IR01SH010	IR01SH010005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.007	J
	IR01SH010	IR01SH010005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	17	J
	IR01SH010	IR01SH010005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	54	
	IR01SH010	IR01SH010005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	49	
	IR01SH010	IR01SH010025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.012	J
	IR01SH010	IR01SH010025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	17	J
	IR01SH010	IR01SH010025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	19	
	IR01SH010	IR01SH010025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	64	
	IR01SH011	IR01SH011005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.021	J
	IR01SH011	IR01SH011005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	12	J
	IR01SH011	IR01SH011005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	80	
	IR01SH011	IR01SH011005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	63	
	IR01SH011	IR01SH011025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.022	J
	IR01SH011	IR01SH011025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	19	
	IR01SH011	IR01SH011025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	33	
	IR01SH011	IR01SH011025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	49	
	IR01SH012	IR01SH012005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.018	J
	IR01SH012	IR01SH012005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	45	
	IR01SH012	IR01SH012005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	38	
	IR01SH012	IR01SH012005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	127	
	IR01SH012	IR01SH012025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.01	J
	IR01SH012	IR01SH012025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	24	
	IR01SH012	IR01SH012025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	25	
	IR01SH012	IR01SH012025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	49	
	IR01SH013	IR01SH013005	29-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.021	J
	IR01SH013	IR01SH013005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	25	
	IR01SH013	IR01SH013005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	23	
	IR01SH013	IR01SH013005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	66	
	IR01SH013	IR01SH013025	29-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.116	
	IR01SH013	IR01SH013025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	36	
	IR01SH013	IR01SH013025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	39	
	IR01SH013	IR01SH013025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	94	
	IR01SH014	IR01SH014005	29-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.085	J
	IR01SH014	IR01SH014005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	34	
	IR01SH014	IR01SH014005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	46	
	IR01SH014	IR01SH014005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	92	
	IR01SH014	IR01SH014025	29-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.252	
	IR01SH014	IR01SH014025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	96	
	IR01SH014	IR01SH014025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	188	
	IR01SH014	IR01SH014025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	335	
	IR01SH015	IR01SH015005	29-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.056	J
	IR01SH015	IR01SH015005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	42	
	IR01SH015	IR01SH015005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	67	
	IR01SH015	IR01SH015005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	122	
	IR01SH015	IR01SH015025	29-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.04	J
	IR01SH015	IR01SH015025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	61	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-2 (Continued)	IR01SH015	IR01SH015025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	64	
	IR01SH015	IR01SH015025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	114	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.118	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	84	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	162	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	235	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1221	0.03	0.03	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1232	0.015	0.015	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1242	0.015	0.015	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1248	0.015	0.015	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1254	0.015	0.015	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	4,4'-DDD	0.042	0.042	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	4,4'-DDE	0.042	0.042	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	4,4'-DDT	0.042	0.042	UJ7
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Aldrin	0.021	0.021	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Alpha-BHC	0.021	0.021	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Alpha-Chlordane	0.021	0.021	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Beta-BHC	0.021	0.021	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Delta-BHC	0.021	0.021	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Dieldrin	0.042	0.042	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Endosulfan I	0.021	0.021	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Endosulfan II	0.042	0.042	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Endosulfan Sulfate	0.042	0.042	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Endrin	0.042	0.042	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Endrin Aldehyde	0.042	0.042	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Gamma-BHC (Lindane)	0.021	0.021	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Gamma-Chlordane	0.021	0.021	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Heptachlor	0.021	0.021	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Heptachlor Epoxide	0.021	0.021	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Methoxychlor	0.21	0.21	UJ7
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	PEST	Toxaphene	0.76	0.76	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.1	4.1	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-2 (Continued)	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.1	4.1	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Acenaphthene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Anthracene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Azobenzene	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.16	0.21	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzoic Acid	4.1	4.1	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzyl Alcohol	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Carbazole	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Chrysene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Di-N-Butylphthalate	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Di-N-Octylphthalate	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Fluoranthene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Fluorene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.1	4.1	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Isophorone	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Naphthalene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.83	0.83	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-2 (Continued)	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Phenanthrene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Phenol	0.83	0.83	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	SVOA8270	Pyrene	0.16	0.16	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Aluminum	4.3	4100	J3
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Antimony	2.6	1.4	J
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Arsenic	0.22	2.8	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Barium	0.43	21	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Beryllium	0.087	0.086	J
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Cadmium	0.22	2.7	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Calcium	22	4200	J9
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Chromium	0.43	31	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Cobalt	0.87	5.2	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Copper	0.43	43	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Copper	0.43	43	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Iron	22	12000	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Lead	0.13	90	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Magnesium	22	3900	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Manganese	0.43	93	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Mercury	0.021	0.11	J3
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Molybdenum	0.87	0.43	U1
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Nickel	0.87	33	J34
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Potassium	110	950	J3
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Selenium	0.22	0.22	J3
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Silver	0.22	0.16	J
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Sodium	110	3700	J3
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Thallium	0.22	0.22	U
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Vanadium	0.43	18	
	IR01SH016	IR01SH016005	29-Aug-02	0	0.5	C&T	TMETAL	Zinc	0.87	110	
	IR01SH016	IR01SH016025	29-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.217	
	IR01SH016	IR01SH016025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	106	
	IR01SH016	IR01SH016025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	600	
	IR01SH016	IR01SH016025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	398	
	IR01SH017	IR01SH017005	29-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.127	
	IR01SH017	IR01SH017005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	26	
	IR01SH017	IR01SH017005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	45	
	IR01SH017	IR01SH017005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	99	
	IR01SH017	IR01SH017025	29-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.14	
	IR01SH017	IR01SH017025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	55	
	IR01SH017	IR01SH017025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	79	
	IR01SH017	IR01SH017025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	147	
01/21SDGI-3	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.782	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	164	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	210	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	477	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1016	0.052	0.052	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1221	0.1	0.1	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1232	0.052	0.052	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1242	0.052	0.052	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1248	0.052	0.052	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1254	0.052	0.68	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PCB	Aroclor-1260	0.052	1.8	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	4,4'-DDD	0.071	0.074	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	4,4'-DDE	0.071	0.078	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	4,4'-DDT	0.071	0.45	UJ9
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Aldrin	0.036	0.036	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Alpha-BHC	0.036	0.036	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Alpha-Chlordane	0.036	0.036	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Beta-BHC	0.036	0.036	UJ7
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Delta-BHC	0.036	0.036	UJ7
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Dieldrin	0.071	0.071	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Endosulfan I	0.036	0.036	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Endosulfan II	0.071	0.071	UJ7
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Endosulfan Sulfate	0.071	0.071	UJ7
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Endrin	0.071	0.071	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Endrin Aldehyde	0.071	0.071	UJ7
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Gamma-BHC (Lindane)	0.036	0.036	UJ7
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Gamma-Chlordane	0.036	0.036	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Heptachlor	0.036	0.036	UJ7
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Heptachlor Epoxide	0.036	0.02	J7
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Methoxychlor	0.36	0.36	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	PEST	Toxaphene	1.3	1.3	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	1.4	1.4	UJ7
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	7.1	7.1	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2-Chlorophenol	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.28	0.44	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2-Methylphenol	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	2-Nitroaniline	2.9	2.9	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	2.9	2.9	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	3-Nitroaniline	2.9	2.9	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	7.1	7.1	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	1.4	1.4	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Chloroaniline	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Methylphenol	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Nitroaniline	2.9	2.9	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	4-Nitrophenol	2.9	2.9	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Acenaphthene	0.28	0.28	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.28	0.28	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Anthracene	0.28	1	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Azobenzene	1.4	1.4	UJ7
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.28	1.4	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.28	1.8	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.28	4.3	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.28	0.34	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.28	1.9	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzoic Acid	7.1	7.1	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Benzyl Alcohol	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	1.4	1.4	U4
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Carbazole	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Chrysene	0.28	4.5	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.28	0.28	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Dibenzofuran	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Diethylphthalate	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Dimethylphthalate	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Di-N-Butylphthalate	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Di-N-Octylphthalate	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Fluoranthene	0.28	1.8	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Fluorene	0.28	0.28	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	7.1	7.1	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Hexachloroethane	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.28	1.5	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Isophorone	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Naphthalene	0.28	0.28	UJ7
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Nitrobenzene	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Pentachlorophenol	2.9	2.9	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Phenanthrene	0.28	0.82	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Phenol	1.4	1.4	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	SVOA8270	Pyrene	0.28	2.3	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Aluminum	9.9	9700	J3
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Antimony	6	4	J

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Arsenic	0.5	8.6	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Barium	0.99	80	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Beryllium	0.2	0.2	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Cadmium	0.5	6.1	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Calcium	50	9600	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Chromium	0.99	91	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Cobalt	2	10	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Copper	0.99	140	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Iron	50	25000	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Lead	0.3	150	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Magnesium	50	14000	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Manganese	0.99	220	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Mercury	0.04	0.51	J3
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Molybdenum	2	1.2	U1
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Nickel	2	81	J34
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Potassium	250	2100	J3
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Selenium	0.5	0.66	J3
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Silver	0.5	0.35	J
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Sodium	250	14000	J3
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Thallium	0.5	0.5	U
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Vanadium	0.99	52	
	IR01SH018	IR01SH018005	29-Aug-02	0	0.5	C&T	TMETAL	Zinc	2	370	
	IR01SH018	IR01SH018025	29-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.271	
	IR01SH018	IR01SH018025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	66	
	IR01SH018	IR01SH018025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	77	
	IR01SH018	IR01SH018025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	124	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.486	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	54	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	40	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	112	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-008	0.000095	0.000095	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-018	0.000046	0.000046	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-028	0.000066	0.000066	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-044	0.000058	0.00268	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-052	0.000062	0.0011	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-066	0.000068	0.000068	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-077	0.000096	0.000096	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-081	0.00063	0.00063	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-101	0.00006	0.00499	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-105	0.000052	0.000052	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-114	0.00063	0.00063	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-118	0.000067	0.00135	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-123	0.00063	0.00063	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-126	0.000084	0.0014	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-128	0.00011	0.0015	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-138	0.00028	0.0206	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-153	0.00042	0.0256	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

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Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-156	0.00063	0.00063	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-157	0.00063	0.00063	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-167	0.00063	0.00063	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-169	0.00063	0.00063	U
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-170	0.00028	0.00764	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-180	0.0003	0.016	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-187	0.00027	0.009	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-189	0.00063	0.0005	J
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-195	0.000051	0.00166	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-206	0.000051	0.00069	
	IR01SH019	IR01SH019005	28-Aug-02	0	0.5	APCL	PCB	PCB-209	0.000054	0.00018	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	2.091	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	250	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	199	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	412	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1016	0.31	0.31	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1221	0.62	0.62	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1232	0.31	0.31	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1242	0.31	0.31	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1248	0.31	0.31	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1254	0.31	0.31	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1260	0.31	4.9	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	4,4'-DDD	0.042	0.042	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	4,4'-DDE	0.042	0.12	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	4,4'-DDT	0.042	0.9	UJ9
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Aldrin	0.022	0.022	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Alpha-BHC	0.022	0.022	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Alpha-Chlordane	0.022	0.027	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Beta-BHC	0.022	0.035	UJ9
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Delta-BHC	0.022	0.022	UJ7
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Dieldrin	0.042	0.37	UJ9
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Endosulfan I	0.022	0.022	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Endosulfan II	0.042	0.042	UJ7
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Endosulfan Sulfate	0.042	0.042	UJ7
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Endrin	0.042	0.042	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Endrin Aldehyde	0.042	0.042	UJ7
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Gamma-BHC (Lindane)	0.022	0.022	UJ7
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Gamma-Chlordane	0.022	0.017	J
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Heptachlor	0.022	0.022	UJ7
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Heptachlor Epoxide	0.022	0.026	UJ9
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Methoxychlor	0.22	0.22	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	PEST	Toxaphene	0.77	0.77	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.84	0.84	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.2	4.2	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.17	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.2	4.2	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Anthracene	0.17	0.68	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Azobenzene	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.63	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.69	J0
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	1.5	J0Y
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.17	UJ0
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.67	J0Y
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzoic Acid	4.2	4.2	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzyl Alcohol	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.84	0.84	U4
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Carbazole	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Chrysene	0.17	1.3	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.099	J0
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Di-N-Butylphthalate	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Di-N-Octylphthalate	0.84	0.84	UJ0
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.17	0.62	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Fluorene	0.17	0.17	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.2	4.2	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.25	J0
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Isophorone	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Naphthalene	0.17	0.17	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.17	0.16	J
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Phenol	0.84	0.84	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	SVOA8270	Pyrene	0.17	0.84	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Aluminum	5.1	5200	J3
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Antimony	3.1	12	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Arsenic	0.25	7.9	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Barium	0.51	110	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Beryllium	0.1	0.11	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Cadmium	0.25	4.5	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Calcium	25	3600	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Chromium	0.51	67	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Cobalt	1	8.6	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Copper	0.51	130	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Iron	25	19000	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Lead	0.15	100	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Magnesium	130	13000	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Manganese	0.51	140	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Mercury	0.024	0.52	J3
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Molybdenum	1	1	U1
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Nickel	1	87	J34
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Potassium	130	830	J3
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Selenium	0.25	0.25	UJ3
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Silver	0.25	0.25	J
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Sodium	130	3800	J3
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Thallium	0.25	0.25	U
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Vanadium	0.51	28	
	IR01SH019	IR01SH019025	28-Aug-02	2	2.5	C&T	TMETAL	Zinc	1	180	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.682	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	169	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	114	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	376	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-008	0.0025	0.0025	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-018	0.0012	0.0012	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-028	0.0018	0.0018	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-044	0.0016	0.0016	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-052	0.0017	0.0017	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-066	0.0018	0.0018	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-077	0.0026	0.0026	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-081	0.017	0.017	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-101	0.0016	0.0071	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-105	0.0014	0.0014	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-114	0.017	0.017	UJ9
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-118	0.0018	0.0018	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-123	0.017	0.017	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-126	0.0022	0.0022	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-128	0.0029	0.002	J
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-138	0.0015	0.019	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-153	0.0022	0.025	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-156	0.017	0.017	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-157	0.017	0.017	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-167	0.017	0.017	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-169	0.017	0.017	U
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-170	0.0015	0.0066	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-180	0.0016	0.015	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-187	0.0015	0.01	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-189	0.017	0.002	J
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-195	0.0013	0.002	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-206	0.0013	0.007	
	IR01SH020	IR01SH020005	29-Aug-02	0	0.5	APCL	PCB	PCB-209	0.0015	0.0015	U
	IR01SH020	IR01SH020025	29-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	1.701	
	IR01SH020	IR01SH020025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	225	
	IR01SH020	IR01SH020025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	96	
	IR01SH020	IR01SH020025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1170	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	1.967	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	267	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	164	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	318	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-008	0.00087	0.00087	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-018	0.00042	0.00042	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-028	0.00061	0.00061	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-044	0.00054	0.00067	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-052	0.00057	0.0036	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-066	0.00063	0.00063	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-077	0.00089	0.00089	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-081	0.0058	0.004	J
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-101	0.0055	0.063	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-105	0.00048	0.00048	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-114	0.0058	0.0058	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-118	0.00062	0.01	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-123	0.0058	0.0058	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-126	0.00077	0.0097	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-128	0.001	0.013	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-138	0.0051	0.219	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-153	0.0077	0.28	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-156	0.0058	0.0058	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-157	0.0058	0.0058	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-167	0.0058	0.0058	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-169	0.0058	0.0058	U
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-170	0.0051	0.103	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-180	0.0055	0.204	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-187	0.005	0.111	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-189	0.0058	0.004	J
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-195	0.00047	0.0176	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-206	0.00047	0.0062	
	IR01SH021	IR01SH021005	29-Aug-02	0	0.5	APCL	PCB	PCB-209	0.0005	0.0005	U
	IR01SH021	IR01SH021025	29-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	1.379	
	IR01SH021	IR01SH021025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	188	
	IR01SH021	IR01SH021025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	81	
	IR01SH021	IR01SH021025	29-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	222	
	IR01SH021S	IR01SH021005S	12-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	2.281	
	IR01SH021S	IR01SH021005S	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	374	
	IR01SH021S	IR01SH021005S	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	170	
	IR01SH021S	IR01SH021005S	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	291	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	4.921	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	833	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	268	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	594	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	0.32	0.32	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	0.63	0.63	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	0.32	0.32	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	0.32	0.32	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	0.32	0.32	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	0.32	0.32	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	0.32	6.8	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.043	0.043	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.043	0.13	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	0.043	0.98	UJ9
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Aldrin	0.022	0.022	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Alpha-BHC	0.022	0.022	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Alpha-Chlordane	0.022	0.022	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Beta-BHC	0.022	0.074	J7
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Delta-BHC	0.022	0.022	UJ7
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.043	0.37	UJ9
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.022	0.022	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.043	0.043	UJ7
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Endosulfan Sulfate	0.043	0.043	UJ7
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Endrin	0.043	0.043	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Endrin Aldehyde	0.043	0.043	UJ7
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Gamma-BHC (Lindane)	0.022	0.032	J7
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Gamma-Chlordane	0.022	0.022	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.022	0.022	UJ7
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Heptachlor Epoxide	0.022	0.037	UJ9
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.22	0.22	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	PEST	Toxaphene	0.78	0.78	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.88	0.88	UJ7
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.4	4.4	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.28	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.8	1.8	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.8	1.8	UJ0
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.8	1.8	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.4	4.4	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.8	1.8	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.8	1.8	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	0.17	0.3	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	0.88	0.88	UJ7
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.69	J0
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.68	J0
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	0.7	J0Y
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.17	UJ0
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.61	J0Y
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Benzoic Acid	4.4	4.4	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Benzyl Alcohol	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.88	1.3	U4J0
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.88	0.88	UJ0
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	0.88	0.88	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	0.17	0.97	J0
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.17	UJ0
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Di-N-Butylphthalate	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Di-N-Octylphthalate	0.88	0.88	UJ0
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.17	1.1	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	0.17	0.17	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.4	4.4	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.17	UJ0
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	0.17	0.35	J7
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.8	1.8	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.17	0.77	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Phenol	0.88	0.88	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	0.17	2.4	J0
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Aluminum	5.7	3100	J3
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Antimony	3.4	11	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Arsenic	0.28	2.9	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Barium	0.57	67	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.11	0.11	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Cadmium	0.28	3.5	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Calcium	280	77000	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Chromium	0.57	220	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Cobalt	1.1	5.4	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Copper	0.57	410	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Iron	28	14000	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Lead	0.17	150	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Magnesium	140	23000	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Manganese	0.57	180	
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Mercury	0.049	1.4	J3
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	1.1	2.1	U1
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Nickel	1.1	110	J34
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Potassium	140	810	J3
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.28	0.28	UJ3
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Silver	0.28	0.23	J
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Sodium	140	4900	J3
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Thallium	0.28	0.28	U
	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Vanadium	0.57	19	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH021S	IR01SH021025S	12-Sep-02	2	2.5	C&T	TMETAL	Zinc	1.1	220	
	IR01SH021W	IR01SH021005W	12-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	2.596	
	IR01SH021W	IR01SH021005W	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	147	
	IR01SH021W	IR01SH021005W	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	125	
	IR01SH021W	IR01SH021005W	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	419	
	IR01SH021W	IR01SH021025W	12-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	4.869	
	IR01SH021W	IR01SH021025W	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	226	
	IR01SH021W	IR01SH021025W	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	75	
	IR01SH021W	IR01SH021025W	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	222	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	4.869	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	919	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	409	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	672	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-008	0.0005	0.0005	U
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-018	0.00024	0.0021	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-028	0.00035	0.0014	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-044	0.00031	0.0026	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-052	0.00033	0.0104	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-066	0.00036	0.00036	U
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-077	0.0005	0.0005	U
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-081	0.0033	0.006	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-101	0.031	0.196	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-105	0.00027	0.00027	U
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-114	0.0033	0.011	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-118	0.00035	0.0252	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-123	0.0033	0.0033	U
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-126	0.00044	0.022	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-128	0.058	0.0359	J
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-138	0.029	0.632	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-153	0.044	0.895	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-156	0.0033	0.0033	U
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-157	0.0033	0.0033	U
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-167	0.0033	0.0033	U
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-169	0.0033	0.0033	U
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-170	0.029	0.307	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-180	0.031	0.692	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-187	0.029	0.373	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-189	0.0033	0.0087	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-195	0.027	0.0742	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-206	0.00027	0.0236	
	IR01SH022	IR01SH022005	28-Aug-02	0	0.5	APCL	PCB	PCB-209	0.00029	0.002	
	IR01SH022	IR01SH022025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	7.082	
	IR01SH022	IR01SH022025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	1350	
	IR01SH022	IR01SH022025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	545	
	IR01SH022	IR01SH022025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1090	
	IR01SH022E	IR01SH022005E	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	2630	
	IR01SH022E	IR01SH022005E	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	607	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH022E	IR01SH022005E	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	1800	
	IR01SH022E	IR01SH022025E	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	3020	
	IR01SH022E	IR01SH022025E	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	618	
	IR01SH022E	IR01SH022025E	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1480	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.767	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	1950	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	1100	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	922	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-008	0.0004	0.0004	U
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-018	0.00019	0.0017	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-028	0.00028	0.00028	U
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-044	0.00024	0.0014	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-052	0.00026	0.0047	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-066	0.00029	0.00029	U
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-077	0.0004	0.0004	U
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-081	0.0027	0.003	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-101	0.0025	0.0555	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-105	0.00022	0.00022	U
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-114	0.0027	0.005	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-118	0.00028	0.00728	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-123	0.0027	0.0027	U
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-126	0.00035	0.0059	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-128	0.00046	0.0079	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-138	0.0023	0.13	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-153	0.0035	0.173	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-156	0.0027	0.0027	U
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-157	0.0027	0.0027	U
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-167	0.0027	0.0027	U
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-169	0.0027	0.0027	U
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-170	0.0023	0.0539	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-180	0.0025	0.113	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-187	0.00023	0.0673	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-189	0.0027	0.002	J
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-195	0.00021	0.00972	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-206	0.00021	0.00517	
	IR01SH024	IR01SH024005	28-Aug-02	0	0.5	APCL	PCB	PCB-209	0.00023	0.0018	
	IR01SH024	IR01SH024025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.61	
	IR01SH024	IR01SH024025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	2510	
	IR01SH024	IR01SH024025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	618	
	IR01SH024	IR01SH024025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	2070	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	6.017	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	1560	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	796	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	888	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-008	0.024	0.01	J
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-018	0.011	0.11	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-028	0.016	0.016	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-044	0.015	0.03	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-052	0.075	2.34	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-066	0.017	0.017	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-077	0.024	0.024	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-081	0.16	0.16	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-101	0.015	0.853	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-105	0.013	0.013	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-114	0.16	0.16	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-118	0.017	0.11	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-123	0.16	0.16	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-126	0.021	0.029	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-128	0.027	0.028	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-138	0.014	0.308	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-153	0.105	2.44	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-156	0.16	0.16	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-157	0.16	0.16	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-167	0.16	0.16	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-169	0.16	0.16	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-170	0.014	0.27	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-180	0.015	0.594	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-187	0.014	0.536	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-189	0.16	0.011	J
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-195	0.013	0.092	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-206	0.013	0.065	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	APCL	PCB	PCB-209	0.014	0.014	
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,1,1,2-Tetrachloroethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,1,1-Trichloroethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,1,2,2-Tetrachloroethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,1,2-Trichloro-1,2,2-Trifluoroethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,1,2-Trichloroethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,1-Dichloroethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,1-Dichloroethene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,1-Dichloropropene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,2,3-Trichlorobenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,2,3-Trichloropropane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,2,4-Trichlorobenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,2,4-Trimethylbenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,2-Dibromo-3-Chloropropane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,2-Dibromoethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,2-Dichlorobenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,2-Dichloroethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,2-Dichloropropane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,3,5-Trimethylbenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,3-Dichlorobenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,3-Dichloropropane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	1,4-Dichlorobenzene	0.0066	0.0023	J
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	2,2-Dichloropropane	0.0066	0.0066	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

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Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	2-Butanone	0.013	0.013	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	2-Chlorotoluene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	2-Hexanone	0.013	0.013	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	4-Chlorotoluene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	4-Methyl-2-Pentanone	0.013	0.013	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Acetone	0.026	0.026	U4
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Benzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Bromobenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Bromochloromethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Bromodichloromethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Bromoform	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Bromomethane	0.013	0.013	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Carbon Disulfide	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Carbon Tetrachloride	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Chlorobenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Chloroethane	0.013	0.013	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Chloroform	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Chloromethane	0.013	0.013	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Cis-1,2-Dichloroethene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Cis-1,3-Dichloropropene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Dibromochloromethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Dibromomethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Dichlorodifluoromethane	0.013	0.013	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Ethylbenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Hexachlorobutadiene	0.0066	0.0066	UJ7
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Isopropylbenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	M,P-Xylenes	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Methylene Chloride	0.026	0.026	U4
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Naphthalene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	N-Butylbenzene	0.0066	0.0066	UJ7
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	O-Xylene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Para-Isopropyl Toluene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Propylbenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Sec-Butylbenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Styrene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Tert-Butyl Methyl Ether	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Tert-Butylbenzene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Tetrachloroethene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Toluene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Trans-1,2-Dichloroethene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Trans-1,3-Dichloropropene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Trichloroethene	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Trichlorofluoromethane	0.0066	0.0066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Vinyl Acetate	0.066	0.066	U
	IR01SH028	IR01SH028005	28-Aug-02	0	0.5	C&T	VOA8260	Vinyl Chloride	0.013	0.013	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	2.025	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	2620	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	1010	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1710	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1016	0.36	0.36	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1221	0.72	0.72	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1232	0.36	0.36	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1242	0.36	0.36	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1248	0.36	0.36	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1254	0.36	13	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PCB	Aroclor-1260	0.36	6.4	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	4,4'-DDD	0.079	0.079	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	4,4'-DDE	0.079	0.28	J7
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	4,4'-DDT	0.079	2.2	UJ9
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Aldrin	0.041	0.041	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Alpha-BHC	0.041	0.041	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Alpha-Chlordane	0.041	0.041	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Beta-BHC	0.041	0.052	J7
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Delta-BHC	0.041	0.041	UJ7
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Dieldrin	0.079	0.74	UJ9
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Endosulfan I	0.041	0.041	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Endosulfan II	0.079	0.079	UJ7
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Endosulfan Sulfate	0.079	0.079	UJ9
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Endrin	0.079	0.079	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Endrin Aldehyde	0.079	0.079	UJ7
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Gamma-BHC (Lindane)	0.041	0.041	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Gamma-Chlordane	0.041	0.041	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Heptachlor	0.041	0.041	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Heptachlor Epoxide	0.041	0.049	J7
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Methoxychlor	0.41	0.41	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	PEST	Toxaphene	1.4	1.4	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.79	0.79	UJ7
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.9	3.9	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.16	0.25	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.6	1.6	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.6	1.6	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.6	1.6	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.9	3.9	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.6	1.6	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.6	1.6	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.16	0.16	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.16	0.16	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Anthracene	0.16	0.13	J
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Azobenzene	0.79	0.79	UJ7
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.16	0.26	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.16	0.22	J0
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.16	0.23	J0Y
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.16	0.16	UJ0
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.16	0.27	J0Y
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzoic Acid	3.9	3.9	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Benzyl Alcohol	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.79	0.85	U4
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Carbazole	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Chrysene	0.16	0.34	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.16	0.16	UJ0
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Di-N-Butylphthalate	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Di-N-Octylphthalate	0.79	0.79	UJ0
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.16	0.36	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Fluorene	0.16	0.16	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.9	3.9	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.16	0.22	J0
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Isophorone	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Naphthalene	0.16	0.31	J7
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.6	1.6	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.16	0.13	J

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Phenol	0.79	0.79	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	SVOA8270	Pyrene	0.16	0.83	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Aluminum	4.6	3200	J3
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Antimony	2.7	13	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Arsenic	0.23	3.7	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Barium	0.46	60	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Beryllium	0.092	0.092	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Cadmium	0.23	6.9	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Calcium	23	3100	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Chromium	0.46	120	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Cobalt	0.92	4.9	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Copper	2.3	1600	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Iron	23	26000	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Lead	0.14	820	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Magnesium	23	3100	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Manganese	0.46	180	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Mercury	0.048	1.8	J3
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Molybdenum	0.92	4.5	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Nickel	0.92	61	J34
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Potassium	110	500	U1
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Selenium	0.23	0.23	UJ3
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Silver	0.23	0.17	J
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Sodium	110	1600	J3
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Thallium	0.23	0.23	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Vanadium	0.46	88	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	TMETAL	Zinc	4.6	940	
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,1,1,2-Tetrachloroethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,1,1-Trichloroethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,1,2,2-Tetrachloroethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,1,2-Trichloro-1,2,2-Trifluoroethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,1,2-Trichloroethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,1-Dichloroethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,1-Dichloroethene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,1-Dichloropropene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,2,3-Trichlorobenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,2,3-Trichloropropane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,2,4-Trichlorobenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,2,4-Trimethylbenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,2-Dibromo-3-Chloropropane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,2-Dibromoethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,2-Dichlorobenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,2-Dichloroethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,2-Dichloropropane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,3,5-Trimethylbenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,3-Dichlorobenzene	0.0052	0.0032	J
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,3-Dichloropropane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	1,4-Dichlorobenzene	0.0052	0.0088	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	2,2-Dichloropropane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	2-Butanone	0.01	0.01	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	2-Chlorotoluene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	2-Hexanone	0.01	0.01	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	4-Chlorotoluene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	4-Methyl-2-Pentanone	0.01	0.0022	J
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Acetone	0.021	0.021	U4
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Benzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Bromobenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Bromochloromethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Bromodichloromethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Bromoform	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Bromomethane	0.01	0.01	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Carbon Disulfide	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Carbon Tetrachloride	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Chlorobenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Chloroethane	0.01	0.01	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Chloroform	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Chloromethane	0.01	0.01	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Cis-1,2-Dichloroethene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Cis-1,3-Dichloropropene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Dibromochloromethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Dibromomethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Dichlorodifluoromethane	0.01	0.01	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Ethylbenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Hexachlorobutadiene	0.0052	0.0052	UJ7
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Isopropylbenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	M,P-Xylenes	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Methylene Chloride	0.021	0.021	U4
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Naphthalene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	N-Butylbenzene	0.0052	0.0052	UJ7
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	O-Xylene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Para-Isopropyl Toluene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Propylbenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Sec-Butylbenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Styrene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Tert-Butyl Methyl Ether	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Tert-Butylbenzene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Tetrachloroethene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Toluene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Trans-1,2-Dichloroethene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Trans-1,3-Dichloropropene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Trichloroethene	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Trichlorofluoromethane	0.0052	0.0052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Vinyl Acetate	0.052	0.052	U
	IR01SH028	IR01SH028025	28-Aug-02	2	2.5	C&T	VOA8260	Vinyl Chloride	0.01	0.01	U
	IR01SH028E	IR01SH028005E	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	425	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH028E	IR01SH028005E	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	310	
	IR01SH028E	IR01SH028005E	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	390	
	IR01SH028E	IR01SH028025E	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	1200	
	IR01SH028E	IR01SH028025E	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	153	
	IR01SH028E	IR01SH028025E	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	305	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	2.338	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	183	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	81	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	218	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-008	0.00011	0.00011	R2
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-018	0.000051	0.00038	J3
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-028	0.000073	0.000073	R2
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-044	0.000065	0.00054	J3
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-052	0.001725	0.0162	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-066	0.000076	0.000076	R2
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-077	0.00011	0.00011	R2
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-081	0.0007	0.0007	R2
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-101	0.00165	0.0399	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-105	0.000058	0.000058	R2
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-114	0.0007	0.002	J3
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-118	0.000075	0.0032	J3
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-123	0.0007	0.0007	R2
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-126	0.000093	0.00232	J3
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-128	0.00012	0.00303	J3
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-138	0.00155	0.0567	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-153	0.002325	0.106	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-156	0.0007	0.0007	R2
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-157	0.0007	0.0007	R2
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-167	0.0007	0.0007	R2
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-169	0.0007	0.0007	R2
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-170	0.00155	0.032	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-180	0.00165	0.0652	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-187	0.0015	0.033	
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-189	0.0007	0.001	J3
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-195	0.000056	0.00516	J3
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-206	0.000056	0.00351	J3
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	APCL	PCB	PCB-209	0.00006	0.0011	J3
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,1,1,2-Tetrachloroethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,1,1-Trichloroethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,1,2,2-Tetrachloroethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,1,2-Trichloro-1,2,2-Trifluoroethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,1,2-Trichloroethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,1-Dichloroethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,1-Dichloroethene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,1-Dichloropropene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,2,3-Trichlorobenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,2,3-Trichloropropane	0.0065	0.0065	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,2,4-Trichlorobenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,2,4-Trimethylbenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,2-Dibromo-3-Chloropropane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,2-Dibromoethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,2-Dichlorobenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,2-Dichloroethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,2-Dichloropropane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,3,5-Trimethylbenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,3-Dichlorobenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,3-Dichloropropane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	1,4-Dichlorobenzene	0.0065	0.0026	J
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	2,2-Dichloropropane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	2-Butanone	0.013	0.013	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	2-Chlorotoluene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	2-Hexanone	0.013	0.013	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	4-Chlorotoluene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	4-Methyl-2-Pentanone	0.013	0.0041	J
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Acetone	0.026	0.026	U4
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Benzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Bromobenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Bromochloromethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Bromodichloromethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Bromoform	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Bromomethane	0.013	0.013	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Carbon Disulfide	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Carbon Tetrachloride	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Chlorobenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Chloroethane	0.013	0.013	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Chloroform	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Chloromethane	0.013	0.013	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Cis-1,2-Dichloroethene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Cis-1,3-Dichloropropene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Dibromochloromethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Dibromomethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Dichlorodifluoromethane	0.013	0.013	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Ethylbenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Hexachlorobutadiene	0.0065	0.0065	UJ7
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Isopropylbenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	M,P-Xylenes	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Methylene Chloride	0.026	0.026	U4
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Naphthalene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	N-Butylbenzene	0.0065	0.0065	UJ7
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	O-Xylene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Para-Isopropyl Toluene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Propylbenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Sec-Butylbenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Styrene	0.0065	0.0065	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Tert-Butyl Methyl Ether	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Tert-Butylbenzene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Tetrachloroethene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Toluene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Trans-1,2-Dichloroethene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Trans-1,3-Dichloropropene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Trichloroethene	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Trichlorofluoromethane	0.0065	0.0065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Vinyl Acetate	0.065	0.065	U
	IR01SH031	IR01SH031005	28-Aug-02	0	0.5	C&T	VOA8260	Vinyl Chloride	0.013	0.013	U
	IR01SH031	IR01SH031025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.144	
	IR01SH031	IR01SH031025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	49	
	IR01SH031	IR01SH031025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	16	
	IR01SH031	IR01SH031025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	107	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	5.209	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	317	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	255	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	114	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-008	0.043	0.043	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-018	0.021	0.021	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-028	0.03	0.03	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-044	0.026	0.026	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-052	0.028	0.029	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-066	0.031	0.031	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-077	0.044	0.044	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-081	0.29	0.29	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-101	0.027	0.17	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-105	0.024	0.024	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-114	0.29	0.29	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-118	0.03	0.03	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-123	0.29	0.29	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-126	0.038	0.073	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-128	0.05	0.093	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-138	0.025	1.46	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-153	0.038	1.78	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-156	0.29	0.29	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-157	0.29	0.29	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-167	0.29	0.29	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-169	0.29	0.29	U
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-170	0.025	0.696	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-180	0.027	1.48	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-187	0.025	0.753	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-189	0.29	0.02	J
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-195	0.023	0.16	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-206	0.023	0.085	
	IR01SH034	IR01SH034005	28-Aug-02	0	0.5	APCL	PCB	PCB-209	0.025	0.011	J
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	2.572	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	1590	
(Continued)	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	460	
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1200	
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,1,1,2-Tetrachloroethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,1,1-Trichloroethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,1,2,2-Tetrachloroethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,1,2-Trichloro-1,2,2-Trifluoroethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,1,2-Trichloroethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,1-Dichloroethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,1-Dichloroethene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,1-Dichloropropene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,2,3-Trichlorobenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,2,3-Trichloropropane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,2,4-Trichlorobenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,2,4-Trimethylbenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,2-Dibromo-3-Chloropropane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,2-Dibromoethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,2-Dichlorobenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,2-Dichloroethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,2-Dichloropropane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,3,5-Trimethylbenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,3-Dichlorobenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,3-Dichloropropane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	1,4-Dichlorobenzene	0.006	0.017	J3
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	2,2-Dichloropropane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	2-Butanone	0.012	0.012	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	2-Chlorotoluene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	2-Hexanone	0.012	0.012	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	4-Chlorotoluene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	4-Methyl-2-Pentanone	0.012	0.012	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Acetone	0.024	0.024	U4
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Benzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Bromobenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Bromochloromethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Bromodichloromethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Bromoform	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Bromomethane	0.012	0.012	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Carbon Disulfide	0.006	0.0017	J3
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Carbon Tetrachloride	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Chlorobenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Chloroethane	0.012	0.012	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Chloroform	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Chloromethane	0.012	0.012	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Cis-1,2-Dichloroethene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Cis-1,3-Dichloropropene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Dibromochloromethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Dibromomethane	0.006	0.006	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Dichlorodifluoromethane	0.012	0.012	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Ethylbenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Hexachlorobutadiene	0.006	0.006	UJ7
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Isopropylbenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	M,P-Xylenes	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Methylene Chloride	0.024	0.024	U4
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Naphthalene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	N-Butylbenzene	0.006	0.006	UJ7
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	O-Xylene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Para-Isopropyl Toluene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Propylbenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Sec-Butylbenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Styrene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Tert-Butyl Methyl Ether	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Tert-Butylbenzene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Tetrachloroethene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Toluene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Trans-1,2-Dichloroethene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Trans-1,3-Dichloropropene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Trichloroethene	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Trichlorofluoromethane	0.006	0.006	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Vinyl Acetate	0.06	0.06	U
	IR01SH034	IR01SH034025	28-Aug-02	2	2.5	C&T	VOA8260	Vinyl Chloride	0.012	0.012	U
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	2.425	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	515	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	165	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	528	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-008	0.00038	0.00038	U
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-018	0.00018	0.0002	J
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-028	0.00026	0.00026	U
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-044	0.00023	0.00062	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-052	0.00025	0.0029	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-066	0.00027	0.00027	U
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-077	0.00038	0.00038	U
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-081	0.0025	0.004	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-101	0.0048	0.0671	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-105	0.00021	0.00021	U
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-114	0.0025	0.0025	U
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-118	0.00027	0.00663	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-123	0.0025	0.0025	U
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-126	0.00033	0.012	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-128	0.00044	0.0163	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-138	0.0044	0.285	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-153	0.0066	0.346	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-156	0.0025	0.0025	U
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-157	0.0025	0.0025	U
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-167	0.0025	0.0025	R2

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-169	0.0025	0.0025	U
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-170	0.0044	0.142	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-180	0.0048	0.292	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-187	0.0044	0.142	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-189	0.0025	0.0054	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-195	0.004	0.029	
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-206	0.0002	0.00939	J2
	IR01SH037	IR01SH037005	28-Aug-02	0	0.5	APCL	PCB	PCB-209	0.00022	0.0029	
	IR01SH037	IR01SH037025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	5.654	
	IR01SH037	IR01SH037025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	1890	
	IR01SH037	IR01SH037025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	474	
	IR01SH037	IR01SH037025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	749	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	8.109	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	1430	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	270	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	705	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-008	0.015	0.015	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-018	0.0073	0.0073	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-028	0.01	0.01	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-044	0.0093	0.013	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-052	0.0099	0.063	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-066	0.011	0.011	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-077	0.015	0.015	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-081	0.1	0.38	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-101	0.095	1.72	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-105	0.0083	0.0083	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-114	0.1	0.1	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-118	0.011	0.338	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-123	0.1	0.1	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-126	0.013	0.013	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-128	0.018	0.464	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-138	0.089	5.62	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-153	0.13	7.2	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-156	0.1	0.1	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-157	0.1	0.1	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-167	0.1	0.1	U
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-169	0.1	0.027	J
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-170	0.0089	3.95	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-180	0.0095	8.1	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-187	0.0087	3.65	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-189	0.1	0.2	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-195	0.0081	0.661	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-206	0.0081	0.221	
	IR01SH040	IR01SH040005	27-Aug-02	0	0.5	APCL	PCB	PCB-209	0.0087	0.01	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	10.794	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	3660	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	458	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1050	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PCB	Aroclor-1016	2.5	2.5	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PCB	Aroclor-1221	5	5	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PCB	Aroclor-1232	2.5	2.5	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PCB	Aroclor-1242	2.5	2.5	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PCB	Aroclor-1248	2.5	2.5	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PCB	Aroclor-1254	2.5	2.5	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PCB	Aroclor-1260	2.5	150	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	4,4'-DDD	1.4	1.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	4,4'-DDE	1.4	1.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	4,4'-DDT	1.4	30	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Aldrin	0.7	0.7	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Alpha-BHC	0.7	0.7	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Alpha-Chlordane	0.7	0.7	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Beta-BHC	0.7	0.7	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Delta-BHC	0.7	0.7	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Dieldrin	1.4	13	UJ9
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Endosulfan I	0.7	0.7	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Endosulfan II	1.4	1.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Endosulfan Sulfate	1.4	1.4	UJ9
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Endrin	1.4	1.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Endrin Aldehyde	1.4	1.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Gamma-BHC (Lindane)	0.7	0.7	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Gamma-Chlordane	0.7	0.7	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Heptachlor	0.7	0.7	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Heptachlor Epoxide	0.7	0.7	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Methoxychlor	7	7	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	PEST	Toxaphene	25	25	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.69	0.69	UJ7
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.4	3.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	0.21	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.4	1.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	1.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.4	1.4	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.4	3.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.4	1.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.4	1.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.14	0.14	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.14	0.14	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Anthracene	0.14	0.13	J
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Azobenzene	0.69	0.69	UJ7
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.14	0.44	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.14	0.45	J0
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.14	0.81	J0Y
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.14	0.47	J0
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.14	0.52	J0Y
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Benzoic Acid	3.4	3.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Benzyl Alcohol	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Carbazole	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Chrysene	0.14	0.59	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	0.14	UJ0
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Di-N-Butylphthalate	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Di-N-Octylphthalate	0.69	0.69	UJ0
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.14	0.42	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Fluorene	0.14	0.14	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.4	3.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.14	0.45	J0
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Isophorone	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Naphthalene	0.14	0.14	UJ7
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.69	0.69	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.4	1.4	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.14	0.19	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Phenol	0.69	0.63	J

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	SVOA8270	Pyrene	0.14	0.62	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Aluminum	4.3	2100	J3
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Antimony	2.6	4.6	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Arsenic	0.21	3.6	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Barium	0.43	21	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Beryllium	0.086	0.053	J
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Cadmium	0.21	4.3	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Calcium	110	15000	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Chromium	0.43	66	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Cobalt	0.86	4	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Copper	2.1	2300	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Iron	21	16000	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Lead	0.13	330	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Magnesium	21	3700	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Manganese	0.43	180	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Mercury	0.2	6	J3
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Molybdenum	0.86	1.2	U1
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Nickel	0.86	41	J34
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Potassium	110	400	J3
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Selenium	0.21	0.21	UJ3
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Silver	0.21	0.15	J
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Sodium	110	730	J3
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Thallium	0.21	0.21	U
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Vanadium	0.43	11	
	IR01SH040	IR01SH040025	27-Aug-02	2	2.5	C&T	TMETAL	Zinc	4.3	700	
	IR01SH040S	IR01SH040005S	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	300	
	IR01SH040S	IR01SH040005S	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	130	
	IR01SH040S	IR01SH040005S	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	454	
	IR01SH040S	IR01SH040025S	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	860	
	IR01SH040S	IR01SH040025S	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	195	
	IR01SH040S	IR01SH040025S	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	582	
	IR01SH040W	IR01SH040005W	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	244	
	IR01SH040W	IR01SH040005W	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	93	
	IR01SH040W	IR01SH040005W	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	297	
	IR01SH040W	IR01SH040025W	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	424	
	IR01SH040W	IR01SH040025W	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	150	
	IR01SH040W	IR01SH040025W	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	518	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	2.249	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	1420	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	288	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	900	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-008	0.0076	0.0076	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-018	0.0036	0.0036	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-028	0.0052	0.0052	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-044	0.0046	0.0046	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-052	0.0049	0.007	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-066	0.0054	0.0054	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-077	0.0077	0.0077	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-081	0.05	0.025	J
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-101	0.0047	0.096	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-105	0.0041	0.0041	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-114	0.05	0.05	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-118	0.0053	0.017	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-123	0.05	0.05	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-126	0.0066	0.11	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-128	0.0088	0.067	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-138	0.0044	0.321	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-153	0.0066	0.379	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-156	0.05	0.05	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-157	0.05	0.05	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-167	0.05	0.05	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-169	0.05	0.05	U
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-170	0.0044	0.211	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-180	0.0047	0.435	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-187	0.0043	0.26	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-189	0.05	0.07	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-195	0.004	0.053	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-206	0.004	0.014	
	IR01SH041	IR01SH041005	27-Aug-02	0	0.5	APCL	PCB	PCB-209	0.0043	0.0043	U
	IR01SH041	IR01SH041025	27-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	6.823	
	IR01SH041	IR01SH041025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	5400	
	IR01SH041	IR01SH041025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	651	
	IR01SH041	IR01SH041025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1450	
	IR01SH041N	IR01SH041005N	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	1150	
	IR01SH041N	IR01SH041005N	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	243	
	IR01SH041N	IR01SH041005N	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	843	
	IR01SH041N	IR01SH041025N	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	7810	
	IR01SH041N	IR01SH041025N	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	899	
	IR01SH041N	IR01SH041025N	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1990	
	IR01SH041S	IR01SH041005S	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	497	
	IR01SH041S	IR01SH041005S	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	169	
	IR01SH041S	IR01SH041005S	12-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	448	
	IR01SH041S	IR01SH041025S	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	2620	
	IR01SH041S	IR01SH041025S	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	439	
	IR01SH041S	IR01SH041025S	12-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	916	
02NWSDGI-2	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	1.13	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	185	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	103	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	322	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	ORGAN	Dibutyltin	0.011	0.011	UJ3
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	ORGAN	Monobutyltin	0.011	0.011	UJ3
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	ORGAN	Tetrabutyltin	0.011	0.011	UJ3
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	ORGAN	Tributyltin	0.011	0.011	UJ3
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-008	0.00041	0.00041	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-018	0.0002	0.0002	U
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-028	0.00029	0.00029	U
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-044	0.00025	0.00043	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-052	0.00027	0.0026	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-066	0.0003	0.0003	U
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-077	0.00042	0.00042	U
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-081	0.0028	0.004	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-101	0.0026	0.0356	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-105	0.00023	0.00023	U
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-114	0.0028	0.003	J
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-118	0.00029	0.00679	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-123	0.0028	0.0028	U
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-126	0.00036	0.00738	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-128	0.00048	0.0086	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-138	0.0024	0.139	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-153	0.0036	0.173	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-156	0.0028	0.0028	U
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-157	0.0028	0.0028	U
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-167	0.0028	0.0028	U
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-169	0.0028	0.0028	U
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-170	0.0024	0.069	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-180	0.0026	0.147	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-187	0.0024	0.0777	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-189	0.0028	0.003	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-195	0.00022	0.0134	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-206	0.00022	0.0097	
	IR02SH004	IR02SH004005	28-Aug-02	0	0.5	APCL	PCB	PCB-209	0.00024	0.0036	
	IR02SH004	IR02SH004025	28-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	1.534	
	IR02SH004	IR02SH004025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	838	
	IR02SH004	IR02SH004025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	278	
	IR02SH004	IR02SH004025	28-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1770	
	IR02SH004E	IR02SH004005E	13-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	1.127	
	IR02SH004E	IR02SH004025E	13-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	2.453	
	IR02SH004N	IR02SH004005N	13-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	1.714	
	IR02SH004N	IR02SH004025N	13-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	1.992	
	IR02SH004W	IR02SH004005W	13-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	1.428	
	IR02SH004W	IR02SH004025W	13-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	2.945	
	IR02SH006	IR02SH006005	5-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.957	
	IR02SH006	IR02SH006005	5-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	160	
	IR02SH006	IR02SH006005	5-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	114	
	IR02SH006	IR02SH006005	5-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	283	
	IR02SH006	IR02SH006025	5-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	1.938	
	IR02SH006	IR02SH006025	5-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	876	
	IR02SH006	IR02SH006025	5-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	538	
	IR02SH006	IR02SH006025	5-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1110	
	IR02SH006	IR02SH006025	5-Sep-02	2	2.5	C&T	TPHEXT-SG	Diesel-Range Organics	2.5	280	H
	IR02SH006	IR02SH006025	5-Sep-02	2	2.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	13	630	M

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH006	IR02SH006025	5-Sep-02	2	2.5	C&T	TPHPRG	Gasoline-Range Organics	0.2	0.2	U
	IR02SH010	IR02SH010005	5-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.277	
	IR02SH010	IR02SH010005	5-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	178	
	IR02SH010	IR02SH010005	5-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	98	
	IR02SH010	IR02SH010005	5-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	264	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.832	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	751	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	698	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	363	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	0.029	0.029	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	0.057	0.057	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	0.029	0.029	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	0.029	0.029	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	0.029	0.029	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	0.029	0.029	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	0.029	1.2	J3
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.02	0.058	J9
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.02	0.1	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	0.02	0.54	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Aldrin	0.01	0.01	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Alpha-BHC	0.01	0.01	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Alpha-Chlordane	0.01	0.026	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Beta-BHC	0.01	0.01	UJ7
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Delta-BHC	0.01	0.01	UJ7
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.02	0.072	UJ9
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.01	0.01	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.02	0.02	UJ7
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Endosulfan Sulfate	0.02	0.02	UJ7
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Endrin	0.02	0.02	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Endrin Aldehyde	0.02	0.02	UJ7
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Gamma-BHC (Lindane)	0.01	0.01	UJ7
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Gamma-Chlordane	0.01	0.021	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.01	0.01	UJ7
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Heptachlor Epoxide	0.01	0.01	UJ7
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.1	0.1	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	PEST	Toxaphene	0.36	0.36	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4	4	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.79	0.79	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.6	1.6	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.6	1.6	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.6	1.6	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4	4	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.6	1.6	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.6	1.6	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.16	0.22	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Benzoic Acid	4	4	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Benzyl Alcohol	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Di-N-Butylphthalate	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Di-N-Octylphthalate	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4	4	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	0.79	0.79	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.6	1.6	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Phenol	0.79	0.79	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	0.16	0.16	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Aluminum	23	2500	J3
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Antimony	2.8	7.8	U1
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Arsenic	0.23	2.7	J7
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Barium	0.47	11	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.094	0.094	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Cadmium	0.23	1.8	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Calcium	120	32000	J9
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Chromium	0.47	46	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Cobalt	0.94	3.8	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Copper	0.47	310	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Iron	23	9500	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Lead	0.14	470	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Magnesium	23	5300	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Manganese	0.47	210	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Mercury	0.045	0.59	J3
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	0.94	0.94	U1
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Nickel	0.94	51	J34
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Potassium	23	370	J3
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.23	0.23	UJ3
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Silver	0.23	0.23	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Sodium	23	1800	J3
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Thallium	0.23	0.23	U
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Vanadium	0.47	57	
	IR02SH010	IR02SH010025	5-Sep-02	2	2.5	C&T	TMETAL	Zinc	0.94	160	
	IR02SH011	IR02SH011005	3-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.271	
	IR02SH011	IR02SH011005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	189	
	IR02SH011	IR02SH011005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	127	
	IR02SH011	IR02SH011005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	359	
	IR02SH011	IR02SH011025	3-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.648	
	IR02SH011	IR02SH011025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	745	
	IR02SH011	IR02SH011025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	156	
	IR02SH011	IR02SH011025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	398	
	IR02SH012	IR02SH012005	3-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.168	
	IR02SH012	IR02SH012005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	449	
	IR02SH012	IR02SH012005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	272	
	IR02SH012	IR02SH012005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	394	
	IR02SH012	IR02SH012025	3-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.599	
	IR02SH012	IR02SH012025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	590	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH012	IR02SH012025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	350	
	IR02SH012	IR02SH012025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	919	
	IR02SH013	IR02SH013005	3-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.883	
	IR02SH013	IR02SH013005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	246	
	IR02SH013	IR02SH013005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	80	
	IR02SH013	IR02SH013005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	249	
	IR02SH013	IR02SH013025	3-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.468	
	IR02SH013	IR02SH013025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	810	
	IR02SH013	IR02SH013025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	416	
	IR02SH013	IR02SH013025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	735	
	IR02SH014	IR02SH014005	3-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.577	
	IR02SH014	IR02SH014005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	320	
	IR02SH014	IR02SH014005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	221	
	IR02SH014	IR02SH014005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	1250	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.51	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	6250	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	642	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1700	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	0.028	0.028	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	0.056	0.056	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	0.028	0.028	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	0.028	0.028	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	0.028	0.028	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	0.028	0.028	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	0.028	0.84	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.039	0.036	J
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.039	0.034	J
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	0.039	0.081	UJ9
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Aldrin	0.02	0.02	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Alpha-BHC	0.02	0.02	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Alpha-Chlordane	0.02	0.02	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Beta-BHC	0.02	0.02	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Delta-BHC	0.02	0.02	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.039	0.077	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.02	0.02	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.039	0.039	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Endosulfan Sulfate	0.039	0.039	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Endrin	0.039	0.039	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Endrin Aldehyde	0.039	0.039	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Gamma-BHC (Lindane)	0.02	0.02	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Gamma-Chlordane	0.02	0.02	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.02	0.02	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Heptachlor Epoxide	0.02	0.02	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.2	0.2	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	PEST	Toxaphene	0.71	0.71	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.79	0.79	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.79	0.79	UJ7
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.9	3.9	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.16	0.16	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.6	1.6	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.6	1.6	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.6	1.6	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.9	3.9	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.6	1.6	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.6	1.6	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.16	0.16	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.16	0.16	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	0.16	0.2	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	0.79	0.79	UJ7
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.16	1	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.16	0.78	J0
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.16	1.4	J0Y
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.16	0.16	UJ0
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.16	0.96	J0Y
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzoic Acid	3.9	3.9	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzyl Alcohol	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	0.16	1.2	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.16	0.16	UJ0
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Di-N-Butylphthalate	0.79	0.79	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Di-N-Octylphthalate	0.79	0.79	UJ0
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.16	1.2	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	0.16	0.16	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.9	3.9	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.16	0.66	J0
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	0.16	0.16	UJ7
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.6	0.99	J
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.16	0.42	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Phenol	0.79	0.79	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	0.16	1.7	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Aluminum	4.2	3200	J3
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Antimony	2.5	18	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Arsenic	0.21	3.3	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Barium	0.42	26	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.084	0.084	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Cadmium	0.21	4.2	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Calcium	210	39000	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Chromium	0.42	83	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Cobalt	0.84	5.3	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Copper	2.1	1600	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Iron	21	13000	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Lead	0.13	300	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Magnesium	21	4400	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Manganese	0.42	240	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Mercury	0.24	8.6	J3
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	0.84	1.5	U1
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Nickel	0.84	64	J34
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Potassium	110	510	U1
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.21	0.21	UJ3
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Silver	0.21	0.28	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Sodium	110	2500	J3
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Thallium	0.21	0.21	U
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Vanadium	0.42	36	
	IR02SH014	IR02SH014025	3-Sep-02	2	2.5	C&T	TMETAL	Zinc	4.2	820	
	IR02SH015	IR02SH015005	3-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.152	
	IR02SH015	IR02SH015005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	438	
	IR02SH015	IR02SH015005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	185	
	IR02SH015	IR02SH015005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	261	
	IR02SH015	IR02SH015025	3-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.836	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH015	IR02SH015025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	3570	
	IR02SH015	IR02SH015025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	913	
	IR02SH015	IR02SH015025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	2350	
	IR02SH016	IR02SH016005	3-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.298	
	IR02SH016	IR02SH016005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	266	
	IR02SH016	IR02SH016005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	826	
	IR02SH016	IR02SH016005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	232	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	1.105	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	2630	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	393	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1400	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	0.014	0.014	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	0.027	0.027	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	0.014	0.014	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	0.014	0.014	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	0.014	0.014	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	0.014	0.014	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	0.014	0.91	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.075	0.075	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.075	0.15	UJ9
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	0.075	0.23	UJ9
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Aldrin	0.039	0.039	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Alpha-BHC	0.039	0.039	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Alpha-Chlordane	0.039	0.039	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Beta-BHC	0.039	0.039	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Delta-BHC	0.039	0.039	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.075	0.43	UJ9
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.039	0.039	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.075	0.075	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Endosulfan Sulfate	0.075	0.075	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Endrin	0.075	0.075	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Endrin Aldehyde	0.075	0.075	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Gamma-BHC (Lindane)	0.039	0.039	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Gamma-Chlordane	0.039	0.039	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.039	0.039	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Heptachlor Epoxide	0.039	0.039	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.39	0.39	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	PEST	Toxaphene	1.4	1.4	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.77	0.77	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.8	3.8	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.15	0.15	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.5	1.5	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.5	1.5	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.5	1.5	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.8	3.8	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.5	1.5	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.5	1.5	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.15	0.15	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.15	0.15	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	0.15	0.15	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.15	0.45	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.15	0.47	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.15	0.68	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.15	0.15	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	0.37	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzoic Acid	3.8	3.8	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Benzyl Alcohol	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	0.15	0.64	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.15	0.15	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Di-N-Butylphthalate	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Di-N-Octylphthalate	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.15	0.7	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	0.15	0.15	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.8	3.8	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.77	0.77	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.15	0.25	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	0.15	0.15	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.5	1.5	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.15	0.3	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Phenol	0.77	0.77	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	0.15	0.87	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Aluminum	4.3	3000	J3
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Antimony	2.6	15	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Arsenic	0.21	8.3	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Barium	0.43	21	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.085	0.085	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Cadmium	0.21	13	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Calcium	530	78000	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Chromium	0.43	140	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Cobalt	0.85	11	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Copper	2.1	1900	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Iron	110	55000	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Lead	0.13	260	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Magnesium	110	9900	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Manganese	0.43	400	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Mercury	0.2	4.7	J3
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	0.85	5.7	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Nickel	0.85	210	J34
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Potassium	110	500	U1
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.21	0.21	UJ3
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Silver	0.21	1.3	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Sodium	110	2800	J3
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Thallium	0.21	0.21	U
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Vanadium	0.43	24	
	IR02SH016	IR02SH016025	3-Sep-02	2	2.5	C&T	TMETAL	Zinc	4.3	1100	
02NWSDGI-3	IR02SH017	IR02SH017005	3-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.143	
	IR02SH017	IR02SH017005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	85	
	IR02SH017	IR02SH017005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	48	
	IR02SH017	IR02SH017005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	143	
	IR02SH017	IR02SH017025	3-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.003	J
	IR02SH017	IR02SH017025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	58	
	IR02SH017	IR02SH017025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	11	
	IR02SH017	IR02SH017025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	106	
	IR02SH018	IR02SH018005	3-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.105	
	IR02SH018	IR02SH018005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	112	
	IR02SH018	IR02SH018005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	55	
	IR02SH018	IR02SH018005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	137	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-3 (Continued)	IR02SH018	IR02SH018025	3-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.555	
	IR02SH018	IR02SH018025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	96	
	IR02SH018	IR02SH018025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	48	
	IR02SH018	IR02SH018025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	153	
02NWSDGI-4	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.286	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	77	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	48	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	376	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PCB	Aroclor-1016	0.013	0.013	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PCB	Aroclor-1221	0.025	0.025	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PCB	Aroclor-1232	0.013	0.013	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PCB	Aroclor-1242	0.013	0.013	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PCB	Aroclor-1248	0.013	0.013	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PCB	Aroclor-1254	0.013	0.013	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PCB	Aroclor-1260	0.013	0.2	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	4,4'-DDD	0.035	0.035	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	4,4'-DDE	0.035	0.035	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	4,4'-DDT	0.035	0.12	UJ9
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Aldrin	0.018	0.018	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Alpha-BHC	0.018	0.018	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Alpha-Chlordane	0.018	0.018	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Beta-BHC	0.018	0.018	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Delta-BHC	0.018	0.018	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Dieldrin	0.035	0.035	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Endosulfan I	0.018	0.018	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Endosulfan II	0.035	0.035	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Endosulfan Sulfate	0.035	0.035	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Endrin	0.035	0.035	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Endrin Aldehyde	0.035	0.035	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Gamma-BHC (Lindane)	0.018	0.018	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Gamma-Chlordane	0.018	0.018	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Heptachlor	0.018	0.018	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Heptachlor Epoxide	0.018	0.018	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Methoxychlor	0.18	0.18	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	PEST	Toxaphene	0.64	0.64	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.5	3.5	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.71	0.71	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-4 (Continued)	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.4	1.4	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	1.4	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.4	1.4	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.5	3.5	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.4	1.4	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.4	1.4	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Acenaphthene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Anthracene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Azobenzene	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Benzoic Acid	3.5	3.5	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Benzyl Alcohol	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Carbazole	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Chrysene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Di-N-Butylphthalate	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Di-N-Octylphthalate	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Fluoranthene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Fluorene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.5	3.5	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Isophorone	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Naphthalene	0.14	0.14	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-4 (Continued)	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.4	1.4	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Phenanthrene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Phenol	0.71	0.71	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	SVOA8270	Pyrene	0.14	0.14	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Aluminum	3.9	4000	J3
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Antimony	2.3	2.4	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Arsenic	0.19	5.7	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Barium	0.39	21	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Beryllium	0.078	0.057	J
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Cadmium	0.19	8.6	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Calcium	490	91000	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Chromium	0.39	100	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Cobalt	0.78	15	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Copper	0.39	41	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Iron	97	38000	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Lead	0.12	25	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Magnesium	490	42000	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Manganese	0.39	430	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Mercury	0.019	0.075	J3
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Molybdenum	0.78	0.64	U1
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Nickel	0.78	270	J34
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Potassium	97	530	J3
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Selenium	0.19	0.19	UJ3
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Silver	0.19	0.1	J
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Sodium	97	2100	J3
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Thallium	0.19	0.19	U
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Vanadium	0.39	18	
	IR02SH019	IR02SH019005	3-Sep-02	0	0.5	C&T	TMETAL	Zinc	0.78	63	
	IR02SH019	IR02SH019025	3-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.429	
	IR02SH019	IR02SH019025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	736	
	IR02SH019	IR02SH019025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	157	
	IR02SH019	IR02SH019025	3-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	648	
02CSDGI-1	IR02SH020	IR02SH020005	27-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.244	
	IR02SH020	IR02SH020005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	71	
	IR02SH020	IR02SH020005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	49	
	IR02SH020	IR02SH020005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	155	
	IR02SH020	IR02SH020025	27-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.419	
	IR02SH020	IR02SH020025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	110	
	IR02SH020	IR02SH020025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	123	
	IR02SH020	IR02SH020025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	146	
	IR02SH021	IR02SH021005	27-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.14	
	IR02SH021	IR02SH021005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	102	
	IR02SH021	IR02SH021005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	38	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02CSDGI-1 (Continued)	IR02SH021	IR02SH021005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	137	
	IR02SH021	IR02SH021025	27-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.415	
	IR02SH021	IR02SH021025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	151	
	IR02SH021	IR02SH021025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	64	
	IR02SH021	IR02SH021025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	180	
	IR02SH022	IR02SH022005	27-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.238	
	IR02SH022	IR02SH022005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	98	
	IR02SH022	IR02SH022005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	58	
	IR02SH022	IR02SH022005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	188	
	IR02SH022	IR02SH022025	27-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.194	
	IR02SH022	IR02SH022025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	78	
	IR02SH022	IR02SH022025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	44	
	IR02SH022	IR02SH022025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	157	
	IR02SH023	IR02SH023005	27-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.152	
	IR02SH023	IR02SH023005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	134	
	IR02SH023	IR02SH023005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	46	
	IR02SH023	IR02SH023005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	156	
	IR02SH023	IR02SH023025	27-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.532	
	IR02SH023	IR02SH023025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	71	
	IR02SH023	IR02SH023025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	29	
	IR02SH023	IR02SH023025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	127	
02CSDGI-2	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.226	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	148	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	6050	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	169	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PCB	Aroclor-1016	0.014	0.014	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PCB	Aroclor-1221	0.028	0.028	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PCB	Aroclor-1232	0.014	0.014	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PCB	Aroclor-1242	0.014	0.014	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PCB	Aroclor-1248	0.014	0.014	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PCB	Aroclor-1254	0.014	0.014	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PCB	Aroclor-1260	0.014	0.35	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	4,4'-DDD	0.038	0.038	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	4,4'-DDE	0.038	0.038	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	4,4'-DDT	0.038	0.12	UJ9
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Aldrin	0.02	0.02	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Alpha-BHC	0.02	0.02	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Alpha-Chlordane	0.02	0.02	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Beta-BHC	0.02	0.02	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Delta-BHC	0.02	0.02	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Dieldrin	0.038	0.038	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Endosulfan I	0.02	0.02	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Endosulfan II	0.038	0.038	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Endosulfan Sulfate	0.038	0.038	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Endrin	0.038	0.038	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Endrin Aldehyde	0.038	0.038	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Gamma-BHC (Lindane)	0.02	0.02	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Gamma-Chlordane	0.02	0.02	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02CSDGI-2 (Continued)	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Heptachlor	0.02	0.02	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Heptachlor Epoxide	0.02	0.02	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Methoxychlor	0.2	0.2	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	PEST	Toxaphene	0.7	0.7	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.9	3.9	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.6	1.6	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.6	1.6	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.6	1.6	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.9	3.9	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.6	1.6	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.6	1.6	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Acenaphthene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Anthracene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Azobenzene	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Benzoic Acid	3.9	3.9	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Benzyl Alcohol	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.78	0.78	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02CSDGI-2 (Continued)	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Carbazole	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Chrysene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Di-N-Butylphthalate	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Di-N-Octylphthalate	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Fluoranthene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Fluorene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.9	3.9	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Isophorone	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Naphthalene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.6	1.6	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Phenanthrene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Phenol	0.78	0.78	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	SVOA8270	Pyrene	0.16	0.16	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Aluminum	5.1	4900	J3
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Antimony	3.1	2.7	J
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Arsenic	0.26	2.7	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Barium	0.51	17	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Beryllium	0.1	0.07	J
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Cadmium	0.26	4.8	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Calcium	640	88000	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Chromium	0.51	130	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Cobalt	1	13	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Copper	0.51	51	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Iron	26	21000	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Lead	0.15	40	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Magnesium	640	50000	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Manganese	0.51	290	
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Mercury	0.02	0.1	J3
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Molybdenum	1	1	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Nickel	1	230	J34
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Potassium	130	850	J3
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Selenium	0.26	0.26	UJ3
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Silver	0.26	0.26	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Sodium	130	2800	J3
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Thallium	0.26	0.26	U
	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Vanadium	0.51	20	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02CSDGI-2 (Continued)	IR02SH024	IR02SH024005	27-Aug-02	0	0.5	C&T	TMETAL	Zinc	1	67	
	IR02SH024	IR02SH024025	27-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.008	J
	IR02SH024	IR02SH024025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	8	J
	IR02SH024	IR02SH024025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	8	J
	IR02SH024	IR02SH024025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	44	
02CSDGI-3	IR02SH025	IR02SH025005	27-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.237	
	IR02SH025	IR02SH025005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	90	
	IR02SH025	IR02SH025005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	34	
	IR02SH025	IR02SH025005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	123	
	IR02SH025	IR02SH025025	27-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.002	J
	IR02SH025	IR02SH025025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	48	
	IR02SH025	IR02SH025025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	14	
	IR02SH025	IR02SH025025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	100	
	IR02SH026	IR02SH026005	11-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.087	J
	IR02SH026	IR02SH026005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	90	
	IR02SH026	IR02SH026005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	42	
	IR02SH026	IR02SH026005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	215	
	IR02SH026	IR02SH026025	11-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.039	J
	IR02SH026	IR02SH026025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	90	
	IR02SH026	IR02SH026025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	11	
	IR02SH026	IR02SH026025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	97	
	IR02SH027	IR02SH027005	11-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.088	J
	IR02SH027	IR02SH027005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	51	
	IR02SH027	IR02SH027005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	26	
	IR02SH027	IR02SH027005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	139	
	IR02SH027	IR02SH027025	11-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.038	J
	IR02SH027	IR02SH027025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	56	
	IR02SH027	IR02SH027025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	16	
	IR02SH027	IR02SH027025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	88	
	IR02SH028	IR02SH028005	11-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.126	
	IR02SH028	IR02SH028005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	109	
	IR02SH028	IR02SH028005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	43	
	IR02SH028	IR02SH028005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	204	
	IR02SH028	IR02SH028025	11-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.098	J
	IR02SH028	IR02SH028025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	54	
	IR02SH028	IR02SH028025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	43	
	IR02SH028	IR02SH028025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	150	
	IR02SH029	IR02SH029005	11-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.101	
	IR02SH029	IR02SH029005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	114	
	IR02SH029	IR02SH029005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	48	
	IR02SH029	IR02SH029005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	234	
	IR02SH029	IR02SH029025	11-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.024	J
	IR02SH029	IR02SH029025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	43	
	IR02SH029	IR02SH029025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	8	
	IR02SH029	IR02SH029025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	91	
	IR02SH030	IR02SH030005	11-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.078	J

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02CSDGI-3 (Continued)	IR02SH030	IR02SH030005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	139	
	IR02SH030	IR02SH030005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	51	
	IR02SH030	IR02SH030005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	259	
	IR02SH030	IR02SH030025	11-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.055	J
	IR02SH030	IR02SH030025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	83	
	IR02SH030	IR02SH030025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	14	
	IR02SH030	IR02SH030025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	105	
02SESDGI-1A	IR02SH031	IR02SH031005	10-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.204	
	IR02SH031	IR02SH031005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	279	
	IR02SH031	IR02SH031005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	133	
	IR02SH031	IR02SH031005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	266	
	IR02SH031	IR02SH031025	10-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.076	J
	IR02SH031	IR02SH031025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	382	
	IR02SH031	IR02SH031025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	76	
	IR02SH031	IR02SH031025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	325	
	IR02SH032	IR02SH032005	10-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.072	J
	IR02SH032	IR02SH032005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	330	
	IR02SH032	IR02SH032005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	116	
	IR02SH032	IR02SH032005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	310	
	IR02SH032	IR02SH032025	10-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.428	
	IR02SH032	IR02SH032025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	247	
	IR02SH032	IR02SH032025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	142	
	IR02SH032	IR02SH032025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1220	
	IR02SH033	IR02SH033005	10-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.086	J
	IR02SH033	IR02SH033005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	132	
	IR02SH033	IR02SH033005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	129	
	IR02SH033	IR02SH033005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	392	
	IR02SH033	IR02SH033025	10-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.092	J
	IR02SH033	IR02SH033025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	58	
	IR02SH033	IR02SH033025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	11	
	IR02SH033	IR02SH033025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	99	
	IR02SH034	IR02SH034005	10-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.107	
	IR02SH034	IR02SH034005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	130	
	IR02SH034	IR02SH034005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	108	
	IR02SH034	IR02SH034005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	368	
	IR02SH034	IR02SH034025	10-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.105	
	IR02SH034	IR02SH034025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	63	
	IR02SH034	IR02SH034025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	17	
	IR02SH034	IR02SH034025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	104	
	IR02SH035	IR02SH035005	10-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.106	
	IR02SH035	IR02SH035005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	519	
	IR02SH035	IR02SH035005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	101	
	IR02SH035	IR02SH035005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	294	
	IR02SH035	IR02SH035025	10-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.395	
	IR02SH035	IR02SH035025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	122	
	IR02SH035	IR02SH035025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	73	
	IR02SH035	IR02SH035025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	159	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-1A (Continued)	IR02SH036	IR02SH036005	10-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.165	
	IR02SH036	IR02SH036005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	339	
	IR02SH036	IR02SH036005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	144	
	IR02SH036	IR02SH036005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	365	
	IR02SH036	IR02SH036025	10-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.255	
	IR02SH036	IR02SH036025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	126	
	IR02SH036	IR02SH036025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	310	
	IR02SH036	IR02SH036025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	295	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.138	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	1010	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	799	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	1950	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PCB	Aroclor-1016	0.016	0.016	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PCB	Aroclor-1221	0.032	0.032	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PCB	Aroclor-1232	0.016	0.016	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PCB	Aroclor-1242	0.016	0.016	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PCB	Aroclor-1248	0.016	0.016	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PCB	Aroclor-1254	0.016	0.016	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PCB	Aroclor-1260	0.016	0.13	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	4,4'-DDD	0.044	0.044	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	4,4'-DDE	0.044	0.044	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	4,4'-DDT	0.044	0.078	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Aldrin	0.022	0.022	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Alpha-BHC	0.022	0.022	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Alpha-Chlordane	0.022	0.022	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Beta-BHC	0.022	0.022	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Delta-BHC	0.022	0.022	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Dieldrin	0.044	0.044	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Endosulfan I	0.022	0.022	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Endosulfan II	0.044	0.044	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Endosulfan Sulfate	0.044	0.044	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Endrin	0.044	0.044	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Endrin Aldehyde	0.044	0.044	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Gamma-BHC (Lindane)	0.022	0.022	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Gamma-Chlordane	0.022	0.022	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Heptachlor	0.022	0.022	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Heptachlor Epoxide	0.022	0.022	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Methoxychlor	0.22	0.22	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	PEST	Toxaphene	0.79	0.79	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.89	0.89	UJ7
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.89	0.89	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-1A (Continued)	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.4	4.4	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.18	0.28	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.8	1.8	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.8	1.8	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.8	1.8	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.4	4.4	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.8	1.8	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.8	1.8	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Acenaphthene	0.18	0.18	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.18	0.18	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Anthracene	0.18	0.12	J
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Azobenzene	0.89	0.89	UJ7
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.18	0.13	J
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.18	0.2	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.18	0.29	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.18	0.18	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.18	0.28	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Benzoic Acid	4.4	4.4	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Benzyl Alcohol	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Carbazole	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Chrysene	0.18	0.27	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.18	0.18	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Di-N-Butylphthalate	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Di-N-Octylphthalate	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Fluoranthene	0.18	0.18	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Fluorene	0.18	0.18	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.4	4.4	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-1A (Continued)	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.18	0.2	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Isophorone	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Naphthalene	0.18	0.35	J7
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.8	1.8	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Phenanthrene	0.18	0.15	J
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Phenol	0.89	0.89	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	SVOA8270	Pyrene	0.18	0.15	J
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Aluminum	31	12000	J3
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Antimony	3.7	16	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Arsenic	0.31	8.9	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Barium	0.61	56	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Beryllium	0.12	0.13	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Cadmium	0.31	12	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Calcium	150	26000	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Chromium	0.61	130	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Cobalt	1.2	13	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Copper	0.61	430	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Iron	61	51000	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Lead	0.18	420	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Magnesium	150	20000	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Manganese	0.61	390	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Mercury	0.25	0.47	J3
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Molybdenum	1.2	4.4	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Nickel	1.2	220	J34
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Potassium	150	1400	J3
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Selenium	0.31	0.31	UJ3
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Silver	0.31	0.31	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Sodium	150	10000	J3
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Thallium	0.31	0.31	U
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Vanadium	0.61	46	
	IR02SH037	IR02SH037005	9-Sep-02	0	0.5	C&T	TMETAL	Zinc	6.1	1000	
	IR02SH037	IR02SH037025	9-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.386	
	IR02SH037	IR02SH037025	9-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	1470	
	IR02SH037	IR02SH037025	9-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	607	
	IR02SH037	IR02SH037025	9-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1080	
02SESDGI-1B	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.129	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	749	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	828	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	946	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PCB	Aroclor-1016	0.015	0.015	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PCB	Aroclor-1221	0.031	0.031	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PCB	Aroclor-1232	0.015	0.015	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-B (Continued)	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PCB	Aroclor-1242	0.015	0.015	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PCB	Aroclor-1248	0.015	0.015	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PCB	Aroclor-1254	0.015	0.015	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PCB	Aroclor-1260	0.015	0.08	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	4,4'-DDD	0.043	0.043	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	4,4'-DDE	0.043	0.043	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	4,4'-DDT	0.043	0.066	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Aldrin	0.022	0.022	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Alpha-BHC	0.022	0.022	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Alpha-Chlordane	0.022	0.022	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Beta-BHC	0.022	0.022	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Delta-BHC	0.022	0.022	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Dieldrin	0.043	0.043	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Endosulfan I	0.022	0.022	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Endosulfan II	0.043	0.043	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Endosulfan Sulfate	0.043	0.043	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Endrin	0.043	0.043	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Endrin Aldehyde	0.043	0.043	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Gamma-BHC (Lindane)	0.022	0.022	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Gamma-Chlordane	0.022	0.022	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Heptachlor	0.022	0.022	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Heptachlor Epoxide	0.022	0.022	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Methoxychlor	0.22	0.22	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	PEST	Toxaphene	0.78	0.78	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.3	4.3	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.17	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.3	4.3	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.87	0.87	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-1B (Continued)	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Anthracene	0.17	0.17	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Azobenzene	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.17	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.17	UJ0
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	0.17	UJ0
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.17	UJ0
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.17	UJ0
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Benzoic Acid	4.3	4.3	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Benzyl Alcohol	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Carbazole	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Chrysene	0.17	0.17	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.17	UJ0
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Di-N-Butylphthalate	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Di-N-Octylphthalate	0.87	0.87	UJ0
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Fluoranthene	0.17	0.17	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Fluorene	0.17	0.17	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.3	4.3	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.17	UJ0
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Isophorone	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Naphthalene	0.17	0.17	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Phenanthrene	0.17	0.17	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Phenol	0.87	0.87	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	SVOA8270	Pyrene	0.17	0.17	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Aluminum	5.8	6700	J3
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Antimony	3.5	6.4	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Arsenic	0.29	4.8	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-1B (Continued)	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Barium	0.58	31	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Beryllium	0.12	0.12	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Cadmium	0.29	12	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Calcium	720	73000	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Chromium	0.58	100	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Cobalt	1.2	14	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Copper	0.58	350	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Iron	140	58000	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Lead	0.17	130	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Magnesium	140	23000	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Manganese	0.58	410	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Mercury	0.024	0.2	J3
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Molybdenum	1.2	2	U1
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Nickel	1.2	340	J34
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Potassium	140	1200	J3
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Selenium	0.29	0.29	UJ3
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Silver	0.29	0.51	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Sodium	140	3900	J3
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Thallium	0.29	0.29	U
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Vanadium	0.58	130	
	IR02SH047	IR02SH047005	10-Sep-02	0	0.5	C&T	TMETAL	Zinc	5.8	510	
	IR02SH047	IR02SH047025	10-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.206	
	IR02SH047	IR02SH047025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	606	
	IR02SH047	IR02SH047025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	785	
	IR02SH047	IR02SH047025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1840	
	IR02SH050	IR02SH050005	6-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.128	
	IR02SH050	IR02SH050005	6-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	147	
	IR02SH050	IR02SH050005	6-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	52	
	IR02SH050	IR02SH050005	6-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	540	
	IR02SH050	IR02SH050025	6-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.168	
	IR02SH050	IR02SH050025	6-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	201	
	IR02SH050	IR02SH050025	6-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	72	
	IR02SH050	IR02SH050025	6-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	270	
	IR02SH051	IR02SH051005	6-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.166	
	IR02SH051	IR02SH051005	6-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	240	
	IR02SH051	IR02SH051005	6-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	142	
	IR02SH051	IR02SH051005	6-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	306	
	IR02SH051	IR02SH051025	6-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.286	
	IR02SH051	IR02SH051025	6-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	713	
	IR02SH051	IR02SH051025	6-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	213	
	IR02SH051	IR02SH051025	6-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	926	
02SESDGI-2	IR02SH041A	IR02SH041A005	10-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.109	
	IR02SH041A	IR02SH041A005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	2130	
	IR02SH041A	IR02SH041A005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	3300	
	IR02SH041A	IR02SH041A005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	1880	
	IR02SH041A	IR02SH041A025	10-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.319	
	IR02SH041A	IR02SH041A025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	1980	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2	IR02SH041A	IR02SH041A025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	1610	
(Continued)	IR02SH041A	IR02SH041A025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	3100	
	IR02SH041A	IR02SH041A025	10-Sep-02	2	2.5	C&T	TPHEXT-SG	Diesel-Range Organics	12	1400	HL
	IR02SH041A	IR02SH041A025	10-Sep-02	2	2.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	58	2600	M
	IR02SH041A	IR02SH041A025	10-Sep-02	2	2.5	C&T	TPHPRG	Gasoline-Range Organics	23	820	J3H
02SESDGI-3	IR02SH052	IR02SH052005	6-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.154	
	IR02SH052	IR02SH052005	6-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	87	
	IR02SH052	IR02SH052005	6-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	24	
	IR02SH052	IR02SH052005	6-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	210	
	IR02SH052	IR02SH052025	6-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.163	
	IR02SH052	IR02SH052025	6-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	109	
	IR02SH052	IR02SH052025	6-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	75	
	IR02SH052	IR02SH052025	6-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	197	
03SDGI-1	IR03SH001	IR03SH001005	11-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.06	J
	IR03SH001	IR03SH001005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	169	
	IR03SH001	IR03SH001005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	59	
	IR03SH001	IR03SH001005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	210	
	IR03SH001	IR03SH001025	11-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.107	
	IR03SH001	IR03SH001025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	144	
	IR03SH001	IR03SH001025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	65	
	IR03SH001	IR03SH001025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	329	
03SDGI-2	IR03SH002	IR03SH002005	11-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.05	J
	IR03SH002	IR03SH002005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	89	
	IR03SH002	IR03SH002005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	47	
	IR03SH002	IR03SH002005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	164	
	IR03SH002	IR03SH002025	11-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.19	
	IR03SH002	IR03SH002025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	341	
	IR03SH002	IR03SH002025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	90	
	IR03SH002	IR03SH002025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	294	
	IR03SH003	IR03SH003005	11-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.413	
	IR03SH003	IR03SH003005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	361	
	IR03SH003	IR03SH003005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	85	
	IR03SH003	IR03SH003005	11-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	247	
	IR03SH003	IR03SH003025	11-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.336	
	IR03SH003	IR03SH003025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	150	
	IR03SH003	IR03SH003025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	94	
	IR03SH003	IR03SH003025	11-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	209	
	IR03SH004	IR03SH004005	26-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.081	J
	IR03SH004	IR03SH004005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	192	
	IR03SH004	IR03SH004005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	33	
	IR03SH004	IR03SH004005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	244	
	IR03SH004	IR03SH004025	26-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.121	
	IR03SH004	IR03SH004025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	129	
	IR03SH004	IR03SH004025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	139	
	IR03SH004	IR03SH004025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	465	
	IR03SH005	IR03SH005005	27-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.083	J
	IR03SH005	IR03SH005005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	154	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
03SDGI-2 (Continued)	IR03SH005	IR03SH005005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	100	
	IR03SH005	IR03SH005005	27-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	198	
	IR03SH005	IR03SH005025	27-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.144	
	IR03SH005	IR03SH005025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	109	
	IR03SH005	IR03SH005025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	283	
	IR03SH005	IR03SH005025	27-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	228	
	IR03SH005W	IR03SH005005W	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	78	
	IR03SH005W	IR03SH005005W	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	87	
	IR03SH005W	IR03SH005005W	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	119	
	IR03SH005W	IR03SH005025W	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	126	
	IR03SH005W	IR03SH005025W	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	68	
	IR03SH005W	IR03SH005025W	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	195	
03SDGI-3	IR03SH006	IR03SH006005	26-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.085	J
	IR03SH006	IR03SH006005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	102	
	IR03SH006	IR03SH006005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	81	
	IR03SH006	IR03SH006005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	274	
	IR03SH006	IR03SH006025	26-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.189	
	IR03SH006	IR03SH006025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	173	
	IR03SH006	IR03SH006025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	72	
	IR03SH006	IR03SH006025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	236	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.062	J
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	152	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	169	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	206	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PCB	Aroclor-1016	0.013	0.013	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PCB	Aroclor-1221	0.027	0.027	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PCB	Aroclor-1232	0.013	0.013	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PCB	Aroclor-1242	0.013	0.013	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PCB	Aroclor-1248	0.013	0.013	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PCB	Aroclor-1254	0.013	0.013	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PCB	Aroclor-1260	0.013	0.045	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	4,4'-DDD	0.037	0.037	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	4,4'-DDE	0.037	0.037	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	4,4'-DDT	0.037	0.037	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Aldrin	0.019	0.019	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Alpha-BHC	0.019	0.019	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Alpha-Chlordane	0.019	0.019	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Beta-BHC	0.019	0.019	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Delta-BHC	0.019	0.019	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Dieldrin	0.037	0.037	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Endosulfan I	0.019	0.019	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Endosulfan II	0.037	0.037	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Endosulfan Sulfate	0.037	0.037	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Endrin	0.037	0.037	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Endrin Aldehyde	0.037	0.037	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Gamma-BHC (Lindane)	0.019	0.019	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Gamma-Chlordane	0.019	0.019	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
03SDGI-3 (Continued)	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Heptachlor	0.019	0.019	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Heptachlor Epoxide	0.019	0.019	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Methoxychlor	0.19	0.19	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	PEST	Toxaphene	0.67	0.67	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.74	0.74	UJ7
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.7	3.7	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.5	1.5	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.5	1.5	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.5	1.5	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.7	3.7	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.5	1.5	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.5	1.5	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Acenaphthene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Anthracene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Azobenzene	0.74	0.74	UJ7
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Benzoic Acid	3.7	3.7	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Benzyl Alcohol	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Carbazole	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Chrysene	0.15	0.15	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
03SDGI-3 (Continued)	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Di-N-Butylphthalate	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Di-N-Octylphthalate	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Fluoranthene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Fluorene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.7	3.7	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Isophorone	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Naphthalene	0.15	0.15	UJ7
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.5	1.5	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Phenanthrene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Phenol	0.74	0.74	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	SVOA8270	Pyrene	0.15	0.15	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Aluminum	4	3500	J3
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Antimony	2.4	2.3	J
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Arsenic	0.2	4.6	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Barium	0.4	15	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Beryllium	0.08	0.073	J
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Cadmium	0.2	5.9	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Calcium	500	69000	J9
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Chromium	0.4	49	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Cobalt	0.8	6.3	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Copper	0.4	190	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Iron	20	24000	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Lead	0.12	67	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Magnesium	500	10000	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Manganese	0.4	270	
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Mercury	0.2	0.18	J3
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Molybdenum	0.8	2.9	U1
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Nickel	0.8	59	J34
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Potassium	20	430	J3
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Selenium	0.2	0.2	UJ3
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Silver	0.2	0.15	J
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Sodium	100	1900	J3
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Thallium	0.2	0.2	U
	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Vanadium	0.4	17	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
03SDGI-3 (Continued)	IR03SH007	IR03SH007005	26-Aug-02	0	0.5	C&T	TMETAL	Zinc	0.8	82	
	IR03SH007	IR03SH007025	26-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.48	
	IR03SH007	IR03SH007025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	87	
	IR03SH007	IR03SH007025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	120	
	IR03SH007	IR03SH007025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	150	
03SDGI-4	IR03SH008	IR03SH008005	26-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.058	J
	IR03SH008	IR03SH008005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	190	
	IR03SH008	IR03SH008005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	58	
	IR03SH008	IR03SH008005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	209	
	IR03SH008	IR03SH008025	26-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.522	
	IR03SH008	IR03SH008025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	1880	
	IR03SH008	IR03SH008025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	914	
	IR03SH008	IR03SH008025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	2740	
	IR03SH008E	IR03SH008005E	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	147	
	IR03SH008E	IR03SH008005E	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	72	
	IR03SH008E	IR03SH008005E	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	140	
	IR03SH008E	IR03SH008025E	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	113	
	IR03SH008E	IR03SH008025E	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	36	
	IR03SH008E	IR03SH008025E	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	249	
	IR03SH008S	IR03SH008005S	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	112	
	IR03SH008S	IR03SH008005S	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	39	
	IR03SH008S	IR03SH008005S	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	187	
	IR03SH008S	IR03SH008025S	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	1730	
	IR03SH008S	IR03SH008025S	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	1030	
	IR03SH008S	IR03SH008025S	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	2670	
	IR03SH008W	IR03SH008005W	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	126	
	IR03SH008W	IR03SH008005W	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	77	
	IR03SH008W	IR03SH008005W	13-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	137	
	IR03SH008W	IR03SH008025W	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	154	
	IR03SH008W	IR03SH008025W	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	442	
	IR03SH008W	IR03SH008025W	13-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	158	
	IR03SH009	IR03SH009005	26-Aug-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.063	J
	IR03SH009	IR03SH009005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Copper	18	157	
	IR03SH009	IR03SH009005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Lead	8	67	
	IR03SH009	IR03SH009005	26-Aug-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	288	
	IR03SH009	IR03SH009025	26-Aug-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.02	J
	IR03SH009	IR03SH009025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Copper	18	94	
	IR03SH009	IR03SH009025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Lead	8	25	
	IR03SH009	IR03SH009025	26-Aug-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	211	
	IR03SH010	IR03SH010005	10-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.064	J
	IR03SH010	IR03SH010005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	138	
	IR03SH010	IR03SH010005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	271	
	IR03SH010	IR03SH010005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	192	
	IR03SH010	IR03SH010025	10-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.039	J
	IR03SH010	IR03SH010025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	126	
	IR03SH010	IR03SH010025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	41	
	IR03SH010	IR03SH010025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	244	
	IR03SH011	IR03SH011005	10-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.101	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
03SDGI-4 (Continued)	IR03SH011	IR03SH011005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	214	
	IR03SH011	IR03SH011005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	58	
	IR03SH011	IR03SH011005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	250	
	IR03SH011	IR03SH011025	10-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.514	
	IR03SH011	IR03SH011025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	3580	
	IR03SH011	IR03SH011025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	483	
	IR03SH011	IR03SH011025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	1280	
	IR03SH011	IR03SH011025	10-Sep-02	2	2.5	C&T	TPHEXT-SG	Diesel-Range Organics	21	450	H
	IR03SH011	IR03SH011025	10-Sep-02	2	2.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	110	830	M
	IR03SH011	IR03SH011025	10-Sep-02	2	2.5	C&T	TPHPRG	Gasoline-Range Organics	1	1	UJ3
	IR03SH012	IR03SH012005	10-Sep-02	0	0.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.077	J
	IR03SH012	IR03SH012005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Copper	18	67	
	IR03SH012	IR03SH012005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Lead	8	26	
	IR03SH012	IR03SH012005	10-Sep-02	0	0.5	SPAWAR	FXMETAL	Zinc	16	180	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	SPAWAR	FPCB	Estimated Total PCBs	0.1	0.619	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Copper	18	4150	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Lead	8	644	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	SPAWAR	FXMETAL	Zinc	16	2530	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	0.013	0.013	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	0.027	0.027	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	0.013	0.013	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	0.013	0.013	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	0.013	0.013	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	0.013	0.013	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	0.013	0.7	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.073	0.073	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.073	0.073	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	0.073	0.17	UJ9
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Aldrin	0.038	0.038	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Alpha-BHC	0.038	0.038	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Alpha-Chlordane	0.038	0.038	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Beta-BHC	0.038	0.038	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Delta-BHC	0.038	0.038	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.073	0.32	UJ9
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.038	0.038	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.073	0.073	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Endosulfan Sulfate	0.073	0.073	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Endrin	0.073	0.073	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Endrin Aldehyde	0.073	0.073	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Gamma-BHC (Lindane)	0.038	0.038	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Gamma-Chlordane	0.038	0.038	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.038	0.038	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Heptachlor Epoxide	0.038	0.038	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.38	0.38	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	PEST	Toxaphene	1.3	1.3	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.74	0.74	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
03SDGI-4 (Continued)	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.7	3.7	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.15	0.15	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.5	1.5	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.5	1.5	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.5	1.5	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.7	3.7	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	4-Bromophenyl-Phenylether	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-Phenylether	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.5	1.5	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.5	1.5	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.15	0.15	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.15	0.15	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	0.15	0.15	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.15	0.21	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.15	0.19	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.15	0.33	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.15	0.15	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	0.22	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Benzoic Acid	3.7	3.7	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Benzyl Alcohol	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)Methane	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)Ether	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Ethylhexyl)phthalate	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	0.15	0.34	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.15	0.15	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.74	0.74	U

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group[a]	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
03SDGI-4 (Continued)	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Di-N-Butylphthalate	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Di-N-Octylphthalate	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.15	0.46	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	0.15	0.15	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.7	3.7	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.15	0.15	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	0.15	0.15	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	N-Nitroso-Di-N-Propylamine	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.5	1.5	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.15	0.15	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Phenol	0.74	0.74	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	0.15	0.52	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Aluminum	5	2100	J3
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Antimony	3	4.4	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Arsenic	0.25	4.1	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Barium	0.5	30	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.1	0.1	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Cadmium	0.25	2.8	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Calcium	25	6400	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Chromium	0.5	180	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Cobalt	1	3.5	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Copper	2.5	1900	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Iron	5	6400	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Lead	0.15	410	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Magnesium	25	4200	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Manganese	0.5	82	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Mercury	0.37	9.8	J3
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	1	1.6	U1
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Nickel	1	41	J34
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Potassium	130	510	U1
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.25	1.1	J3
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Silver	0.25	0.25	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Sodium	130	1800	J3
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Thallium	0.25	0.25	U
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Vanadium	0.5	13	
	IR03SH012	IR03SH012025	10-Sep-02	2	2.5	C&T	TMETAL	Zinc	5	1100	

TABLE A-1: ANALYTICAL RESULTS FOR SYSTEMATIC SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Notes:

a	"F" (such as FXMETAL, FPCB, and so on) indicates that the sample was analyzed using a field test kit.
bgs	Below ground surface
BHC	Benzene hexachloride
C&T	Curtis and Tompkins Laboratory
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
ID	Identification
mg/kg	Milligrams per kilogram
PCB	Polychlorinated biphenyl
SPAWAR	Space and Naval Warfare Laboratory Facility

Data Qualifier Descriptions:

U1	Compound is nondetected because of laboratory blank contamination
U2	Compound is nondetected because of field blank contamination
U4	Compound is nondetected because of common laboratory contamination
J	Result is greater than the detection limit but less than the reporting limit (just "J," no subqualifier number exists)
J1/UJ1/R3	Compound is estimated or rejected because of noncompliant instrument performance criteria
J2/UJ2	Matrix duplicate
J3/UJ3/R2	Accuracy – blank spike, surrogate spike, matrix spike
J4/UJ4	Serial dilution
J5/UJ5/R1	Holding time
J7/UJ7/R7	Initial and continuing calibration
J8	Exceeds calibration range
J9/UJ9	Organics: percent difference (%D) between columns; Inorganics: interference check samples
J0/UJ0/R0	Internal standards
G, D, M, L, H, and Z	Total petroleum hydrocarbons (TPH) identification qualifiers
Y	Benzo(b)fluoranthene quantitated as the total of benzo(b)- and benzo(k)fluoranthene

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-1	IR01B064[a]	9041L010	10/10/90	0.75	0.75	PEL	CHROM	Chromium VI	0.0500000	0.0500000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	CHROM	CHROMIUM VI	0.0500000	0.0500000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PCB	AROCLOR-1016	0.0130000	0.0130000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PCB	AROCLOR-1221	0.0260000	0.0260000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PCB	AROCLOR-1232	0.0130000	0.0130000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PCB	AROCLOR-1242	0.0130000	0.0130000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PCB	AROCLOR-1248	0.0130000	0.0130000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PCB	AROCLOR-1254	0.0130000	0.0130000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PCB	AROCLOR-1260	0.0130000	0.2600000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PCTMST	PERCENT MOISTURE	0.0000000	6.0000000	
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	4,4'-DDD	0.0710000	0.0710000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	4,4'-DDE	0.0710000	0.0710000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	4,4'-DDT	0.0710000	0.0910000	UJ9
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	ALDRIN	0.0370000	0.0370000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	ALPHA-BHC	0.0370000	0.0370000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	ALPHA-CHLORDANE	0.0370000	0.0370000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	BETA-BHC	0.0370000	0.0370000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	DELTA-BHC	0.0370000	0.0370000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	DIELDRIN	0.0710000	0.0710000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	ENDOSULFAN I	0.0370000	0.0370000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	ENDOSULFAN II	0.0710000	0.0710000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	ENDOSULFAN SULFATE	0.0710000	0.0710000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	ENDRIN	0.0710000	0.0710000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	ENDRIN ALDEHYDE	0.0710000	0.0710000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	GAMMA-BHC (LINDANE)	0.0370000	0.0370000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	GAMMA-CHLORDANE	0.0370000	0.0370000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	HEPTACHLOR	0.0370000	0.0370000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	HEPTACHLOR EPOXIDE	0.0370000	0.0370000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	METHOXYCHLOR	0.3700000	0.3700000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	PEST	TOXAPHENE	1.3000000	1.3000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	1,2,4-TRICHLOROBENZENE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	1,2-DICHLOROBENZENE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	1,3-DICHLOROBENZENE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	1,4-DICHLOROBENZENE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2,2'-OXYBIS(1-CHLOROPROPANE)	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2,4,5-TRICHLOROPHENOL	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2,4,6-TRICHLOROPHENOL	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2,4-DICHLOROPHENOL	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2,4-DIMETHYLPHENOL	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2,4-DINITROPHENOL	7.0000000	7.0000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2,4-DINITROTOLUENE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2,6-DINITROTOLUENE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2-CHLORONAPHTHALENE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2-CHLOROPHENOL	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2-METHYLNAPHTHALENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2-METHYLPHENOL	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2-NITROANILINE	2.8000000	2.8000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	2-NITROPHENOL	2.8000000	2.8000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	3,3'-DICHLOROBENZIDINE	2.8000000	2.8000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	3-NITROANILINE	2.8000000	2.8000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	4,6-DINITRO-2-METHYLPHENOL	7.0000000	7.0000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	4-BROMOPHENYL-PHENYLETHER	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	4-CHLORO-3-METHYLPHENOL	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	4-CHLOROANILINE	1.4000000	1.4000000	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-1 (Continued)	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	4-CHLOROPHENYL-PHENYLETHER	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	4-METHYLPHENOL	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	4-NITROANILINE	2.8000000	2.8000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	4-NITROPHENOL	2.8000000	2.8000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	ACENAPHTHENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	ACENAPHTHYLENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	ANTHRACENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	AZOBENZENE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	BENZO(A)ANTHRACENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	BENZO(A)PYRENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	BENZO(B)FLUORANTHENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	BENZO(G,H,I)PERYLENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	BENZO(K)FLUORANTHENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	BENZOIC ACID	7.0000000	7.0000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	BENZYL ALCOHOL	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	BIS(2-CHLOROETHOXY)METHANE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	BIS(2-CHLOROETHYL)ETHER	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	BIS(2-ETHYLHEXYL)PHTHALATE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	BUTYLBENZYLPHTHALATE	1.4000000	1.4000000	U4
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	CARBAZOLE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	CHRYSENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	DI-N-BUTYLPHTHALATE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	DI-N-OCTYLPHTHALATE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	DIBENZ(A,H)ANTHRACENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	DIBENZOFURAN	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	DIETHYLPHTHALATE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	DIMETHYLPHTHALATE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	FLUORANTHENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	FLUORENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	HEXACHLOROBENZENE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	HEXACHLOROBUTADIENE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	HEXACHLOROCYCLOPENTADIENE	7.0000000	7.0000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	HEXACHLOROETHANE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	INDENO(1,2,3-CD)PYRENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	ISOPHORONE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	N-NITROSO-DI-N-PROPYLAMINE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	N-NITROSODIMETHYLAMINE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	N-NITROSODIPHENYLAMINE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	NAPHTHALENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	NITROBENZENE	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	PENTACHLOROPHENOL	2.8000000	2.8000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	PHENANTHRENE	0.2800000	0.1500000	J
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	PHENOL	1.4000000	1.4000000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	SVOA8270	PYRENE	0.2800000	0.2800000	U
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	ALUMINUM	260.0000000	13000.0000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	ANTIMONY	3.1000000	3.1000000	U1J37
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	ARSENIC	0.2600000	3.3000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	BARIUM	0.5200000	160.0000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	BERYLLIUM	0.1000000	0.4400000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	CADMIUM	0.2600000	1.5000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	CALCIUM	26.0000000	6300.0000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	CHROMIUM	0.5200000	89.0000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	COBALT	1.0000000	17.0000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	COPPER	0.5200000	850.0000000	

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-1 (Continued)	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	IRON	260.0000000	26000.0000000	
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	LEAD	0.1600000	690.0000000	
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	MAGNESIUM	1300.0000000	16000.0000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	MANGANESE	0.5200000	730.0000000	
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	MERCURY	0.0430000	1.2000000	
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	MOLYBDENUM	1.0000000	1.0000000	UJ3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	NICKEL	1.0000000	140.0000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	POTASSIUM	26.0000000	1100.0000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	SELENIUM	0.2600000	0.6500000	J37
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	SILVER	0.2600000	0.2600000	UJ3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	SODIUM	26.0000000	110.0000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	THALLIUM	0.2600000	1.8000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	VANADIUM	0.5200000	47.0000000	J3
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TMETAL	ZINC	1.0000000	200.0000000	J2
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TPHEXT-SG	DIESEL RANGE ORGANICS	5.3000000	62.0000000	H
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TPHEXT-SG	MOTOR OIL RANGE ORGANICS	27.0000000	400.0000000	HM
	IR01SH023	IR01SH023TOP	09/06/02	2	2.5	C&T	TPHPRG	GASOLINE RANGE ORGANICS	0.1800000	0.1800000	U
01/21SDGI-3	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	CHROM	Chromium VI	0.07	0.07	R2
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8,9-OCDD	0.0000006	0.0018830	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8,9-OCDF	0.0000007	0.0002565	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8-HPCDD	0.0000009	0.0001649	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8-HPCDF	0.0000004	0.0000644	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,4,7,8,9-HPCDF	0.0000005	0.0000166	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,4,7,8-HXCDD	0.0000016	0.0000038	J5
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,4,7,8-HXCDF	0.0000005	0.0000360	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,6,7,8-HXCDD	0.0000012	0.0000062	J5
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,6,7,8-HXCDF	0.0000005	0.0000118	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,7,8,9-HXCDD	0.0000012	0.0000067	J5
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,7,8,9-HXCDF	0.0000006	0.0000006	UJ05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,7,8-PECDD	0.0000016	0.0000016	UJ5
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	1,2,3,7,8-PECDF	0.0000004	0.0000037	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	2,3,4,6,7,8-HXCDF	0.0000006	0.0000042	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	2,3,4,7,8-PECDF	0.0000004	0.0000076	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	2,3,7,8-TCDD	0.0000005	0.0000005	UJ05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	2,3,7,8-TCDF	0.0000014	0.0000076	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	Total HPCDD	0.0000009	0.0003677	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	Total HPCDF	0.0000004	0.0001881	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	Total HXCDD	0.0000012	0.0000221	J5
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	Total HXCDF	0.0000005	0.0001108	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	Total PECDD	0.0000016	0.0000016	UJ5
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	Total PECDF	0.0000004	0.0000797	J5
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	Total TCDD	0.0000005	0.0000041	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	SWL	DIOXIN	Total TCDF	0.0000003	0.0001559	J05
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PCB	Aroclor-1016	0.16	0.16	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PCB	Aroclor-1221	0.32	0.32	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PCB	Aroclor-1232	0.16	0.16	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PCB	Aroclor-1242	0.16	0.16	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PCB	Aroclor-1248	0.16	0.16	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PCB	Aroclor-1254	0.16	3.5	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PCB	Aroclor-1260	0.16	6.1	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	4,4'-DDD	0.044	0.044	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	4,4'-DDE	0.044	0.044	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	4,4'-DDT	0.044	0.66	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Aldrin	0.023	0.023	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Alpha-BHC	0.023	0.023	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.023	0.023	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Beta-BHC	0.023	0.023	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Delta-BHC	0.023	0.023	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Dieldrin	0.044	0.27	UJ9
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Endosulfan I	0.023	0.023	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Endosulfan II	0.044	0.044	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.044	0.044	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Endrin	0.044	0.1	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Endrin aldehyde	0.044	0.044	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.023	0.023	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.023	0.13	UJ9
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Heptachlor	0.023	0.023	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.023	0.15	UJ9
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Methoxychlor	0.23	0.23	UJ7
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	PEST	Toxaphene	0.8	0.8	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.89	0.89	UJ7
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.4	4.4	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.18	0.18	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.8	1.8	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.8	1.8	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.8	1.8	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.8	1.8	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.4	4.4	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.8	1.8	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.8	1.8	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.18	0.18	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.18	0.18	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Anthracene	0.18	0.11	J
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Azobenzene	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.18	0.33	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.18	0.31	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.18	0.53	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.18	0.1	J
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.18	0.24	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Benzoic acid	4.4	4.4	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Carbazole	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Chrysene	0.18	0.46	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.18	0.18	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.18	0.64	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Fluorene	0.18	0.18	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.4	4.4	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.18	0.12	J
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Isophorone	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Naphthalene	0.18	0.18	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.8	1.8	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.18	0.33	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Phenol	0.89	0.89	U
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	SVOA8270	Pyrene	0.18	0.65	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Aluminum	6.3	1900	J349
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Antimony	3.8	5.2	U1J3
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Arsenic	0.31	3.1	J7
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Barium	0.63	30	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Beryllium	0.13	0.13	U1
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Cadmium	0.31	0.13	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Calcium	310	56000	J39
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Chromium	0.63	71	J3
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Cobalt	1.3	3.5	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Copper	0.63	480	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Iron	63	14000	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Lead	0.19	190	J4
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Magnesium	31	5400	J34
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Manganese	0.63	160	J3
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Mercury	0.12	1.9	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Molybdenum	1.3	1.3	U1
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Nickel	1.3	59	J4
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Potassium	31	560	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Selenium	0.31	0.63	J7
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Silver	0.31	1.2	J7
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Sodium	31	3700	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Thallium	0.31	0.31	UJ3
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Vanadium	0.63	30	

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Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TMETAL	Zinc	1.3	340	
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TPHEXT-SG	Diesel-Range Organics	2.7	140	H
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	13	420	M
	IR01SH025	IR01SH025005	09/04/02	0	0.5	C&T	TPHPRG	Gasoline-Range Organics	0.24	0.24	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	CHROM	Chromium VI	0.07	0.07	R2
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PCB	Aroclor-1016	0.034	0.034	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PCB	Aroclor-1221	0.067	0.067	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PCB	Aroclor-1232	0.034	0.034	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PCB	Aroclor-1242	0.034	0.034	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PCB	Aroclor-1248	0.034	0.034	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PCB	Aroclor-1254	0.034	0.034	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PCB	Aroclor-1260	0.034	1.1	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	4,4'-DDD	0.045	0.045	UJ9
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	4,4'-DDE	0.045	0.045	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	4,4'-DDT	0.045	0.045	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Aldrin	0.023	0.023	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Alpha-BHC	0.023	0.023	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.023	0.023	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Beta-BHC	0.023	0.023	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Delta-BHC	0.023	0.023	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Dieldrin	0.045	0.045	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Endosulfan I	0.023	0.023	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Endosulfan II	0.045	0.045	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.045	0.045	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Endrin	0.045	0.045	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Endrin aldehyde	0.045	0.045	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.023	0.023	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.023	0.045	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Heptachlor	0.023	0.023	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.023	0.023	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Methoxychlor	0.23	0.23	UJ7
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	PEST	Toxaphene	0.83	0.83	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.93	0.93	UJ7
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.6	4.6	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.18	0.18	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.9	1.9	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.9	1.9	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.9	1.9	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.9	1.9	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.6	4.6	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.93	0.93	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.9	1.9	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.9	1.9	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.18	0.18	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.18	0.18	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Anthracene	0.18	0.18	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Azobenzene	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.18	0.11	J
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.18	0.1	J
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.18	0.16	JY
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.18	0.18	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.18	0.18	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.6	4.6	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Carbazole	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Chrysene	0.18	0.14	J
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.18	0.18	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.18	0.17	J
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Fluorene	0.18	0.18	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.6	4.6	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.18	0.18	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Isophorone	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Naphthalene	0.18	0.18	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.9	1.9	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.18	0.18	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Phenol	0.93	0.93	U
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	SVOA8270	Pyrene	0.18	0.31	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Aluminum	5.4	1500	J34
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Antimony	3.3	6.1	U1J3
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Arsenic	0.27	3.7	J7
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Barium	0.54	51	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Beryllium	0.11	0.11	U1
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Cadmium	0.27	1.4	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Calcium	27	4800	J3
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Chromium	0.54	61	J3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Cobalt	1.1	2.8	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Copper	0.54	1400	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Iron	27	14000	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Lead	0.16	740	J4
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Magnesium	27	1700	J34
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Manganese	0.54	80	J3
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Mercury	0.23	4.9	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Molybdenum	1.1	1.7	U1
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Nickel	1.1	29	J4
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Potassium	27	370	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Selenium	0.27	0.61	J7
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Silver	0.27	0.27	U1J7
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Sodium	27	1400	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Thallium	0.27	0.27	UJ3
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Vanadium	0.54	12	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TMETAL	Zinc	1.1	1000	
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TPHEXT-SG	Diesel-Range Organics	2.8	410	HL
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	14	670	LM
	IR01SH025	IR01SH025025	09/04/02	2	2.5	C&T	TPHPRG	Gasoline-Range Organics	0.25	0.23	J3H
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	CHROM	Chromium VI	0.07	0.07	R2
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PCB	Aroclor-1016	0.17	0.17	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PCB	Aroclor-1221	0.34	0.34	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PCB	Aroclor-1232	0.17	0.17	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PCB	Aroclor-1242	0.17	0.17	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PCB	Aroclor-1248	0.17	0.17	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PCB	Aroclor-1254	0.17	0.17	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PCB	Aroclor-1260	0.17	9.4	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	4,4'-DDD	0.094	0.094	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	4,4'-DDE	0.094	0.094	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	4,4'-DDT	0.094	0.31	UJ9
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Aldrin	0.049	0.049	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Alpha-BHC	0.049	0.049	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.049	0.049	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Beta-BHC	0.049	0.049	UJ9
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Delta-BHC	0.049	0.049	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Dieldrin	0.094	0.094	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Endosulfan I	0.049	0.049	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Endosulfan II	0.094	0.094	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.094	0.094	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Endrin	0.094	0.098	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Endrin aldehyde	0.094	0.094	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.049	0.049	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.049	0.17	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Heptachlor	0.049	0.049	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.049	0.057	UJ9
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Methoxychlor	0.49	0.49	UJ7
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	PEST	Toxaphene	1.7	1.7	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.96	0.96	UJ7
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.96	0.96	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.8	4.8	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.19	0.19	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.9	1.9	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.9	1.9	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.9	1.9	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.9	1.9	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.8	4.8	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.9	1.9	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.9	1.9	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.19	0.19	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.19	0.19	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Anthracene	0.19	0.19	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Azobenzene	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.19	0.32	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.19	0.3	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.19	0.52	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.19	0.12	J
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.19	0.25	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Benzoic acid	4.8	4.8	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Carbazole	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Chrysene	0.19	0.38	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.19	0.19	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.19	0.47	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Fluorene	0.19	0.19	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.8	4.8	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.19	0.12	J
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Isophorone	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Naphthalene	0.19	0.19	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.96	0.96	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.9	1.9	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.19	0.13	J
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Phenol	0.96	0.96	U
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	SVOA8270	Pyrene	0.19	0.69	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Aluminum	5.7	1600	J34
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Antimony	3.4	27	J3
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Arsenic	0.28	3.9	J7
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Barium	0.57	120	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Beryllium	0.11	0.11	U1
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Cadmium	0.28	2.3	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Calcium	280	25000	J3
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Chromium	0.57	99	J3
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Cobalt	1.1	6.2	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Copper	0.57	2000	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Iron	57	20000	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Lead	0.17	350	J4
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Magnesium	28	3600	J34
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Manganese	0.57	150	J3
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Mercury	0.24	2.8	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Molybdenum	1.1	6.7	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Nickel	1.1	92	J4
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Potassium	28	400	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Selenium	0.28	0.7	J7
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Silver	0.28	0.3	J7
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Sodium	28	2800	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Thallium	0.28	0.28	UJ3
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Vanadium	0.57	13	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TMETAL	Zinc	1.1	1000	
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TPHEXT-SG	Diesel-Range Organics	1.4	200	H
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	7.1	320	LM
	IR01SH026	IR01SH026005	09/04/02	0	0.5	C&T	TPHPRG	Gasoline-Range Organics	0.25	0.25	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	CHROM	Chromium VI	0.06	0.06	R2
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PCB	Aroclor-1016	0.15	0.15	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PCB	Aroclor-1221	0.31	0.31	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PCB	Aroclor-1232	0.15	0.15	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PCB	Aroclor-1242	0.15	0.15	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PCB	Aroclor-1248	0.15	0.15	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PCB	Aroclor-1254	0.15	0.15	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PCB	Aroclor-1260	0.15	10	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	4,4'-DDD	0.083	0.083	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	4,4'-DDE	0.083	0.083	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	4,4'-DDT	0.083	1	UJ9
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Aldrin	0.043	0.043	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Alpha-BHC	0.043	0.043	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.043	0.043	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Beta-BHC	0.043	0.15	UJ9
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Delta-BHC	0.043	0.043	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Dieldrin	0.083	0.66	UJ9
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Endosulfan I	0.043	0.043	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Endosulfan II	0.083	0.083	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.083	0.083	U

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Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Endrin	0.083	0.36	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Endrin aldehyde	0.083	0.083	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.043	0.39	UJ9
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.043	0.54	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Heptachlor	0.043	0.043	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.043	0.27	UJ9
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Methoxychlor	0.43	0.27	J7
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	PEST	Toxaphene	1.5	1.5	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.85	0.85	UJ7
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.2	4.2	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.17	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.7	1.7	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.2	4.2	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Anthracene	0.17	0.086	J
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Azobenzene	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.3	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.29	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	0.6	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.12	J
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.27	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.2	4.2	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Carbazole	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Chrysene	0.17	1.3	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.17	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.17	0.72	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Fluorene	0.17	0.17	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.2	4.2	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.14	J
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Isophorone	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Naphthalene	0.17	0.17	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.17	0.11	J
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Phenol	0.85	0.85	U
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	SVOA8270	Pyrene	0.17	1.2	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Aluminum	5.2	990	J34
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Antimony	3.1	19	J3
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Arsenic	0.26	2.6	J7
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Barium	0.52	45	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Beryllium	0.1	0.1	U1
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Cadmium	0.26	2.3	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Calcium	130	18000	J3
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Chromium	0.52	110	J3
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Cobalt	1	3.8	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Copper	2.6	4400	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Iron	26	12000	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Lead	0.16	1000	J4
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Magnesium	26	2000	J34
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Manganese	0.52	110	J3
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Mercury	0.23	8	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Molybdenum	1	3.6	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Nickel	1	36	J4
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Potassium	130	480	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Selenium	0.26	0.46	J7
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Silver	0.26	0.26	U1J7
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Sodium	130	2300	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Thallium	0.26	0.26	UJ3
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Vanadium	0.52	11	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TMETAL	Zinc	5.2	3000	
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TPHEXT-SG	Diesel-Range Organics	13	1000	H
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	63	1500	LM
	IR01SH026	IR01SH026025	09/04/02	2	2.5	C&T	TPHPRG	Gasoline-Range Organics	0.23	1.9	J3H
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	CHROM	Chromium VI	0.07	0.07	R2
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PCB	Aroclor-1016	0.16	0.16	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PCB	Aroclor-1221	0.33	0.33	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PCB	Aroclor-1232	0.16	0.16	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PCB	Aroclor-1242	0.16	0.16	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PCB	Aroclor-1248	0.16	0.16	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PCB	Aroclor-1254	0.16	0.16	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PCB	Aroclor-1260	0.16	9.4	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	4,4'-DDD	0.045	0.045	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	4,4'-DDE	0.045	0.045	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	4,4'-DDT	0.045	0.36	UJ9
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Aldrin	0.023	0.023	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Alpha-BHC	0.023	0.023	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.023	0.023	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Beta-BHC	0.023	0.023	UJ9
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Delta-BHC	0.023	0.023	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Dieldrin	0.045	0.045	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Endosulfan I	0.023	0.023	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Endosulfan II	0.045	0.045	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.045	0.045	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Endrin	0.045	0.076	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Endrin aldehyde	0.045	0.045	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.023	0.023	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.023	0.11	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Heptachlor	0.023	0.023	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.023	0.023	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Methoxychlor	0.23	0.23	UJ7
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	PEST	Toxaphene	0.82	0.82	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.92	0.92	UJ7
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.6	4.6	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.18	0.18	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.8	1.8	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.8	1.8	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.8	1.8	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.8	1.8	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.6	4.6	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.8	1.8	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.8	1.8	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.18	0.18	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.18	0.18	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Anthracene	0.18	0.18	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Azobenzene	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.18	0.14	J
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.18	0.14	J
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.18	0.2	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.18	0.18	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.18	0.18	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Benzoic acid	4.6	4.6	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Carbazole	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Chrysene	0.18	0.21	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.18	0.18	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.18	0.21	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Fluorene	0.18	0.18	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.6	4.6	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.18	0.18	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Isophorone	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Naphthalene	0.18	0.18	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.8	1.8	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.18	0.15	J
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Phenol	0.92	0.92	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	SVOA8270	Pyrene	0.18	0.34	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Aluminum	6.4	2100	J34
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Antimony	3.8	5.5	U1J3
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Arsenic	0.32	5.9	J7
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Barium	3.2	1300	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Beryllium	0.13	0.13	U1
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Cadmium	0.32	1.9	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Calcium	160	44000	J3
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Chromium	0.64	120	J3
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Cobalt	1.3	5.8	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Copper	0.64	550	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Iron	32	31000	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Lead	0.19	170	J4
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Magnesium	160	27000	J34
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Manganese	0.64	160	J3
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Mercury	0.043	1.3	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Molybdenum	1.3	1.8	U1
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Nickel	1.3	200	J4

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Potassium	160	630	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Selenium	0.32	0.65	J7
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Silver	0.32	0.32	U
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Sodium	160	3600	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Thallium	0.32	0.32	UJ3
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Vanadium	0.64	40	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TMETAL	Zinc	6.4	690	
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TPHEXT-SG	Diesel-Range Organics	1.4	100	H
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	6.8	260	LM
	IR01SH029	IR01SH029005	09/04/02	0	0.5	C&T	TPHPRG	Gasoline-Range Organics	0.24	0.24	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	CHROM	Chromium VI	0.08	0.08	R2
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PCB	Aroclor-1016	0.04	0.04	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PCB	Aroclor-1221	0.08	0.08	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PCB	Aroclor-1232	0.04	0.04	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PCB	Aroclor-1242	0.04	0.04	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PCB	Aroclor-1248	0.04	0.04	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PCB	Aroclor-1254	0.04	0.04	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PCB	Aroclor-1260	0.04	1.9	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	4,4'-DDD	0.027	0.027	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	4,4'-DDE	0.027	0.027	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	4,4'-DDT	0.027	0.027	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Aldrin	0.014	0.014	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Alpha-BHC	0.014	0.014	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.014	0.014	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Beta-BHC	0.014	0.0083	J
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Delta-BHC	0.014	0.014	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Dieldrin	0.027	0.027	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Endosulfan I	0.014	0.014	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Endosulfan II	0.027	0.027	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.027	0.027	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Endrin	0.027	0.041	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Endrin aldehyde	0.027	0.027	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.014	0.014	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.014	0.053	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Heptachlor	0.014	0.014	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.014	0.023	UJ9
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Methoxychlor	0.14	0.14	UJ7
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	PEST	Toxaphene	0.49	0.49	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	5.5	5.5	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylphenol	1.1	1.1	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	2.2	2.2	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	2.2	2.2	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	2.2	2.2	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	2.2	2.2	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	5.5	5.5	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	4-Methylphenol	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	2.2	2.2	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	2.2	2.2	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Anthracene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Azobenzene	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Benzoic acid	5.5	5.5	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Carbazole	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Chrysene	0.22	0.16	J
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Dibenzofuran	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Diethylphthalate	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Fluorene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	5.5	5.5	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Hexachloroethane	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.22	0.42	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Isophorone	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Naphthalene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Nitrobenzene	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	2.2	2.2	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.22	0.22	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Phenol	1.1	1.1	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	SVOA8270	Pyrene	0.22	0.2	J
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Aluminum	7.3	11000	J34
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Antimony	4.4	4.4	U1J3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Arsenic	0.36	8.2	J7
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Barium	0.73	48	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Beryllium	0.15	0.38	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Cadmium	0.36	2.3	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Calcium	180	22000	J3
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Chromium	0.73	77	J3
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Cobalt	1.5	11	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Copper	0.73	390	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Iron	36	40000	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Lead	0.22	150	J4
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Magnesium	36	9400	J34
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Manganese	0.73	280	J3
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Mercury	0.034	0.51	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Molybdenum	1.5	1.6	U1
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Nickel	1.5	78	J4
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Potassium	180	3500	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Selenium	0.36	1.3	J7
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Silver	0.36	0.36	U
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Sodium	180	6900	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Thallium	0.36	0.36	UJ3
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Vanadium	0.73	42	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TMETAL	Zinc	1.5	230	
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TPHEXT-SG	Diesel-Range Organics	1.6	67	H
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	8.2	150	LM
	IR01SH029	IR01SH029025	09/04/02	2	2.5	C&T	TPHPRG	Gasoline-Range Organics	0.39	0.39	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	CHROM	Chromium VI	0.06	0.06	R2
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PCB	Aroclor-1016	0.067	0.067	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PCB	Aroclor-1221	0.13	0.13	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PCB	Aroclor-1232	0.067	0.067	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PCB	Aroclor-1242	0.067	0.067	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PCB	Aroclor-1248	0.067	0.067	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PCB	Aroclor-1254	0.067	0.067	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PCB	Aroclor-1260	0.067	2	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	4,4'-DDD	0.037	0.037	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	4,4'-DDE	0.037	0.037	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	4,4'-DDT	0.037	0.17	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Aldrin	0.019	0.019	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Alpha-BHC	0.019	0.019	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.019	0.027	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Beta-BHC	0.019	0.019	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Delta-BHC	0.019	0.019	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Dieldrin	0.037	0.037	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Endosulfan I	0.019	0.019	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Endosulfan II	0.037	0.037	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.037	0.037	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Endrin	0.037	0.025	J
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Endrin aldehyde	0.037	0.037	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.019	0.019	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.019	0.035	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Heptachlor	0.019	0.019	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.019	0.019	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Methoxychlor	0.19	0.19	UJ7
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	PEST	Toxaphene	0.67	0.67	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.75	0.75	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.75	0.75	UJ7
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.7	3.7	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.15	0.15	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.5	1.5	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.5	1.5	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.5	1.5	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.5	1.5	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.7	3.7	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.5	1.5	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.5	1.5	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.15	0.15	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.15	0.15	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Anthracene	0.15	0.15	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Azobenzene	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.15	0.085	J
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.15	0.098	J
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.15	0.13	JY
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.15	0.085	J
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	0.11	JY
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.7	3.7	UJ7
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.75	2.7	U4
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Carbazole	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Chrysene	0.15	0.13	J
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.15	0.15	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.15	0.2	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Fluorene	0.15	0.15	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.75	0.75	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.7	3.7	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.15	0.088	J
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Isophorone	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Naphthalene	0.15	0.15	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.75	0.75	UJ7
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.5	1.5	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.15	0.12	J
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Phenol	0.75	0.75	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	SVOA8270	Pyrene	0.15	0.18	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Aluminum	4.9	5200	J34
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Antimony	2.9	2.9	U1J3
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Arsenic	0.24	2.1	J7
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Barium	0.49	68	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Beryllium	0.098	0.2	U1
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Cadmium	0.24	1.1	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Calcium	24	5200	J3
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Chromium	0.49	160	J3
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Cobalt	0.98	19	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Copper	0.49	94	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Iron	24	25000	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Lead	0.15	50	J4
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Magnesium	240	58000	J34
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Manganese	0.49	880	J3
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Mercury	0.021	0.38	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Molybdenum	0.98	0.98	U
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Nickel	0.98	350	J4
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Potassium	120	1300	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Selenium	0.24	0.87	J7
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Silver	0.24	0.24	U1J7
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Sodium	120	3300	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Thallium	0.24	2.3	J3
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Vanadium	0.49	26	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TMETAL	Zinc	4.9	310	
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TPHEXT-SG	Diesel-Range Organics	1.1	27	J3H
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	5.5	130	J3M
	IR01SH032	IR01SH032005	09/04/02	0	0.5	C&T	TPHPRG	Gasoline-Range Organics	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	CHROM	Chromium VI	0.07	0.07	R2
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PCB	Aroclor-1016	0.087	0.087	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PCB	Aroclor-1221	0.17	0.17	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PCB	Aroclor-1232	0.087	0.087	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PCB	Aroclor-1242	0.087	0.087	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PCB	Aroclor-1248	0.087	0.087	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PCB	Aroclor-1254	0.087	0.087	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PCB	Aroclor-1260	0.087	4.1	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	4,4'-DDD	0.047	0.047	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	4,4'-DDE	0.047	0.047	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	4,4'-DDT	0.047	0.18	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Aldrin	0.024	0.024	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Alpha-BHC	0.024	0.024	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.024	0.024	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Beta-BHC	0.024	0.024	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Delta-BHC	0.024	0.024	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Dieldrin	0.047	0.047	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Endosulfan I	0.024	0.024	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Endosulfan II	0.047	0.047	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.047	0.047	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Endrin	0.047	0.047	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Endrin aldehyde	0.047	0.047	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.024	0.024	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.024	0.024	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Heptachlor	0.024	0.024	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.024	0.024	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Methoxychlor	0.24	0.24	UJ7
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	PEST	Toxaphene	0.86	0.86	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.8	4.8	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.9	1.9	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.9	1.9	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.9	1.9	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.9	1.9	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.8	4.8	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.9	1.9	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.9	1.9	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Anthracene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Azobenzene	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.8	4.8	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.97	0.97	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Carbazole	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Chrysene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Fluorene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.8	4.8	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Isophorone	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Naphthalene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.9	1.9	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Phenol	0.97	0.97	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	SVOA8270	Pyrene	0.19	0.19	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Aluminum	32	14000	J34
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Antimony	3.9	3.9	UJ3
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Arsenic	0.32	6.4	J7
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Barium	0.65	23	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Beryllium	0.13	0.34	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Cadmium	0.32	1.7	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Calcium	32	3800	J3
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Chromium	0.65	51	J3
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Cobalt	1.3	10	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Copper	0.65	82	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Iron	32	29000	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Lead	0.19	25	J4
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Magnesium	32	8400	J34
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Manganese	0.65	240	J3
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Mercury	0.026	0.23	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Molybdenum	1.3	1.3	U1
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Nickel	1.3	69	J4
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Potassium	160	2700	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Selenium	0.32	0.68	J7
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Silver	0.32	0.32	U
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Sodium	160	4900	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Thallium	0.32	0.32	UJ3
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Vanadium	0.65	35	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TMETAL	Zinc	1.3	91	
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TPHEXT-SG	Diesel-Range Organics	1.5	22	H
	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	7.3	73	M

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3	IR01SH032	IR01SH032025	09/04/02	2	2.5	C&T	TPHPRG	Gasoline-Range Organics	0.33	0.33	U
(Continued)	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	CHROM	Chromium VI	0.05	0.05	R2
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PCB	Aroclor-1016	0.12	0.12	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PCB	Aroclor-1221	0.24	0.24	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PCB	Aroclor-1232	0.12	0.12	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PCB	Aroclor-1242	0.12	0.12	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PCB	Aroclor-1248	0.12	0.12	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PCB	Aroclor-1254	0.12	0.12	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PCB	Aroclor-1260	0.12	6.5	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	4,4'-DDD	0.033	0.033	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	4,4'-DDE	0.033	0.033	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	4,4'-DDT	0.033	0.85	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Aldrin	0.017	0.017	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Alpha-BHC	0.017	0.017	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.017	0.017	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Beta-BHC	0.017	0.017	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Delta-BHC	0.017	0.017	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Dieldrin	0.033	0.28	UJ9
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Endosulfan I	0.017	0.017	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Endosulfan II	0.033	0.033	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.033	0.033	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Endrin	0.033	0.11	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Endrin aldehyde	0.033	0.033	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.017	0.017	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.017	0.017	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Heptachlor	0.017	0.017	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.017	0.017	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Methoxychlor	0.17	0.17	UJ7
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	PEST	Toxaphene	0.6	0.6	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.4	3.4	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.4	1.4	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.4	1.4	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	1.4	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.4	1.4	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.4	3.4	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.68	0.68	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.4	1.4	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.4	1.4	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Anthracene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Azobenzene	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.13	0.16	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.13	0.13	JY
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.4	3.4	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.68	0.68	U4
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Carbazole	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Chrysene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Fluorene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.4	3.4	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Isophorone	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Naphthalene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.4	0.77	J
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Phenol	0.68	0.68	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	SVOA8270	Pyrene	0.13	0.13	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Aluminum	4.8	2200	J34
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Antimony	2.9	2.9	UJ3
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Arsenic	0.24	3.3	J7
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Barium	0.48	19	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Beryllium	0.097	0.11	U1
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Cadmium	0.24	0.68	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Calcium	120	12000	J3
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Chromium	0.48	33	J3
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Cobalt	0.97	3.7	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Copper	0.48	300	

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Iron	24	13000	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Lead	0.14	86	J4
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Magnesium	24	3400	J34
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Manganese	0.48	170	J3
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Mercury	0.018	0.52	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Molybdenum	0.97	0.97	U1
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Nickel	0.97	36	J4
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Potassium	120	430	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Selenium	0.24	0.26	J7
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Silver	0.24	0.24	U
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Sodium	120	250	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Thallium	0.24	0.73	U1J3
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Vanadium	0.48	13	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TMETAL	Zinc	0.97	180	
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TPHEXT-SG	Diesel-Range Organics	1	20	H
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	5	93	M
	IR01SH035	IR01SH035005	09/04/02	0	0.5	C&T	TPHPRG	Gasoline-Range Organics	0.23	0.23	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	CHROM	Chromium VI	0.06	0.06	R2
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PCB	Aroclor-1016	0.28	0.28	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PCB	Aroclor-1221	0.55	0.55	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PCB	Aroclor-1232	0.28	0.28	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PCB	Aroclor-1242	0.28	0.28	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PCB	Aroclor-1248	0.28	0.28	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PCB	Aroclor-1254	0.28	0.28	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PCB	Aroclor-1260	0.28	9.3	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	4,4'-DDD	0.037	0.037	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	4,4'-DDE	0.037	0.037	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	4,4'-DDT	0.037	0.87	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Aldrin	0.019	0.019	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Alpha-BHC	0.019	0.019	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.019	0.019	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Beta-BHC	0.019	0.019	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Delta-BHC	0.019	0.019	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Dieldrin	0.037	0.32	UJ9
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Endosulfan I	0.019	0.019	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Endosulfan II	0.037	0.037	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.037	0.037	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Endrin	0.037	0.12	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Endrin aldehyde	0.037	0.037	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.019	0.019	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.019	0.019	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Heptachlor	0.019	0.019	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.019	0.019	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Methoxychlor	0.19	0.19	UJ7
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	PEST	Toxaphene	0.68	0.68	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.77	0.77	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.8	3.8	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.15	0.15	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.5	1.5	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.5	1.5	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.5	1.5	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.5	1.5	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.8	3.8	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.5	1.5	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.5	1.5	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.15	0.15	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.15	0.15	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Anthracene	0.15	0.15	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Azobenzene	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.15	0.15	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.15	0.22	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.15	0.28	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.15	0.15	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	0.15	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Benzoic acid	3.8	3.8	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.77	0.77	U4
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Carbazole	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Chrysene	0.15	0.09	J
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.15	0.15	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.15	0.15	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Fluorene	0.15	0.15	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.8	3.8	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.15	0.15	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Isophorone	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Naphthalene	0.15	0.15	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.77	0.77	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.5	1.5	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.15	0.11	J
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Phenol	0.77	0.77	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	SVOA8270	Pyrene	0.15	0.16	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Aluminum	5.6	900	J34
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Antimony	3.3	3.3	U1J3
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Arsenic	0.28	2.9	J7
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Barium	0.56	7.7	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Beryllium	0.11	0.11	U1
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Cadmium	0.28	0.38	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Calcium	28	2900	J3
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Chromium	0.56	30	J3
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Cobalt	1.1	1.3	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Copper	0.56	270	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Iron	5.6	3900	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Lead	0.17	170	J4
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Magnesium	28	1900	J34
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Manganese	0.56	43	J3
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Mercury	0.23	4.4	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Molybdenum	1.1	1.1	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Nickel	1.1	20	J4
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Potassium	28	230	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Selenium	0.28	0.28	UJ7
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Silver	0.28	0.28	U
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Sodium	28	1300	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Thallium	0.28	0.28	U1J3
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Vanadium	0.56	7.3	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TMETAL	Zinc	1.1	210	
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TPHEXT-SG	Diesel-Range Organics	2.3	810	H
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	12	780	LM
	IR01SH035	IR01SH035025	09/04/02	2	2.5	C&T	TPHPRG	Gasoline-Range Organics	0.2	0.15	H
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	CHROM	Chromium VI	0.05	0.05	R2
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PCB	Aroclor-1016	0.06	0.06	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PCB	Aroclor-1221	0.12	0.12	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PCB	Aroclor-1232	0.06	0.06	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PCB	Aroclor-1242	0.06	0.06	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PCB	Aroclor-1248	0.06	0.06	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PCB	Aroclor-1254	0.06	0.06	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PCB	Aroclor-1260	0.06	1.5	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	4,4'-DDD	0.033	0.033	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	4,4'-DDE	0.033	0.033	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	4,4'-DDT	0.033	0.13	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Aldrin	0.017	0.017	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Alpha-BHC	0.017	0.017	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.017	0.017	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Beta-BHC	0.017	0.017	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Delta-BHC	0.017	0.017	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Dieldrin	0.033	0.033	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Endosulfan I	0.017	0.017	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Endosulfan II	0.033	0.033	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.033	0.033	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Endrin	0.033	0.033	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Endrin aldehyde	0.033	0.033	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.017	0.017	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.017	0.017	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Heptachlor	0.017	0.017	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.017	0.017	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Methoxychlor	0.17	0.17	UJ7
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	PEST	Toxaphene	0.59	0.59	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.3	3.3	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.3	1.3	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.3	1.3	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.3	1.3	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.3	1.3	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.3	3.3	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.3	1.3	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.3	1.3	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Anthracene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Azobenzene	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.13	0.16	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.13	0.12	JY
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.3	3.3	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.67	0.67	U4
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Carbazole	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Chrysene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.67	0.67	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.67	0.67	U4
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Fluorene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.3	3.3	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Isophorone	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Naphthalene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.3	1.3	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Phenol	0.67	0.67	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	SVOA8270	Pyrene	0.13	0.13	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Aluminum	4.8	4700	J34
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Antimony	2.9	2.9	U1J3
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Arsenic	0.24	5.2	J7
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Barium	0.48	40	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Beryllium	0.095	0.19	U1
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Cadmium	0.24	1.2	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Calcium	360	66000	J3
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Chromium	0.48	71	J3
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Cobalt	0.95	9.7	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Copper	0.48	230	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Iron	24	25000	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Lead	0.14	44	J4
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Magnesium	120	18000	J34
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Manganese	0.48	450	J3
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Mercury	0.02	0.17	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Molybdenum	0.95	0.95	U1
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Nickel	0.95	120	J4
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Potassium	120	790	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Selenium	0.24	0.45	J7
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Silver	0.24	0.24	U
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Sodium	120	560	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Thallium	0.24	1	U1J3
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Vanadium	0.48	36	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TMETAL	Zinc	0.95	170	
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TPHEXT-SG	Diesel-Range Organics	1	11	H
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	5	64	M
	IR01SH038	IR01SH038005	09/04/02	0	0.5	C&T	TPHPRG	Gasoline-Range Organics	0.31	0.31	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	CHROM	Chromium VI	0.05	0.05	R2
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PCB	Aroclor-1016	0.25	0.25	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PCB	Aroclor-1221	0.5	0.5	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PCB	Aroclor-1232	0.25	0.25	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PCB	Aroclor-1242	0.25	0.25	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PCB	Aroclor-1248	0.25	0.25	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PCB	Aroclor-1254	0.25	0.25	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PCB	Aroclor-1260	0.25	12	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	4,4'-DDD	0.069	0.069	UJ7
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	4,4'-DDE	0.069	0.069	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	4,4'-DDT	0.069	1.1	UJ9
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Aldrin	0.036	0.036	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Alpha-BHC	0.036	0.036	UJ7
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.036	0.036	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Beta-BHC	0.036	0.036	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Delta-BHC	0.036	0.036	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Dieldrin	0.069	0.39	UJ9
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Endosulfan I	0.036	0.036	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Endosulfan II	0.069	0.069	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.069	0.069	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Endrin	0.069	0.15	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Endrin aldehyde	0.069	0.069	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.036	0.036	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.036	0.036	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Heptachlor	0.036	0.036	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.036	0.036	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Methoxychlor	0.36	0.36	UJ7
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	PEST	Toxaphene	1.3	1.3	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.5	3.5	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.4	1.4	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.4	1.4	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	1.4	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.4	1.4	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.5	3.5	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.4	1.4	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.4	1.4	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Anthracene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Azobenzene	0.7	0.7	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.14	0.18	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.14	0.14	JY
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Benzoic acid	3.5	3.5	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.7	0.7	U4
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Carbazole	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Chrysene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Fluorene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.5	3.5	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Isophorone	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Naphthalene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.4	1.4	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.14	0.14	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Phenol	0.7	0.7	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	SVOA8270	Pyrene	0.14	0.14	UJ7
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Aluminum	4.4	3500	J34
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Antimony	2.7	2.7	U1J3
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Arsenic	0.22	5	J7
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Barium	0.44	36	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Beryllium	0.088	0.16	U1
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Cadmium	0.22	1.1	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Calcium	550	110000	J3
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Chromium	0.44	65	J3
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Cobalt	0.88	7.4	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Copper	0.44	300	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Iron	22	22000	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Lead	0.13	79	J4
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Magnesium	110	15000	J34
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Manganese	0.44	470	J3
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Mercury	0.021	0.71	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Molybdenum	0.88	0.88	U1
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Nickel	0.88	80	J4
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Potassium	110	760	

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Selenium	0.22	0.22	UJ7
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Silver	0.22	0.22	U
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Sodium	110	1900	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Thallium	0.22	0.88	U1J3
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Vanadium	0.44	20	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TMETAL	Zinc	4.4	520	
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TPHEXT-SG	Diesel-Range Organics	1.1	38	H
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	5.3	140	M
	IR01SH038	IR01SH038025	09/04/02	2	2.5	C&T	TPHPRG	Gasoline-Range Organics	0.25	0.25	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	CHROM	Chromium VI	0.05	1.7	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PCB	Aroclor-1016	1.2	1.2	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PCB	Aroclor-1221	2.4	2.4	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PCB	Aroclor-1232	1.2	1.2	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PCB	Aroclor-1242	1.2	1.2	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PCB	Aroclor-1248	1.2	1.2	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PCB	Aroclor-1254	1.2	1.2	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PCB	Aroclor-1260	1.2	53	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	4,4'-DDD	0.033	0.033	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	4,4'-DDE	0.033	0.033	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	4,4'-DDT	0.067	0.067	UJ7
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Aldrin	0.017	0.017	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Alpha-BHC	0.017	0.017	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.017	0.011	J
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Beta-BHC	0.017	0.017	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Delta-BHC	0.017	0.017	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Dieldrin	0.033	0.15	UJ9
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Endosulfan I	0.017	0.017	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Endosulfan II	0.033	0.033	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.033	0.033	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Endrin	0.033	0.23	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Endrin aldehyde	0.033	0.7	UJ9
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.017	0.017	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.017	0.22	UJ9
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Heptachlor	0.017	0.017	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.017	0.22	UJ9
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Methoxychlor	0.17	0.14	J7
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	PEST	Toxaphene	0.61	0.61	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.4	3.4	UJ7
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.13	0.13	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.4	1.4	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.4	1.4	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	1.4	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.4	1.4	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.4	3.4	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.4	1.4	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.4	0.83	J
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.13	0.13	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.13	0.13	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Anthracene	0.13	0.13	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Azobenzene	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.13	0.35	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.13	0.59	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.13	0.74	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.13	0.46	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.13	0.71	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Benzoic acid	3.4	3.4	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.68	0.77	U4J7
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Carbazole	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Chrysene	0.13	0.62	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.13	0.26	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.13	0.45	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Fluorene	0.13	0.13	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.4	3.4	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.13	0.52	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Isophorone	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Naphthalene	0.13	0.13	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.68	0.68	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.4	1.4	U
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.13	0.16	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Phenol	0.68	0.73	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	SVOA8270	Pyrene	0.13	0.41	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Aluminum	23	14000	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Antimony	2.7	6	U1J3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Arsenic	0.23	7.8	J37
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Barium	0.46	170	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Beryllium	0.091	0.41	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Cadmium	0.23	2.4	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Calcium	230	48000	J9
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Chromium	0.46	61	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Cobalt	0.91	15	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Copper	2.3	3000	J2
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Iron	46	52000	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Lead	0.14	260	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Magnesium	23	5400	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Manganese	0.46	740	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Mercury	0.18	2.7	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Molybdenum	0.91	2.5	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Nickel	0.91	38	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Potassium	110	1500	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Selenium	0.23	0.87	J37
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Silver	0.23	0.31	J37
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Sodium	110	430	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Thallium	0.23	1.9	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Vanadium	0.46	32	
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TMETAL	Zinc	4.6	980	J3
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TPHEXT-SG	Diesel-Range Organics	10	200	H
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	51	710	M
	IR01SH039	IR01SH039TOP	09/05/02	2	2.5	C&T	TPHPRG	Gasoline-Range Organics	0.22	0.22	UJ3
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	CHROM	Chromium VI	0.05	0.05	R2
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PCB	Aroclor-1016	0.12	0.12	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PCB	Aroclor-1221	0.24	0.24	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PCB	Aroclor-1232	0.12	0.12	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PCB	Aroclor-1242	0.12	0.12	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PCB	Aroclor-1248	0.12	0.12	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PCB	Aroclor-1254	0.12	0.12	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PCB	Aroclor-1260	0.12	5.4	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	4,4'-DDD	0.033	0.033	UJ7
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	4,4'-DDE	0.033	0.033	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	4,4'-DDT	0.033	0.39	UJ9
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Aldrin	0.017	0.017	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Alpha-BHC	0.017	0.017	UJ7
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.017	0.017	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Beta-BHC	0.017	0.017	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Delta-BHC	0.017	0.017	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Dieldrin	0.033	0.033	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Endosulfan I	0.017	0.017	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Endosulfan II	0.033	0.033	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.033	0.033	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Endrin	0.033	0.052	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Endrin aldehyde	0.033	0.033	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.017	0.017	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.017	0.017	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Heptachlor	0.017	0.017	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.017	0.017	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Methoxychlor	0.17	0.17	UJ7
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	PEST	Toxaphene	0.6	0.6	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.67	0.67	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.67	0.67	UJ7
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.3	3.3	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.3	1.3	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.3	1.3	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.3	1.3	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.3	1.3	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.3	3.3	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.3	1.3	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.3	1.3	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Anthracene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Azobenzene	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.13	0.079	JY
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.13	0.077	J
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.3	3.3	UJ7
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Carbazole	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Chrysene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Fluorene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.67	0.67	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.3	3.3	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.13	0.072	J
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Isophorone	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Naphthalene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.67	0.67	UJ7
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.3	1.3	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Phenol	0.67	0.67	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	SVOA8270	Pyrene	0.13	0.13	U
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Aluminum	4.9	5600	J34
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Antimony	3	3	U1J3
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Arsenic	0.25	6.5	J7
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Barium	0.49	78	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Beryllium	0.099	0.22	U1
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Cadmium	0.25	1.7	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Calcium	250	59000	J3
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Chromium	0.49	75	J3
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Cobalt	0.99	11	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Copper	0.49	720	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Iron	25	36000	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Lead	0.15	92	J4
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Magnesium	120	15000	J34
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Manganese	0.49	560	J3
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Mercury	0.04	1.1	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Molybdenum	0.99	1	U1
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Nickel	0.99	81	J4
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Potassium	120	1100	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Selenium	0.25	0.56	J7
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Silver	0.25	0.25	U1J7
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Sodium	120	490	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Thallium	0.25	1.3	J3
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Vanadium	0.49	28	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TMETAL	Zinc	4.9	470	
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TPHEXT-SG	Diesel-Range Organics	1	43	H
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	5	160	M
	IR01SH042	IR01SH042005	09/04/02	0	0.5	C&T	TPHPRG	Gasoline-Range Organics	0.33	0.33	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	CHROM	Chromium VI	0.05	0.81	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PCB	Aroclor-1016	0.065	0.065	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PCB	Aroclor-1221	0.13	0.13	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PCB	Aroclor-1232	0.065	0.065	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PCB	Aroclor-1242	0.065	0.065	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PCB	Aroclor-1248	0.065	0.065	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PCB	Aroclor-1254	0.065	0.065	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PCB	Aroclor-1260	0.065	2.7	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	4,4'-DDD	0.071	0.071	UJ7
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	4,4'-DDE	0.071	0.071	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	4,4'-DDT	0.071	0.44	UJ9
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Aldrin	0.037	0.037	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Alpha-BHC	0.037	0.037	UJ7
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.037	0.037	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Beta-BHC	0.037	0.037	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Delta-BHC	0.037	0.037	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Dieldrin	0.071	0.071	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Endosulfan I	0.037	0.037	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Endosulfan II	0.071	0.071	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.071	0.071	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Endrin	0.071	0.059	J
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Endrin aldehyde	0.071	0.071	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.037	0.037	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.037	0.037	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Heptachlor	0.037	0.037	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.037	0.037	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Methoxychlor	0.37	0.37	UJ7
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	PEST	Toxaphene	1.3	1.3	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.72	0.72	UJ7
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.6	3.6	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	0.14	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.4	1.4	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.4	1.4	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	1.4	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.4	1.4	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.6	3.6	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.4	1.4	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.4	1.4	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.14	0.14	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.14	0.14	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Anthracene	0.14	0.33	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Azobenzene	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.14	1.4	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.14	1.2	J0
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.14	1.9	J0Y
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.14	0.88	J0
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.14	1.2	J0Y
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Benzoic acid	3.6	3.6	UJ7
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.72	0.72	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
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Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
01/21SDGI-3 (Continued)	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Carbazole	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Chrysene	0.14	1.6	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	0.14	J0
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.72	0.72	UJ0
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.14	2.2	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Fluorene	0.14	0.072	J
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.6	3.6	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.14	0.83	J0
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Isophorone	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Naphthalene	0.14	0.14	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.72	0.72	UJ7
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.72	0.72	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.4	1.4	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.14	1.2	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Phenol	0.72	0.46	J
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	SVOA8270	Pyrene	0.14	2.1	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Aluminum	5.2	1700	J349
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Antimony	3.1	4.2	U1J3
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Arsenic	0.26	4.8	J7
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Barium	0.52	23	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Beryllium	0.1	0.1	U1
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Cadmium	0.26	1.2	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Calcium	26	6600	J3
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Chromium	0.52	160	J3
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Cobalt	1	3.4	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Copper	2.6	4600	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Iron	26	11000	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Lead	0.16	600	J4
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Magnesium	26	2000	J34
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Manganese	0.52	150	J3
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Mercury	0.39	14	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Molybdenum	1	1.2	U1
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Nickel	1	31	J4
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Potassium	26	350	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Selenium	0.26	0.33	J7
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Silver	0.26	0.26	U
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Sodium	26	160	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Thallium	0.26	0.26	UJ3
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Vanadium	0.52	13	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TMETAL	Zinc	1	990	
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TPHEXT-SG	Diesel-Range Organics	11	1500	H

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-1	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TPHEXT-SG	Motor Oil-Range Organics	54	2800	M
	IR01SH042	IR01SH042025	09/04/02	2	2.5	C&T	TPHPRG	Gasoline-Range Organics	0.2	0.2	UJ3
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	CHROM	Chromium VI	0.05	0.05	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	APCL	ORGAN	Dibutyltin	0.01	0.012	
	IR02SH002	IR02SH002005	08/30/02	0	0.5	APCL	ORGAN	Monobutyltin	0.01	0.01	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	APCL	ORGAN	Tetrabutyltin	0.01	0.01	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	APCL	ORGAN	Tributyltin	0.05	0.034	J2
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PCB	Aroclor-1016	0.025	0.025	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PCB	Aroclor-1221	0.051	0.051	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PCB	Aroclor-1232	0.025	0.025	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PCB	Aroclor-1242	0.025	0.025	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PCB	Aroclor-1248	0.025	0.025	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PCB	Aroclor-1254	0.025	0.025	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PCB	Aroclor-1260	0.025	1.2	
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	4,4'-DDD	0.017	0.017	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	4,4'-DDE	0.017	0.017	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	4,4'-DDT	0.017	0.17	
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Aldrin	0.009	0.009	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Alpha-BHC	0.009	0.009	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.009	0.009	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Beta-BHC	0.009	0.009	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Delta-BHC	0.009	0.009	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Dieldrin	0.017	0.073	UJ9
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Endosulfan I	0.009	0.009	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Endosulfan II	0.017	0.017	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.017	0.017	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Endrin	0.017	0.026	J3
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Endrin aldehyde	0.017	0.017	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.009	0.009	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.009	0.009	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Heptachlor	0.009	0.009	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.009	0.009	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Methoxychlor	0.09	0.09	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	PEST	Toxaphene	0.32	0.32	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.5	3.5	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.4	1.4	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.4	1.4	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	1.4	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.4	1.4	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-1 (Continued)	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.5	3.5	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.4	1.4	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.4	1.4	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Anthracene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Azobenzene	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.5	3.5	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Carbazole	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Chrysene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Fluorene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.5	3.5	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Isophorone	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Naphthalene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.4	1.4	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Phenol	0.7	0.7	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	SVOA8270	Pyrene	0.14	0.14	U
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Aluminum	5	3400	J34
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Antimony	3	3	R2
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Arsenic	0.25	4.4	J37
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Barium	0.5	31	J3

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Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-1 (Continued)	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Beryllium	0.1	0.18	
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Cadmium	0.25	0.97	J3
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Calcium	750	140000	
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Chromium	0.5	59	J3
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Cobalt	1	9.1	J3
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Copper	0.5	190	J2
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Iron	50	18000	
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Lead	0.15	34	
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Magnesium	250	13000	J3
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Manganese	0.5	600	
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Mercury	0.021	0.19	
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Molybdenum	1	0.53	U1J3
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Nickel	1	150	
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Potassium	25	690	J3
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Selenium	0.25	0.23	U1J3
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Silver	0.25	0.25	UJ3
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Sodium	25	2500	
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Thallium	0.25	1.6	J37
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Vanadium	0.5	21	J3
	IR02SH002	IR02SH002005	08/30/02	0	0.5	C&T	TMETAL	Zinc	1	190	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	CHROM	Chromium VI	0.06	0.3	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	APCL	ORGAN	Dibutyltin	0.011	0.011	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	APCL	ORGAN	Monobutyltin	0.011	0.011	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	APCL	ORGAN	Tetrabutyltin	0.011	0.011	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	APCL	ORGAN	Tributyltin	0.011	0.011	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PCB	Aroclor-1016	0.014	0.014	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PCB	Aroclor-1221	0.027	0.027	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PCB	Aroclor-1232	0.014	0.014	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PCB	Aroclor-1242	0.014	0.014	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PCB	Aroclor-1248	0.014	0.014	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PCB	Aroclor-1254	0.014	0.014	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PCB	Aroclor-1260	0.014	0.7	J3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	4,4'-DDD	0.019	0.019	UJ7
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	4,4'-DDE	0.019	0.019	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	4,4'-DDT	0.019	0.12	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Aldrin	0.0098	0.0098	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Alpha-BHC	0.0098	0.0098	UJ7
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.0098	0.0098	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Beta-BHC	0.0098	0.0098	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Delta-BHC	0.0098	0.0098	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Dieldrin	0.019	0.019	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Endosulfan I	0.0098	0.0098	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Endosulfan II	0.019	0.019	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.019	0.019	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Endrin	0.019	0.019	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Endrin aldehyde	0.019	0.019	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.0098	0.0098	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.0098	0.0098	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Heptachlor	0.0098	0.0098	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.0098	0.0098	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Methoxychlor	0.098	0.098	UJ7
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	PEST	Toxaphene	0.34	0.34	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.76	0.76	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-1 (Continued)	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.76	0.76	UJ7
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.8	3.8	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.15	0.15	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.5	1.5	UJ7
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.5	1.5	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.5	1.5	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.5	1.5	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.8	3.8	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.5	1.5	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.5	1.5	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.15	0.15	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.15	0.15	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Anthracene	0.15	0.15	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Azobenzene	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.15	0.15	J
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.15	0.4	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.15	0.66	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.15	0.33	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	0.34	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Benzoic acid	3.8	3.8	UJ7
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Carbazole	0.76	0.76	UJ7
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Chrysene	0.15	0.62	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.15	0.15	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.15	0.2	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Fluorene	0.15	0.15	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.76	0.76	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
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Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-1 (Continued)	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.8	3.8	UJ7
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.15	0.29	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Isophorone	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Naphthalene	0.15	0.15	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.76	0.76	UJ7
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.76	0.76	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.5	1.5	U
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.15	0.078	J
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Phenol	0.76	0.48	J
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	SVOA8270	Pyrene	0.15	0.78	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Aluminum	4.1	930	J349
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Antimony	2.5	4.9	U1J3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Arsenic	0.21	4.6	J37
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Barium	0.41	12	J3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Beryllium	0.083	0.08	U1
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Cadmium	0.21	0.76	J3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Calcium	21	810	J9
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Chromium	0.41	97	J3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Cobalt	0.83	1.4	J3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Copper	4.1	4800	J2
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Iron	4.1	5300	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Lead	0.12	510	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Magnesium	21	940	J3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Manganese	0.41	47	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Mercury	0.99	19	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Molybdenum	0.83	2.8	J3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Nickel	0.83	17	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Potassium	21	270	J3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Selenium	0.21	0.21	UJ3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Silver	0.21	0.16	U1J3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Sodium	21	1600	
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Thallium	0.21	0.21	UJ37
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Vanadium	0.41	6.7	J3
	IR02SH002	IR02SH002025	08/30/02	2	2.5	C&T	TMETAL	Zinc	0.83	530	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	APCL	ORGAN	Dibutyltin	0.55	0.056	J
	IR02SH003	IR02SH003005	08/30/02	0	0.5	APCL	ORGAN	Monobutyltin	0.11	0.11	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	APCL	ORGAN	Tetrabutyltin	0.011	0.011	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	APCL	ORGAN	Tributyltin	0.55	0.302	J
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PCB	Aroclor-1016	0.13	0.13	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PCB	Aroclor-1221	0.26	0.26	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PCB	Aroclor-1232	0.13	0.13	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PCB	Aroclor-1242	0.13	0.13	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PCB	Aroclor-1248	0.13	0.13	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PCB	Aroclor-1254	0.13	0.13	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PCB	Aroclor-1260	0.13	4.5	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	4,4'-DDD	0.018	0.018	UJ7
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	4,4'-DDE	0.018	0.018	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	4,4'-DDT	0.018	0.44	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Aldrin	0.0094	0.0094	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Alpha-BHC	0.0094	0.0094	UJ7

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-1 (Continued)	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.0094	0.0094	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Beta-BHC	0.0094	0.0094	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Delta-BHC	0.0094	0.0094	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Dieldrin	0.018	0.15	UJ9
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Endosulfan I	0.0094	0.0094	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Endosulfan II	0.018	0.018	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.018	0.018	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Endrin	0.018	0.056	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Endrin aldehyde	0.018	0.018	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.0094	0.0094	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.0094	0.0094	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Heptachlor	0.0094	0.0094	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.0094	0.0094	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Methoxychlor	0.094	0.094	UJ7
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	PEST	Toxaphene	0.33	0.33	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.74	0.74	UJ7
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.7	3.7	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.15	0.15	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.5	1.5	UJ7
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.5	1.5	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.5	1.5	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.5	1.5	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.7	3.7	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.5	1.5	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.5	1.5	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.15	0.15	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.15	0.15	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Anthracene	0.15	0.15	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Azobenzene	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.15	0.16	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.15	0.18	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.15	0.17	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.15	0.15	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	0.16	

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-1 (Continued)	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.7	3.7	UJ7
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Carbazole	0.74	0.74	UJ7
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Chrysene	0.15	0.13	J
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.15	0.15	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.15	0.31	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Fluorene	0.15	0.15	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.7	3.7	UJ7
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.15	0.15	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Isophorone	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Naphthalene	0.15	0.15	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.74	0.74	UJ7
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.5	1.5	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.15	0.097	J
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Phenol	0.74	0.74	U
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	SVOA8270	Pyrene	0.15	0.27	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Aluminum	4.7	2200	J34
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Antimony	2.8	2.8	U1J3
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Arsenic	0.23	3.6	J37
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Barium	0.47	33	J3
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Beryllium	0.093	0.14	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Cadmium	0.23	0.84	J3
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Calcium	930	220000	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Chromium	0.47	180	J3
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Cobalt	0.93	7.1	J3
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Copper	0.47	1200	J2
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Iron	140	17000	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Lead	0.14	130	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Magnesium	700	20000	J3
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Manganese	0.47	550	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Mercury	0.022	0.48	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Molybdenum	0.93	0.51	U1J3
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Nickel	0.93	140	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Potassium	23	560	J3
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Selenium	0.23	0.23	UJ3
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Silver	0.23	0.23	UJ3
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Sodium	23	3600	
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Thallium	0.23	1.2	J37
	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Vanadium	0.47	17	J3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-1	IR02SH003	IR02SH003005	08/30/02	0	0.5	C&T	TMETAL	Zinc	0.93	240	
(Continued)	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	APCL	ORGAN	Dibutyltin	0.012	0.012	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	APCL	ORGAN	Monobutyltin	0.012	0.012	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	APCL	ORGAN	Tetrabutyltin	0.012	0.012	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	APCL	ORGAN	Tributyltin	0.012	0.009	J
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PCB	Aroclor-1016	0.03	0.03	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PCB	Aroclor-1221	0.061	0.061	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PCB	Aroclor-1232	0.03	0.03	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PCB	Aroclor-1242	0.03	0.03	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PCB	Aroclor-1248	0.03	0.03	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PCB	Aroclor-1254	0.03	0.03	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PCB	Aroclor-1260	0.03	1.4	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	4,4'-DDD	0.021	0.021	UJ7
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	4,4'-DDE	0.021	0.023	J9
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	4,4'-DDT	0.021	0.1	UJ9
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Aldrin	0.011	0.011	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Alpha-BHC	0.011	0.0096	UJ97
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.011	0.011	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Beta-BHC	0.011	0.068	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Delta-BHC	0.011	0.011	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Dieldrin	0.021	0.038	UJ9
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Endosulfan I	0.011	0.011	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Endosulfan II	0.021	0.021	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.021	0.021	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Endrin	0.021	0.021	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Endrin aldehyde	0.021	0.021	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.011	0.011	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.011	0.011	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Heptachlor	0.011	0.011	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.011	0.011	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Methoxychlor	0.11	0.11	UJ7
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	PEST	Toxaphene	0.38	0.38	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.85	0.85	UJ7
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.2	4.2	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.17	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	UJ7
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.7	1.7	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.2	4.2	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-1 (Continued)	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Anthracene	0.17	0.17	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Azobenzene	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.24	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.49	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	1.2	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.17	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.53	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.2	4.2	UJ7
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Carbazole	0.85	0.85	UJ7
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Chrysene	0.17	0.56	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.17	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.17	0.35	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Fluorene	0.17	0.17	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.2	4.2	UJ7
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.34	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Isophorone	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Naphthalene	0.17	0.17	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.85	0.85	UJ7
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.17	0.13	J
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Phenol	0.85	0.85	U
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	SVOA8270	Pyrene	0.17	2.1	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Aluminum	4.5	1500	J34
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Antimony	2.7	5.1	U1J3
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Arsenic	0.22	3.4	J37
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Barium	0.45	19	J3
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Beryllium	0.089	0.092	U1
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Cadmium	0.22	0.85	J3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-1 (Continued)	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Calcium	220	11000	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Chromium	0.45	77	J3
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Cobalt	0.89	2.4	J3
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Copper	4.5	3000	J2
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Iron	45	8900	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Lead	0.13	610	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Magnesium	22	2100	J3
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Manganese	0.45	110	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Mercury	0.49	12	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Molybdenum	0.89	1.7	U1J3
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Nickel	0.89	23	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Potassium	22	400	J3
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Selenium	0.22	0.13	U1J3
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Silver	0.22	0.18	U1J3
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Sodium	22	2500	
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Thallium	0.22	0.15	U1J37
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Vanadium	0.45	9.4	J3
	IR02SH003	IR02SH003025	08/30/02	2	2.5	C&T	TMETAL	Zinc	0.89	540	
02NWSDGI-2	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	CHROM	Chromium VI	0.05	0.05	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8,9-OCDD	0.00000027	0.0006757	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8,9-OCDF	0.00000017	0.0002504	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8-HPCDD	0.00000027	0.00009641	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8-HPCDF	0.0000002	0.00006793	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,7,8,9-HPCDF	0.00000025	0.00001457	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,7,8-HXCDD	0.00000051	0.00000178	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,7,8-HXCDF	0.00000015	0.00003096	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,6,7,8-HXCDD	0.0000004	0.0000051	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,6,7,8-HXCDF	0.00000015	0.00000871	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,7,8,9-HXCDD	0.00000039	0.00000375	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,7,8,9-HXCDF	0.00000017	0.00000145	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,7,8-PECDD	0.00000061	0.00000061	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,7,8-PECDF	0.00000013	0.00000296	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	2,3,4,6,7,8-HXCDF	0.00000017	0.00000676	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	2,3,4,7,8-PECDF	0.00000013	0.00000655	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	2,3,7,8-TCDD	0.0000002	0.0000002	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	2,3,7,8-TCDF	0.00000029	0.00000617	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	Total HPCDD	0.00000027	0.000175	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	Total HPCDF	0.0000002	0.0001807	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	Total HXCDD	0.00000039	0.000029	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	Total HXCDF	0.00000015	0.0001102	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	Total PECDD	0.00000061	0.00000141	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	Total PECDF	0.00000013	0.00005713	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	Total TCDD	0.0000002	0.00000469	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	SWL	DIOXIN	Total TCDF	0.00000016	0.00005623	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PCB	Aroclor-1016	0.13	0.13	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PCB	Aroclor-1221	0.26	0.26	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PCB	Aroclor-1232	0.13	0.13	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PCB	Aroclor-1242	0.13	0.13	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PCB	Aroclor-1248	0.13	0.13	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PCB	Aroclor-1254	0.13	0.13	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PCB	Aroclor-1260	0.13	5.9	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	4,4'-DDD	0.018	0.018	UJ7
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	4,4'-DDE	0.018	0.018	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	4,4'-DDT	0.018	0.59	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Aldrin	0.0093	0.0093	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Alpha-BHC	0.0093	0.0093	UJ7
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.0093	0.0093	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Beta-BHC	0.0093	0.0093	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Delta-BHC	0.0093	0.0093	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Dieldrin	0.018	0.22	UJ9
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Endosulfan I	0.0093	0.0093	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Endosulfan II	0.018	0.018	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.018	0.018	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Endrin	0.018	0.075	J9
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Endrin aldehyde	0.018	0.018	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.0093	0.0093	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.0093	0.0093	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Heptachlor	0.0093	0.0093	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.0093	0.064	UJ9
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Methoxychlor	0.093	0.093	UJ7
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	PEST	Toxaphene	0.33	0.33	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.73	0.73	UJ7
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.6	3.6	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	0.14	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.5	1.5	UJ7
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.5	1.5	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.5	1.5	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.5	1.5	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.6	3.6	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.5	1.5	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.5	1.5	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.14	0.14	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.14	0.14	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Anthracene	0.14	0.11	J
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Azobenzene	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.14	1.1	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.14	1	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.14	1.3	

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.14	0.39	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.14	1.1	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.6	3.6	UJ7
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Carbazole	0.73	0.73	UJ7
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Chrysene	0.14	1.2	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	0.14	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.14	1.7	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Fluorene	0.14	0.14	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.6	3.6	UJ7
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.14	0.46	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Isophorone	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Naphthalene	0.14	0.14	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.73	0.73	UJ7
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.5	1.5	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.14	0.38	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Phenol	0.73	0.73	U
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	SVOA8270	Pyrene	0.14	1.4	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Aluminum	5.4	2500	J34
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Antimony	3.2	6.2	U1J3
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Arsenic	0.27	2.7	J37
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Barium	0.54	14	J3
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Beryllium	0.11	0.16	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Cadmium	0.27	1.1	J3
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Calcium	810	48000	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Chromium	0.54	94	J3
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Cobalt	1.1	7	J3
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Copper	0.54	330	J2
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Iron	160	22000	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Lead	0.16	110	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Magnesium	810	24000	J3
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Manganese	0.54	260	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Mercury	0.02	0.6	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Molybdenum	1.1	1.4	U1J3
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Nickel	1.1	190	
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Potassium	27	370	J3
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Selenium	0.27	0.27	UJ3
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Silver	0.27	0.27	UJ3
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Sodium	27	1400	

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Thallium	0.27	0.45	U1J37
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Vanadium	0.54	22	J3
	IR02SH005	IR02SH005005	08/30/02	0	0.5	C&T	TMETAL	Zinc	1.1	500	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	CHROM	Chromium VI	0.07	0.07	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PCB	Aroclor-1016	0.033	0.033	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PCB	Aroclor-1221	0.065	0.065	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PCB	Aroclor-1232	0.033	0.033	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PCB	Aroclor-1242	0.033	0.033	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PCB	Aroclor-1248	0.033	0.033	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PCB	Aroclor-1254	0.033	0.033	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PCB	Aroclor-1260	0.033	1.6	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	4,4'-DDD	0.09	0.09	UJ7
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	4,4'-DDE	0.09	0.09	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	4,4'-DDT	0.09	0.09	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Aldrin	0.047	0.047	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Alpha-BHC	0.047	0.047	UJ7
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.047	0.047	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Beta-BHC	0.047	0.047	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Delta-BHC	0.047	0.047	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Dieldrin	0.09	0.14	UJ9
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Endosulfan I	0.047	0.047	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Endosulfan II	0.09	0.09	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.09	0.09	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Endrin	0.09	0.09	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Endrin aldehyde	0.09	0.09	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.047	0.047	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.047	0.047	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Heptachlor	0.047	0.047	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.047	0.047	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Methoxychlor	0.47	0.47	UJ7
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	PEST	Toxaphene	1.6	1.6	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.91	0.91	UJ7
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.5	4.5	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.18	0.18	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.8	1.8	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.8	1.8	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.8	1.8	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.8	1.8	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.5	4.5	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.91	0.91	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.8	1.8	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.8	1.8	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.18	0.18	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.18	0.18	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Anthracene	0.18	0.18	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Azobenzene	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.18	0.19	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.18	0.22	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.18	0.39	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.18	0.097	J
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.18	0.21	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.5	4.5	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Carbazole	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Chrysene	0.18	0.26	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.18	0.18	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.18	0.3	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Fluorene	0.18	0.18	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.5	4.5	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.18	0.11	J
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Isophorone	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Naphthalene	0.18	0.18	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.8	1.8	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.18	0.11	J
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Phenol	0.91	0.91	U
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	SVOA8270	Pyrene	0.18	0.31	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Aluminum	6.3	2400	J34
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Antimony	3.8	3.4	U1J3
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Arsenic	0.32	3.6	J37
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Barium	0.63	110	J3
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Beryllium	0.13	0.18	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Cadmium	0.32	1.7	J3
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Calcium	950	49000	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Chromium	0.63	130	J3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Cobalt	1.3	16	J3
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Copper	0.63	410	J2
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Iron	190	23000	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Lead	0.19	200	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Magnesium	950	45000	J3
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Manganese	0.63	280	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Mercury	0.027	0.89	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Molybdenum	1.3	2.6	J3
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Nickel	1.3	290	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Potassium	32	460	J3
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Selenium	0.32	0.32	UJ3
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Silver	0.32	0.26	J3
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Sodium	32	2700	
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Thallium	0.32	0.29	U1J37
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Vanadium	0.63	33	J3
	IR02SH005	IR02SH005025	08/30/02	2	2.5	C&T	TMETAL	Zinc	1.3	490	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	CHROM	Chromium VI	0.05	0.05	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8,9-OCDD	0.0000002	0.0008178	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8,9-OCDF	0.00000017	0.0001653	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8-HPCDD	0.0000002	0.0001284	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,6,7,8-HPCDF	0.00000011	0.00004065	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,7,8,9-HPCDF	0.00000014	0.00000408	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,7,8-HXCDD	0.00000038	0.00000153	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,4,7,8-HXCDF	0.0000002	0.00000704	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,6,7,8-HXCDD	0.00000029	0.00000582	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,6,7,8-HXCDF	0.00000019	0.00000578	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,7,8,9-HXCDD	0.00000029	0.00000333	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,7,8,9-HXCDF	0.00000023	0.00000023	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,7,8-PECDD	0.00000032	0.00000032	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	1,2,3,7,8-PECDF	0.00000013	0.00000165	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	2,3,4,6,7,8-HXCDF	0.00000023	0.00000375	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	2,3,4,7,8-PECDF	0.00000013	0.00000368	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	2,3,7,8-TCDD	0.00000016	0.00000016	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	2,3,7,8-TCDF	0.00000019	0.00000419	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	Total HPCDD	0.0000002	0.0002248	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	Total HPCDF	0.00000011	0.0001409	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	Total HXCDD	0.00000029	0.0000337	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	Total HXCDF	0.00000019	0.00006236	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	Total PECDD	0.00000032	0.00000032	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	Total PECDF	0.00000013	0.00003628	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	Total TCDD	0.00000016	0.00000368	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	SWL	DIOXIN	Total TCDF	0.00000012	0.00003597	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PCB	Aroclor-1016	0.013	0.013	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PCB	Aroclor-1221	0.025	0.025	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PCB	Aroclor-1232	0.013	0.013	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PCB	Aroclor-1242	0.013	0.013	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PCB	Aroclor-1248	0.013	0.013	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PCB	Aroclor-1254	0.013	0.013	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PCB	Aroclor-1260	0.013	0.66	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	4,4'-DDD	0.017	0.017	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	4,4'-DDE	0.017	0.025	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	4,4'-DDT	0.017	0.15	UJ9
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Aldrin	0.0089	0.0089	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Alpha-BHC	0.0089	0.0089	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.0089	0.0047	J
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Beta-BHC	0.0089	0.0089	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Delta-BHC	0.0089	0.0089	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Dieldrin	0.017	0.017	UJ9
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Endosulfan I	0.0089	0.0089	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Endosulfan II	0.017	0.017	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.017	0.017	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Endrin	0.017	0.017	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Endrin aldehyde	0.017	0.017	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.0089	0.0089	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.0089	0.0089	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Heptachlor	0.0089	0.0089	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.0089	0.0089	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Methoxychlor	0.089	0.089	UJ7
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	PEST	Toxaphene	0.31	0.31	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.7	0.7	UJ7
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.5	3.5	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.4	1.4	UJ7
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.4	1.4	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	1.4	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.4	1.4	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.5	3.5	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.4	1.4	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.4	1.4	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Anthracene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Azobenzene	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.14	0.14	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
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Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.5	3.5	UJ7
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Carbazole	0.7	0.7	UJ7
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Chrysene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Fluorene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.5	3.5	UJ7
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Isophorone	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Naphthalene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.7	0.7	UJ7
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.4	1.4	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Phenol	0.7	0.7	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	SVOA8270	Pyrene	0.14	0.14	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Aluminum	5	2400	J34
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Antimony	3	6.3	U1J3
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Arsenic	0.25	4.2	J37
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Barium	0.5	11	J3
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Beryllium	0.099	0.17	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Cadmium	0.25	2.1	J3
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Calcium	740	100000	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Chromium	0.5	55	J3
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Cobalt	0.99	9.7	J3
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Copper	0.5	230	J2
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Iron	150	46000	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Lead	0.15	68	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Magnesium	25	7100	J3
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Manganese	0.5	480	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Mercury	0.02	0.76	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Molybdenum	0.99	1.3	U1J3
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Nickel	0.99	93	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Potassium	25	460	J3
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Selenium	0.25	0.25	U
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Silver	0.25	0.25	UJ3
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Sodium	25	2000	
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Thallium	0.25	0.94	U1J37
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Vanadium	0.5	30	J3
	IR02SH008	IR02SH008005	08/30/02	0	0.5	C&T	TMETAL	Zinc	0.99	140	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	CHROM	Chromium VI	0.07	0.16	

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PCB	Aroclor-1016	0.16	0.16	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PCB	Aroclor-1221	0.31	0.31	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PCB	Aroclor-1232	0.16	0.16	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PCB	Aroclor-1242	0.16	0.16	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PCB	Aroclor-1248	0.16	0.16	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PCB	Aroclor-1254	0.16	0.16	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PCB	Aroclor-1260	0.16	6.1	J3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	4,4'-DDD	0.17	0.17	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	4,4'-DDE	0.17	0.31	UJ9
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	4,4'-DDT	0.17	5.1	UJ9
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Aldrin	0.09	0.09	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Alpha-BHC	0.09	0.09	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.09	0.095	J9
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Beta-BHC	0.09	0.09	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Delta-BHC	0.09	0.09	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Dieldrin	0.17	0.46	UJ9
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Endosulfan I	0.09	0.09	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Endosulfan II	0.17	0.17	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.17	0.17	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Endrin	0.17	0.17	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Endrin aldehyde	0.17	1.9	UJ9
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.09	0.09	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.09	0.7	UJ9
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Heptachlor	0.09	0.09	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.09	0.09	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Methoxychlor	0.9	0.9	UJ7
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	PEST	Toxaphene	3.2	3.2	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.4	4.4	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.17	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.8	1.8	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.8	1.8	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.8	1.8	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.8	1.8	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.4	4.4	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.8	1.8	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.8	1.8	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Anthracene	0.17	0.17	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Azobenzene	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.4	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.5	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	0.66	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.28	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.33	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.4	4.4	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Carbazole	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Chrysene	0.17	0.48	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.17	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.17	0.55	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Fluorene	0.17	0.17	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.4	4.4	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.28	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Isophorone	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Naphthalene	0.17	0.17	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.8	1.8	UJ3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.17	0.27	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Phenol	0.88	0.88	U
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	SVOA8270	Pyrene	0.17	0.57	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Aluminum	6	2800	J34
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Antimony	3.6	29	J3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Arsenic	0.3	11	J37
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Barium	0.6	64	J3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Beryllium	0.12	0.3	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Cadmium	0.3	4.4	J3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Calcium	300	12000	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Chromium	0.6	290	J3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Cobalt	1.2	16	J3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Copper	6	1700	J2
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Iron	60	70000	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Lead	0.18	600	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Magnesium	30	3900	J3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Manganese	0.6	520	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Mercury	1.5	24	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Molybdenum	1.2	8.1	J3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02NWSDGI-2 (Continued)	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Nickel	1.2	150	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Potassium	30	690	J3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Selenium	0.3	2.2	J3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Silver	0.3	0.3	UJ3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Sodium	30	3400	
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Thallium	0.3	0.2	U1J37
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Vanadium	0.6	91	J3
	IR02SH008	IR02SH008025	08/30/02	2	2.5	C&T	TMETAL	Zinc	12	950	
02SESDGI-1B	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	CHROM	Chromium VI	0.06	0.06	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	Aroclor-1016	0.014	0.014	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	Aroclor-1221	0.028	0.028	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	Aroclor-1232	0.014	0.014	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	Aroclor-1242	0.014	0.014	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	Aroclor-1248	0.014	0.014	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	Aroclor-1254	0.014	0.014	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	Aroclor-1260	0.014	0.054	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	4,4'-DDD	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	4,4'-DDE	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	4,4'-DDT	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Aldrin	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Alpha-BHC	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Beta-BHC	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Delta-BHC	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Dieldrin	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Endosulfan I	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Endosulfan II	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Endrin	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Endrin aldehyde	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Heptachlor	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Methoxychlor	0.19	0.19	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	Toxaphene	0.68	0.68	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.8	3.8	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.5	1.5	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-1B (Continued)	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.8	3.8	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Anthracene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Azobenzene	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.8	3.8	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Carbazole	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Chrysene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.15	0.22	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Fluorene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.8	3.8	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Isophorone	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Naphthalene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Phenol	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	Pyrene	0.15	0.22	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Aluminum	5.4	6500	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Antimony	3.2	4.4	U1J37
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Arsenic	0.27	6.8	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Barium	0.54	33	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Beryllium	0.11	0.36	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Cadmium	0.27	2.2	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Calcium	270	54000	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Chromium	0.54	47	J3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-1B (Continued)	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Cobalt	1.1	8.5	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Copper	0.54	98	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Iron	54	43000	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Lead	0.16	57	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Magnesium	27	7700	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Manganese	0.54	300	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Mercury	0.02	0.19	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Molybdenum	1.1	2.2	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Nickel	1.1	76	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Potassium	27	1300	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Selenium	0.27	0.81	J37
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Silver	0.27	0.42	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Sodium	27	3900	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Thallium	0.27	0.25	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Vanadium	0.54	53	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	Zinc	1.1	320	J2
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	Aroclor-1016	0.015	0.015	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	Aroclor-1221	0.03	0.03	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	Aroclor-1232	0.015	0.015	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	Aroclor-1242	0.015	0.015	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	Aroclor-1248	0.015	0.015	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	Aroclor-1254	0.015	0.015	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	Aroclor-1260	0.015	0.023	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	4,4'-DDD	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	4,4'-DDE	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	4,4'-DDT	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Aldrin	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Alpha-BHC	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Beta-BHC	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Delta-BHC	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Dieldrin	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Endosulfan I	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Endosulfan II	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Endrin	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Endrin aldehyde	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Heptachlor	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Methoxychlor	0.22	0.22	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	Toxaphene	0.76	0.76	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.2	4.2	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.84	0.84	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-1B (Continued)	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.2	4.2	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Anthracene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Azobenzene	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.2	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	0.14	JY
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.2	4.2	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Carbazole	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Chrysene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Fluorene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.2	4.2	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Isophorone	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Naphthalene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Phenol	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	Pyrene	0.17	0.12	J7

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-1B (Continued)	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Aluminum	5.4	3000	J39
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Antimony	3.2	3.2	UJ37
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Arsenic	0.27	2.3	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Barium	0.54	15	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Beryllium	0.11	0.18	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Cadmium	0.27	0.75	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Calcium	270	64000	J39
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Chromium	0.54	29	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Cobalt	1.1	5.7	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Copper	0.54	20	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Iron	54	12000	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Lead	0.16	13	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Magnesium	27	4300	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Manganese	0.54	250	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Mercury	0.025	0.07	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Molybdenum	1.1	1.1	UJ3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Nickel	1.1	41	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Potassium	270	690	U1J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Selenium	0.27	0.37	J37
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Silver	0.27	0.27	UJ3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Sodium	270	3500	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Thallium	0.27	0.24	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Vanadium	0.54	26	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	Zinc	1.1	64	J2
02SESDGI-2	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	CHROM	Chromium VI	0.07	0.07	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PCB	Aroclor-1016	0.017	0.017	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PCB	Aroclor-1221	0.035	0.035	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PCB	Aroclor-1232	0.017	0.017	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PCB	Aroclor-1242	0.017	0.017	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PCB	Aroclor-1248	0.017	0.017	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PCB	Aroclor-1254	0.017	0.017	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PCB	Aroclor-1260	0.017	0.017	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	4,4'-DDD	0.023	0.023	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	4,4'-DDE	0.023	0.023	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	4,4'-DDT	0.023	0.023	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Aldrin	0.012	0.012	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Alpha-BHC	0.012	0.012	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.012	0.012	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Beta-BHC	0.012	0.012	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Delta-BHC	0.012	0.012	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Dieldrin	0.023	0.023	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Endosulfan I	0.012	0.012	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Endosulfan II	0.023	0.023	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.023	0.023	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Endrin	0.023	0.023	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Endrin aldehyde	0.023	0.023	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.012	0.012	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.012	0.012	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Heptachlor	0.012	0.012	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.012	0.012	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Methoxychlor	0.12	0.12	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	PEST	Toxaphene	0.43	0.43	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.95	0.95	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.7	4.7	UJ7
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.9	1.9	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.9	1.9	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.9	1.9	UJ7
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.9	1.9	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.7	4.7	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.9	1.9	UJ7
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.9	1.9	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Anthracene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Azobenzene	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.19	0.19	UJ7
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Benzoic acid	4.7	4.7	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Carbazole	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Chrysene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.19	0.19	UJ7
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Fluorene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.7	4.7	UJ7
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.19	0.19	UJ7
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Isophorone	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Naphthalene	0.19	0.19	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.9	1.9	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.19	0.19	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Phenol	0.95	0.95	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	SVOA8270	Pyrene	0.19	0.13	J7
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Aluminum	5.4	2700	J34
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Antimony	3.3	3.3	UJ3
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Arsenic	0.27	6.2	J7
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Barium	0.54	15	J3
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Beryllium	0.11	0.12	
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Cadmium	0.27	4.3	J3
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Calcium	680	150000	J9
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Chromium	0.54	36	
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Cobalt	1.1	5.5	J3
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Copper	0.54	120	J2
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Iron	140	20000	
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Lead	0.16	240	J3
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Magnesium	27	5700	J2
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Manganese	0.54	400	
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Mercury	0.027	0.096	
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Molybdenum	1.1	0.9	U1
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Nickel	1.1	43	J3
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Potassium	27	560	J3
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Selenium	0.27	0.27	U
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Silver	0.27	0.46	
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Sodium	27	5000	J3
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Thallium	0.27	0.27	UJ3
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Vanadium	0.54	15	
	IR02SH038	IR02SH038005	09/09/02	0	0.5	C&T	TMETAL	Zinc	1.1	210	
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	CHROM	Chromium VI	0.08	0.08	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PCB	Aroclor-1016	0.018	0.018	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PCB	Aroclor-1221	0.036	0.036	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PCB	Aroclor-1232	0.018	0.018	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PCB	Aroclor-1242	0.018	0.018	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PCB	Aroclor-1248	0.018	0.018	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PCB	Aroclor-1254	0.018	0.018	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PCB	Aroclor-1260	0.018	0.018	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	4,4'-DDD	0.025	0.025	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	4,4'-DDE	0.025	0.025	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	4,4'-DDT	0.025	0.025	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Aldrin	0.013	0.013	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Alpha-BHC	0.013	0.013	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.013	0.013	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Beta-BHC	0.013	0.013	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Delta-BHC	0.013	0.013	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Dieldrin	0.025	0.025	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Endosulfan I	0.013	0.013	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Endosulfan II	0.025	0.025	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.025	0.025	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Endrin	0.025	0.025	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Endrin aldehyde	0.025	0.025	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.013	0.013	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.013	0.013	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Heptachlor	0.013	0.013	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.013	0.013	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Methoxychlor	0.13	0.13	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	PEST	Toxaphene	0.45	0.45	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	5	5	UJ7
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.2	0.2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylphenol	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	2	2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	2	2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	2	2	UJ7
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	2	2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	5	5	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	4-Methylphenol	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	2	2	UJ7
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	2	2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.2	0.2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.2	0.2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Anthracene	0.2	0.2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Azobenzene	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.2	0.2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.2	0.22	
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.2	0.16	JY
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.2	0.2	UJ7
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.2	0.2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Benzoic acid	5	5	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Carbazole	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Chrysene	0.2	0.2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.2	0.2	UJ7
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Dibenzofuran	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Diethylphthalate	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.2	0.2	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Fluorene	0.2	0.2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	5	5	UJ7
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Hexachloroethane	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.2	0.2	UJ7
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Isophorone	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Naphthalene	0.2	0.2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Nitrobenzene	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	2	2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.2	0.2	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Phenol	1	1	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	SVOA8270	Pyrene	0.2	0.2	UJ7
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Aluminum	6.6	1900	J34
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Antimony	4	4	UJ3
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Arsenic	0.33	4.3	J7
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Barium	0.66	9.3	J3
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Beryllium	0.13	0.16	
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Cadmium	0.33	2.1	J3
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Calcium	830	210000	
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Chromium	0.66	31	
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Cobalt	1.3	4.9	J3
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Copper	0.66	19	J2
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Iron	6.6	5900	
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Lead	0.2	45	J3
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Magnesium	33	4500	J2
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Manganese	0.66	620	
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Mercury	0.029	0.098	
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Molybdenum	1.3	1.3	U
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Nickel	1.3	35	J3
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Potassium	33	570	J3
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Selenium	0.33	0.24	U1
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Silver	0.33	0.45	
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Sodium	33	6300	J3
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Thallium	0.33	0.33	UJ3
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Vanadium	0.66	10	
	IR02SH038	IR02SH038025	09/09/02	2	2.5	C&T	TMETAL	Zinc	1.3	75	
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PCB	Aroclor-1016	0.014	0.014	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PCB	Aroclor-1221	0.029	0.029	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PCB	Aroclor-1232	0.014	0.014	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PCB	Aroclor-1242	0.014	0.014	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PCB	Aroclor-1248	0.014	0.014	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PCB	Aroclor-1254	0.014	0.014	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PCB	Aroclor-1260	0.014	0.02	
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	4,4'-DDD	0.039	0.039	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	4,4'-DDE	0.039	0.039	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	4,4'-DDT	0.039	0.039	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Aldrin	0.02	0.02	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Alpha-BHC	0.02	0.02	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.02	0.02	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Beta-BHC	0.02	0.02	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Delta-BHC	0.02	0.02	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Dieldrin	0.039	0.039	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Endosulfan I	0.02	0.02	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Endosulfan II	0.039	0.039	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.039	0.039	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Endrin	0.039	0.039	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Endrin aldehyde	0.039	0.039	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.02	0.02	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.02	0.02	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Heptachlor	0.02	0.02	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.02	0.02	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Methoxychlor	0.2	0.2	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	PEST	Toxaphene	0.71	0.71	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.9	3.9	UJ7
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.6	1.6	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.6	1.6	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.6	1.6	UJ7
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.6	1.6	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.9	3.9	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.6	1.6	UJ7
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.6	1.6	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Anthracene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Azobenzene	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.16	0.16	UJ7
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.9	3.9	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Carbazole	0.79	0.79	U

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Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Chrysene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.16	0.16	UJ7
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Fluorene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.9	3.9	UJ7
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.16	0.16	UJ7
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Isophorone	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Naphthalene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.6	1.6	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.16	0.16	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Phenol	0.79	0.79	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	SVOA8270	Pyrene	0.16	0.16	UJ7
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Aluminum	5.7	2400	J34
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Antimony	3.4	3.8	U1J3
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Arsenic	0.28	4.8	J37
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Barium	0.57	26	J3
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Beryllium	0.11	0.12	
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Cadmium	0.28	3.6	J3
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Calcium	710	120000	
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Chromium	0.57	27	
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Cobalt	1.1	4.8	J3
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Copper	0.57	180	J2
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Iron	140	16000	
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Lead	0.17	140	J3
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Magnesium	28	4400	J2
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Manganese	0.57	380	
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Mercury	0.023	0.095	
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Molybdenum	1.1	0.62	U1
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Nickel	1.1	46	J3
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Potassium	28	440	J3
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Selenium	0.28	0.28	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Silver	0.28	0.28	U
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Sodium	28	2800	J3
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Thallium	0.28	0.28	UJ3
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Vanadium	0.57	16	
	IR02SH039	IR02SH039005	09/09/02	0	0.5	C&T	TMETAL	Zinc	1.1	190	
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PCB	Aroclor-1016	0.015	0.015	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PCB	Aroclor-1221	0.031	0.031	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PCB	Aroclor-1232	0.015	0.015	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PCB	Aroclor-1242	0.015	0.015	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PCB	Aroclor-1248	0.015	0.015	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PCB	Aroclor-1254	0.015	0.015	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PCB	Aroclor-1260	0.015	0.015	J

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	4,4'-DDD	0.021	0.021	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	4,4'-DDE	0.021	0.021	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	4,4'-DDT	0.021	0.021	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Aldrin	0.011	0.011	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Alpha-BHC	0.011	0.011	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.011	0.011	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Beta-BHC	0.011	0.011	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Delta-BHC	0.011	0.011	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Dieldrin	0.021	0.021	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Endosulfan I	0.011	0.011	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Endosulfan II	0.021	0.021	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.021	0.021	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Endrin	0.021	0.021	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Endrin aldehyde	0.021	0.021	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.011	0.011	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.011	0.011	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Heptachlor	0.011	0.011	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.011	0.011	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Methoxychlor	0.11	0.11	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	PEST	Toxaphene	0.38	0.38	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.3	4.3	UJ7
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.17	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.7	1.7	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	UJ7
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.3	4.3	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	UJ7
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Anthracene	0.17	0.17	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Azobenzene	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.17	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.18	
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	0.12	JY
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.17	UJ7

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.17	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.3	4.3	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.85	0.85	U4
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Carbazole	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Chrysene	0.17	0.17	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.17	UJ7
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.17	0.17	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Fluorene	0.17	0.17	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.3	4.3	UJ7
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.17	UJ7
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Isophorone	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Naphthalene	0.17	0.17	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.17	0.17	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Phenol	0.85	0.85	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	SVOA8270	Pyrene	0.17	0.17	UJ7
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Aluminum	5.7	2300	J34
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Antimony	3.4	3.4	UJ3
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Arsenic	0.29	3.6	J7
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Barium	0.57	9.2	J3
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Beryllium	0.11	0.15	
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Cadmium	0.29	2	J3
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Calcium	720	210000	
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Chromium	0.57	22	
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Cobalt	1.1	4.5	J3
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Copper	0.57	60	J2
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Iron	5.7	6000	
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Lead	0.17	38	J3
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Magnesium	29	4200	J2
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Manganese	0.57	500	
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Mercury	0.025	0.084	
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Molybdenum	1.1	1.1	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Nickel	1.1	35	J3
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Potassium	29	630	J3
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Selenium	0.29	0.29	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Silver	0.29	0.29	U
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Sodium	29	5200	J3
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Thallium	0.29	0.24	U1J3
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Vanadium	0.57	8.2	
	IR02SH039	IR02SH039025	09/09/02	2	2.5	C&T	TMETAL	Zinc	1.1	21	

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PCB	Aroclor-1016	0.014	0.014	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PCB	Aroclor-1221	0.028	0.028	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PCB	Aroclor-1232	0.014	0.014	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PCB	Aroclor-1242	0.014	0.014	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PCB	Aroclor-1248	0.014	0.014	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PCB	Aroclor-1254	0.014	0.014	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PCB	Aroclor-1260	0.014	0.059	
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	4,4'-DDD	0.019	0.019	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	4,4'-DDE	0.019	0.019	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	4,4'-DDT	0.019	0.019	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Aldrin	0.0099	0.0099	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Alpha-BHC	0.0099	0.0099	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.0099	0.0099	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Beta-BHC	0.0099	0.0099	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Delta-BHC	0.0099	0.0099	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Dieldrin	0.019	0.019	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Endosulfan I	0.0099	0.0099	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Endosulfan II	0.019	0.019	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.019	0.019	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Endrin	0.019	0.019	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Endrin aldehyde	0.019	0.019	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.0099	0.0099	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.0099	0.0099	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Heptachlor	0.0099	0.0099	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.0099	0.0099	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Methoxychlor	0.099	0.099	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	PEST	Toxaphene	0.35	0.35	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.9	3.9	UJ7
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.6	1.6	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.6	1.6	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.6	1.6	UJ7
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.6	1.6	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.9	3.9	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.6	1.6	UJ7
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.6	1.6	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Anthracene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Azobenzene	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.15	0.15	UJ7
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.9	3.9	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Carbazole	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Chrysene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.15	0.15	UJ7
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Fluorene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.9	3.9	UJ7
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.15	0.15	UJ7
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Isophorone	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Naphthalene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.6	1.6	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.15	0.15	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Phenol	0.78	0.78	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	SVOA8270	Pyrene	0.15	0.15	UJ7
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Aluminum	5.3	2900	J34
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Antimony	3.2	2.2	U1J3
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Arsenic	0.27	3.9	J7
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Barium	0.53	25	J3
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Beryllium	0.11	0.085	J
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Cadmium	0.27	3.6	J3
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Calcium	670	110000	
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Chromium	0.53	35	
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Cobalt	1.1	5.3	J3
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Copper	0.53	80	J2
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Iron	130	16000	
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Lead	0.16	62	J3
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Magnesium	27	5000	J2
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Manganese	0.53	270	
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Mercury	0.023	0.097	
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Molybdenum	1.1	0.62	U1

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Nickel	1.1	58	J3
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Potassium	27	420	J3
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Selenium	0.27	0.27	U
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Silver	0.27	0.21	J
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Sodium	27	2600	J3
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Thallium	0.27	0.27	UJ3
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Vanadium	0.53	30	
	IR02SH040	IR02SH040005	09/09/02	0	0.5	C&T	TMETAL	Zinc	1.1	180	
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	CHROM	Chromium VI	0.08	0.08	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PCB	Aroclor-1016	0.019	0.019	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PCB	Aroclor-1221	0.037	0.037	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PCB	Aroclor-1232	0.019	0.019	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PCB	Aroclor-1242	0.019	0.019	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PCB	Aroclor-1248	0.019	0.019	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PCB	Aroclor-1254	0.019	0.019	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PCB	Aroclor-1260	0.019	0.019	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	4,4'-DDD	0.026	0.026	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	4,4'-DDE	0.026	0.026	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	4,4'-DDT	0.026	0.026	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Aldrin	0.013	0.013	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Alpha-BHC	0.013	0.013	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.013	0.013	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Beta-BHC	0.013	0.013	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Delta-BHC	0.013	0.013	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Dieldrin	0.026	0.026	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Endosulfan I	0.013	0.013	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Endosulfan II	0.026	0.026	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.026	0.026	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Endrin	0.026	0.026	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Endrin aldehyde	0.026	0.026	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.013	0.013	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.013	0.013	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Heptachlor	0.013	0.013	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.013	0.013	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Methoxychlor	0.13	0.13	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	PEST	Toxaphene	0.47	0.47	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	5.1	5.1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylphenol	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	2.1	2.1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	2.1	2.1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	2.1	2.1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	2.1	2.1	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	5.1	5.1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	4-Methylphenol	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	2.1	2.1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	2.1	2.1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Anthracene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Azobenzene	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Benzoic acid	5.1	5.1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	1	1	UJ7
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Carbazole	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Chrysene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Dibenzofuran	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Diethylphthalate	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Fluorene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	5.1	5.1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Hexachloroethane	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.2	0.4	
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Isophorone	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Naphthalene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Nitrobenzene	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	2.1	2.1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.2	0.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Phenol	1	1	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	SVOA8270	Pyrene	0.2	0.13	J
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Aluminum	5.9	940	J34
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Antimony	3.6	3.9	U1J3
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Arsenic	0.3	3.3	J7
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Barium	0.59	9.6	J3
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Beryllium	0.12	0.13	
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Cadmium	0.3	2	J3
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Calcium	890	230000	

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Chromium	0.59	18	
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Cobalt	1.2	3.5	J3
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Copper	0.59	4.1	J2
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Iron	5.9	5200	
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Lead	0.18	2.8	J3
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Magnesium	30	3300	J2
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Manganese	0.59	800	
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Mercury	0.026	0.092	
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Molybdenum	1.2	1.2	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Nickel	1.2	25	J3
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Potassium	30	440	J3
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Selenium	0.3	0.3	U
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Silver	0.3	0.55	
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Sodium	30	6500	J3
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Thallium	0.3	0.96	U1J3
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Vanadium	0.59	4.8	
	IR02SH040	IR02SH040025	09/09/02	2	2.5	C&T	TMETAL	Zinc	1.2	23	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	CHROM	Chromium VI	0.09	0.09	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PCB	Aroclor-1016	0.023	0.023	UJ3
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PCB	Aroclor-1221	0.045	0.045	UJ3
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PCB	Aroclor-1232	0.023	0.023	UJ3
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PCB	Aroclor-1242	0.023	0.023	UJ3
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PCB	Aroclor-1248	0.023	0.023	UJ3
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PCB	Aroclor-1254	0.023	0.023	UJ3
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PCB	Aroclor-1260	0.023	0.031	J3
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	4,4'-DDD	0.031	0.031	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	4,4'-DDE	0.031	0.031	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	4,4'-DDT	0.031	0.031	UJ9
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Aldrin	0.016	0.016	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Alpha-BHC	0.016	0.016	UJ7
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.016	0.016	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Beta-BHC	0.016	0.016	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Delta-BHC	0.016	0.016	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Dieldrin	0.031	0.031	UJ7
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Endosulfan I	0.016	0.016	UJ7
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Endosulfan II	0.031	0.031	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.031	0.031	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Endrin	0.031	0.031	UJ7
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Endrin aldehyde	0.031	0.031	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.016	0.016	UJ7
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.016	0.016	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Heptachlor	0.016	0.016	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.016	0.016	UJ7
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Methoxychlor	0.16	0.16	UJ7
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	PEST	Toxaphene	0.56	0.56	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	6.2	6.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	1.2	1.2	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylphenol	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	2.5	2.5	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	2.5	2.5	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	2.5	2.5	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	2.5	2.5	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	6.2	6.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	4-Methylphenol	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	2.5	2.5	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	2.5	2.5	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Anthracene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Azobenzene	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Benzoic acid	6.2	6.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	1.2	1.2	UJ7
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Carbazole	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Chrysene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Dibenzofuran	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Diethylphthalate	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Fluorene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	6.2	6.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Hexachloroethane	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Isophorone	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Naphthalene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Nitrobenzene	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	1.2	1.2	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	2.5	2.5	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Phenol	1.2	1.2	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	SVOA8270	Pyrene	0.25	0.25	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Aluminum	8.3	8200	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Antimony	5	4.4	J3
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Arsenic	0.42	13	J7
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Barium	0.83	81	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Beryllium	0.17	0.3	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Cadmium	0.42	0.54	U1
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Calcium	42	9100	J9
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Chromium	0.83	78	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Cobalt	1.7	17	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Copper	0.83	400	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Iron	83	31000	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Lead	25	290	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Magnesium	420	15000	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Manganese	0.83	510	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Mercury	0.036	0.77	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Molybdenum	1.7	31	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Nickel	1.7	120	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Potassium	42	1800	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Selenium	0.42	0.74	U1J3
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Silver	0.42	0.41	U1
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Sodium	42	12000	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Thallium	0.42	0.42	U
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Vanadium	0.83	68	
	IR02SH041	IR02SH041005	09/09/02	0	0.5	C&T	TMETAL	Zinc	1.7	560	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PCB	Aroclor-1016	0.015	0.015	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PCB	Aroclor-1221	0.029	0.029	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PCB	Aroclor-1232	0.015	0.015	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PCB	Aroclor-1242	0.015	0.015	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PCB	Aroclor-1248	0.015	0.015	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PCB	Aroclor-1254	0.015	0.015	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PCB	Aroclor-1260	0.015	0.2	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	4,4'-DDD	0.02	0.016	J
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	4,4'-DDE	0.02	0.02	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	4,4'-DDT	0.02	0.02	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Aldrin	0.021	0.021	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Alpha-BHC	0.021	0.021	UJ7
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.021	0.021	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Beta-BHC	0.021	0.021	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Delta-BHC	0.021	0.021	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Dieldrin	0.04	0.04	UJ7
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Endosulfan I	0.021	0.021	UJ7
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Endosulfan II	0.04	0.04	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.04	0.04	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Endrin	0.04	0.04	UJ7
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Endrin aldehyde	0.04	0.04	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.021	0.021	UJ7
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.021	0.021	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Heptachlor	0.021	0.021	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.021	0.021	UJ7
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Methoxychlor	0.21	0.21	UJ7
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	PEST	Toxaphene	0.73	0.73	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.83	0.83	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.1	4.1	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.16	0.096	J
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.7	1.7	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.1	4.1	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.16	0.14	J
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.16	0.16	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Anthracene	0.16	0.15	J
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Azobenzene	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.16	0.21	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.16	0.16	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.16	0.15	JY
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.16	0.16	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.16	0.17	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.1	4.1	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.83	0.83	UJ7
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Carbazole	0.83	0.69	J
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Chrysene	0.16	0.31	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.16	0.16	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.16	0.7	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Fluorene	0.16	0.16	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.1	4.1	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.16	0.31	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Isophorone	0.83	0.83	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Naphthalene	0.16	0.33	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.16	0.7	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Phenol	0.83	0.83	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	SVOA8270	Pyrene	0.16	0.37	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Aluminum	5.4	8100	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Antimony	3.3	39	J3
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Arsenic	0.27	9	J7
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Barium	0.54	270	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Beryllium	0.11	0.097	J
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Cadmium	0.27	4.8	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Calcium	820	37000	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Chromium	0.54	110	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Cobalt	1.1	18	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Copper	0.54	770	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Iron	160	52000	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Lead	16	1000	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Magnesium	820	25000	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Manganese	0.54	640	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Mercury	0.021	0.87	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Molybdenum	1.1	1.1	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Nickel	1.1	180	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Potassium	27	780	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Selenium	0.27	0.27	UJ3
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Silver	0.27	2.3	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Sodium	27	3900	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Thallium	0.27	0.27	U
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Vanadium	0.54	69	
	IR02SH041	IR02SH041025	09/09/02	2	2.5	C&T	TMETAL	Zinc	33	4700	
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PCB	Aroclor-1016	0.014	0.014	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PCB	Aroclor-1221	0.028	0.028	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PCB	Aroclor-1232	0.014	0.014	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PCB	Aroclor-1242	0.014	0.014	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PCB	Aroclor-1248	0.014	0.014	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PCB	Aroclor-1254	0.014	0.014	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PCB	Aroclor-1260	0.014	0.012	J5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	4,4'-DDD	0.019	0.019	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	4,4'-DDE	0.019	0.019	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	4,4'-DDT	0.019	0.019	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Aldrin	0.0098	0.0098	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Alpha-BHC	0.0098	0.0098	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.0098	0.0098	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Beta-BHC	0.0098	0.0098	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Delta-BHC	0.0098	0.0098	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Dieldrin	0.019	0.019	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Endosulfan I	0.0098	0.0098	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Endosulfan II	0.019	0.019	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.019	0.019	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Endrin	0.019	0.019	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Endrin aldehyde	0.019	0.019	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.0098	0.0098	UJ5

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.0098	0.0098	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Heptachlor	0.0098	0.0098	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.0098	0.0098	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Methoxychlor	0.098	0.098	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	PEST	Toxaphene	0.35	0.35	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	3.8	3.8	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.5	1.5	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.5	1.5	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.5	1.5	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.5	1.5	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.8	3.8	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.5	1.5	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.5	1.5	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Anthracene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Azobenzene	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.15	0.15	UJ57
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Benzoic acid	3.8	3.8	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Carbazole	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Chrysene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.15	0.15	UJ57
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.77	0.77	UJ5

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Fluorene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.8	3.8	UJ57
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.15	0.15	UJ57
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Isophorone	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Naphthalene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.5	1.5	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.15	0.15	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Phenol	0.77	0.77	UJ5
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	SVOA8270	Pyrene	0.15	0.15	UJ57
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Aluminum	5.6	2700	J347
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Antimony	3.4	2.7	U1J37
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Arsenic	0.28	5.3	
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Barium	0.56	21	J3
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Beryllium	0.11	0.12	
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Cadmium	0.28	1.3	J3
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Calcium	700	110000	
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Chromium	0.56	31	
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Cobalt	1.1	5.7	J3
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Copper	0.56	89	J2
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Iron	140	16000	
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Lead	0.17	64	J3
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Magnesium	28	5500	J2
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Manganese	0.56	370	
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Mercury	0.02	0.11	
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Molybdenum	1.1	1.1	U
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Nickel	1.1	44	J3
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Potassium	28	570	J3
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Selenium	0.28	0.28	U
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Silver	0.28	0.22	J
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Sodium	28	2800	J3
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Thallium	0.28	0.67	J37
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Vanadium	0.56	17	
	IR02SH042	IR02SH042005	09/09/02	0	0.5	C&T	TMETAL	Zinc	1.1	210	J7
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	CHROM	Chromium VI	0.07	0.07	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PCB	Aroclor-1016	0.018	0.018	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PCB	Aroclor-1221	0.036	0.036	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PCB	Aroclor-1232	0.018	0.018	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PCB	Aroclor-1242	0.018	0.018	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PCB	Aroclor-1248	0.018	0.018	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PCB	Aroclor-1254	0.018	0.018	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PCB	Aroclor-1260	0.018	0.018	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	4,4'-DDD	0.024	0.024	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	4,4'-DDE	0.024	0.024	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	4,4'-DDT	0.024	0.024	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Aldrin	0.013	0.013	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Alpha-BHC	0.013	0.013	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.013	0.013	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Beta-BHC	0.013	0.013	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Delta-BHC	0.013	0.013	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Dieldrin	0.024	0.024	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Endosulfan I	0.013	0.013	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Endosulfan II	0.024	0.024	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.024	0.024	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Endrin	0.024	0.024	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Endrin aldehyde	0.024	0.024	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.013	0.013	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.013	0.013	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Heptachlor	0.013	0.013	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.013	0.013	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Methoxychlor	0.13	0.13	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	PEST	Toxaphene	0.44	0.44	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.9	4.9	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	2	2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	2	2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	2	2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	2	2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.9	4.9	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	2	2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	2	2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Anthracene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Azobenzene	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.9	4.9	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.99	0.99	UJ7

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Carbazole	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Chrysene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Fluorene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.9	4.9	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Isophorone	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Naphthalene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	2	2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Phenol	0.99	0.99	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	SVOA8270	Pyrene	0.2	0.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Aluminum	5.8	2200	J34
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Antimony	3.5	3.5	UJ3
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Arsenic	0.29	3.2	J7
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Barium	0.58	7.5	J3
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Beryllium	0.12	0.13	
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Cadmium	0.29	1.9	J3
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Calcium	730	130000	
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Chromium	0.58	21	
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Cobalt	1.2	4.3	J3
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Copper	0.58	3.3	J2
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Iron	5.8	5800	
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Lead	0.17	3.2	J3
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Magnesium	29	3700	J2
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Manganese	0.58	520	
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Mercury	0.028	0.11	
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Molybdenum	1.2	1.2	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Nickel	1.2	24	J3
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Potassium	29	570	J3
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Selenium	0.29	0.21	U1
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Silver	0.29	0.29	U
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Sodium	29	4600	J3
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Thallium	0.29	0.29	U1J3
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Vanadium	0.58	9.7	
	IR02SH042	IR02SH042025	09/09/02	2	2.5	C&T	TMETAL	Zinc	1.2	13	
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PCB	Aroclor-1016	0.015	0.015	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PCB	Aroclor-1221	0.03	0.03	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PCB	Aroclor-1232	0.015	0.015	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PCB	Aroclor-1242	0.015	0.015	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PCB	Aroclor-1248	0.015	0.015	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PCB	Aroclor-1254	0.015	0.015	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PCB	Aroclor-1260	0.015	0.022	
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	4,4'-DDD	0.021	0.021	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	4,4'-DDE	0.021	0.021	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	4,4'-DDT	0.021	0.021	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Aldrin	0.011	0.011	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Alpha-BHC	0.011	0.011	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.011	0.011	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Beta-BHC	0.011	0.011	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Delta-BHC	0.011	0.011	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Dieldrin	0.021	0.021	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Endosulfan I	0.011	0.011	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Endosulfan II	0.021	0.021	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.021	0.021	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Endrin	0.021	0.021	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Endrin aldehyde	0.021	0.021	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.011	0.011	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.011	0.011	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Heptachlor	0.011	0.011	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.011	0.011	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Methoxychlor	0.11	0.11	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	PEST	Toxaphene	0.37	0.37	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.1	4.1	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.6	1.6	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.6	1.6	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.6	1.6	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.6	1.6	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.1	4.1	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.6	1.6	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.6	1.6	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Anthracene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Azobenzene	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.16	0.16	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Benzoic acid	4.1	4.1	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.82	0.82	UJ7
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Carbazole	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Chrysene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Fluorene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.1	4.1	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Isophorone	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Naphthalene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.6	1.6	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Phenol	0.82	0.82	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	SVOA8270	Pyrene	0.16	0.16	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Aluminum	5.7	2500	J34
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Antimony	3.4	2.5	U1J3
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Arsenic	0.28	5.5	J7
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Barium	0.57	16	J3
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Beryllium	0.11	0.1	J
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Cadmium	0.28	3.9	J3
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Calcium	710	93000	
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Chromium	0.57	32	
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Cobalt	1.1	4.7	J3
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Copper	0.57	91	J2
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Iron	140	17000	
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Lead	0.17	52	J3
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Magnesium	28	4700	J2
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Manganese	0.57	330	
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Mercury	0.022	0.084	
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Molybdenum	1.1	0.8	U1
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Nickel	1.1	44	J3
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Potassium	28	510	J3
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Selenium	0.28	0.28	U
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Silver	0.28	0.35	
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Sodium	28	4300	J3
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Thallium	0.28	0.28	UJ3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Vanadium	0.57	16	
	IR02SH043	IR02SH043005	09/09/02	0	0.5	C&T	TMETAL	Zinc	1.1	300	
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	CHROM	Chromium VI	0.07	0.07	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PCB	Aroclor-1016	0.017	0.017	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PCB	Aroclor-1221	0.035	0.035	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PCB	Aroclor-1232	0.017	0.017	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PCB	Aroclor-1242	0.017	0.017	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PCB	Aroclor-1248	0.017	0.017	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PCB	Aroclor-1254	0.017	0.017	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PCB	Aroclor-1260	0.017	0.017	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	4,4'-DDD	0.024	0.024	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	4,4'-DDE	0.024	0.024	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	4,4'-DDT	0.024	0.024	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Aldrin	0.012	0.012	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Alpha-BHC	0.012	0.012	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.012	0.012	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Beta-BHC	0.012	0.012	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Delta-BHC	0.012	0.012	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Dieldrin	0.024	0.024	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Endosulfan I	0.012	0.012	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Endosulfan II	0.024	0.024	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.024	0.024	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Endrin	0.024	0.024	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Endrin aldehyde	0.024	0.024	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.012	0.012	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.012	0.012	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Heptachlor	0.012	0.012	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.012	0.012	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Methoxychlor	0.12	0.12	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	PEST	Toxaphene	0.44	0.44	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.9	4.9	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.9	1.9	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.9	1.9	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.9	1.9	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.9	1.9	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.9	4.9	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.97	0.97	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.9	1.9	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.9	1.9	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Anthracene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Azobenzene	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.9	4.9	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.97	1.1	U4J7
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Carbazole	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Chrysene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Fluorene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.9	4.9	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Isophorone	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Naphthalene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.9	1.9	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Phenol	0.97	0.97	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	SVOA8270	Pyrene	0.19	0.19	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Aluminum	6.8	3600	J34
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Antimony	4.1	4.1	UJ3
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Arsenic	0.34	2.7	J7
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Barium	0.68	10	J3
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Beryllium	0.14	0.15	
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Cadmium	0.34	2.5	J3
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Calcium	850	68000	J9
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Chromium	0.68	27	
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Cobalt	1.4	5.7	J3
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Copper	0.68	5.4	J2
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Iron	6.8	8600	
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Lead	0.2	5.5	J3
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Magnesium	34	4500	J2
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Manganese	0.68	330	

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Mercury	0.028	0.05	U2
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Molybdenum	1.4	1.4	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Nickel	1.4	34	J3
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Potassium	34	790	J3
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Selenium	0.34	0.34	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Silver	0.34	0.34	U
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Sodium	34	3400	J3
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Thallium	0.34	0.34	UJ3
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Vanadium	0.68	14	
	IR02SH043	IR02SH043025	09/09/02	2	2.5	C&T	TMETAL	Zinc	1.4	23	
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	CHROM	Chromium VI	0.07	0.07	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PCB	Aroclor-1016	0.018	0.018	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PCB	Aroclor-1221	0.035	0.035	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PCB	Aroclor-1232	0.018	0.018	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PCB	Aroclor-1242	0.018	0.018	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PCB	Aroclor-1248	0.018	0.018	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PCB	Aroclor-1254	0.018	0.018	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PCB	Aroclor-1260	0.018	0.042	
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	4,4'-DDD	0.048	0.048	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	4,4'-DDE	0.048	0.048	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	4,4'-DDT	0.048	0.048	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Aldrin	0.025	0.025	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Alpha-BHC	0.025	0.025	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.025	0.025	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Beta-BHC	0.025	0.025	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Delta-BHC	0.025	0.025	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Dieldrin	0.048	0.048	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Endosulfan I	0.025	0.025	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Endosulfan II	0.048	0.048	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.048	0.048	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Endrin	0.048	0.048	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Endrin aldehyde	0.048	0.048	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.025	0.025	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.025	0.025	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Heptachlor	0.025	0.025	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.025	0.025	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Methoxychlor	0.25	0.25	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	PEST	Toxaphene	0.88	0.88	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.8	4.8	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.9	1.9	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.9	1.9	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.9	1.9	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.9	1.9	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.8	4.8	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.9	1.9	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.9	1.9	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Anthracene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Azobenzene	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Benzoic acid	4.8	4.8	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.97	0.97	UJ7
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Carbazole	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Chrysene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Fluorene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.8	4.8	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Isophorone	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Naphthalene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.9	1.9	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Phenol	0.97	0.97	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	SVOA8270	Pyrene	0.19	0.19	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Aluminum	7	3400	J34
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Antimony	4.2	4.2	UJ3
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Arsenic	0.35	4.9	J7
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Barium	0.7	21	J3
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Beryllium	0.14	0.077	J
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Cadmium	0.35	4.6	J3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Calcium	880	120000	
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Chromium	0.7	54	
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Cobalt	1.4	6.3	J3
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Copper	0.7	480	J2
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Iron	180	18000	
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Lead	0.21	120	J3
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Magnesium	35	6300	J2
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Manganese	0.7	320	
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Mercury	0.027	0.17	
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Molybdenum	1.4	0.77	U1
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Nickel	1.4	65	J3
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Potassium	35	670	J3
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Selenium	0.35	0.35	U
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Silver	0.35	0.44	
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Sodium	35	5100	J3
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Thallium	0.35	0.35	UJ3
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Vanadium	0.7	36	
	IR02SH044	IR02SH044005	09/09/02	0	0.5	C&T	TMETAL	Zinc	1.4	350	
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PCB	Aroclor-1016	0.015	0.015	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PCB	Aroclor-1221	0.031	0.031	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PCB	Aroclor-1232	0.015	0.015	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PCB	Aroclor-1242	0.015	0.015	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PCB	Aroclor-1248	0.015	0.015	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PCB	Aroclor-1254	0.015	0.015	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PCB	Aroclor-1260	0.015	0.02	
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	4,4'-DDD	0.021	0.021	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	4,4'-DDE	0.021	0.021	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	4,4'-DDT	0.021	0.021	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Aldrin	0.011	0.011	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Alpha-BHC	0.011	0.011	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.011	0.011	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Beta-BHC	0.011	0.011	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Delta-BHC	0.011	0.011	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Dieldrin	0.021	0.021	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Endosulfan I	0.011	0.011	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Endosulfan II	0.021	0.021	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.021	0.021	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Endrin	0.021	0.021	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Endrin aldehyde	0.021	0.021	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.011	0.011	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.011	0.011	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Heptachlor	0.011	0.011	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.011	0.011	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Methoxychlor	0.11	0.11	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	PEST	Toxaphene	0.38	0.38	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.2	4.2	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.7	1.7	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.2	4.2	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Anthracene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Azobenzene	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.2	4.2	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.84	0.96	U4J7
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Carbazole	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Chrysene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Fluorene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.2	4.2	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.34	
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Isophorone	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Naphthalene	0.17	0.17	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.17	0.17	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Phenol	0.84	0.84	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	SVOA8270	Pyrene	0.17	0.16	J
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Aluminum	5.7	5100	J34
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Antimony	3.4	3.4	UJ3
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Arsenic	0.28	5.2	J7
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Barium	0.57	14	J3
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Beryllium	0.11	0.12	
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Cadmium	0.28	3.4	J3
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Calcium	710	47000	
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Chromium	0.57	30	
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Cobalt	1.1	7.2	J3
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Copper	0.57	22	J2
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Iron	140	14000	
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Lead	0.17	10	J3
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Magnesium	28	5600	J2
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Manganese	0.57	260	
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Mercury	0.025	0.1	
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Molybdenum	1.1	1.1	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Nickel	1.1	41	J3
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Potassium	28	980	J3
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Selenium	0.28	0.28	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Silver	0.28	0.28	U
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Sodium	28	3600	J3
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Thallium	0.28	0.28	UJ3
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Vanadium	0.57	21	
	IR02SH044	IR02SH044025	09/09/02	2	2.5	C&T	TMETAL	Zinc	1.1	29	
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	CHROM	Chromium VI	0.07	0.07	U
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PCB	Aroclor-1016	0.018	0.018	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PCB	Aroclor-1221	0.035	0.035	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PCB	Aroclor-1232	0.018	0.018	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PCB	Aroclor-1242	0.018	0.018	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PCB	Aroclor-1248	0.018	0.018	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PCB	Aroclor-1254	0.018	0.018	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PCB	Aroclor-1260	0.018	0.1	J5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	4,4'-DDD	0.048	0.048	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	4,4'-DDE	0.048	0.048	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	4,4'-DDT	0.048	0.048	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Aldrin	0.025	0.025	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Alpha-BHC	0.025	0.025	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.025	0.025	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Beta-BHC	0.025	0.025	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Delta-BHC	0.025	0.025	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Dieldrin	0.048	0.048	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Endosulfan I	0.025	0.025	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Endosulfan II	0.048	0.048	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.048	0.048	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Endrin	0.048	0.048	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Endrin aldehyde	0.048	0.048	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.025	0.025	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.025	0.025	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Heptachlor	0.025	0.025	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.025	0.025	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Methoxychlor	0.25	0.25	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	PEST	Toxaphene	0.87	0.87	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.96	0.96	UJ5

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.8	4.8	UJ57
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.19	0.19	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.9	1.9	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.9	1.9	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.9	1.9	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.9	1.9	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.8	4.8	UJ57
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.9	1.9	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.9	1.9	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.19	0.19	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.19	0.19	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Anthracene	0.19	0.19	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Azobenzene	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.19	0.19	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.19	0.19	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.19	0.095	JY
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.19	0.19	UJ57
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.19	0.19	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Benzoic acid	4.8	4.8	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.96	0.96	U4J7
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Carbazole	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Chrysene	0.19	0.19	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.19	0.19	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.19	0.18	J
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Fluorene	0.19	0.19	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.8	4.8	UJ57
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.19	0.19	UJ57

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Isophorone	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Naphthalene	0.19	0.22	J
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.9	1.9	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.19	0.1	J
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Phenol	0.96	0.96	UJ5
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	SVOA8270	Pyrene	0.19	0.16	J
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Aluminum	7	9700	J34
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Antimony	4.2	17	J3
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Arsenic	0.35	12	J7
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Barium	0.7	52	J3
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Beryllium	0.14	0.12	J
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Cadmium	0.35	11	J3
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Calcium	350	32000	
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Chromium	0.7	190	
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Cobalt	1.4	15	J3
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Copper	0.7	2600	J2
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Iron	70	46000	
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Lead	0.21	150	J3
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Magnesium	350	32000	J2
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Manganese	0.7	450	
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Mercury	0.024	0.31	
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Molybdenum	1.4	1.6	U1
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Nickel	1.4	200	J3
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Potassium	35	1000	J3
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Selenium	0.35	0.35	U
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Silver	0.35	0.55	
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Sodium	35	4800	J3
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Thallium	0.35	0.35	UJ3
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Vanadium	0.7	51	
	IR02SH045	IR02SH045005	09/09/02	0	0.5	C&T	TMETAL	Zinc	1.4	470	
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PCB	Aroclor-1016	0.015	0.015	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PCB	Aroclor-1221	0.03	0.03	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PCB	Aroclor-1232	0.015	0.015	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PCB	Aroclor-1242	0.015	0.015	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PCB	Aroclor-1248	0.015	0.015	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PCB	Aroclor-1254	0.015	0.015	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PCB	Aroclor-1260	0.015	0.31	
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	4,4'-DDD	0.041	0.041	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	4,4'-DDE	0.041	0.041	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	4,4'-DDT	0.041	0.041	J
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Aldrin	0.021	0.021	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Alpha-BHC	0.021	0.021	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.021	0.021	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Beta-BHC	0.021	0.021	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Delta-BHC	0.021	0.021	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Dieldrin	0.041	0.041	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Endosulfan I	0.021	0.021	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Endosulfan II	0.041	0.041	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.041	0.041	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Endrin	0.041	0.041	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Endrin aldehyde	0.041	0.041	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.021	0.021	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.021	0.021	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Heptachlor	0.021	0.021	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.021	0.021	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Methoxychlor	0.21	0.21	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	PEST	Toxaphene	0.75	0.75	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.2	4.2	UJ7
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	1.7	1.7	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.2	4.2	UJ7
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Anthracene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Azobenzene	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.17	UJ7
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Benzoic acid	4.2	4.2	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Carbazole	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Chrysene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.84	0.84	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Fluorene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.2	4.2	UJ7
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.17	UJ7
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Isophorone	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Naphthalene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Phenol	0.84	0.84	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	SVOA8270	Pyrene	0.17	0.17	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Aluminum	5.7	6100	J34
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Antimony	3.4	3.9	U1J3
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Arsenic	0.28	4	J7
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Barium	0.57	28	J3
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Beryllium	0.11	0.1	J
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Cadmium	0.28	4.5	J3
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Calcium	710	54000	
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Chromium	0.57	53	
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Cobalt	1.1	7.7	J3
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Copper	0.57	140	J2
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Iron	140	18000	
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Lead	0.17	320	J3
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Magnesium	28	7500	J2
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Manganese	0.57	280	
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Mercury	0.025	0.25	
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Molybdenum	1.1	1.1	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Nickel	1.1	56	J3
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Potassium	28	800	J3
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Selenium	0.28	0.28	U
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Silver	0.28	5.4	
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Sodium	28	4700	J3
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Thallium	0.28	0.28	UJ3
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Vanadium	0.57	33	
	IR02SH046	IR02SH046005	09/09/02	0	0.5	C&T	TMETAL	Zinc	1.1	230	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	CHROM	Chromium VI	0.07	0.07	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PCB	Aroclor-1016	0.018	0.018	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PCB	Aroclor-1221	0.036	0.036	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PCB	Aroclor-1232	0.018	0.018	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PCB	Aroclor-1242	0.018	0.018	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PCB	Aroclor-1248	0.018	0.018	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PCB	Aroclor-1254	0.018	0.018	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PCB	Aroclor-1260	0.018	0.12	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	4,4'-DDD	0.048	0.048	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	4,4'-DDE	0.048	0.048	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	4,4'-DDT	0.048	0.04	J
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Aldrin	0.025	0.025	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Alpha-BHC	0.025	0.025	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Alpha-Chlordane	0.025	0.025	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Beta-BHC	0.025	0.025	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Delta-BHC	0.025	0.025	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Dieldrin	0.048	0.048	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Endosulfan I	0.025	0.025	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Endosulfan II	0.048	0.048	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Endosulfan sulfate	0.048	0.048	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Endrin	0.048	0.048	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Endrin aldehyde	0.048	0.048	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Gamma-BHC (lindane)	0.025	0.025	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Gamma-Chlordane	0.025	0.025	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Heptachlor	0.025	0.025	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Heptachlor epoxide	0.025	0.025	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Methoxychlor	0.25	0.25	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	PEST	Toxaphene	0.87	0.87	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dichlorophenol	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dimethylphenol	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrophenol	4.9	4.9	UJ7
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2-Chloronaphthalene	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2-Chlorophenol	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylnaphthalene	0.19	0.19	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2-Methylphenol	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitroaniline	2	2	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	2-Nitrophenol	2	2	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	2	2	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	3-Nitroaniline	2	2	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.9	4.9	UJ7
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	4-Chloroaniline	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	4-Methylphenol	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitroaniline	2	2	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	4-Nitrophenol	2	2	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthene	0.19	0.19	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Acenaphthylene	0.19	0.19	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Anthracene	0.19	0.14	J
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Azobenzene	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)anthracene	0.19	0.23	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(a)pyrene	0.19	0.21	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.19	0.17	JY
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.19	0.19	UJ7
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.19	0.17	JY
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Benzoic acid	4.9	4.9	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Benzyl alcohol	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.98	1.1	U4

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Butylbenzylphthalate	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Carbazole	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Chrysene	0.19	0.28	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.19	0.19	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Dibenzofuran	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Diethylphthalate	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Dimethylphthalate	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-butylphthalate	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Di-n-octylphthalate	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Fluoranthene	0.19	0.48	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Fluorene	0.19	0.19	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobenzene	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorobutadiene	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.9	4.9	UJ7
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Hexachloroethane	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.19	0.19	UJ7
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Isophorone	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Naphthalene	0.19	0.17	J
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Nitrobenzene	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Pentachlorophenol	2	1.4	J
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Phenanthrene	0.19	0.58	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Phenol	0.98	0.98	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	SVOA8270	Pyrene	0.19	0.53	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Aluminum	7.1	7800	J34
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Antimony	4.2	2.8	U1J3
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Arsenic	0.35	7.4	J7
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Barium	0.71	51	J3
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Beryllium	0.14	0.11	J
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Cadmium	0.35	7.6	J3
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Calcium	880	64000	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Chromium	0.71	72	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Cobalt	1.4	11	J3
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Copper	0.71	170	J2
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Iron	180	30000	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Lead	0.21	220	J3
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Magnesium	880	18000	J2
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Manganese	0.71	280	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Mercury	0.025	0.67	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Molybdenum	1.4	0.79	U1
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Nickel	1.4	130	J3
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Potassium	35	1200	J3
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Selenium	0.35	0.35	U
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Silver	0.35	0.4	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Sodium	35	5500	J3
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Thallium	0.35	0.35	UJ3
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Vanadium	0.71	55	
	IR02SH048	IR02SH048005	09/09/02	0	0.5	C&T	TMETAL	Zinc	1.4	640	
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	CHROM	Chromium VI	0.06	0.06	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PCB	Aroclor-1016	0.016	0.016	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PCB	Aroclor-1221	0.032	0.032	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PCB	Aroclor-1232	0.016	0.016	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PCB	Aroclor-1242	0.016	0.016	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PCB	Aroclor-1248	0.016	0.016	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PCB	Aroclor-1254	0.016	0.016	U
(Continued)	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PCB	Aroclor-1260	0.016	0.016	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	4,4'-DDD	0.021	0.021	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	4,4'-DDE	0.021	0.021	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	4,4'-DDT	0.021	0.021	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Aldrin	0.011	0.011	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Alpha-BHC	0.011	0.011	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Alpha-Chlordane	0.011	0.011	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Beta-BHC	0.011	0.011	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Delta-BHC	0.011	0.011	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Dieldrin	0.021	0.021	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Endosulfan I	0.011	0.011	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Endosulfan II	0.021	0.021	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Endosulfan sulfate	0.021	0.021	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Endrin	0.021	0.021	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Endrin aldehyde	0.021	0.021	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Gamma-BHC (lindane)	0.011	0.011	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Gamma-Chlordane	0.011	0.011	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Heptachlor	0.011	0.011	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Heptachlor epoxide	0.011	0.011	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Methoxychlor	0.11	0.11	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	PEST	Toxaphene	0.38	0.38	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-Chloropropane)	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.3	4.3	UJ7
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.7	1.7	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.7	1.7	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	1.7	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.7	1.7	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.3	4.3	UJ7
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.7	1.7	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.7	1.7	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Anthracene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Azobenzene	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	0.17	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.17	0.17	UJ7
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Benzoic acid	4.3	4.3	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Carbazole	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Chrysene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Fluoranthene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Fluorene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.3	4.3	UJ7
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.17	0.17	UJ7
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Isophorone	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Naphthalene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodimethylamine	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitroso-di-n-propylamine	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	N-Nitrosodiphenylamine	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.7	1.7	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Phenanthrene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Phenol	0.86	0.86	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	SVOA8270	Pyrene	0.17	0.17	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Aluminum	6.4	2800	J34
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Antimony	3.8	3	U1J3
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Arsenic	0.32	3.7	J7
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Barium	0.64	61	J3
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Beryllium	0.13	0.12	J
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Cadmium	0.32	2.5	J3
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Calcium	800	110000	J9
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Chromium	0.64	24	
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Cobalt	1.3	5.8	J3
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Copper	0.64	43	J2
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Iron	6.4	7300	
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Lead	0.19	44	J3
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Magnesium	32	4100	J2
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Manganese	0.64	640	
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Mercury	0.024	0.24	
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Molybdenum	1.3	1.3	U
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Nickel	1.3	29	J3
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Potassium	32	550	J3
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Selenium	0.32	0.24	U1
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Silver	0.32	0.18	J
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Sodium	32	3900	J3
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Thallium	0.32	0.23	U1J3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Vanadium	0.64	19	
	IR02SH048	IR02SH048025	09/09/02	2	2.5	C&T	TMETAL	Zinc	1.3	150	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	CHROM	CHROMIUM VI	0.06	0.06	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	CHROM	CHROMIUM VI	0.06	0.06	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	AROCLOR-1016	0.014	0.014	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	AROCLOR-1221	0.028	0.028	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	AROCLOR-1232	0.014	0.014	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	AROCLOR-1016	0.015	0.015	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	AROCLOR-1232	0.015	0.015	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	AROCLOR-1248	0.015	0.015	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	AROCLOR-1260	0.015	0.023	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	AROCLOR-1254	0.015	0.015	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	AROCLOR-1242	0.015	0.015	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCB	AROCLOR-1221	0.03	0.03	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	AROCLOR-1242	0.014	0.014	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	AROCLOR-1248	0.014	0.014	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	AROCLOR-1254	0.014	0.014	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCB	AROCLOR-1260	0.014	0.054	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PCTMST	PERCENT MOISTURE	0	12	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PCTMST	PERCENT MOISTURE	0	20	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	4,4'-DDD	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	4,4'-DDE	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	4,4'-DDT	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	ALDRIN	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	ALPHA-BHC	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	ALPHA-CHLORDANE	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	BETA-BHC	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	DELTA-BHC	0.019	0.019	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	HEPTACHLOR	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	GAMMA-CHLORDANE	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	GAMMA-BHC (LINDANE)	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	ENDRIN ALDEHYDE	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	ENDRIN	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	ENDOSULFAN SULFATE	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	ENDOSULFAN II	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	ENDOSULFAN I	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	DIELDRIN	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	TOXAPHENE	0.76	0.76	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	METHOXYCHLOR	0.22	0.22	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	DELTA-BHC	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	BETA-BHC	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	ALPHA-CHLORDANE	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	ALPHA-BHC	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	ALDRIN	0.022	0.022	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	4,4'-DDT	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	4,4'-DDE	0.042	0.042	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	4,4'-DDD	0.042	0.042	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	DIELDRIN	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	ENDOSULFAN I	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	ENDOSULFAN II	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	ENDOSULFAN SULFATE	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	ENDRIN	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	ENDRIN ALDEHYDE	0.037	0.037	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	GAMMA-BHC (LINDANE)	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	GAMMA-CHLORDANE	0.019	0.019	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	PEST	HEPTACHLOR EPOXIDE	0.022	0.022	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	HEPTACHLOR	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	HEPTACHLOR EPOXIDE	0.019	0.019	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	METHOXYCHLOR	0.19	0.19	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	PEST	TOXAPHENE	0.68	0.68	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	1,2,4-TRICHLOROBENZENE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	1,2-DICHLOROBENZENE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	1,3-DICHLOROBENZENE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	1,4-DICHLOROBENZENE	0.75	0.75	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-NITROANILINE	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-METHYLPHENOL	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-METHYLNAPHTHALENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-CHLOROPHENOL	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-CHLORONAPHTHALENE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,6-DINITROTOLUENE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4-DINITROTOLUENE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4-DINITROPHENOL	4.2	4.2	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4-DIMETHYLPHENOL	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	PYRENE	0.17	0.12	J7
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	PHENOL	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	PHENANTHRENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	PENTACHLOROPHENOL	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	NITROBENZENE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	NAPHTHALENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	N-NITROSODIPHENYLAMINE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	N-NITROSODIMETHYLAMINE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	N-NITROSO-DI-N-PROPYLAMINE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	ISOPHORONE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	INDENO(1,2,3-CD)PYRENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	HEXACHLOROETHANE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	HEXACHLOROCYCLOPENTADIENE	4.2	4.2	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	HEXACHLOROBUTADIENE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	HEXACHLOROBENZENE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	FLUORENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	FLUORANTHENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	DIMETHYLPHTHALATE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	DIETHYLPHTHALATE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	DIBENZOFURAN	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	DIBENZ(A,H)ANTHRACENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	DI-N-OCTYLPHTHALATE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	DI-N-BUTYLPHTHALATE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	CHRYSENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	CARBAZOLE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	BUTYLBENZYLPHTHALATE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	BIS(2-ETHYLHEXYL)PHTHALATE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	BIS(2-CHLOROETHYL)ETHER	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	BIS(2-CHLOROETHOXY)METHANE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	BENZYL ALCOHOL	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	BENZOIC ACID	4.2	4.2	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	BENZO(K)FLUORANTHENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	BENZO(G,H,I)PERYLENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	BENZO(B)FLUORANTHENE	0.17	0.14	J
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	BENZO(A)PYRENE	0.17	0.2	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	BENZO(A)ANTHRACENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	AZOBENZENE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	ANTHRACENE	0.17	0.17	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	ACENAPHTHYLENE	0.17	0.17	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	ACENAPHTHENE	0.17	0.17	U
(Continued)	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-NITROPHENOL	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-NITROANILINE	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-METHYLPHENOL	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-CHLOROPHENYL-PHENYLETHER	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-CHLOROANILINE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-CHLORO-3-METHYLPHENOL	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4-BROMOPHENYL-PHENYLETHER	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	4,6-DINITRO-2-METHYLPHENOL	4.2	4.2	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	3-NITROANILINE	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	3,3'-DICHLOROBENZIDINE	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2-NITROPHENOL	1.7	1.7	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4-DICHLOROPHENOL	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4,6-TRICHLOROPHENOL	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,4,5-TRICHLOROPHENOL	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	2,2'-OXYBIS(1-CHLOROPROPANE)	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	1,4-DICHLOROBENZENE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	1,3-DICHLOROBENZENE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	1,2-DICHLOROBENZENE	0.84	0.84	U
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	SVOA8270	1,2,4-TRICHLOROBENZENE	0.84	0.84	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,2'-OXYBIS(1-CHLOROPROPANE)	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4,5-TRICHLOROPHENOL	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4,6-TRICHLOROPHENOL	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4-DICHLOROPHENOL	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4-DIMETHYLPHENOL	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4-DINITROPHENOL	3.8	3.8	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,4-DINITROTOLUENE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2,6-DINITROTOLUENE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-CHLORONAPHTHALENE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-CHLOROPHENOL	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-METHYLNAPHTHALENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-METHYLPHENOL	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-NITROANILINE	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	2-NITROPHENOL	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	3,3'-DICHLOROBENZIDINE	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	3-NITROANILINE	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4,6-DINITRO-2-METHYLPHENOL	3.8	3.8	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-BROMOPHENYL-PHENYLETHER	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-CHLORO-3-METHYLPHENOL	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-CHLOROANILINE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-CHLOROPHENYL-PHENYLETHER	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-METHYLPHENOL	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-NITROANILINE	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	4-NITROPHENOL	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	ACENAPHTHENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	ACENAPHTHYLENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	ANTHRACENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	AZOBENZENE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	BENZO(A)ANTHRACENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	BENZO(A)PYRENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	BENZO(B)FLUORANTHENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	BENZO(G,H,I)PERYLENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	BENZO(K)FLUORANTHENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	BENZOIC ACID	3.8	3.8	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	BENZYL ALCOHOL	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	BIS(2-CHLOROETHOXY)METHANE	0.75	0.75	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	BIS(2-CHLOROETHYL)ETHER	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	BIS(2-ETHYLHEXYL)PHTHALATE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	BUTYLBENZYLPHTHALATE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	CARBAZOLE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	CHRYSENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	DI-N-BUTYLPHTHALATE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	DI-N-OCTYLPHTHALATE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	DIBENZ(A,H)ANTHRACENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	DIBENZOFURAN	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	DIETHYLPHTHALATE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	DIMETHYLPHTHALATE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	FLUORANTHENE	0.15	0.22	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	FLUORENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	HEXACHLOROBENZENE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	HEXACHLOROBUTADIENE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	HEXACHLOROCYCLOPENTADIENE	3.8	3.8	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	HEXACHLOROETHANE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	INDENO(1,2,3-CD)PYRENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	ISOPHORONE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	N-NITROSO-DI-N-PROPYLAMINE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	N-NITROSODIMETHYLAMINE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	N-NITROSODIPHENYLAMINE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	NAPHTHALENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	NITROBENZENE	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	PENTACHLOROPHENOL	1.5	1.5	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	PHENANTHRENE	0.15	0.15	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	PHENOL	0.75	0.75	U
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	SVOA8270	PYRENE	0.15	0.22	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	ALUMINUM	5.4	6500	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	ANTIMONY	3.2	4.4	U1J37
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	ARSENIC	0.27	6.8	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	BARIUM	0.54	33	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	BERYLLIUM	0.11	0.36	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	CADMIUM	0.27	2.2	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	CALCIUM	270	54000	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	CHROMIUM	0.54	47	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	COBALT	1.1	8.5	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	COPPER	0.54	98	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	IRON	54	43000	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	LEAD	0.16	57	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	MAGNESIUM	27	7700	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	MANGANESE	0.54	300	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	MERCURY	0.02	0.19	
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	MOLYBDENUM	1.1	2.2	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	NICKEL	1.1	76	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	POTASSIUM	27	1300	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	SELENIUM	0.27	0.81	J37
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	SILVER	0.27	0.42	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	SODIUM	27	3900	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	THALLIUM	0.27	0.25	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	VANADIUM	0.54	53	J3
	IR02SH049	IR02SH049005	09/06/02	0	0.5	C&T	TMETAL	ZINC	1.1	320	J2
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	ALUMINUM	5.4	3000	J39
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	ANTIMONY	3.2	3.2	UJ37
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	ARSENIC	0.27	2.3	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	BARIUM	0.54	15	J3

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Subarea	Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit (mg/kg)	Result (mg/kg)	Qualifier
02SESDGI-2 (Continued)	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	BERYLLIUM	0.11	0.18	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	CADMIUM	0.27	0.75	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	CALCIUM	270	64000	J39
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	CHROMIUM	0.54	29	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	COBALT	1.1	5.7	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	COPPER	0.54	20	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	IRON	54	12000	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	LEAD	0.16	13	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	MAGNESIUM	27	4300	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	MANGANESE	0.54	250	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	MERCURY	0.025	0.07	
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	MOLYBDENUM	1.1	1.1	UJ3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	NICKEL	1.1	41	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	POTASSIUM	270	690	U1J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	SELENIUM	0.27	0.37	J37
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	SILVER	0.27	0.27	UJ3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	SODIUM	270	3500	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	THALLIUM	0.27	0.24	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	VANADIUM	0.54	26	J3
	IR02SH049	IR02SH049025	09/06/02	2	2.5	C&T	TMETAL	ZINC	1.1	64	J2
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,4,6,7,8,9-OCDD	0.0002	0.0002	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,4,6,7,8,9-OCDF	0.00007	0.00007	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,4,6,7,8-HPCDD	0.00008	0.00008	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,4,6,7,8-HPCDF	0.0001	0.0001	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,4,7,8,9-HPCDF	0.0001	0.0001	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,4,7,8-HXCDD	0.00006	0.00006	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,4,7,8-HXCDF	0.00004	0.00004	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,6,7,8-HXCDD	0.00006	0.00006	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,6,7,8-HXCDF	0.00003	0.00003	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,7,8,9-HXCDD	0.00005	0.00005	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,7,8,9-HXCDF	0.00004	0.00004	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,7,8-PECDD	0.0002	0.0002	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	1,2,3,7,8-PECDF	0.00007	0.00007	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	2,3,4,6,7,8-HXCDF	0.00004	0.00004	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	2,3,4,7,8-PECDF	0.00008	0.00008	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	2,3,7,8-TCDD	0.00007	0.00007	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	2,3,7,8-TCDF	0.00007	0.00007	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	Total HPCDD	0.00008	0.00008	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	Total HPCDF	0.0001	0.0001	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	Total HXCDD	0.00005	0.00005	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	Total HXCDF	0.00003	0.00003	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	Total PECDD	0.0002	0.0002	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	Total PECDF	0.00007	0.00007	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	Total TCDD	0.00007	0.00007	U
	IR02SS382[a]	9636J363	09/06/96	0	0.5	QT-S	DIOXIN	Total TCDF	0.00007	0.00007	U

TABLE A-2: ANALYTICAL RESULTS FOR BIASED SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Notes:

a Samples were collected from locations IR01B064 and IR02SS382 during the Parcel E remedial investigation (Tetra Tech, LFR Levine-Fricke, and Uribe and Associates. 1997. "Parcel E Remedial Investigation Report, Draft Final, Hunters Point Shipyard, San Francisco, California." October.).

bgs	Below ground surface
BHC	Benzene hexachloride
C&T	Curtis and Tompkins Laboratory
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
HPCDF	Heptachlorodibenzofuran
HPCDD	Heptachlorodibenzo-p-dixon
HXCDF	Hexachlorodibenzofuran
HXCDD	Hexachlorodibenzo-p-dioxin
ID	Identification
mg/kg	Milligrams per kilogram
OCDF	Octachlorodibenzofuran
OCDD	Octachlorodibenzo-p-dixon
PECDF	Pentachlorodibenzofuran
PECDD	Pentachlorodibenzo-p-dioxin
PEL	Pacific Environmental Laboratory
PCB	Polychlorinated biphenyl
SPAWAR	Space and Naval Warfare Laboratory Facility
SWL	Southwest Laboratories, Inc.
TCDF	Tetrachlorodibenzofuran
TCDD	Tetrachlorodibenzo-p-dixon

Data Qualifier Descriptions:

U1	Compound is nondetected because of laboratory blank contamination
U2	Compound is nondetected because of field blank contamination
U4	Compound is nondetected because of common laboratory contamination
J	Result is greater than the detection limit but less than the reporting limit (just "J," no subqualifier number exists)
J1/UJ1/R3	Compound is estimated or rejected because of noncompliant instrument performance criteria
J2/UJ2	Matrix duplicate
J3/UJ3/R2	Accuracy – blank spike, surrogate spike, matrix spike
J4/UJ4	Serial dilution
J5/UJ5/R1	Holding time
J7/UJ7/R7	Initial and continuing calibration
J8	Exceeds calibration range
J9/UJ9	Organics: percent difference (%D) between columns; Inorganics: interference check samples
J0/UJ0/R0	Internal standards
G, D, M, L, H, and Z	Total petroleum hydrocarbons (TPH) identification qualifiers
Y	Benzo(b)fluoranthene quantitated as the total of benzo(b)- and benzo(k)fluoranthene

TABLE A-3: ANALYTICAL RESULTS FOR BRICK SAMPLES FROM THE PARCELS E AND E-2 SHORELINE

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit	Result (mg/kg)	Qualifier
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,4,6,7,8,9-OCDD	0.00000053	2.51E-05	
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,4,6,7,8,9-OCDF	0.0000005	7.2E-06	
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,4,6,7,8-HPCDD	0.00000062	4.94E-06	
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,4,6,7,8-HPCDF	0.00000028	2.69E-06	
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,4,7,8,9-HPCDF	0.00000036	3.6E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,4,7,8-HXCDD	0.00000094	9.4E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,4,7,8-HXCDF	0.00000029	2.9E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,6,7,8-HXCDD	0.00000074	7.4E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,6,7,8-HXCDF	0.00000028	2.8E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,7,8,9-HXCDD	0.00000071	7.1E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,7,8,9-HXCDF	0.00000034	3.4E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,7,8-PECDD	0.00000057	5.7E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	1,2,3,7,8-PECDF	0.00000023	2.3E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	2,3,4,6,7,8-HXCDF	0.00000033	3.3E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	2,3,4,7,8-PECDF	0.00000024	2.4E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	2,3,7,8-TCDD	0.00000013	1.3E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	2,3,7,8-TCDF	0.00000017	1.7E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	TOTAL HPCDD	0.00000062	1.05E-05	
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	TOTAL HPCDF	0.00000028	6.16E-06	
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	TOTAL HXCDD	0.00000071	7.1E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	TOTAL HXCDF	0.00000028	1.27E-06	
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	TOTAL PECDD	0.00000057	5.7E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	TOTAL PECDF	0.00000023	1.11E-06	
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	TOTAL TCDD	0.00000013	1.3E-07	U
IR01SH025A	IR01SH025A005	09/10/02	0	0	SWL	DIOXIN	TOTAL TCDF	0.00000017	1.7E-07	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	CHROM	CHROMIUM VI	0.05	0.05	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PCB	AROCLOR-1016	0.062	0.062	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PCB	AROCLOR-1221	0.12	0.12	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PCB	AROCLOR-1232	0.062	0.062	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PCB	AROCLOR-1242	0.062	0.062	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PCB	AROCLOR-1248	0.062	0.062	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PCB	AROCLOR-1254	0.062	0.062	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PCB	AROCLOR-1260	0.062	1.3	
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PCTMST	PERCENT MOISTURE	0	3	
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	4,4'-DDD	0.068	0.068	UJ7
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	4,4'-DDE	0.068	0.068	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	4,4'-DDT	0.068	0.12	UJ9
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	ALDRIN	0.035	0.035	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	ALPHA-BHC	0.035	0.035	UJ7

TABLE A-3: ANALYTICAL RESULTS FOR BRICK SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit	Result (mg/kg)	Qualifier
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	ALPHA-CHLORDANE	0.035	0.035	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	BETA-BHC	0.035	0.035	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	DELTA-BHC	0.035	0.035	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	DIELDRIN	0.068	0.068	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	ENDOSULFAN I	0.035	0.035	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	ENDOSULFAN II	0.068	0.068	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	ENDOSULFAN SULFATE	0.068	0.068	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	ENDRIN	0.068	0.068	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	ENDRIN ALDEHYDE	0.068	0.068	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	GAMMA-BHC (LINDANE)	0.035	0.035	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	GAMMA-CHLORDANE	0.035	0.035	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	HEPTACHLOR	0.035	0.035	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	HEPTACHLOR EPOXIDE	0.035	0.035	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	METHOXYCHLOR	0.35	0.35	UJ7
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	PEST	TOXAPHENE	1.2	1.2	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	1,2,4-TRICHLOROBENZENE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	1,2-DICHLOROBENZENE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	1,3-DICHLOROBENZENE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	1,4-DICHLOROBENZENE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2,2'-OXYBIS(1-CHLOROPROPANE)	0.68	0.68	UJ7
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2,4,5-TRICHLOROPHENOL	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2,4,6-TRICHLOROPHENOL	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2,4-DICHLOROPHENOL	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2,4-DIMETHYLPHENOL	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2,4-DINITROPHENOL	3.4	3.4	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2,4-DINITROTOLUENE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2,6-DINITROTOLUENE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2-CHLORONAPHTHALENE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2-CHLOROPHENOL	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2-METHYLNAPHTHALENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2-METHYLPHENOL	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2-NITROANILINE	1.4	1.4	UJ7
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	2-NITROPHENOL	1.4	1.4	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	3,3'-DICHLOROBENZIDINE	1.4	1.4	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	3-NITROANILINE	1.4	1.4	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	4,6-DINITRO-2-METHYLPHENOL	3.4	3.4	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	4-BROMOPHENYL-PHENYLETHER	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	4-CHLORO-3-METHYLPHENOL	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	4-CHLOROANILINE	0.68	0.68	U

TABLE A-3: ANALYTICAL RESULTS FOR BRICK SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit	Result (mg/kg)	Qualifier
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	4-CHLOROPHENYL-PHENYLETHER	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	4-METHYLPHENOL	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	4-NITROANILINE	1.4	1.4	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	4-NITROPHENOL	1.4	1.4	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	ACENAPHTHENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	ACENAPHTHYLENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	ANTHRACENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	AZOBENZENE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	BENZO(A)ANTHRACENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	BENZO(A)PYRENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	BENZO(B)FLUORANTHENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	BENZO(G,H,I)PERYLENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	BENZO(K)FLUORANTHENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	BENZOIC ACID	3.4	3.4	UJ7
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	BENZYL ALCOHOL	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	BIS(2-CHLOROETHOXY)METHANE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	BIS(2-CHLOROETHYL)ETHER	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	BIS(2-ETHYLHEXYL)PHTHALATE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	BUTYLBENZYLPHTHALATE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	CARBAZOLE	0.68	0.68	UJ7
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	CHRYSENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	DI-N-BUTYLPHTHALATE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	DI-N-OCTYLPHTHALATE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	DIBENZ(A,H)ANTHRACENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	DIBENZOFURAN	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	DIETHYLPHTHALATE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	DIMETHYLPHTHALATE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	FLUORANTHENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	FLUORENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	HEXACHLOROBENZENE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	HEXACHLOROBUTADIENE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	HEXACHLOROCYCLOPENTADIENE	3.4	3.4	UJ7
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	HEXACHLOROETHANE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	INDENO(1,2,3-CD)PYRENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	ISOPHORONE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	N-NITROSO-DI-N-PROPYLAMINE	0.68	0.68	UJ7
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	N-NITROSODIMETHYLAMINE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	N-NITROSODIPHENYLAMINE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	NAPHTHALENE	0.14	0.14	U

TABLE A-3: ANALYTICAL RESULTS FOR BRICK SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit	Result (mg/kg)	Qualifier
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	NITROBENZENE	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	PENTACHLOROPHENOL	1.4	1.4	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	PHENANTHRENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	PHENOL	0.68	0.68	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	SVOA8270	PYRENE	0.14	0.14	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL		4.3	340	
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	ANTIMONY	2.6	2.6	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	ARSENIC	0.21	0.45	J7
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	BARIUM	0.43	2.4	
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	BERYLLIUM	0.086	0.05	U1
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	CADMIUM	0.21	0.14	J
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	CALCIUM	21	1600	J3
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	CHROMIUM	0.43	5	
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	COBALT	0.86	0.57	J
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	COPPER	0.43	95	
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	IRON	4.3	1400	J3
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	LEAD	0.13	12	
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	MAGNESIUM	21	430	
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	MANGANESE	0.43	42	J3
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	MERCURY	0.21	1.9	
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	MOLYBDENUM	0.86	0.86	U
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	NICKEL	0.86	6.6	J3
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	POTASSIUM	21	80	
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	SELENIUM	0.21	0.18	U1J7
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	SILVER	0.21	0.11	U1
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	SODIUM	21	730	
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	THALLIUM	0.21	0.21	UJ7
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	VANADIUM	0.43	25	J3
IR02SH007	IR02SH007005	08/30/02	0	0	C&T	TMETAL	ZINC	0.86	28	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,4,6,7,8,9-OCDD	0.00000069	6.98E-05	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,4,6,7,8,9-OCDF	0.00000049	1.53E-05	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,4,6,7,8-HPCDD	0.00000063	9.43E-06	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,4,6,7,8-HPCDF	0.0000003	0.00001	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,4,7,8,9-HPCDF	0.00000041	1.72E-06	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,4,7,8-HXCDD	0.00000064	6.4E-07	U
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,4,7,8-HXCDF	0.00000036	3.77E-06	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,6,7,8-HXCDD	0.00000054	5.4E-07	U
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,6,7,8-HXCDF	0.00000036	1.07E-06	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,7,8,9-HXCDD	0.00000055	5.5E-07	U

TABLE A-3: ANALYTICAL RESULTS FOR BRICK SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit	Result (mg/kg)	Qualifier
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,7,8,9-HXCDF	0.00000048	4.8E-07	U
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,7,8-PECDD	0.00000041	4.1E-07	U
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	1,2,3,7,8-PECDF	0.0000002	2E-07	U
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	2,3,4,6,7,8-HXCDF	0.00000042	1.59E-06	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	2,3,4,7,8-PECDF	0.00000021	8.6E-07	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	2,3,7,8-TCDD	0.00000024	2.4E-07	U
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	2,3,7,8-TCDF	0.00000017	4.1E-07	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	TOTAL HPCDD	0.00000063	1.67E-05	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	TOTAL HPCDF	0.0000003	1.97E-05	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	TOTAL HXCDD	0.00000054	5.4E-07	U
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	TOTAL HXCDF	0.00000036	1.47E-05	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	TOTAL PECDD	0.00000041	4.1E-07	U
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	TOTAL PECDF	0.0000002	8.6E-07	
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	TOTAL TCDD	0.00000024	2.4E-07	U
IR02SH007	IR02SH007005	08/30/02	0	0	SWL	DIOXIN	TOTAL TCDF	0.00000021	5.2E-07	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	CHROM	CHROMIUM VI	0.05	0.05	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PCB	AROCLOR-1016	0.013	0.013	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PCB	AROCLOR-1221	0.025	0.025	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PCB	AROCLOR-1232	0.013	0.013	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PCB	AROCLOR-1242	0.013	0.013	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PCB	AROCLOR-1248	0.013	0.013	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PCB	AROCLOR-1254	0.013	0.013	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PCB	AROCLOR-1260	0.013	0.05	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PCTMST	PERCENT MOISTURE	0	6	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	4,4'-DDD	0.0035	0.0035	UJ7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	4,4'-DDE	0.0035	0.0035	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	4,4'-DDT	0.0035	0.0035	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	ALDRIN	0.0018	0.0018	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	ALPHA-BHC	0.0018	0.0018	UJ7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	ALPHA-CHLORDANE	0.0018	0.0018	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	BETA-BHC	0.0018	0.0018	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	DELTA-BHC	0.0018	0.0018	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	DIELDRIN	0.0035	0.0035	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	ENDOSULFAN I	0.0018	0.0018	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	ENDOSULFAN II	0.0035	0.0035	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	ENDOSULFAN SULFATE	0.0035	0.0035	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	ENDRIN	0.0035	0.0035	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	ENDRIN ALDEHYDE	0.0035	0.0035	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	GAMMA-BHC (LINDANE)	0.0018	0.0018	U

TABLE A-3: ANALYTICAL RESULTS FOR BRICK SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit	Result (mg/kg)	Qualifier
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	GAMMA-CHLORDANE	0.0018	0.0018	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	HEPTACHLOR	0.0018	0.0018	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	HEPTACHLOR EPOXIDE	0.0018	0.0018	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	METHOXYCHLOR	0.018	0.018	UJ7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	PEST	TOXAPHENE	0.063	0.063	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	1,2,4-TRICHLOROBENZENE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	1,2-DICHLOROBENZENE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	1,3-DICHLOROBENZENE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	1,4-DICHLOROBENZENE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2,2'-OXYBIS(1-CHLOROPROPANE)	0.71	0.71	UJ7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2,4,5-TRICHLOROPHENOL	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2,4,6-TRICHLOROPHENOL	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2,4-DICHLOROPHENOL	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2,4-DIMETHYLPHENOL	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2,4-DINITROPHENOL	3.6	3.6	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2,4-DINITROTOLUENE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2,6-DINITROTOLUENE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2-CHLORONAPHTHALENE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2-CHLOROPHENOL	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2-METHYLNAPHTHALENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2-METHYLPHENOL	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2-NITROANILINE	1.4	1.4	UJ7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	2-NITROPHENOL	1.4	1.4	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	3,3'-DICHLOROBENZIDINE	1.4	1.4	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	3-NITROANILINE	1.4	1.4	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	4,6-DINITRO-2-METHYLPHENOL	3.6	3.6	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	4-BROMOPHENYL-PHENYLETHER	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	4-CHLORO-3-METHYLPHENOL	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	4-CHLOROANILINE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	4-CHLOROPHENYL-PHENYLETHER	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	4-METHYLPHENOL	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	4-NITROANILINE	1.4	1.4	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	4-NITROPHENOL	1.4	1.4	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	ACENAPHTHENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	ACENAPHTHYLENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	ANTHRACENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	AZOBENZENE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	BENZO(A)ANTHRACENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	BENZO(A)PYRENE	0.14	0.14	U

TABLE A-3: ANALYTICAL RESULTS FOR BRICK SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit	Result (mg/kg)	Qualifier
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	BENZO(B)FLUORANTHENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	BENZO(G,H,I)PERYLENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	BENZO(K)FLUORANTHENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	BENZOIC ACID	3.6	3.6	UJ7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	BENZYL ALCOHOL	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	BIS(2-CHLOROETHOXY)METHANE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	BIS(2-CHLOROETHYL)ETHER	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	BIS(2-ETHYLHEXYL)PHTHALATE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	BUTYLBENZYLPHTHALATE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	CARBAZOLE	0.71	0.71	UJ7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	CHRYSENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	DI-N-BUTYLPHTHALATE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	DI-N-OCTYLPHTHALATE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	DIBENZ(A,H)ANTHRACENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	DIBENZOFURAN	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	DIETHYLPHTHALATE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	DIMETHYLPHTHALATE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	FLUORANTHENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	FLUORENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	HEXACHLOROBENZENE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	HEXACHLOROBUTADIENE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	HEXACHLOROCYCLOPENTADIENE	3.6	3.6	UJ7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	HEXACHLOROETHANE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	INDENO(1,2,3-CD)PYRENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	ISOPHORONE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	N-NITROSO-DI-N-PROPYLAMINE	0.71	0.71	UJ7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	N-NITROSODIMETHYLAMINE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	N-NITROSODIPHENYLAMINE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	NAPHTHALENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	NITROBENZENE	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	PENTACHLOROPHENOL	1.4	1.4	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	PHENANTHRENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	PHENOL	0.71	0.71	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	SVOA8270	PYRENE	0.14	0.14	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	ALUMINUM	4.4	2700	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	ANTIMONY	2.6	2.6	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	ARSENIC	0.22	0.28	J7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	BARIUM	0.44	18	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	BERYLLIUM	0.087	0.66	

TABLE A-3: ANALYTICAL RESULTS FOR BRICK SAMPLES FROM THE PARCELS E AND E-2 SHORELINE (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Detection Limit	Result (mg/kg)	Qualifier
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	CADMIUM	0.22	0.22	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	CALCIUM	22	1100	J3
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	CHROMIUM	0.44	5.7	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	COBALT	0.87	1.4	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	COPPER	0.44	30	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	IRON	4.4	670	J3
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	LEAD	0.13	15	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	MAGNESIUM	22	490	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	MANGANESE	0.44	18	J3
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	MERCURY	0.018	0.024	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	MOLYBDENUM	0.87	0.88	U1
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	NICKEL	0.87	28	J3
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	POTASSIUM	22	140	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	SELENIUM	0.22	0.22	UJ7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	SILVER	0.22	0.22	U
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	SODIUM	22	3200	
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	THALLIUM	0.22	1.1	U1J7
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	VANADIUM	0.44	520	J3
IR02SH009	IR02SH009005	08/30/02	0	0	C&T	TMETAL	ZINC	0.87	24	

Notes:

bgs	Below ground surface
BHC	Benzene hexachloride
C&T	Curtis and Tompkins Laboratory
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
HPCDF	Heptachlorodibenzofuran
HPCDD	Heptachlorodibenzo-p-dixon
HXCDF	Hexachlorodibenzofuran
HXCDD	Hexachlorodibenzo-p-dioxin
ID	Identification
mg/kg	Milligrams per kilogram
OCDF	Octachlorodibenzofuran
OCDD	Octachlorodibenzo-p-dixon
PECDF	Pentachlorodibenzofuran
PECDD	Pentachlorodibenzo-p-dioxin
PCB	Polychlorinated biphenyl
SWL	Southwest Laboratories, Inc.
TCDF	Tetrachlorodibenzofuran
TCDD	Tetrachlorodibenzo-p-dixon

Data Qualifier Descriptions:

U1	Compound is nondetected because of laboratory blank contamination
U2	Compound is nondetected because of field blank contamination
U4	Compound is nondetected because of common laboratory contamination
J	Result is greater than the detection limit but less than the reporting limit (just "J," no subqualifier number exists)
J1/UJ1/R3	Compound is estimated or rejected because of noncompliant instrument performance criteria
J2/UJ2	Matrix duplicate
J3/UJ3/R2	Accuracy – blank spike, surrogate spike, matrix spike
J4/UJ4	Serial dilution
J5/UJ5/R1	Holding time
J7/UJ7/R7	Initial and continuing calibration
J8	Exceeds calibration range
J9/UJ9	Organics: percent difference (%D) between columns; Inorganics: interference check samples
J0/UJ0/R0	Internal standards
G, D, M, L, H, and Z	Total petroleum hydrocarbons (TPH) identification qualifiers
Y	Benzo(b)fluoranthene quantitated as the total of benzo(b)- and benzo(k)fluoranthene

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	CHROM	Chromium VI	0.05	U	0.05
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	0.013	U	0.013
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	0.013	U	0.013
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	0.013	U	0.013
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	0.013	U	0.013
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	0.013	U	0.013
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	0.26	J3	0.013
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	0.026	U	0.026
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	alpha-Chlordane	0.037	U	0.037
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	Aldrin	0.037	U	0.037
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	alpha-BHC	0.037	U	0.037
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	beta-BHC	0.037	U	0.037
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	delta-BHC	0.037	U	0.037
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	gamma-BHC (lindane)	0.037	U	0.037
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.071	U	0.071
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.071	U	0.071
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	0.091	UJ9	0.071
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.071	U	0.071
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.037	U	0.037
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.071	U	0.071
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	Endosulfan sulfate	0.071	U	0.071
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	Endrin	0.071	U	0.071
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	Endrin aldehyde	0.071	U	0.071
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	gamma-Chlordane	0.037	U	0.037
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.037	U	0.037
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.37	U	0.37
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	Toxaphene	1.3	U	1.3
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	PEST	Heptachlor epoxide	0.037	U	0.037
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	1.4	U4	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.28	U	0.28

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzoic acid	7	U	7
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzyl alcohol	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	2.8	U	2.8
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	7	U	7
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	7	U	7
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	7	U	7
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	1.4	U	1.4

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodimethylamine	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodiphenylamine	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	2.8	U	2.8
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	2.8	U	2.8
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	2.8	U	2.8
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Nitrophenol	2.8	U	2.8
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	2.8	U	2.8
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	2.8	U	2.8
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.15	J	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Phenol	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	0.28	U	0.28
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	1.4	U	1.4
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Silver	0.26	UJ3	0.26
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Aluminum	13000	J3	260
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Arsenic	3.3	J3	0.26
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Barium	160	J3	0.52
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.44	J3	0.1
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Calcium	6300	J3	26
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Cadmium	1.5	J3	0.26
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Cobalt	17	J3	1
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Chromium	89	J3	0.52
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Copper	850		0.52
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Iron	26000		260
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Potassium	1100	J3	26
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Magnesium	16000	J3	1300
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Manganese	730		0.52
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	1	UJ3	1
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Sodium	110	J3	26
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Nickel	140	J3	1
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Lead	690		0.16
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Antimony	3.1	U1J37	3.1
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.65	J37	0.26
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Thallium	1.8	J3	0.26

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Vanadium	47	J3	0.52
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Zinc	200	J2	1
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TMETAL	Mercury	1.2		0.043
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TPHEXT-SG	Diesel-range organics	62	H	5.3
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TPHEXT-SG	Motor oil-range organics	400	HM	27
IR01SH023	IR01SH023TOP	6-Sep-02	2	2.5	C&T	TPHPRG	Gasoline-range organics	0.18	U	0.18
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	CHROM	Chromium VI	0.06	U	0.06
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	CHROM	Chromium VI	0.57		0.05
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	CHROM	Chromium VI	0.07	U	0.07
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1016	0.013	U	0.013
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1221	0.027	U	0.027
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1242	0.013	U	0.013
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1248	0.013	U	0.013
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1254	0.013	U	0.013
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1232	0.013	U	0.013
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1260	0.1	J3	0.013
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1016	0.065	U	0.065
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1221	0.13	U	0.13
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1232	0.065	U	0.065
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1242	0.065	U	0.065
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1248	0.065	U	0.065
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1254	0.49		0.065
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1260	1.1		0.065
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	0.017	U	0.017
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	0.034	U	0.034
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	0.017	U	0.017
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	0.017	U	0.017
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	0.017	U	0.017
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	0.37	J3	0.017
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	0.53	J3	0.017
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	alpha-Chlordane	0.093	U	0.093
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	Aldrin	0.093	U	0.093
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	alpha-BHC	0.093	U	0.093
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	beta-BHC	0.093	U	0.093
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	delta-BHC	0.093	U	0.093
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	gamma-BHC (lindane)	0.093	U	0.093
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	4,4'-DDD	0.18	U	0.18
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	4,4'-DDE	0.18	U	0.18
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	4,4'-DDT	0.18	U	0.18

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	Dieldrin	0.18	U	0.18
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	Endosulfan I	0.093	U	0.093
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	Endosulfan II	0.18	U	0.18
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	Endosulfan sulfate	0.18	U	0.18
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	Endrin	0.18	U	0.18
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	Endrin aldehyde	0.18	U	0.18
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	gamma-Chlordane	0.093	U	0.093
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	Heptachlor	0.093	U	0.093
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	Methoxychlor	0.93	U	0.93
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	Toxaphene	3.3	U	3.3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	PEST	Heptachlor epoxide	0.093	U	0.093
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	alpha-Chlordane	0.037	U	0.037
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	Aldrin	0.037	U	0.037
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	alpha-BHC	0.075		0.037
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	beta-BHC	0.044		0.037
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	delta-BHC	0.037	U	0.037
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	gamma-BHC (lindane)	0.037	U	0.037
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	4,4'-DDD	0.072	U	0.072
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	4,4'-DDE	0.072	U	0.072
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	4,4'-DDT	0.078	UJ9	0.072
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	Dieldrin	0.1		0.072
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	Endosulfan I	0.037	U	0.037
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	Endosulfan II	0.072	U	0.072
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	Endosulfan sulfate	0.072	U	0.072
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	Endrin	0.072	U	0.072
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	Endrin aldehyde	0.072	U	0.072
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	gamma-Chlordane	0.037	UJ9	0.037
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	Heptachlor	0.037	U	0.037
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	Methoxychlor	0.37	U	0.37
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	Toxaphene	1.3	U	1.3
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	PEST	Heptachlor epoxide	0.037	U	0.037
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	alpha-Chlordane	0.025	U	0.025
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	Aldrin	0.025	U	0.025
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	alpha-BHC	0.025	U	0.025
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	beta-BHC	0.025	U	0.025
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	delta-BHC	0.025	U	0.025
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	gamma-BHC (lindane)	0.031	UJ9	0.025
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.048	U	0.048
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.048	U	0.048

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	0.13	UJ9	0.048
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.19		0.048
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.048	U	0.048
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	Endosulfan sulfate	0.048	U	0.048
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	Endrin	0.048	U	0.048
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	Endrin aldehyde	0.048	U	0.048
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	gamma-Chlordane	0.036	UJ9	0.025
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.025	U	0.025
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.25	U	0.25
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	Toxaphene	0.87	U	0.87
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	Heptachlor epoxide	0.025	U	0.025
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.025	U	0.025
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthene	2		0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthylene	0.59	U	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Anthracene	0.59	U	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Azobenzene	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Butylbenzylphthalate	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-bromophenyl-phenylether	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)anthracene	0.59	U	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzoic acid	15	U	15
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)pyrene	0.59	R0	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.41	J0Y	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.59	R0	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.59	R0	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzyl alcohol	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Chrysene	0.61		0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Chloroaniline	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Chlorophenol	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Chloronaphthalene	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Carbazole	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.59	R0	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Dibenzofuran	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	5.9	UJ7	5.9

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	1,2-Dichlorobenzene	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	1,3-Dichlorobenzene	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	1,4-Dichlorobenzene	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dichlorophenol	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Diethylphthalate	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dimethylphenol	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Dimethylphthalate	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	15	U	15
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Di-n-butylphthalate	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Di-n-octylphthalate	3	R0	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrophenol	15	U	15
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrotoluene	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,6-Dinitrotoluene	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Fluorene	0.9		0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Fluoranthene	0.49	J	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobutadiene	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorocyclopentadiene	15	U	15
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobenzene	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Hexachloroethane	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.59	R0	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Isophorone	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Methylphenol	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Methylphenol	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Methylnaphthalene	0.53	J	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Naphthalene	1.1		0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodimethylamine	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodiphenylamine	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Nitroaniline	5.9	U	5.9
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	3-Nitroaniline	5.9	U	5.9
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Nitroaniline	5.9	U	5.9
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Nitrobenzene	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Nitrophenol	5.9	U	5.9
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Nitrophenol	5.9	U	5.9
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Pentachlorophenol	5.9	U	5.9
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Phenanthrene	0.59	U	0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Phenol	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Pyrene	0.8		0.59
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	3	U	3

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4,5-Trichlorophenol	3	U	3
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4,6-Trichlorophenol	3	U	3
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthene	1.6		0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthylene	0.29	U	0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Anthracene	0.17	J	0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Azobenzene	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Butylbenzylphthalate	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-bromophenyl-phenylether	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)anthracene	0.23	J	0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzoic acid	7.2	U	7.2
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	J	0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.24	JY	0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.29	UJ7	0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.24	JY	0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzyl alcohol	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Chrysene	0.31		0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Chloroaniline	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Chlorophenol	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Chloronaphthalene	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Carbazole	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.29	U	0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Dibenzofuran	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	2.9	U	2.9
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	1,2-Dichlorobenzene	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	1,3-Dichlorobenzene	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	1,4-Dichlorobenzene	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dichlorophenol	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Diethylphthalate	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dimethylphenol	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Dimethylphthalate	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	7.2	UJ7	7.2
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Di-n-butylphthalate	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Di-n-octylphthalate	1.4	U	1.4

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrophenol	7.2	UJ7	7.2
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrotoluene	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,6-Dinitrotoluene	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Fluorene	0.85		0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Fluoranthene	0.85		0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobutadiene	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorocyclopentadiene	7.2	UJ7	7.2
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobenzene	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Hexachloroethane	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.29	UJ7	0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Isophorone	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Methylphenol	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Methylphenol	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Methylnaphthalene	0.18	J	0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Naphthalene	0.32		0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodiphenylamine	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Nitroaniline	2.9	U	2.9
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	3-Nitroaniline	2.9	U	2.9
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Nitroaniline	2.9	U	2.9
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Nitrobenzene	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Nitrophenol	2.9	U	2.9
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Nitrophenol	2.9	U	2.9
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Pentachlorophenol	2.9	U	2.9
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Phenanthrene	1.5		0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Phenol	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	Pyrene	0.83		0.29
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4,5-Trichlorophenol	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4,6-Trichlorophenol	1.4	U	1.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodimethylamine	1.4	U	1.4
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.96	U	0.96

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	1.1	U4	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzoic acid	4.8	U	4.8
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.9	UJ7	1.9
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.8	U	4.8
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	4.8	U	4.8
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.8	U	4.8
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.19	U	0.19

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodimethylamine	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.9	U	1.9
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.9	U	1.9
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.9	U	1.9
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.9	U	1.9
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.9	U	1.9
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.9	U	1.9
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Phenol	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	0.19	U	0.19
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.96	U	0.96
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.96	U	0.96
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Silver	0.27	UJ3	0.27
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Aluminum	4800	J39	5.5
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Arsenic	1.1	J3	0.27
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Beryllium	0.16	J3	0.11
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Calcium	2500	J39	27
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Cadmium	1.1	J3	0.27
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Cobalt	4.9	J3	1.1
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Chromium	51	J3	0.55
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Copper	920		0.55
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Iron	13000		27
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Potassium	450	J3	27
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Magnesium	3700	J3	27
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Manganese	170		0.55
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Molybdenum	1.1	U1J3	1.1
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Sodium	270	J3	27
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Nickel	33	J3	1.1
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Lead	180		0.16
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Antimony	4.3	U1J37	3.3

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Selenium	0.66	J37	0.27
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Thallium	0.27	UJ3	0.27
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Vanadium	24	J3	0.55
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Zinc	560	J2	1.1
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Mercury	5.3		0.44
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TMETAL	Barium	24	J3	0.55
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Silver	0.29	J3	0.24
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Aluminum	3500	J3	4.7
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Arsenic	2.9	J3	0.24
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Barium	36	J3	0.47
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Beryllium	0.72	J3	0.094
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Calcium	4400	J3	24
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Cadmium	1.8	J3	0.24
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Cobalt	8.5	J3	0.94
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Chromium	170	J3	0.47
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Copper	3300		2.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Iron	24000		24
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Potassium	280	J3	24
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Magnesium	6000	J3	24
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Manganese	200		0.47
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Molybdenum	14	J3	0.94
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Sodium	94	J3	24
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Nickel	220	J3	0.94
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Lead	1600		0.14
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Antimony	28	J37	2.8
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Selenium	0.57	J37	0.24
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Thallium	0.49	J3	0.24
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Vanadium	210	J3	0.47
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Zinc	750	J2	0.94
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TMETAL	Mercury	5.9		0.4
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Silver	0.5	J3	0.33
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Aluminum	3500	J3	6.6
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Arsenic	0.27	U1J3	0.33
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Barium	27	J3	0.66
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.15	J3	0.13
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Cadmium	3.2	J3	0.33
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Cobalt	67	J3	1.3
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Chromium	400	J3	0.66
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Copper	900		0.66

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Iron	57000		66
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Potassium	440	J3	33
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Magnesium	110000	J3	660
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Manganese	690		0.66
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	5.8	J3	1.3
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Sodium	95	J3	33
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Nickel	2200	J3	1.3
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Lead	520		0.2
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Antimony	270	J37	4
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.78	J37	0.33
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Thallium	0.74	J3	0.33
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Vanadium	27	J3	0.66
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Zinc	1200	J2	1.3
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Mercury	2.5		0.14
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TMETAL	Calcium	1700	J3	33
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TPHEXT-SG	Diesel-range organics	780	H	11
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TPHEXT-SG	Motor oil-range organics	3200	M	56
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TPHEXT-SG	Diesel-range organics	310	H	5.4
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TPHEXT-SG	Motor oil-range organics	600	M	27
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TPHEXT-SG	Diesel-range organics	150	H	1.4
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TPHEXT-SG	Motor oil-range organics	290	LM	7.2
IR01SH027	IR01SH027BOT	6-Sep-02	10	10.5	C&T	TPHPRG	Gasoline-range organics	1.6	H	0.26
IR01SH027	IR01SH027MID	6-Sep-02	6	6.5	C&T	TPHPRG	Gasoline-range organics	3.3	H	0.25
IR01SH027	IR01SH027TOP	6-Sep-02	2	2.5	C&T	TPHPRG	Gasoline-range organics	0.22	J	0.27
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	CHROM	Chromium VI	0.05	U	0.05
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	CHROM	Chromium VI	0.09	U	0.09
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	CHROM	Chromium VI	0.06	U	0.06
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	CHROM	Chromium VI	0.41		0.05
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	CHROM	Chromium VI	1		0.05
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PCB	Aroclor-1016	0.025	U	0.025
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PCB	Aroclor-1221	0.049	U	0.049
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PCB	Aroclor-1232	0.025	U	0.025
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PCB	Aroclor-1242	0.025	U	0.025
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PCB	Aroclor-1248	0.025	U	0.025
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PCB	Aroclor-1254	0.025	U	0.025
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PCB	Aroclor-1260	0.9		0.025
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PCB	Aroclor-1016	0.41	U	0.41
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PCB	Aroclor-1221	0.82	U	0.82
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PCB	Aroclor-1232	0.41	U	0.41

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PCB	Aroclor-1242	0.41	U	0.41
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PCB	Aroclor-1248	0.41	U	0.41
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PCB	Aroclor-1254	0.41	U	0.41
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PCB	Aroclor-1260	8.6		0.41
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1016	0.34	U	0.34
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1221	0.68	U	0.68
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1232	0.34	U	0.34
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1242	0.34	U	0.34
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1248	0.34	U	0.34
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1254	0.34	U	0.34
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PCB	Aroclor-1260	9.3		0.34
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1016	0.013	U	0.013
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1221	0.025	U	0.025
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1232	0.013	U	0.013
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1242	0.013	U	0.013
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1248	0.013	U	0.013
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1254	0.013	U	0.013
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PCB	Aroclor-1260	0.43		0.013
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	0.63	U	0.63
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	1.3	U	1.3
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	0.63	U	0.63
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	0.63	U	0.63
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	0.63	U	0.63
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	0.63	U	0.63
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	31		0.63
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	alpha-Chlordane	0.045	U	0.045
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	Aldrin	0.045	U	0.045
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	alpha-BHC	0.045	U	0.045
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	beta-BHC	0.045	U	0.045
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	delta-BHC	0.045	U	0.045
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	gamma-BHC (lindane)	0.045	U	0.045
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	4,4'-DDD	0.087	U	0.087
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	4,4'-DDE	0.087	U	0.087
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	4,4'-DDT	0.1	UJ9	0.087
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	Dieldrin	0.087	U	0.087
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	Endosulfan I	0.045	U	0.045
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	Endosulfan II	0.087	U	0.087
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	Endosulfan sulfate	0.087	U	0.087
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	Endrin	0.087	U	0.087

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	Endrin aldehyde	0.087	U	0.087
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	gamma-Chlordane	0.045	U	0.045
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	Heptachlor	0.045	U	0.045
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	Methoxychlor	0.45	U	0.45
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	Toxaphene	1.6	U	1.6
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	PEST	Heptachlor epoxide	0.045	U	0.045
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	alpha-Chlordane	0.058	U	0.058
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	Aldrin	0.058	U	0.058
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	alpha-BHC	0.058	U	0.058
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	beta-BHC	0.058	U	0.058
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	delta-BHC	0.058	U	0.058
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	gamma-BHC (lindane)	0.058	U	0.058
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	4,4'-DDD	0.11	U	0.11
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	4,4'-DDE	0.11	U	0.11
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	4,4'-DDT	0.29	UJ9	0.11
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	Dieldrin	0.11	U	0.11
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	Endosulfan I	0.058	U	0.058
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	Endosulfan II	0.11	U	0.11
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	Endosulfan sulfate	0.11	U	0.11
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	Endrin	0.11	U	0.11
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	Endrin aldehyde	0.11	U	0.11
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	gamma-Chlordane	0.058	U	0.058
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	Heptachlor	0.058	U	0.058
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	Methoxychlor	0.58	U	0.58
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	Toxaphene	2.1	U	2.1
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	PEST	Heptachlor epoxide	0.058	U	0.058
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	alpha-Chlordane	0.038	U	0.038
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	Aldrin	0.038	U	0.038
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	alpha-BHC	0.056		0.038
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	beta-BHC	0.038	U	0.038
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	delta-BHC	0.038	U	0.038
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	gamma-BHC (lindane)	0.038	U	0.038
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	4,4'-DDD	0.074	U	0.074
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	4,4'-DDE	0.074	U	0.074
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	4,4'-DDT	0.38	UJ9	0.074
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	Dieldrin	0.57	UJ9	0.074
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	Endosulfan I	0.038	U	0.038
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	Endosulfan II	0.074	U	0.074
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	Endosulfan sulfate	0.074	U	0.074

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	Endrin	0.074	U	0.074
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	Endrin aldehyde	0.074	U	0.074
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	gamma-Chlordane	0.065	UJ9	0.038
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	Heptachlor	0.038	UJ9	0.038
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	Methoxychlor	0.38	U	0.38
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	Toxaphene	1.4	U	1.4
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	PEST	Heptachlor epoxide	0.038	U	0.038
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	alpha-Chlordane	0.036	U	0.036
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	Aldrin	0.036	U	0.036
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	alpha-BHC	0.036	U	0.036
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	beta-BHC	0.036	U	0.036
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	delta-BHC	0.036	U	0.036
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	gamma-BHC (lindane)	0.036	U	0.036
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	4,4'-DDD	0.071	U	0.071
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	4,4'-DDE	0.071	U	0.071
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	4,4'-DDT	0.071	UJ9	0.071
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	Dieldrin	0.071	U	0.071
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	Endosulfan I	0.036	U	0.036
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	Endosulfan II	0.071	U	0.071
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	Endosulfan sulfate	0.071	U	0.071
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	Endrin	0.071	U	0.071
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	Endrin aldehyde	0.071	U	0.071
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	gamma-Chlordane	0.036	U	0.036
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	Heptachlor	0.036	U	0.036
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	Methoxychlor	0.36	U	0.36
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	Toxaphene	1.3	U	1.3
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	PEST	Heptachlor epoxide	0.036	U	0.036
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	alpha-Chlordane	0.018	U	0.018
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	Aldrin	0.018	U	0.018
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	alpha-BHC	0.018	U	0.018
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	beta-BHC	0.018	U	0.018
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	delta-BHC	0.018	U	0.018
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	gamma-BHC (lindane)	0.018	U	0.018
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.22	UJ9	0.035
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.035	U	0.035
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	0.035	U	0.035
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.42	UJ9	0.035
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.018	U	0.018
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.035	U	0.035

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	Endosulfan sulfate	0.035	UJ9	0.035
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	Endrin	0.035	U	0.035
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	Endrin aldehyde	0.035	U	0.035
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	gamma-Chlordane	0.018	UJ9	0.018
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.018	U	0.018
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.12	J	0.18
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	Toxaphene	0.63	U	0.63
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	PEST	Heptachlor epoxide	0.022	UJ9	0.018
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Acenaphthene	1.7		0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Acenaphthylene	0.69	U	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Anthracene	0.81		0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Azobenzene	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Butylbenzylphthalate	3.5	UJ0	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	3.5	UJ0	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	4-bromophenyl-phenylether	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Benzo(a)anthracene	1.6	J0	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Benzoic acid	17	U	17
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Benzo(a)pyrene	1.8	J0	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Benzo(b)fluoranthene	2.7	J0Y	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.69	R0	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Benzo(k)fluoranthene	1.5	J0Y	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Benzyl alcohol	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Chrysene	2.5	J0	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	4-Chloroaniline	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2-Chlorophenol	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2-Chloronaphthalene	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Carbazole	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.69	R0	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Dibenzofuran	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	6.9	UJ0	6.9
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	1,2-Dichlorobenzene	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	1,3-Dichlorobenzene	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	1,4-Dichlorobenzene	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2,4-Dichlorophenol	3.5	U	3.5

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Diethylphthalate	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2,4-Dimethylphenol	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Dimethylphthalate	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	17	UJ7	17
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Di-n-butylphthalate	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Di-n-octylphthalate	3.5	R0	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2,4-Dinitrophenol	17	UJ7	17
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2,4-Dinitrotoluene	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2,6-Dinitrotoluene	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Fluorene	0.69	U	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Fluoranthene	4.3		0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Hexachlorobutadiene	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Hexachlorocyclopentadiene	17	UJ7	17
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Hexachlorobenzene	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Hexachloroethane	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.69	R0	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Isophorone	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2-Methylphenol	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2-Methylnaphthalene	0.69	U	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Naphthalene	0.64	J	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	N-nitrosodimethylamine	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	N-nitrosodiphenylamine	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2-Nitroaniline	6.9	U	6.9
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	3-Nitroaniline	6.9	U	6.9
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	4-Nitroaniline	6.9	U	6.9
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Nitrobenzene	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2-Nitrophenol	6.9	U	6.9
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	4-Nitrophenol	6.9	U	6.9
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Pentachlorophenol	6.9	U	6.9
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Phenanthrene	0.69	U	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Phenol	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	Pyrene	6.9	J0	0.69
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2,4,5-Trichlorophenol	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	2,4,6-Trichlorophenol	3.5	U	3.5
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	SVOA8270	4-Methylphenol	3.5	U	3.5
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Acenaphthene	4.1		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Acenaphthylene	0.46	U	0.46

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Anthracene	2		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Azobenzene	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Butylbenzylphthalate	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	2.3	U4	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	4-bromophenyl-phenylether	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Benzo(a)anthracene	2		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Benzoic acid	12	U	12
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Benzo(a)pyrene	1.3		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Benzo(b)fluoranthene	2.1		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Benzo(g,h,i)perylene	1.2		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.86		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Benzyl alcohol	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Chrysene	3.2		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	4-Chloroaniline	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2-Chlorophenol	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2-Chloronaphthalene	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Carbazole	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.46	U	0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Dibenzofuran	2.1	J	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	4.6	U	4.6
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	1,2-Dichlorobenzene	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	1,3-Dichlorobenzene	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	1,4-Dichlorobenzene	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2,4-Dichlorophenol	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Diethylphthalate	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2,4-Dimethylphenol	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Dimethylphthalate	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	12	U	12
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Di-n-butylphthalate	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Di-n-octylphthalate	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2,4-Dinitrophenol	12	U	12
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2,4-Dinitrotoluene	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2,6-Dinitrotoluene	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Fluorene	1.9		0.46

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Fluoranthene	7.1		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Hexachlorobutadiene	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Hexachlorocyclopentadiene	12	U	12
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Hexachlorobenzene	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Hexachloroethane	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.91		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Isophorone	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2-Methylphenol	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	4-Methylphenol	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2-Methylnaphthalene	2.5		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Naphthalene	6.3		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	N-nitrosodimethylamine	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	N-nitrosodiphenylamine	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2-Nitroaniline	4.6	U	4.6
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	3-Nitroaniline	4.6	U	4.6
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	4-Nitroaniline	4.6	U	4.6
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Nitrobenzene	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2-Nitrophenol	4.6	U	4.6
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	4-Nitrophenol	4.6	U	4.6
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Pentachlorophenol	4.6	U	4.6
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Phenanthrene	8.9		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Phenol	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	Pyrene	7.6		0.46
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2,4,5-Trichlorophenol	2.3	U	2.3
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	SVOA8270	2,4,6-Trichlorophenol	2.3	U	2.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthene	0.15	J	0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthylene	0.3	U	0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Anthracene	0.25	J	0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Azobenzene	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Butylbenzylphthalate	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-bromophenyl-phenylether	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)anthracene	0.49		0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzoic acid	7.6	U	7.6

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)pyrene	0.35	J0	0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.61	J0Y	0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.3	UJ07	0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.48	J0Y	0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Benzyl alcohol	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Chrysene	0.99		0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Chloroaniline	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Chlorophenol	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Chloronaphthalene	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Carbazole	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.3	UJ0	0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Dibenzofuran	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	3	U	3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	1,2-Dichlorobenzene	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	1,3-Dichlorobenzene	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	1,4-Dichlorobenzene	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dichlorophenol	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Diethylphthalate	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dimethylphenol	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Dimethylphthalate	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	7.6	UJ7	7.6
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Di-n-butylphthalate	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Di-n-octylphthalate	1.5	UJ0	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrophenol	7.6	UJ7	7.6
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrotoluene	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,6-Dinitrotoluene	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Fluorene	0.43		0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Fluoranthene	1.4		0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobutadiene	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorocyclopentadiene	7.6	UJ7	7.6
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobenzene	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Hexachloroethane	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.3	UJ07	0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Isophorone	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Methylphenol	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Methylphenol	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Methylnaphthalene	0.45		0.3

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Naphthalene	0.46		0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodimethylamine	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodiphenylamine	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Nitroaniline	3	U	3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	3-Nitroaniline	3	U	3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Nitroaniline	3	U	3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Nitrobenzene	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2-Nitrophenol	3	U	3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	4-Nitrophenol	3	U	3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Pentachlorophenol	3	U	3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Phenanthrene	2.3		0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Phenol	2.5		1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	Pyrene	1.9		0.3
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4,5-Trichlorophenol	1.5	U	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	SVOA8270	2,4,6-Trichlorophenol	1.5	U	1.5
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthene	0.14	U	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthylene	0.14	U	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Anthracene	0.14	U	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Azobenzene	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Butylbenzylphthalate	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)anthracene	0.12	J	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzoic acid	3.5	U	3.5
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)pyrene	0.23	J0	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.27	J0Y	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.21	J07	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.13	J0Y	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Benzyl alcohol	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Chrysene	0.18		0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Chloroaniline	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Chlorophenol	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Chloronaphthalene	0.7	U	0.7

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Carbazole	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	UJ0	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Dibenzofuran	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	U	1.4
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dichlorophenol	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Diethylphthalate	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dimethylphenol	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Dimethylphthalate	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.5	UJ7	3.5
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Di-n-butylphthalate	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Di-n-octylphthalate	0.7	UJ0	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrophenol	3.5	UJ7	3.5
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Fluorene	0.14	U	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Fluoranthene	0.1	J	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobutadiene	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.5	UJ7	3.5
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobenzene	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Hexachloroethane	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.2	J07	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Isophorone	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Methylphenol	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Methylphenol	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	U	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Naphthalene	0.14	U	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodimethylamine	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Nitroaniline	1.4	U	1.4
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	3-Nitroaniline	1.4	U	1.4
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Nitroaniline	1.4	U	1.4
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Nitrobenzene	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2-Nitrophenol	1.4	U	1.4
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	4-Nitrophenol	1.4	U	1.4

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Pentachlorophenol	1.4	U	1.4
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Phenanthrene	0.07	J	0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Phenol	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	Pyrene	0.19		0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.7	U	0.7
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.14	U	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.14	U	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	0.14	U	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.77	U4	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.2		0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzoic acid	3.5	U	3.5
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.29	J0	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.38	J0Y	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.14	UJ0	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.3	J0Y	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	0.3		0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	UJ0	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	UJ7	1.4
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.7	U	0.7

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.5	U	3.5
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.7	UJ0	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.5	U	3.5
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	0.14	U	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.24		0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.5	U	3.5
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.35	J0	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	U	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	0.14	U	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodimethylamine	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.4	U	1.4
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.4	U	1.4
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.4	U	1.4
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.4	U	1.4
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.4	U	1.4
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.4	U	1.4
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.14	U	0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Phenol	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	0.27		0.14
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.7	U	0.7
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.7	U	0.7
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Silver	0.24	UJ3	0.24
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Arsenic	1.7	J3	0.24
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Barium	70	J3	0.48

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Beryllium	0.23	J3	0.096
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Calcium	100000	J3	1200
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Cadmium	1.5	J3	0.24
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Cobalt	5.7	J3	0.96
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Chromium	30	J3	0.48
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Copper	100		0.48
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Iron	15000		48
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Potassium	510	J3	24
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Magnesium	5100	J3	24
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Manganese	200		0.48
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Molybdenum	0.98	U1J3	0.96
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Sodium	990	J3	24
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Nickel	46	J3	0.96
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Lead	47		0.14
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Antimony	4	U1J37	2.9
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Selenium	0.24	J37	0.24
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Thallium	0.24	UJ3	0.24
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Vanadium	34	J3	0.48
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Zinc	150	J2	0.96
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Mercury	0.79		0.017
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TMETAL	Aluminum	3300	J3	4.8
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Silver	0.38	UJ3	0.38
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Aluminum	3300	J3	7.5
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Arsenic	2.2	J3	0.38
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Barium	97	J3	0.75
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Beryllium	0.26	J3	0.15
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Calcium	200000	J3	1900
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Cadmium	1.9	J3	0.38
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Cobalt	4.5	J3	1.5
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Chromium	42	J3	0.75
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Copper	380		0.75
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Iron	11000		7.5
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Potassium	520	J3	38
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Magnesium	3100	J3	38
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Manganese	240		0.75
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Molybdenum	1	U1J3	1.5
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Sodium	680	J3	38
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Nickel	35	J3	1.5
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Lead	92		0.23

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Antimony	14	J37	4.5
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Selenium	0.33	J37	0.38
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Thallium	0.38	UJ3	0.38
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Vanadium	39	J3	0.75
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Mercury	17		1.6
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TMETAL	Zinc	400	J2	1.5
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Silver	0.18	J3	0.26
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Aluminum	2300	J3	5.1
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Arsenic	3.5	J3	0.26
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Barium	25	J3	0.51
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Beryllium	0.23	J3	0.1
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Calcium	2500	J3	26
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Cadmium	1.1	J3	0.26
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Cobalt	3.7	J3	1
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Chromium	210	J3	0.51
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Copper	5300		2.6
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Iron	11000		26
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Potassium	370	J3	26
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Magnesium	2400	J3	26
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Manganese	180		0.51
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Molybdenum	2.7	J3	1
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Sodium	130	J3	26
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Nickel	30	J3	1
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Lead	620		0.15
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Antimony	37	J37	3.1
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Selenium	0.26	UJ37	0.26
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Thallium	0.24	J3	0.26
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Vanadium	45	J3	0.51
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Zinc	1300	J2	1
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TMETAL	Mercury	23		1.1
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Silver	0.24	UJ3	0.24
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Aluminum	1700	J39	4.8
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Arsenic	2	J3	0.24
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Beryllium	0.099	J3	0.096
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Calcium	1200	J39	24
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Cadmium	0.98	J3	0.24
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Cobalt	2.2	J3	0.96
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Chromium	26	J3	0.48
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Copper	76		0.48

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Iron	14000		24
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Potassium	230	J3	24
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Magnesium	1500	J3	24
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Manganese	88		0.48
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Molybdenum	0.57	U1J3	0.96
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Sodium	46	J3	24
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Nickel	19	J3	0.96
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Lead	36		0.14
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Antimony	2.4	U1J37	2.9
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Selenium	0.24	UJ37	0.24
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Thallium	0.24	UJ3	0.24
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Vanadium	9.5	J3	0.48
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Zinc	310	J2	0.96
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Mercury	0.82		0.019
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TMETAL	Barium	11	J3	0.48
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Silver	0.21	J3	0.26
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Aluminum	1400	J3	5.2
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Arsenic	4	J3	0.26
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Barium	21	J3	0.52
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.13	J3	0.1
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Calcium	2900	J3	26
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Cadmium	1.9	J3	0.26
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Cobalt	3	J3	1
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Chromium	140	J3	0.52
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Copper	3700		2.6
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Iron	12000		26
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Potassium	270	J3	26
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Magnesium	790	J3	26
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Manganese	120		0.52
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	7	J3	1
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Sodium	71	J3	26
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Nickel	73	J3	1
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Lead	860		0.15
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Antimony	16	J37	3.1
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.77	J37	0.26
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Thallium	0.26	UJ3	0.26
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Vanadium	16	J2	0.52
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Zinc	1300	J2	1
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TMETAL	Mercury	20		0.94

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TPHEXT-SG	Diesel-range organics	4400	H	42
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	TPHEXT-SG	Motor oil-range organics	3400	LM	210
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TPHEXT-SG	Diesel-range organics	9600	H	34
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TPHEXT-SG	Motor oil-range organics	3300	LM	170
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TPHEXT-SG	Diesel-range organics	470	H	11
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TPHEXT-SG	Motor oil-range organics	770	LM	57
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TPHEXT-SG	Diesel-range organics	460	H	5.2
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TPHEXT-SG	Motor oil-range organics	740	LM	26
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TPHEXT-SG	Diesel-range organics	27	H	1
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TPHEXT-SG	Motor oil-range organics	160	M	5.2
IR01SH030	IR01SH030B20	6-Sep-02	18	18.5	C&T	TPHPRG	Gasoline-range organics	10000	J3H	340
IR01SH030	IR01SH030BOT	6-Sep-02	10	10.5	C&T	TPHPRG	Gasoline-range organics	0.4	H	0.21
IR01SH030	IR01SH030MID	6-Sep-02	6	6.5	C&T	TPHPRG	Gasoline-range organics	0.2	U	0.2
IR01SH030	IR01SH030TOP	6-Sep-02	2	2.5	C&T	TPHPRG	Gasoline-range organics	0.25	U	0.25
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Acetone	0.02	U4	0.02
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Bromodichloromethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Bromobenzene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Bromochloromethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Bromomethane	0.01	U	0.01
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	N-butylbenzene	0.018	J7	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Sec-butylbenzene	0.02		0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Tert-butylbenzene	0.0043	J	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Benzene	0.00077	J	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Toluene	0.0005	J	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Carbon disulfide	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Chlorobenzene	0.022		0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	2-Chlorotoluene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	4-Chlorotoluene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Chloroethane	0.0065	J	0.01
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Chloromethane	0.01	U	0.01
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Carbon tetrachloride	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Para-isopropyl toluene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Dibromochloromethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,2-dibromo-3-chloropropane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Dibromomethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,1-dichloroethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,2-dichloroethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,2-Dichlorobenzene	0.002	J	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,3-Dichlorobenzene	0.003	J	0.0051

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,4-Dichlorobenzene	0.012		0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,1-dichloroethene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Cis-1,2-dichloroethene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Trans-1,2-dichloroethene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,1-dichloropropene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Cis-1,3-dichloropropene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Trans-1,3-dichloropropene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,2-dichloropropane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,3-dichloropropane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	2,2-dichloropropane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Ethylbenzene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,2-dibromoethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Trichlorofluoromethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,1,2-trichloro-1,2,2-trifluoroethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Dichlorodifluoromethane	0.092		0.01
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Hexachlorobutadiene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	2-hexanone	0.01	U	0.01
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Isopropylbenzene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	2-butanone	0.01	U	0.01
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	4-methyl-2-pentanone	0.01	U	0.01
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Tert-butyl methyl ether	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Methylene chloride	0.02	U4	0.02
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Naphthalene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Propylbenzene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,1,2,2-tetrachloroethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Tetrachloroethene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Styrene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Bromoform	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,1,1,2-tetrachloroethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,1,1-trichloroethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,1,2-trichloroethane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,2,3-Trichlorobenzene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,2,4-Trichlorobenzene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Trichloroethene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Chloroform	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,2,3-trichloropropane	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,2,4-trimethylbenzene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	1,3,5-trimethylbenzene	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Vinyl acetate	0.051	U	0.051

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	Vinyl chloride	0.01	U	0.01
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	M,p-xylenes	0.0051	U	0.0051
IR01SH030	IR01SH030B16	6-Sep-02	14	14.5	C&T	VOA8260	O-xylene	0.0051	U	0.0051
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	CHROM	Chromium VI	0.06	U	0.06
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	CHROM	Chromium VI	1.2		0.05
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	CHROM	Chromium VI	0.06		0.05
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1016	0.39	U	0.39
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1221	0.77	U	0.77
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1232	0.39	U	0.39
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1242	0.39	U	0.39
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1248	0.39	U	0.39
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1254	0.39	U	0.39
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1260	8		0.39
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1016	0.063	U	0.063
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1221	0.13	U	0.13
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1232	0.063	U	0.063
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1242	0.063	U	0.063
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1248	0.063	U	0.063
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1254	0.063	U	0.063
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1260	1.9		0.063
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	0.32	U	0.32
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	0.64	U	0.64
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	0.32	U	0.32
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	0.32	U	0.32
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	0.32	U	0.32
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	0.32	U	0.32
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	11		0.32
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	alpha-Chlordane	0.022	U	0.022
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	Aldrin	0.022	U	0.022
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	alpha-BHC	0.022	U	0.022
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	beta-BHC	0.022	U	0.022
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	delta-BHC	0.022	U	0.022
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	gamma-BHC (lindane)	0.022	U	0.022
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDD	0.043	U	0.043
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDE	0.043	U	0.043
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDT	0.75	UJ9	0.043
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	Dieldrin	0.046	UJ9	0.043
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan I	0.022	U	0.022
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan II	0.043	U	0.043

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan sulfate	0.043	U	0.043
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	Endrin aldehyde	0.043	U	0.043
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	gamma-Chlordane	0.022	U	0.022
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	Heptachlor	0.022	U	0.022
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	Methoxychlor	0.22	UJ7	0.22
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	Toxaphene	0.78	U	0.78
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	Heptachlor epoxide	0.058	UJ9	0.022
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	PEST	Endrin	0.11		0.043
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	alpha-Chlordane	0.018	U	0.018
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	Aldrin	0.018	U	0.018
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	alpha-BHC	0.018	U	0.018
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	beta-BHC	0.018	U	0.018
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	delta-BHC	0.018	U	0.018
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	gamma-BHC (lindane)	0.018	U	0.018
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDD	0.035	U	0.035
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDE	0.035	U	0.035
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDT	0.32	UJ9	0.035
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	Dieldrin	0.035	UJ9	0.035
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan I	0.018	U	0.018
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan II	0.035	U	0.035
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan sulfate	0.035	U	0.035
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	Endrin	0.045		0.035
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	Endrin aldehyde	0.035	U	0.035
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	gamma-Chlordane	0.018	U	0.018
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	Heptachlor	0.018	U	0.018
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	Methoxychlor	0.18	UJ7	0.18
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	Toxaphene	0.63	U	0.63
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	PEST	Heptachlor epoxide	0.018	U	0.018
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	alpha-Chlordane	0.018	U	0.018
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	Aldrin	0.018	U	0.018
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	alpha-BHC	0.018	U	0.018
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	beta-BHC	0.018	U	0.018
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	delta-BHC	0.018	U	0.018
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	gamma-BHC (lindane)	0.018	U	0.018
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.035	U	0.035
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.035	U	0.035
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	0.74	UJ9	0.035
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.063	UJ9	0.035
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.018	U	0.018

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.035	U	0.035
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan sulfate	0.035	U	0.035
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	Endrin	0.1		0.035
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	Endrin aldehyde	0.035	U	0.035
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	gamma-Chlordane	0.018	U	0.018
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.018	U	0.018
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.18	UJ7	0.18
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	Toxaphene	0.64	U	0.64
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	PEST	Heptachlor epoxide	0.018	U	0.018
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthene	0.13	J	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthylene	0.17	U	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Anthracene	0.17	U	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Azobenzene	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Butylbenzylphthalate	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.86	UJ7	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)anthracene	0.11	J	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzoic acid	4.3	UJ7	4.3
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)pyrene	0.17	J0	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.16	J0Y	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.14	J0	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.16	J0Y	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzyl alcohol	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Chrysene	0.67		0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chloroaniline	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Chlorophenol	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Chloronaphthalene	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Carbazole	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.17	UJ0	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dibenzofuran	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.7	U	1.7
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.86	U	0.86

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dichlorophenol	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Diethylphthalate	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dimethylphenol	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dimethylphthalate	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.3	U	4.3
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Di-n-butylphthalate	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Di-n-octylphthalate	0.86	UJ0	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrophenol	4.3	U	4.3
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Fluorene	0.14	J	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Fluoranthene	0.29		0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobutadiene	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.3	U	4.3
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobenzene	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachloroethane	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.12	J0	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Isophorone	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Methylphenol	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Methylphenol	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Methylnaphthalene	0.17	U	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Naphthalene	0.17	U	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodimethylamine	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.86	UJ7	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Nitroaniline	1.7	U	1.7
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	3-Nitroaniline	1.7	U	1.7
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Nitroaniline	1.7	U	1.7
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Nitrobenzene	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Nitrophenol	1.7	U	1.7
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Nitrophenol	1.7	U	1.7
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Pentachlorophenol	1.7	U	1.7
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Phenanthrene	0.11	J	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Phenol	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Pyrene	0.86		0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.86	U	0.86
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.86	U	0.86
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthene	0.14	U	0.14

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthylene	0.14	U	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Anthracene	0.14	U	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Azobenzene	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Butylbenzylphthalate	0.69	UJ0	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.69	UJ7	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.69	UJ0	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)anthracene	0.14	UJ0	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzoic acid	3.5	UJ7	3.5
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)pyrene	0.23	J0	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.21	J0Y	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.45	J0	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	J0Y	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzyl alcohol	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Chrysene	0.13	J0	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chloroaniline	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Chlorophenol	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Chloronaphthalene	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Carbazole	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	UJ0	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dibenzofuran	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	UJ0	1.4
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dichlorophenol	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Diethylphthalate	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dimethylphenol	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dimethylphthalate	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.5	U	3.5
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Di-n-butylphthalate	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Di-n-octylphthalate	0.69	UJ0	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrophenol	3.5	U	3.5
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.69	U	0.69

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Fluorene	0.14	U	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Fluoranthene	0.086	J	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobutadiene	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.5	U	3.5
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobenzene	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachloroethane	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.27	J0	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Isophorone	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Methylphenol	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Methylphenol	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	U	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Naphthalene	0.14	U	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodimethylamine	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.69	UJ7	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Nitroaniline	1.4	U	1.4
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	3-Nitroaniline	1.4	U	1.4
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Nitroaniline	1.4	U	1.4
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Nitrobenzene	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Nitrophenol	1.4	U	1.4
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Nitrophenol	1.4	U	1.4
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Pentachlorophenol	1.4	U	1.4
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Phenanthrene	0.14	U	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Phenol	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	Pyrene	0.14	J0	0.14
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.69	U	0.69
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.69	U	0.69
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.072	J	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.14	U	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	0.14	J	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.71	UJ0	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.71	UJ7	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.71	UJ0	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.31	J0	0.14

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzoic acid	3.5	UJ7	3.5
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.3	J0	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.35	J0Y	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.39	J0	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.25	J0Y	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	0.33	J0	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	UJ0	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	UJ0	1.4
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.5	U	3.5
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	1.1	U4	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.71	UJ0	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.5	U	3.5
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	0.14	U	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.75		0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.5	U	3.5
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.39	J0	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.71	U	0.71

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.074	J	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	0.14	U	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodimethylamine	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.71	UJ7	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.4	U	1.4
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.4	U	1.4
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.4	U	1.4
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.4	U	1.4
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.4	U	1.4
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.4	U	1.4
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.71		0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Phenol	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	0.84	J0	0.14
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.71	U	0.71
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.71	U	0.71
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Silver	0.21	J37	0.29
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Aluminum	3400	J39	5.7
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Arsenic	3.2	J37	0.29
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Barium	54	J3	0.57
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Beryllium	0.23	U1	0.11
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Calcium	6200		29
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Cadmium	2.1	J3	0.29
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Cobalt	14	J3	1.1
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Chromium	110	J3	0.57
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Copper	970	J2	0.57
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Iron	20000		29
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Potassium	520	J3	140
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Magnesium	5600	J3	29
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Manganese	270		0.57
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Molybdenum	3.3	J3	1.1
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Sodium	190		140
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Nickel	130	J3	1.1
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Lead	840	J3	0.17
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Antimony	11	U1J3	3.4
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Selenium	0.21	J37	0.29
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Thallium	0.56	U1J3	0.29

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Vanadium	55		0.57
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Zinc	790	J3	5.7
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TMETAL	Mercury	9.4		0.52
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Aluminum	3700	J3	5.3
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Arsenic	3	J37	0.27
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Barium	65	J3	0.53
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Beryllium	0.26		0.11
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Calcium	54000		660
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Cadmium	3.6	J3	0.27
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Cobalt	6.5	J3	1.1
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Chromium	120	J3	0.53
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Copper	1100	J2	0.53
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Iron	20000		130
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Potassium	320	J3	27
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Magnesium	4100	J3	27
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Manganese	200		0.53
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Molybdenum	2.2	U1J3	1.1
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Sodium	99		27
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Nickel	96	J3	1.1
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Lead	560	J3	0.16
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Antimony	25	J3	3.2
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Selenium	0.4	J37	0.27
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Thallium	0.22	U1J3	0.27
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Vanadium	61		0.53
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Zinc	750	J3	1.1
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Mercury	6.4		0.4
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TMETAL	Silver	0.29	J37	0.27
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Silver	0.61	J37	0.25
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Aluminum	6600	J3	5
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Arsenic	3.9	J37	0.25
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Barium	58	J3	0.5
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.4		0.1
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Calcium	6500	J9	25
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Cadmium	1.6	J3	0.25
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Cobalt	7.4	J3	1
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Chromium	65	J3	0.5
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Copper	380	J2	0.5
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Iron	14000		25
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Potassium	540	J3	25

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Magnesium	3800	J3	25
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Manganese	290		0.5
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	1.3	U1J3	1
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Sodium	140		25
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Nickel	68	J3	1
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Lead	2700	J3	0.75
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Antimony	14	J3	3
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.61	J37	0.25
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Thallium	0.69	U1J3	0.25
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Vanadium	150		0.5
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Zinc	370	J3	5
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TMETAL	Mercury	4.6		0.39
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TPHEXT-SG	Diesel-range organics	540	HL	6.5
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TPHEXT-SG	Motor oil-range organics	790	M	32
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TPHEXT-SG	Diesel-range organics	270	HL	2.1
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TPHEXT-SG	Motor oil-range organics	620	M	11
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TPHEXT-SG	Diesel-range organics	240	HL	2.1
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TPHEXT-SG	Motor oil-range organics	610	M	11
IR01SH033	IR01SH033BOT	5-Sep-02	10	10.5	C&T	TPHPRG	Gasoline-range organics	2.8	J3H	0.25
IR01SH033	IR01SH033MID	5-Sep-02	6	6.5	C&T	TPHPRG	Gasoline-range organics	1.4	H	0.32
IR01SH033	IR01SH033TOP	5-Sep-02	2	2.5	C&T	TPHPRG	Gasoline-range organics	0.37	U	0.37
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	CHROM	Chromium VI	0.07	U	0.07
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	CHROM	Chromium VI	0.55		0.05
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	CHROM	Chromium VI	0.74		0.05
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1016	44	U	44
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1221	87	U	87
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1232	44	U	44
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1248	44	U	44
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1254	44	U	44
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1260	1300		44
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1242	44	U	44
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1016	1.3	U	1.3
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1221	2.6	U	2.6
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1232	1.3	U	1.3
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1242	1.3	U	1.3
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1248	1.3	U	1.3
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1254	1.3	U	1.3
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1260	41		1.3
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	13	U	13

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	26	U	26
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	13	U	13
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	13	U	13
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	13	U	13
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	13	U	13
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	270		13
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	alpha-Chlordane	0.62	U	0.62
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	Aldrin	0.62	U	0.62
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	alpha-BHC	0.62	U	0.62
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	beta-BHC	0.62	U	0.62
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	delta-BHC	0.62	U	0.62
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	gamma-BHC (lindane)	0.62	U	0.62
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDD	1.2	U	1.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDE	1.2	U	1.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDT	1.2	UJ7	1.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	Dieldrin	36	UJ9	1.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan I	0.62	U	0.62
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan II	1.2	U	1.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan sulfate	1.7	UJ9	1.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	Endrin	1.2	U	1.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	Endrin aldehyde	1.2	UJ9	1.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	gamma-Chlordane	0.62	U	0.62
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	Heptachlor	0.62	U	0.62
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	Methoxychlor	11	J7	6.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	Toxaphene	22	U	22
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	PEST	Heptachlor epoxide	1.7	UJ9	0.62
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	alpha-Chlordane	0.018	U	0.018
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	Aldrin	0.018	U	0.018
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	alpha-BHC	0.018	U	0.018
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	beta-BHC	0.018	U	0.018
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	delta-BHC	0.018	U	0.018
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	gamma-BHC (lindane)	0.018	U	0.018
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDD	0.035	U	0.035
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDE	0.035	U	0.035
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDT	0.07	UJ7	0.07
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	Dieldrin	0.12	UJ9	0.035
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan I	0.018	U	0.018
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan II	0.035	U	0.035
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan sulfate	0.83	UJ9	0.035

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	Endrin	0.25		0.035
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	Endrin aldehyde	0.035	U	0.035
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	gamma-Chlordane	0.018	U	0.018
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	Heptachlor	0.018	U	0.018
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	Methoxychlor	0.15	J7	0.18
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	Toxaphene	0.64	U	0.64
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	PEST	Heptachlor epoxide	0.2	UJ9	0.018
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	alpha-Chlordane	0.018	U	0.018
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	Aldrin	0.018	U	0.018
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	alpha-BHC	0.018	U	0.018
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	beta-BHC	0.018	U	0.018
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	delta-BHC	0.018	U	0.018
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	gamma-BHC (lindane)	0.018	U	0.018
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.035	U	0.035
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.035	U	0.035
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	0.35	UJ7	0.35
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.8	J9	0.035
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.018	U	0.018
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.35	U	0.35
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan sulfate	0.33	UJ9	0.35
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	Endrin	1.3		0.035
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	Endrin aldehyde	0.035	U	0.035
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	gamma-Chlordane	0.18	U	0.18
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.018	U	0.018
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.79	J7	0.18
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	Toxaphene	0.64	U	0.64
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	PEST	Heptachlor epoxide	0.018	U	0.018
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthene	0.19	U	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthylene	0.19	U	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Anthracene	0.19	U	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Azobenzene	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Butylbenzylphthalate	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.96	UJ7	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)anthracene	0.15	J	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzoic acid	4.8	UJ7	4.8

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)pyrene	0.13	J0	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.17	J0Y	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.19	UJ0	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.19	UJ0	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzyl alcohol	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Chrysene	0.72		0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chloroaniline	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Chlorophenol	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Chloronaphthalene	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Carbazole	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.19	UJ0	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dibenzofuran	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.9	U	1.9
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,2-Dichlorobenzene	2.7		0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,3-Dichlorobenzene	6.3		0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,4-Dichlorobenzene	5.8		0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dichlorophenol	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Diethylphthalate	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dimethylphenol	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dimethylphthalate	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.8	U	4.8
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Di-n-butylphthalate	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Di-n-octylphthalate	0.96	UJ0	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrophenol	4.8	U	4.8
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Fluorene	0.19	U	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Fluoranthene	0.28		0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobutadiene	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.8	U	4.8
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobenzene	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachloroethane	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.19	UJ0	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Isophorone	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Methylphenol	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Methylphenol	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Methylnaphthalene	0.19	U	0.19

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Naphthalene	0.19	U	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodimethylamine	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.96	UJ7	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Nitroaniline	1.9	U	1.9
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	3-Nitroaniline	1.9	U	1.9
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Nitroaniline	1.9	U	1.9
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Nitrobenzene	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Nitrophenol	1.9	U	1.9
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Nitrophenol	1.9	U	1.9
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Pentachlorophenol	1.9	U	1.9
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Phenanthrene	0.17	J	0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Phenol	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Pyrene	0.63		0.19
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	280		38
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.96	U	0.96
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.96	U	0.96
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthene	0.14	U	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthylene	0.14	U	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Anthracene	0.11	J	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Azobenzene	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Butylbenzylphthalate	0.71	UJ0	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.71	UJ7	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.71	U4J0	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)anthracene	0.53	J0	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzoic acid	3.5	UJ7	3.5
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)pyrene	0.7	J0	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.98	J0Y	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.64	J0	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.66	J0Y	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzyl alcohol	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Chrysene	1	J0	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chloroaniline	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Chlorophenol	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Chloronaphthalene	0.71	U	0.71

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Carbazole	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	UJ0	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dibenzofuran	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	UJ0	1.4
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dichlorophenol	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Diethylphthalate	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dimethylphenol	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dimethylphthalate	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.5	U	3.5
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Di-n-butylphthalate	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Di-n-octylphthalate	0.71	UJ0	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrophenol	3.5	U	3.5
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Fluorene	0.14	U	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Fluoranthene	0.89		0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobutadiene	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.5	U	3.5
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobenzene	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachloroethane	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.67	J0	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Isophorone	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Methylphenol	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Methylphenol	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	U	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Naphthalene	0.14	U	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodimethylamine	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.71	UJ7	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Nitroaniline	1.4	U	1.4
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	3-Nitroaniline	1.4	U	1.4
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Nitroaniline	1.4	U	1.4
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Nitrobenzene	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Nitrophenol	1.4	U	1.4
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Nitrophenol	1.4	U	1.4

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Pentachlorophenol	1.4	U	1.4
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Phenanthrene	0.45		0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Phenol	0.56	J	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	Pyrene	1.3	J0	0.14
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.71	U	0.71
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.14	U	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.14	U	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	0.14	U	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.71	UJ0	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	1.3	U4J0	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.11	J0	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzoic acid	3.5	U	3.5
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.33	J0	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.44	J0Y	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.31	J0	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.15	J0Y	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	0.38	J0	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.14	R0	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	UJ0	1.4
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.71	U	0.71

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.5	U	3.5
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.71	R0	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.5	U	3.5
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	0.14	U	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.16		0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.5	U	3.5
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.14	R0	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.14	U	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	0.14	U	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodimethylamine	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.4	U	1.4
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.4	U	1.4
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.4	U	1.4
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.4	U	1.4
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	1.4	U	1.4
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.4	U	1.4
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.14	J	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Phenol	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	0.46	J0	0.14
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.71	U	0.71
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.71	U	0.71
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Silver	0.3	UJ3	0.3
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Aluminum	8300	J3	6.1
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Arsenic	6.5	J37	0.3

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Barium	34	J3	0.61
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Beryllium	0.39		0.12
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Calcium	4300		30
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Cadmium	1.6	J3	0.3
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Chromium	49	J3	0.61
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Copper	190	J2	0.61
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Iron	29000		30
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Potassium	2300	J3	30
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Magnesium	7600	J3	30
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Manganese	280		0.61
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Molybdenum	0.91	U1J3	1.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Sodium	2800		30
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Nickel	61	J3	1.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Lead	52	J3	0.18
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Antimony	3.6	R2	3.6
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Selenium	0.86	J37	0.3
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Thallium	0.74	U1J3	0.3
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Vanadium	31		0.61
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Zinc	150	J3	1.2
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Mercury	2.3		0.14
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TMETAL	Cobalt	10	J3	1.2
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Silver	0.14	J37	0.26
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Aluminum	2300	J3	5.1
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Arsenic	3.4	J37	0.26
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Barium	130	J3	0.51
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Beryllium	0.15	U1	0.1
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Calcium	6400		26
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Cadmium	1.9	J3	0.26
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Cobalt	4.4	J3	1
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Chromium	100	J3	0.51
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Copper	2000	J2	0.51
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Iron	21000		26
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Potassium	340	J3	26
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Magnesium	2300	J3	26
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Manganese	230		0.51
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Molybdenum	1.4	U1J3	1
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Sodium	94		26
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Nickel	37	J3	1
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Lead	370	J3	0.15

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Antimony	5.1	U1J3	3.1
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Selenium	0.78	J37	0.26
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Thallium	0.36	U1J3	0.26
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Vanadium	15		0.51
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Zinc	940	J3	1
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TMETAL	Mercury	18		0.4
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Silver	0.21	J37	0.25
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Aluminum	4000	J3	5
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Arsenic	4.3	J37	0.25
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Barium	93	J3	0.5
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.22	U1	0.1
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Calcium	18000		250
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Cadmium	1.9	J3	0.25
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Chromium	92	J3	0.5
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Copper	1600	J2	0.5
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Iron	29000		50
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Potassium	750	J3	25
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Magnesium	3400	J3	25
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Manganese	330		0.5
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	1.5	U1J3	1
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Sodium	150		25
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Nickel	44	J3	1
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Lead	500	J3	0.15
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Antimony	10	U1J3	3
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.59	J37	0.25
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Thallium	0.94	U1J3	0.25
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Vanadium	23		0.5
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Zinc	840	J3	1
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Mercury	8.5		0.4
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TMETAL	Cobalt	6.9	J3	1
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TPHEXT-SG	Diesel-range organics	400	HZ	14
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TPHEXT-SG	Motor oil-range organics	400	M	72
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TPHEXT-SG	Diesel-range organics	300	H	5.3
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TPHEXT-SG	Motor oil-range organics	690	M	26
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TPHEXT-SG	Diesel-range organics	680	HL	5.3
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TPHEXT-SG	Motor oil-range organics	1700	M	27
IR01SH036	IR01SH036BOT	5-Sep-02	10	10.5	C&T	TPHPRG	Gasoline-range organics	290	HZ	36
IR01SH036	IR01SH036MID	5-Sep-02	6	6.5	C&T	TPHPRG	Gasoline-range organics	0.2	U	0.2
IR01SH036	IR01SH036TOP	5-Sep-02	2	2.5	C&T	TPHPRG	Gasoline-range organics	0.2	U	0.2

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	CHROM	Chromium VI	0.07	U	0.07
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	CHROM	Chromium VI	0.07	U	0.07
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	CHROM	Chromium VI	1.7		0.05
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1016	90	U	90
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1221	180	U	180
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1232	90	U	90
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1242	90	U	90
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1248	90	U	90
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1254	90	U	90
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1260	1900		90
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1016	18	U	18
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1221	36	U	36
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1232	18	U	18
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1242	18	U	18
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1248	18	U	18
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1254	18	U	18
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1260	320		18
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	1.2	U	1.2
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	2.4	U	2.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	1.2	U	1.2
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	1.2	U	1.2
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	1.2	U	1.2
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	1.2	U	1.2
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	53		1.2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	alpha-Chlordane	0.64	U	0.64
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	Aldrin	0.64	U	0.64
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	alpha-BHC	0.64	U	0.64
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	beta-BHC	0.64	U	0.64
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	delta-BHC	0.64	U	0.64
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	gamma-BHC (lindane)	0.64	U	0.64
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDD	1.2	U	1.2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDE	1.2	U	1.2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDT	1.2	UJ7	1.2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	Dieldrin	65	UJ9	2.5
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan I	0.64	U	0.64
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan II	1.2	U	1.2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan sulfate	3.3	UJ9	1.2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	Endrin	1.2	U	1.2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	Endrin aldehyde	8.3	UJ9	1.2

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	gamma-Chlordane	4.7	UJ9	0.64
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	Heptachlor	0.64	U	0.64
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	Methoxychlor	24	J7	6.4
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	Toxaphene	23	U	23
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	PEST	Heptachlor epoxide	5.5	UJ9	0.64
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	alpha-Chlordane	0.25	U	0.25
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	Aldrin	0.25	U	0.25
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	alpha-BHC	0.25	U	0.25
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	beta-BHC	0.25	U	0.25
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	delta-BHC	0.25	U	0.25
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	gamma-BHC (lindane)	0.25	U	0.25
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDD	0.49	U	0.49
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDE	0.49	U	0.49
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDT	0.49	UJ7	0.49
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	Dieldrin	11	UJ9	0.49
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan I	0.25	U	0.25
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan II	0.49	U	0.49
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan sulfate	0.51	UJ9	0.49
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	Endrin	0.49	U	0.49
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	Endrin aldehyde	1.4	UJ9	0.49
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	gamma-Chlordane	0.98	UJ9	0.25
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	Heptachlor	0.25	U	0.25
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	Methoxychlor	4	J7	2.5
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	Toxaphene	9	U	9
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	PEST	Heptachlor epoxide	0.25	U	0.25
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	alpha-Chlordane	0.011	J	0.017
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	Aldrin	0.017	U	0.017
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	beta-BHC	0.017	U	0.017
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	delta-BHC	0.017	U	0.017
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	gamma-BHC (lindane)	0.017	U	0.017
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.033	U	0.033
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.033	U	0.033
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	0.067	UJ7	0.067
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.15	UJ9	0.033
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.017	U	0.017
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.033	U	0.033
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan sulfate	0.033	U	0.033
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	Endrin	0.23		0.033
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	Endrin aldehyde	0.7	UJ9	0.033

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	gamma-Chlordane	0.22	UJ9	0.017
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.017	U	0.017
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.14	J7	0.17
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	Toxaphene	0.61	U	0.61
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	Heptachlor epoxide	0.22	UJ9	0.017
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	PEST	alpha-BHC	0.017	U	0.017
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthene	1.3	J	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthylene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Anthracene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Azobenzene	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Butylbenzylphthalate	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-bromophenyl-phenylether	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)anthracene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzoic acid	49	U	49
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)pyrene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(b)fluoranthene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(g,h,i)perylene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(k)fluoranthene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzyl alcohol	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Chrysene	1.1	J	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chloroaniline	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Chlorophenol	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Chloronaphthalene	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Carbazole	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dibenz(a,h)anthracene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dibenzofuran	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	20	U	20
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,2-Dichlorobenzene	26		9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,3-Dichlorobenzene	67		9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,4-Dichlorobenzene	410		49
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dichlorophenol	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Diethylphthalate	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dimethylphenol	9.9	U	9.9

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dimethylphthalate	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	49	U	49
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Di-n-butylphthalate	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Di-n-octylphthalate	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrophenol	49	U	49
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrotoluene	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,6-Dinitrotoluene	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Fluorene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Fluoranthene	1.3	J	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobutadiene	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorocyclopentadiene	49	U	49
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobenzene	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachloroethane	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Isophorone	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Methylphenol	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Methylphenol	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Methylnaphthalene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Naphthalene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodimethylamine	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodiphenylamine	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Nitroaniline	20	U	20
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	3-Nitroaniline	20	U	20
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Nitroaniline	20	U	20
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Nitrobenzene	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Nitrophenol	20	U	20
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Nitrophenol	20	U	20
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Pentachlorophenol	20	U	20
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Phenanthrene	2	U	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Phenol	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Pyrene	1.1	J	2
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	49		9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4,5-Trichlorophenol	9.9	U	9.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4,6-Trichlorophenol	9.9	U	9.9
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthylene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Anthracene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Azobenzene	1	U	1

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Butylbenzylphthalate	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	1	UJ7	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-bromophenyl-phenylether	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)anthracene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzoic acid	5	U	5
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)pyrene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzyl alcohol	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Chrysene	0.15	J	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chloroaniline	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Chlorophenol	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Chloronaphthalene	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Carbazole	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dibenzofuran	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	2	U	2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,2-Dichlorobenzene	3.2		1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,3-Dichlorobenzene	8.7		1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,4-Dichlorobenzene	51		5
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dichlorophenol	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Diethylphthalate	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dimethylphenol	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dimethylphthalate	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	5	U	5
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Di-n-butylphthalate	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Di-n-octylphthalate	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrophenol	5	UJ7	5
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrotoluene	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,6-Dinitrotoluene	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Fluorene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Fluoranthene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobutadiene	1	U	1

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorocyclopentadiene	5	U	5
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobenzene	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachloroethane	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Isophorone	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Methylphenol	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Methylphenol	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Methylnaphthalene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Naphthalene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodimethylamine	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodiphenylamine	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Nitroaniline	2	U	2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	3-Nitroaniline	2	U	2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Nitroaniline	2	U	2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Nitrobenzene	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Nitrophenol	2	U	2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Nitrophenol	2	U	2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Pentachlorophenol	2	U	2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Phenanthrene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Phenol	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	Pyrene	0.2	U	0.2
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	9.3		1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4,5-Trichlorophenol	1	U	1
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4,6-Trichlorophenol	1	U	1
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	0.13	U	0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	0.13	U	0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	0.13	U	0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.77	U4J7	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	0.35		0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzoic acid	3.4	U	3.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	0.59		0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.74		0.13

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.46		0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.71		0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzyl alcohol	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	0.62		0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.26		0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.4	U	1.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.4	U	3.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	3.4	UJ7	3.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	0.13	U	0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	0.45		0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.4	U	3.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.52		0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	0.13	U	0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	0.13	U	0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodimethylamine	0.68	U	0.68

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	1.4	U	1.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	1.4	U	1.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	1.4	U	1.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Nitrophenol	1.4	U	1.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	0.83	J	1.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	1.4	U	1.4
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	0.16		0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Phenol	0.73		0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	0.41		0.13
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.68	U	0.68
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.68	U	0.68
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Silver	0.32	UJ3	0.32
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Aluminum	8900	J3	6.5
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Arsenic	7	J37	0.32
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Beryllium	0.47		0.13
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Calcium	20000		320
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Cadmium	3.9	J3	0.32
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Cobalt	13	J3	1.3
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Chromium	72	J3	0.65
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Copper	570	J2	0.65
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Iron	46000		65
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Potassium	2200	J3	320
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Magnesium	7300	J3	32
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Manganese	650		0.65
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Molybdenum	2.4	J3	1.3
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Sodium	2700		320
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Nickel	65	J3	1.3
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Lead	200	J3	0.19
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Antimony	4	U1J3	3.9
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Selenium	0.83	J37	0.32
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Thallium	1.2	J3	0.32
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Vanadium	37		0.65
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Zinc	470	J3	13
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Mercury	1.7		0.062
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TMETAL	Barium	160	J3	0.65

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Silver	0.32	UJ3	0.32
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Aluminum	7900	J3	6.4
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Arsenic	5.1	J37	0.32
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Barium	62	J3	0.64
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Beryllium	0.4		0.13
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Calcium	66000		320
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Cadmium	1.7	J3	0.32
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Cobalt	8.4	J3	1.3
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Chromium	46	J3	0.64
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Copper	38	J2	0.64
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Iron	77000		64
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Potassium	6900	J3	320
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Magnesium	6900	J3	32
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Manganese	210		0.64
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Molybdenum	1.2	U1J3	1.3
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Sodium	7900		320
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Nickel	60	J3	1.3
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Lead	92	J3	0.19
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Antimony	3.9	R2	3.9
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Selenium	0.32	UJ37	0.32
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Thallium	0.32	UJ3	0.32
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Vanadium	29		0.64
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Zinc	110	J3	1.3
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TMETAL	Mercury	0.2		0.025
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Silver	0.31	J37	0.23
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Aluminum	14000	J3	23
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Arsenic	7.8	J37	0.23
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Barium	170	J3	0.46
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.41		0.091
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Calcium	48000	J9	230
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Cadmium	2.4	J3	0.23
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Cobalt	15	J3	0.91
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Chromium	61	J3	0.46
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Copper	3000	J2	2.3
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Iron	52000		46
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Potassium	1500	J3	110
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Magnesium	5400	J3	23
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Manganese	740		0.46
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	2.5	J3	0.91

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Sodium	430		110
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Nickel	38	J3	0.91
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Lead	260	J3	0.14
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Antimony	6	U1J3	2.7
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.87	J37	0.23
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Thallium	1.9	J3	0.23
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Vanadium	32		0.46
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Zinc	980	J3	4.6
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TMETAL	Mercury	2.7		0.18
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TPHEXT-SG	Diesel-range organics	2600	H	15
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TPHEXT-SG	Motor oil-range organics	3400	LM	74
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TPHEXT-SG	Diesel-range organics	970	H	15
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TPHEXT-SG	Motor oil-range organics	1700	LM	74
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TPHEXT-SG	Diesel-range organics	200	H	10
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TPHEXT-SG	Motor oil-range organics	710	M	51
IR01SH039	IR01SH039BOT	5-Sep-02	10	10.5	C&T	TPHPRG	Gasoline-range organics	88	HZ	75
IR01SH039	IR01SH039MID	5-Sep-02	6	6.5	C&T	TPHPRG	Gasoline-range organics	210	HZ	150
IR01SH039	IR01SH039TOP	5-Sep-02	2	2.5	C&T	TPHPRG	Gasoline-range organics	0.22	UJ3	0.22
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	CHROM	Chromium VI	0.07	U	0.07
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	CHROM	Chromium VI	0.06	U	0.06
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	CHROM	Chromium VI	0.24		0.05
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1221	0.17	U	0.17
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1232	0.085	U	0.085
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1242	0.085	U	0.085
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1248	0.085	U	0.085
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1254	0.085	U	0.085
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1260	2.1		0.085
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PCB	Aroclor-1016	0.085	U	0.085
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1016	0.026	U	0.026
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1221	0.053	U	0.053
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1232	0.026	U	0.026
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1242	0.026	U	0.026
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1248	0.026	U	0.026
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1254	0.93		0.026
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PCB	Aroclor-1260	0.75		0.026
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1016	2.5	U	2.5
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1221	4.9	U	4.9
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1232	2.5	U	2.5
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1242	2.5	U	2.5

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1248	2.5	U	2.5
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1254	2.5	U	2.5
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PCB	Aroclor-1260	120		2.5
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	alpha-Chlordane	0.024	U	0.024
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	Aldrin	0.024	U	0.024
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	alpha-BHC	0.024	U	0.024
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	beta-BHC	0.024	U	0.024
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	delta-BHC	0.024	U	0.024
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	gamma-BHC (lindane)	0.024	U	0.024
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDD	0.047	U	0.047
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDE	0.047	U	0.047
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	4,4'-DDT	0.21		0.047
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	Dieldrin	0.047	U	0.047
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan I	0.024	U	0.024
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan II	0.047	U	0.047
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	Endosulfan sulfate	0.047	U	0.047
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	Endrin	0.047	U	0.047
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	Endrin aldehyde	0.047	U	0.047
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	gamma-Chlordane	0.024	U	0.024
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	Heptachlor	0.024	U	0.024
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	Methoxychlor	0.24	UJ7	0.24
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	Toxaphene	0.86	U	0.86
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	PEST	Heptachlor epoxide	0.024	U	0.024
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	alpha-Chlordane	0.019	U	0.019
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	Aldrin	0.019	U	0.019
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	alpha-BHC	0.019	U	0.019
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	beta-BHC	0.019	U	0.019
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	delta-BHC	0.019	U	0.019
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	gamma-BHC (lindane)	0.019	U	0.019
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDD	0.036	U	0.036
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDE	0.036	U	0.036
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	4,4'-DDT	0.086		0.036
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	Dieldrin	0.036	U	0.036
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan I	0.019	U	0.019
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan II	0.036	U	0.036
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	Endosulfan sulfate	0.036	U	0.036
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	Endrin	0.036	U	0.036
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	Endrin aldehyde	0.036	U	0.036
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	gamma-Chlordane	0.028		0.019

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	Heptachlor	0.019	U	0.019
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	Methoxychlor	0.19	UJ7	0.19
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	Toxaphene	0.66	U	0.66
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	PEST	Heptachlor epoxide	0.019	U	0.019
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	alpha-Chlordane	0.018	U	0.018
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	Aldrin	0.018	U	0.018
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	alpha-BHC	0.018	U	0.018
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	beta-BHC	0.018	U	0.018
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	delta-BHC	0.018	U	0.018
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	gamma-BHC (lindane)	0.018	U	0.018
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDD	0.034	UJ9	0.034
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDE	0.034	U	0.034
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	4,4'-DDT	2.1	UJ9	0.34
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	Dieldrin	0.42	UJ9	0.034
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan I	0.015	J	0.018
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan II	0.034	U	0.034
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	Endosulfan sulfate	0.34	U	0.34
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	Endrin	0.56		0.034
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	Endrin aldehyde	0.34	U	0.34
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	gamma-Chlordane	0.018	U	0.018
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	Heptachlor	0.018	U	0.018
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	Methoxychlor	0.33	J7	0.18
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	Toxaphene	0.62	U	0.62
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	PEST	Heptachlor epoxide	0.49	UJ9	0.018
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Acenaphthylene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Anthracene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Azobenzene	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Butylbenzylphthalate	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.94	UJ7	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)anthracene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzoic acid	4.7	U	4.7
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(a)pyrene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.19	U	0.19

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Benzyl alcohol	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Chrysene	0.12	J	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chloroaniline	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Chlorophenol	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Chloronaphthalene	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Carbazole	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dibenzofuran	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.9	U	1.9
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dichlorophenol	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Diethylphthalate	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dimethylphenol	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Dimethylphthalate	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	4.7	U	4.7
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Di-n-butylphthalate	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Di-n-octylphthalate	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrophenol	4.7	UJ7	4.7
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Fluorene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Fluoranthene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobutadiene	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorocyclopentadiene	4.7	U	4.7
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachlorobenzene	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Hexachloroethane	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Isophorone	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Methylphenol	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Methylphenol	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Methylnaphthalene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Naphthalene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodimethylamine	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.94	U	0.94

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Nitroaniline	1.9	U	1.9
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	3-Nitroaniline	1.9	U	1.9
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Nitroaniline	1.9	U	1.9
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Nitrobenzene	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2-Nitrophenol	1.9	U	1.9
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	4-Nitrophenol	1.9	U	1.9
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Pentachlorophenol	1.9	U	1.9
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Phenanthrene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Phenol	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	Pyrene	0.19	U	0.19
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.94	U	0.94
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.94	U	0.94
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthene	0.15	U	0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Anthracene	0.15	U	0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Azobenzene	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Butylbenzylphthalate	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	0.81	U4J7	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-bromophenyl-phenylether	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)anthracene	0.29		0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzoic acid	3.7	U	3.7
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(a)pyrene	0.2		0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(b)fluoranthene	0.35		0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(g,h,i)perylene	0.15	U	0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzo(k)fluoranthene	0.37		0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Benzyl alcohol	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Chrysene	2.4		0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chloroaniline	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Chlorophenol	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Chloronaphthalene	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Carbazole	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dibenz(a,h)anthracene	0.15	U	0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dibenzofuran	0.73	U	0.73

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	1.5	U	1.5
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,2-Dichlorobenzene	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,3-Dichlorobenzene	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,4-Dichlorobenzene	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dichlorophenol	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Diethylphthalate	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dimethylphenol	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Dimethylphthalate	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	3.7	U	3.7
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Di-n-butylphthalate	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Di-n-octylphthalate	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrophenol	3.7	UJ7	3.7
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4-Dinitrotoluene	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,6-Dinitrotoluene	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Fluorene	0.15	U	0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Fluoranthene	0.83		0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobutadiene	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorocyclopentadiene	3.7	U	3.7
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachlorobenzene	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Hexachloroethane	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	0.32		0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Isophorone	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Methylphenol	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Methylphenol	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Methylnaphthalene	0.15	U	0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Naphthalene	0.15	U	0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodimethylamine	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitrosodiphenylamine	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Nitroaniline	1.5	U	1.5
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	3-Nitroaniline	1.5	U	1.5
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Nitroaniline	1.5	U	1.5
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Nitrobenzene	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2-Nitrophenol	1.5	U	1.5
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	4-Nitrophenol	1.5	U	1.5
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Pentachlorophenol	1.5	U	1.5
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Phenanthrene	0.15	U	0.15
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Phenol	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Pyrene	0.84		0.15

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4,5-Trichlorophenol	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	2,4,6-Trichlorophenol	0.73	U	0.73
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	SVOA8270	Acenaphthylene	0.15	U	0.15
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthene	2.8	U	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Acenaphthylene	2.8	U	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Anthracene	2.8	U	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Azobenzene	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Butylbenzylphthalate	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethoxy)methane	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-Chloroethyl)ether	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,2'-Oxybis(1-chloropropane)	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Bis(2-ethylhexyl)phthalate	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-bromophenyl-phenylether	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)anthracene	1.6	J	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzoic acid	70	U	70
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(a)pyrene	2.8	U	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(b)fluoranthene	3.8		2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(g,h,i)perylene	2.8	U	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzo(k)fluoranthene	2.8	U	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Benzyl alcohol	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chloro-3-Methylphenol	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Chrysene	2.2	J	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chloroaniline	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Chlorophenol	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Chloronaphthalene	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Chlorophenyl-phenylether	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Carbazole	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dibenz(a,h)anthracene	2.8	U	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dibenzofuran	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,2-Dichlorobenzene	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,3-Dichlorobenzene	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,4-Dichlorobenzene	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dichlorophenol	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Diethylphthalate	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dimethylphenol	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Dimethylphthalate	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4,6-Dinitro-2-Methylphenol	70	U	70
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Di-n-butylphthalate	14	U	14

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Di-n-octylphthalate	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrophenol	70	U	70
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4-Dinitrotoluene	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,6-Dinitrotoluene	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Fluorene	2.8	U	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Fluoranthene	2.8		2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobutadiene	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorocyclopentadiene	70	U	70
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachlorobenzene	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Hexachloroethane	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Indeno(1,2,3-cd)pyrene	2.8	U	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Isophorone	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Methylphenol	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Methylphenol	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Methylnaphthalene	2.8	U	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Naphthalene	2.8	U	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodimethylamine	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitrosodiphenylamine	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	N-nitroso-di-n-propylamine	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Nitroaniline	28	U	28
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	3-Nitroaniline	28	U	28
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Nitroaniline	28	U	28
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Nitrobenzene	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2-Nitrophenol	28	U	28
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	4-Nitrophenol	28	U	28
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Pentachlorophenol	28	U	28
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Phenanthrene	2	J	2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Phenol	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	Pyrene	3.9		2.8
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	1,2,4-Trichlorobenzene	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4,5-Trichlorophenol	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	2,4,6-Trichlorophenol	14	U	14
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	SVOA8270	3,3'-Dichlorobenzidine	28	U	28
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Silver	0.33	UJ3	0.33
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Aluminum	8600	J3	6.6
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Arsenic	10	J37	0.33
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Barium	79	J3	0.66
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Beryllium	0.43		0.13
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Calcium	51000		330

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Cadmium	2.2	J3	0.33
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Cobalt	12	J3	1.3
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Chromium	69	J3	0.66
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Copper	460	J2	0.66
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Iron	42000		66
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Potassium	2700	J3	330
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Magnesium	8100	J3	33
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Manganese	520		0.66
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Molybdenum	1.9	U1J3	1.3
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Sodium	5100		330
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Nickel	66	J3	1.3
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Lead	72	J3	0.2
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Antimony	4.6	U1J3	4
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Selenium	0.31	J37	0.33
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Thallium	1.5	J3	0.33
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Vanadium	38		0.66
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Zinc	510	J3	13
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TMETAL	Mercury	1.2		0.027
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Silver	0.26	UJ3	0.26
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Aluminum	1900	J3	5.3
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Arsenic	3.4	J37	0.26
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Barium	42	J3	0.53
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Calcium	6900		26
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Cadmium	1.4	J3	0.26
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Cobalt	4.3	J3	1.1
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Chromium	74	J3	0.53
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Copper	1800	J2	0.53
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Iron	6500		5.3
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Potassium	350	J3	26
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Magnesium	1200	J3	26
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Manganese	270		0.53
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Molybdenum	0.79	U1J3	1.1
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Sodium	290		26
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Nickel	15	J3	1.1
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Lead	360	J3	0.16
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Antimony	16	J3	3.2
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Selenium	0.3	J37	0.26
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Thallium	0.85	U1J3	0.26
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Vanadium	5		0.53

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sampling Location ID No.	Sample ID No.	Sample Date	Depth (feet bgs) Top	Depth (feet bgs) Bottom	Laboratory	Analyte Group	Analyte	Result (mg/kg)	Qualifier	Detection Limit (mg/kg)
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Zinc	1700	J3	1.1
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Mercury	9.7		0.43
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TMETAL	Beryllium	0.31		0.11
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Silver	0.3	J37	0.25
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Aluminum	4400	J3	5
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Arsenic	5.5	J37	0.25
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Barium	88	J3	0.5
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Beryllium	0.26		0.1
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Calcium	26000		250
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Cadmium	1.8	J3	0.25
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Cobalt	7	J3	1
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Chromium	87	J3	0.5
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Copper	3100	J2	5
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Iron	30000		50
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Potassium	690	J3	25
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Magnesium	3400	J3	25
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Manganese	430		0.5
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Molybdenum	1.7	U1J3	1
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Sodium	170		25
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Nickel	36	J3	1
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Lead	510	J3	0.15
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Antimony	6.1	U1J3	3
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Selenium	0.52	J37	0.25
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Thallium	0.63	U1J3	0.25
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Vanadium	23		0.5
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Zinc	760	J3	1
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TMETAL	Mercury	5.8		0.37
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TPHEXT-SG	Diesel-range organics	34	H	1.4
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TPHEXT-SG	Motor oil-range organics	88	LM	7.1
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TPHEXT-SG	Diesel-range organics	200	H	11
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TPHEXT-SG	Motor oil-range organics	460	LM	55
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TPHEXT-SG	Diesel-range organics	1700	H	21
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TPHEXT-SG	Motor oil-range organics	1100	LM	100
IR02SH001	IR02SH001BOT	5-Sep-02	10	10.5	C&T	TPHPRG	Gasoline-range organics	0.24	U	0.24
IR02SH001	IR02SH001MID	5-Sep-02	6	6.5	C&T	TPHPRG	Gasoline-range organics	0.35	H	0.19
IR02SH001	IR02SH001TOP	5-Sep-02	2	2.5	C&T	TPHPRG	Gasoline-range organics	5.2	U	5.2

TABLE A-4: ANALYTICAL RESULTS FOR ONSHORE SAMPLING LOCATIONS BAYWARD OF THE LANDFILL SHEET-PILE WALL (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Notes:	All results in milligrams per kilogram
bgs	Below ground surface
BHC	Benzene hexachloride
C&T	Curtis and Tompkins Laboratory
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
ID	Identification

Data Qualifier Descriptions:

U1	Compound is nondetected because of laboratory blank contamination
U2	Compound is nondetected because of field blank contamination
U4	Compound is nondetected because of common laboratory contamination
J	Result is greater than the detection limit but less than the reporting limit (just "J," no subqualifier number exists)
J1/UJ1/R3	Compound is estimated or rejected because of noncompliant instrument performance criteria
J2/UJ2	Matrix duplicate
J3/UJ3/R2	Accuracy – blank spike, surrogate spike, matrix spike
J4/UJ4	Serial dilution
J5/UJ5/R1	Holding time
J7/UJ7/R7	Initial and continuing calibration
J8	Exceeds calibration range
J9/UJ9	Organics: percent difference (%D) between columns Inorganics: interference check samples
J0/UJ0/R0	Internal standards
G, D, M, L, H, and Z	Total petroleum hydrocarbons (TPH) identification qualifiers
Y	Benzo(b)fluoranthene quantitated as the total of benzo(b)- and benzo(k)fluoranthene

APPENDIX B
BORING LOGS FOR THE PARCELS E AND E-2 SHORELINE
(PROVIDED ON COMPACT DISC ONLY)

LIST OF BORINGS

IR01SH001	IR01SH022S	IR02SH003	IR02SH030	IR03SH005
IR01SH002	IR01SH023	IR02SH004	IR02SH031	IR03SH0005W
IR01SH003	IR01SH024	IR02SH004E	IR02SH032	IR03SH006
IR01SH004	IR01SH025	IR02SH004N	IR02SH033	IR03SH007
IR01SH005	IR01SH026	IR02SH004W	IR02SH034	IR03SH008
IR01SH006	IR01SH027	IR02SH005	IR02SH035	IR03SH008E
IR01SH007	IR01SH028	IR02SH006	IR02SH036	IR03SH008S
IR01SH008	IR01SH028E	IR02SH008	IR02SH037	IR03SH008W
IR01SH009	IR01SH029	IR02SH010	IR02SH038	IR03SH009
IR01SH010	IR01SH030	IR02SH011	IR02SH039	IR03SH010
IR01SH011	IR01SH031	IR02SH012	IR02SH040	IR03SH011
IR01SH012	IR01SH032	IR02SH013	IR02SH041	IR03SH012
IR01SH013	IR01SH033	IR02SH014	IR02SH041A	
IR01SH014	IR01SH034	IR02SH015	IR02SH042	
IR01SH015	IR01SH035	IR02SH016	IR02SH043	
IR01SH016	IR01SH036	IR02SH017	IR02SH044	
IR01SH017	IR01SH037	IR02SH018	IR02SH045	
IR01SH018	IR01SH038	IR02SH019	IR02SH046	
IR01SH019	IR01SH039	IR02SH020	IR02SH047	
IR01SH019N	IR01SH040	IR02SH021	IR02SH048	
IR01SH019S	IR01SH040S	IR02SH022	IR02SH049	
IR01SH019W	IR01SH040W	IR02SH023	IR02SH050	
IR01SH020	IR01SH041	IR02SH024	IR02SH051	
IR01SH021	IR01SH041N	IR02SH025	IR02SH052	
IR01SH021S	IR01SH041S	IR02SH026	IR03SH001	
IR01SH021W	IR01SH042	IR02SH027	IR03SH002	
IR01SH022	IR02SH001	IR02SH028	IR03SH003	
IR01SH022E	IR02SH002	IR02SH029	IR03SH004	

Tetra Tech EM Inc.

Log of Boring: IR01SH001

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/11/02
Completed: 09/11/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH001005	0			SM	SILTY SAND WITH GRAVEL: reddish gray (2.5YR 5/1); wet; loose; 60% sand; 20% nonplastic silt; 20% gravel; with brick chips and shell fragments; boring location is within a debris area
1									
2				IR01SH001025	0				Same as above, but becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH002

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/11/02
Completed: 09/11/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH002005	0			SM	Well-sorted SILTY SAND: dusky red (10R 3/2); wet; loose; 80% fine sand; 20% nonplastic silt
1									
2				IR01SH002025	0				Same as above, with some brick chips; becomes saturated below 0.5 foot bgs
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH003

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/11/02
Completed: 09/11/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH003005				SC	
1					0				Well-sorted CLAYEY SAND: dark reddish brown (2.5YR 3/3); moist to wet; dense; 70% sand; 30% clay
2				IR01SH003025	3.7				Same as above, but becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH004

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH004005	0			CL	SANDY CLAY: dark gray (5YR 4/1); wet; medium stiff; 60% clay; 40% well-sorted sand
1					0				
2				IR01SH004025					Same as above, but becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH005

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH005005	0			SC	Well-sorted CLAYEY SAND: brown (7.5YR 5/3); wet; medium dense; 70% sand; 30% slight plasticity clay
1									
2				IR01SH005025	0				Same as above, with some brick chips; becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH006

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH006005				GC	
1					0			SC	Poorly sorted CLAYEY GRAVEL WITH SAND: brown (7.5YR 4/4); wet; dense; 50% gravel; 30% slightly plastic clay; 20% sand; with some grass roots
2				IR01SH006025	0				Well-sorted CLAYEY SAND: brown (7.5YR 5/2); saturated; loose; slight plasticity; fine sand
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH007

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH007005				SC	
1					0				Poorly sorted CLAYEY SAND WITH GRAVEL: very dark gray (7.5YR 3/1); wet; loose; 60% sand; 20% nonplastic clay; 20% gravel; with some roots and brick chips
2				IR01SH007025	0				Same as above, but becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH008

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH008005				SM	
1					0				Well-sorted SILTY SAND: dark brown (7.5YR 3/2); wet; medium dense; 80% fine sand; 20% silt; with roots and brick chips
2				IR01SH008025	0				Same as above, but becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH009

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HSA
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH009005	0			SM	Well-sorted SILTY SAND WITH GRAVEL: dark reddish gray (5YR 4/2); moist; loose; 80% fine sand; 10% silt; 10% rounded gravel (up to 2 cm in diameter); with little roots and brick chips
1									
2				IR01SH009025	0				Well-sorted SILTY SAND WITH GRAVEL: dark reddish gray (5YR 4/2); saturated; loose; 80% fine sand; 10% silt; 10% gravel;with some bricks and glass
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH010

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH010005				SM	
1					0				Well-sorted SILTY SAND: yellowish red (5YR 5/6); moist; loose; fine sand; with organic matter and roots present
2				IR01SH010025	0				Same as above, but no apparent organic matter; becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH011

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH011005				SM	
1					0				Well-sorted SILTY SAND: brown (10YR 5/3); moist; loose; fine sand; with trace brick pieces and organic matter and roots
2				IR01SH011025	0				Same as above, but with no roots; becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH012

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH012005				SM	Well-sorted SILTY SAND WITH GRAVEL: brown (7.5YR 4/4); moist; loose; 75% fine sand; 20% silt; 5% gravel
1									
2				IR01SH012025					Well-sorted SILTY SAND: very dark gray (5YR 3/1); saturated; dense; fine sand; with brick chips
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH013

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH013005	0			SM	Well-sorted SILTY SAND: light reddish brown (2.5YR 6/3); slightly moist; loose; fine sand
1									
2				IR01SH013025	1				Well-sorted SILTY SAND WITH GRAVEL: light reddish brown (2.5 YR 6/3); saturated; loose; 65% fine sand; 20% silt; 15% subrounded gravel (up to 3 cm in diameter); with some bricks
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH014

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH014005	0			SM	Well-sorted SILTY SAND: black (Gley 1 2.5/N); wet; medium dense; fine sand; silt is nonplastic
1									
2				IR01SH014025	0				Same as above, but becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH015

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH015005	0			SM	Well-sorted SILTY SAND: black (Gley 1 2.5/N); wet; loose; 80% fine sand; 20% nonplastic silt
1									
2				IR01SH015025	0				Same as above, but becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH016

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH016005	0			SM	Well-sorted SILTY SAND: black (Gley 1 2.5/N); wet; loose; 70% fine sand; 30% silt
1									
2				IR01SH016025	0				Same as above, but becomes saturated below 0.5 foot; with glass and brick pieces
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH017

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH017005	0			SM	Well-sorted SILTY SAND: weak red (2.5YR 4/2); moist; loose; 70% fine sand; 30% silt; grass and roots are present
1									
2				IR01SH017025	0				Same as above; becomes wet, with some brick pieces and roots
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH018

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH018005	0			CL SM	SANDY CLAY WITH GRAVEL: dark reddish gray (10YR 3/1); moist; medium stiff; 65% plastic clay; 30% sand; 5% gravel; with some roots and organic matter
1									
2				IR01SH018025	0				Well-sorted SILTY SAND WITH CLAY: black (2.5Y 2.6/1); wet; medium dense; 60% fine sand; 30% silt; 10% clay
3									
4									Same as above, but becomes saturated below 1.5 feet
5									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH019

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/28/02
Completed: 08/28/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH019005	0			SC	Well-sorted CLAYEY SAND: brown (5YR 4/3); moist; medium dense; 70% fine sand; 30% clay; roots are present
1									
2				IR01SH019025	0				Becomes wet below 0.5 foot
3									Becomes saturated below 1.0 foot; color changes to black (10YR 2/1) below 2.0 feet
4									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH019N

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30						SM	
1					0				Silty SAND with Gravel, dark reddish gray (10R 3/1), 75% sand, 20% silt, 5% gravel, well sorted, fine-grained, wet, loose, with roots present.
2					0				
3									Same as above, saturated below 0.5' bgs.
									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH019S

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30						SM	
1					0				Silty SAND, reddish brown (5YR 5/4), 70% sand, 30% silt, well sorted, wet, loose, with roots present
2					0				Same as above, saturated below 0.5'bgs
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH019W

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30						SM	
1					0				Silty SAND, weak red (2.5YR 5/2), 80% sand, 20% silt, fine-grained, well sorted, wet, loose
2					0				
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH020

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH020005	0			CH	SILTY CLAY: dusky red (10R 3/2); wet; medium stiff; 85% plastic clay; 15% silt; with some roots and organic matter
1								SC	
2				IR01SH020025	0				Well-sorted CLAYEY SAND: very dark gray (Gley 1 3/N); saturated; medium dense; fine sand; some organic matter
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH021

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/29/02
Completed: 08/29/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH021005	0			SM	Well-sorted SILTY SAND: reddish brown (5YR 4/3); saturated; loose; 90% medium sand; 10% silt; with some roots
1									
2				IR01SH021025	0				Color changes to very dark gray (Gley 1 3/N)
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH021S

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH021005S				SM	
1					0				Well-sorted SILTY SAND: black (7.5YR 2.5/1); wet; 75% sand; 25% silt
2				IR01SH021025S	0				Moisture content increases to saturated below 0.5 foot
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH021W

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH021005W				SM	Poorly sorted SILTY SAND WITH GRAVEL: reddish brown (2.5YR 5/4); moist to wet; medium dense; 50% sand; 25% silt; 25% gravel; with roots present
1					0				
2				IR01SH021025W	0				Moisture content increases to saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH022

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/28/02
Completed: 08/28/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH022005	0			SM	Well-sorted SILTY SAND: brown (10YR 4/3); wet; moderately dense; 70% medium sand; 30% nonplastic silt; with roots and wood chips
2				IR01SH022025	0				Well-sorted SILTY SAND: black (Gley 1 2.5/N); saturated; moderately dense; 70% medium sand; 30% nonplastic silt; with roots, wood chips, and black-stained organic matter
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH022E

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH022005E				SM	
1					0				Well-sorted SILTY SAND: reddish brown (2.5YR 5/4); wet; loose; 75% fine sand; 25% silt
2				IR01SH022025E	0				Moisture content incresaes to saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH022S

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30						SM	
1					0				Silty SAND, black (Gley 1 2.5/N), 75% sand, 25% silt, well sorted, fine-grained, wet, loose
2					0				
3									Same as above, saturated below 0.5' bgs.
									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH023

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: DIRECT-PUSH
Boring Started: 09/06/02
Completed: 09/06/02
Boring Depth (feet bgs): 4.00
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		48						SP	Well-sorted GRAVELLY SAND: pale red (10R 6/3); dry; loose; 85% fine sand; 15% gravel
1					0				
2				IR01SH023TOP					Same as above, but becomes saturated below 0.5 foot
3									
4									Total depth of boring = 4 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH024

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/28/02
Completed: 08/28/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH024005	0			SM	Well-sorted SILTY SAND WITH GRAVEL: reddish brown (5YR 5/4); wet; medium dense; 80% fine sand; 15% silt; 5% gravel
2				IR01SH024025	0				Well-sorted SILTY SAND: reddish brown (5YR 5/4); saturated; medium dense; fine sand
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH025

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/04/02
Completed: 09/04/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH025005	0			SW	Moderately well-sorted GRAVELLY SAND: black (5YR 2.5/1); wet; loose; 60% medium sand; 40% loose gravel (up to 3 cm in diameter)
2				IR01SH025025	0				Content becomes 70% sand, 20% gravel, 10% silt; sand becomes fine- to medium-grained; saturated below 0.5 foot
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH026

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/04/02
Completed: 09/04/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH026005	0			SP	Well-sorted SAND WITH GRAVEL AND SILT: reddish black (2.5YR 2.5/1); wet; loose; 80% fine to medium sand; 10% gravel; 10% silt; with some sea shells
1									
2				IR01SH026025	0				Same as above, but becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH027

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: DIRECT-PUSH
Boring Started: 09/06/02
Completed: 09/06/02
Boring Depth (feet bgs): 12.00
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0–4		48		IR01SH027TOP	0			SW	Poorly sorted GRAVELLY SAND WITH SILT: reddish brown (5YR 5/4); dry; loose; 65% sand; 30% loose gravel (up to 4 cm in diameter); 5% silt
5–8		36		IR01SH027MID	0				Same as above, with some wood chips from 5 to 8 feet
8–12		0		IR01SH027BOT	0			SM	Well-sorted SILTY SAND: black (Gley 1 2.5/N); moist to wet; soft; medium sand; with trace to little wood chips
									Total depth of boring = 12 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH028

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/28/02
Completed: 08/28/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH028005	4			SP	Well-graded GRAVELLY SAND: black (Gley 1 2.5/N); wet; loose; 75% fine to medium, rounded sand; 25% gravel; material is black sandblasting abrasive
1									
2				IR01SH028025	4.5				Becomes saturated below 0.5 foot; poor recovery from 0.5 to 2.5 feet; three attempts required to get enough recovery for sampling purposes
3									
4									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH028E

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH028005E				SC/CH	
1					0			CH	Clayey SAND/Sandy CLAY, black (Gley 1 2.5/N), 50% sand, 50% clay, well sorted, wet, soft, clay is plastic
2				IR01SH028025E	0				Silty CLAY, dark greenish gray (Gley 1 4/5G), very plastic, moist, with hard shells present.
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH029

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/04/02
Completed: 09/04/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH029005	0			SW	
1								CH	Poorly sorted GRAVELLY SAND WITH SILT: dark reddish gray (10R 3/1); wet; loose; 50% sand, 40% gravel (up to 3 cm in diameter); 10% silt; with some sea shells and glass
2				IR01SH029025					SILTY CLAY: very dark gray (Gley 1 3/N); saturated; medium stiff; high plasticity; 90% clay; 10% silt
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH030

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: DIRECT-PUSH
Boring Started: 09/06/02
Completed: 09/06/02
Boring Depth (feet bgs): 20.00
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0–2		0		IR01SH030TOP	0			SP	Well-sorted GRAVELLY SAND WITH SILT: reddish brown (5YR 5/3); dry; loose; 65% sand; 30% gravel (up to 2 cm in diameter); 5% silt
2–12		36, 48		IR01SH030MID, IR01SH030BOT	0, 0			SM	Well-sorted SILTY SAND: reddish brown (5YR 5/3); moist; loose; 80% fine sand; 20% silt
12–20		36, 48		IR01SH030B16, IR01SH030B20	150, 47			GP/SP	Well-sorted SANDY GRAVEL/GRAVELLY SAND: black (Gley 1 2.5/N); wet; loose; 50% gravel; 50% sand; with oily contamination and petroleum hydrocarbon odor Same as above, with persistent petroleum hydrocarbon odor
20									Total depth of boring = 20 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH031

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/28/02
Completed: 08/28/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH031005	0			CL CH	SILTY CLAY: very dark gray (Gley 1 3/N); wet; medium stiff; 80% slightly plastic clay; 20% silt
1									
2				IR01SH031025	0				SILTY CLAY: dark gray (Gley 1 4/N); saturated; 95% high plasticity clay; 5% silt; with some shell fragments and Bay Mud odor
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH032

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/04/02
Completed: 09/04/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH032005	0			SC	
1								CH	Well-sorted CLAYEY SAND WITH GRAVEL: brown (7.5YR 4/2); moist; medium dense; 55% sand; 30% slight plasticity clay; 15% gravel
2				IR01SH032025	0				SANDY CLAY: dark gray (Gley 1 4/N); saturated; stiff; 90% plastic clay; 10% sand
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH033

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: DIRECT-PUSH
Boring Started: 09/05/02
Completed: 09/05/02
Boring Depth (feet bgs): 12.00
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0–3		48		IR01SH033TOP				SM	Well-sorted SILTY SAND WITH GRAVEL: reddish brown (2.5YR 5/3); dry; loose; 65% fine sand; 25% silt; 10% gravel
4–8		48		IR01SH033MID				GP	Well-sorted GRAVEL: greenish gray (Gley 1 5/10Y); dry; loose; subangular Well-sorted SANDY GRAVEL WITH SAND: weak red (10R 4/2); slightly moist; loose
8–12		48		IR01SH033BOT				SM	Well-sorted SILTY SAND WITH CLAY: black (Gley 1 2.5/N); saturated; loose; soft; 65% fine to medium sand; 25% silt; 10% clay; with strong petroleum hydrocarbon odor
12									Total depth of boring = 12 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH034

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/28/02
Completed: 08/28/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH034005	0			SM	Well-sorted SILTY SAND: weak red (5YR 4/4); moist to wet; loose; 90% medium to coarse sand (mostly silica); 10% silt
1									
2				IR01SH034025	8				Moisture content increases saturated below 0.5 foot; with black staining and petroleum hydrocarbon odor
3									NOTE: Due to field conditions, the original boring location was moved 10 feet east for accessibility
4									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH035

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/04/02
Completed: 09/04/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH035005				SM	Well-sorted SILTY SAND: pinkish white (2.5YR 8/2); slightly moist; loose; 75% fine sand (soft beach sand); 25% silt
1									
2				IR01SH035025					Moisture content increases to saturated below 1.5 feet; medium sand with depth; with occasional laminated layers of black sand (up to 2 cm thick)
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH036

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: DIRECT-PUSH
Boring Started: 09/05/02
Completed: 09/05/02
Boring Depth (feet bgs): 12.00
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0–4		48		IR01SH036TOP				SP	Well-sorted SILTY SAND WITH GRAVEL: gray (5YR 5/1); slightly moist; loose; 70% fine sand; 20% silt; 10% gravel; with occasional layers of black sand (up to 2 inches thick)
4–8		48		IR01SH036MID					Well-sorted SAND: pink to black (5YR 8/4 to 5Y 2.5/1); moist; loose; fine to medium; with zones of silty sand, with gravel (up to 1 inch thick)
8–12		48		IR01SH036BOT				CH	Moisture content increases to saturated below 7 feet CLAY: very dark gray (Gley 1 3/N); saturated; stiff; high plasticity
12									Total depth of boring = 12 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH037

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/28/02
Completed: 08/28/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH037005	0			SM	Well-sorted SILTY SAND: weak red (10R 5/2); dry; loose; 70% fine to medium sand; 30% silt; with roots present
1									
2				IR01SH037025	0				Color changes to reddish brown (5YR 4/4); moisture content increases to saturated below 0.5 foot; dense; with some roots, wood chips, and black sand
3									Total depth of boring = 2.5 feet
4									
5									
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Tetra Tech EM Inc.

Log of Boring: IR01SH038

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/04/02
Completed: 09/04/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH038005				SM	Well-sorted SILTY SAND: pinkish gray (5YR 7/2); slightly moist; loose; 80% fine sand; 20% silt; with sea shells and black sand
1									
2				IR01SH038025					Moisture content increases to wet from 1 to 2 feet; saturated below 2 feet
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH039

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: DIRECT-PUSH
Boring Started: 09/05/02
Completed: 09/05/02
Boring Depth (feet bgs): 12.00
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0–4		48		IR01SH039TOP				SM	Well-sorted SILTY SAND: light gray (10R 7/1); dry; loose; 70% fine sand; 30% silt
4–6		36							Moisture content increases to wet
6–8				IR01SH039MID				CL	SANDY CLAY: black (7.5YR 2.5/1); saturated; medium stiff; slight plasticity; 50% clay; 50% fine sand; with wood chips and strong petroleum hydrocarbon odor
8–12		48		IR01SH039BOT				CH	CLAY: black (Gley 1 2.5/1); saturated; soft; high plasticity
12									Total depth of boring = 12 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH040

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/27/02
Completed: 08/27/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH040005	0			SM	Well-sorted SILTY SAND: dark reddish brown (5YR 5/3); slightly moist; loose; fine sand; with some black sand, plant roots, and shell fragments
1									
2				IR01SH040025					Same as above, with some gravel; boring location is surrounded by black sand area; however, black sand is not present below 0.5 foot
3									Total depth of boring = 2.5 feet
4									
5									
6									
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Tetra Tech EM Inc.

Log of Boring: IR01SH040S

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH040005S				SM	
1					0				Well-sorted SILTY SAND: pale red (10R 6/2); wet; loose; 90% medium to coarse sand; 10% silt; with abundant roots and shells
2				IR01SH040025S	0				
3									Moisture content increases to saturated below 0.5 foot
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH040W

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH040005W				SM	
1					0				Well-sorted SILTY SAND: pale red (10R 6/2); wet; loose; 80% fine to medium sand; 20% silt; with sea shell fragments
2				IR01SH040025W	0				
3									Moisture content increases to saturated below 1 foot
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH041

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/27/02
Completed: 08/27/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH041005	0			SM	Well-sorted SILTY SAND: grayish brown (10YR 5/2); slightly moist; 80% fine sand; 20% silt
1									
2				IR01SH041025	0				Color changes to brown (7.5YR 4/2); moist; silt content increases to 30%
3									Total depth of boring = 2.5 feet
4									
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8									
9									
10									
11									
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Tetra Tech EM Inc.

Log of Boring: IR01SH041N

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH041005N				SM	Well-sorted SILTY SAND: light red (2.5YR 6/6), wet; loose; 90% fine sand; 10% silt
1					0				
2				IR01SH041025N	0				
3									Moisture content increases to saturated below 0.5 foot
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR01SH041S

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/12/02
Completed: 09/12/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH041005S				SM	
1					0				Well-sorted SILTY SAND: brown (7.5YR 5/4); wet; loose; 90% fine to medium sand; 10% silt; with shell fragments and roots
2				IR01SH041025S	0				
									Moisture content increases to saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR01SH042

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-01
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/03/02
Completed: 09/03/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR01SH042005				SM	Well-sorted SILTY SAND: pinkish gray (5YR 7/2); slightly moist; loose; 80% fine sand; 20% silt; with shell fragments and black sand
1									
2				IR01SH042025					Moisture content increases to wet from 0.5 to 2 feet; saturated below 2 feet
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH001

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: DIRECT-PUSH
Boring Started: 09/05/02
Completed: 09/05/02
Boring Depth (feet bgs): 12.00
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		48						SW	
1								SM	Black SAND
2				IR02SH001TOP					Silty SAND, red (2.5YR 5/6), 90% sand, 10% silt, fine- to medium- grained, well sorted, moist, loose
3									
4		24							
5									Same as above, wet below 4'bgs
6				IR02SH001MID					
7								CH	
8		24							Sandy CLAY, very dark gray (Gley 1 3/N), plastic, saturated medium stiff
9									
10				IR02SH001BOT					
11									
12									Total depth of boring = 12 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH002

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/30/02
Completed: 08/30/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH002005	0			SM	Silty SAND, dark reddish gray (5YR 4/2), 90% sand, 10% silt, medium- to coarse- grained, well sorted, moist, loose, with intermixed black sand and some sea shells
1									
2				IR02SH002025	0				Same as above, color chang to reddish brown (5YR 5/4), material percentage change to 75% sand, 25% silt, grain size change to fine-grained, saturated below 0.5'bgs. No sea shells noted from 0.5' to 2.5'bgs.
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH003

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/30/02
Completed: 08/30/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH003005	0			SP SM	Gravelly SAND with Silt, dark reddish gray (5YR 4/2), 70% sand, 25% gravel, 5% silt, medium- to coarse-grained, well sorted, wet, loose, gravel up to 2 cm in diameter, rounded to sub-rounded, shells and black sand present.
1									
2				IR02SH003025	0				
3									Silty SAND, reddish brown (5YR 5/4), 80% sand, 20% silt, fine-grained, well sorted, saturated, loose
4									Total depth of boring = 2.5 feet
5									
6									
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Tetra Tech EM Inc.

Log of Boring: IR02SH004

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/28/02
Completed: 08/28/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH004005	0			SP	Gravelly SAND, very dark gray (Gley 1 3/N), 90% sand, 10% gravel, coarse-grained angular, well sorted, wet, loose, gravel up to 3 cm in diameter, rounded to sub-rounded
1									
2				IR02SH004025	0				Same as above, saturated below 0.5'bgs
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH004E

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/13/02
Completed: 09/13/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH004005E				SM	Silty SAND with Gravel, dark reddish gray (5YR 4/2), 70% sand, 20% silt, 10% gravel, fine-grained, well sorted, loose, saturated below 0.2'bgs, with shell fragments abundant
1					0				
2				IR02SH004025E	0				
3									Total depth of boring = 2.5 feet
4									
5									
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Tetra Tech EM Inc.

Log of Boring: IR02SH004N

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/13/02
Completed: 09/13/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
0									Ground Surface
0–2		30		IR02SH004005N IR02SH004025N	0 0			SM	Silty SAND with Gravel, dark reddish gray (5YR 4/2), 70% sand, 20% silt, 10% gravel, well sorted, wet to saturated, loose, shell fragments and kiln bricks present
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH004W

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/13/02
Completed: 09/13/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH004005W	0			SM	Silty SAND, reddish black (10R 2.5/1), 80% sand, 20% silt, fine-grained, well sorted, wet to 0.5'bgs, saturated below 0.5'bgs, loose, shell fragments present
1									
2				IR02SH004025W	0				
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH005

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/30/02
Completed: 08/30/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH005005	0			SW	Gravelly SAND, reddish gray (5YR 5/2), 60% sand, 40% gravel, medium- to coarse-grained, poorly sorted, wet, loose, black sand and sea shells present
1									
2				IR02SH005025	0				Same as above with brick chips present
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH006

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/05/02
Completed: 09/05/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH006005				SM	Silty SAND, weak red (10YR 4/2), 80% sand, 20% silt, fine- to medium-grained, well sorted, wet, loose, black sand and shell fragments present
1									
2				IR02SH006025					Same as above, saturated below 0.2'bgs
3									Same as above, color change to black (Gley 1 2.5/N), below 1.5'bgs, with petroleum hydrocarbon odor
4									Total depth of boring = 2.5 feet
5									
6									
7									
8									
9									
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Tetra Tech EM Inc.

Log of Boring: IR02SH008

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/30/02
Completed: 08/30/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH008005	0			SW	Gravelly SAND with Silt, dark reddish gray (10R 4/1), 65% sand, 30% gravel, 5% silt, medium- to coarse-grained, poorly sorted, wet, soft, gravel up to 2 cm in diameter, sub-rounded, with little to some black sand and sea shells
1									
2				IR02SH008025	0				
3									Same as above saturated below 0.5'bgs
									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH010

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/05/02
Completed: 09/05/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH010005				SM	Silty SAND with Gravel, light reddish brown (5YR 6/3), 70% sand, 20% silt, 10% gravel, fine- to medium-grained, well sorted, slightly moist, loose, shells abundant
1									
2				IR02SH010025					Same as above, saturated below 1.0'bgs
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH011

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/03/02
Completed: 09/03/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH011005	0			SM	Silty SAND, reddish gray (5YR 5/2), 90% sand, 10% silt, fine- to medium-grained, well sorted, moist, soft, roots and sea shells present
1									
2				IR02SH011025	0				Same as above, saturated below 1.5'bgs, with kiln brick chips present.
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH012

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/03/02
Completed: 09/03/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH012005	0			SM	Silty SAND, reddish gray (5YR 5/2), 85% sand, 15% silt, fine-grained, well sorted, slightly moist, soft, with shells, black sand and roots present
1									
2				IR02SH012025	0				Same as above, saturated below 1.0'bgs
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH013

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/03/02
Completed: 09/03/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH013005	0			SM	Silty SAND with Gravel, reddish gray (5YR 5/2) 85% sand, 10% silt, 5% gravel, fine- to medium-grained, well sorted, wet, soft, gravel up to 0.5 inch in diameter, rounded, black sand present
1									
2				IR02SH013025	0				Same as above, saturated below 0.5'bgs
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH014

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/03/02
Completed: 09/03/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH014005	0			GP	
1								SM	Sandy GRAVEL with Silt, dark gray (7.5YR 4/1), 50% gravel, 40% sand, 10% silt, rounded, loose, up to 2.5 cm in diameter, moderately well sorted, wet, with shells present
2				IR02SH014025	0				Silty SAND, black (5YR 2.5/1), 90% sand, 10% silt, fine-grained, well sorted, wet to 1.0' bgs, saturated below 1.0' bgs, soft, wood chips present and sea shell fragments present
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH015

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/03/02
Completed: 09/03/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH015005	0			SM	Silty SAND, reddish gray (5YR 5/2), 80% silt, 20% silt, fine-grained, well sorted, wet to saturated, soft, with black sand and shells present
1					0			SC	Clayey SAND, black (5YR 2.5/1), 60% sand, 40% clay, fine-grained, well sorted, saturated, medium dense, clay is slightly plastic at 1.5'bgs, increasing plasticity with depth.
2				IR02SH015025	0				Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH016

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/03/02
Completed: 09/03/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH016005	0			SM	Silty SAND with Gravel, reddish gray (5YR 5/2), 80% sand, 10% silt, 10% gravel, fine-grained, well sorted, wet, medium dense, with black sand and sea shells present
1									
2				IR02SH016025	0				Same as above, saturated below 0.5'bgs
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH017

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/03/02
Completed: 09/03/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH017005	0			SP	
1								CH	Gravelly SAND, reddish gray (5YR 5/2), 60% sand, 40% gravel, fine-grained, well sorted, wet, loose, gravel up to 3.5 cm in diameter, rounded to sub-rounded
2				IR02SH017025	0				Silty CLAY, dark bluish gray (Gley 2 4/5B), 80% clay, 20% silt, high plasticity, saturated, stiff.
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH018

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/03/02
Completed: 09/03/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH018005	0			SM	Silty SAND with Gravel, pinkish gray (5YR 6/2), 75% sand, 15% silt, 10% gravel, fine-grained, well sorted, dry, loose, with roots, sea shells, and black sand present
1								SP	
2				IR02SH018025	0				Sand with silt, dark olive gray (5Y 3/2), 95% sand, 5% silt, coarse-grained, well sorted, wet from 0.5'bgs to 1.0'bgs, saturated below 1.0' bgs, loose, the material is comprised primarily of shell fragments with some partial and full sea shells present
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH019

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/03/02
Completed: 09/03/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH019005	0			GW	
1								GC	Sandy GRAVEL with Silt, brown (7.5YR 4/2), 55% gravel, 40% sand, 5% silt, rounded to sub-rounded up to 7 cm in diameter, poorly sorted, wet, dense, presence of sea shells
2				IR02SH019025	0				Clayey GRAVEL with Sand, brown (7.5YR 5/4), 55% gravel, 25% clay, 20% sand, angular up to 1 cm in diameter, well sorted, saturated, dense, the gravel is comprised primarily of shell fragments
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH020

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/27/02
Completed: 08/27/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH020005	0			SP	Gravelly SAND, very dark gray (Gley 1 3/N), 80% sand, 20% gravel, well sorted, saturated, loose, gravel sub-angular up to 1.5 cm in diameter, shell fragments present
1									
2				IR02SH020025	0				
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH021

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/27/02
Completed: 08/27/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH021005	0			SP	
1								SC	Gravelly SAND, very dark gray (2.5Y 3/1), 70% sand, 30% gravel, medium- to coarse-grained, well sorted, moist at surface, saturated below 0.1'bgs, loose
2				IR02SH021025	0				Clayey SAND with Gravel, dark reddish gray (10R 4/1), 55% sand, 25% clay, 20% gravel, medium- to coarse-grained, moderately well sorted, saturated, loose, gravel rounded up to 2.5 cm in diameter
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH022

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/27/02
Completed: 08/27/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH022005	0			SP	
1								GP	Gravelly SAND, very dark bluish gray (Gley 2 3/5B), medium- to coarse-grained, moderately well sorted, saturated, loose, shell fragments present
2				IR02SH022025	0				Sandy GRAVEL, very dark bluish gray (Gley 2 3/5B), 60% gravels, 40% sand, sub-rounded up to 2 cm in diameter, moderately well sorted, saturated, loose
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH023

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/27/02
Completed: 08/27/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH023005	0			SP	
1								CH	Gravelly SAND, very dark greenish gray (Gley 1 3/10Y), 90% sand, 10% gravel, medium- to coarse-grained, well sorted, moist, loose
2				IR02SH023025	0				Silty CLAY, very dark gray (Gley 1 3/N), 85% clay, 15% silt, plastic to very plastic, moist, medium stiff
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH024

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/27/02
Completed: 08/27/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH024005	0			SP	Gravelly,SAND, black, (5Y 2.5/1), 60% sand, 40% gravel, medium- to coarse-grained, moderately well sorted, wet, loose, gravel rounded to sub-rounded up to 2 cm in diameter, sea shells fragments present.
1								CL	
2				IR02SH024025	0				Gravelly, Clay with Sand (Weathered Serpentine), dark gray (Gley 1 4/N), slightly plastic, saturated, stiff
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH025

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/27/02
Completed: 08/27/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH025005	0			ML	
1								CH	Clayey SILT with Sand, very dark greenish gray (Gley 1 3/N), slightly plastic, saturated, medium stiff, sea shell fragments present
2				IR02SH025025	0				Silty CLAY, very dark greenish gray (Gley 1 3/N), very plastic, saturated, stiff
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH026

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/11/02
Completed: 09/11/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH026005				SP	
1					0			CH	Gravelly SAND, reddish gray (2.5YR 5/1), 90% sand, 10% gravel, coarse-grained, well sorted, wet, loose, mostly shell fragment material
2				IR02SH026025	0				
3									Sandy CLAY, very dark gray (Gley 1 3/N), plastic, saturated, stiff
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH027

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/11/02
Completed: 09/11/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH027005	0			SP	
1								CH	Sand with silt, reddish gray (2.5YR 5/1), 95% sand, 5% silt, medium- to coarse-grained, well sorted, wet, loose, shell fragments present
2				IR02SH027025	0				Silty CLAY, very dark gray (Gley 1 3/N), 90% clay, 10% silt, very plastic, saturated, stiff
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH028

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/11/02
Completed: 09/11/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH028005				SM	
1					0				Silty SAND, reddish gray (2.5YR 5/1), 90% sand, 10% silt, poorly sorted, medium- to coarse-grained, wet from 0 to 1.0'bgs, saturated below 1.0'bgs, loose, shells abundent
2				IR02SH028025	0			CH	
3									Clay with Silt, 95% clay, 5% silt, very plastic, saturated, stiff, shell fragments present
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH029

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/11/02
Completed: 09/11/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH029005	0			CH	Silty SAND, reddish gray (2.5YR 5/1), 80% sand, 20% silt, medium-grained, well sorted, wet, loose, shells present
1									
2				IR02SH029025	0				Silty CLAY, very dark gray (Gley 1 3/N), 90% clay, 10% silt, plastic, saturated, stiff
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH030

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/11/02
Completed: 09/11/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH030005				SM	
1					0				Silty SAND, reddish gray (2.5YR 5/1), 75% sand, 25% silt, fine-grained, well sorted, moist to wet, loose, shells and roots present
2				IR02SH030025	0				
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH031

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/10/02
Completed: 09/10/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH031005	0			SP SM	Gravelly SAND with Silt, very dark gray (2.5Y 3/1), 65% sand, 30% gravel, 5% silt, medium-grained, well sorted, moist, loose, shells present
2				IR02SH031025	.1				Silty SAND, black (10R 2.5/1), 75% sand, 25% silt, well sorted, saturated, black coloring appears to be staining, sea shells present
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH032

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/10/02
Completed: 09/10/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH032005	0			SM	Silty SAND with Gravel, very dark gray (2.5Y 3/1), 70% sand, 25% silt, 5% gravel, medium-grained, well sorted, saturated, loose, shell fragments present
1									
2				IR02SH032025	0				
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH033

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/10/02
Completed: 09/10/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH033005				SM	Silty SAND with Gravel, very dark gray (2.5Y 3/1), 80% sand, 15% silt, 5% gravel, well sorted, medium-grained, wet, loose
1					0				
2				IR02SH033025	0				
3									Same as above, saturated below 0.5'bgs
4									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH034

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/10/02
Completed: 09/10/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH034005				SM	
1					0				Silty SAND with Gravel, dark gray, (2.5Y 4/1), 65% sand, 25% silt, 10% gravel, medium-grained, well sorted, moist, loose, sea shells present
2				IR02SH034025	0				
3									Same as above, saturated below 0.5'bgs
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH035

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/10/02
Completed: 09/10/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH035005				SP	
1					0			SW/GW	Gravelly SAND, dark gray (2.5Y 4/1), 70% sand, 30% gravel, medium-grained, well sorted, moist, loose, sea shells present
2				IR02SH035025	0				
3									Gravelly SAND with Clay, black (10R 2.5/1), 40% sand, 40% gravel, 20% clay, poorly sorted, moist, loose, with asphalt pieces present
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH036

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/10/02
Completed: 09/10/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH036005	0			SP	
1								SC	Gravelly SAND, dark gray (2.5Y 4/1), 75% sand, 25% gravel, medium-grained, well sorted, moist, loose, shells present
2				IR02SH036025	0				Clayey SAND, black (10R 2.5/1), 70% sand, 30% clay, well sorted, moist, dense, wood and shells present
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH037

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/09/02
Completed: 09/09/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH037005	0			SC SM	Clayey SAND with Gravel, dusky red (10R 3/2), 60% sand, 30% clay, 10% gravel, moderately well sorted, moist, dense, glass and roots present
1									
2				IR02SH037025	0				Silty SAND, dark reddish gray (10R 3/1), medium-grained, well sorted, saturated
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH038

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/09/02
Completed: 09/09/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH038005	0			SP	SAND with Silt, very dark gray (Gley 2 3/10G), 95% sand, 5% silt, well sorted, medium-grained, wet, loose, shells abundant
1									
2				IR02SH038025	0				
3									Same as above, saturated below 0.5' bgs
									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH039

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/09/02
Completed: 09/09/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH039005				SP	
1					0				SAND with Silt, dark gray (Gley 2 3/10G), 95% sand, 5% silt, well sorted, medium-grained, wet, loose, abundant sea shells
2				IR02SH039025	0				
3									Same as above, saturated below 0.5' bgs
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH040

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/09/02
Completed: 09/09/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH040005	0			SP	SAND with Silt, dark greenish gray (Gley 2 3/10G), 95% sand, 15% silt, medium-grained, well sorted, wet, loose, sea shells present
1									
2				IR02SH040025	0				Same as above, saturated below 0.5'bgs
3									Same as above, saturated below 0.5' bgs
4									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH041

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/09/02
Completed: 09/09/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH041005				CH	
1					0			GW	Sandy CLAY with Silt, reddish brown (5YR 4/3), 75% clay, 20% sand, 5% silt, plastic, moist, stiff, with some organic matter
2				IR02SH041025	0				Sandy GRAVEL with Clay, black (Gley 1 2.5/N), 50% gravel, 40% sand, 10% clay, poorly sorted, saturated, loose, some asphalt material present
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH041A

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/10/02
Completed: 09/10/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH041A005	0			SW	
1					68			GC/CL	Gravelly SAND, dark gray (2.5Y 4/1), 60% sand, 40% gravel, poorly sorted, medium- to coarse-grained, wet, loose, with glass and sea shells present
2				IR02SH041A025					Clayey GRAVEL/Gravelly CLAY with Sand, black (10R 2.5/1), 40% gravel, 40% clay, 20% sand, gravel is moderately well sorted, clay is slightly plastic, saturated, dense/stiff, with sea shells present and petorleum hydrocarbon odor.
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH042

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/09/02
Completed: 09/09/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH042005				SP	
1					0				Silty SAND, dark greenish gray (Gley 2 3/10G) medium- to coarse-grained, well sorted, saturated, loose, sea shells present
2				IR02SH042025	0				
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH043

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/09/02
Completed: 09/09/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH043005				SP	
1					0				Well-sorted SAND WITH GRAVEL AND SILT: dark greenish gray (Gley 2 3/10G); moist; loose; 90% medium to coarse sand; 5% gravel; 5% silt; with abundant sea shells
2				IR02SH043025	0				
3									Moisture content increases to saturated below 0.5 foot
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH044

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/09/02
Completed: 09/09/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH044005				SP	
1					0				Well-sorted GRAVELLY SAND WITH SILT: dark greenish gray (Gley 2 3/10G); wet; loose; 60% sand; 35% subrounded to rounded gravel (up to 1.5-cm diameter); 5% silt
2				IR02SH044025	0				Moisture content increases to saturated below 0.5 foot; gravel content decreases
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH045

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/09/02
Completed: 09/09/02
Boring Depth (feet bgs): 0.75
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
0									Ground Surface
0		9		IR02SH045005	0			SC	Well-sorted CLAYEY SAND WITH GRAVEL: black (Gley 1 2.5/N); saturated; 60% fine sand; 35% clay; 5% gravel
1									Total depth of boring = 0.75 feet

Tetra Tech EM Inc.

Log of Boring: IR02SH046

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/09/02
Completed: 09/09/02
Boring Depth (feet bgs): 0.75
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		9		IR02SH046005	0			SP	Well-sorted GRAVELLY SAND WITH SILT: dark greenish gray (Gley 2 3/10G); saturated; loose; 70% fine to medium sand; 25% gravel; 5% silt
1									Total depth of boring = 0.75 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH047

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/10/02
Completed: 09/10/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH047005	0			SP	Well-sorted GRAVELLY SAND WITH SILT: dark gray (2.5Y 4/1); wet; loose; 60% medium sand; 30% gravel; 10% silt; with sea shells
1									
2				IR02SH047025	0				Moisture content increases to saturated below 0.5 foot; with wood chips
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH048

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/09/02
Completed: 09/09/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH048005				SC	
1					0			SP	Well-sorted CLAYEY SAND: black (Gley 1 2.5/N); wet; medium dense; 55% sand; 45% slightly plastic clay; organic matter present
2				IR02SH048025	0				Well-sorted SAND WITH SILT: black (Gley 1 2.5/N); saturated; loose; 95% fine sand, 5% silt
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH049

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/06/02
Completed: 09/06/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH049005	0			GP/GC	Well-sorted SANDY GRAVEL/CLAYEY GRAVEL: very dark gray (5Y 3/1); wet to saturated; loose; 80% subrounded gravel (up to 2-cm diameter); 10% sand; 10% nonplastic clay
1									
2				IR02SH049025	0			SM	Well-sorted SILTY SAND WITH GRAVEL: black (5YR 2.5/1); saturated; loose; 65% fine sand; 30% silt; 5% gravel; with sea shell fragments
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH050

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/06/02
Completed: 09/06/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH050005				SP	
1								CH	Well-sorted GRAVELLY SAND: black (5Y 2.5/1); wet; loose; 75% medium to coarse sand; 25% subrounded gravel (up to 2-cm diameter)
2				IR02SH050025					
3									SANDY CLAY: black (5Y 2.5/1); saturated; stiff; plastic; 70% clay; 30% sand
4									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH051

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/06/02
Completed: 09/06/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH051005				GW	
1					0			SW	Poorly sorted SANDY GRAVEL: black (5YR 5/1); saturated; loose; 70% subrounded gravel (up to 3-cm diameter); 30% sand
2				IR02SH051025	0				Poorly sorted GRAVELLY SAND WITH CLAY: dark reddish gray (2.5YR 3/1); saturated; loose; 70% sand; 25% gravel; 5% clay
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR02SH052

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-02
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/06/02
Completed: 09/06/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR02SH052005				GW	
1					0				Poorly sorted SANDY GRAVEL: black (5Y 2.5/1); saturated; loose; 70% subrounded gravel (up to 2-cm diameter); 30% sand
2				IR02SH052025	0				
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR03SH001

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/11/02
Completed: 09/11/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH001005	0			SM	Well-sorted SILTY SAND: reddish gray (2.5YR 5/1); moist; loose; 75% fine sand; 25% silt; shells and roots present
1									
2				IR03SH001025	0				Moisture content increases to saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR03SH002

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/11/02
Completed: 09/11/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH002005	0			SM	Well-sorted SILTY SAND: reddish gray (2.5YR 5/1); moist; soft; 80% fine sand; 20% silt; sea shells and roots present
1									
2				IR03SH002025	0				
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR03SH003

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/11/02
Completed: 09/11/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH003005	0			SM	Poorly sorted SILTY SAND WITH GRAVEL: reddish gray (10R 5/1), dry; loose; 65% sand; 25% silt; 10% gravel; with some sea shells
1									
2				IR03SH003025	0				Color changes to weak red (2.5YR 4/2); saturated below 1 foot; dense; 70% well-sorted sand; 30% silt; gravel content decreases to 0%
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR03SH004

Logged By: R. SHAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/26/02
Completed: 08/26/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH004005	0			SW	Well-graded GRAVELLY SAND: brown (10YR 5/3) to grayish brown (10YR 3/2); wet to saturated; very loose; medium to coarse sand; with shell fragments
1									
2				IR03SH004025	0				Sand becomes medium dense; fine to coarse; with pebbles
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR03SH005

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/27/02
Completed: 08/27/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH005005	0			GP	
1								SM	Moderately well-sorted SANDY GRAVEL WITH SILT: dark greenish gray (Gley 2 4/10BG); wet to saturated; loose; 45% medium to fine, subrounded to subangular gravel; 40% sand; 15% silt; shell fragments present
2				IR03SH005025	0				Well-sorted SILTY SAND WITH GRAVELS: dark greenish gray (Gley 2 4/10BG); saturated; loose; 75% medium to coarse sand; 15% silt; 10% rounded gravel (up to 2-cm diameter)
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR03SH005W

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/13/02
Completed: 09/13/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH005005W				SM/SW	Poorly sorted SILTY SAND/GRAVELLY SAND: very dark gray (5Y 3/1); wet from 0 to 0.5 foot; loose; 60% sand; 20% silt; 20% gravel; shells fragments present; becomes saturated below 0.5 foot
1					0				
2				IR03SH005025W	0				
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR03SH006

Logged By: R. SHAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/26/02
Completed: 08/26/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH006005	0			SW	Well-graded SAND: brown (10YR 5/3); wet to 0.4 foot; loose; fine to medium; with shell fragments, gravel, and cobbles; becomes saturated below 0.4 foot
1									
2				IR03SH006025	.7				Color changes to black (10YR 3/1); grain size increases to medium to coarse; with shell fragments and cobbles
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR03SH007

Logged By: R. SHAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/26/02
Completed: 08/26/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH007005	0			SW	
1								GW	Well-graded SAND WITH GRAVEL: very dark grayish brown (2.5Y 3/2); wet to 0.4 foot; very loose; medium to coarse sand; gravel is subangular to subrounded gravel; with shell fragments; becomes saturated below 0.4 foot
2				IR03SH007025	.7				
3									Same as above to 2.5 feet; gravel encountered at 2.5 feet
									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR03SH008

Logged By: R. SHAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/26/02
Completed: 08/26/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH008005	1.2			SW	
1								GW	Well-graded SAND: wet to 0.2 foot; loose; medium to coarse; few gravel; with little shell fragments; becomes saturated below 0.2 foot
2				IR03SH008025	0				Well-graded GRAVEL WITH SAND AND SILT: black (Gley 1 2.5/N); saturated; loose; with an oily appearance and heavy petroleum hydrocarbon odor
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR03SH008E

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/13/02
Completed: 09/13/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH008005E	0			SM	Well-sorted SILTY SAND: reddish gray (10R 5/1); wet from 0 to 0.5 foot; medium dense; fine; becomes saturated below 0.5 foot
1									
2				IR03SH008025E	0				
3									Total depth of boring = 2.5 feet
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Tetra Tech EM Inc.

Log of Boring: IR03SH008S

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/13/02
Completed: 09/13/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH008005S				SW	
1					0				Poorly sorted GRAVELLY SAND WITH SILT: dark gray (10YR 4/1); wet from 0 to 0.5 foot; loose; 60% sand; 30% gravel; 10% silt; becomes saturated below 0.5 foot
2				IR03SH008025S	4.3			SC	
3									Well-sorted CLAYEY SAND: wet; dense; 75% sand; 25% clay; material has black staining that appears to be caused by petroleum hydrocarbons
4									Total depth of boring = 2.5 feet
5									
6									
7									
8									
9									
10									
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34									
35									

Tetra Tech EM Inc.

Log of Boring: IR03SH008W

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/13/02
Completed: 09/13/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH008005W	0			SW	Poorly sorted GRAVELLY SAND WITH SILT: dark gray (10YR 4/1); wet from 0 to 0.5 foot; loose; 60% sand; 30% gravel; 10% silt; with shell fragments; becomes saturated below 0.5 foot
1									
2				IR03SH008025W	0				
3									Total depth of boring = 2.5 feet
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
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Tetra Tech EM Inc.

Log of Boring: IR03SH009

Logged By: R. SHAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 08/26/02
Completed: 08/26/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH009005	0			SW	
1								CH	Well-graded SAND: dark gray (2.5Y 3/2); wet; loose; medium to coarse; with shell fragments and angular pebbles
2				IR03SH009025	0				SANDY CLAY WITH SILT AND GRAVEL: dark gray (2.5Y 3/2); saturated; plastic; with shell fragments
3									Total depth of boring = 2.5 feet

Tetra Tech EM Inc.

Log of Boring: IR03SH010

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/10/02
Completed: 09/10/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH010005				SP	
1					0				Well-sorted GRAVELLY SAND: very dark gray (2.5Y 3/1); wet from 0 to 0.5 foot; loose; 65% sand; 35% gravel; with shell fragments; becomes saturated below 0.5 foot
2				IR03SH010025	0				
3									Total depth of boring = 2.5 feet
4									
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35									

Tetra Tech EM Inc.

Log of Boring: IR03SH011

Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/10/02
Completed: 09/10/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH011005	0			SP	Well-sorted GRAVELLY SAND: very dark gray (2.5Y 3/1); wet; loose; 75% sand; 25% gravel; with sea shells
1									
2				IR03SH011025	9.1				Color changes to black (5Y 2.5/1) due to staining caused by presence of petroleum hydrocarbons; becomes saturated below 0.5 foot
3									Total depth of boring = 2.5 feet
4									
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35									

Tetra Tech EM Inc.

Log of Boring: IR03SH012

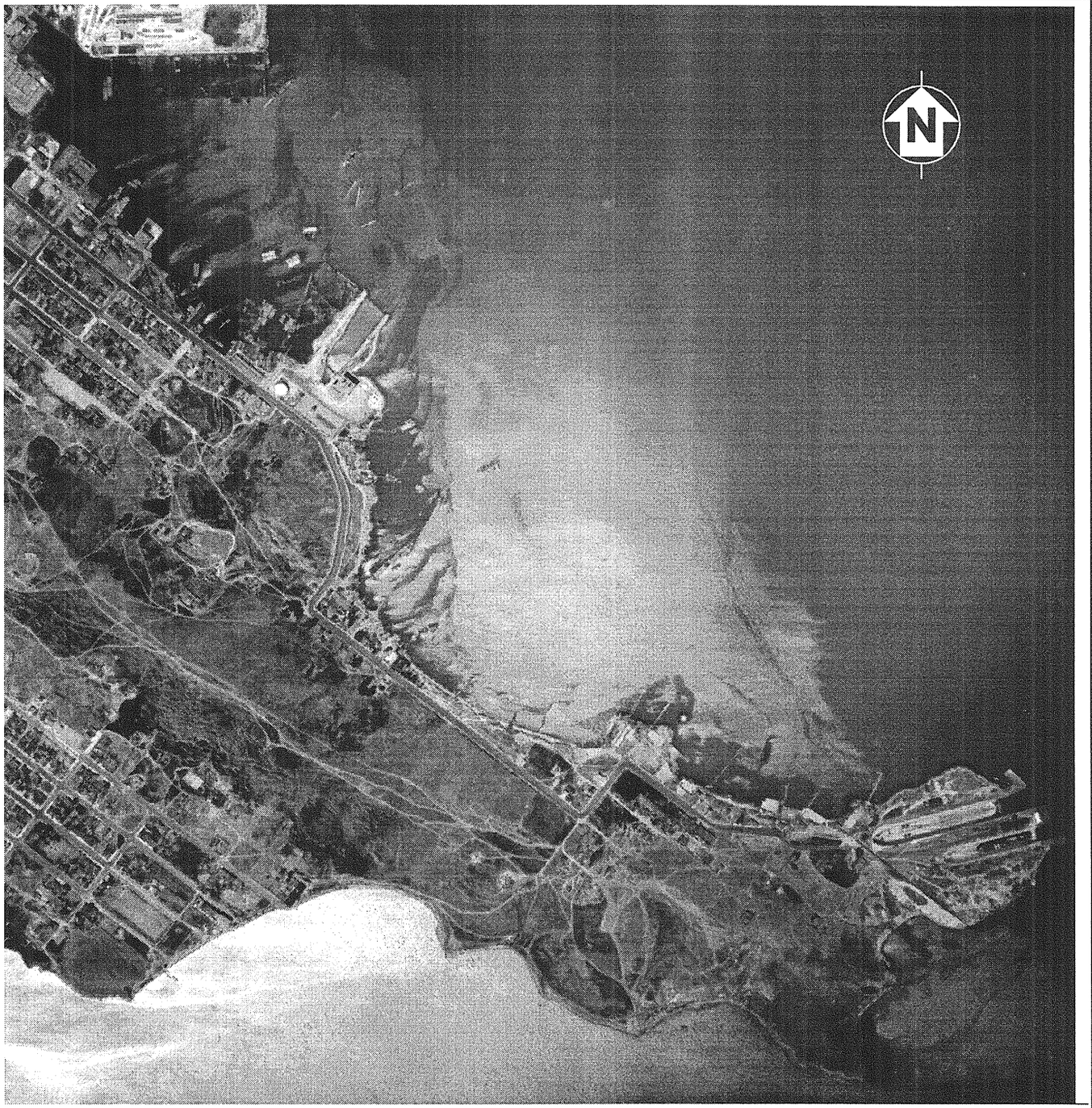
Logged By: A. ABDALLAH
Logging Consultant: R&M ENVIRONMENTAL
Drilling Company: VIRONEX

Project: PARCEL E STANDARD DATA GAPS
Project No: DO19
Location: IR-03
Ground Surface Elevation (feet msl):

Drilling Method: HAND AUGER
Boring Started: 09/10/02
Completed: 09/10/02
Boring Depth (feet bgs): 2.50
Boring Diameter (inches): 2.00

DEPTH (FEET)	DRIVE INTERVAL	RECOVERY (IN)	BLOW COUNTS	SAMPLE ID	OVM (PPM)	WATER LEVEL	GRAPHIC LOG	USCS SOIL TYPE	DESCRIPTION
									Ground Surface
0		30		IR03SH012005	0			GP	
1								SP	GRAVEL AND SHELL FRAGMENTS: wet; loose; 80% shell fragments; 20% gravel (up to 0.5 cm in diameter)
2				IR03SH012025	0				Well-sorted SILTY SAND: black (10R 2.5/1); saturated; loose; 90% medium sand; 10% silt
3									Total depth of boring = 2.5 feet

APPENDIX C
AERIAL PHOTOGRAPHS OF THE FILLING HISTORY OF THE PARCELS E AND E-2 SHORELINE (PROVIDED ON COMPACT DISC ONLY)

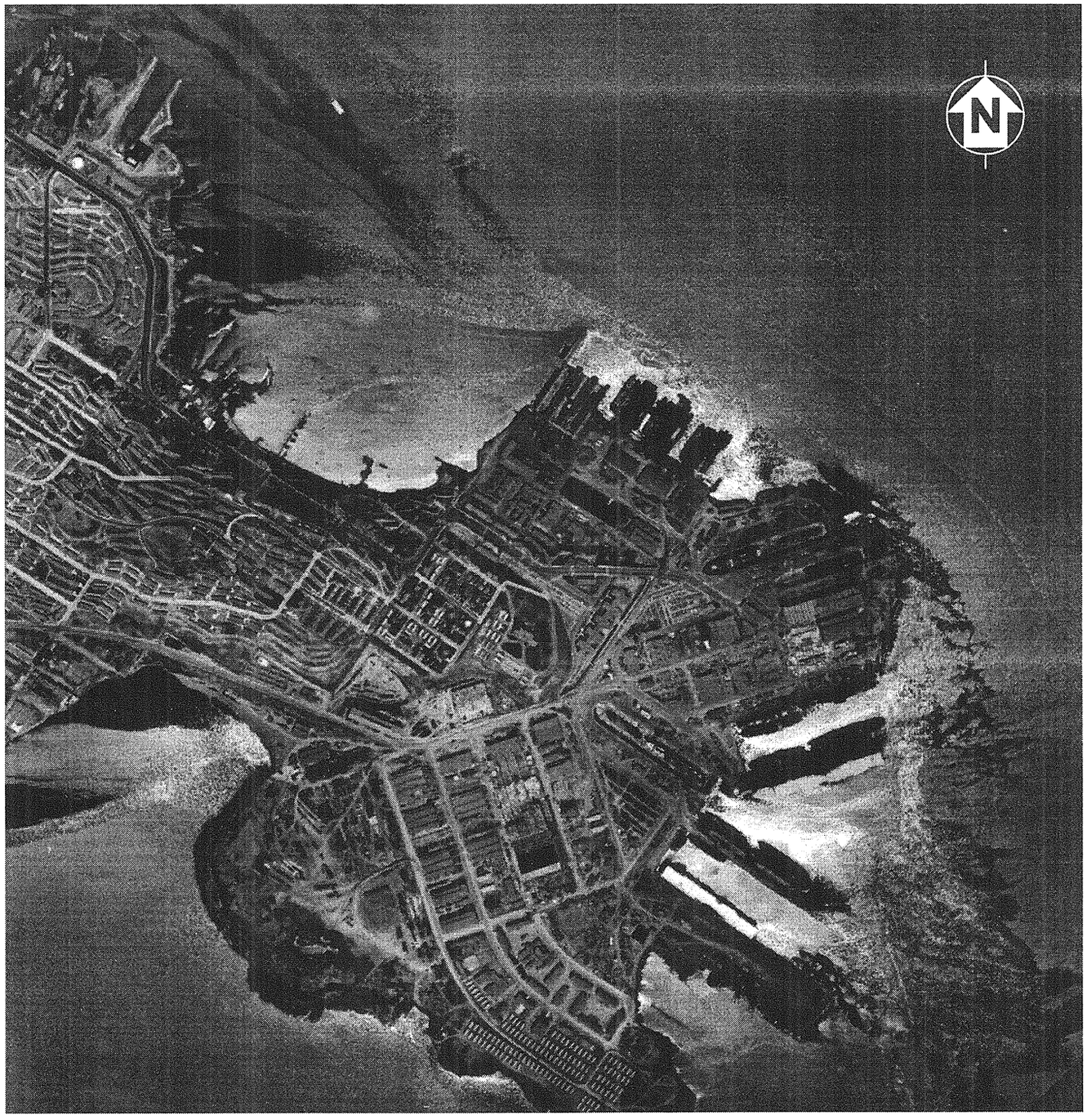


0 500 1000 2000

APPROXIMATE SCALE IN FEET

FIGURE C-1
AERIAL PHOTO, 1935
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

DATE: 02/24/96 JLH DN FILE NAME: 069\012M\02\HP-35.DS4

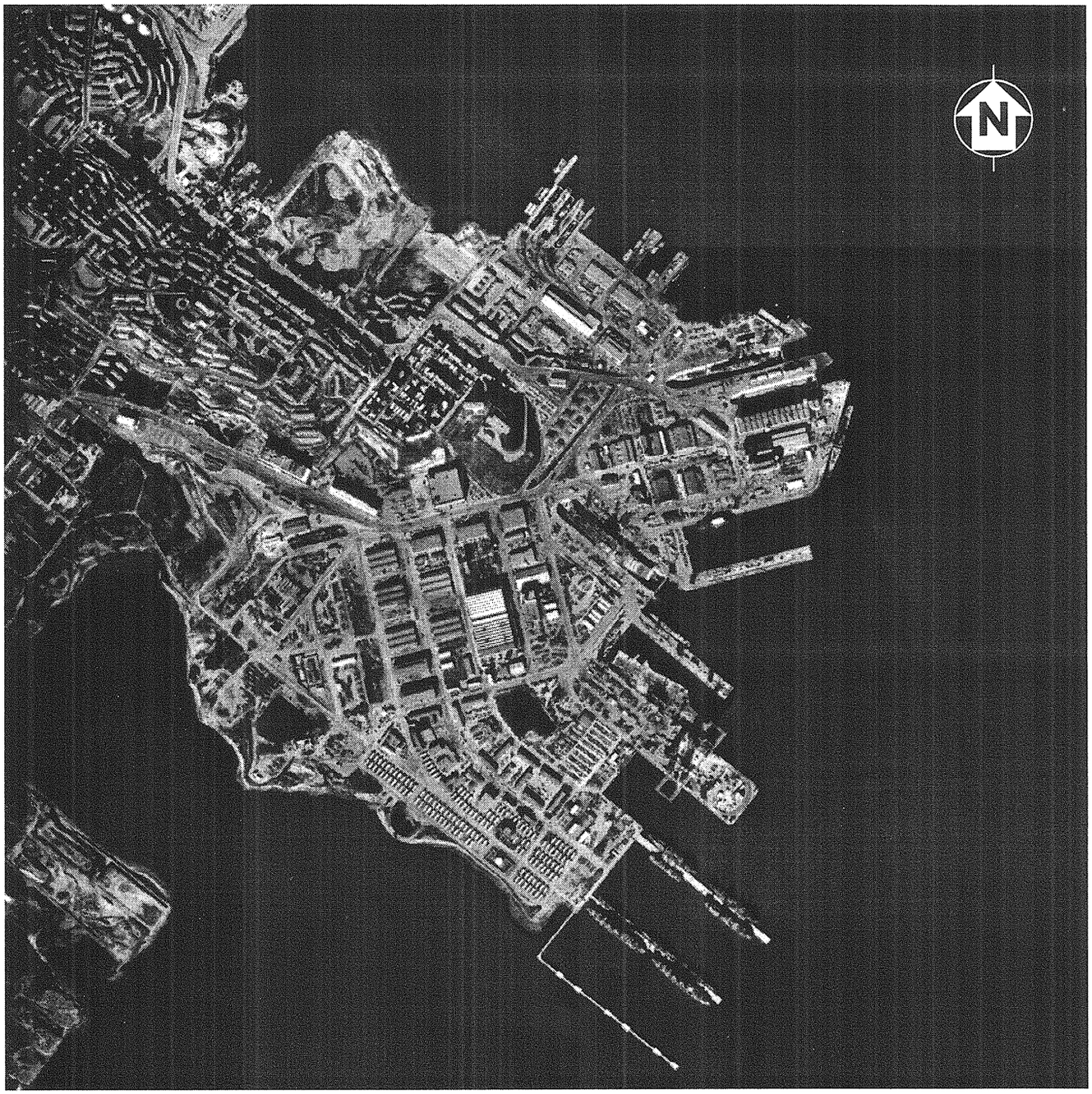


0 500 1000 2000

APPROXIMATE SCALE IN FEET

FIGURE C-2
AERIAL PHOTO, 1946
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

DATE: 02/24/96 JLH DN FILE NAME: 069\012M\02\HP-46.DS4

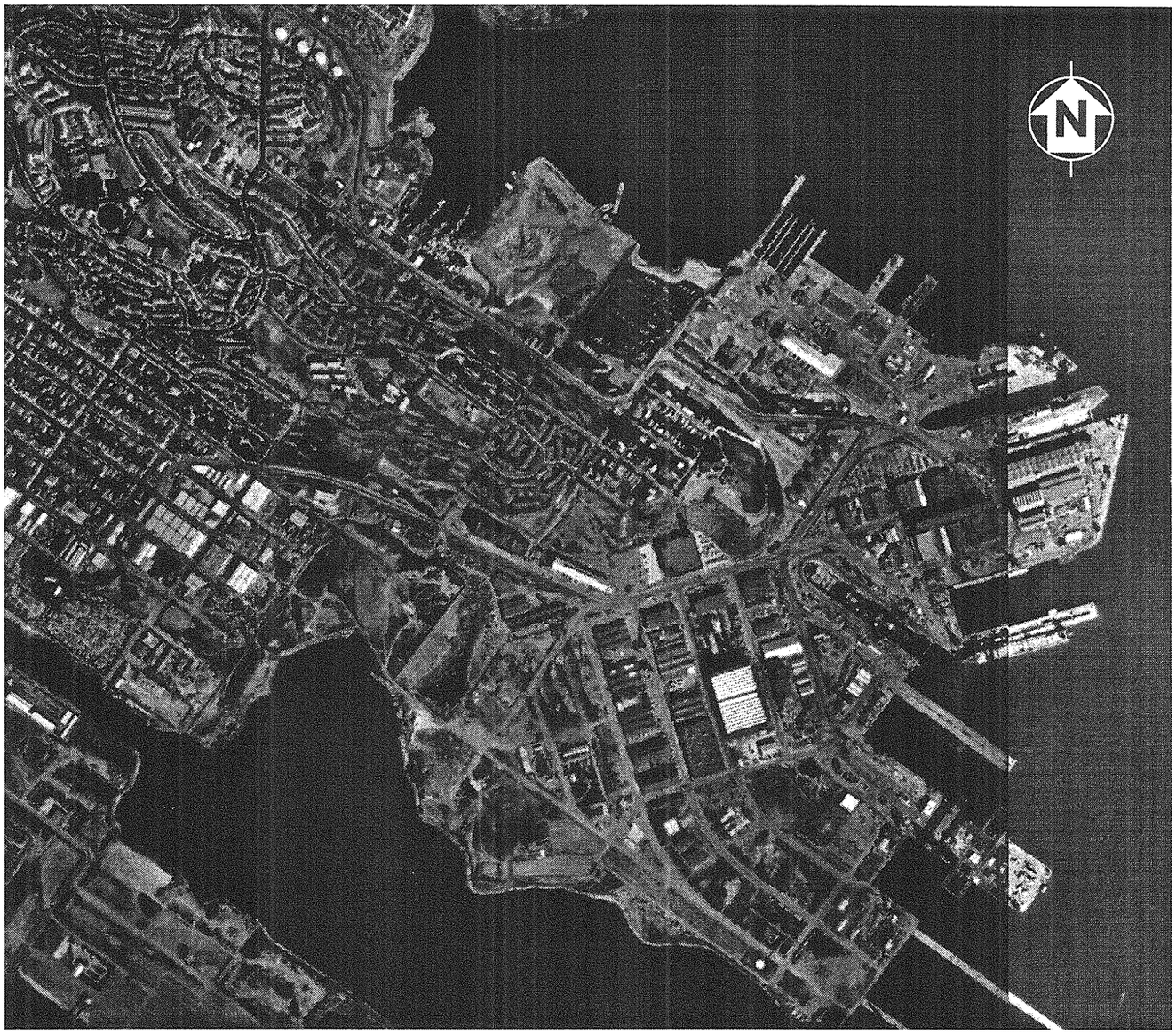


0 500 1000 2000

APPROXIMATE SCALE IN FEET

FIGURE C-3
AERIAL PHOTO, 1969
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

DATE: 02/24/96 JLH DN FILE NAME: 069\012M\02\HP-69.DS4



0 500 1000 2000

APPROXIMATE SCALE IN FEET

FIGURE C-4
AERIAL PHOTO, 1985
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

DATE: 02/24/96 JLH DN FILE NAME: 069\012M\02\HP-85.DS4

APPENDIX D
ANALYSIS OF ANALYTICAL METHODS AND QUALITY CONTROL

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ACRONYMS AND ABBREVIATIONS

%D	Percent difference
APCL	Applied Physics and Chemistry Laboratory
BHC	Benzene hexachloride
C&T	Curtis and Tompkins Ltd.
CLP	Contract Laboratory Program
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
EPA	U.S. Environmental Protection Agency
GC	Gas chromatograph
ICP	Inductively coupled plasma
ICS	Interference check samples
IDL	Instrument detection limit
LCS	Laboratory control sample
LUFT	Leaking underground fuel tank
MS	Matrix spike
MSD	Matrix spike duplicate
PARCC	Precision, accuracy, representativeness, completeness, and comparability
PCB	Polychlorinated biphenyl
QA	Quality assurance
QC	Quality control
RL	Reporting limit
SAP	Sampling and analysis plan
SDGI	Standard data gaps investigation
SOP	Standard operating procedure
SVOC	Semivolatile organic compound
Tetra Tech	Tetra Tech EM Inc.
TPH	Total petroleum hydrocarbons
TPH-e	Total petroleum hydrocarbons as extractables
TPH-p	Total petroleum hydrocarbons as purgeables
VOC	Volatile organic compound

1.0 INTRODUCTION

Tetra Tech EM Inc. (Tetra Tech) conducted sampling and analysis for the U.S. Department of the Navy under Delivery Order No. 019 in support of Phase I of the shoreline characterization under the standard data gaps investigation (SDGI) at Parcels E and E-2 in Hunters Point Shipyard, San Francisco, California. This appendix summarizes the data quality assessment for analytical data generated during shoreline sediment sampling conducted from August 26, 2002, through September 13, 2002, at Parcels E and E-2. The data quality assessment included analysis of quality control (QC) samples and data validation. Each activity is discussed below, followed by conclusions drawn based on the data quality assessment. Appendix E presents the quality control summary report.

2.0 DATA VALIDATION

Data validation is the systematic process of reviewing and qualifying data against a set of criteria to ensure that the data are adequate for their intended use. The laboratory analytical data were validated in accordance with the procedures outlined in the following documents:

- "Contract Laboratory Program [CLP] National Functional Guidelines for Organic Data Review" (U.S. Environmental Protection Agency [EPA] 1999)
- "CLP National Functional Guidelines for Inorganic Data Review" (EPA 1994)
- "CLEAN II Data Validation Statement of Work"(Tetra Tech 2001)
- "Comprehensive Long-Term Environmental Action Navy II Analytical Services Statement of Work" (Tetra Tech 2000)

Data validation was conducted in two stages. First, a cursory review was conducted of the analytical reports and quality assurance (QA)/QC information for 80 percent of the chemical data. Next, a full review was conducted of the analytical reports, QA/QC information, and the associated raw chemical data for 20 percent of the chemical results. Field screening data are not validated.

The data validation process assesses the acceptability of the data by evaluating the critical indicator parameters of precision, accuracy, representativeness, completeness, and comparability (PARCC). PARCC parameters were assessed by completing the following tasks:

- Reviewing the precision and accuracy of laboratory QC data
- Reviewing the precision and accuracy of field QC data
- Reviewing the overall analytical process, including holding times, calibration, analytical or matrix performance, and analyte identification and quantitation
- Assigning qualifiers to affected data when QA/QC criteria were not achieved
- Reviewing and summarizing the implications of the frequency and severity of qualifiers in the validated data

Qualifiers were assigned to the results in the electronic database at each stage of the validation, in accordance with the EPA guidelines (EPA 1994, 1999), the SDGI SAP (Tetra Tech 2002), and the associated analytical methods. The data validation qualifiers and comment codes below were applied to the data set.

Qualifier and Comment Code	Description
U1	Compound is considered nondetected because of laboratory blank contamination
U2	Compound is considered nondetected because of field blank contamination
U4	Compound is considered nondetected because of common laboratory contamination
J	Result exceeds detection limit but is less than reporting limit ("J" only, with no sub-qualifier number)
J1/UJ1/R3	Result is considered estimated or was rejected because of noncompliant instrument performance criteria
J2/UJ2	Compound is estimated because matrix duplicate precision was exceeded
J3/UJ3/R2	Compound is estimated or rejected because accuracy was exceeded in matrix spike, blank spike, or surrogate spike
J4/UJ4	Result considered estimated because of serial dilution problem
J5/UJ5/R1	Result considered estimated because of holding time problem
J7/UJ7/R7	Result considered estimated because of initial or continuing calibration problem
J8	Result considered estimated because it exceeds calibration range
J9/UJ9	Metals result considered estimated because interference check sample Organics – percent difference (%D) between columns
J0/UJ0/R0	Compound is estimated or rejected because internal standard was exceeded
G, D, M, L, H, and Z(see notes below)	TPH identification qualifiers in accordance with the statement of work

Notes:

D	Diesel
G	Gasoline
J	Estimated result
H	In the heavier hydrocarbon end of the analyte's range in the standard
L	In the lighter hydrocarbon end of the analyte's range in the standard
M	Motor oil
R	Rejected result
TPH	Total petroleum hydrocarbons
U	Nondetected result
Z	Pattern does not resemble TPH

Data validation of results for sediment and kiln brick samples is discussed below.

3.0 ANALYTICAL METHODS

From August 26 through September 13, 2002, 95 sediment and three kiln brick samples were collected from the Parcel E shoreline, along with accompanying QC samples. Field QA/QC consisted of collecting equipment rinsate blanks, trip blanks, and source blanks, in accordance with the SDGI SAP for the Parcel E shoreline (Tetra Tech 2002). The chemical analytical program included the following analyses and methods:

- Volatile organic compounds (VOC) using EPA Methods 8260 and 5035 (EPA 1996)
- Semivolatile organic compounds (SVOC) using EPA Method 8270 (EPA 1996)
- Organochlorine pesticides and polychlorinated biphenyls (PCB) using EPA Methods 8081/8082 (EPA 1996)
- PCB congeners using the National Oceanic and Atmospheric Administration (1993) method (Applied Physics and Chemistry Laboratory [APCL] standard operating procedure [SOP] [APCL 2001])
- Organotins using gas chromatography and flame photometric detection (APCL 1997)
- Dioxins and furans using EPA Method 8290 (EPA 1996)
- Total petroleum hydrocarbons (TPH) as purgeables (TPH-p) using the State of California's "Leaking Underground Fuel Tank [LUFT] Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure" (State of California 1989) and EPA Methods 8015A and 5035 (EPA 1996)
- TPH as extractables (TPH-e) using the State of California's "LUFT Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure" (State of California 1989) and EPA Method 8015A (EPA 1996)
- Total metals using EPA Method 6010/7000 (EPA 1996)
- Hexavalent chromium using EPA Method 7196A (EPA 1996)

Samples were submitted to the laboratories below for the analyses indicated.

- Curtis and Tompkins Ltd. (C&T), in Berkeley, California, analyzed samples for VOCs, SVOCs, pesticides, PCBs, TPH, metals, and hexavalent chromium.
- APCL in Chino, California, analyzed samples for organotins and PCB congeners.
- Southwest Laboratories, Inc., in Broken Arrow, Oklahoma, analyzed samples for dioxins and furans.

Systematic shoreline sediment samples were split and initially analyzed using X-ray fluorescence for copper and lead and immunoassay test kits for PCBs (Tetra Tech 2002). Homogenized sediment samples were split as follows: one filled sample container was prepared for shipment to

the Space and Naval Warfare laboratory for PCB screening using immunoassay test kits, and one container was sent to C&T. C&T split the sample into two similar volumes: one sample was dried, ground, sieved through a 60-mesh screen, and then was shipped to the Space and Naval Warfare laboratory for copper and lead screening using X-ray fluorescence; the other sample was archived. All QC samples associated with the stored sediment samples were extracted immediately and stored. The QC samples were analyzed when the stored sediment samples were released for analysis.

3.1 DATA VALIDATION FOR SEDIMENT

Ninety-five sediment samples were collected and various numbers of samples were analyzed for VOCs, SVOCs, pesticides and PCBs, PCB congeners, organotins, dioxins and furans, TPH, metals, and hexavalent chromium. Data validation of these results is discussed below, followed by a discussion of other qualifiers applied to results for sediment samples.

3.1.1 VOCs in Sediment

Three types of QC samples (blanks, matrix spike [MS] and matrix spike duplicate [MSD] samples, and laboratory control samples [LCS]), internal standards, and surrogates were analyzed to monitor the data quality of the analysis for VOCs. Results were qualified as discussed below because of low surrogate recoveries, the presence of common laboratory contaminants in the blanks, and instrument calibration problems.

- Results for 1,4-dichlorobenzene and carbon disulfide were qualified as estimated in one sample because of surrogate recovery problems.
- Results for methylene chloride and acetone were qualified as nondetected in five samples because of the presence of common laboratory contaminants.
- Nondetected results for n-butylbenzene in five samples and hexachlorobutadiene in four samples were qualified as estimated because of problems with the percent difference (%D) in continuing calibration.

All QC criteria for LCS, MS/MSD, and internal standards were met. No samples were reextracted or reanalyzed, and no results were rejected.

3.1.2 SVOCs in Sediment

Three types of QC samples (blanks, MS/MSD samples, and LCSs), internal standards, and surrogates were analyzed to monitor the data quality of the analysis for SVOCs. Results were qualified as discussed below because of problems with internal standard area counts, the presence of common laboratory contaminants in blanks, instrument calibration problems, MS/MSD problems, and because sample cooler temperature and technical holding times were exceeded.

- Results for dibenzo(a,h)anthracene, di-n-octylphthalate, and indeno(1,2,3-cd)pyrene were rejected for three samples because of severe problems with the internal standard. Results for benzo(g,h,i)perylene were rejected for two samples. Finally, results for benzo(a)pyrene and benzo(k)fluoranthene were rejected for one sample.

  In addition, results for the following analytes were qualified as estimated because of problems with the internal standard area count: benzo(b)fluoranthene for 18 samples; benzo(a)pyrene and benzo(k)fluoranthene for 17 samples; benzo(g,h,i)perylene for 16 samples; and 3,3'-dichlorobenzidine, bis(2-ethylhexyl)phthalate, butylbenzyl-phthalate chrysene, dibenzo(a,h)anthracene, and pyrene for six samples. Internal standard area counts of less than 50 percent of the standard area counts for these samples may indicate a loss of instrument sensitivity.

- Results for bis(2-ethylhexyl)phthalate were qualified as nondetected in 21 samples because of the presence of common laboratory contaminants in the blanks. Results were qualified as nondetected for di-n-butylphthalate in two samples and for butylbenzylphthalate in one sample.

- Results for the following analytes were qualified as estimated because of problems with the %D for continuing calibration: 2,2'-oxybis(1-chloropropane) for 26 samples; hexachlorocyclopentadiene for 19 samples; 2,4-dinitrophenol for 17 samples; benzo(g,h,i)perylene, benzoic acid, bis(2-ethylhexyl)phthalate, indeno(1,2,3-cd)pyrene, and n-nitroso-di-n-propylamine for 13 samples; 3,3'-dichlorobenzidine, 4,6-dinitro-2-methylphenol, and pyrene for 8 samples; azobenzene and naphthalene for 7 samples; dibenzo(a,h)anthracene for 6 samples; and 2-nitroaniline, 4-nitroaniline, and carbazole for 5 samples.

- Nondetected results for pentachlorophenol were qualified as estimated in one sample because of MS/MSD accuracy problems.

- All results for SVOCs in two samples were qualified as estimated because the temperature of the sample cooler was reported at 19 °C when it was received by the laboratory and because the extraction holding time of 7 days was exceeded by 1 day.

Recoveries of all LCSs met the acceptance criteria. No samples were reextracted or reanalyzed.

3.1.3 Pesticides and PCBs in Sediment

Pesticides and PCB were analyzed on the same sample extract. Three types of QC samples (blanks, MS/MSD samples, and LCSs) and two surrogates per sample were analyzed to monitor data quality. Results were qualified as discussed below because of low surrogate recoveries; problems with instrument calibration, MS/MSD, or compound identification; and because the cooler temperature was exceeded.

- All results for PCBs in four samples were qualified as estimated because of surrogate recovery problems.
- Results for the following analytes were qualified as estimated because of problems in the initial percent relative standard deviation and %D in the continuing calibration for pesticides: 4,4'-dichlorodiphenyldichloroethane (DDD) and 4,4'-dichlorodiphenyltrichloroethane (DDT) for 8 samples; 4,4'-dichlorodiphenyldichloroethene (DDE) for 1 sample; alpha-benzene hexachloride (BHC) for 10 samples; beta-BHC, endosulfan sulfate, and heptachlor for 4 samples; endosulfan I for 3 samples; endosulfan II, endrin aldehyde, delta-BHC, and heptachlor epoxide for 5 samples; endrin and dieldrin for 2 samples; gamma-BHC for 6 samples; and methoxychlor for 37 samples.
- Results for Aroclor-1260 in three samples and endrin in one sample were qualified as estimated because of accuracy problems in the MS/MSD analysis.
- Results for the following analytes were qualified as estimated because of problems with the %D for compound identification: 4,4'-DDD in 30 samples, 4,4'-DDE in 4 samples, and 4,4'-DDT in 3 samples; alpha-chlordane, alpha-BHC, endrin, and heptachlor for 1 sample; beta-BHC for 4 samples; gamma-BHC for 2 samples and gamma-chlordane for 9 samples; and dieldrin in 31 samples, endosulfan sulfate in 8 samples, endrin aldehyde in 5 samples, and heptachlor epoxide in 14 samples. The large %D between the results quantitated from the quantitation column and the confirmation column for these samples raises questions about whether the compounds were identified accurately.
- All results for pesticides and PCBs were qualified as estimated in two samples because the temperature of the sample cooler was 19 °C when it was received by the laboratory.

One sample for PCB analysis was reanalyzed because of low surrogate recovery. The original PCB results were considered the most usable because the reanalyzed sample exceeded the technical holding time. Recoveries of all LCS samples met the acceptance criteria. No results for pesticides or PCBs were rejected.

3.1.4 PCB Congeners in Sediment

A split of the sample was sent to the analytical laboratory for analysis of PCB congeners to evaluate whether the signature in the shoreline PCB matches the PCB signature in the offshore sediment. This split sample was sent if results from the test kit indicated that PCB concentrations at predetermined locations exceeded the modified ecological preliminary remediation goal of 1.0 milligram per kilogram. The laboratory analyzed 12 samples for PCB congeners during this sampling effort.

Three types of QC samples (blanks, MS/MSD samples, and LCSs) and surrogates were analyzed to monitor data quality. Results were either rejected or were considered estimated, as discussed below, because of severe problems with surrogate recoveries, MS/MSD precision and accuracy were exceeded, or problems in compound identification.

- Ten detected results were considered estimated and 11 nondetected results were rejected because of severe problems in the surrogate for one sample. Surrogate recoveries outside of the QC limit (less than 10 percent) demonstrated a severe analytical deficiency. Detected results may be biased low, and false nondetects may have been reported.

- The nondetected result for PCB-167 was rejected for one sample because of MS/MSD accuracy problems. In addition, the detected result for PCB-206 was qualified as estimated in one sample because of MS/MSD precision problems.

- The detected result for PCB-114 in one sample was raised to the reporting limit (RL) and was reported as nondetected because of compound identification problems. The reported result was less than one-half of the RL. The positive result reported by the laboratory for this compound was considered both qualitatively and quantitatively unacceptable.

LCS recoveries for PCB congeners were acceptable. Blank data were also acceptable. All QC criteria for calibrations were met. No samples were reextracted or reanalyzed.

3.1.5 Organotins in Sediment

Three types of QC samples (blanks, MS/MSD samples, and LCSs) and surrogates were analyzed to monitor the data quality. Results were qualified as discussed below because of surrogate and precision problems.

- The result for tributyltin for one sample was qualified as estimated because of precision problems in the MS/MSD analysis.

- All results for organotin were qualified as estimated for one sample because of surrogate recovery problems.

Recoveries of all LCS samples met the acceptance criteria. The precision of all MS/MSD analyses was acceptable with the exception of tributyltin in one batch. All calibration criteria were met. No samples were reextracted or reanalyzed, and no results were rejected.

3.1.6 Dioxins and Furans in Sediment

Three types of QC samples (blanks, MS/MSD samples, and LCSs), internal standards, and surrogates were analyzed to monitor the data quality. Results were qualified as discussed below because of internal standard percent recovery problems and elevated sample cooler temperature.

- Internal standard recovery for one sample was less than 40 percent, which caused half of all the dioxin and furan results for the sample to be qualified as estimated. Internal standard recoveries of less than 40 percent may indicate a loss of instrument sensitivity. This sample was reanalyzed. All results for dioxins and furans in the reanalyzed sample, except for 2,3,7,8-tetrachlorodibenzo furan, were considered the most usable.

- All results for dioxins and furans were qualified as estimated for one sample because the temperature of the sample cooler was 20.3 °C when it was received by the laboratory.

Recoveries of all LCSs and MS/MSD samples met the QC acceptance criteria. All calibration, internal standard, and surrogate recovery QC acceptance criteria were also met. No results were rejected.

3.1.7 TPH in Sediment

Three types of QC samples (blanks, MS/MSD samples, and LCSs) and one surrogate per sample were analyzed to monitor the data quality. Results were qualified as discussed below because of accuracy problems in the MS/MSD analysis and surrogate problems.

- The surrogate compound bromofluorobenzene was used to monitor the extraction efficiency for each sample. Of all the samples processed and analyzed for TPH-e, surrogate recoveries were outside of the QC limits for six samples. Among those six samples, the surrogate recoveries were lower than the QC limits for two samples, which indicated that the results might be biased low. The surrogate recoveries were higher than the QC limits for four samples, which indicated that the results might be biased high.

- All results for TPH-e in one sample and TPH-p in two samples were qualified as estimated because of accuracy problems in the MS/MSD analysis.

- All detected results flagged “H,” “L,” and “M” by the laboratory indicate that a fuel pattern was present; however, this pattern did not match any of the standards used for calibration.

LCS recovery and calibration QC acceptance criteria were met. Data for blank samples were acceptable. No samples were reextracted or reanalyzed, and no results were rejected.

3.1.8 Metals in Sediment

Three types of QC samples (blanks, MSs, and LCSs) were analyzed to monitor the data quality. Results were qualified as discussed below because of problems in instrument calibration, calibration and method blank, inductively coupled plasma (ICP) interference check sample (ICS), LCS, MS, sample/sample duplicate, and ICP serial dilution.

- Results for antimony in 12 samples, arsenic in 52 samples, selenium in 37 samples, silver in 13 samples, and thallium in 9 samples were qualified as estimated because of calibration problems. In addition, results for aluminum and zinc were qualified as estimated for one sample.

- Most metals were not detected in the blanks; however, results for detected metals less than 5 times the maximum blank concentration were qualified as nondetected because of calibration problems and method blank contamination. Of all the data for metals, results were considered nondetected for antimony in 37 samples, beryllium in 17 samples, molybdenum in 45 samples, potassium in 5 samples, selenium in 6 samples, silver in 7 samples, and thallium in 21 samples because of calibration problems and method blank contamination. Results for arsenic and cadmium were considered nondetected in one sample.

- Results for aluminum in 7 samples and calcium in 14 samples were qualified as estimated because ICP ICS results were outside method QC limits.

- Results for copper in 36 samples, magnesium in 16 samples, vanadium in 1 sample, and zinc in 11 samples and were qualified as estimated because of precision problems in the sample/sample duplicate analysis.

- Results for antimony were qualified as rejected in three samples because of severe problems in the MS analysis.

- Results for the following analytes were qualified as estimated because of ICP serial dilution problems: aluminum in 38 samples and nickel for 30 samples; and magnesium and lead for 14 samples. The %D between the original sample results and the serial dilution results was outside the QC limits of 10 percent for analyte concentrations greater than 50 times the instrument detection limits (IDL).

- LCS and laboratory control sample duplicate results were slightly lower the QC limits of 80 to 120 percent for several samples. Because of this problem, results for silver were qualified as estimated in 8 samples; and results for aluminum, lead, thallium, and zinc were qualified as estimated in 12 samples. Detected results may be biased low, and false nondetects may have been reported.

No samples were reextracted or reanalyzed.

3.1.9 Hexavalent Chromium in Sediment

Three types of QC samples (blanks, MSs, and LCSs) were analyzed to monitor the data quality. MS/MSD recoveries did not meet the QC acceptance limits, which resulted in rejected nondetect results for hexavalent chromium in 12 samples. Spike recoveries were below 30 percent, indicating that detected results may be biased low, and false nondetects may have been reported.

LCS recovery and calibration QC acceptance criteria were met. Blank data were acceptable. No samples were reextracted or reanalyzed.

3.1.10 Other Qualifications

All detected analytical results for organic compounds below the RL were qualified as estimated. All detected analytical results for inorganic compounds above the IDL but below the RL were also qualified as estimated. Detected results reported below the RL are considered qualitatively acceptable but quantitatively unreliable because of the uncertainty in analytical precision near the limit of detection.

3.2 KILN BRICK DATA VALIDATION

Three kiln brick samples were analyzed. Two were analyzed for SVOCs, pesticides and PCBs, metals, and hexavalent chromium and one of this pair was analyzed for dioxins and furans. One brick sample was only analyzed for dioxins and furans. Data validation of these results is discussed below, followed by a discussion of other qualifiers applied to results for the kiln brick samples.

3.2.1 SVOCs in Kiln Brick

Three types of QC samples (blanks, MS/MSD samples, and LCSs), internal standards, and surrogates were analyzed to monitor the data quality. Results for bis(2-chloroisopropyl)ether, n-nitroso-di-n-propylamine, benzoic acid, hexachlorocyclopentadiene, 2-nitroaniline, and carbazole were qualified as estimated for two samples because continuing calibration was exceeded.

Recoveries of all LCSs and MS/MSD and blank data met the QC acceptance criteria. Internal standard and surrogate recovery criteria were also met. No samples were reextracted or reanalyzed, and no results were rejected.

3.2.2 Pesticides and PCBs in Kiln Brick

The same sample extract was analyzed for pesticides and PCBs. Three types of QC samples (blanks, MS/MSD samples, and LCSs) and two surrogates per sample were analyzed to monitor the data quality. No data for PCBs were qualified. Results were qualified as discussed below because of instrument calibration and compound identification problems during the analysis of pesticides.

- Results for 4,4'-DDD, alpha-BHC, and methoxychlor were qualified as estimated for two samples because the %D for continuing calibration was exceeded.
- A result for 4,4'-DDT was qualified as estimated in one sample because of confirmation problems. In addition, it is questionable whether the second column accurately confirmed the identity of this compound because of the large %D between the results quantitated from the quantitation column and the confirmation column.

LCS, MS/MSD, surrogate recovery, and blank data met the QC acceptance criteria. Internal standard criteria were also met. No samples were reextracted or reanalyzed, and no results were rejected.

3.2.3 Dioxins and Furans in Kiln Brick

Three types of QC samples (blanks, MS/MSD samples, and LCSs), internal standards, and surrogates were analyzed to monitor the data quality. No data were qualified. LCS, MS/MSD, surrogate recovery, and internal standard QC acceptance criteria were met. Blank data were also acceptable. No samples were reextracted or reanalyzed, and no results were rejected.

3.2.4 Metals in Kiln Brick

Three types of QC samples (blanks, MS samples, and LCSs) were analyzed to monitor the data quality. Results were qualified as discussed below because of problems in instrument calibration, calibration and method blanks, precision, and accuracy.

- Results for arsenic, selenium, and thallium were qualified as estimated for two samples because calibration was exceeded.
- Results for beryllium, molybdenum, selenium, silver, and thallium were considered nondetected for one sample because of calibration and method blank contamination.
- Results for calcium, iron, manganese, nickel, and vanadium were qualified as estimated for two samples because of problems in accuracy and laboratory duplicate precision.

LCS recoveries were acceptable. No samples were reextracted or reanalyzed, and no results were rejected.

3.2.5 Hexavalent Chromium in Kiln Brick

Three types of QC samples (blank, MS, and LCS) were analyzed to monitor the data quality of the hexavalent chromium analysis. No data were qualified. No samples were reextracted or reanalyzed for hexavalent chromium analysis.

3.2.6 Other Qualifications

All detected analytical results for organic compounds below the RL were qualified as estimated. All detected analytical results for inorganic compounds above the IDL but below the RL were also qualified as estimated. Detected results below the RL are considered qualitatively acceptable but quantitatively unreliable because of the uncertainty in analytical precision near the limit of detection.

4.0 QUALITY CONTROL SAMPLES

QC samples were collected in the field and analyzed to check the precision, accuracy, and representativeness of sampling and analysis. Twenty-one field QC samples (15 equipment rinsates, 1 source blank, and 5 trip blanks) were collected in accordance with the SDGI SAP (Tetra Tech 2002).

Trace levels of arsenic, iron, mercury, potassium, sodium, and zinc were detected in six equipment rinsates. The mercury result in one sample was considered nondetected because of contamination problems in the equipment rinsate. Mercury was detected in the associated equipment rinsate at 0.10 microgram per liter.

Benzene, o-xylene, gasoline-range organics, PCB-052, PCB-105, and PCB-209 were detected at low concentrations in several field QC samples. Toluene was detected 1.8 micrograms per liter and tert-butyl methyl ether was detected at 1.2 micrograms per liter in one equipment rinsate.

Although field contamination by several metals and organic compounds appears to have occurred, the results for the investigative samples of sediment and kiln brick do not appear to have been affected. The low occurrence of results affected by blank contamination indicates that the general quality of the analytical data was not significantly compromised by blank contamination. A summary of data validation is presented in the following section.

5.0 CONCLUSIONS OF THE DATA QUALITY ASSESSMENT

The QC sample results and data validation indicate that data are generally acceptable. All samples were analyzed within all specifications of the requested methods. Although some data were qualified, a final review of the data set indicates that the data are of good overall quality. Data quality is generally consistent with existing guidelines for definitive data. Data qualified as estimated (J) or nondetected and estimated (UJ) are considered valid and usable for all purposes. Data qualified as rejected (R) are considered unusable for all purposes. The full review of 20 percent of the data shows that the total of percentage of rejected data for this project is about 0.3 percent; therefore, more than 99 percent of all of the data are suitable for site characterization and risk assessment. Considering the sampling program, QA/QC, and data validation results, PARCC characteristics of the data are generally acceptable.

All supporting documentation, including laboratory results and cursory and full validation reports, are available on request.

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APPENDIX E
QUALITY CONTROL SUMMARY REPORT

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ACRONYMS AND ABBREVIATIONS

%D	Percent difference
APCL	Applied Physics and Chemistry Ltd.
C&T	Curtis and Tompkins Ltd.
CLEAN	Comprehensive Long-Term Environmental Action Navy
DDT	Dichlorodiphenyltrichloroethane
DQO	Data quality objective
EPA	U.S. Environmental Protection Agency
FS	Feasibility study
FSP/QAPP	Field sampling plan and quality assurance project plan
GC/MS	Gas chromatography/mass spectroscopy
GPC	Gel-permeation chromatography
ICP	Inductively coupled plasma
ICS	Interference check samples
LCS	Laboratory control sample
LUFT	Leaking underground fuel tank
MDL	Method detection limit
MS	Matrix spike
MSD	Matrix spike duplicate
Navy	U.S. Department of the Navy
NOAA	National Oceanic and Atmospheric Administration
PARCC	Precision, accuracy, representativeness, completeness, and comparability
PCB	Polychlorinated biphenyl
QA	Quality assurance
QC	Quality control
QCSR	Quality control summary report
RPD	Relative percent difference
SDG	Sample delivery group
SOP	Standard operating procedure
SOW	Statement of work
SVOC	Semivolatile organic compound

Tetra Tech	Tetra Tech EM Inc.
TPH	Total petroleum hydrocarbons
TPH-e	Total petroleum hydrocarbons as extractables
TPH-p	Total petroleum hydrocarbons as purgeables
VOC	Volatile organic compound
XRF	X-ray fluorescence

1.0 INTRODUCTION

This quality control summary report (QCSR) summarizes the chemical quality control (QC) data for samples collected during the standard data gaps investigation (SDGI) between August 26, 2002, and September 13, 2002. The samples were collected along the Parcels E and E-2 shoreline, as described in the sampling and analysis plan (SAP) for the SDGI (Tetra Tech 2002). This appendix also provides a general overview of analytical data quality for this sampling event in accordance with the project data quality objectives (DQO).

The DQO process is a series of planning steps designed to ensure that the type, quantity, and quality of environmental data used in decision-making are appropriate for the intended application. DQOs for the SDGI at Parcel E were developed in accordance with U.S. Environmental Protection Agency (EPA) guidance for the DQO process (EPA 2000).

The DQOs included collection and analysis of sediment and kiln brick samples along the Parcels E and E-2 shoreline to assess whether source areas in the Parcels E and E-2 shoreline area correspond with the proposed offshore footprint for the Parcel F feasibility study (FS) (identified in the Parcel F validation study [Battelle, Entrix, Inc., and Neptune and Company 2002]). The DQOs were also developed to characterize adequately certain areas (referred to as "data gaps") along the Parcels E and E-2 shoreline for potential analytes of concern in sediment. Details of the DQOs and sampling design, including the proposed sampling locations, are presented in the SDGI SAP (Tetra Tech 2002).

This appendix consists of the following eight sections:

- Section 1.0 describes the document scope and organization.
- Section 2.0 discusses the analytical methodology.
- Section 3.0 discusses the data validation methodology.
- Section 4.0 discusses the parameters of precision, accuracy, representativeness, completeness, and comparability (PARCC), which are used to evaluate acceptability of the data during the data validation process.
- Section 5.0 presents the evaluation of the analytical and matrix performance.
- Section 6.0 summarizes the results of the cursory and full data validation and discusses the general QC issues.
- Section 7.0 presents conclusions about data acceptability for the evaluation of the Parcel E standard data gaps investigation shoreline sampling event.
- Section 8.0 lists the references used to prepare this QCSR.

Tables E-1 through E-15, which were used to prepare this appendix, are presented after Section 8.0.

2.0 ANALYTICAL METHODOLOGY

Samples were analyzed at both off-site laboratories and using field test kits. These methods are discussed in Sections 2.1 and 2.2.

2.1 LABORATORY ANALYTICAL METHODS

The Navy collected 95 sediment samples, 3 brick samples, and accompanying QC samples as appropriate for this project. Field quality assurance (QA) and QC consisted of collecting equipment rinsate blanks, trip blanks, and source blanks. In accordance with the SDGI SAP, 21 field QA/QC samples were collected for this sampling effort: 15 equipment rinsates, 1 source blank, and five trip blanks (Tetra Tech 2002).

All the biased shoreline sediment samples, three kiln brick samples, and 10 percent of the systematic shoreline sediment samples were submitted to the laboratory and analyzed for semivolatile organic compounds (SVOC), organochlorine pesticides, polychlorinated biphenyls (PCB), metals, and hexavalent chromium. Selected samples were also analyzed for volatile organic compounds (VOC), total petroleum hydrocarbons (TPH) as purgeables (TPH-p), TPH as extractables (TPH-e) (based on field observations and measurements), PCB congeners, organotins, and dioxins and furans.

The laboratory followed analytical methods specified in the SDGI SAP and the analytical services statement of work (SOW) (Tetra Tech 2002, 2000, respectively). The analytical program included the following analyses and methods:

- VOCs by EPA Methods 8260 and 5035 (EPA 1996)
- SVOCs by EPA Method 8270 (EPA 1996)
- Organochlorine pesticides and PCBs by EPA Methods 8081/8082 (EPA 1996)
- PCB congeners by the National Oceanic and Atmospheric Administration (NOAA) method (NOAA 1993) and by Applied Physics and Chemistry Laboratory (APCL) standard operating procedure (SOP) F-48 (APCL 2001)
- Organotins by gas chromatograph with flame photometric detector by APCL SOP F-41 (APCL 1997)
- Dioxins and furans by EPA Method 8290 (EPA 1996)
- TPH-p by the leaking underground fuel tank (LUFT) field manual (State of California 1989) and EPA Methods 8015A and 5035 (EPA 1996)

- TPH-e by the LUFT field manual (State of California 1989) and EPA Method 8015A (EPA 1996)
- Total metals by EPA Method 6010/7000 (EPA 1996)
- Hexavalent chromium by EPA Method 7196A (EPA 1996)

Table E-1 lists requirements for sample containers, holding times, and preservatives.

Samples collected along the Parcel E shoreline as part of the standard data gaps investigation were submitted to the following laboratories:

- Curtis & Tompkins Ltd. (C&T), in Berkeley, California, analyzed samples for VOCs, SVOCs, pesticides, PCBs, TPH, metals, and hexavalent chromium.
- APCL in Chino, California, analyzed samples for organotins and PCB congeners.
- Southwest Laboratories, Inc., in Broken Arrow, Oklahoma, analyzed samples for dioxins and furans.

The laboratories analyzed samples in batches or sample delivery groups (SDG), each of which contained between 4 and 15 samples. The laboratories provided EPA Contract Laboratory Program-like deliverable packages for all data for this project.

2.2 FIELD TEST KIT METHODS

Systematic sediment samples collected along the Parcels E and E-2 shoreline were split and initially analyzed using field test kit methods for two purposes. First, because of the elevated concentrations of copper, lead, and PCBs reported in the sediment of Parcel F, samples were analyzed to determine whether these chemicals are present in shoreline sediment at concentrations sufficient to pose a threat to offshore areas. Second, the analytical results were used to evaluate whether source areas in the Parcels E and E-2 shoreline area correspond with the proposed footprint for the offshore Parcel F FS (identified in the Parcel F validation study [Battelle, Entrix, Inc., and Neptune and Company 2002]) (Tetra Tech 2002). Samples were analyzed for copper, lead, and zinc by X-ray fluorescence (XRF) spectrometry in accordance with the procedures set forth in the SOP for XRF (Battelle 2001) and for PCBs by immunoassay techniques.

Sample containers were filled with the homogenized sediment as follows: one container was prepared for shipment to the Space and Naval Warfare laboratory for PCB screening using immunoassay test kits, and one container was sent to C&T. C&T split the sample into two similar volumes. One split was dried, ground, sieved through a 60-mesh screen, and returned to the Space and Naval Warfare laboratory in San Diego, California, to be screened for copper, lead, and zinc using XRF; the other split was archived. At specified locations, the archived split samples were released for analysis of PCB congeners to determine whether the PCB signature in

the shoreline sediment matched the PCB signature in the offshore sediment. These split samples were released for PCB congener analysis if test kit results indicated that PCBs exceed the modified ecological preliminary remediation goal of 1.0 milligram per kilogram. The results for the split samples were statistically evaluated to compare the field and laboratory results in the project report. A minimum of 10 percent of the samples analyzed using XRF and immunoassay test kits were sent as split samples to the analytical laboratory for routine analysis. All the QC samples associated with stored sediment samples were extracted immediately and stored. The QC samples were analyzed as the stored sediment samples were released for analysis.

3.0 DATA VALIDATION METHODOLOGY

Validation is the systematic process for reviewing and qualifying data against a set of criteria to ensure that the data are adequate for the intended use. The data validation process assesses the acceptability of the data by evaluating the critical indicator parameters of PARCC. The laboratory analytical data were validated according to the procedures outlined in the following documents:

- "Contract Laboratory Program National Functional Guidelines for Organic Data Review" (EPA 1999)
- "Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" (EPA 1994)
- "Comprehensive Long-Term Environmental Action Navy II [CLEAN II] Analytical Services Statement of Work" (Tetra Tech 2000)
- "CLEAN II Data Validation Statement of Work" (Tetra Tech 2001)

Data validation occurred in the following two stages: (1) a cursory review of analytical reports and QA/QC information for 80 percent of the chemical data, and (2) full review of analytical reports, QA/QC information, and associated raw data for 20 percent of the chemical data (Tetra Tech 2002). Of all samples submitted for analysis, about 23 percent were selected for full validation. Field screening data were not validated.

QA/QC criteria were reviewed in accordance with EPA guidance (EPA 1999), the SDGI SAP (Tetra Tech 2002), and the data validation guidelines (Tetra Tech 2001). The cursory review for organic and inorganic methods consisted of evaluating the following requirements, as applicable:

- Holding times
- Initial and continuing calibrations
- Field and laboratory blank results
- Laboratory control sample (LCS) spike results
- Matrix spike (MS) and matrix spike duplicate (MSD) results

- Field and laboratory matrix duplicate results
- Surrogate recoveries
- Internal standard performance
- Inductively coupled plasma (ICP) serial dilutions

In addition to QA/QC criteria described above, the following criteria were reviewed for full validation:

- Method compliance
- Instrument performance check samples
- Cleanup performance check samples
- ICP interference check samples (ICS)
- System performance
- Target analyte identification
- Tentatively identified compound identification
- Detection and quantitation limit verification
- Overall assessment of the data

Qualifiers were assigned to the results in the electronic database at each stage of the validation, in accordance with EPA guidance (EPA 1999), the SDGI SAP (Tetra Tech 2002), and the associated analytical methods. Table E-2 defines data validation qualifiers and comment codes applied to the data set. Table E-3 summarizes the data validation criteria.

The overall objective of data validation is to ensure that the quality of the chemical data set is adequate for the intended use, as defined by the SDGI SAP (Tetra Tech 2002) and in accordance with the PARCC parameters for quality assurance plans (EPA 1998a, 1998b). PARCC parameters were assessed by completing the following tasks:

- Reviewing the precision and accuracy of laboratory QC data
- Reviewing the precision and accuracy of field QC data
- Reviewing the overall analytical process, including holding time, calibration, analytical or matrix performance, and analyte identification and quantitation
- Assigning qualifiers to affected data when QA/QC criteria were not achieved
- Reviewing and summarizing implications of the frequency and severity of qualifiers in the validated data

Laboratory Data Consultants in Carlsbad, California, validated the laboratory analytical data in accordance with EPA guidance (EPA 1994, 1999), the Tetra Tech laboratory services SOW (Tetra Tech 2000), and Tetra Tech data validation guidelines (Tetra Tech 2001), using the following information provided by the laboratory:

- Raw data
- Instrument calibration information
- Instrument printouts for samples and standards
- Instrument run logs
- Bench sheets
- Standards preparation information
- QC sample results

The findings of the cursory and full validation are presented in Section 6.0.

4.0 SUMMARY OF THE EVALUATION OF PRECISION, ACCURACY, REPRESENTATIVENESS, COMPLETENESS, AND COMPARABILITY

Laboratory analytical data were evaluated for acceptable quality and quantity based on the PARCC critical indicator parameters, as discussed in the following sections.

4.1 PRECISION

Precision is a measure of the reproducibility of an experimental value without considering a true or referenced value. The primary indicators of precision were the relative percent difference (RPD) of the MS and MSD for organic analysis and the RPD between sample duplicate pairs for inorganic analysis. Table E-3 lists the acceptance criteria for organic and inorganic analyses. Additional criteria and guidance were taken from EPA validation guidance documents (EPA 1994, 1999) and the validation SOW (Tetra Tech 2001).

Of 12,644 individual analytical results, 74 (about 0.6 percent) were affected by duplicate precision results that exceeded QC limits. This low occurrence of problems in laboratory or field precision supports the validity, usability, and defensibility of the data.

4.2 ACCURACY

Accuracy is the degree to which a measurement agrees with its true value and is expressed as percent recovery. Accuracy is assessed by comparing recoveries of target compounds spiked into samples (MSs) and clean matrixes (LCSs), and the nontarget system monitoring compounds (surrogate spikes), with associated control limits. Through the process of data validation, MS, LCS, and surrogate spike recoveries were evaluated for compliance with the acceptance criteria

for accuracy listed for each analysis in Table E-3. Additional criteria and guidance were taken from EPA validation guidance documents (EPA 1994, 1999) and the validation SOW (Tetra Tech 2001).

The frequency of analysis for MS/MSD samples met the criteria of 5 percent of the samples, as specified in the SDGI SAP (Tetra Tech 2002). LCSs were analyzed as required (one LCS per analytical batch) for chemical parameters in each SDG. Surrogate spike compounds were added to each field and QC sample for organic analysis. Internal standards were added to the samples for analysis of VOCs and SVOCs and used in sample quantitation (see Section 5.1).

Of 12,644 individual analytical records generated during this sampling event, 967, or 7.6 percent, were affected by accuracy problems. The low frequency of accuracy problems supports the validity, usability, and defensibility of the data.

4.3 REPRESENTATIVENESS

Representativeness is a qualitative parameter defined by the degree the data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or a process or environmental condition. Sample results were evaluated for representativeness by examining items related to sample collection, including chain-of-custody documentation, sample labeling, collection dates, and the condition of the samples when they were received at the laboratory.

Laboratory procedures were also examined, including (1) anomalies reported by the laboratory, either when the samples were received at the laboratory or during analytical processes; (2) adherence to recommended holding times for samples before analysis; (3) calibration of laboratory instruments; (4) adherence to analytical methods; (5) quantitation limits used for samples; and (6) completeness of documentation for the data package. Any item that may have adversely affected the representativeness of the sample result is documented in the data validation reports.

All samples were analyzed within the holding times specified by the methods, except for two sediment samples for SVOCs. All sediment and brick samples were received at the laboratory at the appropriate receipt temperatures of 2 to 6 °C in the ice chest, except for two sediment samples for analysis of SVOCs, pesticides, and PCBs, and one sediment sample for dioxins and furans.

Initial and continuing instrument calibrations were performed as required by the methods. Of 12,644 individual analytical records, 493, or about 3.9 percent, were affected by calibration problems.

The sediment project-required reporting limits for this project (San Francisco Bay Regional Water Quality Control Board 1998; Long and others 1995) were met for all chemical parameters, except for 4,4'-dichlorodiphenyldichcloroethane, 4,4'-dichlorodiphenyldichloroethene, 4,4'-dichlorodiphenyltrichloroethane (DDT), dieldrin, endrin, Aroclors, and dibenzo(a)anthracene. These compounds were reported at higher quantitation limits than were

specified in the above documents. The quantitation limits achieved for all other analytes were adequate to satisfy the DQOs.

Laboratory and field blanks were analyzed to evaluate the existence and magnitude of contamination that had resulted from sample collection or laboratory activities (EPA 1994, 1999). Blanks prepared and analyzed in the laboratory consisted of calibration, method, and preparation blanks. Field blanks consisted of source blanks, equipment rinsate blanks, and trip blanks. If a problem with any blank was detected, all associated data were carefully evaluated to assess whether the sample data were affected. At a minimum, calibration and preparation blanks were analyzed once every analytical period for each instrument. Method and preparation blanks were prepared at a frequency of 1 per preparation batch per matrix or every 20 samples, whichever was greater (EPA 1994, 1999). Equipment rinsate blanks for a specified set of sample analyses were collected for this sampling event and were analyzed for the same target analytes as the samples collected. Source blanks were collected for water used for the equipment rinsate blanks. Trip blanks were shipped with each cooler that contained samples for analysis of VOCs and TPH-p.

Sample results were compared with an action level when laboratory and field blank contamination were identified. The action level was 5 times the highest concentration found in an associated laboratory or field blank except for common laboratory contaminants, which were compared with an action level of 10 times the highest level found in the associated field blank. Detected results less than the action level were considered nondetected at the level of the original result or the reporting limit, whichever was higher (EPA 1994, 1999). Data were qualified as "U1" for laboratory blank contamination and as "U2" for field blank contamination. These qualifiers indicated that the results were nondetected and reflected a quantitation limit that may have been raised because of low-level laboratory or field blank contamination.

Some organic analytes, including acetone, methylene chloride, and phthalates, were identified as common laboratory contaminants (EPA 1999). The analytes were qualified as "U4" in all samples and field blanks where the levels were less than 5 times the reporting limit for those analytes (EPA 1999), indicating that the result is considered nondetected.

Of 12,644 individual analytical records generated for this sampling event, 155 results, or about 1.2 percent of all analytical results, were affected by laboratory blank contamination. One result, or 0.01 percent of all analytical results, was affected by field blank contamination; 39 results, or about 0.3 percent of all analytical results, were affected by laboratory common blank contamination. The low occurrence of results affected by blank contamination indicates that the general quality of the analytical data was not significantly compromised by blank contamination. The sampling program met the relevant requirements for data representativeness in terms of accepted site characterization methodology and existing guidance.

4.4 COMPLETENESS

Completeness is defined as the percentage of measurements considered valid. The validity of results is evaluated through the data validation process. All sample results that were rejected and any missing analyses were considered incomplete. Data that are qualified as estimated (J) or

nondetected estimated (UJ) are considered valid and usable. Data that were qualified as rejected (R) are considered unusable for all purposes.

Completeness is measured by the number of valid sample results divided by the total number of sample results. Each analyte for each methodology was multiplied by the total number of samples analyzed to calculate the total number of sample analyses. For the SDGI of the Parcels E and E-2 shoreline, 5,444 individual analytical results were generated and 32 were rejected, resulting in 99.7 percent completeness for this sampling event.

4.5 COMPARABILITY

Comparability is a qualitative assessment of how well one data set compares with another. The important determinants of comparability include the uniformity of sampling activities, analytical procedures, data reporting, and data validation. Methodology and technical performance were consistent throughout the Parcel E shoreline sampling and analysis procedures. The use of EPA protocols, specific EPA analytical methods, and the standard process of data validation have resulted in a high degree of comparability for the data.

Elevated reporting limits were assessed during the data validation process determines whether a justifiable reason could be identified for the raised limits. Reporting limits were frequently raised because of high concentrations of target or interfering compounds. In these cases, sample volumes were diluted and analyzed, or a smaller aliquot of the original sample was analyzed. Elevated reporting limits for these samples were determined to be acceptable for evaluating the nature and extent of existing soil or sediment contamination.

5.0 ANALYTICAL AND MATRIX PERFORMANCE

In addition to data quality requirements discussed in Section 4.0, further laboratory QA/QC criteria were evaluated during the cursory and full data review. These additional criteria were primarily focused on analytical and matrix performance. Sections 5.1 and 5.2 discuss analytical and matrix performance for organic and inorganic analysis. Table E-3 lists performance criteria for organic and inorganic analysis.

5.1 ORGANIC ANALYSIS

The internal standard performance was evaluated, where applicable, for organic analysis. Internal standard performance criteria ensure that the sensitivity and response of the gas chromatography (GC) with mass spectrometry (GC/MS) instrument are stable during each analytical run. However, matrix effects frequently present unique problems in evaluating analytical performance, and these matrix effects may affect the performance of the internal standard. The internal standard solution was added to each sample and the associated calibration standard. Their internal standard results were compared to the performance criteria. Section 6.0 discusses analytical results for the internal standard for each analysis. No organic data were qualified with the general qualifier "J8," which would indicate that sample concentrations exceeded the calibration range.

The following requirements were evaluated, as applicable, as part of the full review for organic analyses: instrument performance check samples and cleanup performance check samples for florisil cartridges and gel-permeation chromatography (GPC), as applicable to analysis of VOCs, SVOCs, pesticides, and PCBs.

GC/MS instrument performance check samples were analyzed for VOC and SVOC analyses to ensure mass resolution, identification and, to some degree, sensitivity. Specifically, minimum and maximum ion abundance requirements must be met for bromofluorobenzene for analysis of VOCs and for decafluorotriphenylphosphine for analysis of SVOCs. In addition, instrument performance check samples were analyzed to ensure adequate resolution and instrument sensitivity for analysis of pesticides and PCBs by GC with an electron capture detector. Analytical requirements for target analytes and surrogates include criteria for RPD between true and actual values, chromatographic resolution, and percent breakdown for DDT and endrin (EPA 1994).

Cleanup check samples were analyzed to verify the recovery of target analytes through the cleanup process for analysis of SVOCs, pesticides, and PCBs. The GPC cleanup removes matrix interferences from sample extracts before analysis begins. These processes are checked by running a blank spike through the GPC column and calculating the percent recovery. GPC is checked weekly (EPA 1994).

In addition to performance check samples, the stability of the chromatographic baseline for each sample was evaluated. A shift was observed in the chromatographic baseline for samples analyzed for pesticides. Although the shift was not significant enough to affect accurate analyte identification, the results were qualified as estimated (J1) because they may be quantitatively uncertain. Baseline shifts may result from sample matrix interferences. Overall, about 0.01 percent of the organic data were qualified because of analytical or matrix performance problems.

5.2 INORGANIC ANALYSIS

ICP serial dilutions, and ICP ICS were evaluated for inorganic analysis. The ICP serial dilution analysis can evaluate whether matrix interference exists and whether the accuracy of the analytical data is affected. Overall, about 3.8 percent of the data were estimated (J4) because of ICP serial dilution problems. The low percentage of noncompliant serial dilution results may indicate that a characteristic of the digestate matrix is not affecting the analysis. These characteristics may include viscosity or the presence of other analytes at concentrations high enough to interfere with the detected analytes.

The ICP interference check verifies the validity of the laboratory's interelement and background correction factors. High concentrations of the elements aluminum, calcium, iron, and magnesium can affect sample results if the interelement and background correction factors have not been optimized. Incorrect correction factors may result in false positives, false negatives, or biased results. Of all analytical data for inorganic compounds, about 0.8 percent of the data were qualified as estimated (J9) because of ICS criteria violations. No data were rejected because of ICS criteria violations. No negative drift in the ICP baseline was observed in calibration blanks

associated with several samples; therefore, no samples analyzed for total metals were qualified as estimated (J1) because they may be biased low.

6.0 DATA REVIEW

The following sections discuss the findings of the data validation for each analysis. The discussion is intended to provide a general summary; specific details may be found in the data validation reports, which have been archived and are available on request. Sections 6.1 through 6.11 discuss the components of the cursory and full reviews and the results of each specific assessment. Tables E-4 through E-15 list the number of analytes qualified or rejected for each component of the data review and for each analysis.

6.1 VOLATILE ORGANIC COMPOUNDS

Five environmental sediment samples were collected in EnCore® sample containers and analyzed for VOCs. The findings of the data review for VOCs are summarized below.

- The analytical holding time requirement was met for all samples.
- All initial and continuing calibrations were performed as required. About 3 percent of the results were qualified as estimated (J7/UJ7) because of continuing calibration percent differences (%D) outside of QC limits (Table E-4).
- LCS and MS were analyzed at appropriate frequencies for all samples; all percent recoveries met QC criteria. Because of surrogate recoveries outside of QC limits, 0.6 of sediment results were qualified as estimated (J3). Table E-5 summarizes the sample results affected by requirements for accuracy.
- Internal standard compounds were added to all samples; all internal standard area counts met the QC limits.
- No results were qualified because of blank contamination with the exception of common laboratory contaminants. The common laboratory contaminants were compared with an action level of 10 times the highest level found in the associated blank. About 3 percent of the results for sediment samples were considered common laboratory contaminants (EPA 1999) and qualified as nondetected (U4) because sample concentrations were less than 5 times the blank concentrations.(Table E–6).
- About 3.3 percent of analytes detected at concentrations greater than the method detection limit (MDL) but less than the reporting limits were qualified as estimated (J) (Table E-7).

No data for VOCs were rejected during data review.

6.2 SEMIVOLATILE ORGANIC COMPOUNDS

Seventy-nine environmental sediment and 2 environmental kiln brick samples were analyzed for SVOCs. The findings of the data review for SVOCs are summarized below.

- About 2.5 percent of results for the sediment samples were qualified as estimated (J5/UJ5) because the holding times were exceeded and the temperature of the cooler temperature was reported at 19°C when it was received by the laboratory. No SVOC data were rejected because of holding time violations. Table E-8 summarizes the data qualified because holding time and temperature were exceeded.

- Initial and continuing calibrations were performed as required. Because some of continuing calibration %D exceeded the criteria, about 3.5 percent of sediment results and about 8.8 percent of kiln brick results were qualified as estimated (J7/UJ7) (Table E-4).

- LCS and MS were analyzed at appropriate frequencies for all samples. All LCS percent recoveries met QC criteria. All surrogate compound recoveries were acceptable. About 0.02 percent of results for sediment samples were qualified as estimated (J3/UJ3) because MS/MSD recoveries were outside QC limits. Specific details on the compounds affected by problems with accuracy are provided in Table E-5.

- Internal standard compounds were added to all samples; about 2.8 percent of results for sediment samples were qualified as estimated (J0/UJ0), and 0.2 percent of results were rejected (R0) because internal standard area counts were outside of QC limits (Table E-9).

- No sample results were qualified because of blank contamination except for common laboratory contaminants. Less than 0.5 percent of sediment results were qualified as nondetected because of common laboratory contamination (U4) (Table E-6).

- About 2 percent of results for SVOCs detected at concentrations between the MDL and the reporting limits were qualified as estimated (J) (Table E-7).

6.3 ORGANOCHLORINE PESTICIDES

Seventy-nine environmental sediment and 2 environmental kiln brick samples were analyzed for organochlorine pesticides. The findings of the data review for organochlorine pesticides are presented below.

- The analytical holding time requirement was met for all samples. About 2.5 percent of results for sediment samples were qualified as estimated (J5/UJ5) because the cooler temperature was reported at 19 °C when it was received by the laboratory (Table E-8).

- Initial and continuing calibrations were performed as required. About 7 percent of sediment results and 15 percent of kiln brick results were qualified as estimated (J7/UJ7) because of calibration violations. Specific details on the compounds that were affected are provided in Table E-4.

- LCSs and MS were analyzed at appropriate frequencies for all samples. All LCS percent recoveries met QC criteria. All surrogate compound recoveries were acceptable. Because of accuracy problems in the MS/MSD analysis, 0.06 percent of results were qualified as estimated (J3/UJ3) (Table E-5).

- Pesticides were positively identified when a peak fell within the specified retention time "windows" on two dissimilar columns. Single-peak results were checked for quantitative agreement between the two columns by generating a %D value for detected results. Detected results with %D greater than 50 percent and less than 100 percent were qualified as estimated (J9). Because of matrix effects, results with %Ds greater than 100 percent were considered misidentified and were qualified as nondetected (UJ9) (Tetra Tech 2001). Overall, about 7 percent of data for sediment and 2.5 percent of data for kiln brick were qualified as estimated (J9/UJ9) because of problems in analyte identification (Table E-10). No data were rejected because of problems in analyte identification.

- About 0.8 percent of results for sediment were qualified as estimated (J). The organochlorine pesticides were detected at concentrations greater than the MDL but less than the reporting limits (Table E-7).

6.4 POLYCHLORINATED BIPHENYLS

Seventy-nine environmental sediment samples and 2 environmental brick samples were analyzed for PCBs. The findings of the data review for PCBs are summarized below.

- The holding time requirements were met for all samples. Because of the cooler temperature reported at 19 °C on receipt by the laboratory, about 2.5 percent of sediment results were qualified as estimated (J5/UJ5). Table E-8 presents the data qualified because temperature requirements were exceeded.

- Initial calibrations were performed as required and met QC criteria. Continuing calibrations were performed as required and met QC criteria.

- LCSs and MS were analyzed at appropriate frequencies for all samples, and percent recoveries met QC criteria. Because of accuracy problems in the MS/MSD and surrogate analysis, about 7 percent of results for sediment were qualified as estimated (J3/UJ3). Details are provided in Table E-5.

- No PCB results were qualified as estimated because of blank contamination. No data were qualified because of problems in analyte identification.

- About 0.2 percent of results for sediment detected at concentrations between the MDL and the reporting limits were qualified as estimated (J). Table E-7 summarizes data qualified as estimated because results were reported below the reporting limits.

6.5 POLYCHLORINATED BIPHENYL CONGENERS

Twelve environmental sediment samples were analyzed for PCB congeners. The findings of the data review for PCB congeners are summarized below.

- The holding time requirements were met for all samples.

- Initial and continuing calibrations were performed as required and met QC criteria.

- LCSs and MS analyses were performed at appropriate frequencies for all samples, and percent recoveries met QC criteria. Because of accuracy problems in the MS/MSD and surrogate analysis, about 3 percent of sediment results were qualified as estimated (J3/UJ3), and about 3.6 percent of sediment results were qualified as rejected (R2). Specific details on the compounds that were affected are provided in Table E–5.

- Internal standard compounds were added to all samples; all area counts met QC limits.

- Sample and sample duplicate RPDs were used to evaluate the laboratory's analytical precision within the SDG. Data affected by problems in precision were qualified as estimated (J2) and are summarized in Table E-11. Overall, 0.3 percent of sediment data were qualified as estimated because of precision violations. No data were rejected because of precision violations.

- No PCB congener results were qualified as estimated because of blank contamination.

- About 0.3 percent of sediment data were qualified as estimated (J9/UJ9) because of compound identification problems. No data were rejected because of analyte identification problems. Table E-10 summarizes data qualified because of analyte identification problems.

- Analytes detected at concentrations greater than the MDL but less than the reporting limits were qualified as estimated (J). About 4.5 percent of sediment results were qualified as estimated because detected results were reported below the reporting limits (Table E-7).

6.6 ORGANOTINS

Five environmental sediment samples were analyzed for organotins. The findings of the data review for organotins are summarized below.

- The holding time requirements of 14 days to extraction, 7 days to derivitization, and 2 days to analysis were met for all samples.
- Initial and continuing calibrations were performed as required and met QC criteria.
- LCSs and MS were analyzed at appropriate frequencies for all samples, and percent recoveries met QC criteria. Twenty percent of results for sediment were qualified as estimated (J3) because of surrogate spike recoveries (Table E-5).
- Because of precision problems in the MS/MSD, 5 percent of sediment data were qualified as estimated (J2) and is summarized in Table E-11.
- No results for organotins were qualified as estimated because of blank contamination.
- Fifteen percent of results for sediment detected at concentrations greater than the MDL but less than the reporting limit were qualified as estimated (J) and are presented in Table E-7.

6.7 DIOXINS AND FURANS

Three environmental sediment and two environmental kiln brick samples were analyzed for dioxins and furans. The findings of the data review for dioxins and furans are summarized below.

- The holding time requirements were met for all samples. Thirty-two percent of results for dioxins and furans in sediments were qualified as estimated (J5/UJ5) because the temperature of the shipment container was reported as 20.3 °C when it was received by the laboratory. Table E-8 presents the data qualified because temperature requirements were exceeded.
- Initial and continuing calibrations were performed as required and met QC criteria.
- LCSs and MS analyses were performed at appropriate frequencies for all samples, and percent recoveries met QC criteria. All surrogate compound recoveries were acceptable.
- Internal standard compounds were added to all samples, and recoveries of these compounds met acceptance limits, with the following exceptions: about 23 percent of dioxins and furans results for sediments were qualified as estimated (J0/UJ0) because of poor internal standard recoveries (Table E-9).

- No dioxins and furans were detected at concentrations greater than the MDL but less than the reporting limits.

6.8 TOTAL PETROLEUM HYDROCARBONS AS EXTRACTABLES

Thirty-eight environmental sediment samples were analyzed for TPH-e. The findings of the data review for TPH-e are summarized below.

- The holding time requirements were met for all samples.
- Initial and continuing calibrations were performed as required and met QC criteria.
- LCSs and MS were analyzed at appropriate frequencies for all samples, and percent recoveries met QC criteria. About 2.6 percent of TPH-e results in sediment were qualified as estimated (J3/UJ3) because of accuracy problems in the MS/MSD and surrogate analysis. Table E-5 summarizes the sample results affected by accuracy exceedances.
- No TPH-e results were qualified as estimated because of blank contamination.
- No TPH-e results were detected at concentrations greater than the MDL but less than the reporting limits.
- TPH-e was positively identified when a response was recorded in the appropriate retention time window for the analysis. A more definitive fingerprinting of the chromatographic peak for the type of petroleum product was also used. TPH identification qualifiers and their descriptions are listed in Table E-2.

6.9 TOTAL PETROLEUM HYDROCARBONS AS PURGEABLES

Thirty-seven environmental sediment samples were analyzed for TPH-p. The findings of the data review for TPH-p are summarized below.

- The holding time requirements were met for all samples.
- Initial and continuing calibrations were performed as required and met QC criteria.
- LCSs and MS were analyzed at appropriate frequencies for all samples, and percent recoveries met QC criteria. About 22 percent of results for sediment were qualified as estimated (J3/UJ3) because of accuracy problems in the MS/MSD analysis. Details are provided in Table E–5.
- No TPH-p results were qualified as estimated because of blank contamination.

- TPH-p results detected at concentrations greater than the MDL but less than the reporting limits were qualified as estimated (J) and are presented in Table E-7. Overall, 2.7 percent of results for sediment were qualified as estimated because detected results were below the reporting limits.

- TPH-p was positively identified when a response was recorded in the appropriate retention time window for the particular analysis. A more definitive fingerprinting of the chromatographic peak for the type of petroleum product was also used. TPH identification qualifiers and their descriptions are listed in Table E-2.

6.10 TOTAL METALS

Seventy-nine environmental sediment and 2 environmental kiln brick samples were analyzed for total metals. The findings of the data review for total metals are summarized below.

- The holding time requirements were met for target analyte list metals.

- Initial and continuing calibrations were performed as required and most of them met QC criteria. Overall, about 6.6 percent of results for sediment and 12.5 percent of results for kiln brick results were qualified as estimated (J7/UJ7) because of calibration criteria violations (Table E-4).

- LCSs were performed at appropriate frequencies for all samples, and all percent recoveries met QC criteria for brick samples. Because of low recoveries, 10 percent of silver and 15 percent of aluminum, lead, thallium, and zinc results were qualified as estimated (J3). Overall, about 45 percent of results for sediment brick results were qualified as estimated (J3) because LCSs and MS percent recoveries were outside of QC limits , and 21 percent of results for kiln brick results were qualified as estimated (J3) because MS percent recoveries were outside of QC limits (Table E-5). Aluminum, antimony, barium, cadmium, chromium, cobalt, nickel, selenium, and thallium were most affected. Three results for antimony were rejected because of low MS recoveries.

- Of all the data for metals, about 3.4 percent of the results for sediment were qualified as estimated (J2) because of sample/sample duplicate precision violations (Table E-11). The metals affected included copper, magnesium, vanadium, and zinc.

- Data that were qualified based on laboratory and field blank contamination are presented in Tables E-12 and E-13. Of all data for metals, about 7.4 percent of sediment results and 10.4 percent of kiln brick results were qualified as nondetected because of laboratory blank contamination (U1); 0.05 percent of sediment data were qualified as nondetected because of field blank contamination (U2).

- ICP serial dilutions and spectral interference check analyses were performed at the required frequencies. Overall, about 5 percent of the data were estimated (J4) because of ICP serial dilution problems (Table E-14). Of all the data for metals, about 1 percent of the results for sediment were qualified as estimated because of ICS criteria violations. Data affected by these criteria were flagged as estimated (J9) and are presented in Table E-15.

- The results detected between the instrument detection limit and the reporting limits were flagged (B) by the laboratory to indicate that the results are quantitatively unreliable. These results were subsequently qualified in data validation as (J), indicating that they are estimated because of uncertainty in analytical precision near the limit of detection. Inorganic results reported below the reporting limits and qualified as estimated (J) are listed in Table E-7. About 1.5 percent of results for sediment and 4.2 percent of results for kiln brick were qualified as estimated (J).

6.11 HEXAVALENT CHROMIUM

Sixty-three environmental sediment samples and two environmental kiln brick samples were analyzed for hexavalent chromium. The findings of the data review for hexavalent chromium are summarized below.

- The holding time requirements were met for all samples.

- Initial and continuing calibrations were performed as required and met QC criteria.

- LCSs were analyzed at appropriate frequencies for all samples, and percent recoveries met QC criteria. About 21 percent of nondetected results for sediment samples were rejected (R2) because of low MS/MSD recoveries (Table E-5). Spike recoveries were below 30 percent, indicating that detected results may be biased low and that false nondetects may have been reported. The evidence suggests that the soil matrix may not support the analysis of hexavalent chromium because hexavalent chromium was not detected in these samples and MS/MSD recoveries were 0 percent for the associated MS (and LCS recoveries were acceptable).

- All sample/sample duplicate RPDs met QC criteria.

- No results for hexavalent chromium were qualified as estimated because of blank contamination. No results for hexavalent chromium were detected at concentrations greater than the MDL but less than the reporting limits.

7.0 CONCLUSION

Although some qualifiers were added to the data, a final review of the data set against EPA data quality characteristics discussed in Section 4.0 indicated that the data are of good overall quality. Analytical results from the shoreline characterization at Parcels E and E-2 under the standard data gaps investigation met project objectives for the quantity and quality of data required to support decisions based on this investigation.

Data without qualifiers and data qualified as estimated with a "UJ" or "J" qualifier are usable in support of project objectives. Because 0.3 percent of the data were rejected (R), 99.7 percent of all data are considered usable. All pertinent documentation and data are available on request, including cursory and full validation reports and the database that contains sample results.

8.0 REFERENCES

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TABLES

TABLE E-1: SAMPLE CONTAINER, HOLDING TIME, AND PRESERVATIVE REQUIREMENTS
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parameter	Method/ Reference	Sample Amount	Sample Container	Preservation	Holding Time (days)	
					Extraction	Analysis
Sediment Inorganic Analysis						
Metals (except mercury)	EPA 6010B/SW-846	2.5 grams	One 16-ounce glass jar with Teflon-lined cap	Cool 4 ± 2ºC	180	180
Hexavalent Chromium	EPA 3060A/7196A, SW-846	40 grams	One 16-ounce glass jar with Teflon-lined cap	Cool 4 ± 2ºC	30	4
Mercury	EPA 7471A/SW-846	0.2 gram	An aliquot from container for metals analysis	Cool 4 ± 2ºC	28	28
Metals – XRF (copper and lead)	EPA 6200	20 grams	An aliquot from container for metals analysis	Cool 4 ± 2ºC	180	180
Sediment Organic Analysis						
VOCs	EPA 5035/8260C, SW-846	5.0 grams	Three EnCore® samplers and one 60-milliliter glass jar	Cool 4 ± 2ºC	14	48 hours/14 days preserved
SVOCs (including PAHs)	EPA 8270C/SW-846 (with silica gel cleanup)	30 grams	An aliquot from container for metals analysis	Cool 4 ± 2ºC	14	40
Pesticides	EPA 8081A/SW-846	30 grams	An aliquot from container for metals analysis	Cool 4 ± 2ºC	14	40
PCB Congeners	NOAA Method	30 grams	One 8-ounce glass jar with Teflon-lined cap	Cool 4 ± 2ºC	14	40
Tributyltin	EPA[a]	150 grams	One 8-ounce glass jar with Teflon-lined cap	Cool 4 ± 2ºC	14/7[b]	2
Dioxins and Furans	EPA 8290/SW-846	10 grams	One 8-ounce glass jar with Teflon-lined cap	Cool 4 ± 2ºC	30	45
PCBs by Immunoassay	See SOP (Battelle 2001)	20 grams	One 8-ounce glass jar with Teflon-lined cap	Cool 4 ± 2ºC	14	40
TPH-Purgeables (gasoline-range organics)	EPA 5035/8015B Modified/SW-846	5.0 grams	Three EnCore® samplers	Cool 4 ± 2ºC	NA	48 hours/14 days preserved
TPH-Extractables (diesel- and motor oil-range organics)	EPA 8015B Modified/SW-846 (with silica gel cleanup)	30 grams	An aliquot from container for metal analysis	Cool 4 ± 2ºC	14	40

TABLE E-1: SAMPLE CONTAINER, HOLDING TIME, AND PRESERVATIVE REQUIREMENTS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parameter	Method/ Reference	Sample Amount	Sample Container	Preservation	Holding Time (days)	
					Extraction	Analysis
Equipment Rinsates and Trip and Source Blanks						
Metals (except mercury)	EPA 6010B/SW-846	100 milliliters	500-milliliter polyethylene jar or bottle	HNO_3 to pH <2.0; Cool 4 ± 2ºC	6 months	NA
Mercury	EPA 7470A/SW-846	100 milliliters	An aliquot from the container for metals analysis	HNO_3, to pH <2.0; Cool 4 ± 2ºC	28	NA
Pesticides	EPA 8081A/SW-846	1 liter	Two 1-liter amber glass jars	Cool 4 ± 2ºC	7	40
PCBs	EPA 8082/SW-846	1 liter	Two 1-liter amber glass jars	Cool 4 ± 2ºC	7	40
SVOCs (including PAHs)	EPA 3520B/8270C, SW-846	1 liter	Two 1-liter amber glass jars	Cool 4 ± 2ºC	14	40
TPH-Purgeables (gasoline-range organics)	EPA 8015B Modified/SW-846	5 milliliters	Two 40-milliliter glass jars	Cool 4 ± 2ºC	14	40
TPH-Extractables (diesel- and motor oil-range organics)	EPA 8015B Modified/SW-846	1 liter	One 1-liter amber glass jars	Cool 4 ± 2ºC	14	40

Notes:

a Tributyltin should be analyzed based on the guidance provided by EPA (1997), which is based on analytical procedures described by Muller (1987) and Krone and others (1989).

b "x" days/"y" days refers to days for extraction/days for derivitization.

EPA	U.S. Environmental Protection Agency	PAH	Polynuclear aromatic hydrocarbon	TPH	Total petroleum hydrocarbons
HNO_3	Nitric acid	PCB	Polychlorinated biphenyl	VOC	Volatile organic compound
NA	Not applicable	SOP	Standard operating procedure	XRF	X-ray fluorescence
NOAA	National Oceanic and Atmospheric Administration	SVOC	Semivolatile organic compound		

Source:

Battelle. 2001. "Guide for Using Rapid Sediment Characterization Methods in Ecological Risk Assessments." June 29.

Krone, C.A., D.W. Brown, D.G. Burrows, R.G. Bogar, S.L. Chan, and U. Varansai. 1989. "A Method for Analysis of Butyltin Species and the Measurement of Butyltins in Sediment and English Sole Livers from Puget Sound." *Marine Environmental Research.* Volume 27. Pages 1 to 18.

Muller, M.D. 1987. "Comprehensive Trace Level Determination of Organotin Compounds in Environmental Samples Using High Resolution Gas Chromatography with Flame Photometric Determination." *Analytical Chemistry.* Volume 59. Pages 617 to 623.

EPA. 1997. "Recommended Guidelines for Measuring Organic Compounds in Puget Sound Water, Sediment, and Tissue Samples." Puget Sound Water Quality Action Team.

TABLE E-2: DATA VALIDATION QUALIFIERS AND COMMENT CODES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Qualifier	Description
U1	Compound is nondetected because of laboratory blank contamination
U2	Compound is nondetected because of field blank contamination
U4	Compound is nondetected because of common laboratory contamination
J	Result is greater than the detection limit but less than the reporting limit ("J," only with no sub-qualifier number)
J1/UJ1/R3	Instrument performance
J2/UJ2	Matrix duplicate
J3/UJ3/R2	Accuracy – blank spike, surrogate spike, matrix spike
J4/UJ4	Serial dilution
J5/UJ5/R1	Holding time
J7/UJ7/R7	Initial and continuing calibration
J8	Exceeds calibration range
J9/UJ9	Organic compounds: percent difference (%D) between columns Inorganic compounds: interference check samples
J0/UJ0/R0	Internal standard
G, D, M, L, H, and Z	TPH identification qualifiers in accordance with the statement of work
Y	Benzo(b)fluoranthene quantitated as the total of benzo(b)- and benzo(k)fluoranthene

Notes:

D	Diesel
G	Gasoline
J	Estimated result
H	In the heavier hydrocarbon end of the analyte's range in the standard
L	In the lighter hydrocarbon end of the analyte's range in the standard
M	Motor oil
R	Rejected result
TPH	Total petroleum hydrocarbons
U	Nondetected result
Z	Pattern does not resemble TPH

Sources:

Tetra Tech EM Inc. 2001. "CLEAN II Data Validation Statement of Work." August.

TABLE E-3: DATA VALIDATION CRITERIA

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Description	
Holding Time Criteria		
VOC[a]	Soil: J5/UJ5 if HT exceeded by less than 2 times	
SVOC, Pesticides/PCBs, TPH-extractables[a,b,d]	J5 detected results and R1 nondetected results if HT exceeded by more than 2 times	
Metals[c]		
Cyanide[c]		
Hexavalent chromium		
Blank Contamination Criteria		
Calibration blank	The purpose is to evaluate analytical instruments for possible laboratory contamination.	
Method and preparation blank	The purpose is to evaluate extraction or preparation procedures for possible laboratory contamination.	
Equipment blank	The purpose is to evaluate decontamination procedures as a possible cause of field contamination.	
Trip blank	The purpose is to evaluate whether shipping the samples introduces contamination for volatile analyses.	
Source blank	The purpose is to evaluate source water used in equipment decontamination procedures for possible contamination.	
All analyses[a,c]	Positive results are reported only if the sample concentration exceeds the concentration in any associated blank by 10 times for analytes recognized as common laboratory contaminants or by 5 times for other analytes.	
Laboratory Duplicate Sample Criteria		
Organics	No criteria	
Inorganics[c]	**Soil**	**Water**
Analytes > 5 × CRDL	RPD ± 35%	RPD ± 20%
Analytes < 5 × CRDL	RPD ± 2 × CRDL	RPD ± × CRDL

TABLE E-3: DATA VALIDATION CRITERIA (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Description
Surrogate Recovery Criteria	
VOCs[a]	Soil Recovery Limits
1,2-Dichloroethane	70-121
Bromofluorobenzene	59-113
Toluene	84-138
SVOCs[a]	Soil Recovery Limits
1,2-Dichlorobenzene	20-130
2-Chlorophenol	20-130
2-Fluorobiphenyl	30-115
2-Fluorophenol	25-121
2,4,6-Tribromophenol	19-122
Nitrobenzene	23-120
Phenol	24-113
Terphenyl	18-137
Pesticides/PCBs[a]	Soil Recovery Limits
Tetrachloro-m-xylene	30-150
Decachlorobiphenyl	30-150
TPH-extractables[b,d,e]	Soil Recovery Limits
o-Terphenyl	60-140
Matrix Spike and Blank Spike Recovery Criteria	
VOCs[a]	Soil Recovery/RPD Limits
1,1-Dichloroethene	59-172/22
Benzene	66-142/21
Chlorobenzene	60-133/21
Toluene	59-139/21
Trichloroethene	62-137/24

TABLE E-3: DATA VALIDATION CRITERIA (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Description
Matrix Spike and Blank Spike Recovery Criteria (Continued)	
SVOCs[a] and PAHs[a]	Soil Recovery/RPD Limits
1,2,4-Trichlorobenzene	38-107/23
1,4-Dichlorobenzene	28-104/27
2-Chlorophenol	25-102/50
2,4-Dinitrotoluene	28-89/47
4-Chloro-3-methylphenol	26-103/33
4-Nitrophenol	11-114/50
Acenaphthene	31-137/19
N-Nitroso-di-n-propylamine	41-126/38
Pentachlorophenol	17-109/47
Phenol	26-90/35
Pyrene	35-142/36
Pesticides/PCBs[a]	Soil Recovery/RPD Limits
4,4'-DDT	23-134/50
Aldrin	34-132/43
Dieldrin	31-134/38
Endrin	42-139/45
Heptachlor	35-130/31
TPH-extractables[b,d,e]	LCS recovery limits: 60-140 MS/MSD recovery and RPD limits: 50-150/50
Inorganics[c]	LCS recovery limits: 80-120 MS recovery limits: 75-125 (does not apply if the sample concentration exceeds the spike concentration by 4 times or more)

TABLE E-3: DATA VALIDATION CRITERIA (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Description	
Calibration Criteria		
VOCs, SVOCs[a]	Initial Calibration (1) RRFs ≥ 0.05 (2) % RSD ≤ 30 Continuing Calibration (1) RRFs ≥ 0.05 (2) %D ≤ 25	
Pesticides/PCBs[a]	Initial Calibration (1) %RSDs ≤ 20 (2) Resolution ≥ 60% (3) Absolute RT are within the appropriate RT windows Continuing Calibration %D ≤ 25	
TPH-extractables[b,d,e]	Initial Calibration %RSDs ≤ 20 or correlation coefficient (r) ≥ 0.995. Continuing Calibration %Ds ≤ 15	
Inorganics[c]	Initial Calibration A blank and at least one standard must be used to establish the calibration. Correlation coefficient (r) ≥ 0.995. Initial and Continuing Calibration Verification Recovery limits are 90 to 110%, Hg: 80-120%	
Instrument Performance Criteria		
VOCs[a]	Tuning with BFB, the following ion abundances should be obtained:	
	m/z = 50	8-40% of m/z = 95
	m/z = 75	30-66% of m/z = 95
	m/z = 95	base peak, 100% relative abundance
	m/z = 96	5-9% of m/z = 95
	m/z = 173	<2% of m/z = 174
	m/z = 174	50-120% of m/z = 95

TABLE E-3: DATA VALIDATION CRITERIA (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Description	
Instrument Performance Criteria (Continued)		
VOCs[a] (Continued)	m/z = 175	4-9% of m/z = 174
	m/z = 176	93-101% of m/z = 174
	m/z = 177	5-9% of m/z = 176
SVOCs[a]	Tuning with DFTPP, the following ion abundances should be obtained:	
	m/z = 51	30-80% of m/z = 198
	m/z = 68	<2% of m/z = 69
	m/z = 70	<2% of m/z = 69
	m/z = 127	25-75%of m/z = 198
	m/z = 197	<1% of m/z = 198
	m/z = 198	base peak, 100% relative abundance
	m/z = 199	5-9% of m/z = 198
	m/z = 275	10-30% of m/z = 198
	m/z = 365	>0.75% of m/z = 198
	m/z = 441	present, but <m/z = 443
	m/z = 442	40-110% of m/z = 198
	m/z – 443	15-24% of m/z = 442
Pesticides/PCBs[a]	(1) 4,4'-DDT retention time ≥ 12 minutes	
	(2) Total percent breakdown for 4,4'-DDT and Endrin ≤ 30	
Internal Standards Criteria		
VOCs, SVOCs[a]	(1) All sample internal standard area counts must be within - 50 to + 100 percent of the area counts in the associated calibration standard.	
	(2) All sample internal standard retention times must not vary more than + or - 30 seconds from the retention time of the associated calibration standard.	

TABLE E-3: DATA VALIDATION CRITERIA (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Description
Serial Dilution Criteria	
Inorganics[c]	Analysis of a 5-fold dilution must agree within 10 percent with the analysis of the undiluted sample for all analytes whose concentrations in the undiluted sample are greater than 50 times the IDL.
ICP Interference Check Sample Criteria	
Inorganics[c]	(1) Recoveries for the analytes present in solution AB must be within 80-120%. (2) Analytes not present in solution A should be observed with an absolute value ≤ the IDL.

Notes:

a Criteria from EPA's "Contract Laboratory Program National Functional Guidelines for Organic Data Review" (EPA 1999).

b Criteria from EPA's "Test Methods for Evaluating Solid Waste, Third Edition SW-846" (EPA 1996).

c Criteria from EPA's "Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" (EPA 1994)

d Criteria from State of California's "Leaking Underground Fuel Tank Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure" (State of California 1989)

e Criteria from Tetra Tech EM Inc.'s "CLEAN II Data Validation Statement of Work" (Tetra Tech EM Inc. 2001)

%D	Percent difference	ICP	Inductively coupled plasma emission spectroscopy	R	Rejected result
%RSD	Percent relative standard deviation	IDL	Instrument detection limit	RPD	Relative percent difference
BFB	Bromofluorobenzene	J	Estimated result	RRF	Relative response factor
CRDL	Contract-required detection limit	LCS	Laboratory control sample	RT	Retention time
DDT	Dichlorodiphenyltrichloroethane	MS	Matrix spike	SVOC	Semivolatile organic compound
DFTPP	Decafluorotriphenylphosphine	MSD	Matrix spike duplicate	TPH	Total petroleum hydrocarbon
EPA	U.S. Environmental Protection Agency	m/z	Mass-to-charge ratio	U	Nondetected result
Hg	Mercury	PAH	Polynuclear aromatic hydrocarbon	VOC	Volatile organic compound
HT	Holding time	PCB	Polychlorinated biphenyl		

TABLE E-4: DATA QUALIFICATION: CALIBRATION EXCEEDANCES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J7)	Number (Percent) of Analytes Rejected (R7)
Total Metals				
Arsenic	Brick	2	2	0
Selenium	Brick	2	2	0
Thallium	Brick	2	2	0
Total	**Brick**	**48**	**6 (12.50%)**	**0 (0.00%)**
Aluminum	Sediment	79	1	0
Antimony	Sediment	79	12	0
Arsenic	Sediment	79	52	0
Selenium	Sediment	79	37	0
Silver	Sediment	79	13	0
Thallium	Sediment	79	9	0
Zinc	Sediment	79	1	0
Total	**Sediment**	**1,896**	**125 (6.59%)**	**0 (0.00%)**
Antimony	Water	15	6	0
Arsenic	Water	15	2	0
Lead	Water	15	4	0
Selenium	Water	15	3	0
Thallium	Water	15	1	0
Total	**Water**	**360**	**16 (4.44%)**	**0 (0.00%)**
Volatiles 8260				
Hexachlorobutadiene	Sediment	5	4	0
n-Butylbenzene	Sediment	5	5	0
Total	**Sediment**	**335**	**9 (2.69%)**	**0 (0.00%)**
Vinyl acetate	Water	2	2	0
Total	**Water**	**134**	**2 (1.49%)**	**0 (0.00%)**
Semivolatiles 8270				
2,2'-oxybis(1-Chloropropane)	Brick	2	2	0
2-Nitroaniline	Brick	2	2	0
Benzoic acid	Brick	2	2	0
Carbazole	Brick	2	2	0
Hexachlorocyclopentadiene	Brick	2	2	0
n-Nitroso-di-n-propylamine	Brick	2	2	0
Total	**Brick**	**136**	**12 (8.82%)**	**0 (0.00%)**
2,2'-oxybis(1-Chloropropane)	Sediment	79	26	0
2,4-Dinitrophenol	Sediment	79	17	0
2-Nitroaniline	Sediment	79	5	0
3,3'-Dichlorobenzidine	Sediment	79	8	0
4,6-dinitro-2-Methylphenol	Sediment	79	8	0
2-Nitroaniline	Sediment	79	5	0
Azobenzene	Sediment	79	7	0
Benzo(g,h,i)perylene	Sediment	79	13	0
Benzoic acid	Sediment	79	13	0
bis(2-Ethylhexyl)phthalate	Sediment	79	13	0
Carbazole	Sediment	79	5	0
Dibenz(a,h)anthracene	Sediment	79	6	0
Hexachlorobutadiene	Sediment	79	19	0
Indeno(1,2,3-cd)pyrene	Sediment	79	13	0
n-Nitroso-di-n-propylamine	Sediment	79	13	0
Naphthalene	Sediment	79	7	0
Pyrene	Sediment	79	8	0
Total	**Sediment**	**5,356**	**186 (3.47%)**	**0 (0.00%)**
3,3'-Dichlorobenzidine	Water	13	2	0
Benzoic acid	Water	13	1	0
n-Nitrosodimethylamine	Water	13	1	0
Pyrene	Water	13	1	0
Total	**Water**	**884**	**5 (0.57%)**	**0 (0.00%)**

TABLE E-4: DATA QUALIFICATION: CALIBRATION EXCEEDANCES (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J7)	Number (Percent) of Analytes Rejected (R7)
Pesticides				
4,4'-DDD	Brick	2	2	0
alpha-BHC	Brick	2	2	0
Methoxychlor	Brick	2	2	0
Total	**Brick**	**40**	**6 (15.00%)**	**0 (0.00%)**
4,4'-DDD	Sediment	79	8	0
4,4'-DDE	Sediment	79	1	0
4,4'-DDT	Sediment	79	8	0
alpha-BHC	Sediment	79	10	0
beta-BHC	Sediment	79	4	0
delta-BHC	Sediment	79	5	0
Dieldrin	Sediment	79	2	0
Endosulfan I	Sediment	79	3	0
Endosulfan II	Sediment	79	5	0
Endosulfan sulfate	Sediment	79	4	0
Endrin	Sediment	79	2	0
Endrin aldehyde	Sediment	79	5	0
gamma-BHC (Lindane)	Sediment	79	6	0
Heptachlor	Sediment	79	4	0
Heptachlor epoxide	Sediment	79	5	0
Methoxychlor	Sediment	79	37	0
Total	**Sediment**	**1,580**	**109 (6.90%)**	**0 (0.00%)**
4,4'-DDD	Water	14	1	0
4,4'-DDT	Water	14	3	0
alpha-BHC	Water	14	2	0
Dieldrin	Water	14	2	0
Endosulfan I	Water	14	1	0
Endrin	Water	14	1	0
gamma-BHC (Lindane)	Water	14	1	0
Heptachlor	Water	14	1	0
Heptachlor epoxide	Water	14	1	0
Methoxychlor	Water	14	2	0
Total	**Water**	**280**	**15 (5.36%)**	**0 (0.00%)**
PCBs				
Aroclor-1016	Water	14	1	0
Aroclor-1260	Water	14	1	0
Total	**Water**	**98**	**2 (2.04%)**	**0 (0.00%)**
Full Summary	**All**	**12644**	**493 (3.90%)**	**0 (0.00%)**

Notes:

BHC	Benzene hexachloride
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
PCB	Polychlorinated biphenyl

TABLE E-5: DATA QUALIFICATION: ACCURACY EXCEEDANCES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J3)	Number (Percent) of Analytes Rejected (R2)
Hexavalent Chromium				
Chromium VI	Sediment	63	0	13
Total	**Sediment**	**63**	**0 (0.00%)**	**13 (20.63%)**
Total Metals				
Calcium	Brick	2	2	0
Iron	Brick	2	2	0
Manganese	Brick	2	2	0
Nickel	Brick	2	2	0
Vanadium	Brick	2	2	0
Total	**Brick**	**48**	**10 (20.83%)**	**0 (0.00%)**
Aluminum	Sediment	79	77	0
Antimony	Sediment	79	60	3
Arsenic	Sediment	79	32	0
Barium	Sediment	79	47	0
Beryllium	Sediment	79	11	0
Cadmium	Sediment	79	47	0
Calcium	Sediment	79	25	0
Chromium	Sediment	79	45	0
Cobalt	Sediment	79	47	0
Lead	Sediment	79	28	0
Magnesium	Sediment	79	45	0
Maganese	Sediment	79	14	0
Mercury	Sediment	79	16	0
Molybdenum	Sediment	79	31	0
Nickel	Sediment	79	55	0
Potassium	Sediment	79	59	0
Selenium	Sediment	79	48	0
Silver	Sediment	79	31	0
Sodium	Sediment	79	43	0
Thallium	Sediment	79	61	0
Vanadium	Sediment	79	18	0
Zinc	Sediment	79	12	0
Total	**Sediment**	**1,896**	**852 (44.94%)**	**3 (0.16%)**
Aluminum	Water	15	1	0
Total	**Water**	**360**	**1 (0.28%)**	**0 (0.00%)**
Volatiles 8260				
1,4-Dichlorobenzene	Sediment	5	1	0
Carbon disulfide	Sediment	5	1	0
Total	**Sediment**	**335**	**2 (0.60%)**	**0 (0.00%)**
Semivolatiles 8270				
Pentachlorophenol	Sediment	79	1	0
Total	**Sediment**	**5,356**	**1 (0.02%)**	**0 (0.00%)**
2,4-Dinitrotoluene	Water	13	2	0
4-Chloro-3-methylphenol	Water	13	2	0
4-Nitrophenol	Water	13	2	0
n-Nitroso-di-n-propylamine	Water	13	2	0
Pentachlorophenol	Water	13	2	0
Total	**Water**	**884**	**10 (1.13%)**	**0 (0.00%)**
Pesticides				
Endrin	Sediment	79	1	0
Total	**Sediment**	**1,580**	**1 (0.06%)**	**0 (0.00%)**

TABLE E-5: DATA QUALIFICATION: ACCURACY EXCEEDANCES (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J3)	Number (Percent) of Analytes Rejected (R2)
PCBs				
Aroclor-1016	Sediment	78	5	0
Aroclor-1221	Sediment	79	5	0
Aroclor-1232	Sediment	79	5	0
Aroclor-1242	Sediment	79	5	0
Aroclor-1248	Sediment	79	5	0
Aroclor-1254	Sediment	79	5	0
Aroclor-1260	Sediment	78	8	0
Total	**Sediment**	**551**	**38 (6.90%)**	**0 (0.00%)**
PCB-008	Sediment	12	0	1
PCB-018	Sediment	12	1	0
PCB-028	Sediment	12	0	1
PCB-044	Sediment	12	1	0
PCB-066	Sediment	12	0	1
PCB-077	Sediment	12	0	1
PCB-081	Sediment	12	0	1
PCB-105	Sediment	12	0	1
PCB-114	Sediment	12	1	0
PCB-118	Sediment	12	1	0
PCB-123	Sediment	12	0	1
PCB-126	Sediment	12	1	0
PCB-128	Sediment	12	1	0
PCB-156	Sediment	12	0	1
PCB-157	Sediment	12	0	1
PCB-167	Sediment	12	0	2
PCB-169	Sediment	12	0	1
PCB-189	Sediment	12	1	0
PCB-195	Sediment	12	1	0
PCB-206	Sediment	12	1	0
PCB-209	Sediment	12	1	0
Total	**Sediment**	**336**	**10 (2.98%)**	**12 (3.57%)**
Organotins				
Dibutyltin	Sediment	5	1	0
Monobutyltin	Sediment	5	1	0
Tetrabutyltin	Sediment	5	1	0
Tributyltin	Sediment	5	1	0
Total	**Sediment**	**20**	**4 (20.00%)**	**0 (0.00%)**
TPH-Extractables				
Diesel-Range Organics	Sediment	38	1	0
Motor Oil-Range Organics	Sediment	38	1	0
Total	**Sediment**	**76**	**2 (2.63%)**	**0 (0.00%)**
TPH-Purgeables				
Gasoline-Range Organics	Sediment	37	8	0
Total	**Sediment**	**37**	**8 (21.62%)**	**0 (0.00%)**
Full Summary	**All**	**12644**	**939 (7.43%)**	**28 (0.22%)**

Notes:

PCB Polychlorinated biphenyl

TPH Total petroleum hydrocarbon

TABLE E-6: DATA QUALIFICATION: COMMON LABORATORY CONTAMINATION

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Reported (U4)
Volatiles 8260			
Acetone	Sediment	5	5
Methylene chloride	Sediment	5	5
Total	**Sediment**	**335**	**10 (2.99%)**
2-Butanone	Water	2	1
Acetone	Water	2	2
Methylene chloride	Water	2	1
Total	**Water**	**134**	**4 (2.99%)**
Semivolatiles 8270			
bis(2-Ethylhexyl)phthalate	Sediment	79	21
Butylbenzylphthalate	Sediment	79	1
di-n-Butylphthalate	Sediment	79	1
di-n-Octylphthalate	Sediment	79	1
Total	**Sediment**	**5,356**	**24 (0.45%)**
bis(2-Ethylhexyl)phthalate	Water	13	1
Total	**Water**	**884**	**1 (0.11%)**
Full Summary	**All**	**12644**	**39 (0.31%)**

TABLE E-7: DATA QUALIFICATION: RESULTS REPORTED BELOW THE REPORTING LIMIT

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J)
Total Metals			
Cadmium	Brick	2	1
Cobalt	Brick	2	1
Total	**Brick**	**48**	**2 (4.17%)**
Antimony	Sediment	79	4
Beryllium	Sediment	79	14
Silver	Sediment	79	11
Total	**Sediment**	**1,896**	**29 (1.53%)**
Arsenic	Water	15	1
Iron	Water	15	1
Mercury	Water	15	1
Potassium	Water	15	3
Sodium	Water	15	1
Zinc	Water	15	2
Total	**Water**	**360**	**9 (2.50%)**
Volatiles 8260			
1,2-Dichlorobenzene	Sediment	5	1
1,3-Dichlorobenzene	Sediment	5	2
1,4-Dichlorobenzene	Sediment	5	2
4-Methyl-2-pentanone	Sediment	5	2
Benezene	Sediment	5	1
Chloroethane	Sediment	5	1
Tert-butylbenzene	Sediment	5	1
Toluene	Sediment	5	1
Total	**Sediment**	**335**	**11 (3.28%)**
Benzene	Water	2	1
O-Xylene	Water	2	1
Total	**Water**	**134**	**2 (1.49%)**
Semivolatiles 8270			
2-Methylnaphthalene	Sediment	79	4
4-Nitrophenol	Sediment	79	1
Acenaphthene	Sediment	79	5
Anthracene	Sediment	79	12
Benzo(a)anthracene	Sediment	79	10
Benzo(a)pyrene	Sediment	79	4
Benzo(b)fluoranthene	Sediment	79	13
Benzo(g,h,i)perylene	Sediment	79	6
Benzo(k)fluoranthene	Sediment	79	3

TABLE E-7: DATA QUALIFICATION: RESULTS REPORTED BELOW THE REPORTING LIMIT (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J)
Semivolatiles 8270 (Continued)			
Carbazole	Sediment	79	1
Chrysene	Sediment	79	10
Dibenz(a,h)anthracene	Sediment	79	0
Dibenzofuran	Sediment	79	1
Fluoranthene	Sediment	79	6
Fluorene	Sediment	79	2
Indeno(1,2,3-CD)pyrene	Sediment	79	6
Naphthalene	Sediment	79	3
Pentachlorophenol	Sediment	79	3
Phenanthrene	Sediment	79	19
Phenol	Sediment	79	4
Pyrene	Sediment	79	6
Total	**Sediment**	**5,356**	**119 (2.22%)**
Pesticides			
4,4'-DDD	Sediment	79	2
4,4'-DDE	Sediment	79	1
4,4'-DDT	Sediment	79	2
alpha-Chlordane	Sediment	79	2
beta-BHC	Sediment	79	1
Endosulfan I	Sediment	79	1
Endrin	Sediment	79	2
gamma-Chlordane	Sediment	79	1
Methoxychlor	Sediment	79	1
Total	**Sediment**	**1,580**	**13 (0.82%)**
PCBs			
Aroclor-1260	Sediment	78	1
Total	**Sediment**	**551**	**1 (0.18%)**
PCB-008	Sediment	12	1
PCB-018	Sediment	12	1
PCB-081	Sediment	12	2
PCB-114	Sediment	12	1
PCB-128	Sediment	12	2
PCB-169	Sediment	12	1
PCB-189	Sediment	12	6
PCB-209	Sediment	12	1
Total	**Sediment**	**336**	**15 (4.46%)**

TABLE E-7: DATA QUALIFICATION: RESULTS REPORTED BELOW THE REPORTING LIMIT (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J)
PCB-052	Water	5	1
PCB-105	Water	5	1
PCB-209	Water	5	1
Total	**Water**	**140**	**3 (2.14%)**
Organotins			
Dibutyltin	Sediment	5	1
Tributyltin	Sediment	5	2
Total	**Sediment**	**20**	**3 (15.00%)**
TPH-Purgeables			
Gasoline-Range Organics	Sediment	37	1
Total	**Sediment**	**37**	**1 (2.70%)**
Full Summary	**All**	**12,644**	**208 (1.65%)**

Notes:

BHC	Benzene hexachloride
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
PCB	Polychlorinated biphenyl
TPH	Total petroleum hydrocarbons

TABLE E-8: DATA QUALIFICATION: HOLDING TIME EXCEEDANCES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J5)	Number (Percent) of Analytes Rejected (R1)
Total Metals				
Mercury	Water	15	3	0
Total	**Water**	**360**	**3 (0.83%)**	**0 (0.00%)**
Semivolatiles 8270				
1,2,4-Trichlorobenzene	Sediment	79	2	0
1,2-Dichlorobenzene	Sediment	79	2	0
1,3-Dichlorobenzene	Sediment	79	2	0
1,4-Dichlorobenzene	Sediment	79	2	0
2,2'-oxybis(1-Chloropropane)	Sediment	79	2	0
2,4,5-Trichlorophenol	Sediment	79	2	0
2,4,6-Trichlorophenol	Sediment	79	2	0
2,4-Dichlorophenol	Sediment	79	2	0
2,4-Dimethylphenol	Sediment	79	2	0
2,4-Dinitrophenol	Sediment	79	2	0
2,4-Dinitrotoluene	Sediment	79	2	0
2,6-Dinitrotoluene	Sediment	79	2	0
2-Chloronaphthalene	Sediment	79	2	0
2-Chlorophenol	Sediment	79	2	0
2-Methylnaphthalene	Sediment	79	2	0
2-Methylphenol	Sediment	79	2	0
2-Nitroaniline	Sediment	79	2	0
2-Nitrophenol	Sediment	63	2	0
3,3'-Dichlorobenzidine	Sediment	79	2	0
3-Nitroaniline	Sediment	79	2	0
4,6-dinitro-2-Methylphenol	Sediment	79	2	0
4-Bromophenyl-phenylether	Sediment	79	2	0
4-Chloro-3-methylphenol	Sediment	79	2	0
4-Chloroaniline	Sediment	79	2	0
4-Chlorophenyl-phenylether	Sediment	79	2	0
4-Methylphenol	Sediment	79	2	0
4-Nitroaniline	Sediment	79	2	0
4-Nitrophenol	Sediment	79	2	0
Acenaphthene	Sediment	79	2	0
Acenaphthylene	Sediment	79	2	0
Anthracene	Sediment	79	2	0
Azobenzene	Sediment	79	2	0
Benzo(a)anthracene	Sediment	79	2	0
Benzo(a)pyrene	Sediment	79	2	0
Benzo(b)fluoranthene	Sediment	79	1	0
Benzo(g,h,i)perylene	Sediment	79	2	0
Benzo(k)fluoranthene	Sediment	79	2	0
Benzoic acid	Sediment	79	2	0
Benzyl alcohol	Sediment	79	2	0
bis(2-Chloroethoxy)methane	Sediment	79	2	0
bis(2-Chloroethyl)ether	Sediment	79	2	0
bis(2-Ethylhexyl)phthalate	Sediment	79	1	0
Butylbenzyphthalate	Sediment	79	2	0
Carbazole	Sediment	79	2	0
Chrysene	Sediment	79	2	0
di-n-Butylphthalate	Sediment	79	2	0
di-n-Octylphthalate	Sediment	79	2	0
Dibenz(a,h)anthracene	Sediment	79	2	0

TABLE E-8: DATA QUALIFICATION: HOLDING TIME EXCEEDANCES (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J5)	Number (Percent) of Analytes Rejected (R1)
Semivolatiles 8270 (Continued)				
Dibenzofuran	Sediment	79	2	0
Diethylphthalate	Sediment	79	2	0
Dimethylphthalate	Sediment	79	2	0
Fluoranthene	Sediment	79	1	0
Fluorene	Sediment	79	2	0
Hexachlorobenzene	Sediment	79	2	0
Hexachlorobutadiene	Sediment	79	2	0
Hexachlorocyclopentadiene	Sediment	79	2	0
Hexachloroethane	Sediment	79	2	0
Indeno(1,2,3-cd)pyrene	Sediment	79	2	0
Isophorone	Sediment	79	2	0
n-Nitroso-di-n-propylamine	Sediment	79	2	0
n-Nitrosodimethylamine	Sediment	79	2	0
n-Nitrosodiphenylamine	Sediment	79	2	0
Naphthalene	Sediment	79	1	0
Nitrobenzene	Sediment	79	2	0
Pentachlorophenol	Sediment	79	2	0
Phenathrene	Sediment	79	1	0
Phenol	Sediment	79	2	0
Pyrene	Sediment	79	1	0
Total	**Sediment**	**5,356**	**130 (2.43%)**	**0 (0.00%)**
1,2,4-Trichlorobenzene	Water	13	2	0
1,2-Dichlorobenzene	Water	13	2	0
1,3-Dichlorobenzene	Water	13	2	0
1,4-Dichlorobenzene	Water	13	2	0
2,2'-oxybis(1-Chloropropane)	Water	13	2	0
2,4,5-Trichlorophenol	Water	13	2	0
2,4,6-Trichlorophenol	Water	13	2	0
2,4-Dichlorophenol	Water	13	2	0
2,4-Dimethylphenol	Water	13	2	0
2,4-Dinitrophenol	Water	13	2	0
2,4-Dinitrotoluene	Water	13	2	0
2,6-Dinitrotoluene	Water	13	2	0
2-Chloronaphthalene	Water	13	2	0
2-Chlorophenol	Water	13	2	0
2-Methylnaphthalene	Water	13	2	0
2-Methylphenol	Water	13	2	0
2-Nitroaniline	Water	13	2	0
2-Nitrophenol	Water	13	2	0
3,3'-Dichlorobenzidine	Water	13	1	0
3-Nitroaniline	Water	13	2	0
4,6-dinitro-2-Methylphenol	Water	13	2	0
4-Bromophenyl-phenylether	Water	13	2	0
4-Chloro-3-methylphenol	Water	13	2	0
4-Chloroaniline	Water	13	2	0
4-Chlorophenyl-phenylether	Water	13	2	0
4-Methylphenol	Water	13	2	0
4-Nitroaniline	Water	13	2	0
4-Nitrophenol	Water	13	2	0
Acenaphthene	Water	13	2	0
Acenaphthylene	Water	13	2	0
Anthracene	Water	13	2	0

TABLE E-8: DATA QUALIFICATION: HOLDING TIME EXCEEDANCES (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J5)	Number (Percent) of Analytes Rejected (R1)
Semivolatiles 8270 (Continued)				
Azobenzene	Water	13	2	0
Benzo(a)anthracene	Water	13	2	0
Benzo(a)pyrene	Water	13	2	0
Benzo(b)fluoranthene	Water	13	2	0
Benzo(g,h,i)perylene	Water	13	2	0
Benzo(k)fluoranthene	Water	13	2	0
Benzoic acid	Water	13	2	0
Benzyl alcohol	Water	13	2	0
bis(2-Chloroethoxy)methane	Water	13	2	0
bis(2-Chloroethyl)ether	Water	13	2	0
bis(2-Ethylhexyl)phthalate	Water	13	2	0
Butylbenzylphthalate	Water	13	2	0
Carbazole	Water	13	2	0
Chrysene	Water	13	2	0
di-n-Butylphthalate	Water	13	2	0
di-n-Octylphthalate	Water	13	2	0
Dibenz(a,h)anthracene	Water	13	2	0
Dibenzofuran	Water	13	2	0
Diethylphthalate	Water	13	2	0
Dimethylphthalate	Water	13	2	0
Fluoranthene	Water	13	2	0
Fluorene	Water	13	2	0
Hexachlorobenzene	Water	13	2	0
Hexachlorobutadiene	Water	13	2	0
Hexachlorocyclopentadiene	Water	13	2	0
Hexachloroethane	Water	13	2	0
Indeno(1,2,3-cd)pyrene	Water	13	2	0
Isophorone	Water	13	2	0
n-Nitroso-di-n-propylamine	Water	13	2	0
n-Nitrosodimethylamine	Water	13	2	0
n-Nitrosodiphenylamine	Water	13	2	0
Naphthalene	Water	13	2	0
Nitrobenzene	Water	13	2	0
Pentachlorophenol	Water	13	2	0
Phenathrene	Water	13	2	0
Phenol	Water	13	2	0
Pyrene	Water	13	2	0
Total	**Water**	**884**	**135 (15.27%)**	**0 (0.00%)**
Pesticides				
4,4'-DDD	Sediment	79	2	0
4,4'-DDE	Sediment	79	2	0
4,4'-DDT	Sediment	79	2	0
Aldrin	Sediment	79	2	0
alpha-BHC	Sediment	79	2	0
alpha-Chlordane	Sediment	79	2	0
beta-BHC	Sediment	79	2	0
delta-BHC	Sediment	79	2	0
Dieldrin	Sediment	79	2	0
Endosulfan I	Sediment	79	2	0
Endosulfan II	Sediment	79	2	0
Endosulfan sulfate	Sediment	79	2	0
Endrin	Sediment	79	2	0

TABLE E-8: DATA QUALIFICATION: HOLDING TIME EXCEEDANCES (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J5)	Number (Percent) of Analytes Rejected (R1)
Pesticides (Continued)				
Endrin aldehyde	Sediment	79	2	0
gamma-BHC (Lindane)	Sediment	79	2	0
gamma-Chlordane	Sediment	79	2	0
Heptachlore	Sediment	79	2	0
Heptachlore epoxide	Sediment	79	2	0
Methoxychlor	Sediment	79	2	0
Toxaphene	Sediment	79	2	0
Total	**Sediment**	**1,580**	**40 (2.53%)**	**0 (0.00%)**
4,4'-DDD	Water	14	1	0
4,4'-DDE	Water	14	1	0
4,4'-DDT	Water	14	1	0
Aldrin	Water	14	1	0
alpha-BHC	Water	14	1	0
alpha-Chlordane	Water	14	1	0
beta-BHC	Water	14	1	0
delta-BHC	Water	14	1	0
Dieldrin	Water	14	1	0
Endosulfan I	Water	14	1	0
Endosulfan II	Water	14	1	0
Endosulfan sulfate	Water	14	1	0
Endrin	Water	14	1	0
Endrin aldehyde	Water	14	1	0
gamma-BHC (Lindane)	Water	14	1	0
gamma-Chlordane	Water	14	1	0
Heptachlore	Water	14	1	0
Heptachlore epoxide	Water	14	1	0
Methoxychlor	Water	14	1	0
Toxaphene	Water	14	1	0
Total	**Water**	**280**	**20 (7.14%)**	**0 (0.00%)**
PCBs				
Aroclor-1016	Sediment	78	2	0
Aroclor-1221	Sediment	79	2	0
Aroclor-1232	Sediment	79	2	0
Aroclor-1242	Sediment	79	2	0
Aroclor-1248	Sediment	79	2	0
Aroclor-1254	Sediment	79	2	0
Aroclor-1260	Sediment	78	2	0
Total	Sediment	**551**	**14 (2.54%)**	**0 (0.00%)**
Aroclor-1016	Water	14	3	0
Aroclor-1221	Water	14	3	0
Aroclor-1232	Water	14	3	0
Aroclor-1242	Water	14	3	0
Aroclor-1248	Water	14	3	0
Aroclor-1254	Water	14	3	0
Aroclor-1260	Water	14	3	0
Total	**Water**	**98**	**21 (21.43%)**	**0 (0.00%)**
Dioxins				
1,2,3,4,6,7,8,9-OCDD	Sediment	3	1	0
1,2,3,4,6,7,8,9-OCDF	Sediment	3	1	0
1,2,3,4,6,7,8-HPCDD	Sediment	3	1	0
1,2,3,4,6,7,8-HPCDF	Sediment	3	1	0
1,2,3,4,7,8,9-HPCDF	Sediment	3	1	0

TABLE E-8: DATA QUALIFICATION: HOLDING TIME EXCEEDANCES (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J5)	Number (Percent) of Analytes Rejected (R1)
Dioxins (Continued)				
1,2,3,4,7,8-HXCDD	Sediment	3	1	0
1,2,3,4,7,8-HXCDF	Sediment	3	1	0
1,2,3,6,7,8-HXCDD	Sediment	3	1	0
1,2,3,6,7,8-HXCDF	Sediment	3	1	0
1,2,3,7,8,9-HXCDD	Sediment	3	1	0
1,2,3,7,8,9-HXCDF	Sediment	3	1	0
1,2,3,7,8-PECDD	Sediment	3	1	0
1,2,3,7,8-PECDF	Sediment	3	1	0
2,3,4,6,7,8-HXCDF	Sediment	3	1	0
2,3,4,7,8-PECDF	Sediment	3	1	0
2,3,7,8-TCDD	Sediment	3	1	0
Total HPCDD	Sediment	3	1	0
Total HPCDF	Sediment	3	1	0
Total HXCDD	Sediment	3	1	0
Total HXCDF	Sediment	3	1	0
Total PECDD	Sediment	3	1	0
Total PECDF	Sediment	3	1	0
Total TCDD	Sediment	3	1	0
Total TCDF	Sediment	3	1	0
Total	**Sediment**	**75**	**24 (32.00%)**	**0 (0.00%)**
Full Summary	**All**	**12,644**	**387 (3.06%)**	**0 (0.00%)**

Notes:

BHC	Benzene hexachloride
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
HPCDD	Heptachlorodibenzo-p-dioxin
HPCDF	Heptachlorodibenzofuran
HXCDD	Hexachlorodibenzo-p-dioxin
HXCDF	Hexachlorodibenzofuran
PCB	Polychlorinated biphenyl
OCDD	Octachlorodibenzo-p-dioxin
OCDF	Octachlorodibenzofuran
PECDD	Polychlorinated dibenzo-p-dioxin
PECDF	Polychlorinated dibenzofuran
TCDD	Tetrachlorodibenzo-p-dioxin
TCDF	Tetrachlorodibenzofuran

TABLE E-9: DATA QUALIFICATION: INTERNAL STANDARD EXCEEDANCES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J0)	Number (Percent) of Analytes Rejected (R0)
Semivolatiles 8270				
3,3'-Dichlorobenzidine	Sediment	79	6	0
Benzo(a)anthracene	Sediment	79	6	0
Benzo(a)pyrene	Sediment	79	17	1
Benzo(b)fluoranthene	Sediment	79	18	0
Benzo(g,h,i)perylene	Sediment	79	16	2
Benzo(k)fluoranthene	Sediment	79	17	1
Bis(2-ethylhexyl)phthalate	Sediment	79	6	0
Butylbenzyphthalate	Sediment	79	6	0
Chrysene	Sediment	79	6	0
di-n-Octylphthalate	Sediment	79	15	3
Dibenz(a,h)anthracene	Sediment	79	15	3
Indeno(1,2,3-cd)pyrene	Sediment	79	15	3
Pyrene	Sediment	79	6	0
Total	**Sediment**	**5,356**	**149 (2.78%)**	**13 (0.24%)**
Dioxins				
1,2,3,4,6,7,8,9-OCDD	Sediment	3	1	0
1,2,3,4,6,7,8,9-OCDF	Sediment	3	1	0
1,2,3,4,6,7,8-HPCDD	Sediment	3	1	0
1,2,3,4,6,7,8-HPCDF	Sediment	3	1	0
1,2,3,4,7,8,9-HPCDF	Sediment	3	1	0
1,2,3,4,7,8-HXCDF	Sediment	3	1	0
1,2,3,6,7,8-HXCDF	Sediment	3	1	0
1,2,3,7,8,9-HXCDF	Sediment	3	1	0
1,2,3,7,8-PECDF	Sediment	3	1	0
2,3,4,6,7,8-HXCDF	Sediment	3	1	0
2,3,4,7,8-PECDF	Sediment	3	1	0
2,3,7,8-TCDD	Sediment	3	1	0
Total HPCDD	Sediment	3	1	0
Total HPCDF	Sediment	3	1	0
Total HXCDF	Sediment	3	1	0
Total TCDD	Sediment	3	1	0
Total TCDF	Sediment	3	1	0
Total	**Sediment**	**75**	**17 (22.67%)**	**0 (0.00%)**
Full Summary	**All**	**12,644**	**166 (1.31%)**	**13 (0.10%)**

Notes:

HPCDD	Heptachlorodibenzo-p-dioxin
HPCDF	Heptachlorodibenzofuran
HXCDF	Hexachlorodibenzofuran
OCDD	Octachlorodibenzo-p-dioxin
OCDF	Octachlorodibenzofuran
PECDF	Polychlorinated dibenzofuran
TCDD	Tetrachlorodibenzo-p-dioxin
TCDF	Tetrachlorodibenzofuran

TABLE E-10: DATA QUALIFICATION: ORGANIC ANALYTICAL AND MATRIX PERFORMANCE EXCEEDANCES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J1)	Number (Percent) of Analytes Estimated (J8)	Number (Percent) of Analytes Estimated (J9)	Number (Percent) of Analytes Rejected (R3)
Pesticides						
4,4'-DDT	Brick	2	0	0	1	0
Total	**Brick**	**40**	**0 (0.00%)**	**0 (0.00%)**	**1 (2.50%)**	**0 (0.00%)**
4,4'-DDD	Sediment	79	0	0	4	0
4,4'-DDE	Sediment	79	0	0	3	0
4,4'-DDT	Sediment	79	0	0	30	0
alpha-BHC	Sediment	79	0	0	1	0
alpha-Chlordane	Sediment	79	0	0	1	0
beta-BHC	Sediment	79	0	0	4	0
Dieldrin	Sediment	79	0	0	31	0
Endosulfan sulfate	Sediment	79	0	0	8	0
Endrin	Sediment	79	0	0	1	0
Endrin aldehyde	Sediment	79	0	0	5	0
gamma-BHC (Lindane)	Sediment	79	0	0	2	0
gamma-Chlordane	Sediment	79	0	0	9	0
Heptachlor	Sediment	79	0	0	1	0
Heptachlor epoxide	Sediment	79	0	0	14	0
Total	**Sediment**	**1,580**	**0 (0.00%)**	**0 (0.00%)**	**114 (7.22%)**	**0 (0.00%)**
4,4'-DDT	Water	14	1	0	0	0
Total	**Water**	**280**	**1 (0.36%)**	**0 (0.00%)**	**0 (0.00%)**	**0 (0.00%)**
PCB Congeners						
PCB-114	Sediment	12	0	0	1	0
Total	**Sediment**	**336**	**0 (0.00%)**	**0 (0.00%)**	**1 (0.30%)**	**0 (0.00%)**
Full Summary	**All**	**10,242**	**1 (0.01%)**	**0 (0.00%)**	**116 (1.13%)**	**0 (0.00%)**

Notes:

BHC	Benzene hexachloride
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
PCB	Polychlorinated biphenyl

TABLE E-11: DATA QUALIFICATION: MATRIX DUPLICATE PRECISION EXCEEDANCES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Reported (J2)
Total Metals			
Copper	Sediment	79	36
Magnesium	Sediment	79	16
Vanadium	Sediment	79	1
Zinc	Sediment	79	11
Total	**Sediment**	**1,896**	**64 (3.38%)**
Semivolatiles 8270			
2-Chlorophenol	Water	13	2
Acenaphthene	Water	13	2
Phenol	Water	13	2
Pyrene	Water	13	2
Total	**Water**	**884**	**8 (0.90%)**
PCB Congeners			
PCB-206	Sediment	12	1
Total	**Sediment**	**336**	**1 (0.30%)**
Organotins			
Tributyltin	Sediment	5	1
Total	**Sediment**	**20**	**1 (5.00%)**
Full Summary	**All**	**12,644**	**74 (0.59%)**

Notes:

PCB Polychlorinated biphenyl

TABLE E-12: DATA QUALIFICATION: LABORATORY METHOD BLANK CONTAMINATION

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Reported (U1)
Total Metals			
Beryllium	Brick	2	1
Molybdenum	Brick	2	1
Selenium	Brick	2	1
Silver	Brick	2	1
Thallium	Brick	2	1
Total	**Brick**	**48**	**5 (10.42%)**
Antimony	Sediment	79	37
Arsenic	Sediment	79	1
Beryllium	Sediment	79	17
Cadmium	Sediment	79	1
Molybdenum	Sediment	79	46
Potassium	Sediment	79	5
Selenium	Sediment	79	6
Silver	Sediment	79	7
Thallium	Sediment	79	21
Total	**Sediment**	**1,896**	**141 (7.44%)**
Aluminum	Water	15	1
Iron	Water	15	1
Lead	Water	15	4
Selenium	Water	15	1
Zinc	Water	15	1
Total	**Water**	**360**	**8 (2.22%)**
TPH-Purgeables			
Gasoline-Range Organics	Water	8	1
Total	**Water**	**8**	**1 (12.50%)**
Full Summary	**All**	**12,644**	**155 (1.23%)**

Notes:

TPH Total petroleum hydrocarbons

TABLE E-13: DATA QUALIFICATION: FIELD BLANK CONTAMINATION

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Reported (U2)
Total Metals			
Mercury	Sediment	79	1
Total	**Sediment**	**1,896**	**1 (0.05%)**
Full Summary	**All**	**12,644**	**1 (0.01%)**

TABLE E-14: DATA QUALIFICATION: SERIAL DILUTION EXCEEDANCES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J4)
Total Metals			
Aluminum	Sediment	79	38
Lead	Sediment	79	14
Magnesium	Sediment	79	14
Nickel	Sediment	79	30
Total	**Sediment**	**1,896**	**96 (5.06%)**
Full Summary	**All**	**2527**	**96 (3.80%)**

TABLE E-15: DATA QUALIFICATION: INORGANIC ANALYTICAL AND MATRIX PERFORMANCE EXCEEDANCES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analysis	Matrix	Number of Analytes Reported	Number (Percent) of Analytes Estimated (J1)	Number (Percent) of Analytes Estimated (J9)	Number (Percent) of Analytes Rejected (R3)
Total Metals					
Aluminum	Sediment	79	0	7	0
Calcium	Sediment	79	0	14	0
Total	**Sediment**	**1,896**	**0 (0.00%)**	**21 (1.11%)**	**0 (0.00%)**
Full Summary	**All**	**2,527**	**0 (0.00%)**	**21 (0.83%)**	**0 (0.00%)**

APPENDIX F
EVALUATION OF DATA FOR POLYCHLORINATED BIPHENYLS AND METALS IN SEDIMENT SAMPLES COLLECTED FROM THE PARCELS E AND E-2 SHORELINE

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ACRONYMS AND ABBREVIATIONS

bgs	Below ground surface
DQO	Data quality objective
ECD	Electron capture detector
EPA	U.S. Environmental Protection Agency
ER-L	Effects range-low
ER-M	Effects range-median
GC	Gas chromatography
HPS	Hunters Point Shipyard
ICP	Inductively coupled plasma
IR	Installation Restoration
mg/kg	Milligrams per kilogram
PCB	Polychlorinated biphenyl
r	Correlation coefficient
r^2	Coefficient of determination
Tetra Tech	Tetra Tech EM Inc.
TOC	Total organic carbon
XRF	X-ray fluorescence
Water Board	San Francisco Bay Regional Water Quality Control Board

1.0 INTRODUCTION

The shoreline technical memorandum describes the objectives of the investigation for metals and polychlorinated biphenyls (PCB) in soils and sediments in Parcels E, E-2, and F at Hunters Point Shipyard (HPS) in San Francisco, California. This appendix describes the data evaluation summarized in the body of the shoreline technical memorandum. The purpose of the investigation was to collect additional data on chemicals in sediments along the Parcels E and E-2 shoreline to delineate potential source areas for PCBs and metals. These data were also evaluated for patterns in chemical composition (PCB congener fingerprints) and inter-element relationships between concentrations of metals and Aroclors that may be useful in establishing a connection between onshore sources (sediment and debris in Parcels E and E-2) and offshore sinks (sediments in Parcel F).

Data for metals and PCBs in samples collected from Parcels E, E-2, and F were evaluated to address the following study questions using the tools and techniques described in this appendix:

- Do concentrations of copper, lead, and PCBs in shoreline areas exceed ambient concentrations for San Francisco Bay sediments and therefore pose a potential source of contamination to offshore sediments?

- Do contaminated sediments in Parcel F show a distinct chemistry that can be linked to source areas within Parcels E and E-2? That is, can contaminants in offshore sediments in areas of Parcel F (Areas VIII, Eastern Wetland; Area IX, Oil Reclamation Ponds; and Area X, South Basin) be associated with potential source areas using the chemical characteristics and associations of metals and Aroclors?

- Does onshore contamination poses an unacceptable ecological risk to shoreline receptors? (Note: This question is addressed in Appendix G, Screening-Level Ecological Risk Assessment of the Parcels E and E-2 Shoreline.)

Samples of sediment and debris collected from the shoreline along Parcels E and E-2 at HPS were analyzed for total Aroclors using a combination of immunoassay field screening and laboratory analysis. Laboratory and field screening data for total Aroclors were compared against screening criteria.

Selected surface samples were also analyzed in the laboratory for PCB congeners. These data were used to create congener "fingerprints" of PCBs in onshore (Parcels E and E-2) soils and sediment that were then compared with congener fingerprints for offshore (Parcel F) sediment samples collected during the validation study for Parcel F (Battelle, Entrix, and Neptune and Company 2002). Identifying onshore sources of PCBs will aid the Navy in focusing remediation on potential source areas. Establishing a connection between onshore sources and offshore sinks may also be used to help identify (and then eliminate) pathways that connect onshore sources and offshore sinks. Areas identified as most likely to contribute to offshore contamination can then be evaluated further in a feasibility study, and an appropriate remedial alternative can be selected (for example, source removal or elimination of transport pathways). Evaluation of PCB data is discussed in Section 2.0 of this appendix.

Samples of sediment and debris collected from Parcels E and E-2 at HPS were analyzed for metals using a combination of field-screening and laboratory techniques. Field screening was conducted by x-ray fluorescence (XRF) and laboratory analysis was conducted using inductively coupled plasma (ICP) emission spectroscopy. Data from samples analyzed in the laboratory were used to check and calibrate potential biases in the field screening data. The locations for samples analyzed in the laboratory were more widely spaced (less dense coverage) than locations analyzed by XRF field screening. The goal of the field screening analysis was to provide more complete (that is, denser) coverage of the shoreline at a lower cost than fixed-laboratory analysis. Denser sampling enables identification of smaller areas of potential contamination that may be acting as sources of metals to offshore sediments (Parcel F). The field screening analysis focused on the two metals of concern: copper and lead. Data for zinc were also collected as part of the XRF analysis. Copper and lead were found at concentrations near or above effects-range median (ER-M) values in samples of offshore sediments (Battelle, Entrix, and Neptune and Company 2002). Evaluation of data for the primary metals of concern (copper and lead), as well as other metals, is discussed in Section 3.0 of this appendix.

In summary, the sampling and analysis conducted for the shoreline investigation was successful in defining both general areas and specific locations of higher concentrations for PCBs (see Section 2.0) and metals (see Section 3.0). Results of the evaluation assessing the possible connection between onshore sources and offshore sinks were less conclusive. The PCB congener patterns were consistent between onshore and offshore sediments; however, the patterns did not provide an unequivocal link between onshore sources of PCBs and PCBs in offshore sediments. Likewise for metals, no definitive connection could be made between onshore sources and offshore sinks, based on the relative proportions of metals or the results of regression analysis.

Section 4.0 provides conclusions and recommendations based on results of the data evaluation described in Sections 2.0 and 3.0. Figures, tables, and attachments presenting the data for PCBs and metals in the shoreline samples follow Section 5.0.

2.0 CHARACTERIZATION OF POLYCHLORINATED BIPHENYLS IN SHORELINE AND OFFSHORE SAMPLES

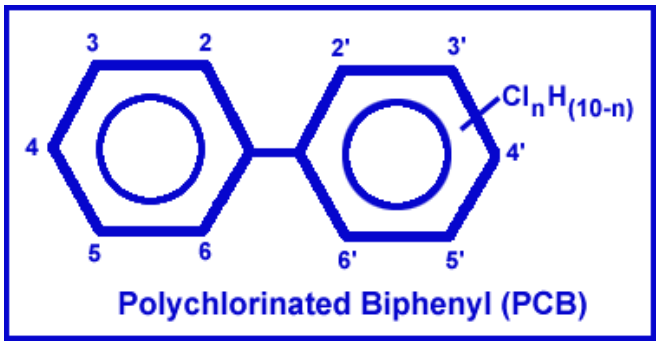
Samples of sediment collected from onshore (Parcels E and E-2) and offshore (Parcel F) of HPS were analyzed for PCBs as both Aroclor mixtures and individual congeners. The PCB congener patterns for shoreline and offshore samples were visually compared to evaluate possible relationships between potential source areas along the shoreline and contaminated sediments in offshore locations. The distribution of relative abundances of PCB congeners describes the "congener fingerprint." A similar distribution of the relative abundances of different congeners indicates that offshore contamination is possibly related to (that is, is consistent with) an onshore source of PCBs. (A dissimilar distribution of congeners would have suggested a different source; that is, a source other than the PCB contamination in Parcels E and E-2.)

The following sections provide a brief introduction to Aroclors and PCB congeners, discuss the sampling and analytical methods, and present the analytical results and the results of the evaluation of PCB congener patterns. The laboratory analytical results are presented in Table F-1. Field screening data and associated laboratory analytical results are presented in

Table F-2. Sampling locations are shown on Figures F-1 and F-2. PCB congener patterns for select samples are presented on Figures F-3 through F-9.

2.1 AROCLORS AND PCB CONGENERS

Aroclors are complex commercial mixtures that were manufactured through the progressive chlorination of batches of the chemical biphenyl (two benzene rings) until a specific target percentage of chlorine by weight was achieved. As shown in the figure to the right, each biphenyl molecule can hold a maximum of 10 chlorine atoms at the positions denoted by numbers on the rings.



The names of the Aroclors include a numerical identifier that describes the percentage of chlorine (for example, Aroclor-1254 contains 54 percent chlorine). (Note: Aroclor-1016 is an exception and contains 40 to 42 percent chlorine.) The individual components of the Aroclors are grouped into 209 distinct categories called "PCB congeners," so that each one is unique in the total number of chlorine substituents and the position of each chlorine substituent. About 50 to 75 of the 209 congeners are typically present at measurable quantities in a specific Aroclor; about 50 of the congeners are not found in any of the Aroclors. The specific makeup of PCB congeners in each Aroclor can exhibit differences by manufacturer's lot.

Higher molecular weight congeners are less mobile in the environment. Natural processes can result in dechlorination, the process that removes one or more of the chlorine atoms on the PCB molecule. Therefore, compositional changes from the original source material may result from differential partitioning (differences in solubility and adsorption), environmental degradation, differential biological uptake and metabolism, or other mechanisms.

2.2 SAMPLING AND ANALYSIS

Shoreline and offshore samples were screened for PCBs using immunoassay test kits at the Navy's Space and Naval Warfare Systems Center (SPAWAR) in San Diego. The test kits provide quick, semi-quantitative results for the calibrated Aroclor (in this case, Aroclor-1254) and one or more Aroclors of similar chlorination levels. Based on the screening results, selected samples of onshore sediment were selected for laboratory analysis of Aroclors and PCB congeners.

Laboratory analysis for Aroclor mixtures is routinely performed using U.S. Environmental Protection Agency (EPA) Method 8082, applying gas chromatography (GC) with an electron capture detector (ECD). The standard target analyte list for this method consists of the seven most common Aroclors: Aroclors-1016, -1221, -1232, -1242, -1248, -1254, and -1260. PCB congeners are typically analyzed using a dual column GC/ECD or a GC/mass spectrometer (GC/MS), using

several EPA or National Oceanic and Atmospheric Administration methods. The congeners are often reported by their "Ballschmitter & Zell numbers" for identification (for example, "PCB-153"), which are widely accepted in the scientific community. The various laboratories used in this study reported slightly different lists of congeners; therefore, only the 20 congeners (listed in Table F-1) common to both lists were used for the evaluation. (Concentrations of PCB congeners reported in samples are expected to total less than the concentrations reported for Aroclors because not all congeners are reported by typical analytical methods.)

In May 2001, surface (0 to 0.2 feet below ground surface [bgs]) sediment samples were collected from offshore Area X and nearby locations in the South Basin during the Parcel F validation study (Battelle, Entrix, and Neptune and Company 2002). Figure F-1 shows the locations where samples were collected during the data validation study. Based on the screening results from the initial assessment, 23 of the sediment samples were selected for analysis of Aroclors and PCB congeners at Battelle's laboratory in Duxbury, Massachusetts.

During August and September 2002, sediment samples were collected from the shoreline along Parcels E and E-2 adjacent to Area X during the standard data gaps investigation (Tetra Tech EM Inc. [Tetra Tech] 2002). Figure F-1 shows the locations where the sediment samples were collected during the standard data gaps investigation. The sediment samples were collected at varying depths (mostly at 0 to 0.5 and 2 to 2.5 feet bgs, and at 10 feet bgs; deeper samples were collected at a few locations only along the sheet-pile wall) along the shoreline. Selected samples from various depths were analyzed for Aroclors by Curtis &Tompkins Ltd. in Berkeley, California. Using the field screening results, a total of 12 surface samples near the Landfill Area or adjacent to the area described as the "low-volume footprint" were selected for congener analysis. Analysis of PCB congeners in these samples was conducted at Applied Physics and Chemistry Laboratory in Chino, California. The low-volume footprint refers to the areal extent of PCB-contaminated sediments in Parcel F that is delineated when specific criteria are used to define the contamination, as discussed in the Parcel F validation study (Battelle, Entrix, and Neptune and Company 2002)

2.2.1 Comparability of Immunoassay and Laboratory Data for Total Aroclors

In addition to the congener evaluation, data for total Aroclors were collected and evaluated, along with the data for metals (see Section 3.0 of this appendix). Both field screening (immunoassay) and laboratory data were collected for analysis of total Aroclors. Linear regression analysis was used to evaluate the subset of 16 samples analyzed by both immunoassay and laboratory methods. Equations that describe the best linear fit between the field screening and laboratory measurements were generated. The final regression equation showed that the results obtained using the immunoassay technique were biased low compared with the laboratory data. The correction factor based on this regression equation was used to convert field screening measurements to laboratory-equivalent concentrations before the data were plotted. However, Section 3.0 further discusses data comparability and the evaluation of corrected field data for total Aroclors; this section also discusses the spatial distribution and relationship of data for metals and Aroclors.

2.3 RESULTS OF DATA EVALUATION FOR PCB CONGENERS

Results for Aroclors and PCB congeners show that only Aroclor-1260 and Aroclor-1254, two of the three most common Aroclors (the third is Aroclor-1242), were detected in the shoreline samples. All of the results discussed below are shown in Tables F-1 and F-2. For sampling locations along the shoreline of both Parcels E and E-2, Aroclor-1260 was detected in all samples at concentrations ranging from 0.09 to 1,900 milligrams per kilogram (mg/kg). The highest concentrations were detected in samples collected from locations IR01SH036, IR01SH039, IR01SH040, and IR02SH001 at the southern corner of the Landfill Area (Parcel E-2), along the San Francisco Bay side of the sheet-pile wall. Aroclor-1254 was detected in only seven of the shoreline samples, at concentrations ranging from 0.06 mg/kg to a maximum of 13 mg/kg in one sample from location IR01SH028. Only Aroclor-1260 was detected in offshore sediment samples collected from Area X, with concentrations ranging from below detection limits to 5.4 mg/kg. The highest concentrations in offshore sediments were detected in samples collected in the eastern part of Area X, within 100 feet of the shoreline along Parcels E and E-2, from locations SB-16, SB-19, SB-20, SB-21, and SB-22 (see Figure F-1).

In contrast to data for Aroclors, data for PCB congeners can provide the lower detection limits and the detailed information necessary for risk assessment. Data for the congeners can be analyzed in statistically rigorous ways such as principal component analysis. However, the evaluation presented in this section is based on pattern recognition, which can provide a cursory level of PCB characterization. Visual analysis of congener patterns is especially useful in cases (such as this) where the patterns are relatively simple and straightforward. The congener results for the shoreline and offshore samples are presented on the graphs as relative proportions, so that widely different concentrations can be easily compared on the same graph.

Plots of the congener patterns for onshore and offshore samples were constructed and compared. Congener plots for selected shoreline and offshore samples, including two samples collected from locations SB-1 and SB-2 at the mouth of Yosemite Creek, are shown on Figures F-3 through F-9. The patterns for onshore and offshore samples generally appear similar, both in terms of the distribution of congeners and the relative concentrations of congeners. Aroclor-1260 congeners, which include PCB-138, PCB-153, and PCB-180, are present in all of the samples collected in Parcels E, E-2, and F. Aroclor-1254 congeners, which include PCB-101, PCB-118, and PCB-138, are also present in the samples, but at lower concentrations—about one-third or less of the Aroclor-1260 concentrations. Samples from locations SB-1 and SB-2 (see Figure F-1) are enhanced in PCB-101 and PCB-118, a pattern that may indicate a contribution from Aroclor-1254. Overall, the ratio of Aroclor-1254 to Aroclor-1260 is approximately 1:3.

Although the presence of a PCB congener pattern similar to Aroclor-1254 in an environmental sample could be a result of a source of Aroclor-1254, it may also be caused by the dechlorination of Aroclor-1260 during weathering or other degradation processes (such as PCB-180 dechlorinated to PCB-153 then to PCB-101 and to PCB-52). If dechlorination is the primary factor, it appears to be occurring at approximately equal rates in the shoreline and offshore environment because the congener patterns are similar in both locations. The similarity of the

patterns also suggests that Aroclor-1254 has not been preferentially transported offshore from the shoreline in significant quantities. Although Aroclor-1254 was reported in analysis by EPA Method 8082 as not detected in all of the offshore and most of the shoreline samples, it may have been present at concentrations less than the EPA Method 8082 reporting limit. However, it can be difficult to accurately quantify Aroclor-1254 by EPA Method 8082 when Aroclor-1260 is present, especially at higher concentrations.

Some of the offshore samples were grouped into categories (designated as Groups A through D on Figure F-2) to evaluate if a relationship existed between PCB congener patterns and distance from the eastern shoreline of South Basin Area X. There appeared to be a slight increase in low-molecular-weight congeners (PCB-52, -101, -105, -118, and -128) and a slight decrease in high-molecular-weight congeners (PCB-153, -170, -180, -187, and -195) from the shoreline outward, which may indicate weathering or variations in fate and transport of individual congeners. However, the slight differences observed may not be significant because the patterns for each category were generally similar.

2.4 SUMMARY OF CONGENER ANALYSIS

PCB congener patterns for 12 surface samples collected from the shoreline of Parcels E and E-2 and for 23 surface sediment samples collected from offshore (Parcel F) were evaluated visually based on congener distribution and relative concentrations of congeners. Congener patterns for samples collected from South Basin Area X are consistent with samples collected from the shoreline of Parcels E and E-2 to the east, in that Aroclor-1260 appears to be the main Aroclor present in both sets of samples, with some smaller contribution from Aroclor-1254. Congener patterns for samples collected from South Basin Area X are also consistent with samples collected from locations SB-1 and SB-2 at the mouth of Yosemite Creek, southwest of Area X.

The congener patterns for onshore and offshore samples do not appear to point to one particular location over the other (that is, Parcel E-2 or Yosemite Creek) as the source of PCBs in Area X sediments, or to rule out either of these locations as a possible source. Similar congener patterns are seen for both shoreline and offshore samples. In addition, the congener data for samples collected from Area X do not provide evidence of a significant amount of weathering or degradation when compared with data for the shoreline samples, or to the samples collected from the mouth of Yosemite Creek. This lack of weathering or degradation indicates relatively recent deposition or that degradation is occurring at approximately the same rate onshore and offshore.

The congener data for offshore sediment samples are consistent with congener data for sediment samples collected from the Parcels E and E-2 shoreline. Data from Yosemite Creek (based on samples collected at the mouth of the creek) also show a similar congener pattern. The absence of other, lower-weight Aroclors (for example, Aroclor-1242) or odd congener patterns indicating different or unusual weathering or degradation processes make the congener analysis only moderately useful for designating an onshore source. However, the congener data do not rule out such a source.

3.0 GEOCHEMICAL ASSESSMENT FOR METALS IN SHORELINE AND OFFSHORE SAMPLES

Elevated concentrations of metals in offshore sediments have been hypothesized to originate from onshore sources in Parcels E and E-2 (Battelle, Entrix, and Neptune and Company 2002). Specifically, concentrations of copper, lead, and mercury were found to exceed the ER-M in at least one sediment sample collected from offshore areas (Parcel F). Concentrations of a contaminant that exceed its corresponding ER-M indicate that adverse effects to benthic fauna are likely (that is, they have been observed in sediment toxicity tests in more than 50 percent of cases studied). Because of the potential for adverse ecological effects, identifying the location of onshore source areas and understanding the relationship between onshore sources and offshore sinks is an important step in protecting ecological receptors. Knowledge of contaminant source areas and transport pathways will allow more efficient targeting of remedial strategies.

The following sections discuss the sampling and analysis conducted to evaluate the relationships of metals found in samples collected from shoreline and onshore locations in Parcels E and E-2, and from adjacent offshore areas (Areas VIII, IX, and X of Parcel F). Data for total Aroclors were also evaluated for a possible relationship with metals contamination. Section 3.1 discusses the purpose of this evaluation, Section 3.2 discusses the sampling and analysis, Section 3.3 discusses the geochemical assessment, and Section 3.4 summarizes the results of the data evaluation. Conclusions and recommendations are provided in Section 4.0.

3.1 PURPOSE OF THE SHORELINE INVESTIGATION FOR METALS

Data were grouped and evaluated by area for this investigation. Most broadly, the data were divided into groups for onshore (Parcels E and E-2) and offshore (Parcel F) areas. The area offshore of Parcels E and E-2 was further subdivided into three areas. Area X includes the area offshore of the Installation Restoration (IR)-01 Panhandle, the Landfill Area, and a portion of IR-02 Northeast. Area IX includes the area offshore of IR-02 Northeast. Area VIII encompasses the area offshore of the metal debris reef of IR-02 Southeast (see Figure 2 in the technical memorandum). Although they were not the focus of this study, data are also available for offshore sediments in Area I, Area III, and a reference area (Battelle, Entrix, and Neptune and Company 2002).

The metals of concern in sediments off shore of Parcels E and E-2 include copper and lead, which were detected at concentrations greater than ER-M concentrations in at least one sample from Parcel F. Concentrations of chromium, nickel, and zinc were also found above ambient levels, but less than ER-M concentrations (Battelle, Entrix, and Neptune and Company 2002). Data for metals collected from shoreline areas of Parcels E and E-2 were screened against ambient values to highlight the areas of elevated concentrations that may be contributing to offshore contamination. The ambient values were calculated for metals in sediments of the San Francisco Bay and published in a staff report by the San Francisco Bay Regional Water Quality Control Board (Water Board) (1998). Box and whisker plots illustrate these comparisons (see Section 3.3.1).

Inter-element relationships of metals in shoreline samples from Parcels E and E-2 and sediment samples from Parcel F were evaluated in addition to simply screening the concentrations against ambient values to better understand the contributions of onshore contamination to offshore sediments. "Inter-element relationships" refer to the tendency for certain metals to associate with one another (resulting in a positive correlations among metals concentrations) because of similar geochemical behavior or because the associated metals were present together in the contaminant source. Scatter plots and regression analysis were used to evaluate possible associations between metals and several other parameters (texture, total organic carbon [TOC], and total Aroclors) (see Section 3.3.2). Relationships between selected metals were also evaluated using trilinear diagrams, which depict data as the relative proportions of three variables and can be used to identify distinct compositional types and mixing between types (see Section 3.3.3). However, both the scatter plots and trilinear diagrams contributed little to understanding the relationship between onshore sources and offshore contamination.

3.2 SAMPLING AND ANALYSIS FOR PARCELS E AND E-2 SHORELINE

During August and September 2002, 79 samples (biased and systematic) were collected from the three IR sites along the Parcel E and E-2 shoreline and analyzed for the full standard suite of metals. Results of this full suite analysis of metals were available for 39 samples collected from IR-01, 38 samples collected from IR-02, and 2 samples collected from IR-03. Additional samples collected along the Parcel E and E-2 shoreline were analyzed for copper, lead, and zinc using field-based XRF. The data for onshore areas (Parcels E and E-2) included laboratory data for 24 metals in the 79 samples and field screening data for copper, lead, and zinc for all samples. Data for onshore samples collected from IR-01, IR-02, and IR-03 were compiled in the data set along with data for offshore sediment samples collected from Areas VIII, IX, and X (Battelle, Entrix, and Neptune and Company 2002). Data for PCB congeners and Aroclors were also collected for samples from Parcels E and E-2 (see Section 2.0).

Field screening data for copper and lead provided more complete spatial coverage along the shoreline areas of Parcels E and E-2 than the laboratory data alone. These two metals were selected for XRF analysis because of the elevated concentrations (relative to reference and screening levels) reported in the sediments of Parcel F Areas VIII, IX, and X (Battelle, Entrix, and Neptune and Company 2002). The following source areas were hypothesized for Areas VII, IX, and X (Battelle, Entrix, and Neptune and Company 2002):

- Area VIII, Potential Source: A storm sewer outfall and area of metal debris along the shoreline
- Area IX, Potential Source: IR-03 (Former Oil Reclamation Ponds Area)
- Area X, Potential Source: IR-01/21 (the Landfill Area), former drum storage area, area of metal debris along the shoreline, and off-site sources affecting sediments in Yosemite Creek

Data for metals collected by field and laboratory analysis were compiled for sediment samples collected from the Parcel E and E-2 shoreline. Laboratory data for sediment samples collected for the Parcel F validation study (Battelle, Entrix, Inc., and Neptune and Company 2002) were also included in the overall data set for metals. The validation study for Parcel F noted an area of contaminated sediments, which it termed the "low-volume footprint" (see Figure F-10). This footprint represents the lateral extent of contaminated sediments, based on specific screening criteria.

The data sets for offshore sediments (Parcel F) included analytical data for some metals, Aroclors, grain size (as percent fines), and TOC. However, data were not collected for some major mineral-forming metals (calcium, magnesium, potassium, and sodium) in these sediment samples from Parcel F. The data for sediments were discussed in the Parcel F validation study (Battelle, Entrix, and Neptune and Company 2002) and are used here for comparison with the data collected from the adjacent onshore and shoreline areas of Parcels E and E-2. Direct comparisons of metals and Aroclors concentrations between groups are further qualified as a result of differences in grain size (as percent fines) and TOC between groups, as discussed in Section 3.2.2.

3.2.1 Comparability of XRF and Laboratory Data for Metals

Approximately 10 percent of samples analyzed by XRF were sent to the laboratory for confirmation analysis. Sixteen confirmation samples were analyzed in the laboratory out of the 176 XRF samples collected in IR-01, IR-02, and IR-03. Sampling locations for metals are listed in Table F-3. Laboratory data for samples from Parcels E and E-2 included results for the complete standard suite of metals and Aroclors. Field data collected using XRF analysis provided data only for copper, lead, and zinc (see Section 4.2 of technical memorandum).

Analytical data collected by the field and laboratory methods are not always directly comparable. XRF measures a "whole rock" composition, whereas standard EPA analytical methods (SW-846) employ a digestion of the sample, followed by analysis of the liquid. Digestion is not complete; therefore, metals contained in recalcitrant mineral phases are not reported. As a result, XRF analysis may find a higher concentration compared to standard ICP analysis on the digested sample. In addition, high concentrations of metals such as iron can cause an additive interference with the XRF analysis for certain metals, leading to high bias in the analytical results for the screening-level data. ICP analysis is also subject to analytical interferences; however, most of the environmental data collected at HPS are from laboratory analysis. Therefore, the XRF data must be calibrated to make a valid assessment and comparison with laboratory data.

The comparison of laboratory and field XRF data for these three metals showed that concentrations measured by XRF were consistently about twice the value of concentrations measured in the laboratory. Because of this extreme bias in the field screening results, all XRF data were converted to laboratory-equivalent concentrations using linear regression analysis. Regression analysis, using a stepwise process and multiple evaluation criteria (studentized residuals, hat matrix, Cook's D influence [Cook 1997; Freund, Littell, and Creighton 2003]), was

used to eliminate outliers and establish a mathematical relationship between the XRF results for copper, lead, and zinc (as well as the immunoassay results for total Aroclors) and the laboratory (confirmation) results for the same samples (see Table F-4). The calibrated XRF data were then used in comparisons with laboratory data and were screened against values of the ER-M for copper lead, and zinc. Field and laboratory data for PCBs were also subjected to regression analysis to provide a correction factor for the field data; field data for PCBs were biased low, so the correction increased the reported concentration in most cases (see Section 2.0).

Outliers, which are data points that do not appear consistent with the rest of the data in the data set, were also identified by linear regression and plotting the data. Two high-value outliers were delineated for both lead and zinc, and one high-value outlier was identified for copper in the XRF results during the comparison of field and laboratory data (see Table F-4). The concentration of lead in a sample from one location (IR02SH024) analyzed in the laboratory was 40 mg/kg and the original XRF screening value was 6,050 mg/kg. The laboratory result for a sample from location IR02SH047 was 130 mg/kg and the original XRF value was 828 mg/kg. Original XRF data for zinc in samples from two locations (IR01SH007 and IR03SH012) showed a large disparity from the laboratory results and were also excluded from further evaluation. The laboratory result for a sample from one location (IR02SH014) was 1,600 mg/kg for copper and the XRF screening value was 6,250 mg/kg. These XRF results (see Table F-4) were therefore deemed completely unusable in this data evaluation. Aside from these five outliers, all other XRF values were calibrated to laboratory confirmation samples and used in the data evaluation discussed in Section 3.3.

3.2.2 Relationship of Concentration with TOC and Texture

As noted in the validation study, TOC was positively correlated with percent fines (that is, was inversely related to grain size) (Battelle, Entrix, and Neptune and Company 2002). The lowest levels of TOC were in sediment samples from Area VIII, corresponding to the coarser-grained texture of sediments in this area, whereas levels of TOC were higher in Area X, corresponding to the finer-grained texture of sediments in this area. In general, fine-grained sediments correspond to lower-energy depositional environments, and coarser-grained sediments correspond to higher-energy, erosional environments.

Fine-grained sediments may contain greater concentrations of metals and PCBs than do coarser-grained sediments because of the higher surface-to-volume ratio of fine-grained materials, which means more potential sorption sites for these constituents. The concentration of metals and PCBs in sediment may also be related to TOC because of the sorption capacity of organic carbon. It is necessary to assess the effects of both grain size and TOC on the concentration of metals and PCBs in a sample when comparisons of data sets are made. Scatter plots and regression analysis were used in this investigation to evaluate the relationship between aluminum and percent fines (silt plus clay fractions) (see Figure F-11) and aluminum and TOC (see Figure F-12). Similar plots show the relationships between concentrations of TOC and aluminum and selected metals and total Aroclors in sediment samples from Parcel F (see Attachment F-1). In general, concentrations of Aroclors consistently showed a significant

positive correlation with concentrations of copper, lead, mercury, and zinc in samples collected from Area X, but results for other areas were less definitive.

Soil texture and TOC were not measured for onshore samples collected from Parcels E and E-2; however, concentrations of aluminum and other major mineral-forming metals were measured. The following sections discuss use of aluminum concentrations as a proxy for soil texture as well as methods and results of the geochemical assessment for samples collected from Parcels E, E-2, and F.

3.3 GEOCHEMICAL ASSESSMENT OF METALS IN PARCELS E AND E-2 SAMPLES

Data for metals in samples collected from the shoreline of Parcels E and E-2 were evaluated to identify potential onshore source areas, which may be related to elevated concentrations of metals in sediment samples collected from offshore areas (Parcel F). Data were evaluated using statistical and graphical methods that are commonly used in geochemical assessments, including box and whisker plots, scatter plots and linear regressions, and trilinear diagrams. Table F-3 lists the shoreline and offshore sampling locations evaluated in the geochemical assessment. The type of analysis (field screening or laboratory) for each sample is also indicated in this table.

Data for all metals (and total Aroclors) were compared with various screening levels, including the ER-M and ambient concentrations for San Francisco Bay sediments (see Table F-6). These screening criteria are discussed in Section 3.2 of the technical memorandum to which this appendix is attached. No screening levels have been established for some metals (aluminum, calcium, iron, potassium, magnesium, and sodium). As noted previously, concentrations of copper and lead zinc in samples from Parcels E and E-2 shoreline frequently exceeded the ambient values for San Francisco Bay sediments. Some samples also contained concentrations of cadmium, mercury, nickel, antimony, and zinc that exceeded the ambient values for San Francisco Bay sediments (Water Board 1998).

Concentration thresholds for screening-level benchmarks (ER-M values, and ambient levels) are shown on the plots provided on Figure F-13. Laboratory and calibrated XRF data for copper, lead, and zinc are the focus of the graphical analysis because these three metals were measured most frequently and provide the greatest spatial coverage along the shoreline of Parcels E and E-2. XRF data for copper, lead, and zinc were systematically collected at locations every 100 feet of shoreline. A total of 176 samples were analyzed for copper, lead, and zinc using XRF field screening. Laboratory data for antimony, cadmium, chromium, mercury and nickel are also shown relative to screening levels on the box and whisker plots discussed in Section 3.3.1.

3.3.1 Box and Whisker Plots

Box and whisker plots, a standard tool in statistical evaluations and exploratory data analysis, are useful for comparing different groups of data. Several questions identified in the data quality objectives (DQO) for this investigation can be addressed using categorized box and whisker

plots that show concentrations of copper, lead, and other metals at locations across each area of the shoreline for Parcels E and E-2.

Concentrations of copper and lead (as well as zinc, which was also analyzed by XRF) were plotted using categorized box and whisker plots grouped by subarea to provide a broad comparison across the shoreline of Parcels E and E-2 (see Figure F-13). These plots show some significant differences between subareas across the shoreline of Parcels E and E-2. The ranges of concentrations measured by laboratory and calibrated XRF analysis for copper, lead, and zinc were also plotted by location for IR-01, IR-02, and IR-03 in Parcel E (see Figures F-14, F-15, and F-16). At some locations, concentrations of these metals in shoreline samples exceeded the ER-M values, which are used as screening criteria for sediments (the ER-M values are 270 mg/kg for copper, 218 mg/kg for lead, and 410 mg/kg for zinc). Altogether, these box and whisker plots clearly identify subareas and sampling locations within Parcels E and E-2 that contain elevated concentrations of copper, lead, and zinc (see Figures F-13, F-14, F-15, and F-16). Laboratory data for five other metals found at concentrations close to or above ER-M concentrations are included as Figures F-21, F-22, F-23, F-24, F-26, F-27, F-29, F-30, and F-31. Plots for other metals analyzed by laboratory methods are provided as Attachment F-2 to this appendix.

Field and laboratory data for total Aroclors grouped by area (see Figure F-17) and location (see Figure F-18) are included for comparison with the metals plots. These data show that samples collected from the shoreline of Parcel E-2 (the Landfill Area) generally contained the highest concentrations of metals and Aroclors. The metal slag area along the IR-01 Panhandle Area contains high concentrations of copper, lead, and zinc, but does not contain high concentrations of Aroclors (compare Figures F-13 and F-17). Box and whisker plots of total Aroclors in shoreline samples from IR-01, IR-02, and adjacent offshore areas clearly show source locations and contaminant distributions (see Figure F-19; note difference in scales).

As noted above, concentrations that exceeded screening criteria were identified in some of the shoreline areas; therefore, box and whisker plots comparing data for adjacent onshore and offshore areas were also plotted on the same graph. Of all metals evaluated, concentrations of copper, lead, mercury, and zinc in samples from Parcels E and E-2 most frequently exceeded ER-M values; although antimony, cadmium, chromium, nickel, and zinc also exceeded screening criteria in at least one sample (see Figures F-20 through F-31). The plots show that, although concentrations of copper and lead in some shoreline areas exceeded San Francisco Bay ambient values, the adjacent offshore sediments generally do not contain these metals at concentrations above ER-M values (see Figures F-20, F-24, and F-28).

Data for lead, copper, zinc, and total Aroclors were also plotted by depth interval for IR-01 and IR-02, but there were no well-defined, increasing or decreasing trends in concentration with depth for these four metals (see Attachment F-3). The lack of trend with depth may be related to the heterogeneity of the fill materials used to construct Parcels E and E-2. This finding differs from the validation study, which found that concentrations of metals in offshore sediments were generally highest in the surface sediments, except for mercury in a few locations in Area X

(Battelle, Entrix, and Neptune and Company 2002). The validation study noted that few metals exceeded ER-M values in sediment samples collected below 2 feet bgs in Parcel F.

In summary, the series of box and whisker plots provides a useful overview and general comparison of the data for metals in onshore (Parcels E and E-2) and offshore (Parcel F) locations. These plots address DQO Study Question 1 and effectively convey the magnitude and distribution of metals contamination in onshore and offshore locations. Plots such as these allow decision-makers to efficiently evaluate a large quantity of data, something not easily communicated in tables of numbers or summary statistics.

3.3.2 Scatter Plots and Regression Analysis

Scatter plots and regression analysis are useful tools for assessing inter-element relationships and possible relationships and patterns between groups of data. The geochemical assessment of metals data generally evaluates these relationships, including co-occurrence and correlation of constituents (Navy 2002). Naturally occurring metals typically show a lognormal distribution and a correlation with other mineral-forming metals, depending on the environment and the specific geochemical behavior of each metal. The data may also be normalized to a factor such as grain size (as percent fines), TOC, or a major mineral-forming metal such as aluminum.

Categorized scatter plots for untransformed, logtransformed, and data normalized to aluminum were constructed to visually evaluate the inter-element relationships of selected metals (copper, lead, mercury, and zinc) and total Aroclors in onshore (Parcels E and E-2) and offshore (Parcel F) samples. Review of the plots showed that the logtransformed data provided the best fit in most cases. Although correlation coefficients (r values) were calculated for all inter-element comparisons within data groups for IR-01, IR-02, Area VIII, Area IX, and Area X, Table F-7 focuses on selected metals (chromium, copper, mercury, nickel, lead, and zinc) and key parameters of total Aroclors, aluminum, percent fines, and TOC. The correlation coefficient, r, measures the strength and direction of the correlation whereas the coefficient of determination (r^2) gives the proportion of variance that is predictable from the other variable (that is, r^2 is the ratio of the explained variation to the total variation).

Correlation analysis showed that concentrations of total Aroclors are significantly correlated with copper, mercury, lead, and zinc (among other metals) in IR-02, Area IX, and Area X, but not generally in IR-01 and Area VIII (see Table F-7). The side-by-side box plots for metals and Aroclors show similarly elevated concentrations by area (see Figures F-13 and F-17), but not necessarily a one-to-one relationship by sampling location (see Figures F-14, F-15, F-16, F-18, and F-19).

Data for other metals in the data set were also evaluated similarly. In concert with the scatter plots, linear regression analysis was used to quantify the strength of inter-element correlations. There were strong inter-element correlations that varied by data grouping; but the scatter plots and regression results were not particularly diagnostic with respect to identifying contaminant sources and sinks. The additional scatter plots are included as Attachment F-1 to this appendix.

3.3.3 Trilinear Diagrams

Trilinear diagrams are used in geochemistry to evaluate mixing and the resulting trends in composition. Trilinear plots allow analytical results for three components to be expressed as a single point on the plot; data plotted on a trilinear diagram represent the relative abundances of the three constituents or measurements. These plots were chosen over tables of numbers to depict the data because graphic expressions of relative abundances present a large amount of data in a more easily understandable format than tabular data.

Several different combinations or groupings of data were evaluated to find those that were most distinctive and that expressed potential contaminant sources and sinks. Use of these relative abundances also eliminates the need to normalize the data for grain size, TOC, or aluminum concentrations. This factor is important because sediment grain size and TOC influence contaminant fate and transport. In general, sediments with higher concentrations of TOC and finer texture can contain higher contaminant burdens than sediments with lower concentrations of TOC and more coarse-grained sediments. Geochemical normalizers, such as aluminum and iron, may also reduce the effects of texture and TOC heterogeneity between samples. However, several assumptions must first be checked to use these geochemical normalizers: (1) there is a significant relationship between the normalizer and the contaminant in reference samples, (2) the normalizer is insensitive to anthropogenic inputs, and (3) the normalizer is stable under the geochemical conditions at the sampling sites. Use of relative abundances, such as those depicted on the trilinear diagrams, avoids some of the potential drawbacks of geochemical normalizers.

Three sets of groupings were chosen for the trilinear plots: (1) copper, lead, and zinc; (2) copper, lead, and mercury; and (3) copper and lead, along with total Aroclors. The plots were also categorized in two different ways: (1) by subarea within Parcels E and E-2, and (2) by parcel for Parcels E and F. Only data from laboratory analysis were plotted in the trilinear diagrams. Although interesting, none of these groupings of data plotted on the trilinear diagrams was particularly useful for distinguishing among the groups of data. Therefore, only two examples of the trilinear diagrams are included in this appendix (see Figures F-32 and F-33).

Trilinear Diagrams of Copper, Lead, and Zinc

Logtransformed data for copper, lead, and zinc were plotted for Parcels E and F (see Figure F-32). Both groups plot in approximately the center of the trilinear diagram, indicating that the relative proportions of these three metals are not particularly diagnostic. Different subareas of Parcels E and E-2 were also plotted to assess whether these categorized plots could be used to refine the evaluation of contaminant source areas and to provide diagnostic characteristics of source composition (see Figure F-33). As seen on both Figures F-32 and F-33, the concentrations of major heavy metals such as copper, lead, and zinc are sufficiently high in ambient sediments and soils that the addition of a different source composition is largely swamped by the ambient proportions. Trace metals, such as rare earth elements, or stable isotopes, such as lead-206, -207, and -208, typically provide a more diagnostic “fingerprint” of contaminant sources. However, the practical knowledge to be gained from isotopic analysis is probably not sufficient to justify the cost.

3.4 RESULTS OF GEOCHEMICAL ASSESSMENT OF METALS DATA

Results of the geochemical assessment of metals data are discussed in the following sections in terms of the primary study questions posed in the project DQOs.

3.4.1 Shoreline Contributions of Metals to Sediments in Offshore Areas

One of the original study questions in Table 3 of the sampling and analysis plan (Tetra Tech 2002) asked whether concentrations of copper and lead in shoreline sediment were at sufficient levels to pose a threat to offshore areas. This question was rephrased slightly to quantitatively define "threat," and asked, "Do concentrations of copper, lead, and PCBs in shoreline areas exceed ambient concentrations)?" Box and whisker plots of the distribution of metals concentrations in relation to ambient values clearly show distinct areas of the shoreline where concentrations of copper and lead in sediment are elevated (see Figures F-13, F-14, F-15, and F-16, which also display data for zinc). The plots also show that two areas, the IR-01 Panhandle Area (other than the slag area) and IR-02 Central, are not significant source areas for these metals. Sediment in IR-03, the Former Oil Reclamation Ponds Area, generally contains copper and lead at concentrations below ER-M values, but concentrations of these metals are elevated at several locations (see Figure F-16). Box plots showing the combined laboratory and field screening (corrected) data for total Aroclors show a similar (but not identical) pattern to the metals of concern. That is, concentrations of total Aroclors are highest in the Landfill Area (Parcel E-2) and IR-02 Northwest (see Figure F-17). Concentrations of total Aroclors were less than 1.0 mg/kg in all soil samples collected from the metal slag area, IR-02 Central, IR-02 Southeast, IR-03, and all of the Panhandle Area, except at two locations (IR01SH018 and IR01SH019), which are adjacent to the Landfill Area (Parcel E-2).

Area X is considered a depositional environment, with percent fines ranging from 8.6 percent for sample AAB-101 at location SB-19 to 99.6 percent for samples AAB-121 and AAB-122 at locations SB-04 and SB-03. The median percent fines for sediment samples from Area X was 97.1 percent and the mean percent fines was 85.3 percent. Concentrations of copper, lead, and zinc in shoreline sediment samples collected along the Landfill Area clearly exceeded ER-M values; however, very few of the offshore samples show similarly high concentrations when these data are plotted (by location) alongside concentrations for sediment samples collected from the adjacent offshore area (Area X), despite the fine-grained nature of the offshore sediments. Although concentrations of metals are higher in Area X sediments than in reference sediments, the concentrations of copper, lead, and zinc are less than ER-M values for nearly every sediment sample from this area (see Figures F-20 and F-21). Average concentrations of copper (104 mg/kg) and lead (98.3 mg/kg) in Area X sediments are about half the ER-M values. The median values are lower, indicating the data are right-skewed: 84.7 mg/kg for copper and 87.6 m/kg for lead.

Examination of the side-by-side box and whisker plots for onshore and associated offshore areas shows that concentrations of copper, lead, zinc, and other selected metals in offshore sediments are significantly lower than in sediments along the shoreline areas of Parcels E and E-2 (see Figures F-20 through F-31). They are lower despite the occurrence of finer-grained materials

offshore (using aluminum concentrations as an indicator of grain size for shoreline samples, which is supported by the positive correlation between aluminum and percent fines [see Figure F-12]). As previously noted, concentrations of metals and PCBs are generally greater in finer-grained materials because of the larger surface area per unit volume compared with coarser-grained materials. The number of sorption sites is higher because of the larger surface area; therefore, a greater mass of sorbed metals, PCBs, and other contaminants may be present in finer-grained materials when compared with an equal volume of coarser-grained materials. Hence, a direct comparison of concentrations, without taking into account sample texture and TOC content, may be misleading.

The main influx of metals from Parcels E and E-2 to offshore sediments in Parcel F is likely from suspended materials transported into the bay via overland flow. Metals present beneath the soil surface in Parcels E and E-2 are effectively immobile because they are not subject to overland transport as particulate materials. Under atmospheric conditions (oxidizing conditions) and a normal range of pH (6 to 9), copper, lead, zinc, and other metals will not be dissolved in groundwater at more than a few tens of micrograms per liter, based on the mineral phases that control solubility. The dissolved concentration for copper in neutral pH, oxygenated groundwater is maintained at about 10 micrograms per liter by copper hydroxy carbonates. Likewise, the dissolved concentration of lead in oxygenated groundwater is also maintained at low levels (less than 10 micrograms per liter) by the low solubility of lead hydroxy carbonates. Therefore, groundwater in contact with contaminated soils at depth in Parcels E and E-2 is unlikely to contribute to metals contamination in offshore sediments. However, the solubility of metals is variable and depends on several factors, including pH, redox condition (Eh), and solution composition of the groundwater. Data for dissolved metals in groundwater samples collected from wells near the shoreline area of Parcels E and E-2 were reviewed to verify that concentrations of dissolved copper, mercury, lead, and zinc were close to the equilibrium levels for neutral pH, oxygenated groundwater. Other than several samples that were contaminated with suspended particulates, concentrations of trace metals were within expected ranges.

Inter-element relationships, discussed in Section 3.3.3, provide some information for distinguishing onshore sources of offshore contamination, but only with great uncertainty. Many factors control the distribution of contaminants in offshore sediments, including whether the offshore area is in a depositional or erosional environment, which influences sediment texture and TOC content (both of which are positively correlated with increasing concentrations of contaminants). Additional factors include the direction and magnitude of longshore currents and the degree of mixing of sediments from other areas.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Results of the data evaluation performed for shoreline sediment at Parcels E and E-2 and offshore areas of Parcel F can be used to identify discrete areas where concentrations of metals and PCBs are either above or below a level of concern. The following conclusions and recommendations are based on the evaluation of data for PCBs and metals provided in this appendix.

4.1 CONCLUSIONS

The following conclusions were developed to address each study question presented in the introduction to this appendix. Box and whisker plots provided the most useful graphical tool for addressing several of the primary questions posed in the DQOs.

Box and whisker plots on Figures F-13 through F-31 show the data for metals and total Aroclors grouped by parcel, subarea, and sampling location. Figure F-14, for example, clearly shows that most locations along the Landfill Area (Parcel E-2) contain copper at concentrations exceeding the ambient value of 68.1 mg/kg and the ER-M value of 270 mg/kg. However, Figure F-20 shows that, despite the elevated concentrations of copper along the Parcel E-2 shoreline, most of the offshore sediment samples contained concentrations of copper near the ambient value of 68.1 mg/kg for San Francisco Bay sediments. Concentrations in only three samples slightly exceeded the ER-M value.

Concentrations of total Aroclors showed a distribution that was similar, but not identical, to concentrations for copper and lead (see Figures F-17, F-18, and F-19). In general, concentrations of total Aroclors exceeded 1.0 mg/kg in the Landfill Area (Parcel E-2) and IR-02 Northwest (see Figure F-17). Concentrations of total Aroclors in samples collected from the Panhandle Area (except for locations IR01SH018 and IR01SH019), IR-02 Central, IR-02 Southeast, and IR-03 were generally less than 1.0 mg/kg (see Figure F-17).

As described in Section 3.4.1, the main influx of metals from Parcels E and E-2 to offshore sediments in Parcel F is likely the result from suspended materials transported into the bay during overland flow. Metals present in subsurface soil at Parcels E and E-2 are effectively immobile because they are not subject to overland transport as particulate materials and the solubility controls at near-neutral pH keep concentrations of dissolved copper and lead at low concentrations (tens of micrograms per liter) in groundwater. Controlling overland flow and removing areas of contaminated materials should minimize or prevent migration of contaminants into offshore areas.

The box and whisker plots summarizing data for metals and Aroclor in subareas of Parcels E and E-2 (see Figures F-13 and F-17) show generally higher concentrations for Aroclors and metals along the E-2 shoreline; however, this distribution is more striking for Aroclors than for copper and lead. The two metals show several areas (metal slag, Landfill, IR-02 Northwest, and IR-02 Southeast) where concentrations are elevated (see Figure F-13), but the Aroclors are dominated by the higher concentrations in and adjacent to the Landfill Area (see Figure F-17). However, when specific locations within the Landfill Area were evaluated, the locations with the highest concentrations of Aroclors did not contain the highest concentrations of copper and lead, and vice versa (compare Figure F-18 with Figure F-20).

Regression analysis indicated that the concentrations of copper, lead, and total Aroclors showed strong positive correlations in samples collected from IR-02, Area X, and Area IX, but not in samples from IR-01 or Area VIII (see Table F-7). None of these concentrations of metals were correlated with aluminum or percent fines for IR-02, Area X or Area IX; however, aluminum

concentrations showed a positive correlation with copper, mercury, nickel, and zinc concentrations for Area VIII.

Concentrations of metals and PCBs are more likely to co-occur in offshore sediments, although this correlation seems related to the percent fines or TOC content of the sediments. Metals and PCBs are less likely to co-occur in onshore areas, although the shoreline along the Landfill Area and IR-02 Northwest contain elevated concentrations of both PCBs and metals (see Figures F-14 and F-17). Remediating the slag piles along the Panhandle Area will reduce a potential source of metals, and removing selected areas from the Landfill Area will reduce a potential source of PCBs.

Concentrations of metals in Areas IX and X generally showed a positive correlation with TOC (TOC was measured in offshore samples only), but this correlation was not seen for Area VIII. Concentrations of most metals also showed a strong correlation with aluminum (and percent fines) in reference sediments, but not so much in Areas IX and X. The categorized scatter plots for concentrations of metals in sediment (see Attachment F-1) show less scatter for reference samples than site samples. Based on these correlations and scatter plots, it could be proposed that the addition of site-specific metals contamination to sediments in Parcel F creates more "scatter" in the regression plots of metals and aluminum than would be seen in noncontaminated or reference areas. That is, mixing of site-specific contaminants with naturally occurring concentrations of the same metals produces scatter because of different proportions of metals in each source. However, no single factor gleaned from the scatter plots or regression analysis was particularly diagnostic for assigning a specific onshore source of metals contamination that could be related to contaminated sediments in offshore areas. The trilinear diagrams (see Figures F-32 and F-33) showed slight differences in metals compositions between different onshore and offshore areas, but were of limited utility for comparing data with screening criteria or defining specific sources along the shoreline of Parcels E and E-2 that could be linked to contaminated sediments.

Results of the PCB congener analysis showed similar congener patterns for onshore and offshore samples; however, the patterns are not definitive. The data are consistent with a source in Parcels E or E-2 and a sink in Area X of the South Basin.

4.2 RECOMMENDATIONS

There are no distinct chemical patterns that can be used to make a definitive link between onshore sources and offshore sinks; however, the information collected for this investigation can be used to define areas of concern. The metal slag area, Landfill Area (Parcel E-2), the sheet-pile wall, and IR-02 Northwest contained the highest concentrations of metals; frequently exceeding ER-M values for copper and lead (see Figure F-13). In contrast, the Panhandle Area, other than the metal slag area, contains copper, lead, and total Aroclors at concentrations less than the ER-M values (see Figures F-16 and F-17). Concentrations of total Aroclors are less than 1.0 mg/kg for samples collected from the tip of the Panhandle Area to location IR01SH017. Likewise, IR-02 Central contains concentrations of metals less than ER-M values and total Aroclors less than 1.0 mg/kg.

Results from this investigation also show that approximately 75 percent of the samples for IR-02 Southeast and IR-03 contained concentrations of metals less than ER-M values, so further investigation should focus on locations represented by the 25 percent of samples that exceeded ER-M values for metals. Concentrations of total Aroclors in IR-02 Southeast and IR-03 were less than 1.0 mg/kg in all samples. The highest concentrations of total Aroclors were found in samples from along the Landfill Area (Parcel E-2) and IR-02 Northwest shoreline (see Figure F-17).

The information collected for the characterization of the Parcels E and E-2 shoreline provides the basis for delineating areas of the greatest concern. Future investigations can focus on the areas identified here as potential sources of metals and PCBs.

5.0 REFERENCES

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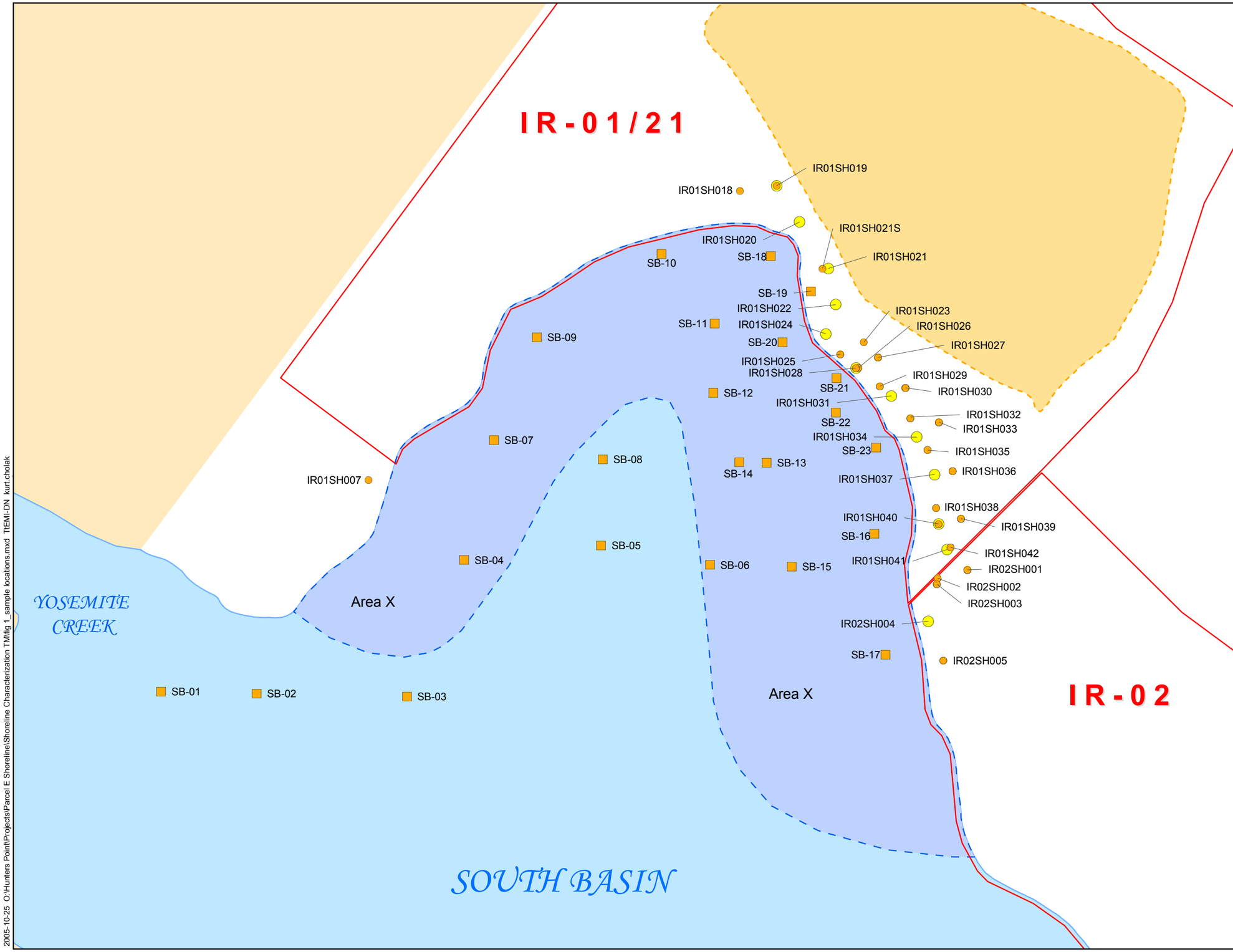
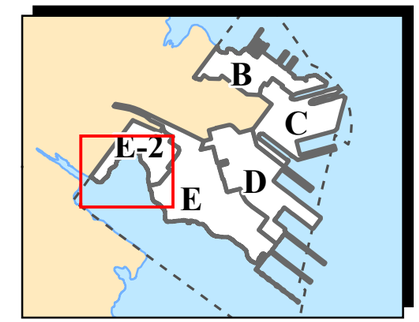
FIGURES





Location Map

Sampling locations used in analysis

- Aroclor analysis sampling location
- PCB congener sampling location
- Parcel F validation study sampling location
- Landfill cap
- Low-Volume Footprint - Parcel F VS
- IR site boundary
- Non-Navy property

Note:

IR Installation restoration

200 0 200

Scale in Feet

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U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE F-1
SHORELINE AND OFFSHORE SEDIMENT SAMPLE LOCATIONS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum

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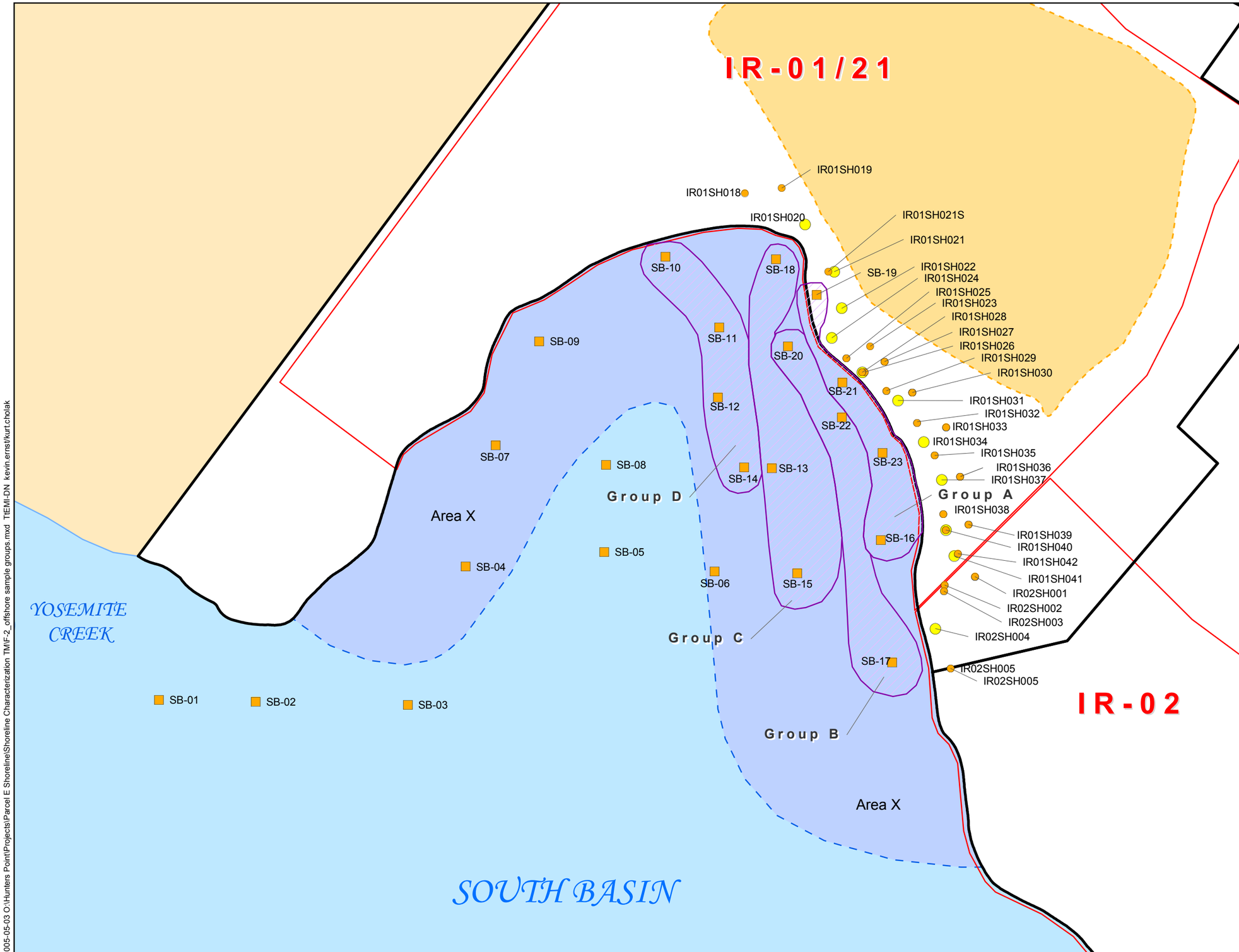

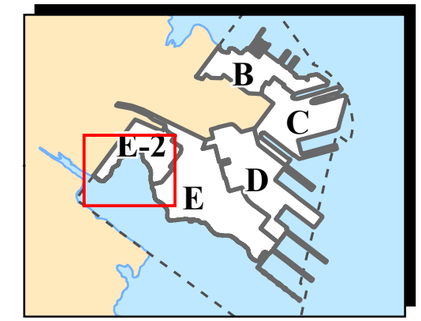

Location Map

Sampling locations used in analysis

- Aroclor analysis sampling location
- PCB congener sampling location
- Parcel F validation study sampling location
- Offshore sediment sample groupings
- Low-Volume Footprint - Parcel F VS
- Landfill cap
- Parcel boundary
- IR site boundary
- Non-Navy property

Notes:

IR Installation restoration
PCB Polychlorinated biphenyls

200 0 200
Scale in Feet

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FIGURE F-2
OFFSHORE SEDIMENT SAMPLE GROUPINGS

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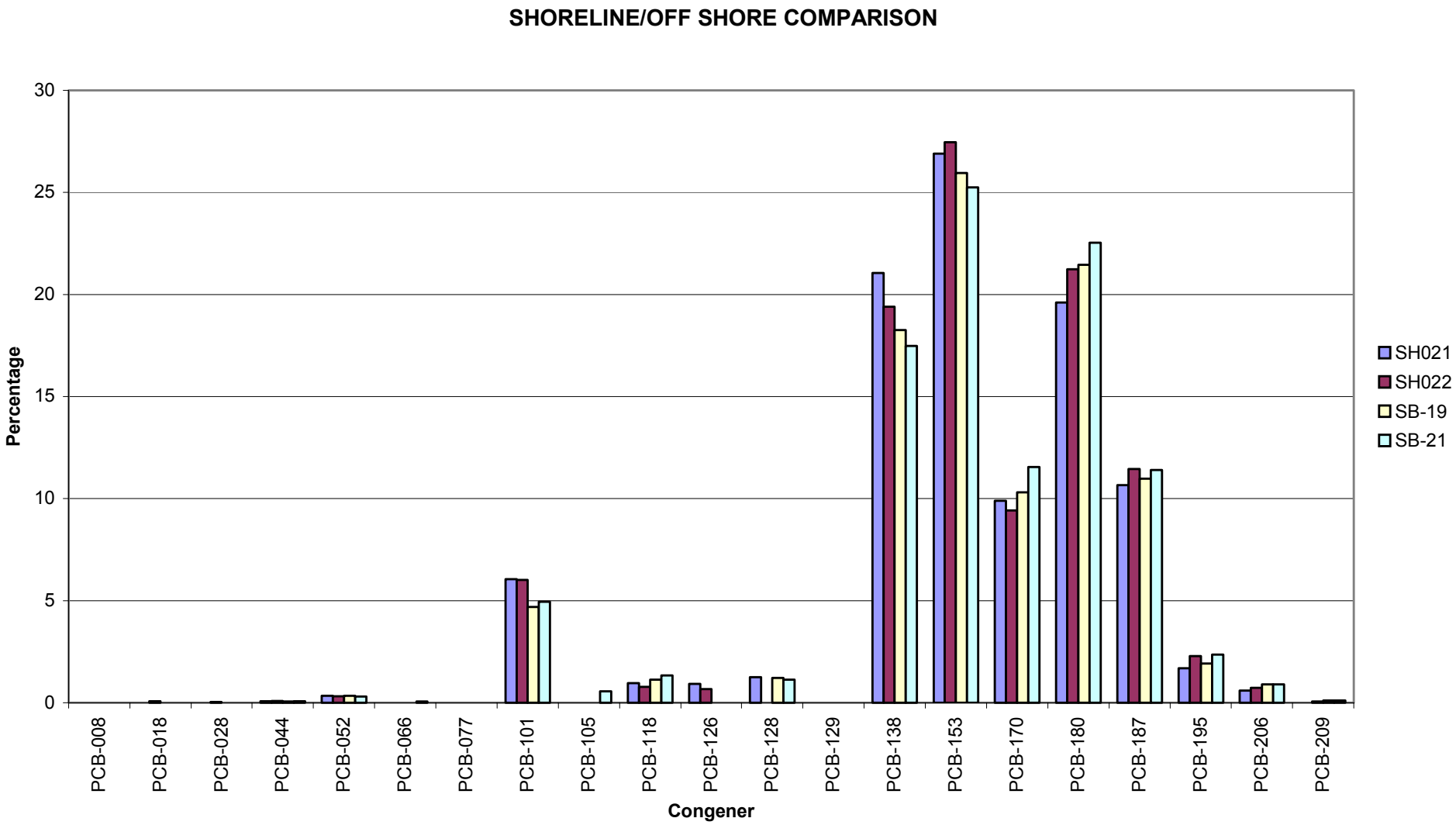

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FIGURE F-3
SHORELINE AND OFFSHORE CONGENER FINGERPRINTS COMPARISON AT PARCEL F SAMPLE SB-21

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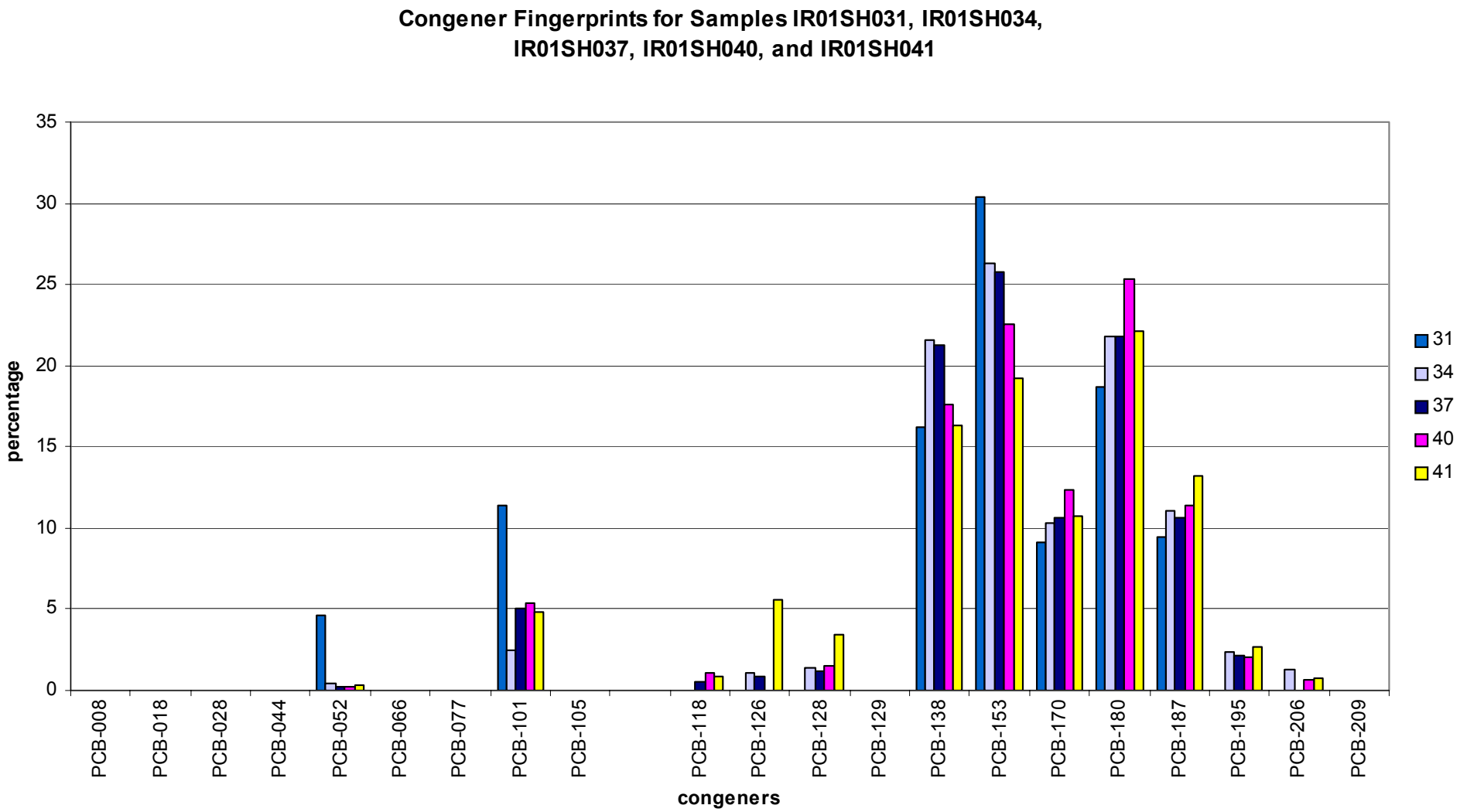

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FIGURE F-4
SHORELINE CONGENER FINGERPRINTS

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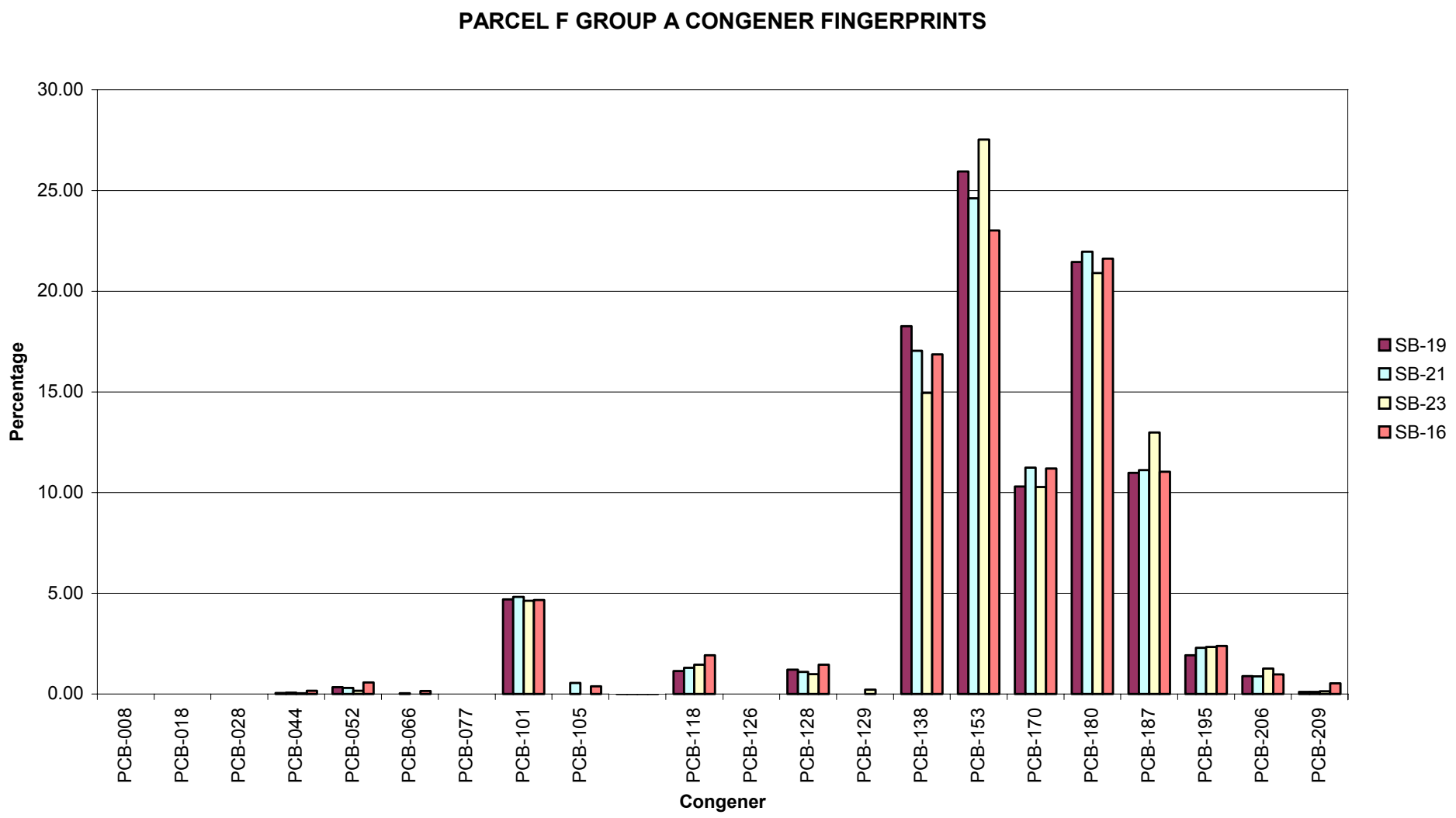

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FIGURE F-5
GROUP A CONGENER FINGERPRINTS

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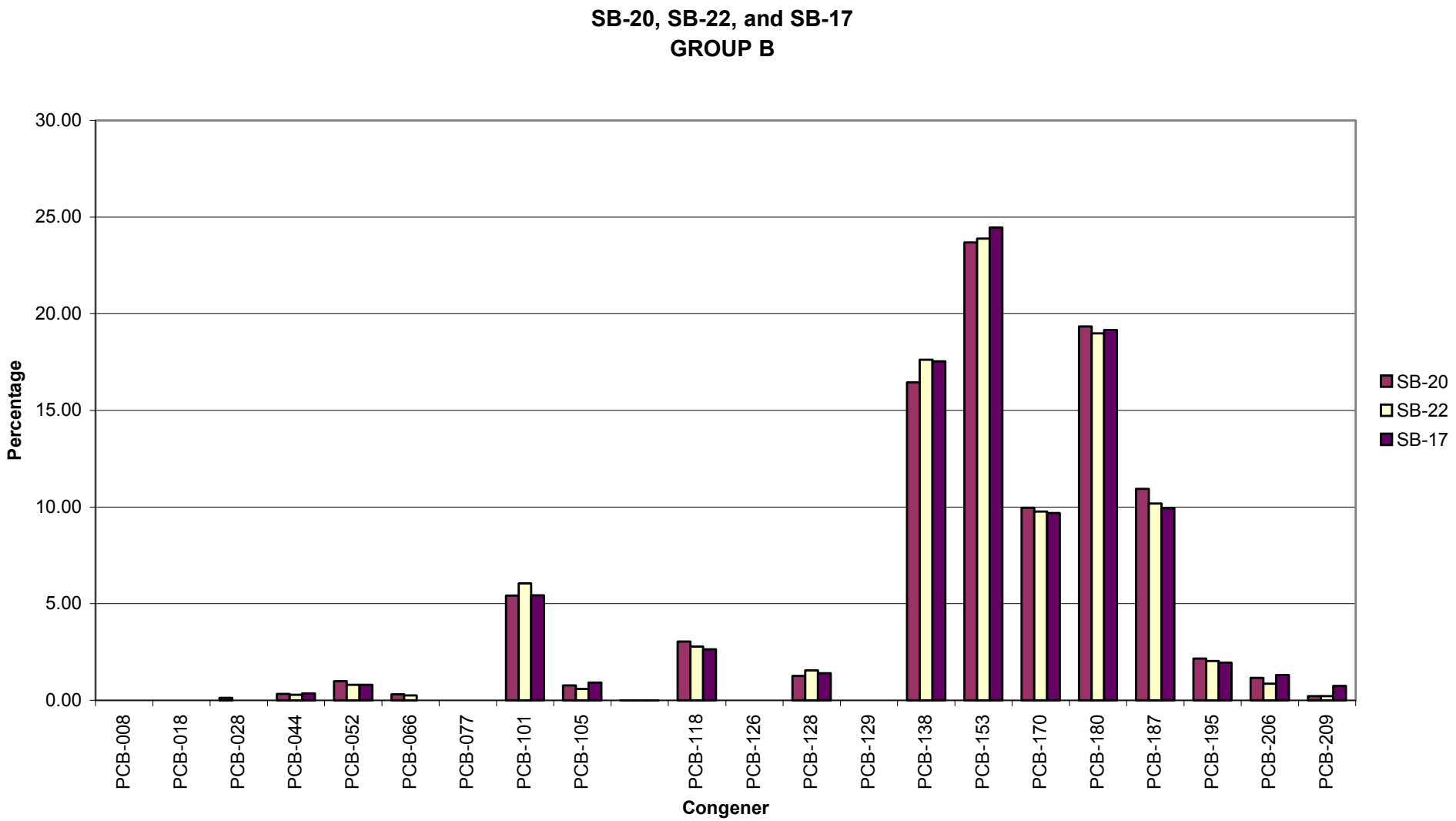

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FIGURE F-6
GROUP B CONGENER FINGERPRINTS

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Technical Memorandum

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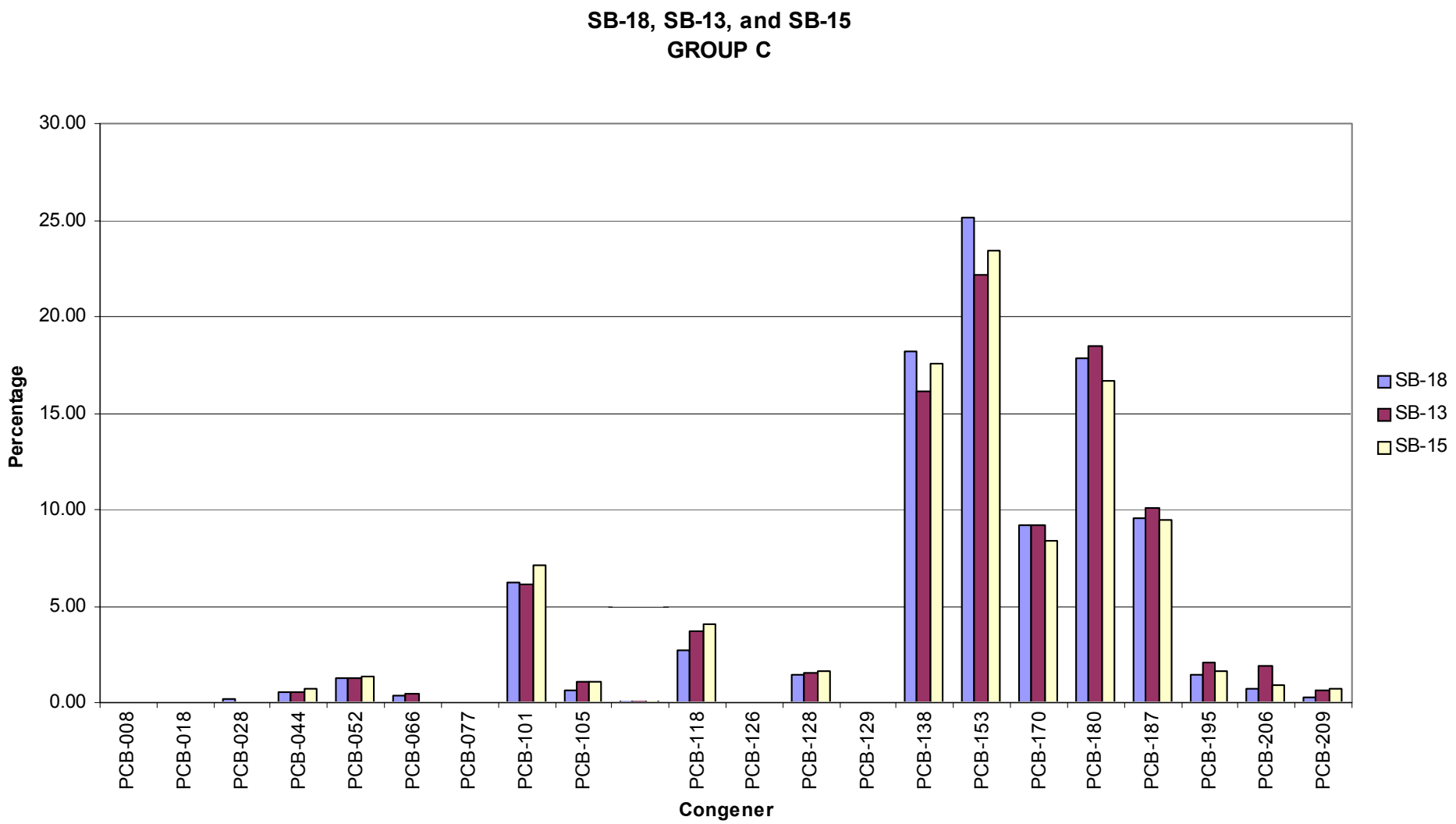

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FIGURE F-7
GROUP C CONGENER FINGERPRINTS

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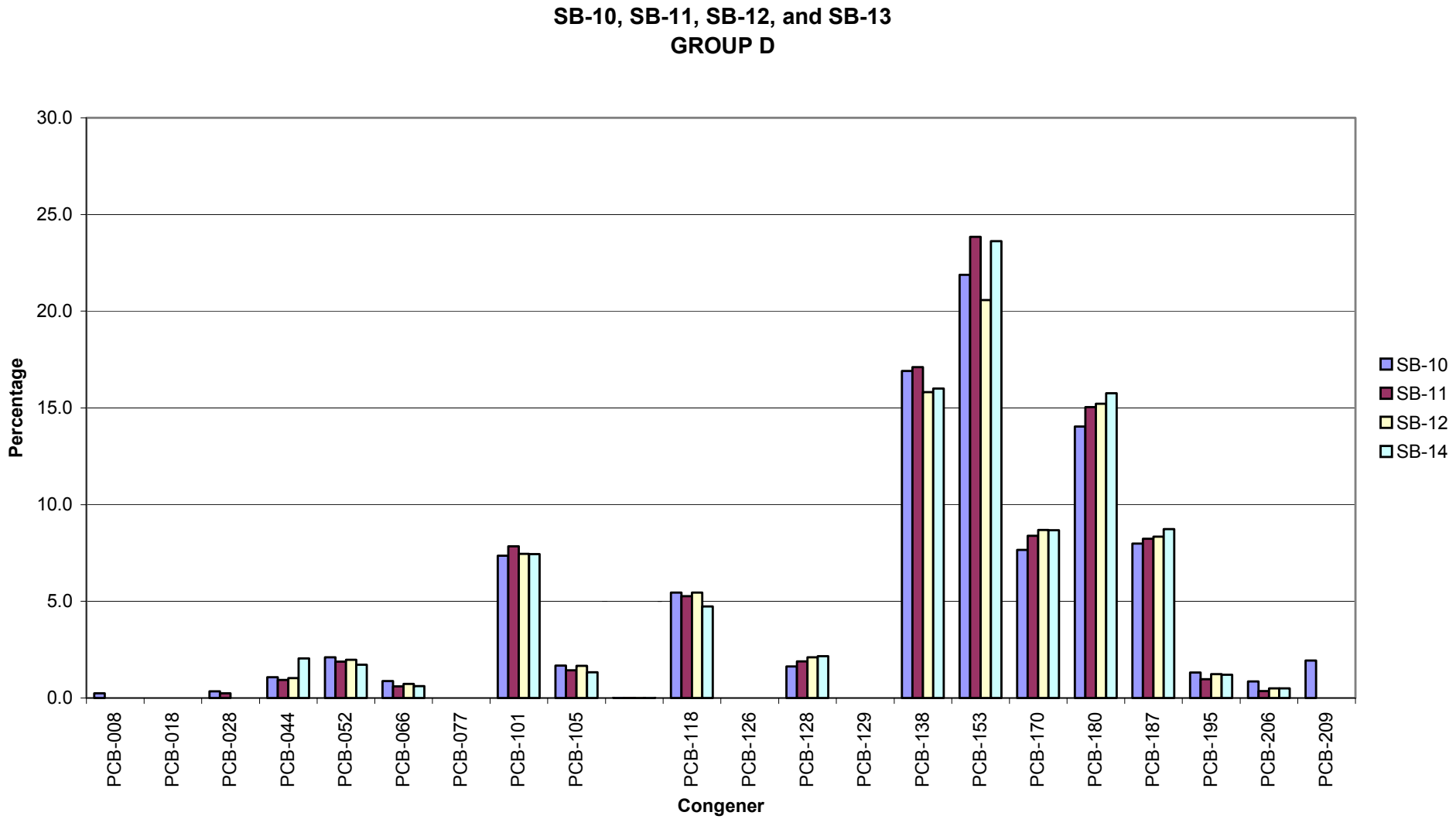

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FIGURE F-8
GROUP D CONGENER FINGERPRINTS

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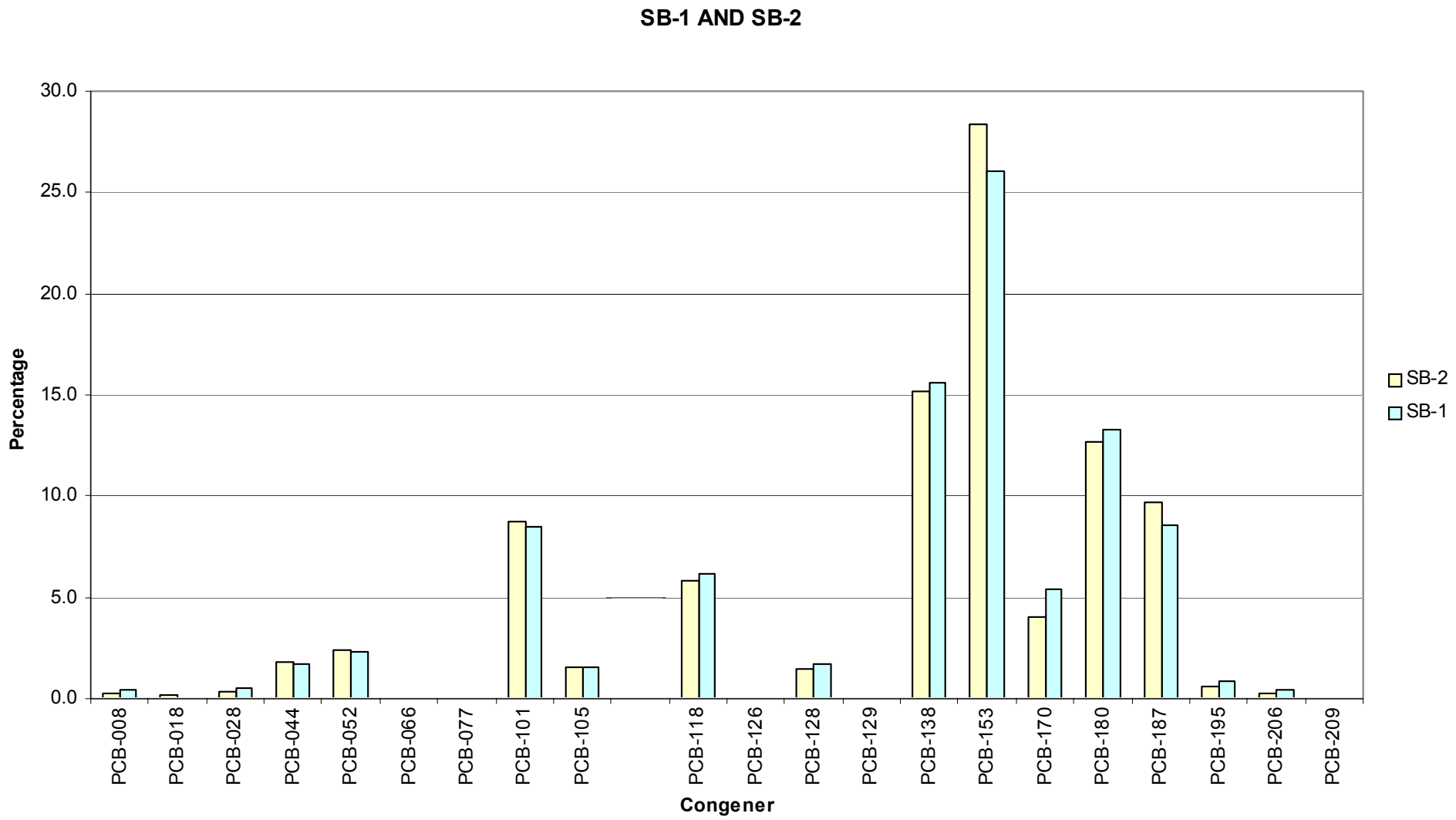

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FIGURE F-9
YOSEMITE CREEK
CONGENER FINGERPRINTS

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Technical Memorandum

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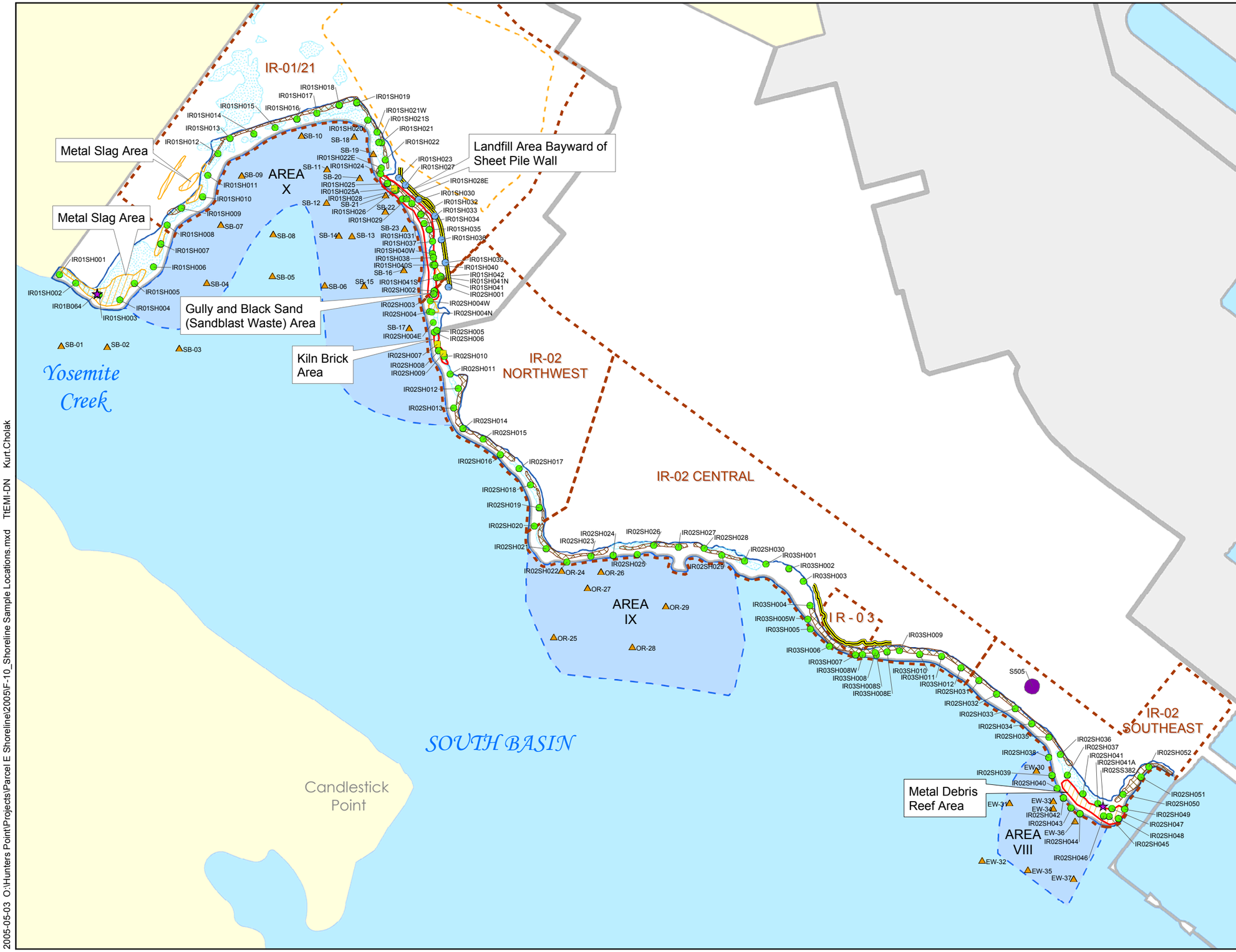

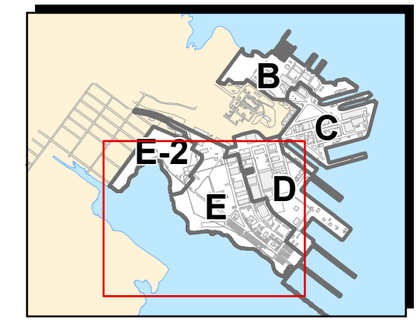

Location Map

- Shoreline Sampling Location (Tetra Tech EM Inc.)
- Offshore Sampling Location (Battelle)
- Onshore Sampling Location (Tetra Tech EM Inc.)
- Brick Sampling Location
- Location Sampled during Previous RI
- Drainage Channel
- Sheet Pile Wall
- Biased Sample Area
- Debris Area
- Riprap
- Wetland
- Former Aboveground Storage Tank
- Edge of Landfill Cap Geomembrane
- Low-Volume Footprint - Parcel F VS
- Sub-IR Site Boundary
- Shoreline Remedial Unit
- Parcel Boundary
- Non-Navy Property
- Parcels C and D

Notes:

IR	Installation Restoration
RI	Remedial Investigation
VS	Validation Study

400 200 0 400

Scale in Feet

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FIGURE F-10
SHORELINE AND OFFSHORE SAMPLING LOCATIONS AND SITE FEATURES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum

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Figure F-11. Aluminum versus Percent Fines in Parcel F Sediments, Overall and by Area

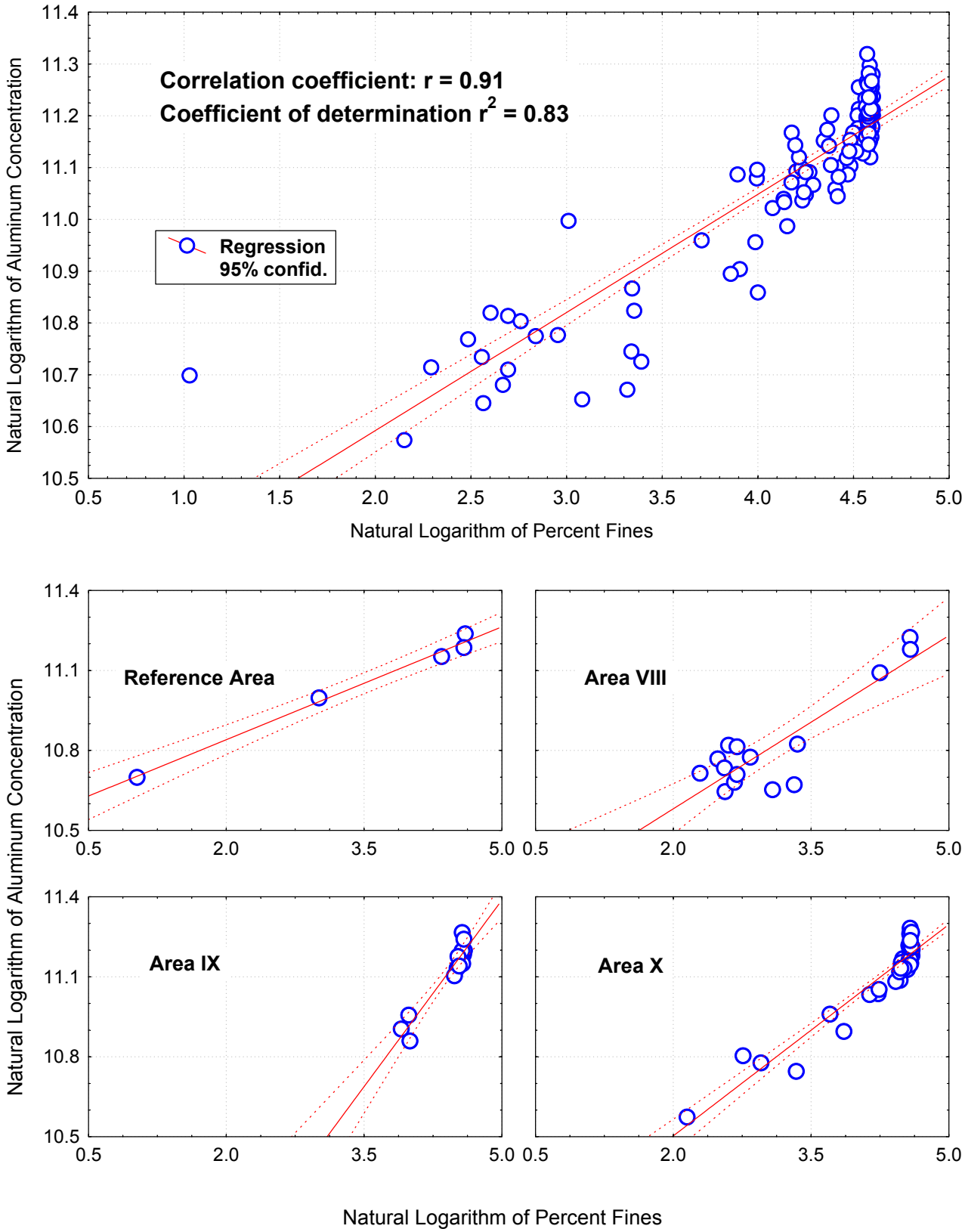
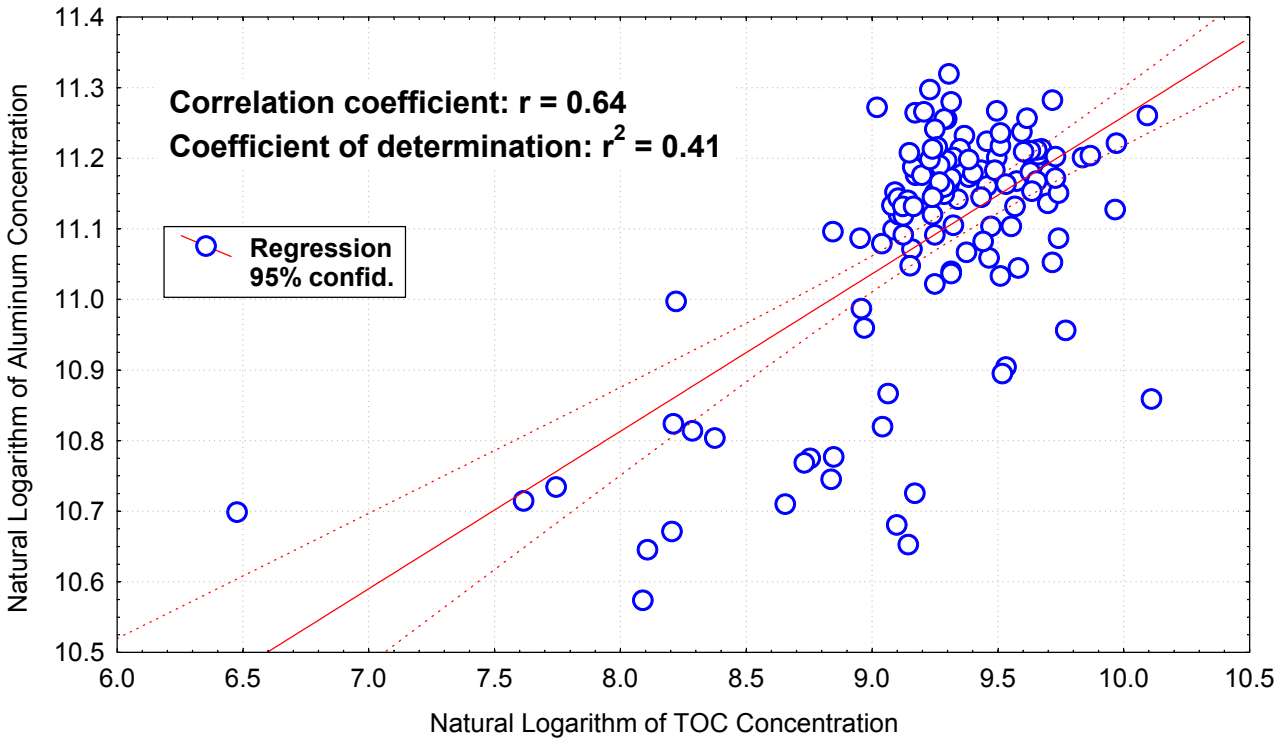


Figure F-12. Aluminum versus Total Organic Carbon in Parcel F Sediments, Overall and by Area



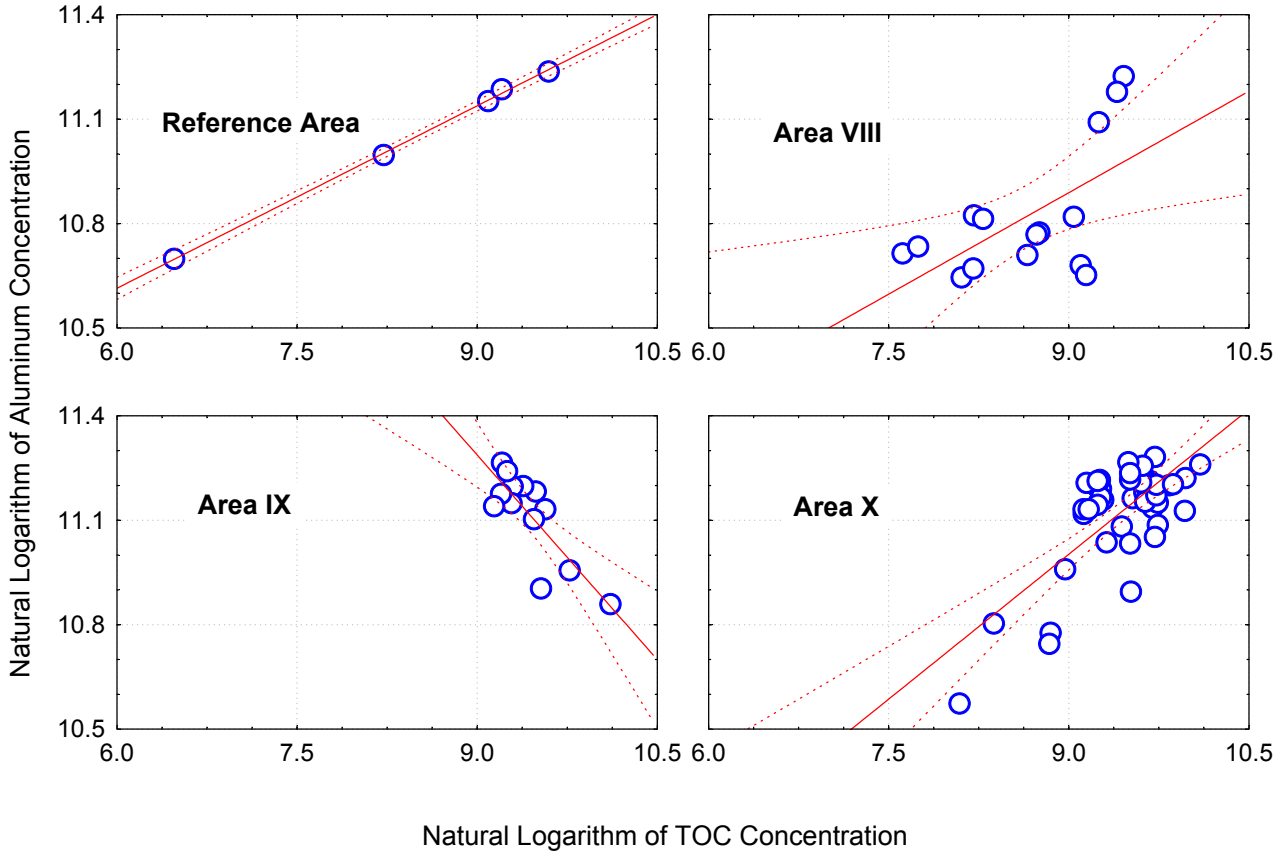


Figure F-13. Copper, Lead, and Zinc in Parcels E and E-2, by Area

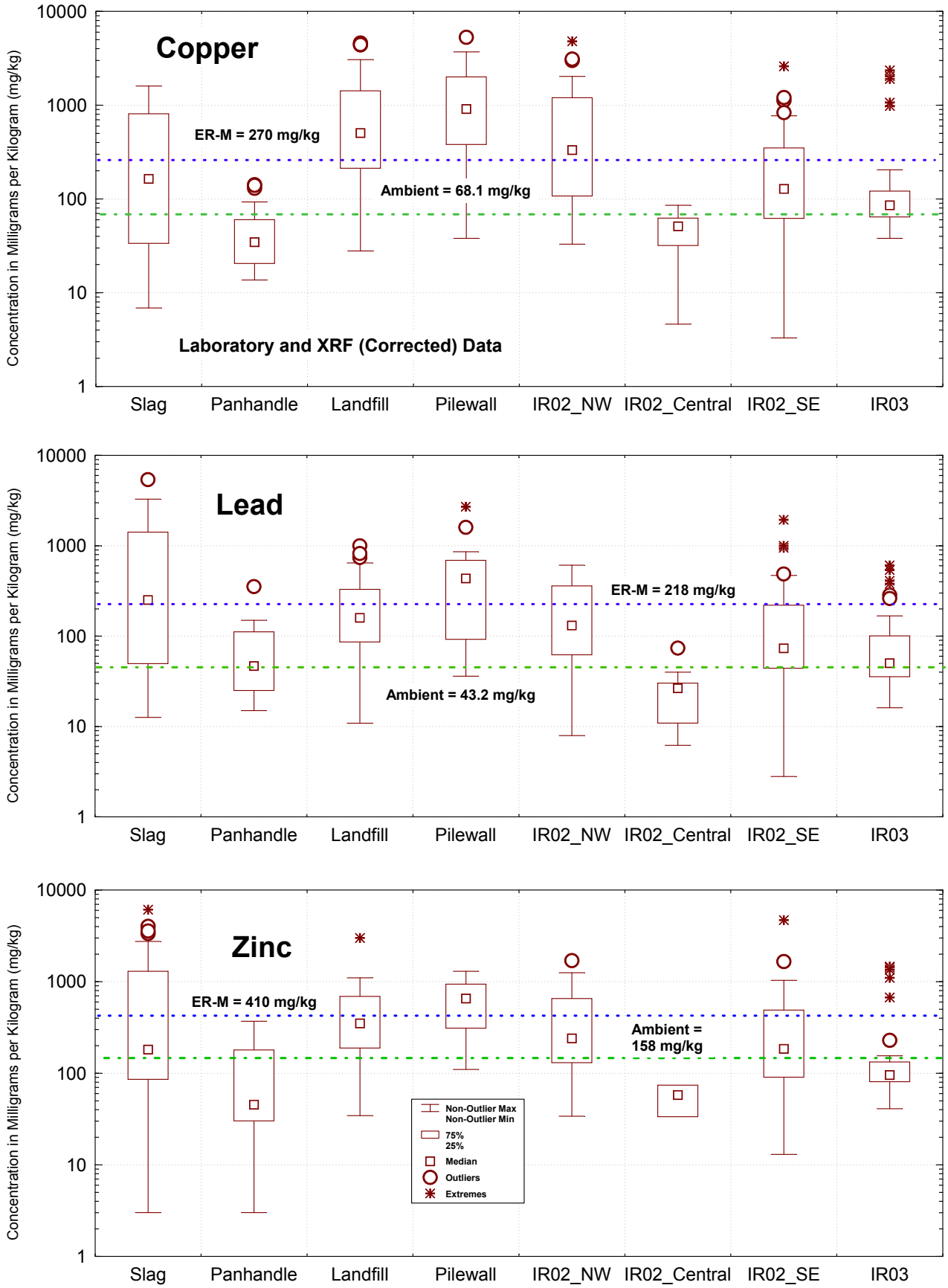


Figure F-14. Copper, Lead, and Zinc in IR-01, by Location

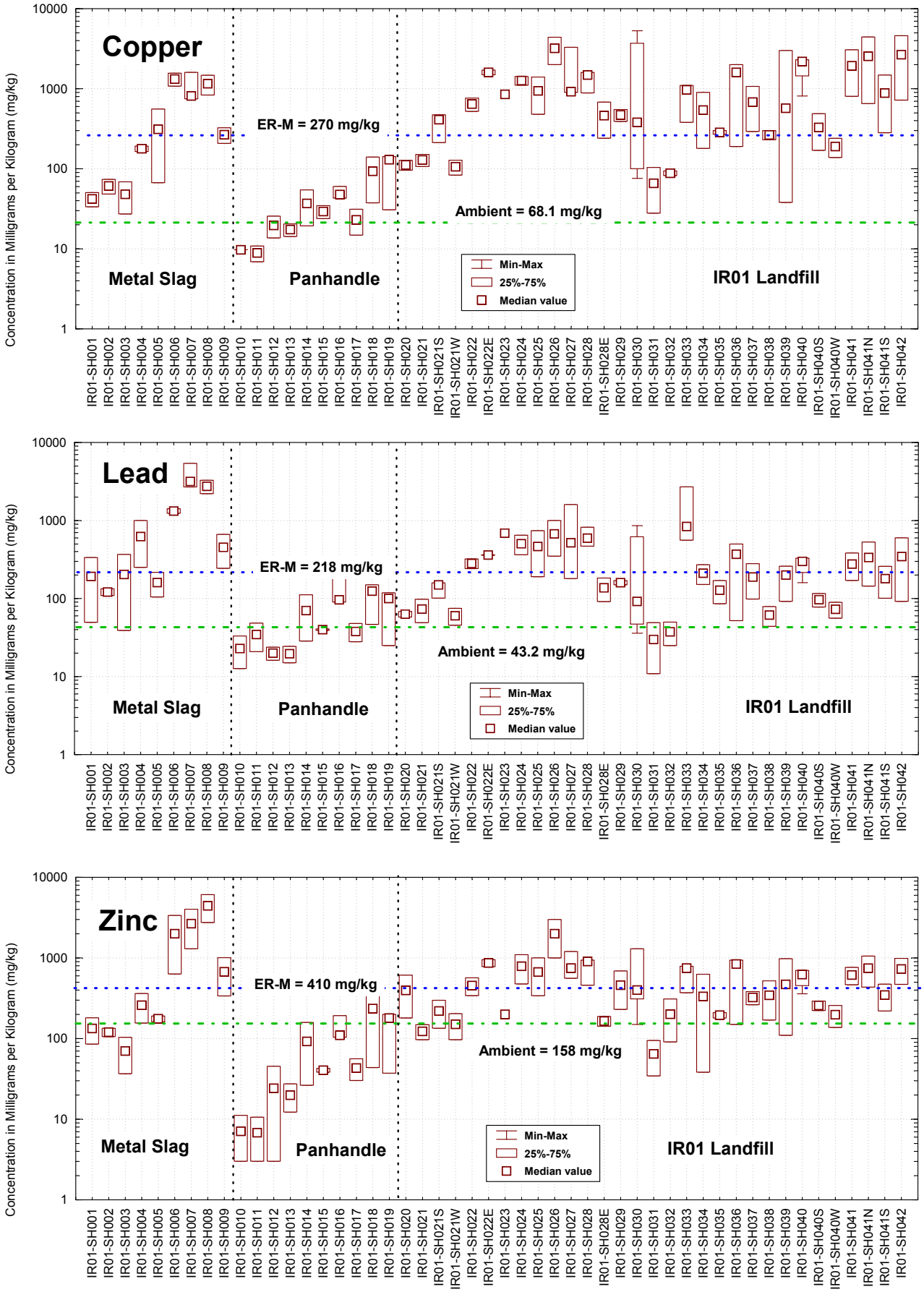


Figure F-15. Copper, Lead, and Zinc in IR-02, by Location

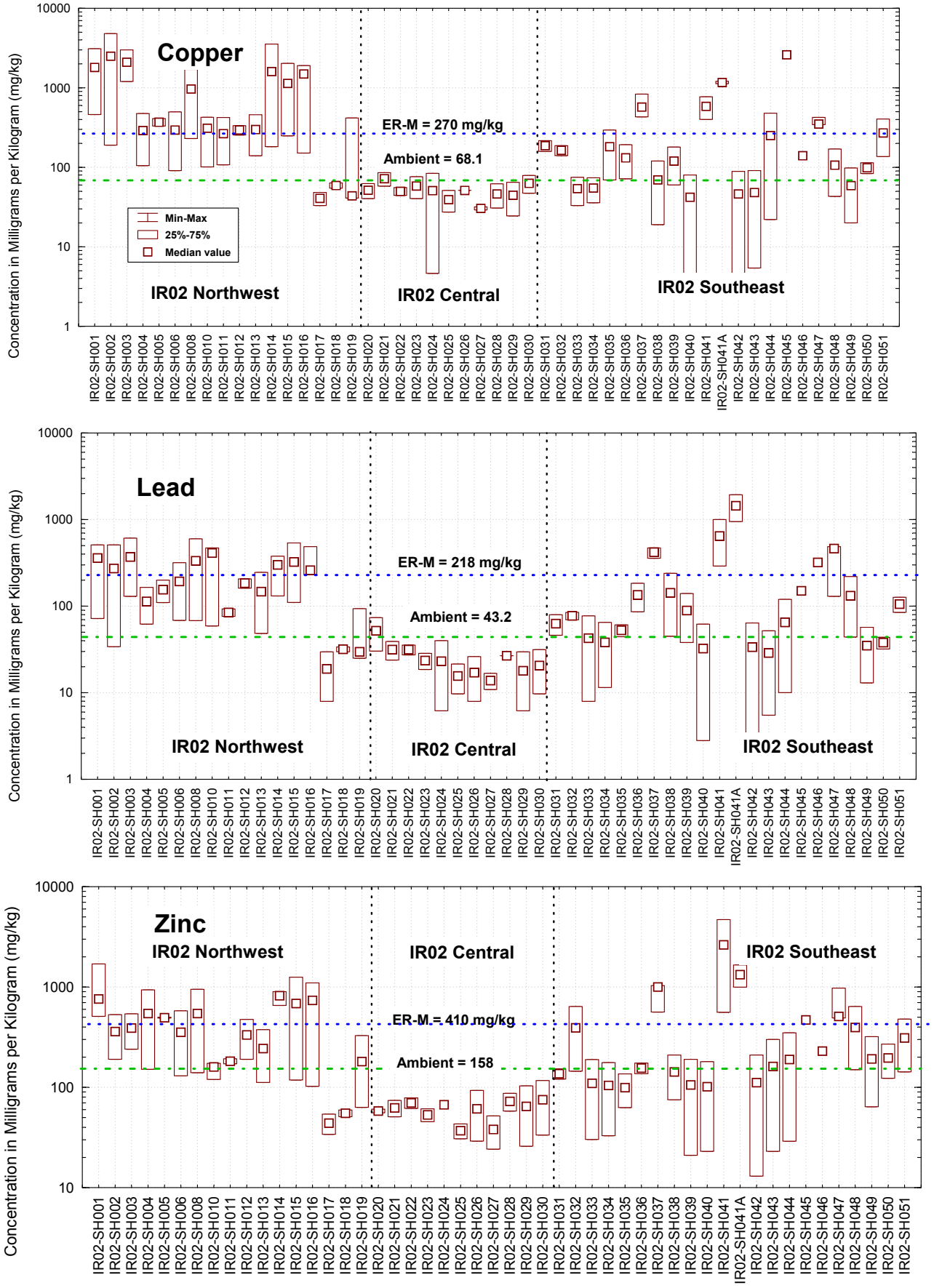
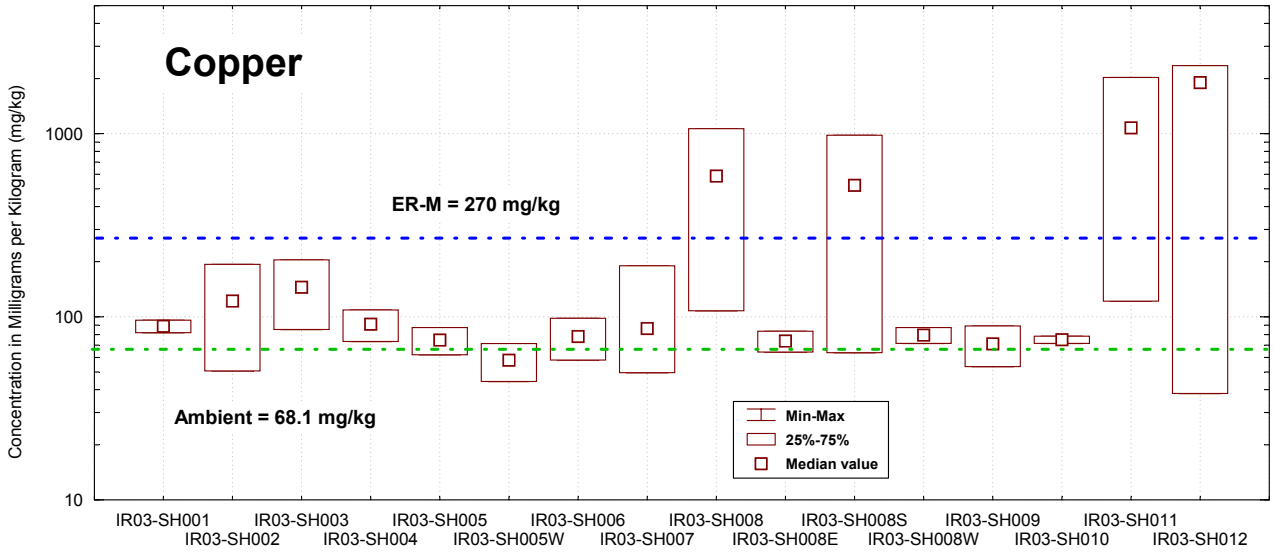
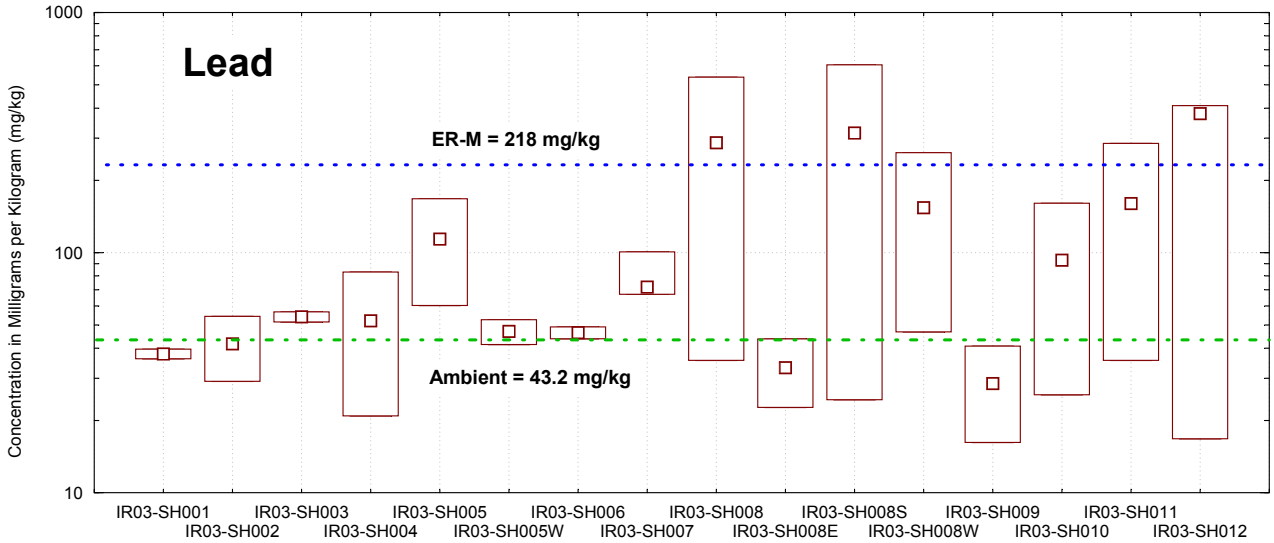


Figure F-16. Copper, Lead, and Zinc in IR-03, by Location





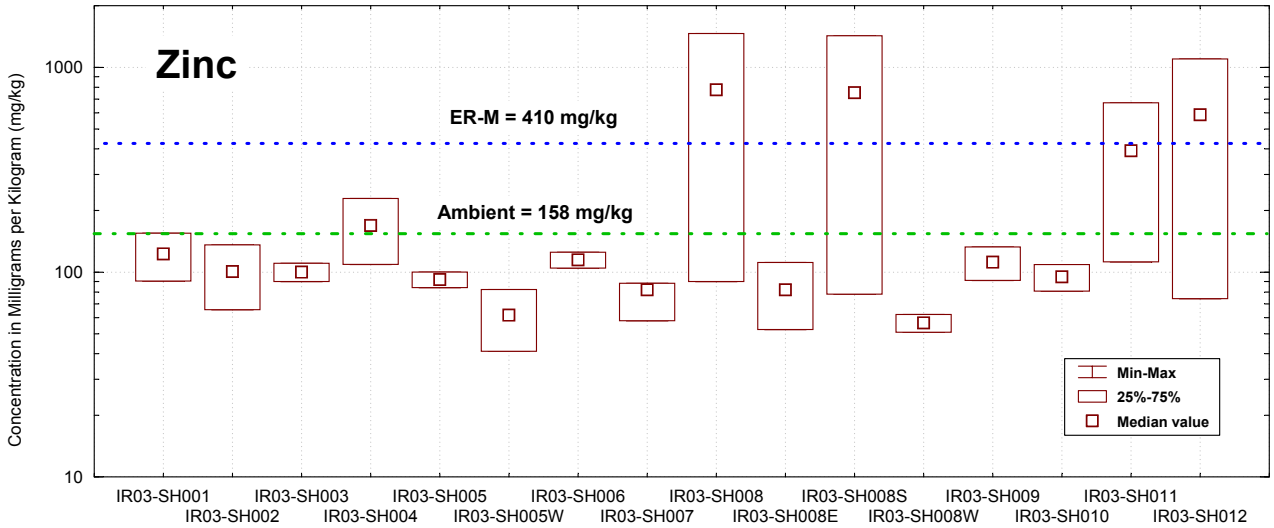
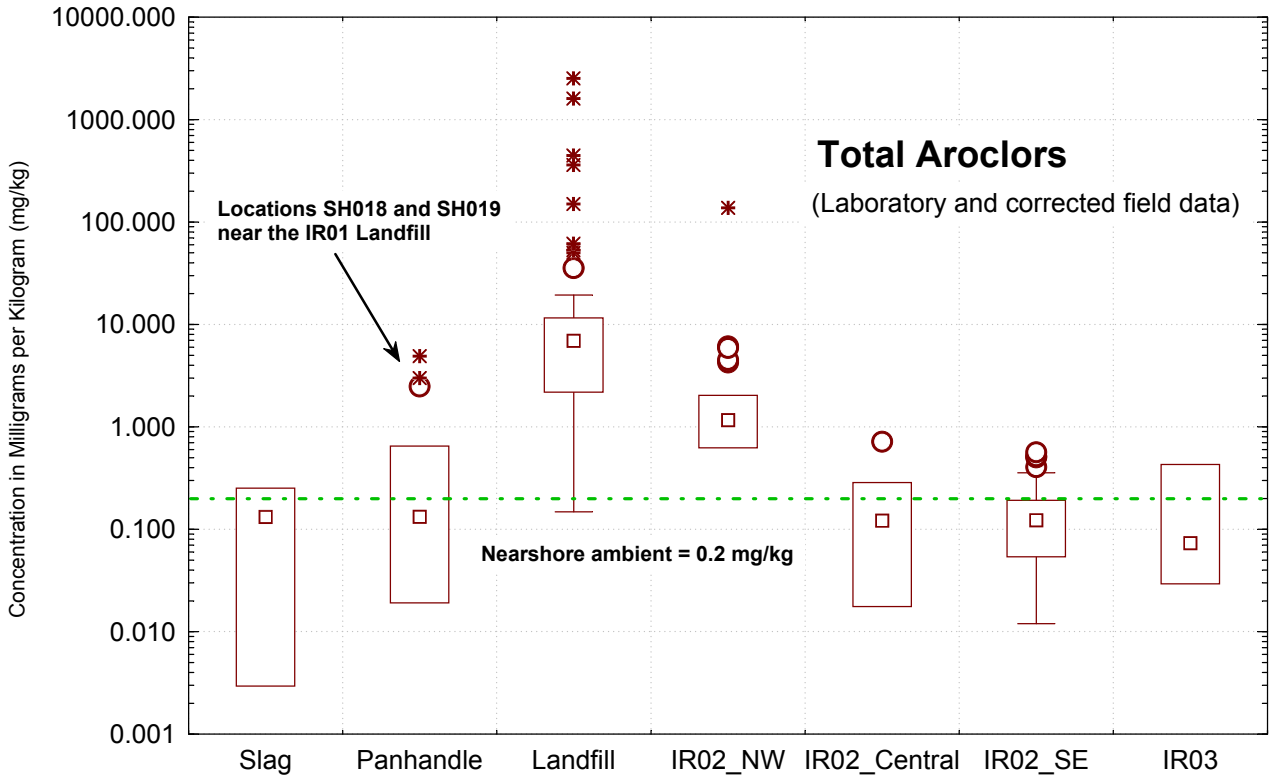


Figure F-17. Total Aroclors in Parcels E and E-2, by Area



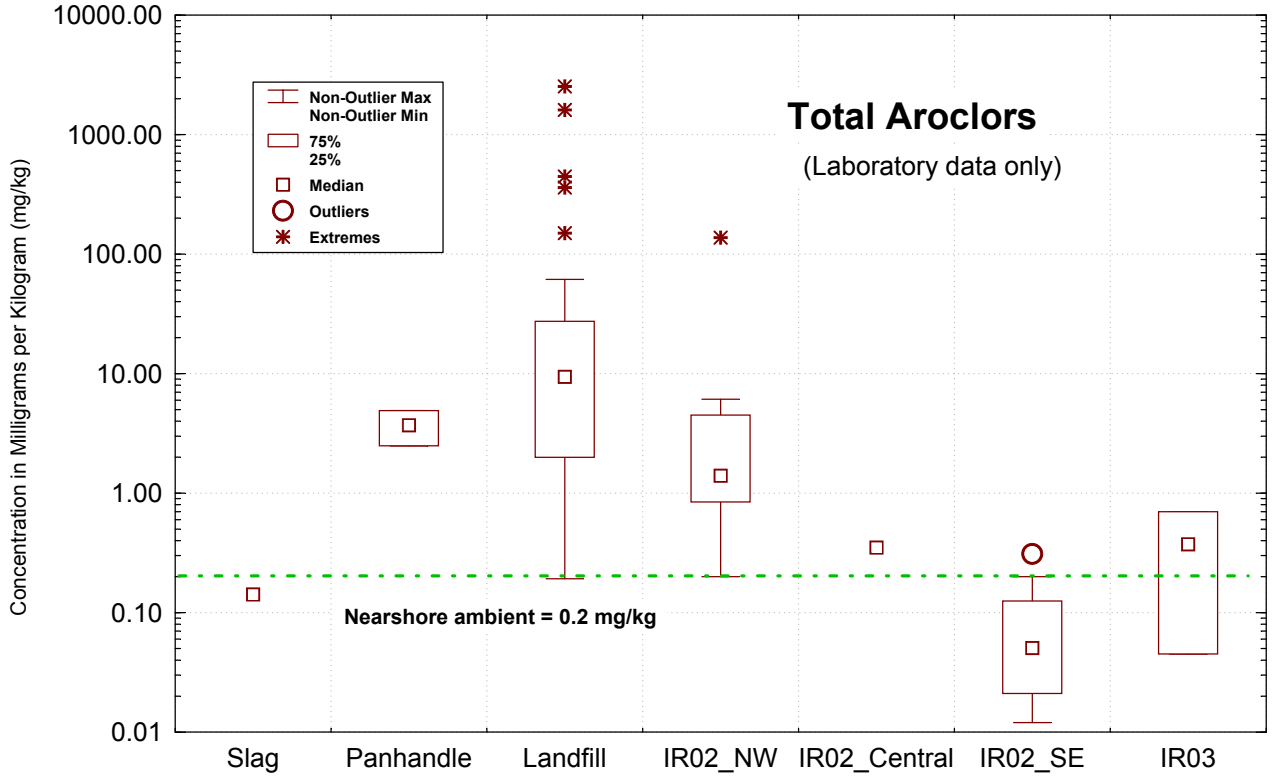
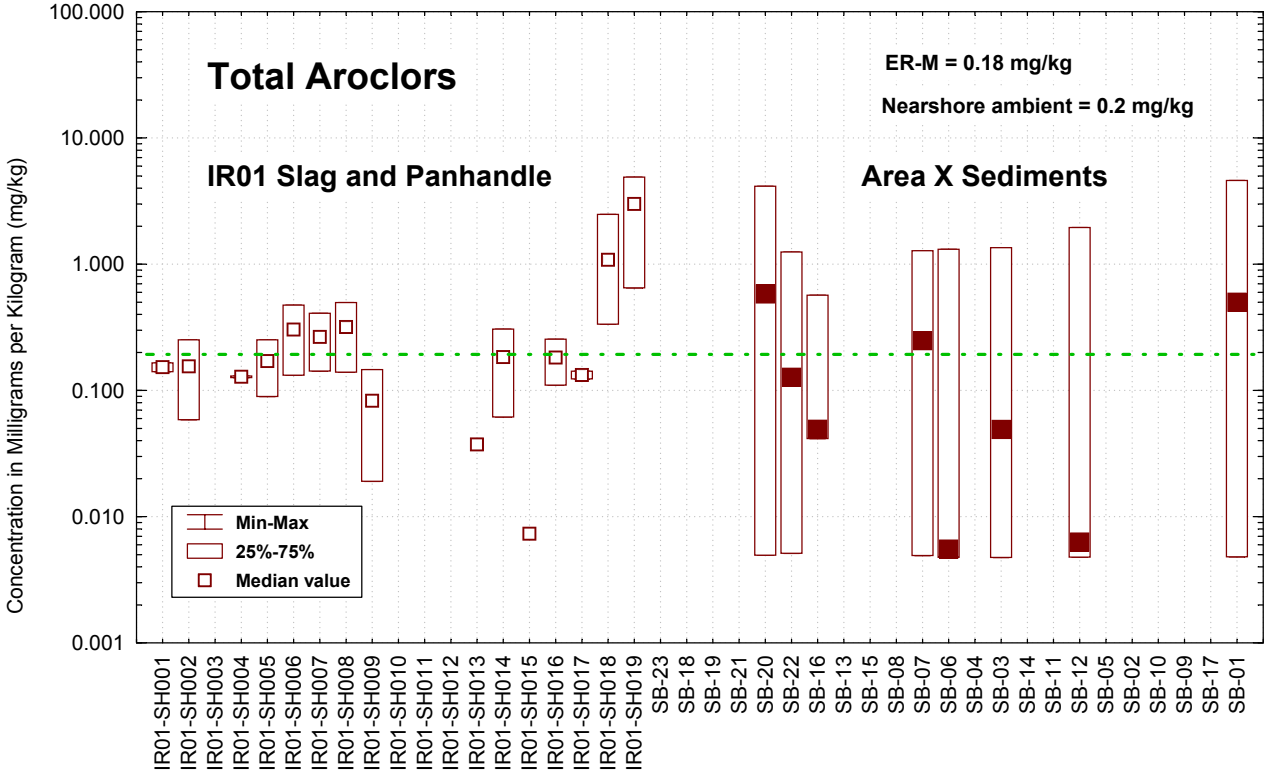


Figure F-18. Total Aroclors in IR-01 Panhandle, IR-01 Landfill, and Area X, by Location



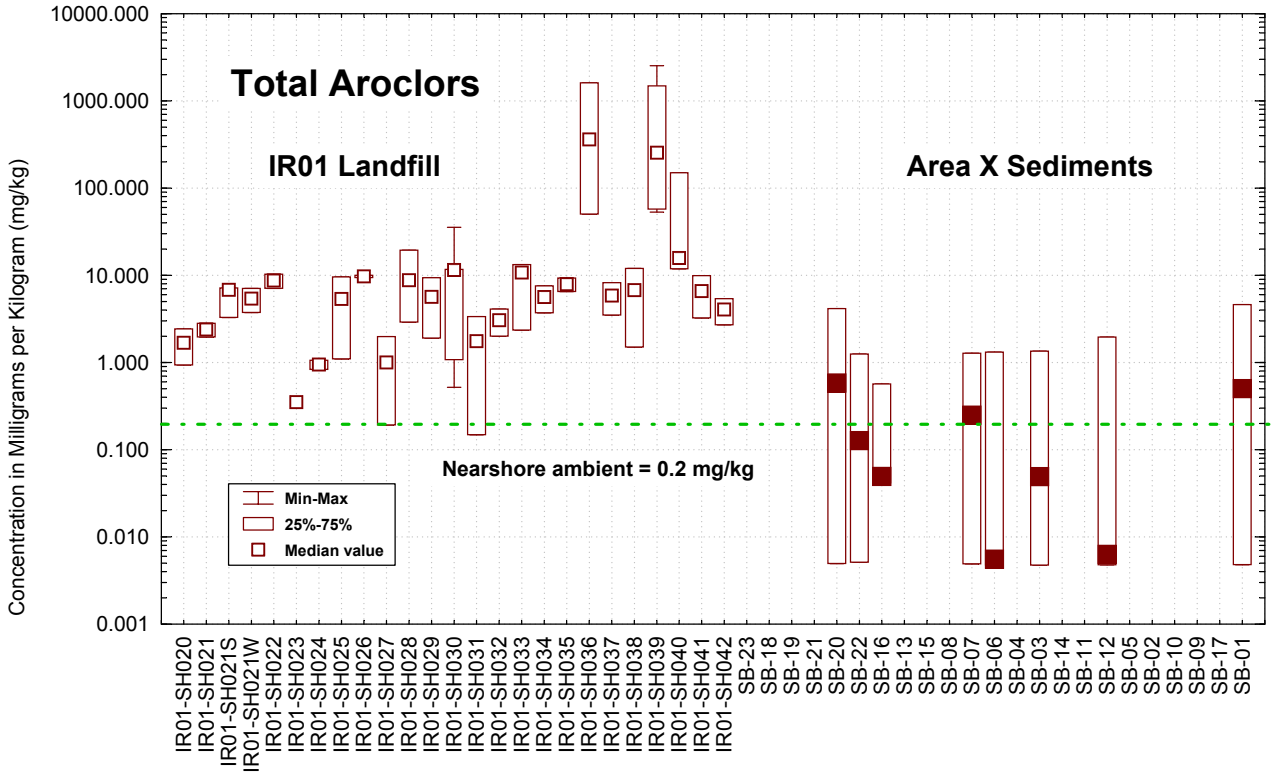
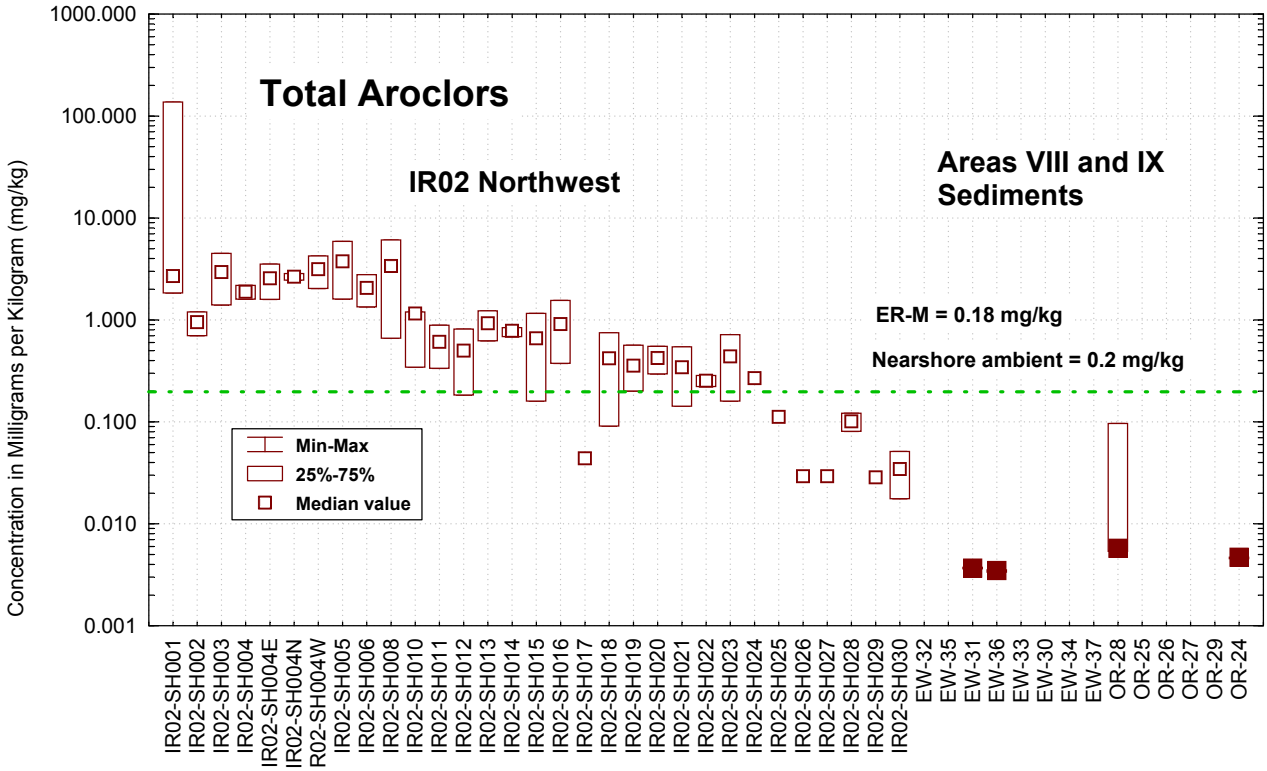


Figure F-19. Total Aroclors in IR-02 Northwest, IR-02 Southeast, IR-03, and Area VIII and IX, by Location



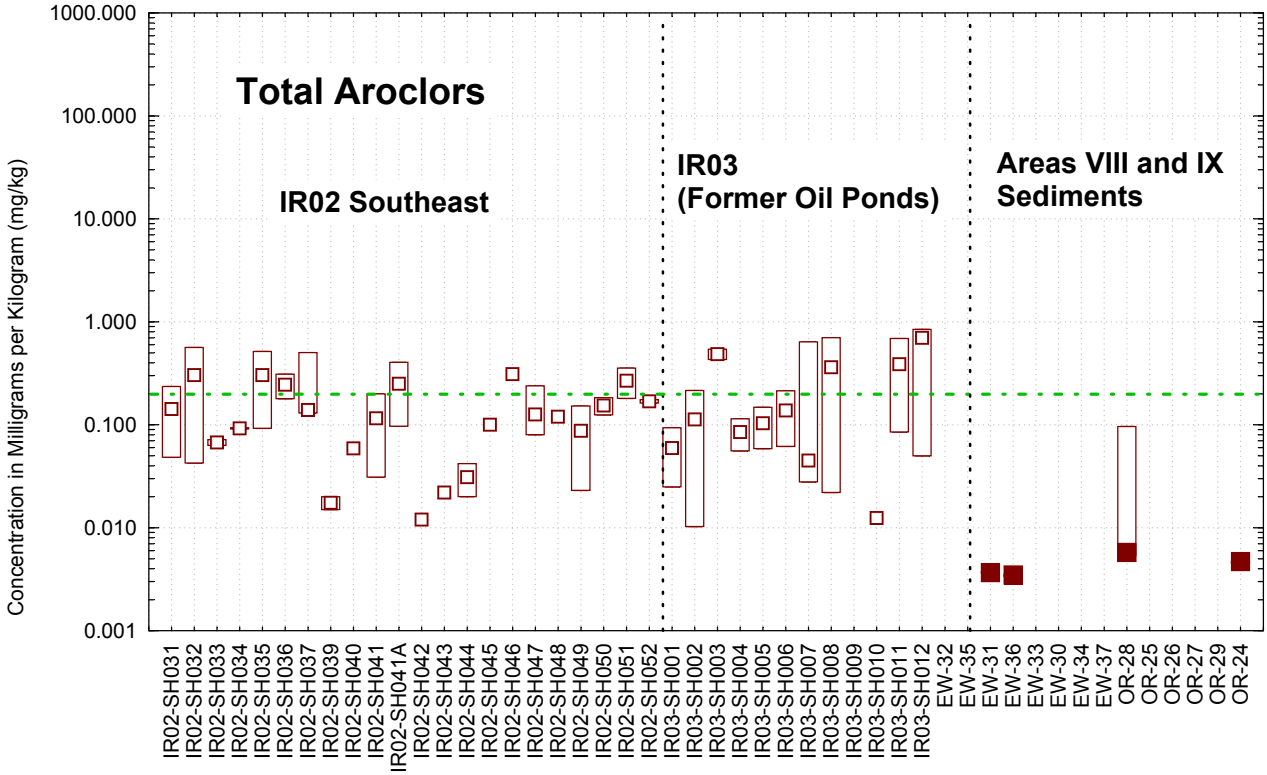
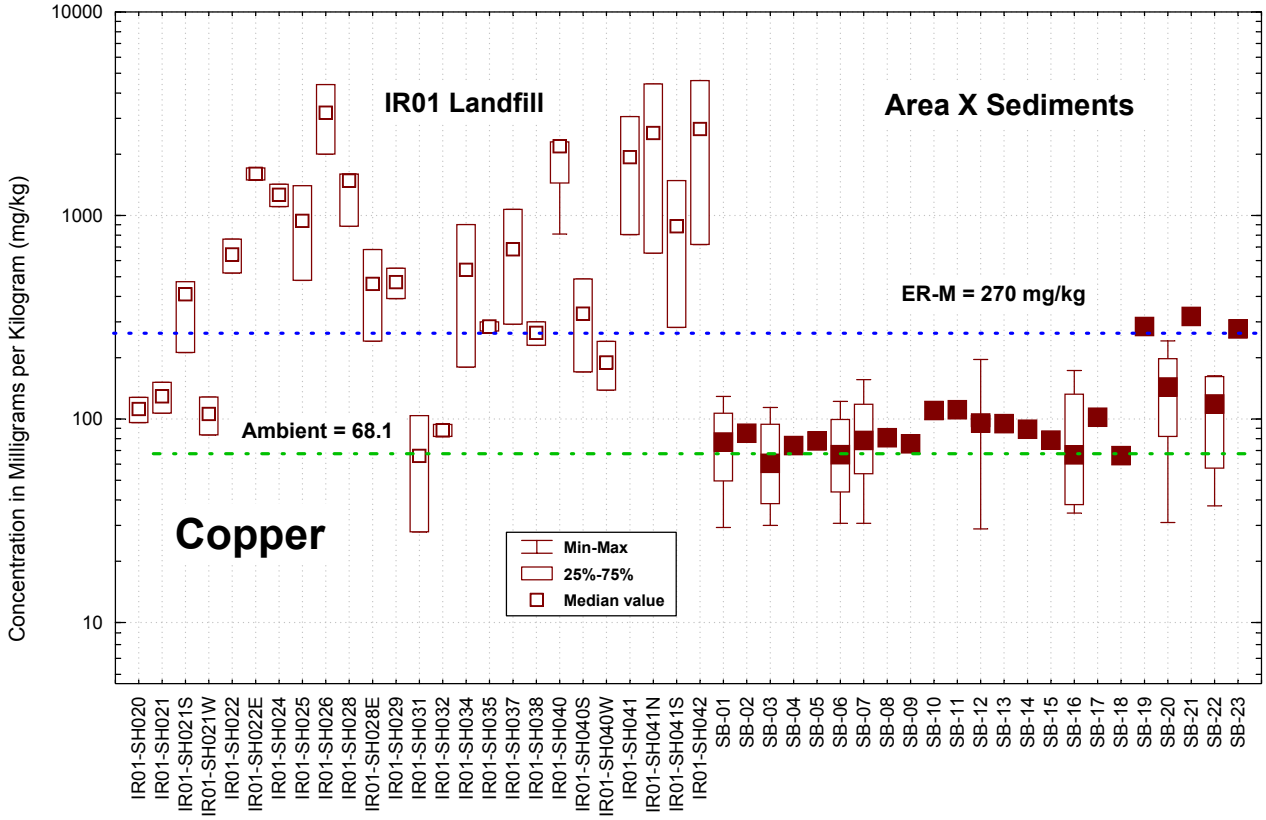


Figure F-20. Copper and Lead in IR-01 Landfill and Area X, by Location



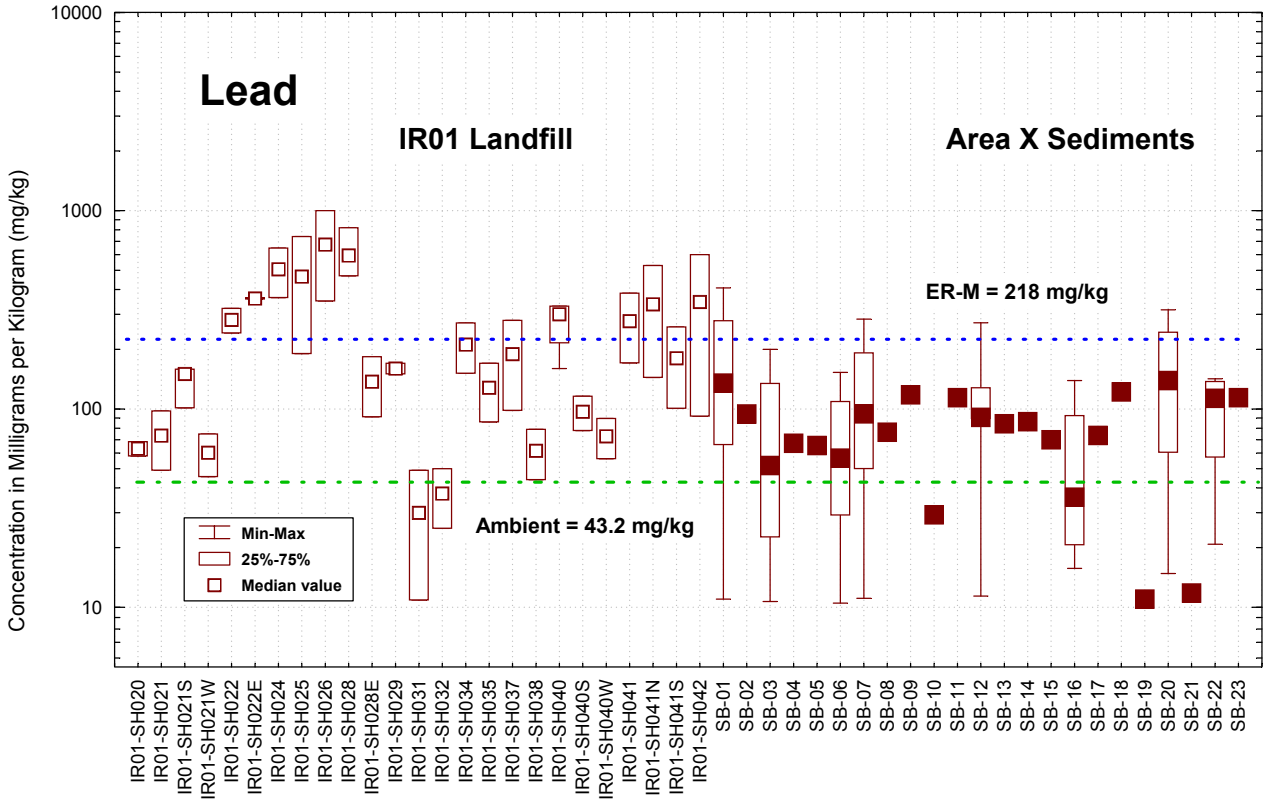
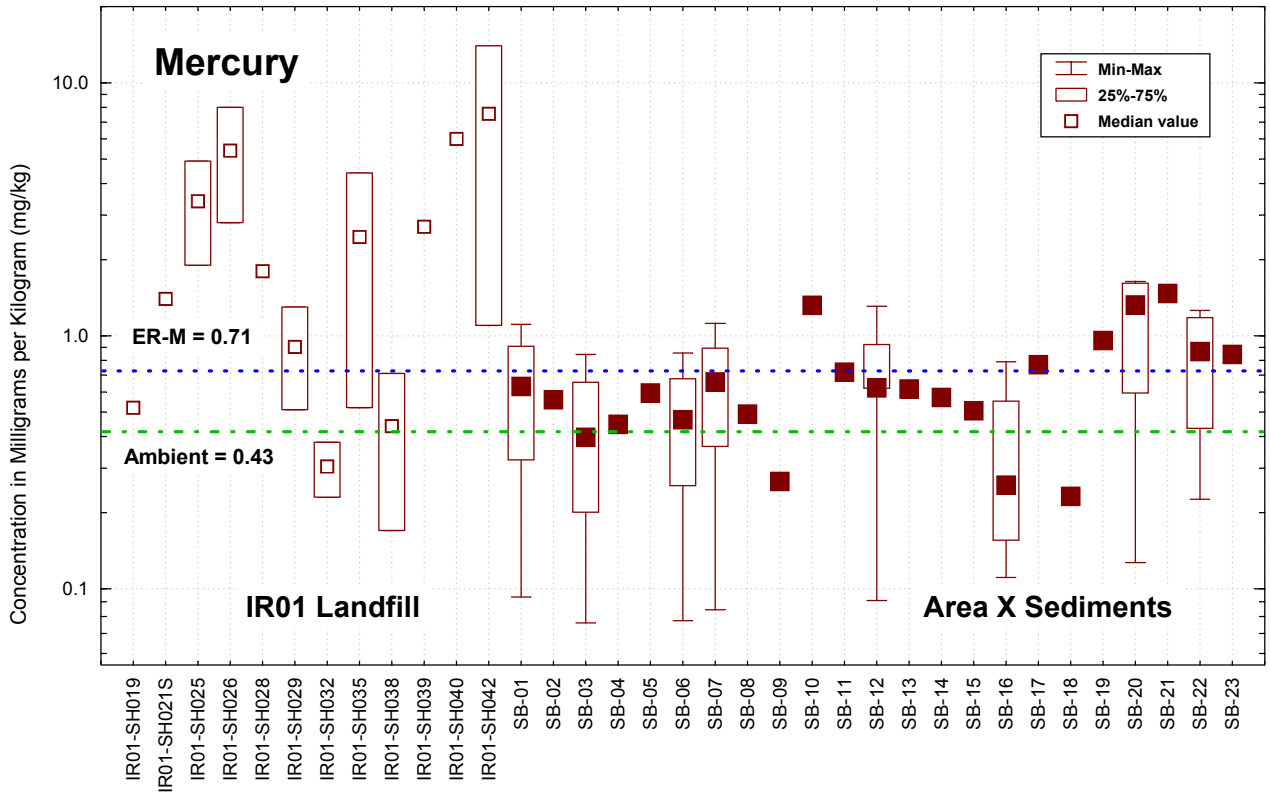


Figure F-21. Mercury and Zinc in IR-01 Landfill and Area X, by Location



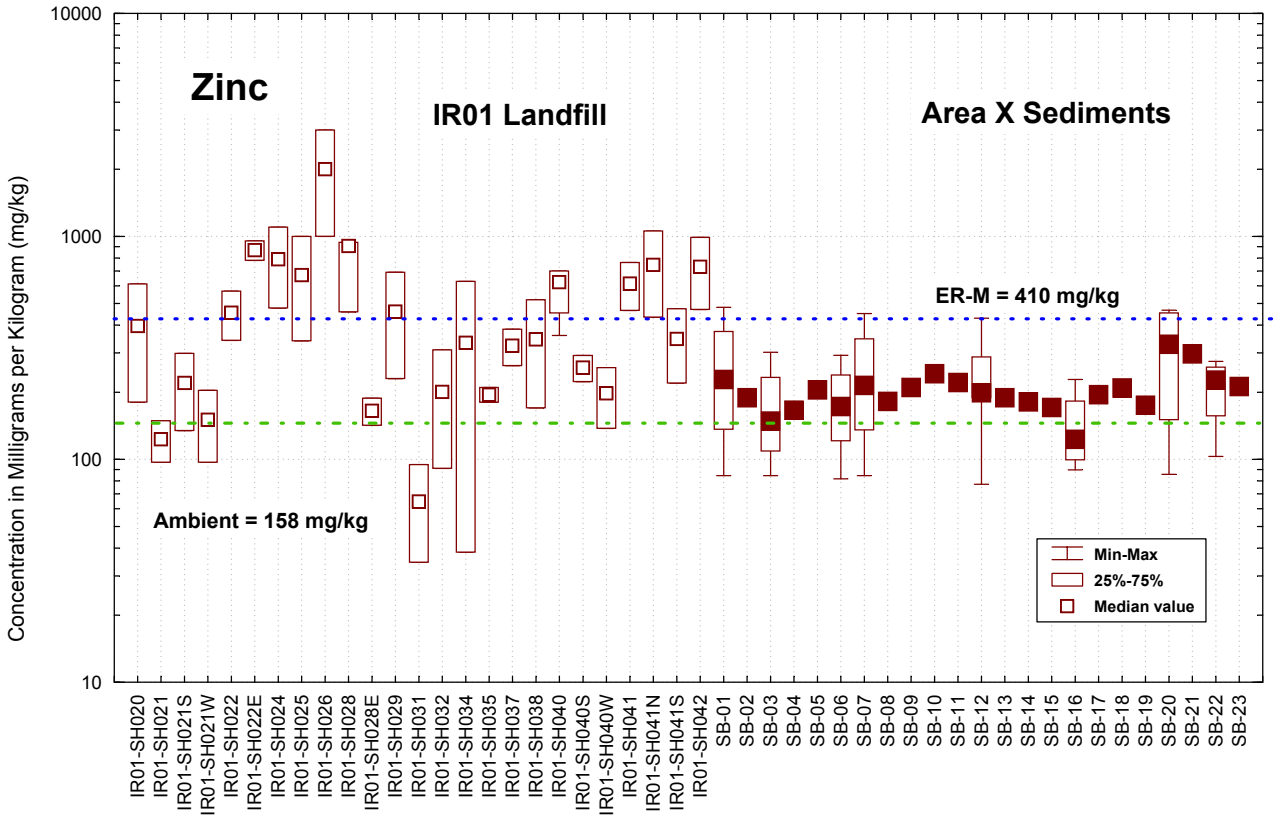


Figure F-22. Chromium and Nickel in IR-01 Landfill and Area X, by Location

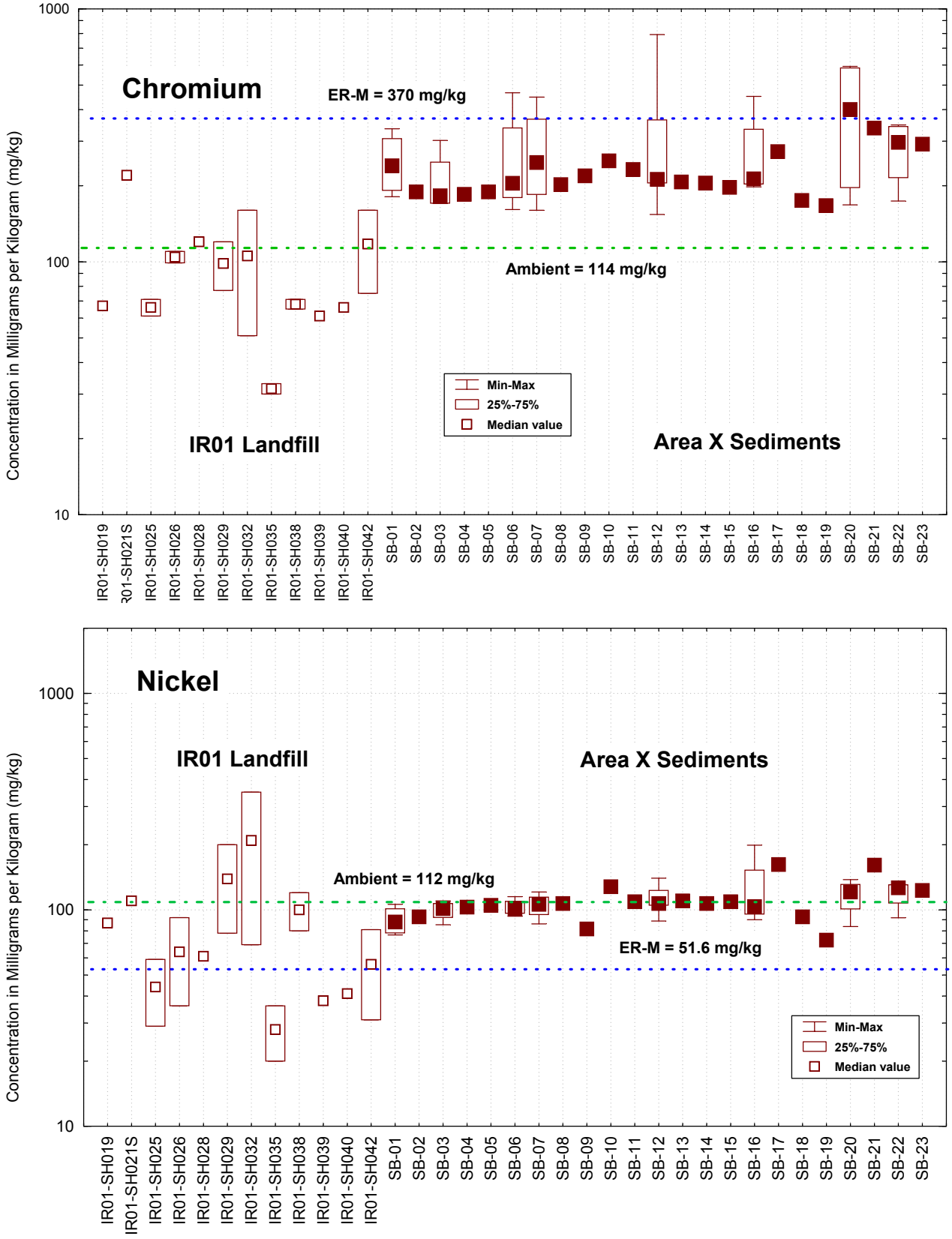


Figure F-23. Antimony and Cadmium in IR-01 Landfill and Area X, by Location

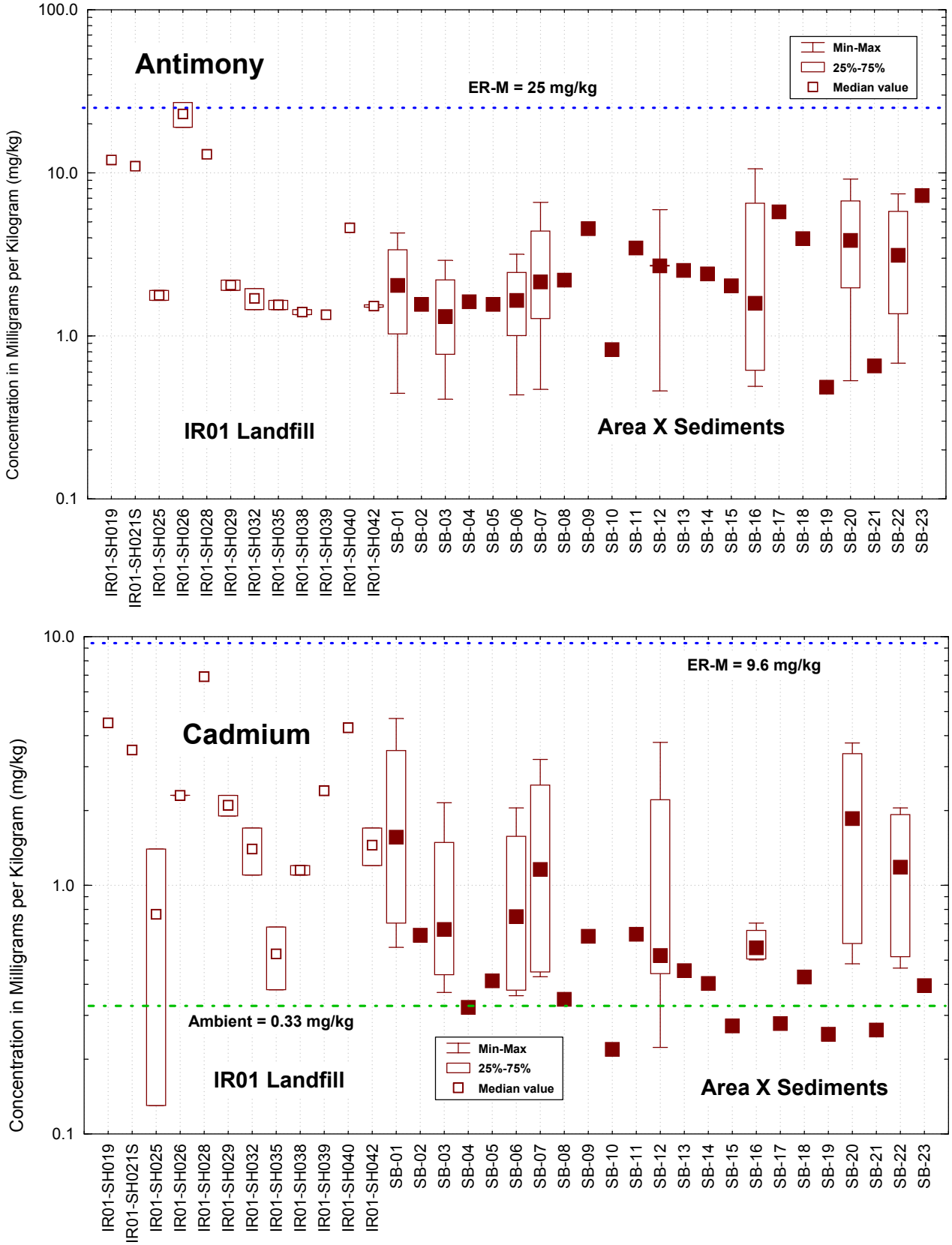
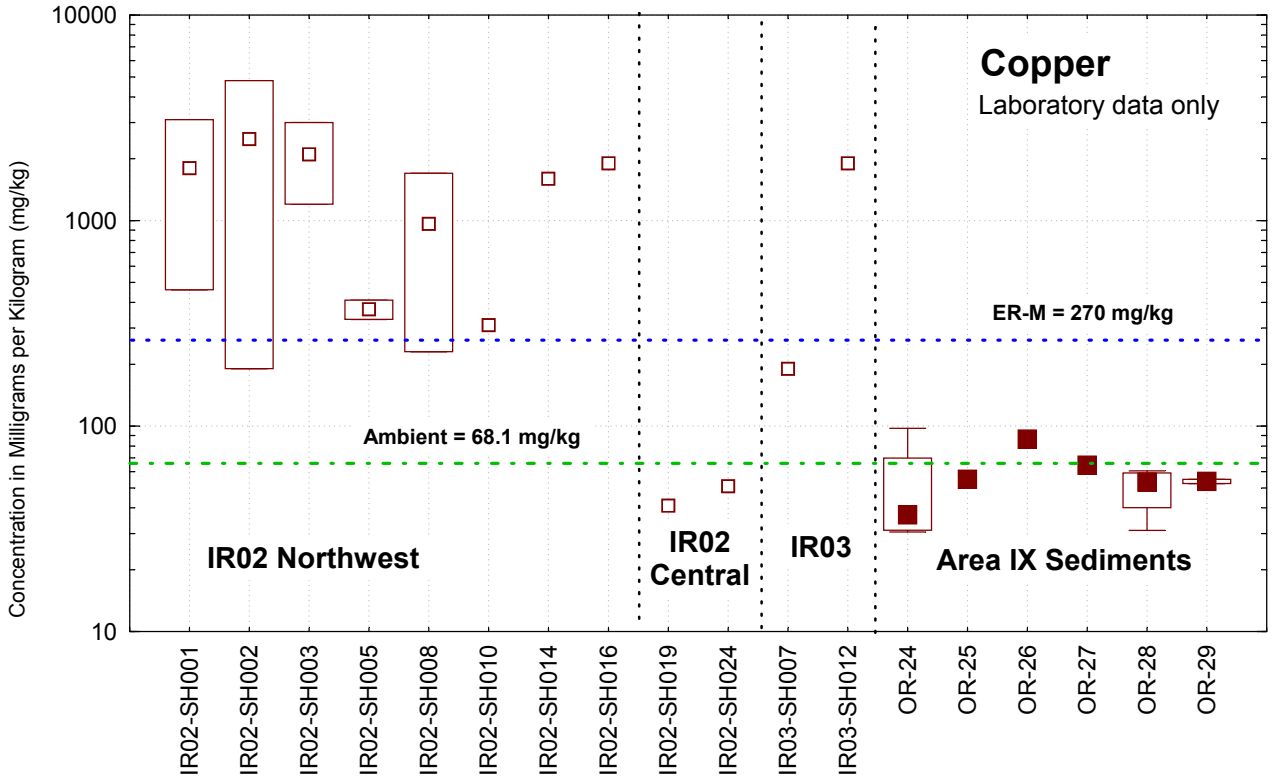


Figure F-24. Copper and Lead in IR-02 Northwest, IR-02 Central, IR-03, and Area IX, by Location



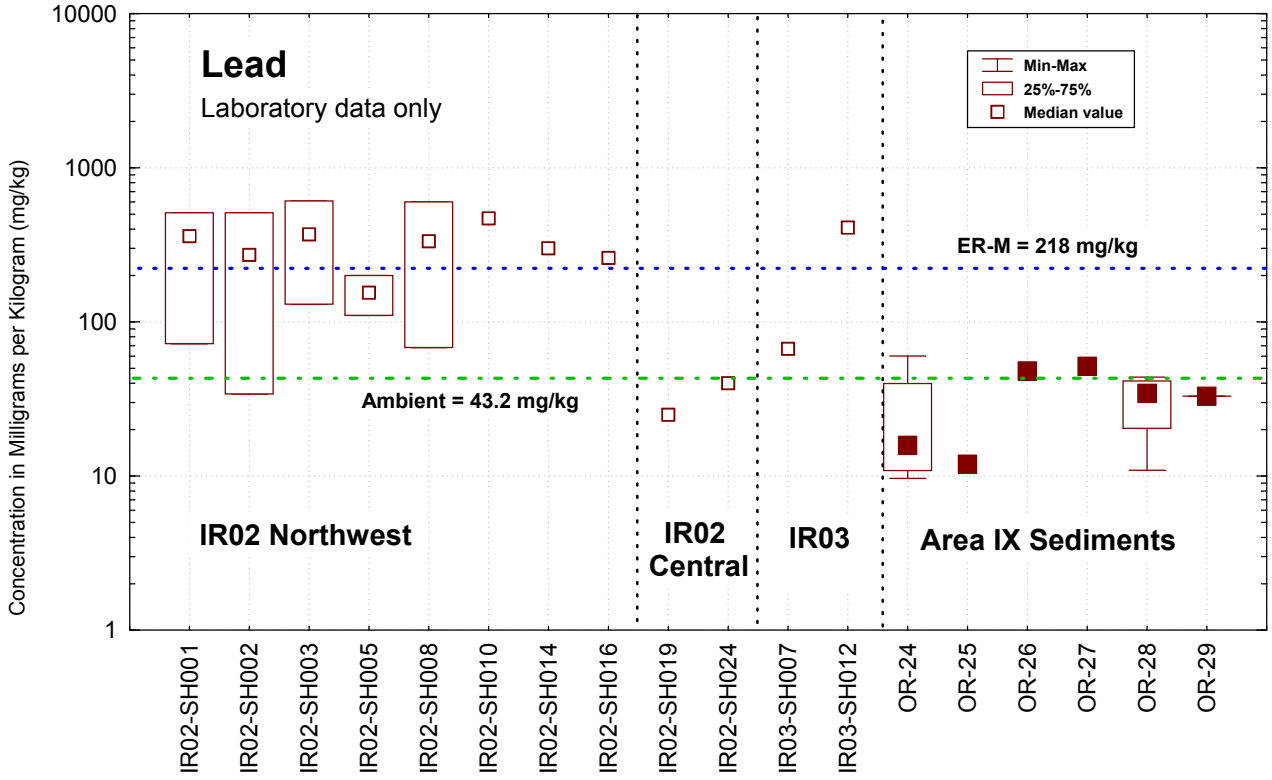
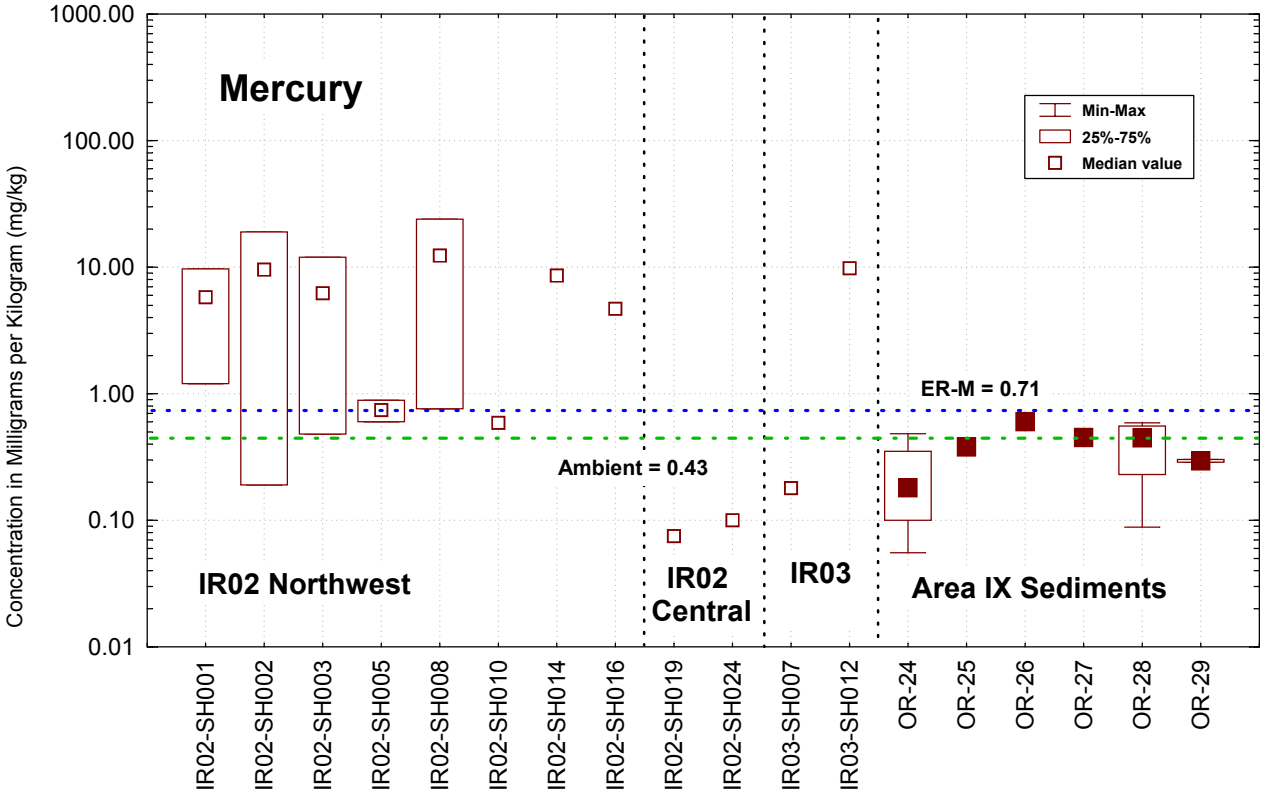


Figure F-25. Mercury and Zinc in IR-02 Northwest, IR-02 Central, IR-03, and Area IX, by Location



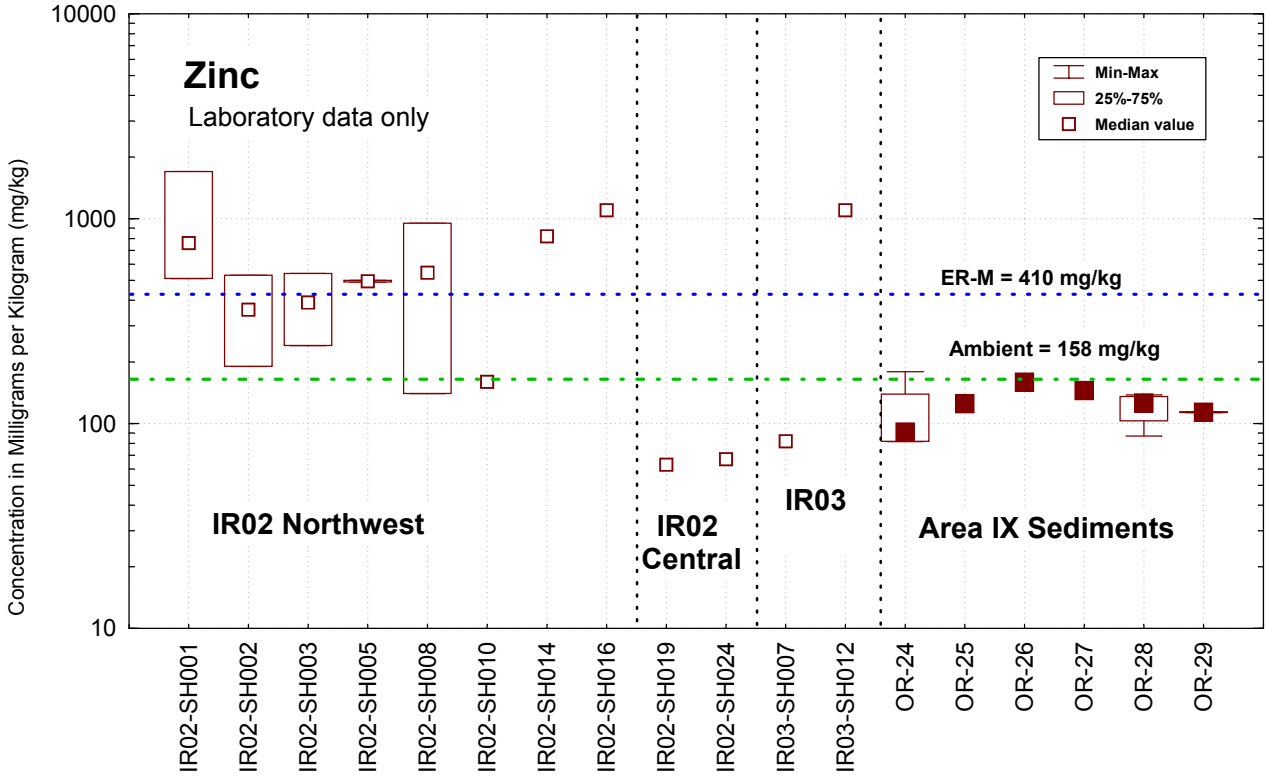
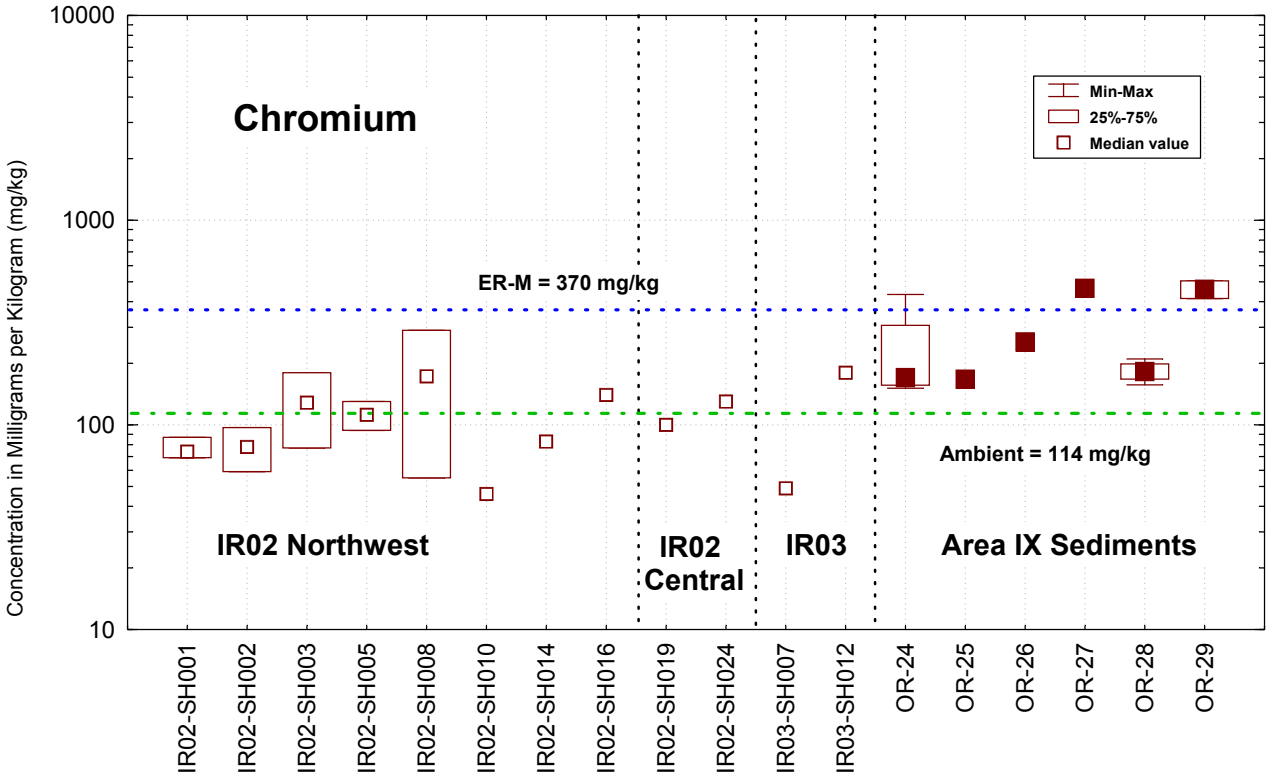


Figure F-26. Chromium and Nickel in IR-02 Northwest, IR-02 Central, IR-03, and Area IX, by Location



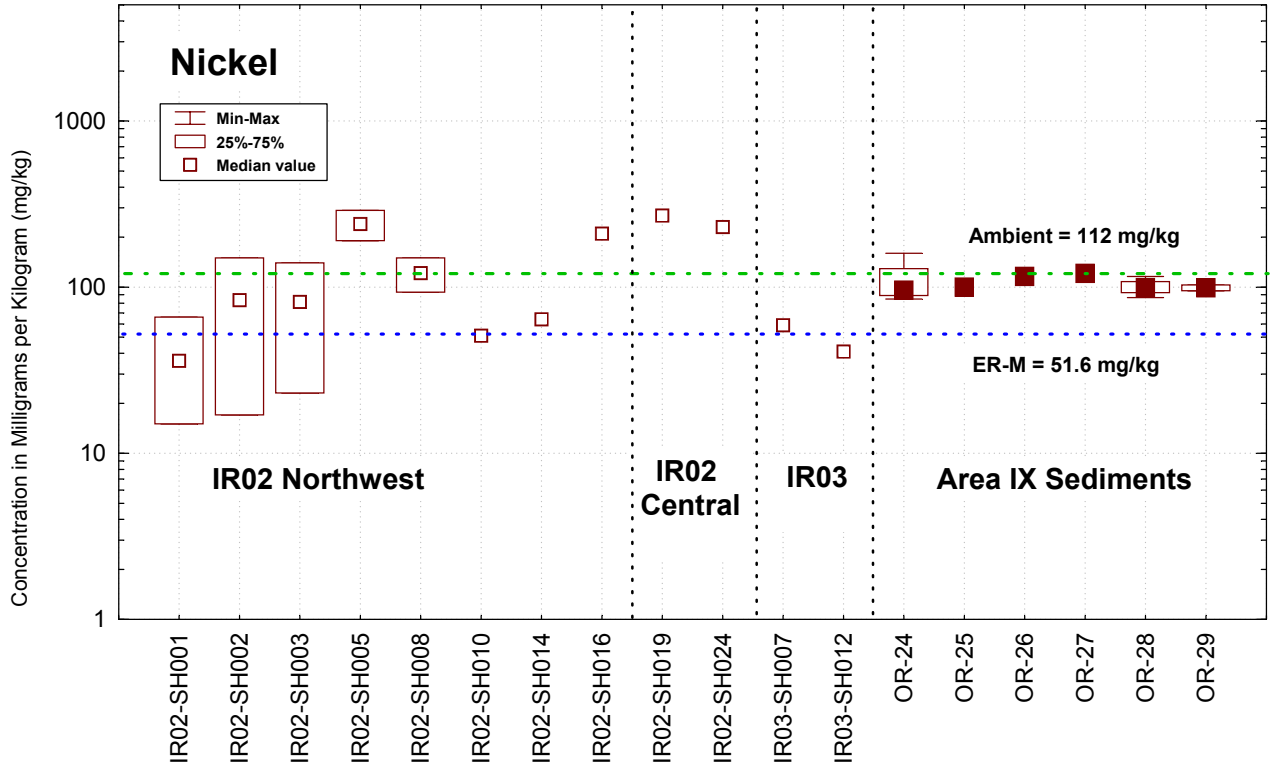


Figure F-27. Antimony and Cadmium in IR-02 Northwest, IR-02 Central, IR-03, and Area IX, by Location

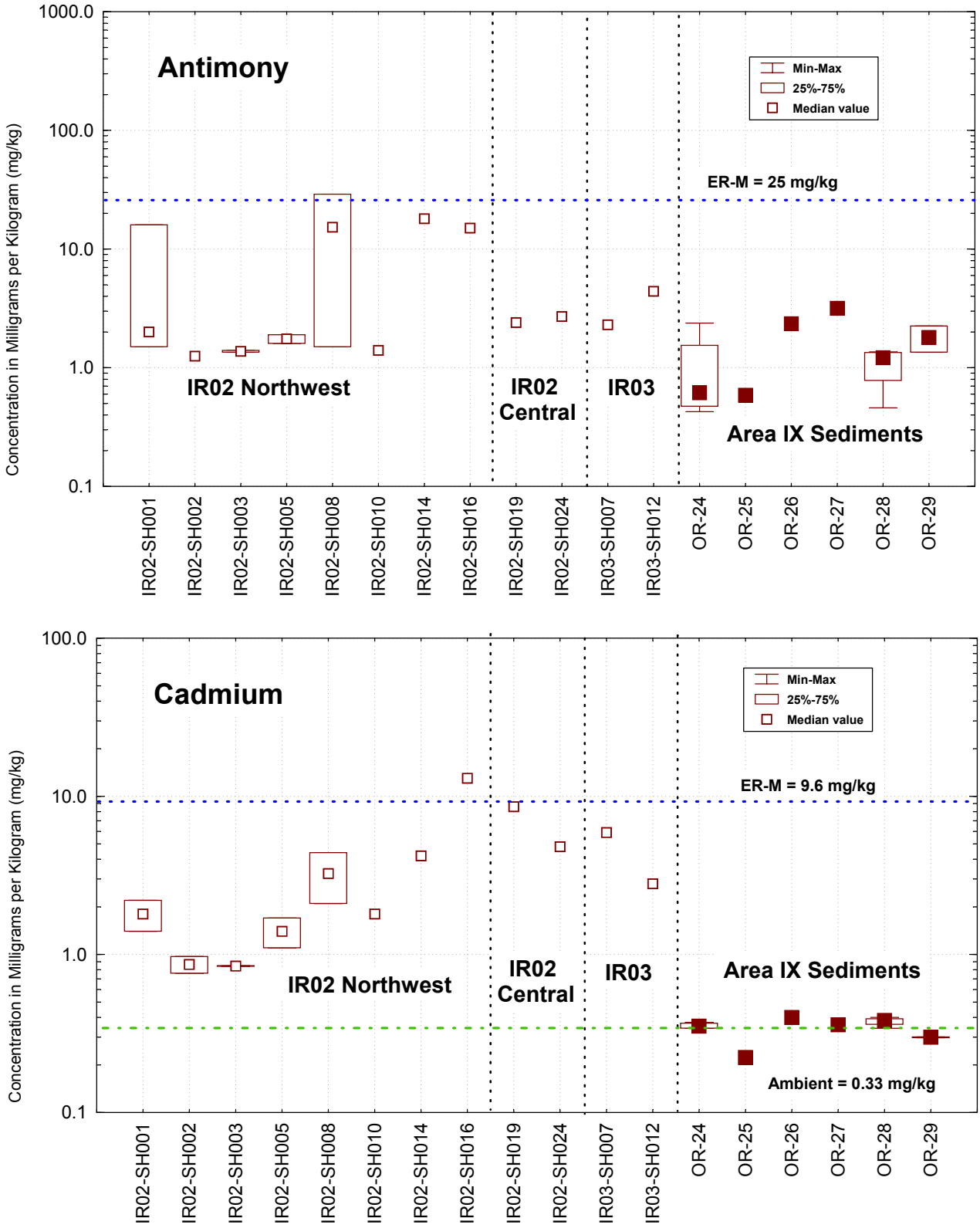
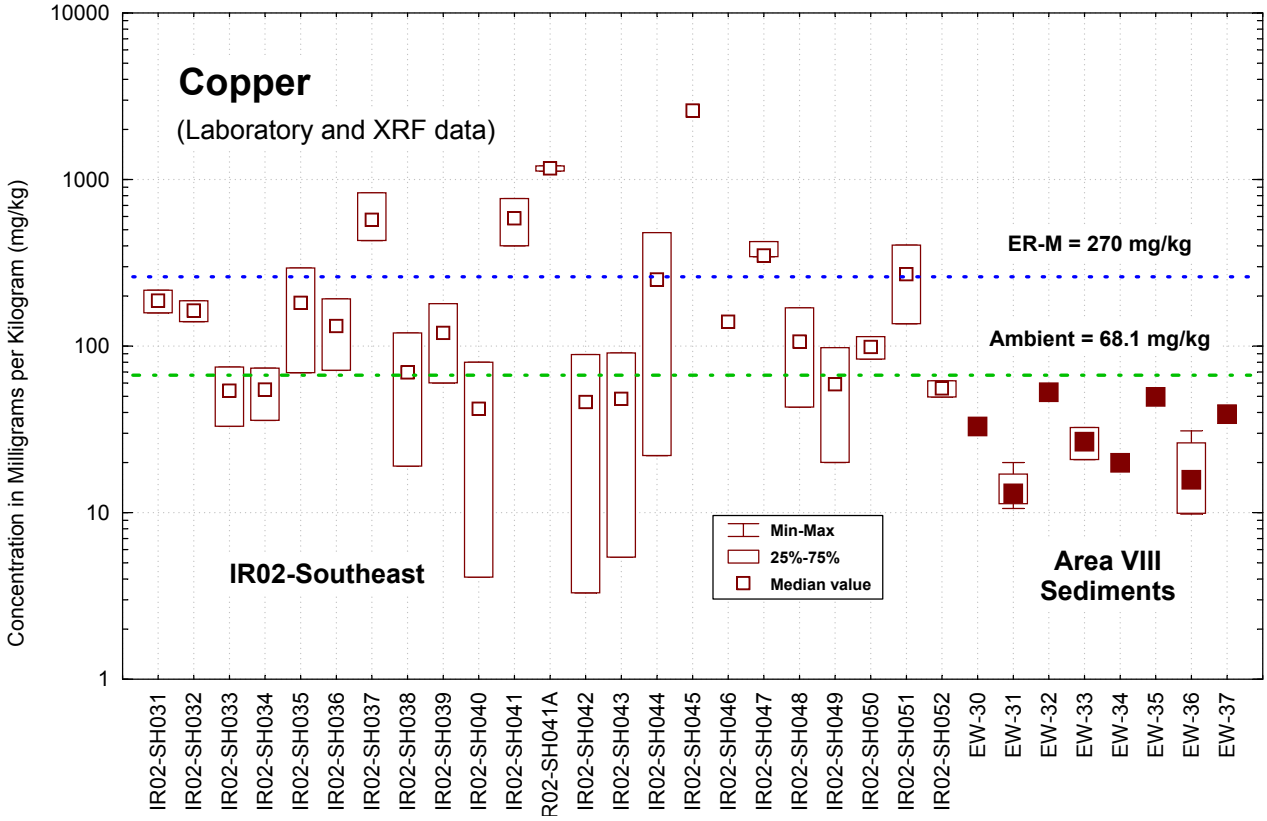


Figure F-28. Copper and Lead in IR-02 Southeast and Area VIII by Location



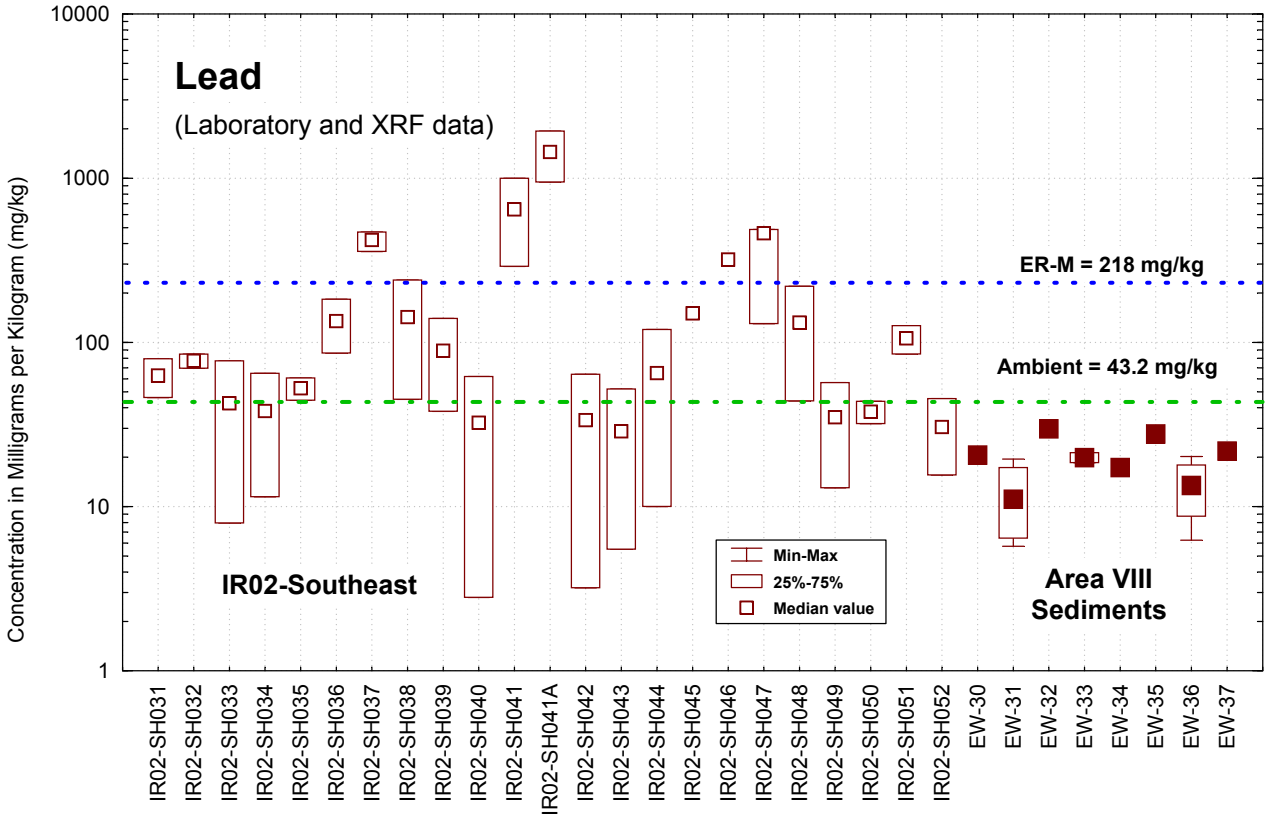


Figure F-29. Mercury and Zinc in IR-02 Southeast and Area VIII, by Location

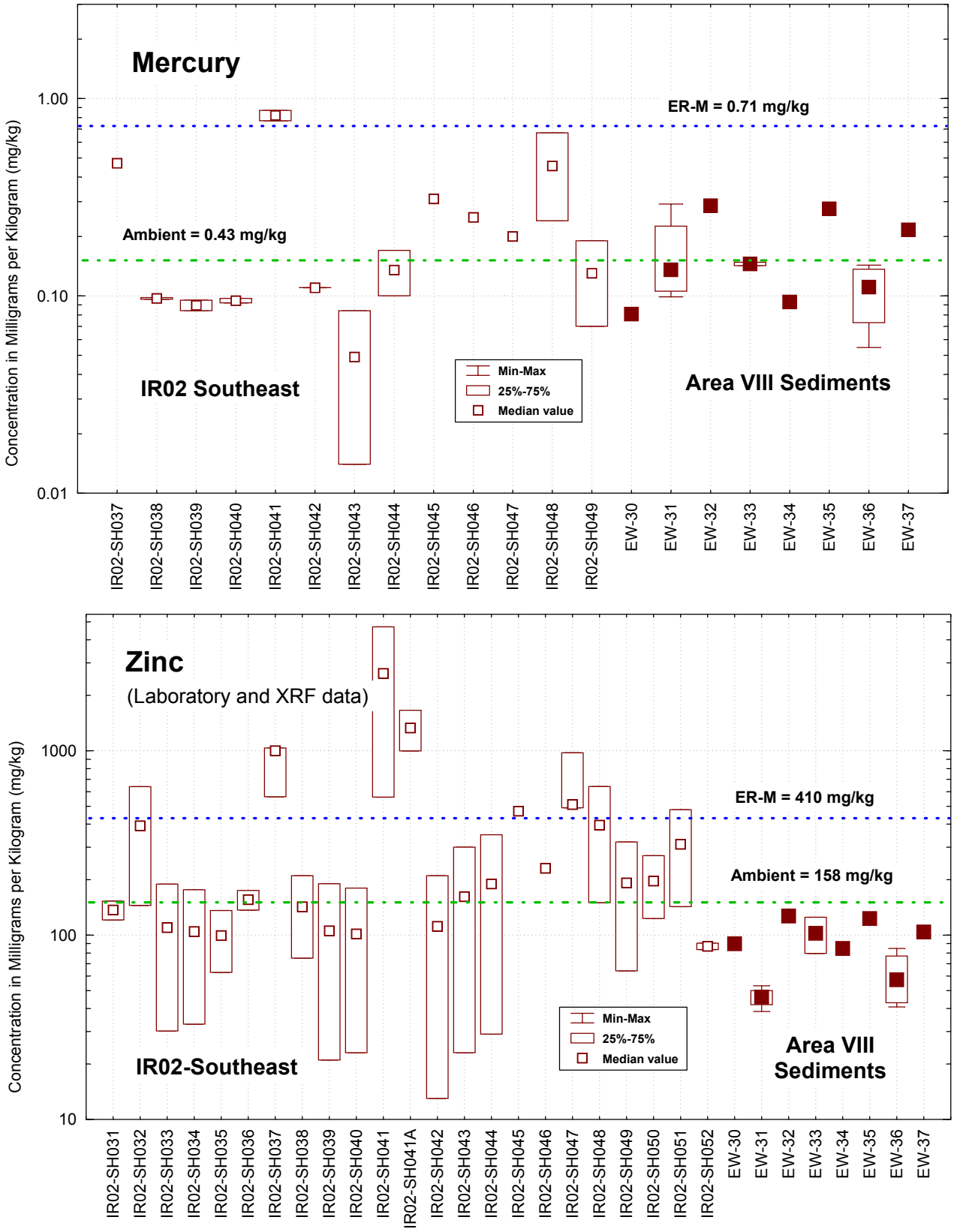
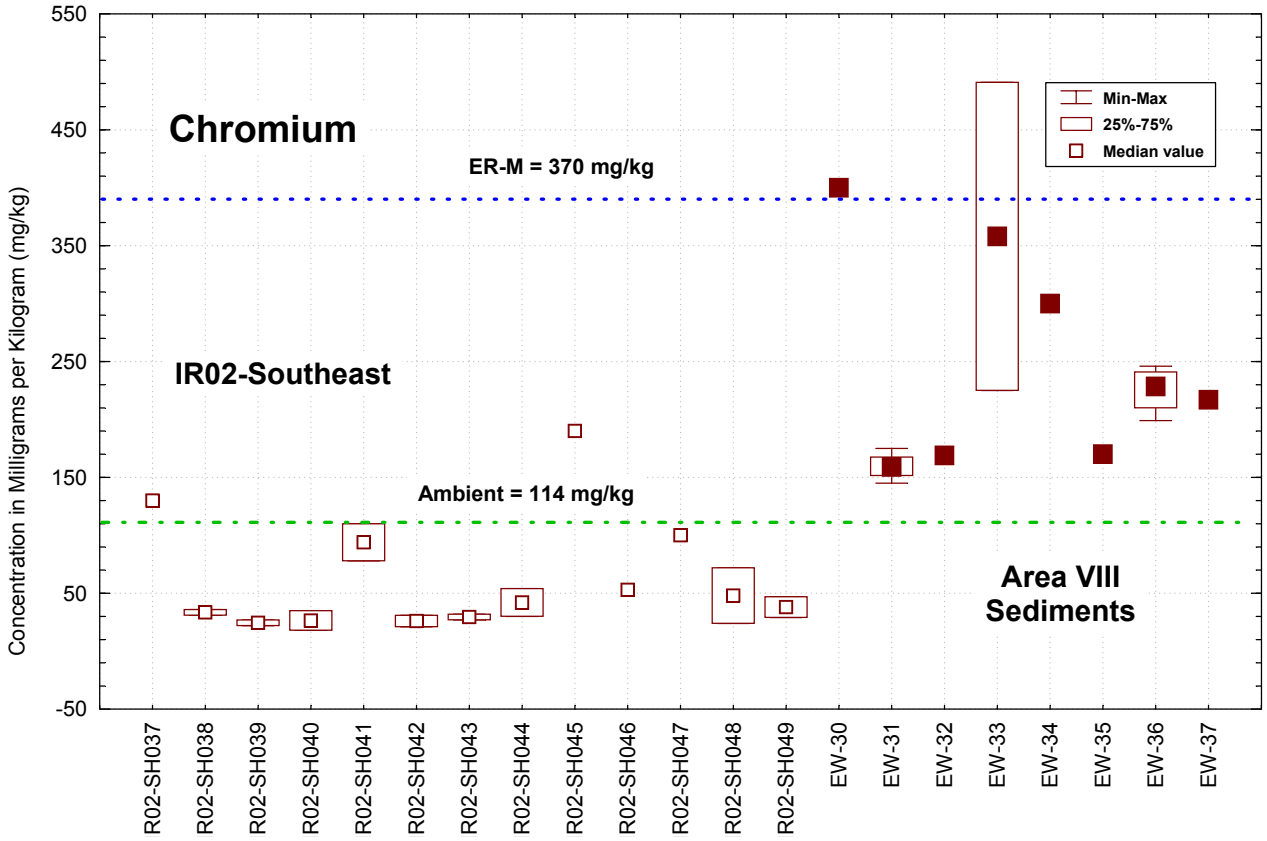


Figure F-30. Chromium and Nickel in IR-02 Southeast and Area VIII, by Location



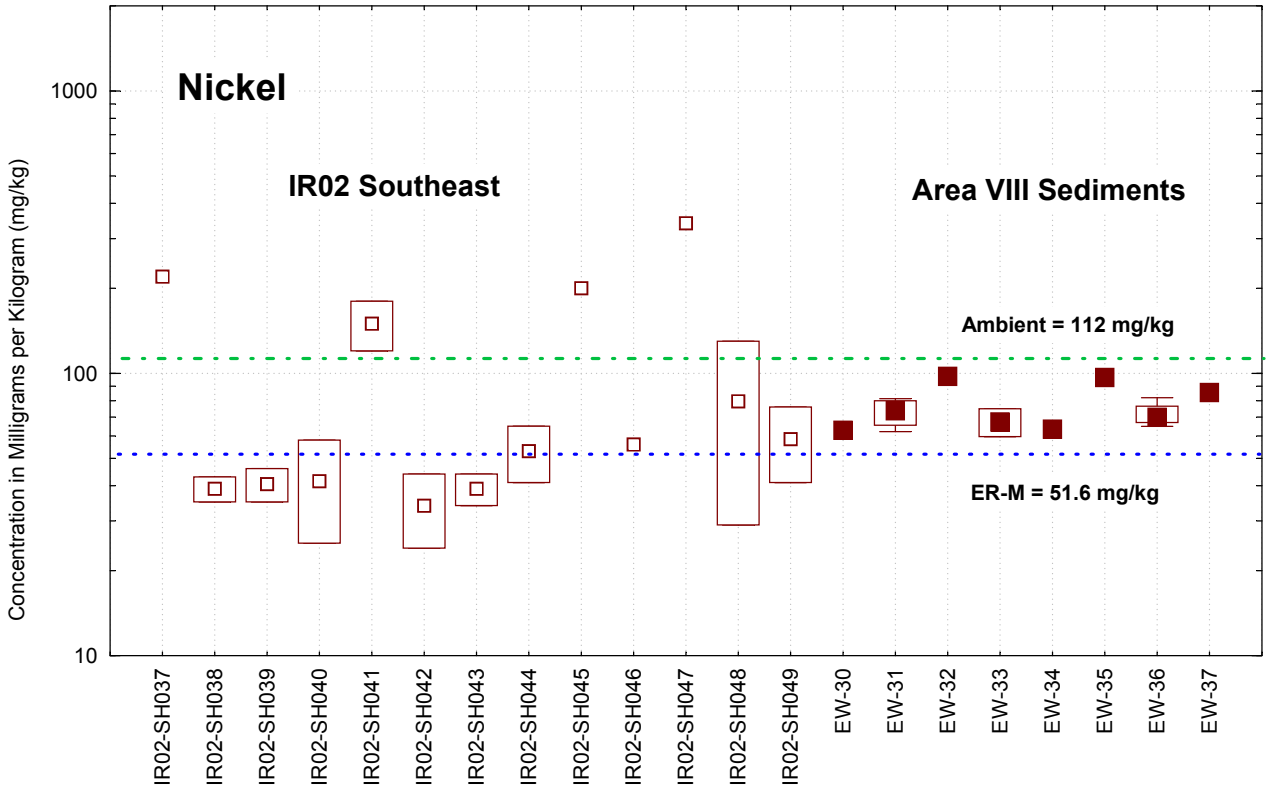


Figure F-31. Antimony and Cadmium in IR-02 Southeast and Area VIII, by Location

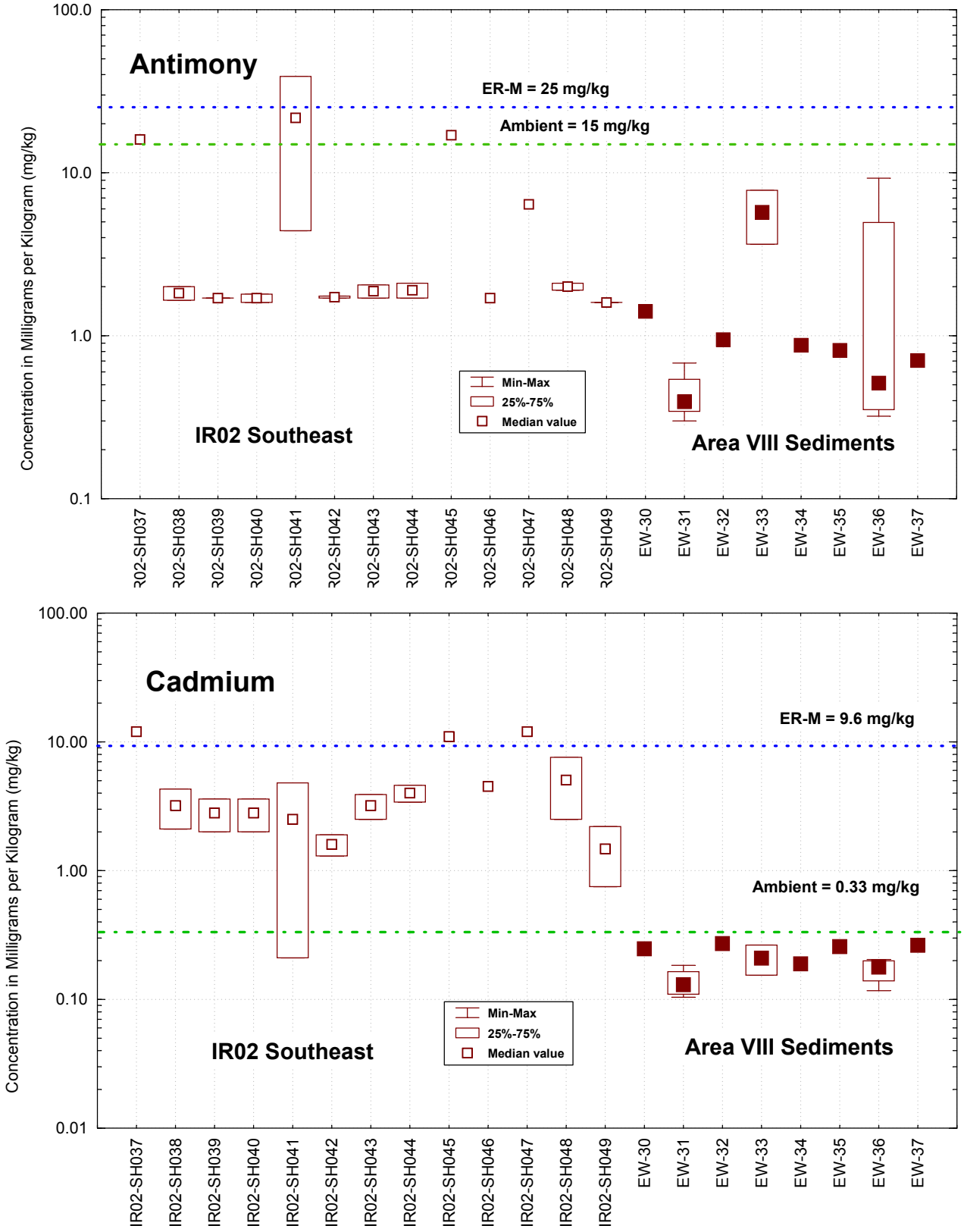


Figure F-32. Trilinear Diagrams Showing Proportions of Copper, Lead, and Zinc in Samples from Parcels E, E-2, and F

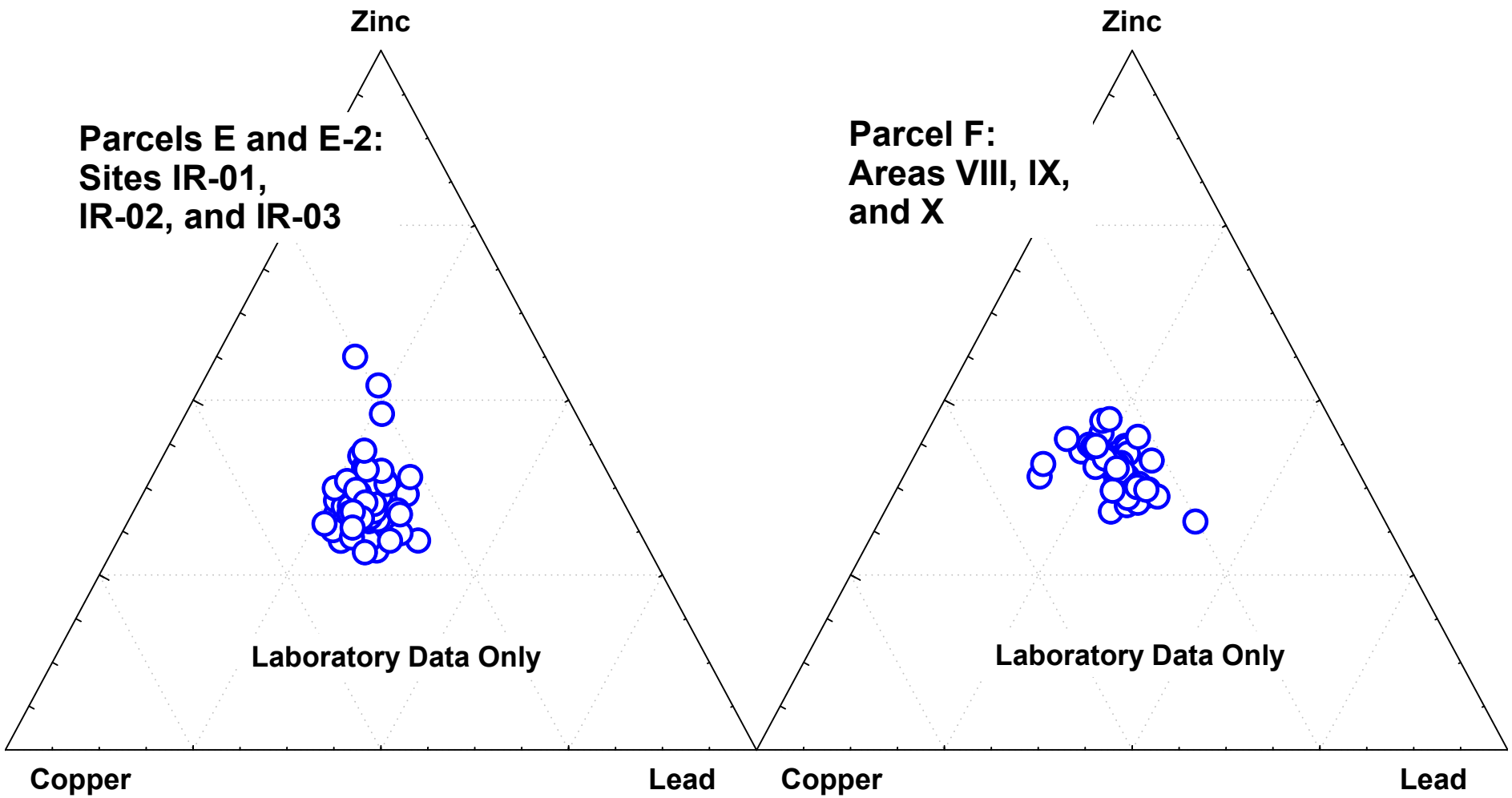
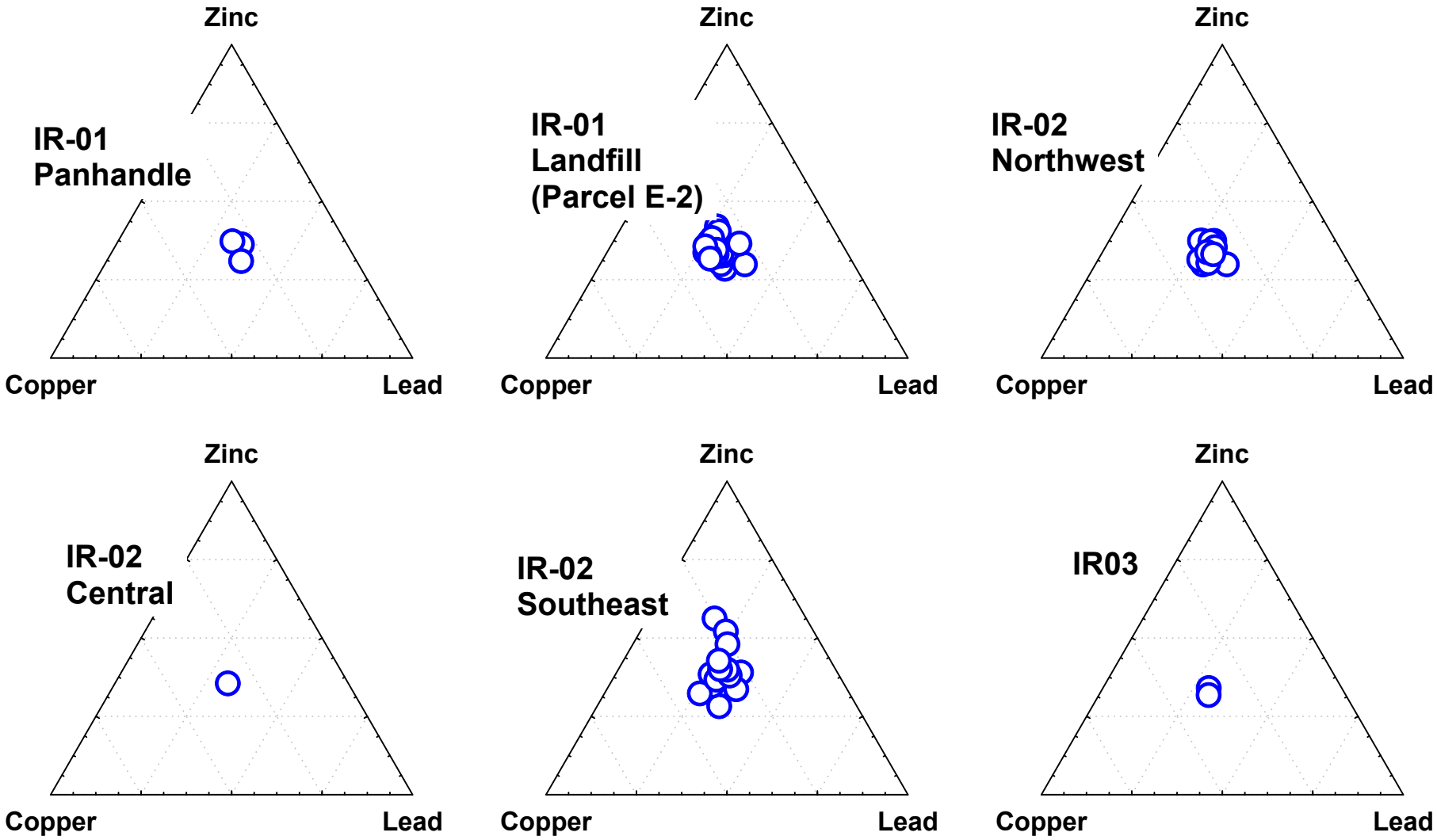


Figure F-33. Trilinear Diagrams Showing Relative Concentrations of Copper, Lead and Zinc in Subareas of Parcels E and E-2 (Laboratory Data Only)



TABLES

TABLE F-1: CONCENTRATIONS OF AROCLORS AND PCB CONGENERS IN ONSHORE (PARCEL E) AND OFFSHORE (PARCEL F) SAMPLES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sample ID Number	Depth (feet bgs)	Aroclor (mg/kg)[a]							PCB congener (µg/kg)																			
		1016	1221	1232	1242	1248	1254	1260	8	18	28	44	52	66	77	101	105	118	126	128	138	153	170	180	187	195	206	209
Parcel E Shoreline Samples																												
IR01SH007	0 - 0.5	ND	ND	ND	ND	ND	**0.056**	**0.086**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH018	0 - 0.5	ND	ND	ND	ND	ND	**0.68**	**1.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH019	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	**2.7**	**1.1**	ND	ND	**5**	ND	**1.4**	**1.4**	**1.5**	**21**	**26**	**7.6**	**16**	**9.0**	**1.7**	**0.7**	**0.2**
IR01SH019	2 - 2.5	ND	ND	ND	ND	ND	ND	**4.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH020	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	**7.1**	ND	**1.8**	ND	**2**	**19**	**25**	**6.6**	**15**	**10**	**2.0**	**7.0**	ND
IR01SH021	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	**0.7**	**3.6**	ND	ND	**63**	ND	**10**	**9.7**	**13**	**220**	**280**	**100**	**200**	**110**	**18**	**6.2**	ND
IR01SH021S	2 - 2.5	ND	ND	ND	ND	ND	ND	**6.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	ND	**2.1**	**1.4**	**2.6**	**10**	ND	ND	**200**	ND	**25**	**22**	**36**	**630**	**900**	**310**	**690**	**370**	**74**	**24**	**2.0**
IR01SH024	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	ND	**1.7**	ND	1.4	4.7	ND	ND	**56**	ND	**7.3**	**5.9**	**7.9**	**130**	**170**	**54**	**110**	**67**	**9.7**	**5.2**	**1.8**
IR01SH025	0 - 0.5	ND	ND	ND	ND	ND	**3.5**	**6.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2 - 2.5	ND	ND	ND	ND	ND	ND	**1.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH026	0 - 0.5	ND	ND	ND	ND	ND	ND	**9.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2 - 2.5	ND	ND	ND	ND	ND	ND	**10**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH027	2 - 2.5	ND	ND	ND	ND	ND	**0.37**	**0.53**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6 - 6.5	ND	ND	ND	ND	ND	**0.49**	**1.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10 - 10.5	ND	ND	ND	ND	ND	ND	**0.10**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH028	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	**10**	**110**	ND	**30**	**2,300**	ND	ND	**850**	ND	**110**	**29**	**28**	**310**	**2,400**	**270**	**590**	**540**	**92**	**65**	**14**
	2 - 2.5	ND	ND	ND	ND	ND	**13**	**6.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH029	0 - 0.5	ND	ND	ND	ND	ND	ND	**9.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2 - 2.5	ND	ND	ND	ND	ND	ND	**1.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH030	2 - 2.5	ND	ND	ND	ND	ND	ND	**31**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6 - 6.5	ND	ND	ND	ND	ND	ND	**0.43**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10 - 10.5	ND	ND	ND	ND	ND	ND	**9.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	14 - 14.5	ND	ND	ND	ND	ND	ND	**0.90**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	18 - 18.5	ND	ND	ND	ND	ND	ND	**8.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH031	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	NA	**0.4**	NA	**0.5**	**16**	NA	NA	40	NA	**3.2**	**2.3**	**3**	**57**	**110**	**32**	**65**	**33**	**5.2**	**3.5**	**1.1**
IR01SH032	0 - 0.5	ND	ND	ND	ND	ND	ND	**2.0**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2 - 2.5	ND	ND	ND	ND	ND	ND	**4.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH033	2 - 2.5	ND	ND	ND	ND	ND	ND	**11**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6 - 6.5	ND	ND	ND	ND	ND	ND	**1.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10 - 10.5	ND	ND	ND	ND	ND	ND	**8.0**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH034	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	**29**	ND	ND	**170**	ND	ND	**73**	**93**	**1,500**	**1,800**	**700**	**1,500**	**750**	**160**	**85**	**11**
IR01SH035	0 - 0.5	ND	ND	ND	ND	ND	ND	**6.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2 - 2.5	ND	ND	ND	ND	ND	ND	**9.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH036	2 - 2.5	ND	ND	ND	ND	ND	ND	**270**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6 - 6.5	ND	ND	ND	ND	ND	ND	**41**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10 - 10.5	ND	ND	ND	ND	ND	ND	**1,300**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH037	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	ND	**0.2**	ND	**0.62**	**2.9**	ND	ND	**67.1**	ND	**6.63**	**12**	**16.3**	**285**	**346**	**142**	**292**	**142**	**29**	**9.39**	**2.9**
IR01SH038	0 - 0.5	ND	ND	ND	ND	ND	ND	**1.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2 - 2.5	ND	ND	ND	ND	ND	ND	**12**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH039	2 - 2.5	ND	ND	ND	ND	ND	ND	**53**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6 - 6.5	ND	ND	ND	ND	ND	ND	**320**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10 - 10.5	ND	ND	ND	ND	ND	ND	**1,900**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR01SH040	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	**13**	**63**	ND	ND	**1,700**	ND	**340**	ND	**460**	**5,600**	**7,200**	**4,000**	**8,100**	**3,600**	**660**	**220**	**10**
	2 - 2.5	ND	ND	ND	ND	ND	ND	**150**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE F-1: CONCENTRATIONS OF AROCLORS AND PCB CONGENERS IN ONSHORE (PARCEL E) AND OFFSHORE (PARCEL F) SAMPLES (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Sample ID Number	Depth (feet bgs)	Aroclor (mg/kg)[a]							PCB congener (µg/kg)																			
		1016	1221	1232	1242	1248	1254	1260	8	18	28	44	52	66	77	101	105	118	126	128	138	153	170	180	187	195	206	209
Parcel E Shoreline Samples																												
IR01SH041	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	**7.0**	ND	ND	**96**	ND	**17**	**110**	**67**	**320**	**380**	**210**	**440**	**260**	**53**	**14**	ND
IR01SH042	0 - 0.5	ND	ND	ND	ND	ND	ND	**5.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2 - 2.5	ND	ND	ND	ND	ND	ND	**2.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR02SH001	2 - 2.5	ND	ND	ND	ND	ND	ND	**120**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6 - 6.5	ND	ND	ND	ND	ND	**0.93**	**0.75**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10 - 10.5	ND	ND	ND	ND	ND	ND	**2.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR02SH002	0 - 0.5	ND	ND	ND	ND	ND	ND	**1.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2 - 2.5	ND	ND	ND	ND	ND	ND	**0.70**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR02SH003	0 - 0.5	ND	ND	ND	ND	ND	ND	**4.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2 - 2.5	ND	ND	ND	ND	ND	ND	**1.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IR02SH004	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	**0.43**	**2.6**	ND	ND	**35.6**	ND	**6.79**	**7.38**	**8.6**	**139**	**173**	**69**	**147**	**77.7**	**13.4**	**9.7**	**3.6**
IR02SH005	0 - 0.5	ND	ND	ND	ND	ND	ND	**5.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2 - 2.5	ND	ND	ND	ND	ND	ND	**1.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Offshore Samples, South Basin Area X																												
SB-01	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.5**	**1.3**	**0.58**	**1.4**	**4.7**	**6.3**	ND	ND	**24**	**4.3**	**17**	ND	**4.7**	**43**	**72**	**15**	**37**	**24**	**2.4**	**1.2**	**0.5**
SB-02	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.8**	**1.1**	**0.96**	**1.7**	**8.3**	**11**	ND	ND	**41**	**7.3**	**27**	ND	**6.9**	**71**	**130**	**19**	**60**	**45**	**3.0**	**1.3**	**0.4**
SB-03	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.1**	**0.54**	**0.19**	**0.46**	**0.1**	**1.6**	ND	ND	**6.5**	**1.4**	**4.5**	ND	**1.6**	**15**	**23**	**6.8**	**13**	**8**	**1.2**	**0.7**	**0.3**
SB-04	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.3**	**0.81**	**0.28**	**0.74**	**1.7**	**2.9**	ND	ND	**11**	**2.3**	**8.2**	ND	**2.8**	**25**	**43**	**11**	**22**	**14**	**1.8**	**1.1**	**0.5**
SB-05	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.2**	**0.29**	**0.15**	**0.6**	**0.84**	**2.1**	ND	ND	**9.5**	**1.8**	**6.0**	ND	**2.4**	**26**	**35**	**10**	**24**	**11**	**1.9**	**0.9**	**0.4**
SB-06	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.1**	ND	**0.09**	**0.19**	**0.47**	**0.93**	ND	ND	**3.8**	**0.9**	**3.0**	ND	**1.0**	**9.5**	**13**	**5.0**	**8.9**	**5.0**	**0.9**	**0.5**	**0.2**
SB-07	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.3**	**0.9**	**0.26**	**0.94**	**2.4**	**4.3**	ND	ND	**18**	**3.3**	**12**	ND	**4.0**	**35**	**51**	**15**	**31**	**18**	**2.3**	**1.1**	**0.5**
SB-08	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.3**	**0.7**	**0.21**	**0.6**	**1.7**	**3.3**	ND	ND	**14**	**2.9**	**10**	ND	**3.4**	**31**	**48**	**13**	**27**	**16**	**2.1**	**0.9**	**0.4**
SB-09	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.2**	**0.2**	**0.25**	**0.51**	**2.7**	**5.4**	2.1	ND	**19**	**4.4**	**13**	ND	**3.7**	**30**	**40**	**9.0**	**17**	**10**	**1.7**	**1.2**	**0.7**
SB-10	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.5**	**0.89**	**0.57**	**1.2**	**3.9**	**7.6**	3.2	ND	**27**	**6.1**	**20**	ND	**5.9**	**61**	**79**	**28**	**51**	**29**	**4.7**	**3.1**	**7.0**
Offshore Samples, South Basin Area X																												
SB-11	0 - 0.2	ND	ND	ND	ND	ND	ND	**1.0**	**0.85**	**0.47**	**1.4**	**5.2**	**10**	**3.4**	ND	**43**	**8.0**	**29**	ND	**10**	**95**	**130**	**46**	**83**	**46**	**5.4**	**2.0**	**6.6**
SB-12	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.5**	**0.8**	**0.4**	**1.0**	**3.4**	**6.6**	**2.6**	ND	**28**	**5.5**	**19**	ND	**7.3**	**55**	**75**	**29**	**51**	**29**	**4.1**	**1.8**	**0.7**
	4 - 6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB-13	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.6**	**0.48**	**0.37**	**0.75**	**1.9**	**4.6**	**1.8**	ND	**22**	**4.1**	**14**	ND	**5.6**	**59**	**82**	**34**	**68**	**37**	**7.8**	**7.1**	**2.4**
SB-14	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.5**	**0.89**	**0.26**	**0.87**	**5.8**	**4.8**	**1.7**	ND	**21**	**3.8**	**13**	ND	**6.1**	**45**	**66**	**24**	**44**	**25**	**3.4**	**1.4**	**0.7**
SB-15	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.4**	ND	ND	ND	**1.5**	**2.8**	**1.0**	ND	**15**	**2.2**	**8**	ND	**3.3**	**36**	**48**	**17**	**34**	**19**	**3.3**	**1.9**	**1.4**
SB-16	0 - 0.2	ND	ND	ND	ND	ND	NA	**1.7**	**0.41**	**0.33**	**0.61**	**1.5**	**5.1**	**1.4**	na	**42**	**3.4**	**17**	na	**13**	**150**	**210**	**100**	**190**	**98**	**21**	**8.7**	**4.8**
SB-17	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.8**	**0.33**	**0.31**	**0.56**	**1.6**	**3.5**	**ND**	ND	**24**	**4.1**	**12**	ND	**6.3**	**78**	**110**	**43**	**85**	**44**	**8.7**	**5.8**	**3.3**
SB-18	0 - 0.2	ND	ND	ND	ND	ND	ND	**0.7**	**0.48**	**0.35**	**0.73**	**2.3**	**5.2**	**1.4**	ND	**26**	**2.6**	**11**	ND	**6.0**	**76**	**100**	**38**	**74**	**40**	**6.0**	**2.9**	**1.3**
SB-19	0 - 0.2	ND	ND	ND	ND	ND	ND	**3.3**	**0.12**	**0.39**	**0.15**	**0.82**	**5.3**	ND	ND	**72**	ND	**17**	ND	**19**	**280**	**400**	**160**	**330**	**170**	**30**	**14**	**1.6**
SB-20	0 - 0.2	ND	ND	ND	ND	ND	ND	**1.4**	**0.55**	**0.46**	**1.0**	**2.6**	**7.7**	**2.4**	ND	**42**	**6.0**	**24**	ND	**9.8**	**130**	**190**	**78**	**150**	**86**	**17**	**9.1**	**1.7**
SB-21	0 - 0.2	ND	ND	ND	ND	ND	ND	**5.4**	ND	**0.3**	**0.57**	**1.9**	**7.7**	**1.2**	ND	**125**	**14**	**34**	ND	**29**	**440**	**640**	**290**	**570**	**290**	**60**	**23**	**2.8**
SB-22	0 - 0.2	ND	ND	ND	ND	ND	ND	**1.6**	**0.44**	**0.41**	**0.82**	**2.6**	**7.2**	**2.3**	ND	**55**	**5.3**	**25**	ND	**14**	**160**	**220**	**89**	**170**	**92**	**18**	**7.8**	**2.0**

Notes: All results are reported on a dry weight basis.
Results are rounded to two significant figures.
Detected concentrations in bold-face font

a Shoreline samples were analyzed for Aroclors by SW-846 EPA Method 8082.
Offshore sediment samples discussed in the draft final "Hunters Point Shipyard Parcel F Validation Study Report" (Battelle, Entrix, and Neptune & Company 2004). August 17.

µg/kg Microgram per kilograms
bgs Below ground surface
mg/kg Milligrams per kilogram
NA Not analyzed/not available
ND Not detected
PCB Polychlorinated biphenyl

TABLE F-2: CONCENTRATIONS OF TOTAL AROCLORS BY FIELD AND LABORATORY ANALYSIS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Parcels E and E-2 Shoreline Samples									
Sample ID Number	Sampling Date	Depth (feet bgs)	Group	Analyte	Result	Qualifier	Detection Limit	Units	Corrected Result
IR01SH001	11-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.156		0.1	mg/kg	0.166
IR01SH001	11-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.139		0.1	mg/kg	0.141
IR01SH002	11-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.083	J	0.1	mg/kg	0.059
IR01SH002	11-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.215		0.1	mg/kg	0.252
IR01SH003	11-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.041	J	0.1	mg/kg	0.000
IR01SH003	11-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.045	J	0.1	mg/kg	0.003
IR01SH004	12-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.132		0.1	mg/kg	0.130
IR01SH004	12-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.129		0.1	mg/kg	0.126
IR01SH005	12-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.104		0.1	mg/kg	0.089
IR01SH005	12-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.215		0.1	mg/kg	0.252
IR01SH006	12-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.367		0.1	mg/kg	0.475
IR01SH006	12-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.133		0.1	mg/kg	0.132
IR01SH007	12-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.224		0.1	mg/kg	0.265
IR01SH007	12-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.322		0.1	mg/kg	0.409
IR01SH008	12-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.138		0.1	mg/kg	0.139
IR01SH008	12-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.382		0.1	mg/kg	0.497
IR01SH009	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.056	J	0.1	mg/kg	0.019
IR01SH009	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.143		0.1	mg/kg	0.146
IR01SH010	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.007	J	0.1	mg/kg	0.000
IR01SH010	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.012	J	0.1	mg/kg	0.000
IR01SH011	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.021	J	0.1	mg/kg	0.000
IR01SH011	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.022	J	0.1	mg/kg	0.000
IR01SH012	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.018	J	0.1	mg/kg	0.000
IR01SH012	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.01	J	0.1	mg/kg	0.000
IR01SH013	29-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.021	J	0.1	mg/kg	0.000
IR01SH013	29-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.116		0.1	mg/kg	0.107
IR01SH014	29-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.085	J	0.1	mg/kg	0.062
IR01SH014	29-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.252		0.1	mg/kg	0.306
IR01SH015	29-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.056	J	0.1	mg/kg	0.019
IR01SH015	29-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.04	J	0.1	mg/kg	0.000
IR01SH016	29-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.118		0.1	mg/kg	0.110
IR01SH016	29-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.217		0.1	mg/kg	0.255
IR01SH017	29-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.127		0.1	mg/kg	0.123
IR01SH017	29-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.14		0.1	mg/kg	0.142
IR01SH018	29-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.782		0.1	mg/kg	1.083
IR01SH018	29-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.271		0.1	mg/kg	0.334
IR01SH019	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.486		0.1	mg/kg	0.649
IR01SH019	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	2.091		0.1	mg/kg	3.000
IR01SH020	29-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.682		0.1	mg/kg	0.936
IR01SH020	29-Aug-02	2 - 2.5	FPCB	Total Aroclors	1.701		0.1	mg/kg	2.429
IR01SH021	29-Aug-02	0 - 0.5	FPCB	Total Aroclors	1.967		0.1	mg/kg	2.819
IR01SH021	29-Aug-02	2 - 2.5	FPCB	Total Aroclors	1.379		0.1	mg/kg	1.957
IR01SH021S	12-Sep-02	0 - 0.5	FPCB	Total Aroclors	2.281		0.1	mg/kg	3.279
IR01SH021S	12-Sep-02	2 - 2.5	FPCB	Total Aroclors	4.921		0.1	mg/kg	7.146
IR01SH021W	12-Sep-02	0 - 0.5	FPCB	Total Aroclors	2.596		0.1	mg/kg	3.740
IR01SH021W	12-Sep-02	2 - 2.5	FPCB	Total Aroclors	4.869		0.1	mg/kg	7.070
IR01SH022	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	4.869		0.1	mg/kg	7.070
IR01SH022	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	7.082		0.1	mg/kg	10.312
IR01SH024	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.767		0.1	mg/kg	1.061
IR01SH024	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.61		0.1	mg/kg	0.831
IR01SH028	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	6.017		0.1	mg/kg	8.752
IR01SH028	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	2.025		0.1	mg/kg	2.904
IR01SH031	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	2.338		0.1	mg/kg	3.362
IR01SH031	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.144		0.1	mg/kg	0.148
IR01SH034	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	5.209		0.1	mg/kg	7.568
IR01SH034	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	2.572		0.1	mg/kg	3.705
IR01SH037	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	2.425		0.1	mg/kg	3.490
IR01SH037	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	5.654		0.1	mg/kg	8.220

TABLE F-2: CONCENTRATIONS OF TOTAL AROCLORS BY FIELD AND LABORATORY ANALYSIS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Parcels E and E-2 Shoreline Samples									
Sample ID Number	Sampling Date	Depth (feet bgs)	Group	Analyte	Result	Qualifier	Detection Limit	Units	Corrected Result
IR01SH040	27-Aug-02	0 - 0.5	FPCB	Total Aroclors	8.109		0.1	mg/kg	11.817
IR01SH040	27-Aug-02	2 - 2.5	FPCB	Total Aroclors	10.794		0.1	mg/kg	15.750
IR01SH041	27-Aug-02	0 - 0.5	FPCB	Total Aroclors	2.249		0.1	mg/kg	3.232
IR01SH041	27-Aug-02	2 - 2.5	FPCB	Total Aroclors	6.823		0.1	mg/kg	9.933
IR02SH004	28-Aug-02	0 - 0.5	FPCB	Total Aroclors	1.13		0.1	mg/kg	1.592
IR02SH004	28-Aug-02	2 - 2.5	FPCB	Total Aroclors	1.534		0.1	mg/kg	2.184
IR02SH004E	13-Sep-02	0 - 0.5	FPCB	Total Aroclors	1.127		0.1	mg/kg	1.588
IR02SH004E	13-Sep-02	2 - 2.5	FPCB	Total Aroclors	2.453		0.1	mg/kg	3.531
IR02SH004N	13-Sep-02	0 - 0.5	FPCB	Total Aroclors	1.714		0.1	mg/kg	2.448
IR02SH004N	13-Sep-02	2 - 2.5	FPCB	Total Aroclors	1.992		0.1	mg/kg	2.855
IR02SH004W	13-Sep-02	0 - 0.5	FPCB	Total Aroclors	1.428		0.1	mg/kg	2.029
IR02SH004W	13-Sep-02	2 - 2.5	FPCB	Total Aroclors	2.945		0.1	mg/kg	4.251
IR02SH006	5-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.957		0.1	mg/kg	1.339
IR02SH006	5-Sep-02	2 - 2.5	FPCB	Total Aroclors	1.938		0.1	mg/kg	2.776
IR02SH010	5-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.277		0.1	mg/kg	0.343
IR02SH010	5-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.832		0.1	mg/kg	1.156
IR02SH011	3-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.271		0.1	mg/kg	0.334
IR02SH011	3-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.648		0.1	mg/kg	0.886
IR02SH012	3-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.168		0.1	mg/kg	0.183
IR02SH012	3-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.599		0.1	mg/kg	0.815
IR02SH013	3-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.883		0.1	mg/kg	1.231
IR02SH013	3-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.468		0.1	mg/kg	0.623
IR02SH014	3-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.577		0.1	mg/kg	0.782
IR02SH014	3-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.51		0.1	mg/kg	0.684
IR02SH015	3-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.152		0.1	mg/kg	0.160
IR02SH015	3-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.836		0.1	mg/kg	1.162
IR02SH016	3-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.298		0.1	mg/kg	0.374
IR02SH016	3-Sep-02	2 - 2.5	FPCB	Total Aroclors	1.105		0.1	mg/kg	1.556
IR02SH017	3-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.143		0.1	mg/kg	0.146
IR02SH017	3-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.003	J	0.1	mg/kg	0.000
IR02SH018	3-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.105		0.1	mg/kg	0.091
IR02SH018	3-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.555		0.1	mg/kg	0.750
IR02SH019	3-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.286		0.1	mg/kg	0.356
IR02SH019	3-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.429		0.1	mg/kg	0.565
IR02SH020	27-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.244		0.1	mg/kg	0.294
IR02SH020	27-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.419		0.1	mg/kg	0.551
IR02SH021	27-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.14		0.1	mg/kg	0.142
IR02SH021	27-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.415		0.1	mg/kg	0.545
IR02SH022	27-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.238		0.1	mg/kg	0.286
IR02SH022	27-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.194		0.1	mg/kg	0.221
IR02SH023	27-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.152		0.1	mg/kg	0.160
IR02SH023	27-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.532		0.1	mg/kg	0.716
IR02SH024	27-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.226		0.1	mg/kg	0.268
IR02SH024	27-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.008	J	0.1	mg/kg	0.000
IR02SH025	27-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.237		0.1	mg/kg	0.284
IR02SH025	27-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.002	J	0.1	mg/kg	0.000
IR02SH026	11-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.087	J	0.1	mg/kg	0.064
IR02SH026	11-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.039	J	0.1	mg/kg	0.000
IR02SH027	11-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.088	J	0.1	mg/kg	0.066
IR02SH027	11-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.038	J	0.1	mg/kg	0.000
IR02SH028	11-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.126		0.1	mg/kg	0.122
IR02SH028	11-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.098	J	0.1	mg/kg	0.081
IR02SH029	11-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.101		0.1	mg/kg	0.085
IR02SH029	11-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.024	J	0.1	mg/kg	0.000
IR02SH030	11-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.078	J	0.1	mg/kg	0.051
IR02SH030	11-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.055	J	0.1	mg/kg	0.018
IR02SH031	10-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.204		0.1	mg/kg	0.236

TABLE F-2: CONCENTRATIONS OF TOTAL AROCLORS BY FIELD AND LABORATORY ANALYSIS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Parcels E and E-2 Shoreline Samples									
Sample ID Number	Sampling Date	Depth (feet bgs)	Group	Analyte	Result	Qualifier	Detection Limit	Units	Corrected Result
IR02SH031	10-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.076	J	0.1	mg/kg	0.048
IR02SH032	10-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.072	J	0.1	mg/kg	0.042
IR02SH032	10-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.428		0.1	mg/kg	0.564
IR02SH033	10-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.086	J	0.1	mg/kg	0.063
IR02SH033	10-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.092	J	0.1	mg/kg	0.072
IR02SH034	10-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.107		0.1	mg/kg	0.094
IR02SH034	10-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.105		0.1	mg/kg	0.091
IR02SH035	10-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.106		0.1	mg/kg	0.092
IR02SH035	10-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.395		0.1	mg/kg	0.516
IR02SH036	10-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.165		0.1	mg/kg	0.179
IR02SH036	10-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.255		0.1	mg/kg	0.311
IR02SH037	9-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.138		0.1	mg/kg	0.139
IR02SH037	9-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.386		0.1	mg/kg	0.502
IR02SH041A	10-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.109		0.1	mg/kg	0.097
IR02SH041A	10-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.319		0.1	mg/kg	0.404
IR02SH047	10-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.129		0.1	mg/kg	0.126
IR02SH047	10-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.206		0.1	mg/kg	0.239
IR02SH050	6-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.128		0.1	mg/kg	0.125
IR02SH050	6-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.168		0.1	mg/kg	0.183
IR02SH051	6-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.166		0.1	mg/kg	0.180
IR02SH051	6-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.286		0.1	mg/kg	0.356
IR02SH052	6-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.154		0.1	mg/kg	0.163
IR02SH052	6-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.163		0.1	mg/kg	0.176
IR03SH001	11-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.06	J	0.1	mg/kg	0.025
IR03SH001	11-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.107		0.1	mg/kg	0.094
IR03SH002	11-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.05	J	0.1	mg/kg	0.010
IR03SH002	11-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.19		0.1	mg/kg	0.215
IR03SH003	11-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.413		0.1	mg/kg	0.542
IR03SH003	11-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.336		0.1	mg/kg	0.429
IR03SH004	26-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.081	J	0.1	mg/kg	0.056
IR03SH004	26-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.121		0.1	mg/kg	0.114
IR03SH005	27-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.083	J	0.1	mg/kg	0.059
IR03SH005	27-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.144		0.1	mg/kg	0.148
IR03SH006	26-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.085	J	0.1	mg/kg	0.062
IR03SH006	26-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.189		0.1	mg/kg	0.214
IR03SH007	26-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.062	J	0.1	mg/kg	0.028
IR03SH007	26-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.48		0.1	mg/kg	0.640
IR03SH008	26-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.058	J	0.1	mg/kg	0.022
IR03SH008	26-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.522		0.1	mg/kg	0.702
IR03SH009	26-Aug-02	0 - 0.5	FPCB	Total Aroclors	0.063	J	0.1	mg/kg	0.029
IR03SH009	26-Aug-02	2 - 2.5	FPCB	Total Aroclors	0.02	J	0.1	mg/kg	0.000
IR03SH010	10-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.064	J	0.1	mg/kg	0.031
IR03SH010	10-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.039	J	0.1	mg/kg	0.000
IR03SH011	10-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.101		0.1	mg/kg	0.085
IR03SH011	10-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.514		0.1	mg/kg	0.690
IR03SH012	10-Sep-02	0 - 0.5	FPCB	Total Aroclors	0.077	J	0.1	mg/kg	0.050
IR03SH012	10-Sep-02	2 - 2.5	FPCB	Total Aroclors	0.619		0.1	mg/kg	0.844
IR01SH007	12-Sep-02	0 - 0.5	PCB	Total Aroclors	0.142		0.015	mg/kg	Laboratory
IR01SH018	29-Aug-02	0 - 0.5	PCB	Total Aroclors	2.48		0.052	mg/kg	Laboratory
IR01SH019	28-Aug-02	2 - 2.5	PCB	Total Aroclors	4.9		0.31	mg/kg	Laboratory
IR01SH021S	12-Sep-02	2 - 2.5	PCB	Total Aroclors	6.8		0.32	mg/kg	Laboratory
IR01SH023	6-Sep-02	2 - 2.5	PCB	Total Aroclors	0.26		0.013	mg/kg	Laboratory
IR01SH025	4-Sep-02	0 - 0.5	PCB	Total Aroclors	9.6		0.16	mg/kg	Laboratory
IR01SH025	4-Sep-02	2 - 2.5	PCB	Total Aroclors	1.1		0.034	mg/kg	Laboratory
IR01SH026	4-Sep-02	0 - 0.5	PCB	Total Aroclors	9.4		0.17	mg/kg	Laboratory
IR01SH026	4-Sep-02	2 - 2.5	PCB	Total Aroclors	10		0.15	mg/kg	Laboratory
IR01SH027	6-Sep-02	2 - 2.5	PCB	Total Aroclors	0.9		0.017	mg/kg	Laboratory
IR01SH027	6-Sep-02	6 - 6.5	PCB	Total Aroclors	1.59		0.065	mg/kg	Laboratory

TABLE F-2: CONCENTRATIONS OF TOTAL AROCLORS BY FIELD AND LABORATORY ANALYSIS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Parcels E and E-2 Shoreline Samples									
Sample ID Number	Sampling Date	Depth (feet bgs)	Group	Analyte	Result	Qualifier	Detection Limit	Units	Corrected Result
IR01SH027	6-Sep-02	10 - 10.5	PCB	Total Aroclors	0.1		0.013	mg/kg	Laboratory
IR01SH028	28-Aug-02	2 - 2.5	PCB	Total Aroclors	19.4		0.36	mg/kg	Laboratory
IR01SH029	4-Sep-02	0 - 0.5	PCB	Total Aroclors	9.4		0.16	mg/kg	Laboratory
IR01SH029	4-Sep-02	2 - 2.5	PCB	Total Aroclors	1.9		0.04	mg/kg	Laboratory
IR01SH030	6-Sep-02	2 - 2.5	PCB	Total Aroclors	31		0.63	mg/kg	Laboratory
IR01SH030	6-Sep-02	6 - 6.5	PCB	Total Aroclors	0.43		0.013	mg/kg	Laboratory
IR01SH030	6-Sep-02	10 - 10.5	PCB	Total Aroclors	9.3		0.34	mg/kg	Laboratory
IR01SH030	6-Sep-02	14 - 14.5	PCB	Total Aroclors	0.9		0.025	mg/kg	Laboratory
IR01SH030	6-Sep-02	18 - 18.5	PCB	Total Aroclors	8.6		0.41	mg/kg	Laboratory
IR01SH032	4-Sep-02	0 - 0.5	PCB	Total Aroclors	2		0.067	mg/kg	Laboratory
IR01SH032	4-Sep-02	2 - 2.5	PCB	Total Aroclors	4.1		0.087	mg/kg	Laboratory
IR01SH033	5-Sep-02	2 - 2.5	PCB	Total Aroclors	11		0.32	mg/kg	Laboratory
IR01SH033	5-Sep-02	6 - 6.5	PCB	Total Aroclors	1.9		0.063	mg/kg	Laboratory
IR01SH033	5-Sep-02	10 - 10.5	PCB	Total Aroclors	8		0.39	mg/kg	Laboratory
IR01SH035	4-Sep-02	0 - 0.5	PCB	Total Aroclors	6.5		0.12	mg/kg	Laboratory
IR01SH035	4-Sep-02	2 - 2.5	PCB	Total Aroclors	9.3		0.28	mg/kg	Laboratory
IR01SH036	5-Sep-02	2 - 2.5	PCB	Total Aroclors	270		13	mg/kg	Laboratory
IR01SH036	5-Sep-02	6 - 6.5	PCB	Total Aroclors	41		1.3	mg/kg	Laboratory
IR01SH036	5-Sep-02	10 - 10.5	PCB	Total Aroclors	1300		44	mg/kg	Laboratory
IR01SH038	4-Sep-02	0 - 0.5	PCB	Total Aroclors	1.5		0.06	mg/kg	Laboratory
IR01SH038	4-Sep-02	2 - 2.5	PCB	Total Aroclors	12		0.25	mg/kg	Laboratory
IR01SH039	5-Sep-02	2 - 2.5	PCB	Total Aroclors	53		1.2	mg/kg	Laboratory
IR01SH039	5-Sep-02	6 - 6.5	PCB	Total Aroclors	320		18	mg/kg	Laboratory
IR01SH039	5-Sep-02	10 - 10.5	PCB	Total Aroclors	1900		90	mg/kg	Laboratory
IR01SH040	27-Aug-02	2 - 2.5	PCB	Total Aroclors	150		2.5	mg/kg	Laboratory
IR01SH042	4-Sep-02	0 - 0.5	PCB	Total Aroclors	5.4		0.12	mg/kg	Laboratory
IR01SH042	4-Sep-02	2 - 2.5	PCB	Total Aroclors	2.7		0.065	mg/kg	Laboratory
IR02SH001	5-Sep-02	2 - 2.5	PCB	Total Aroclors	120		2.5	mg/kg	Laboratory
IR02SH001	5-Sep-02	6 - 6.5	PCB	Total Aroclors	1.68		0.026	mg/kg	Laboratory
IR02SH001	5-Sep-02	10 - 10.5	PCB	Total Aroclors	2.1		0.085	mg/kg	Laboratory
IR02SH002	30-Aug-02	0 - 0.5	PCB	Total Aroclors	1.2		0.025	mg/kg	Laboratory
IR02SH002	30-Aug-02	2 - 2.5	PCB	Total Aroclors	0.7		0.014	mg/kg	Laboratory
IR02SH003	30-Aug-02	0 - 0.5	PCB	Total Aroclors	4.5		0.13	mg/kg	Laboratory
IR02SH003	30-Aug-02	2 - 2.5	PCB	Total Aroclors	1.4		0.03	mg/kg	Laboratory
IR02SH005	30-Aug-02	0 - 0.5	PCB	Total Aroclors	5.9		0.13	mg/kg	Laboratory
IR02SH005	30-Aug-02	2 - 2.5	PCB	Total Aroclors	1.6		0.033	mg/kg	Laboratory
IR02SH008	30-Aug-02	0 - 0.5	PCB	Total Aroclors	0.66		0.013	mg/kg	Laboratory
IR02SH008	30-Aug-02	2 - 2.5	PCB	Total Aroclors	6.1		0.16	mg/kg	Laboratory
IR02SH010	5-Sep-02	2 - 2.5	PCB	Total Aroclors	1.2		0.029	mg/kg	Laboratory
IR02SH014	3-Sep-02	2 - 2.5	PCB	Total Aroclors	0.84		0.028	mg/kg	Laboratory
IR02SH016	3-Sep-02	2 - 2.5	PCB	Total Aroclors	0.91		0.014	mg/kg	Laboratory
IR02SH019	3-Sep-02	0 - 0.5	PCB	Total Aroclors	0.2		0.013	mg/kg	Laboratory
IR02SH024	27-Aug-02	0 - 0.5	PCB	Total Aroclors	0.35		0.014	mg/kg	Laboratory
IR02SH037	9-Sep-02	0 - 0.5	PCB	Total Aroclors	0.13		0.016	mg/kg	Laboratory
IR02SH039	9-Sep-02	0 - 0.5	PCB	Total Aroclors	0.02		0.014	mg/kg	Laboratory
IR02SH039	9-Sep-02	2 - 2.5	PCB	Total Aroclors	0.015		0.015	mg/kg	Laboratory
IR02SH040	9-Sep-02	0 - 0.5	PCB	Total Aroclors	0.059		0.014	mg/kg	Laboratory
IR02SH041	9-Sep-02	0 - 0.5	PCB	Total Aroclors	0.031		0.023	mg/kg	Laboratory
IR02SH041	9-Sep-02	2 - 2.5	PCB	Total Aroclors	0.2		0.015	mg/kg	Laboratory
IR02SH042	9-Sep-02	0 - 0.5	PCB	Total Aroclors	0.012		0.014	mg/kg	Laboratory
IR02SH043	9-Sep-02	0 - 0.5	PCB	Total Aroclors	0.022		0.015	mg/kg	Laboratory
IR02SH044	9-Sep-02	0 - 0.5	PCB	Total Aroclors	0.042		0.018	mg/kg	Laboratory
IR02SH044	9-Sep-02	2 - 2.5	PCB	Total Aroclors	0.02		0.015	mg/kg	Laboratory
IR02SH045	9-Sep-02	0 - 0.5	PCB	Total Aroclors	0.1		0.018	mg/kg	Laboratory
IR02SH046	9-Sep-02	0 - 0.5	PCB	Total Aroclors	0.31		0.015	mg/kg	Laboratory
IR02SH047	10-Sep-02	0 - 0.5	PCB	Total Aroclors	0.08		0.015	mg/kg	Laboratory

TABLE F-2: CONCENTRATIONS OF TOTAL AROCLORS BY FIELD AND LABORATORY ANALYSIS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Parcels E and E-2 Shoreline Samples									
Sample ID Number	Sampling Date	Depth (feet bgs)	Group	Analyte	Result	Qualifier	Detection Limit	Units	Corrected Result
IR02SH048	9-Sep-02	0 - 0.5	PCB	Total Aroclors	0.12		0.018	mg/kg	Laboratory
IR02SH049	6-Sep-02	0 - 0.5	PCB	Total Aroclors	0.152		0.014	mg/kg	Laboratory
IR02SH049	6-Sep-02	2 - 2.5	PCB	Total Aroclors	0.023		0.015	mg/kg	Laboratory
IR03SH007	26-Aug-02	0 - 0.5	PCB	Total Aroclors	0.045		0.013	mg/kg	Laboratory
IR03SH012	10-Sep-02	2 - 2.5	PCB	Total Aroclors	0.7		0.013	mg/kg	Laboratory

Notes: The corrected result is the field-screening result calibrated to laboratory confirmation samples. Field measurements were slightly less than the laboratory measurement, so the corrected values are generally greater for higher concentrations.

The regression equation used was: laboratory result = (1.465 * field-screening result) - 0.063

ID Number	Identification number
bgs	Below ground surface
J	Estimated concentration
mg/kg	Milligrams per kilogram
PCB	Polychlorinated biphenyl
FPCB	Field measured PCB

TABLE F-3: SAMPLING LOCATIONS FOR METALS ANALYSIS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Offshore or Shoreline Area	Parcel F Sampling Location[a]	Shoreline Sampling Location[b]	
		Full Laboratory Analysis	Field-Screening Analysis (XRF)
Chromium			
Area X - South Basin	SB-16	IR01SH038	IR01SH037
		IR01SH041	IR01SH040
Area IX – Former Oil Reclamation Ponds	OR-24	IR02SH024	IR02SH021
	OR-27		IR02SH022
			IR02SH023
Area VIII – Eastern Wetlands	EW-30	IR02SH038	
	EW-33	IR02SH037	IR02SH035
		IR02SH038	IR02SH036
		IR02SH039	
		IR02SH040	
		IR02SH041	
		IR02SH042	
Copper			
Area X – South Basin	SB-19	IR01SH025	IR01SH028
	SB-21	IR01SH026	IR01SH031
	SB-23	IR01SH029	IR01SH034
		IR01SH033	IR01SH037
		IR01SH035	IR01SH040
		IR01SH038	
		IR01SH041	
Lead			
Area X – South Basin (Panhandle)	SB-01	IR01SH007	IR01SH001
	SB-02		IR01SH002
	SB-03		IR01SH003
	SB-04		IR01SH004
	SB-07		IR01SH005
	SB-09		IR01SH006
			IR01SH008
			IR01SH009
			IR01SH010
			IR01SH011
			IR01SH012
			IR01SH013
Area X – South Basin	SB-11	IR01SH021	IR01SH024
	SB-16	IR01SH022	IR01SH028
	SB-18	IR01SH025	IR01SH031
	SB-20	IR01SH026	IR01SH034
	SB-22	IR01SH029	IR01SH037
	SB-23	IR01SH033	IR01SH040
		IR01SH035	
		IR01SH038	
Area IX – Former Oil Reclamation Ponds	OR-24	IR02SH024	IR02SH021
	OR-26		IR02SH022
	OR-27		IR02SH023

TABLE F-3: SAMPLING LOCATIONS FOR METALS ANALYSIS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Offshore or Shoreline Area	Parcel F Sampling Location[a]	Shoreline Sampling Location[b]	
		Full Laboratory Analysis	Field-Screening Analysis (XRF)
Mercury			
Area X – South Basin (Panhandle)	SB-10	IR01SH016	IR01SH015
		IR01SH018	IR01SH017
Area X – South Basin	SB-11	IR01SH025	IR01SH019
	SB-16	IR01SH026	IR01SH021
	SB-17	IR01SH029	IR01SH022
	SB-19	IR01SH033	IR01SH024
	SB-20	IR01SH035	IR01SH031
	SB-21	IR01SH038	IR01SH033
	SB-22	IR01SH042	IR01SH034
	SB-23	IR02SH005	IR01SH037
		IR02SH008	IR01SH041
			IR02SH004
			IR02SH006
			IR02SH007
			IR02SH009
Zinc			
Area X – South Basin (Panhandle) -1	SB-04	IR01SH007	IR01SH006
	SB-07		IR01SH008
			IR01SH009
Area X – South Basin – Subarea 2	SB-18	IR01SH018	IR01SH021W
	SB-19		IR01SH022
	SB-20		IR01SH024
	SB-21		IR01SH028
Area X South Basin – Subarea 3	SB-15	None	IR01SH037
	SB-16		IR01SH040
			IR01SH040S
			IR01SH041
			IR01SH041S
			IR01SH041N
Area VIII – Eastern Wetlands	EW-33	IR02SH037	IR02SH041A
	EW-34	IR02SH047	IR02SH047
	EW-36		

Notes:

a Offshore areas are based on the Parcel F validation study (Figures 3-3 to 3-5) (Battelle and others 2002)

b All shoreline sampling locations were chosen based on surface (0 to 0.5 foot bgs) analyte concentrations

bgs Below ground surface

XRF X-ray fluorescence (for copper, lead, and zinc only)

Sources:

Battelle, Entrix, Inc., and Neptune and Company. 2002. "Draft Hunters Point Shipyard Parcel E Validation Study Report, San Francisco, California." April 2

TABLE F-4: STEPWISE REMOVAL OF OUTLIERS DURING LINEAR REGRESSION ANALYSIS FOR FIELD AND LABORATORY DATA

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Step	Analyte	Sample Size at Beginning of Step	Number of Measurements Removed in Step	Measurements Removed[a]		Datum Also Excluded from Geochemical Evaluation	Sampling Location	Criteria for Removal[b]
				Independent Measurement	Dependent Measurement			
1	Copper	16	1	6,250	1,600	Yes	IR02SH014	SR, CD, h
	Lead	16	2	6,050	40	Yes	IR02SH024	SR, CD, h
				4,580	5,400		IR01SH007	SR, h
	Zinc	16	1	6,630	1,300	Yes	IR01SH007	SR, CD, h
	PCB	15	2	4.92	6.80		IR01SH021	SR
				10.79	150		IR01SH040	SR, CD, h
2	Copper	15	1	1,320	1,600		IR01SH007	SR
	Lead	14	2	1,010	820		IR01SH028	SR, h
				828	130	Yes	IR02SH047	SR
	Zinc	15	2	1,400	1,100		IR02SH016	SR
				2,530	1,100	Yes	IR03SH012	SR
	PCB	13	2	2.09	4.90		IR01SH019	SR, h
				2.03	19.40		IR01SH028	SR, h
3	PCB	11	2	0.78	2.50		IR01SH018	SR
				1.11	0.91		IR02SH016	SR, h

Notes: All units are milligrams per kilogram

a Rapid screening technique is the independent variable and laboratory analysis is the dependent variable.

b SR= Studentized residual; CD = Cook's D influence; h = Hat matrix diagonal (indicator of leverage)

Final Regression Equations:

Copper:	Lab = (0.567 x field-screening result) + 0.0867	(r2= 0.93, n = 14)
Lead:	Lab = (0.587 x field-screening result) + 1.491	(r2= 0.92, n= 12)
Zinc:	Lab = (0.543 x field-screening result) - 23.600	(r2= 0.95, n= 13)
PCB:	Lab = (1.465 x Field-Screening Result) - 0.063	(r2= 0.94, n= 9)

Copper, lead, and zinc were measured in the field using x-ray fluorescence

PCB (Total Aroclors) were measured in the field by immunoassay

TABLE F-5. LABORATORY DATA FOR METALS AND TOTAL AROLCORS IN PARCEL E AND E-2 SHORELINE SAMPLES COMPARED WITH DIFFERENT SCREENING CRITERIA

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Subarea	Sample ID	Location ID	Depth (feet bgs)	Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	Tl	V	Zn	TotalAr
E-2	IR-01/21	Slag - Panhandle	Shoreline	IR01_01	IR01SH007005	IR01SH007	0 - 0.5	0.65	7500	10	280	0.087	6300	17	12	88	1600	48000	0.18	1500	6500	740	6.5	3800	120	5400	15	1.8	0.15	55	1300	0.142
E-2	IR-01/21	Panhandle	Shoreline	IR01_02	IR01SH016005	IR01SH016	0 - 0.5	0.16	4100	2.8	21	0.086	4200	2.7	5.2	31	43	12000	0.11	950	3900	93	0.435	3700	33	90	1.4	0.22	0.11	18	110	
E-2	IR-01/21	Panhandle	Shoreline	IR01_03	IR01SH018005	IR01SH018	0 - 0.5	0.35		8.6	80	0.2	9600	6.1	10	91	140	25000	0.51	2100	14000	220	1	14000	81	150	4	0.66	0.25	52	370	2.48
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH019025	IR01SH019	2 - 2.5	0.25	5200	7.9	110	0.11	3600	4.5	8.6	67	130	19000	0.52	830	13000	140	0.5	3800	87	100	12	0.125	0.125	28	180	4.9
E-2	IR-01/21	Landfill	Shoreline	IR01_03	S	IR01SH021S	2 - 2.5	0.23	3100	2.9	67	0.055	77000	3.5	5.4	220	410	14000	1.4	810	23000	180	0.55	4900	110	150	11	0.14	0.14	19	220	6.8
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	P	IR01SH023	2 - 2.5	0.13	13000	3.3	160	0.44	6300	1.5	17	89	850	26000	1.2	1100	16000	730	0.5	110	140	690	1.55	0.65	1.8	47	200	0.26
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH025005	IR01SH025	0 - 0.5	1.2	1900	3.1	30	0.065	56000	0.13	3.5	71	480	14000	1.9	560	5400	160	0.65	3700	59	190	1.9	0.63	0.155	30	340	9.6
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH025025	IR01SH025	2 - 2.5	0.135	1500	3.7	51	0.055	4800	1.4	2.8	61	1400	14000	4.9	370	1700	80	0.55	1400	29	740	1.65	0.61	0.135	12	1000	1.1
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH026005	IR01SH026	0 - 0.5	0.3	1600	3.9	120	0.055	25000	2.3	6.2	99	2000	20000	2.8	400	3600	150	6.7	2800	92	350	27	0.7	0.14	13	1000	9.4
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH026025	IR01SH026	2 - 2.5	0.13	990	2.6	45	0.05	18000	2.3	3.8	110	4400	12000	8	480	2000	110	3.6	2300	36	1000	19	0.46	0.13	11	3000	10
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	T	IR01SH027	10 - 10.5	0.135	4800	1.1	24	0.16	2500	1.1	4.9	51	920	13000	5.3	450	3700	170	0.55	270	33	180	1.65	0.66	0.135	24	560	0.1
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	IR01SH027MID	IR01SH027	6 - 6.5	0.29	3500	2.9	36	0.72	4400	1.8	8.5	170	3300	24000	5.9	280	6000	200	14	94	220	1600	28	0.57	0.49	210	750	1.59
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	P	IR01SH027	2 - 2.5	0.5	3500	0.165	27	0.15	1700	3.2	67	400	900	57000	2.5	440	110000	690	5.8	95	2200	520	270	0.78	0.74	27	1200	0.9
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH028025	IR01SH028	2 - 2.5	0.17	3200	3.7	60	0.046	3100	6.9	4.9	120	1600	26000	1.8	55	3100	180	4.5	1600	61	820	13	0.115	0.115	88	940	19.4
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH029005	IR01SH029	0 - 0.5	0.16	2100	5.9	1300	0.065	44000	1.9	5.8	120	550	31000	1.3	630	27000	160	0.65	3600	200	170	1.9	0.65	0.16	40	690	9.4
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH029025	IR01SH029	2 - 2.5	0.18	11000	8.2	48	0.38	22000	2.3	11	77	390	40000	0.51	3500	9400	280	0.75	6900	78	150	2.2	1.3	0.18	42	230	1.9
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	IR01SH030B16	IR01SH030	14 - 14.5	0.12	3300	1.7	70	0.23	100000	1.5	5.7	30	100	15000	0.79	510	5100	200	0.48	990	46	47	1.45	0.24	0.12	34	150	0.9
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	IR01SH030B20	IR01SH030	18 - 18.5	0.19	3300	2.2	97	0.26	200000	1.9	4.5	42	380	11000	17	520	3100	240	0.75	680	35	92	14	0.33	0.19	39	400	8.6
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	T	IR01SH030	10 - 10.5	0.18	2300	3.5	25	0.23	2500	1.1	3.7	210	5300	11000	23	370	2400	180	2.7	130	30	620	37	0.13	0.24	45	1300	9.3
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	IR01SH030MID	IR01SH030	6 - 6.5	0.12	1700	2	11	0.099	1200	0.98	2.2	26	76	14000	0.82	230	1500	88	0.48	46	19	36	1.45	0.12	0.12	9.5	310	0.43
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	P	IR01SH030	2 - 2.5	0.21	1400	4	21	0.13	2900	1.9	3	140	3700	12000	20	270	790	120	7	71	73	860	16	0.77	0.13	16	1300	31
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH032005	IR01SH032	0 - 0.5	0.12	5200	2.1	68	0.049	5200	1.1	19	160	94	25000	0.38	1300	58000	880	0.49	3300	350	50	1.45	0.87	2.3	26	310	2
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH032025	IR01SH032	2 - 2.5	0.16	14000	6.4	23	0.34	3800	1.7	10	51	82	29000	0.23	2700	8400	240	0.65	4900	69	25	1.95	0.68	0.16	35	91	4.1
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	T	IR01SH033	10 - 10.5	0.21	3400	3.2	54	0.055	6200	2.1	14	110	970	20000	9.4	520	5600	270	3.3	190	130	840	1.7	0.21	0.145	55	790	8
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	IR01SH033MID	IR01SH033	6 - 6.5	0.29	3700	3	65	0.26	54000	3.6	6.5	120	1100	20000	6.4	320	4100	200	0.55	99	96	560	25	0.4	0.135	61	750	1.9
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	P	IR01SH033	2 - 2.5	0.61	6600	3.9	58	0.4	6500	1.6	7.4	65	380	14000	4.6	540	3800	290	0.5	140	68	2700	14	0.61	0.125	150	370	11
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH035005	IR01SH035	0 - 0.5	0.12	2200	3.3	19	0.0485	12000	0.68	3.7	33	300	13000	0.52	430	3400	170	0.485	250	36	86	1.45	0.26	0.12	13	180	6.5
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH035025	IR01SH035	2 - 2.5	0.14	900	2.9	7.7	0.055	2900	0.38	1.3	30	270	3900	4.4	230	1900	43	0.55	1300	20	170	1.65	0.14	0.14	7.3	210	9.3
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	T	IR01SH036	10 - 10.5	0.15	8300	6.5	34	0.39	4300	1.6	10	49	190	29000	2.3	2300	7600	280	0.6	2800	61	52		0.86	0.15	31	150	1300
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	IR01SH036MID	IR01SH036	6 - 6.5	0.14	2300	3.4	130	0.05	6400	1.9	4.4	100	2000	21000	18	340	2300	230	0.5	94	37	370	1.55	0.78	0.13	15	940	41
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	P	IR01SH036	2 - 2.5	0.21	4000	4.3	93	0.05	18000	1.9	6.9	92	1600	29000	8.5	750	3400	330	0.5	150	44	500	1.5	0.59	0.125	23	840	270
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH038005	IR01SH038	0 - 0.5	0.12	4700	5.2	40	0.0475	66000	1.2	9.7	71	230	25000	0.17	790	18000	450	0.475	560	120	44	1.45	0.45	0.12	36	170	1.5
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH038025	IR01SH038	2 - 2.5	0.11	3500	5	36	0.044	110000	1.1	7.4	65	300	22000	0.71	760	15000	470	0.44	1900	80	79	1.35	0.11	0.11	20	520	12
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	T	IR01SH039	10 - 10.5	0.16	8900	7	160	0.47	20000	3.9	13	72	570	46000	1.7	2200	7300	650	2.4	2700	65	200	1.95	0.83	1.2	37	470	1900
E-2	IR-01/21	Landfill	Sheet-Pile W	IR01_SP	IR01SH039MID	IR01SH039	6 - 6.5	0.16	7900	5.1	62	0.4	66000	1.7	8.4	46	38	77000	0.2	6900	6900	210	0.65	7900	60	92		0.16	0.16	29	110	320
E-2	IR-01/21	Landfill	Shoreline	IR01_03	P	IR01SH039	2 - 2.5	0.31	14000	7.8	170	0.41	48000	2.4	15	61	3000	52000	2.7	1500	5400	740	2.5	430	38	260	1.35	0.87	1.9	32	980	53
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH040025	IR01SH040	2 - 2.5	0.15	2100	3.6	21	0.053	15000	4.3	4	66	2300	16000	6	400	3700	180	0.43	730	41	330	4.6	0.105	0.105	11	700	150
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH042005	IR01SH042	0 - 0.5	0.125	5600	6.5	78	0.0495	59000	1.7	11	75	720	36000	1.1	1100	15000	560	0.495	490	81	92	1.5	0.56	1.3	28	470	5.4
E-2	IR-01/21	Landfill	Shoreline	IR01_03	IR01SH042025	IR01SH042	2 - 2.5	0.13	1700	4.8	23	0.05	6600	1.2	3.4	160	4600	11000	14	350	2000	150	0.5	160	31	600	1.55	0.33	0.13	13	990	2.7
E-2	IR-02	IR02 Northwest	Sheet-Pile W	IR02_SP	T	IR02SH001	10 - 10.5	0.165	8600	10	79	0.43	51000	2.2	12	69	460	42000	1.2	2700	8100	520	0.65	5100	66	72	2	0.31	1.5	38	510	2.1
E-2	IR-02	IR02 Northwest	Sheet-Pile W	IR02_SP	IR02SH001MID	IR02SH001	6 - 6.5	0.13	1900	3.4	42	0.31	6900	1.4	4.3	74	1800	6500	9.7	350	1200	270	0.55	290	15	360	16	0.3	0.13	5	1700	1.68
E-2	IR-02	IR02 Northwest	Sheet-Pile W	IR02_SP	P	IR02SH001	2 - 2.5	0.3	4400	5.5	88	0.26	26000	1.8	7	87	3100	30000	5.8	690	3400	430	0.5	170	36	510	1.5	0.52	0.125	23	760	120
E-2	IR-02	IR02 Northwest	Shoreline	IR02_01	IR02SH002005	IR02SH002	0 - 0.5	0.125	3400	4.4	31	0.18	140000	0.97	9.1	59	190	18000	0.19	690	13000	600	0.5	2500	150	34		0.125	1.6	21	190	1.2
E-2	IR-02	IR02 Northwest	Shoreline	IR02_01	IR02SH002025	IR02SH002	2 - 2.5	0.105	930	4.6	12	0.0415	810	0.76	1.4	97	4800	5300	19	270	940	47	2.8	1600	17	510	1.25	0.105	0.105	6.7	530	0.7
E-2	IR-02	IR02 Northwest	Shoreline	IR02_01	IR02SH003005	IR02SH003	0 - 0.5	0.115	2200	3.6	33	0.14	220000	0.84	7.1	180	1200	17000	0.48	560	20000	550	0.465	3600	140	130	1.4	0.115	1.2	17	240	4.5
E-2	IR-02	IR02 Northwest	Shoreline	IR02_01	IR02SH003025	IR02SH003	2 - 2.5	0.11	1500	3.4	19	0.0445	11000	0.85	2.4	77	3000	8900	12	400	2100	110	0.445	2500	23	610	1.35	0.11	0.11	9.4	540	1.4
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH005005	IR02SH005	0 - 0.5	0.135	2500	2.7	14	0.16	48000	1.1	7	94	330	22000	0.6	370	24000	260	0.55	1400	190	110	1.6	0.135	0.135	22	500	5.9
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH005025	IR02SH005	2 - 2.5	0.26	2400	3.6	110	0.18	49000	1.7	16	130	410	23000	0.89	460	45000	280	2.6	2700	290	200	1.9	0.16	0.16	33	490	1.6
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH008005	IR02SH008	0 - 0.5	0.125	2400	4.2	11	0.17	100000	2.1	9.7	55	230	46000	0.76	460	7100	480	0.495	2000	93	68	1.5	0.125	0.125	30	140	0.66
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH008025	IR02SH008	2 - 2.5	0.15	2800	11	64	0.3	12000	4.4	16	290	1700	70000	24	690	3900	520	8.1	3400	150	600	29	2.2	0.15	91	950	6.1
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH010025	IR02SH010	2 - 2.5	0.115	2500	2.7	11	0.047	32000	1.8	3.8	46	310	9500	0.59	370	5300	210	0.47	1800	51	470	1.4	0.115	0.115	57	160	1.2
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH014025	IR02SH014	2 - 2.5	0.28	3200	3.3	26	0.042	39000	4.2	5.3	83	1600	13000	8.6	55	4400	240	0.42	2500	64	300	18	0.105	0.105	36	820	0.84
E	IR-02	IR02 Northwest	Shoreline	IR02_02	IR02SH016025	IR02SH016	2 - 2.5	1.3	3000	8.3	21	0.0425	78000	13	11	140	1900	55000	4.7	55	9900	400	5.7	2800	210	260	15	0.105	0.105	24	1100	0.91
E	IR-02	IR02 Northwest	Shoreline	IR02_04	IR02SH019005	IR02SH019	0 - 0.5	0.1	4000	5.7	21	0.057	91000	8.6	15	100	41	38000	0.075	530	42000	430	0.39	2100	270	25	2.4	0.095	0.095	18	63	0.2
E	IR-02	IR02 Central	Shoreline	IR02C_02	IR02SH024005	IR02SH024	0 - 0.5	0.13	4900	2.7	17	0.07	88000	4.8	13	130	51	21000	0.1	850	50000	290	0.5	2800	230	40	2.7	0.13	0.13	20	67	0.35
E	IR-02	IR02 Southeast	Shoreline	IR02_1A	IR02SH037005	IR02SH037	0 - 0.5	0.31	12000	8.9	56	0.13	26000	12	13	130	430	51000	0.47	1400	20000	390	4.4	10000	220	420	16	0.155	0.155	46	1000	0.13
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH038005	IR02SH038	0 - 0.5	0.46	2700	6.2	15	0.12	150000	4.3	5.5	36	120	20000	0.096	560	5700	400	0.55	5000	43	240	1.65	0.135	0.135	15	210	
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH038025	IR02SH038	2 - 2.5	0.45	1900	4.3	9.3	0.16	210000	2.1	4.9	31	19	5900	0.098	570	4500	620	0.65	6300	35	45	2	0.165	0.165	10	75	
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH039005	IR02SH039	0 - 0.5	0.14	2400	4.8	26	0.12	120000	3.6	4.8	27	180	16000	0.095	440	4400	380	0.55	2800	46	140	1.7	0.14	0.14	16	190	0.02
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH039025	IR02SH039	2 - 2.5	0.145	2300	3.6	9.2	0.15	210000	2	4.5	22	60	6000	0.084	630	4200	500	0.55	5200	35	38	1.7	0.145	0.145	8.2	21	0.015
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH040005	IR02SH040	0 - 0.5	0.21	2900	3.9	25	0.085	110000	3.6	5.3	35	80	16000	0.097	420	5000	270	0.55	2600	58	62	1.6	0.135	0.135	30	180	0.059
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH040025	IR02SH040	2 - 2.5	0.55	940	3.3	9.6	0.13	230000	2	3.5	18	4.1	5200	0.092	440	3300	800	0.6	6500	25	2.8	1.8	0.15	0.15	4.8	23	

TABLE F-5. LABORATORY DATA FOR METALS AND TOTAL AROLCORS IN PARCEL E AND E-2 SHORELINE SAMPLES COMPARED WITH DIFFERENT SCREENING CRITERIA (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Parcel	Site	Area	Location	Subarea	Sample ID	Location ID	Depth (feet bgs)	Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	Tl	V	Zn	TotalAr
E-2	IR-01/21	Slag - Panhandle	Shoreline	IR01_01	IR01SH007005	IR01SH007	0 - 0.5	0.65	7500	10	280	0.087	6300	17	12	88	1600	48000	0.18	1500	6500	740	6.5	3800	120	5400	15	1.8	0.15	55	1300	0.142
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH041005	IR02SH041	0 - 0.5	0.21	8200	13	81	0.3	9100	0.21	17	78	400	31000	0.77	1800	15000	510	31	12000	120	290	4.4	0.21	0.21	68	560	0.031
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH041025	IR02SH041	2 - 2.5	2.3	8100	9	270	0.097	37000	4.8	18	110	770	52000	0.87	780	25000	640	0.55	3900	180	1000	39	0.135	0.135	69	4700	0.2
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH042005	IR02SH042	0 - 0.5	0.22	2700	5.3	21	0.12	110000	1.3	5.7	31	89	16000	0.11	570	5500	370	0.55	2800	44	64	1.7	0.14	0.67	17	210	0.012
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH042025	IR02SH042	2 - 2.5	0.145	2200	3.2	7.5	0.13	130000	1.9	4.3	21	3.3	5800	0.11	570	3700	520	0.6	4600	24	3.2	1.75	0.145	0.145	9.7	13	
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH043005	IR02SH043	0 - 0.5	0.35	2500	5.5	16	0.1	93000	3.9	4.7	32	91	17000	0.084	510	4700	330	0.55	4300	44	52	1.7	0.14	0.14	16	300	0.022
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH043025	IR02SH043	2 - 2.5	0.17	3600	2.7	10	0.15	68000	2.5	5.7	27	5.4	8600	0.014	790	4500	330	0.7	3400	34	5.5	2.05	0.17	0.17	14	23	
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH044005	IR02SH044	0 - 0.5	0.44	3400	4.9	21	0.077	120000	4.6	6.3	54	480	18000	0.17	670	6300	320	0.7	5100	65	120	2.1	0.175	0.175	36	350	0.042
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH044025	IR02SH044	2 - 2.5	0.14	5100	5.2	14	0.12	47000	3.4	7.2	30	22	14000	0.1	980	5600	260	0.55	3600	41	10	1.7	0.14	0.14	21	29	0.02
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH045005	IR02SH045	0 - 0.5	0.55	9700	12	52	0.12	32000	11	15	190	2600	46000	0.31	1000	32000	450	0.7	4800	200	150	17	0.175	0.175	51	470	0.1
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH046005	IR02SH046	0 - 0.5	5.4	6100	4	28	0.1	54000	4.5	7.7	53	140	18000	0.25	800	7500	280	0.55	4700	56	320	1.7	0.14	0.14	33	230	0.31
E	IR02	IR02 Southeast	Shoreline	IR02_1A	IR02SH047005	IR02SH047	0 - 0.5	0.51	6700	4.8	31	0.06	73000	12	14	100	350	58000	0.2	1200	23000	410	0.6	3900	340	130	6.4	0.145	0.145	130	510	0.08
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH048005	IR02SH048	0 - 0.5	0.4	7800	7.4	51	0.11	64000	7.6	11	72	170	30000	0.67	1200	18000	280	0.7	5500	130	220	2.1	0.175	0.175	55	640	0.12
E	IR-02	IR02 Southeast	Shoreline	IR02_02	IR02SH048025	IR02SH048	2 - 2.5	0.18	2800	3.7	61	0.12	110000	2.5	5.8	24	43	7300	0.24	550	4100	640	0.65	3900	29	44	1.9	0.16	0.16	19	150	
E	IR-02	IR02 Southeast	Shoreline	IR02_1B	IR02SH049005	IR02SH049	0 - 0.5	0.42	6500	6.8	33	0.36	54000	2.2	8.5	47	98	43000	0.19	1300	7700	300	2.2	3900	76	57	1.6	0.81	0.25	53	320	0.152
E	IR-02	IR02 Southeast	Shoreline	IR02_1B	IR02SH049025	IR02SH049	2 - 2.5	0.135	3000	2.3	15	0.18	64000	0.75	5.7	29	20	12000	0.07	135	4300	250	0.55	3500	41	13	1.6	0.37	0.24	26	64	0.023
E	IR-03	IR03 Oil Ponds	Shoreline	IR03_03	IR03SH007005	IR03SH007	0 - 0.5	0.15	3500	4.6	15	0.073	69000	5.9	6.3	49	190	24000	0.18	430	10000	270	0.4	1900	59	67	2.3	0.1	0.1	17	82	0.045
E	IR-03	IR03 Oil Ponds	Shoreline	IR03_03	IR03SH012025	IR03SH012	2 - 2.5	0.25	2100	4.1	30	0.05	6400	2.8	3.5	180	1900	6400	9.8	65	4200	82	0.5	1800	41	410	4.4	1.1	0.125	13	1100	0.7
	Exceeds Hunters Point ambient level (HPAL) for soil							1.43	NA	11.1	314	0.71	NA	3.14	R	R	124	NA	2.28	NA	NA	1431	2.7	NA	R	9	9.05	1.95	0.81	117	110	NA
	Exceeds protective soil concentration (PSC)							NA	NA	NA	NA	NA	NA	4.24	NA	NA	1084	NA	NA	NA	NA	NA	NA	NA	1941	442	NA	1.95	NA	NA	719	NA
	Exceeds effects-range median (ER-M) for sediment							3.7	NA	70	NA	NA	NA	9.6	NA	370	270	NA	0.71	NA	NA	NA	NA	NA	51.6	218	25	NA	NA	NA	410	0.18
	Exceeds ambient concentration for sediment							0.58	NA	15.3	NA	NA	NA	0.33	NA	114	68.1	NA	0.43	NA	NA	NA	NA	NA	112	43.2	NA	0.65	NA	NA	158	0.0148

Notes: All results in mg/kg.

bgs Below ground surface

NA Not available, no screening level available

R Screening level based on a regression equation with magnesium

TABLE F-6: SEDIMENT AND SOIL SCREENING CRITERIA

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

	Sediment Screening Criteria			Soil Screening Criteria	
Analyte	ER-L (mg/kg)	ER-M (mg/kg)	Ambient (mg/kg)[a]	HPAL (mg/kg)	PSC (mg/kg)
Metals (mg/kg)					
Aluminum	NA	NA	NA	NA	NA
Antimony	2[b]	25[b]	NA	9.05	NA
Arsenic	8.2[c]	70[c]	15.3	11.1	NA
Barium	NA	NA	NA	314	NA
Beryllium	NA	NA	NA	0.71	NA
Cadmium	1.2[c]	9.6[c]	0.33	3.14	4.24
Chromium	81[c]	370[c]	114	R[d]	NA
Cobalt	NA	NA	NA	R[d]	NA
Copper	34[c]	270[c]	68.1	124	1,084
Lead	46.7[c]	218[c]	43.2	9.0	442
Magnesium	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	1,431	NA
Mercury	0.15[c]	0.71[c]	0.43	2.28	NA
Molybdenum	NA	NA	NA	2.68	NA
Nickel	20.9[c]	51.6[c]	112	R[d]	1,941
Selenium	NA	NA	0.65	1.95	1.95
Silver	1[c]	3.7[c]	0.58	1.43	NA
Thallium	NA	NA	NA	0.81	NA
Vanadium	NA	NA	NA	117	NA
Zinc	150[c]	410[c]	158	110	719
Pesticides (mg/kg)					
4,4'-DDD	0.002[b]	0.020[b]	NA	NA	NA
4,4'-DDE	0.0022[c]	0.027[c]	NA	NA	NA
4,4'-DDT	0.001[b]	0.007[b]	NA	NA	NA
Total DDT	0.00158[c]	0.046[c]	0.007	NA	NA
Aldrin	NA	NA	NA	NA	NA
alpha BHC	NA	NA	NA	NA	NA
alpha Chlordane	0.0005[b]	0.006[b]	NA	NA	NA
gamma Chlordane	0.0005[b]	0.006[b]	NA	NA	NA
Total Chlordane	0.0005[b]	0.006[b]	NA	NA	NA
beta BHC	NA	NA	NA	NA	NA
delta BHC	NA	NA	NA	NA	NA
Dieldrin	0.00002[b]	0.008[b]	0.00044	NA	NA
Endosulfan I	NA	NA	NA	NA	NA
Endosulfan II	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA
Endrin	0.00002[b]	0.045[b]	NA	NA	NA
Endrin aldehyde	NA	NA	NA	NA	NA
gamma BHC (lindane)	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA
Aroclors (mg/kg)				NA	NA
Aroclor-1016	0.0227[c]	0.18[c]	0.0148	NA	NA
Aroclor-1221	0.0227[c]	0.18[c]	0.0148	NA	NA
Aroclor-1232	0.0227[c]	0.18[c]	0.0148	NA	NA
Aroclor-1242	0.0227[c]	0.18[c]	0.0148	NA	NA
Aroclor-1248	0.0227[c]	0.18[c]	0.0148	NA	NA
Aroclor-1254	0.0227[c]	0.18[c]	0.0148	NA	NA
Aroclor-1260	0.0227[c]	0.18[c]	0.0148	NA	NA
Total Aroclors	0.0227[c]	0.18[c]	0.0148	NA	NA
SVOCs (mg/kg)					
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA
2,2'-oxybis(1-Chloropropane)	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA
2,4-Dichlorphenol	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA

TABLE F-6: SEDIMENT AND SOIL SCREENING CRITERIA (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

	Sediment Screening Criteria			Soil Screening Criteria	
Analyte	ER-L (mg/kg)	ER-M (mg/kg)	Ambient (mg/kg)[a]	HPAL (mg/kg)	PSC (mg/kg)
SVOCs (mg/kg) (Continued)					
2,6-Dinitrotoluene	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA
2-Methylnaphthalene	0.07	0.67	0.0194	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA
4,6-dinitro-2-Methylphenol	NA	NA	NA	NA	NA
4-Bromophenyl-phenylether	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA
4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA
Acenaphthene	0.016[c]	0.5[c]	0.0266	NA	NA
Acenaphthylene	0.044[c]	0.64[c]	0.0317	NA	NA
Anthracene	0.0853[c]	1.1[c]	0.088	NA	NA
Azobenzene	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.261[c]	1.6[c]	0.244	NA	NA
Benzo(a)pyrene	0.43[c]	1.6[c]	0.412	NA	NA
Benzo(b)fluoranthene	NA	NA	0.371	NA	NA
Benzo(g,h,i)perylene	NA	NA	0.31	NA	NA
Benzo(k)fluoranthene	NA	NA	0.258	NA	NA
Benzoic acid	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	NA
Butylbenzylphthalate	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA
Chrysene	0.384[c]	2.8[c]	0.289	NA	NA
Dibenz(a,h)anthracene	0.0634[c]	0.26[c]	0.0327	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA
Diethylphthalate	NA	NA	NA	NA	NA
Dimethylphthalate	NA	NA	NA	NA	NA
di-n-Butylphthalate	NA	NA	NA	NA	NA
di-n-Octylphthalate	NA	NA	NA	NA	NA
Fluoranthene	0.6[c]	5.1[c]	0.514	NA	NA
Fluorene	0.019[c]	0.54[c]	0.0253	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA
Hexachlorethane	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	0.382	NA	NA
Isophorone	NA	NA	NA	NA	NA
Naphthalene	0.16[c]	2.1[c]	0.0558	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA
n-Nitrosodimethylamine	NA	NA	NA	NA	NA
n-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA
n-Nitrosodiphenylamine	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA
Phenanthrene	0.24[c]	1.5[c]	0.237	NA	NA
Phenol	NA	NA	NA	NA	NA
Pyrene	0.665[c]	2.6[c]	0.655	NA	NA
Total HMW PAHs	1.7[c]	9.6[c]	3.06	NA	NA
Total LMW PAHs	0.552[c]	3.16[c]	0.434	NA	NA
Total PAHs	4.022[c]	44.792[c]	3.39	NA	NA
Organotins (mg/kg)				NA	NA
Dibutyltin	0.02[e]	NA	NA	NA	NA
Monobutyltin	0.025[e]	NA	NA	NA	NA
Tetrabutyltin	0.025[e]	NA	NA	NA	NA
Tributyltin	0.025[e]	NA	NA	NA	NA

TABLE F-6: SEDIMENT AND SOIL SCREENING CRITERIA (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

	Sediment Screening Criteria			Soil Screening Criteria	
Analyte	ER-L (mg/kg)	ER-M (mg/kg)	Ambient (mg/kg)[a]	HPAL (mg/kg)	PSC (mg/kg)

Notes:

a Ambient concentration based on an 85th-percentile of 100 percent fines.

b Values based on Long and Morgan (1991)

c Values based on Long and others (1995)

d HPAL for respective metal determned by regression equation based on the concenration of magnesium in the sample.

e Screening value from EPA (1996)

BHC	Benzene hexachloride	HPAL	Hunters Point ambient level
DDD	Dichlorodiphenyldichloroethane	LMW	Low molecular-weight
DDE	Dichlorodiphenyldichloroethene	mg/kg	Milligram per kilogram
DDT	Dichlorodiphenyltrichloroethane	NA	Not available
EPA	U.S. Environmental Protection Agency	PAH	Polynuclear aromatic hydrocarbon
ER-L	Effects-range low	PSC	Protective soil concentration (terrestrial ecological soil screening level)
ER-M	Effects-range median		
HMW	High molecular-weight	SVOC	Semivolatile organic chemical

Sources:

EPA. 1996c. "Recommendations for Screening Values for Tributyltin in Sediments at Superfund Sites in Puget Sound, Washington." EPA 910/R/96/014. October.

Long, E.R., D.D. MacDonald, S.L. Smith, and F.D. Calder. 1995. "Incidence of Adverse Biological Effects within Ranges of Chemical Concentrations in Marine and Estuarine Sediments." *Environmental Management*. Volume 19. Number 1. Pages 81 to 97.

Long, E.R., and L.G. Morgan. 1991. "The Potential for Biological Effects of Sediment-Sorbed Contaminants Tested in the National Status Administration, and Trends Program." National Oceanic and Atmospheric Administration Technical Memorandum NOS OMA 52. Seattle, Washington.

Tetra Tech EM Inc. and LFR Levine-Fricke. 2000b. "Draft Final Protectived Soil Concentrations Technical Memorandum, Parcel E, Hunters Point Shipyard, San Francisco, California." March 14.

TABLE F-7: CORRELATION COEFFICIENTS FOR SELECTED METALS, BY AREA

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Area	Parameter	Log Aluminum	Log Aroclor	Log Fines	Log TOC	5% Signif Level
IR-01	Log Chromium	-0.09	-0.08	ND	ND	0.33
IR-02	Log Chromium	**0.33**	**0.59**	ND	ND	0.33
Area VIII	Log Chromium	-0.20	**-0.84**	-0.46	-0.03	0.52
Area IX	Log Chromium	**-0.82**	**0.84**	**-0.82**	**0.74**	0.56
Area X	Log Chromium	0.07	**0.79**	0.05	**0.46**	0.31
IR-01	Log Copper	-0.32	0.03	ND	ND	0.33
IR-02	Log Copper	0.11	**0.62**	ND	ND	0.33
Area VIII	Log Copper	**0.68**	-0.30	**0.56**	0.49	0.52
Area IX	Log Copper	-0.33	**0.76**	-0.38	**0.60**	0.56
Area X	Log Copper	**-0.43**	**0.88**	**-0.42**	0.14	0.31
IR-01	Log Mercury	**-0.48**	0.23	ND	ND	0.33
IR-02	Log Mercury	-0.13	**0.69**	ND	ND	0.33
Area VIII	Log Mercury	**0.54**	0.48	**0.65**	0.40	0.52
Area IX	Log Mercury	-0.04	**0.56**	-0.15	0.39	0.56
Area X	Log Mercury	-0.12	**0.82**	-0.13	**0.40**	0.31
IR-01	Log Nickel	0.27	-0.21	ND	ND	0.33
IR-02	Log Nickel	**0.57**	0.07	ND	ND	0.33
Area VIII	Log Nickel	**0.81**	-0.31	**0.79**	0.40	0.52
Area IX	Log Nickel	-0.28	**0.84**	-0.38	0.41	0.56
Area X	Log Nickel	0.00	**0.72**	0.07	**0.39**	0.31
IR-01	Log Lead	-0.16	-0.10	ND	ND	0.33
IR-02	Log Lead	0.20	**0.47**	ND	ND	0.33
Area VIII	Log Lead	0.48	-0.42	0.34	0.42	0.52
Area IX	Log Lead	-0.35	**0.75**	-0.41	**0.56**	0.56
Area X	Log Lead	0.13	**0.81**	0.11	**0.50**	0.31
IR-01	Log Zinc	**-0.42**	-0.02	ND	ND	0.33
IR-02	Log Zinc	0.32	**0.42**	ND	ND	0.33
Area VIII	Log Zinc	**0.62**	**-0.60**	0.42	**0.57**	0.52
Area IX	Log Zinc	-0.21	**0.78**	-0.26	0.51	0.56
Area X	Log Zinc	-0.05	**0.85**	-0.10	**0.45**	0.31

Notes:	Significant correlation coefficients in bold-face font (blue for negative, red for positive correlation)
	Correlations calculated using laboratory data only
Log	Logarithm
ND	No data
IR	Installation Restoration
TOC	Total organic carbon
5% Signif Level	Correlation coefficient showing statistical significance at 5 percent confidence level

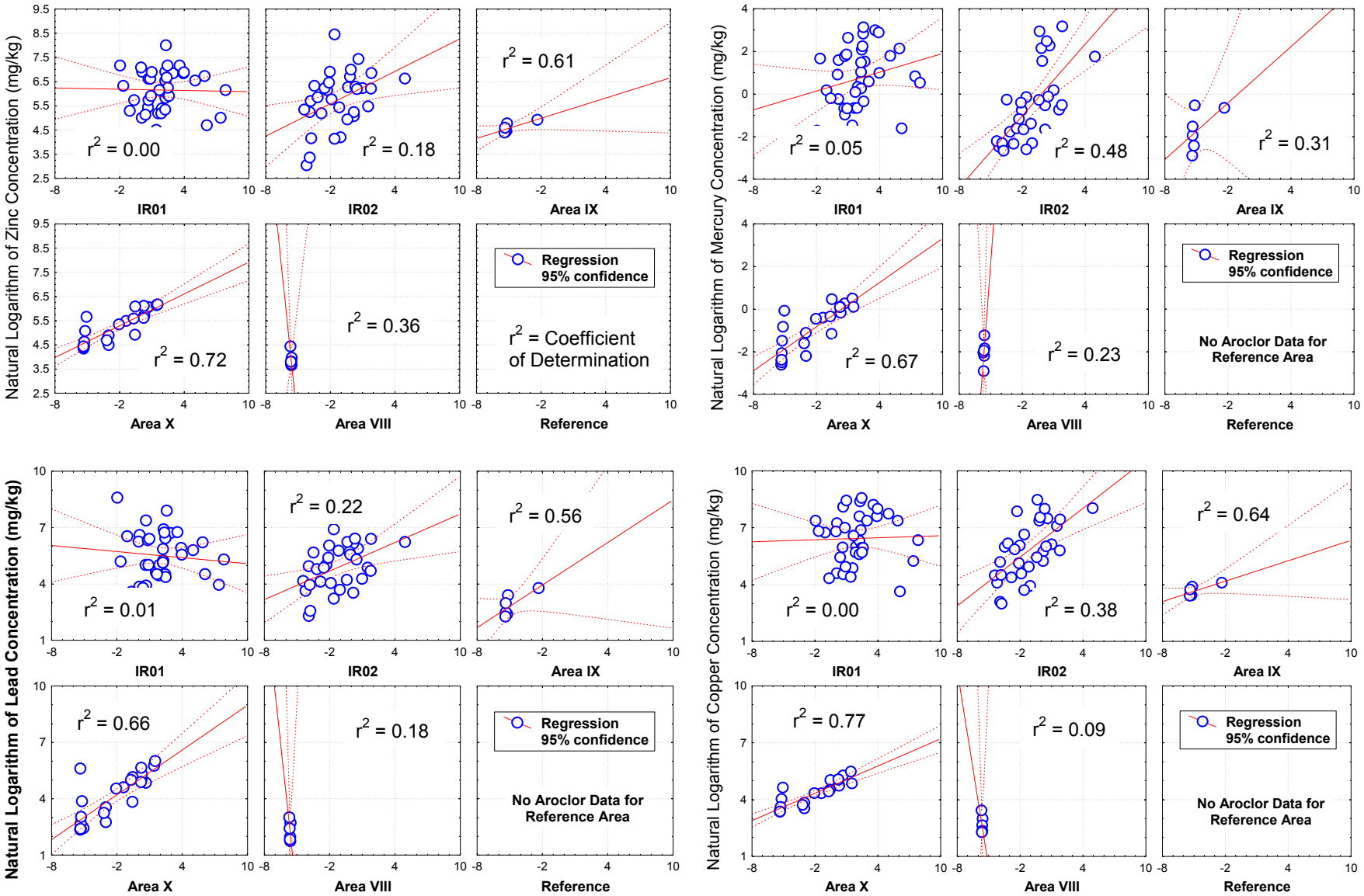
The correlation coefficient, r, represents the linear relationship between two variables; the coefficient of determination, r2, represents the proportion of common variation between the two variables (that is, the strength or magnitude of the relationship). To interpret the correlation between variables, both the magnitude and significance of the correlation are important. The significance depends on the size of the sample population (n) and the magnitude of the correlation. The larger the same size, the smaller the effect that can be proven significant for that sample population.

ATTACHMENT F-1
SCATTER PLOTS OF DATA FOR METALS AND TOTAL AROCLORS

(Provided on Compact Disc Only)

Attachment 1, Figure F1-1. Regression Plots for Total Aroclors versus Metals

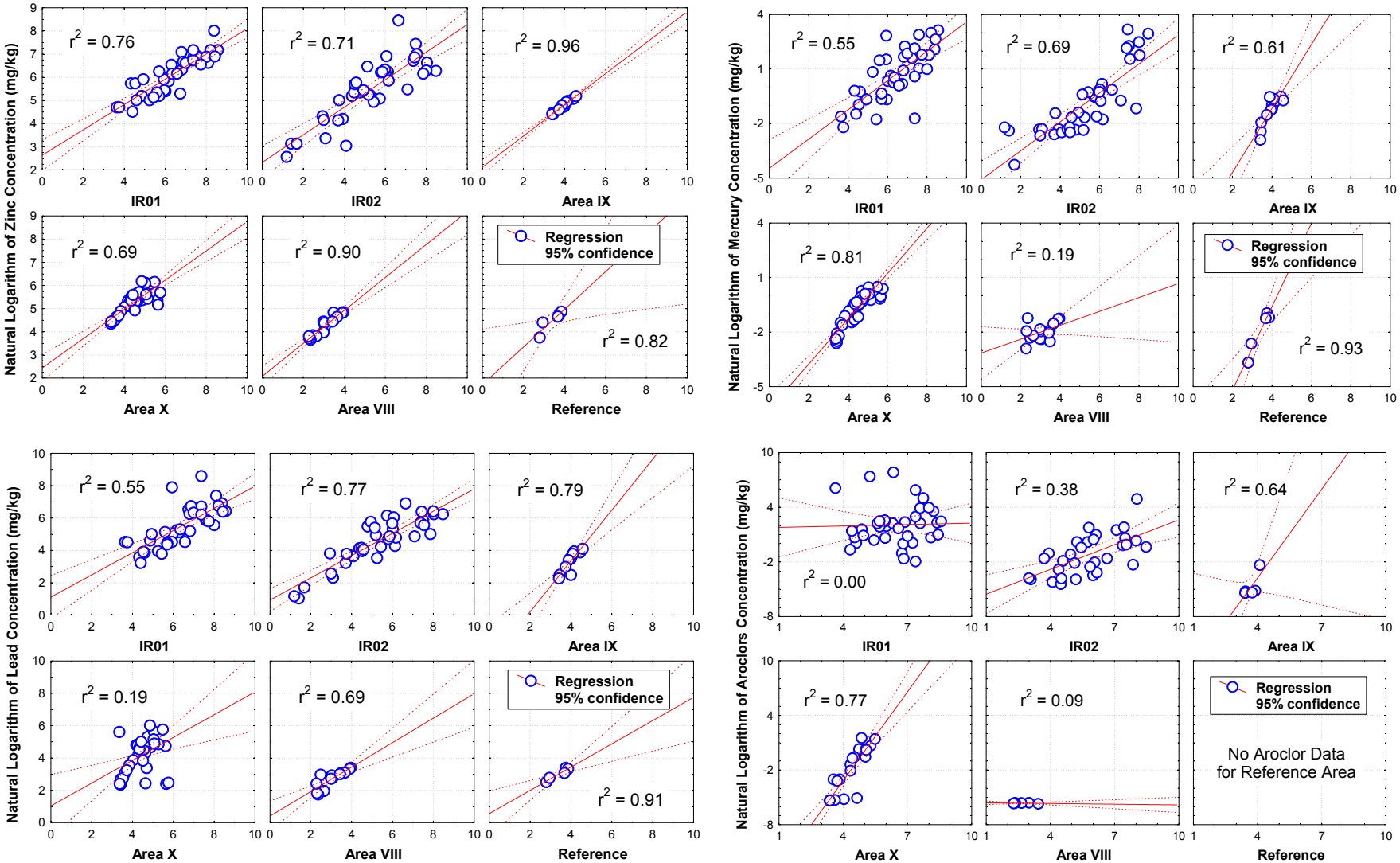
Laboratory Data for Aroclors, Copper, Lead, Mercury, and Zinc



Concentration of Total Aroclors, Natural Logarithm of mg/kg

Attachment 1, Figure F1-2. Regression Plots for Copper versus Aroclors and Metals

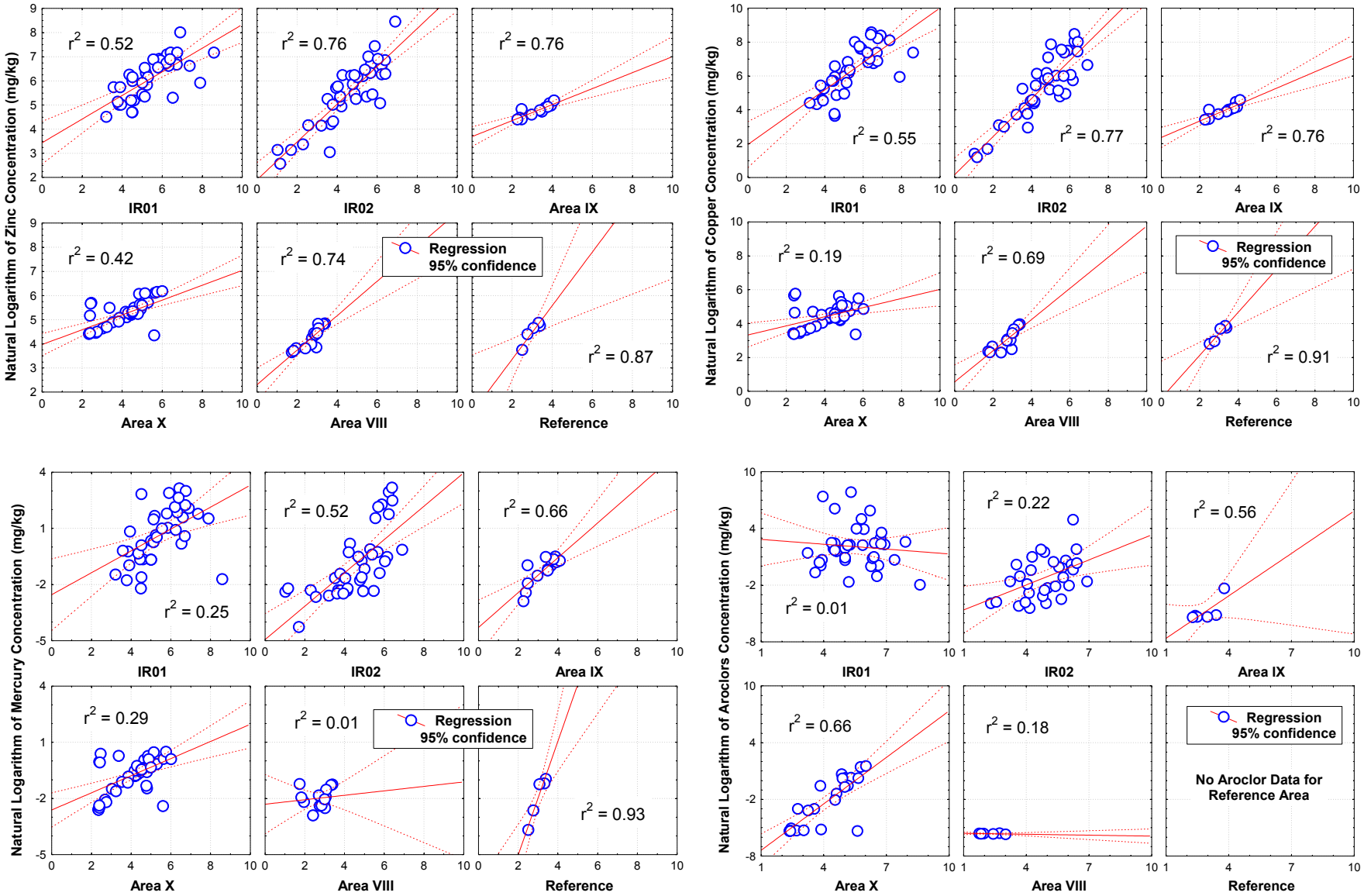
Laboratory Data for Copper, Aroclors, Lead, Mercury, and Zinc



Concentration of Copper, Natural Logarithm of mg/kg

Attachment 1, Figure F1-3. Regression Plots for Lead versus Aroclors and Metals

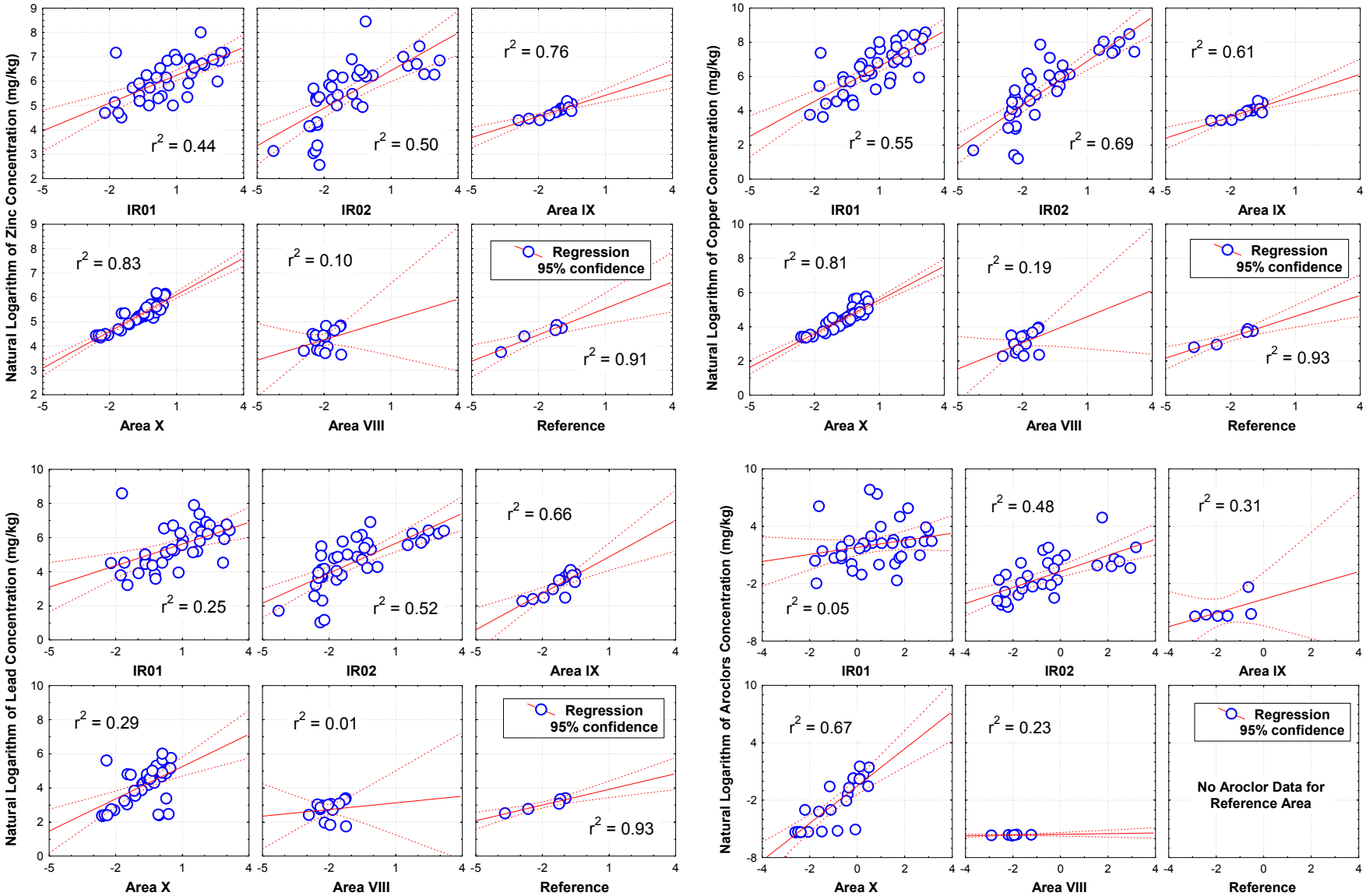
Laboratory Data for Lead, Aroclors, Copper, Mercury, and Zinc



Concentration of Lead, Natural Logarithm of mg/kg

Attachment 1, Figure F1-4. Regression Plots for Mercury versus Aroclors and Metals

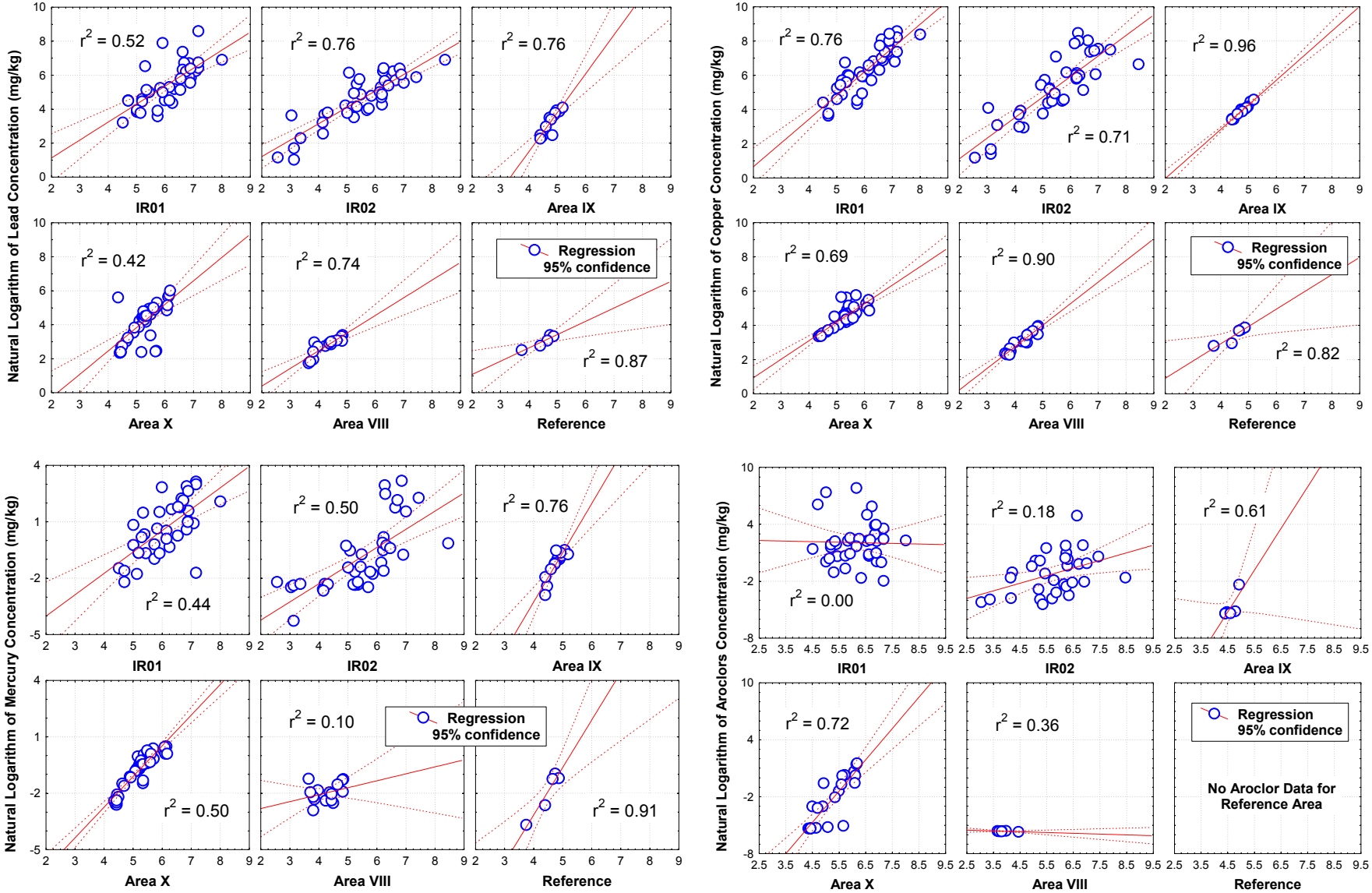
Laboratory Data for Mercury, Aroclors, Copper, Lead, and Zinc



Concentration of Mercury, Natural Logarithm of mg/kg

Attachment 1, Figure F1-5. Regression Plots for Zinc versus Total Aroclors and Metals

Laboratory Data for Zinc, Aroclors, Copper, Lead, and Mercury

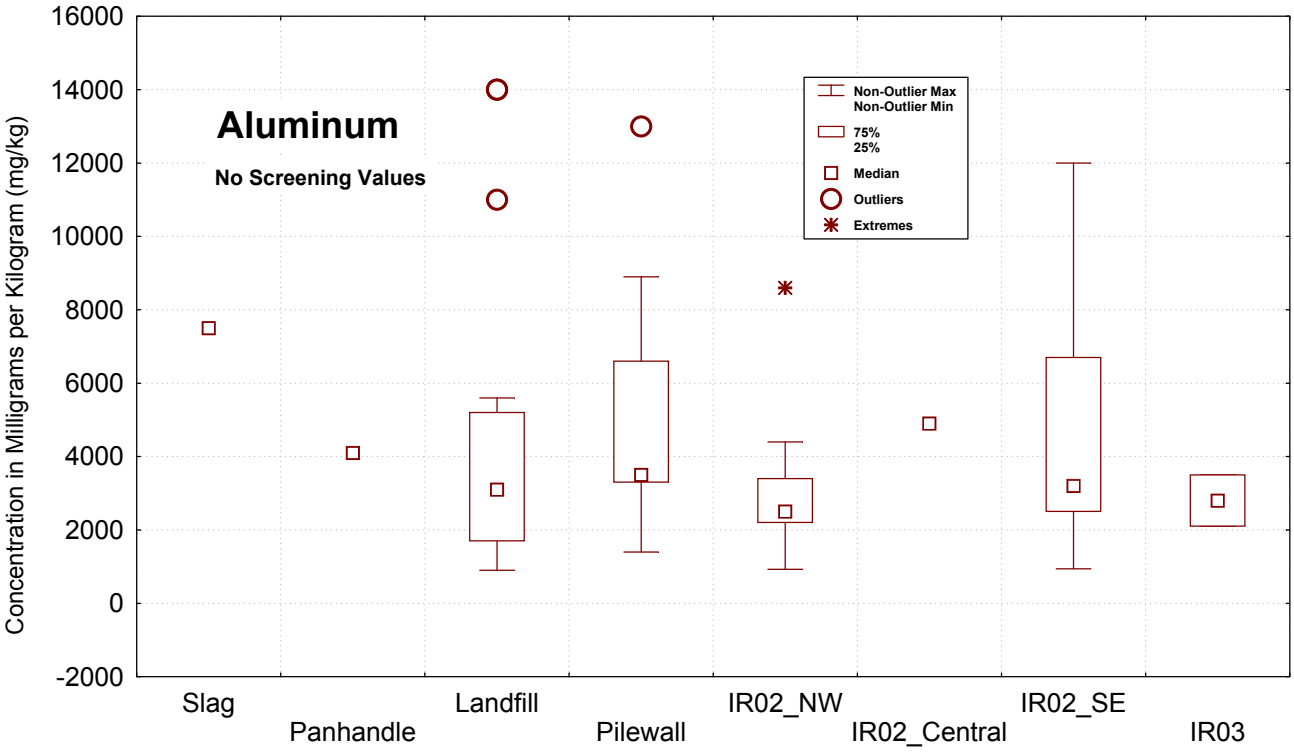


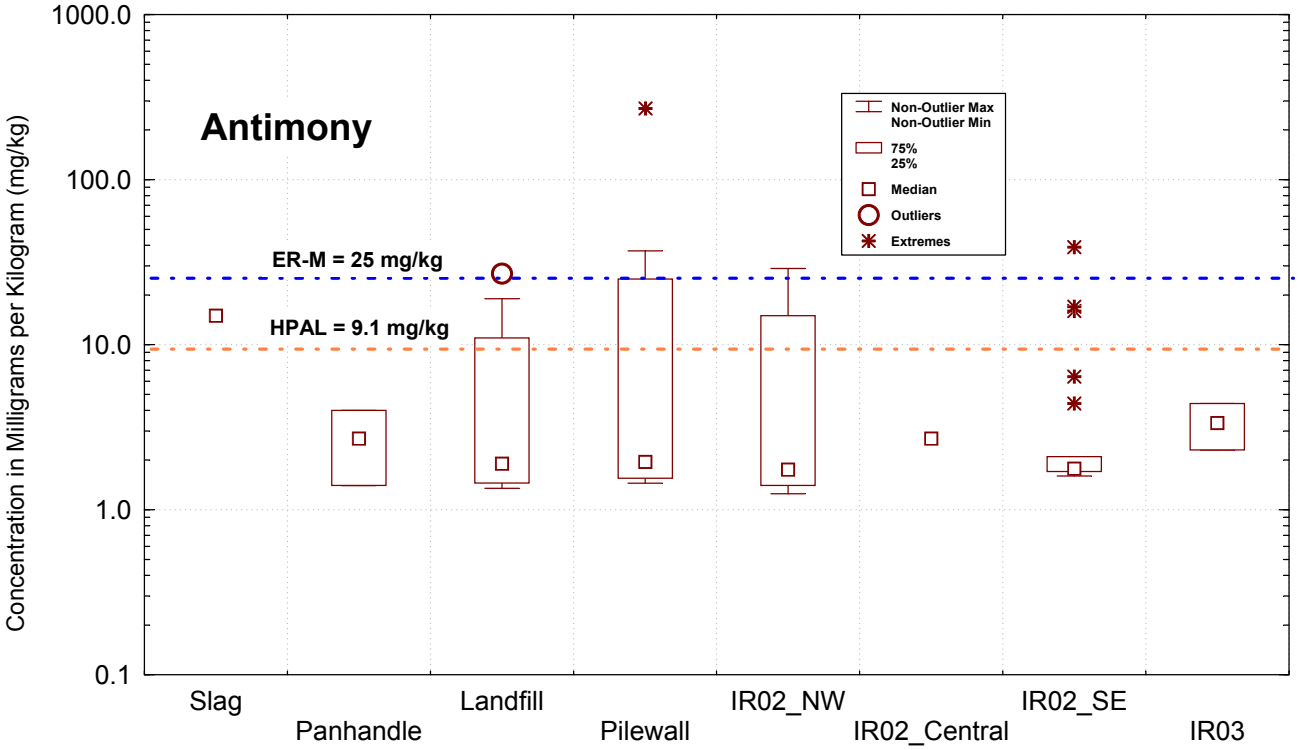
Concentration of Zinc, Natural Logarithm of mg/kg

ATTACHMENT F-2
BOX-AND-WHISKER PLOTS FOR ADDITIONAL METALS

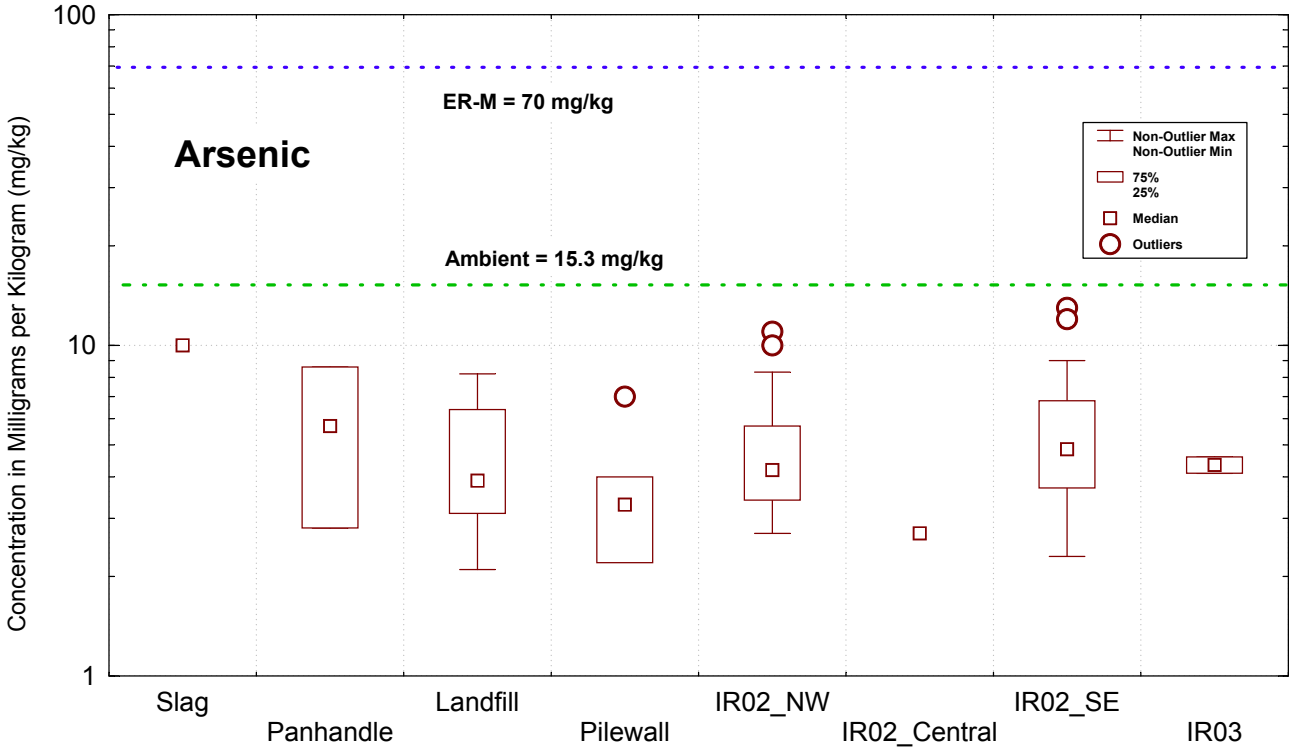
(Provided on Compact Disc Only)

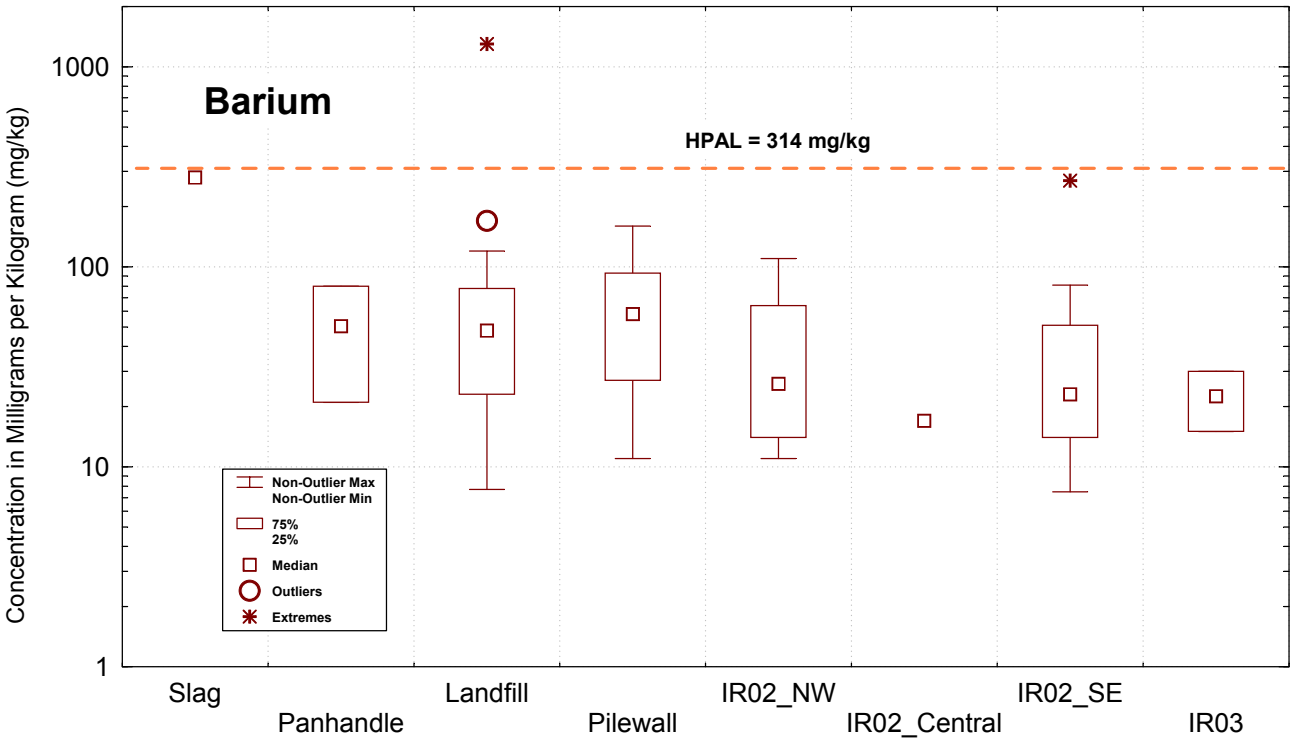
Attachment 2, Figure F2-1. Aluminum and Antimony in Samples from Parcels E, E-2



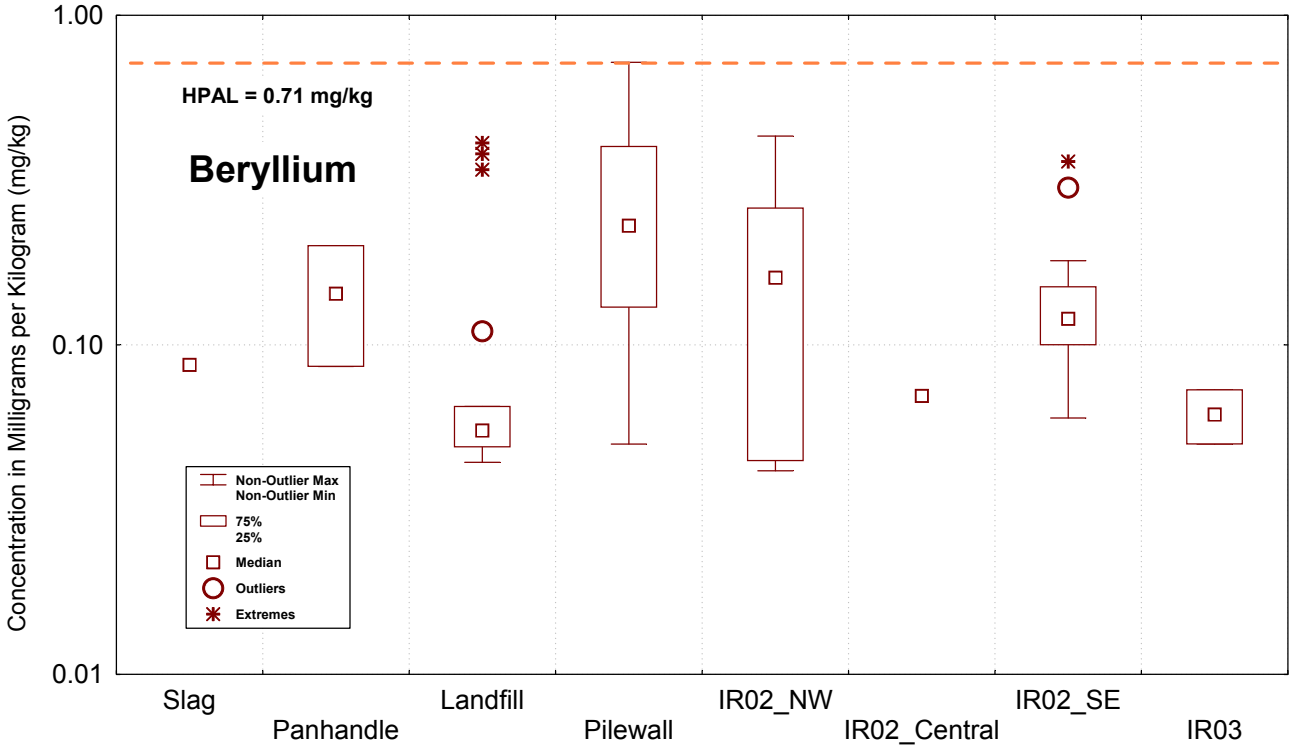


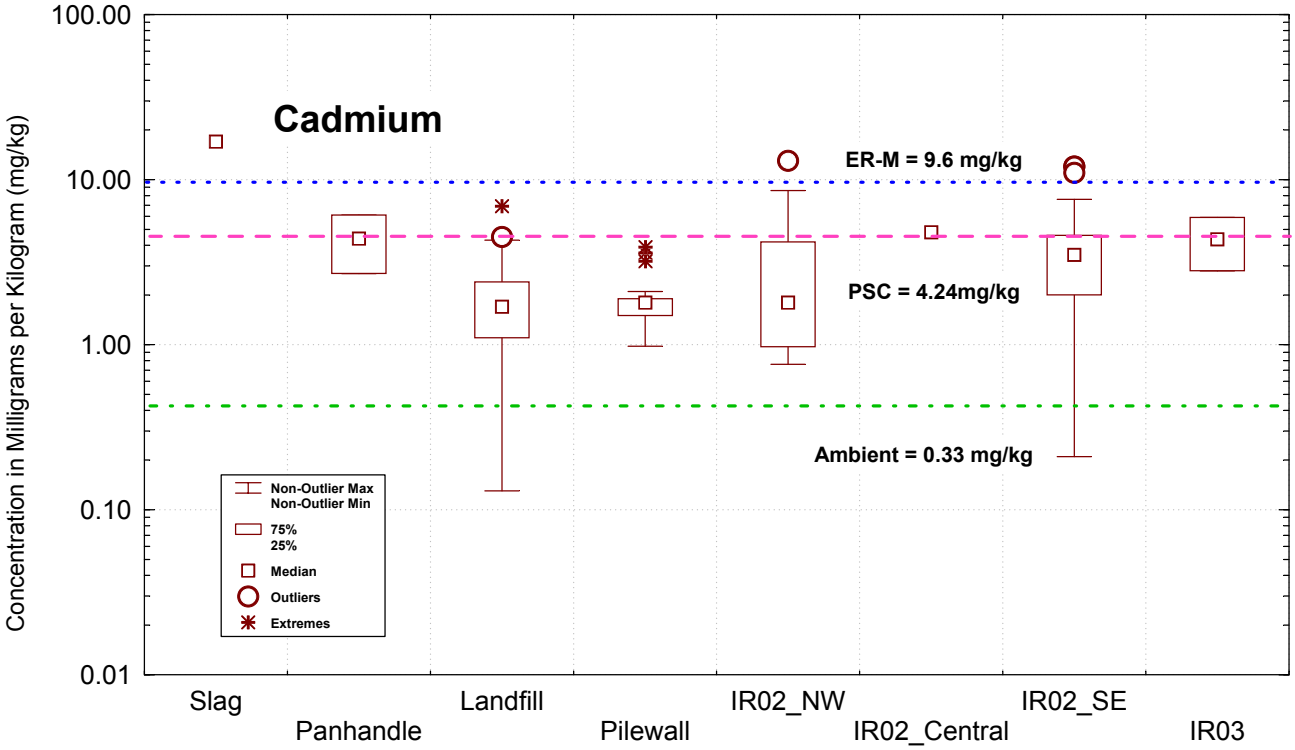
Attachment 2, Figure F2-2. Arsenic and Barium in Samples from Parcels E, E-2



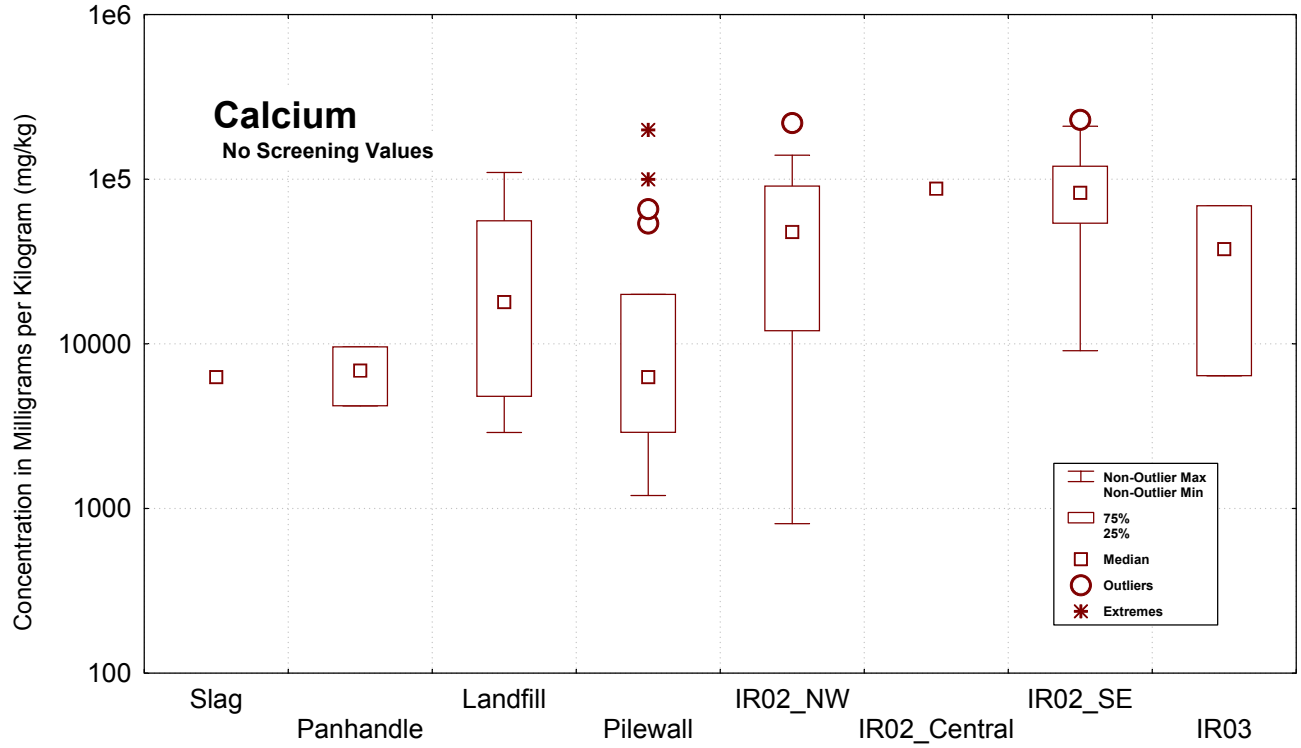


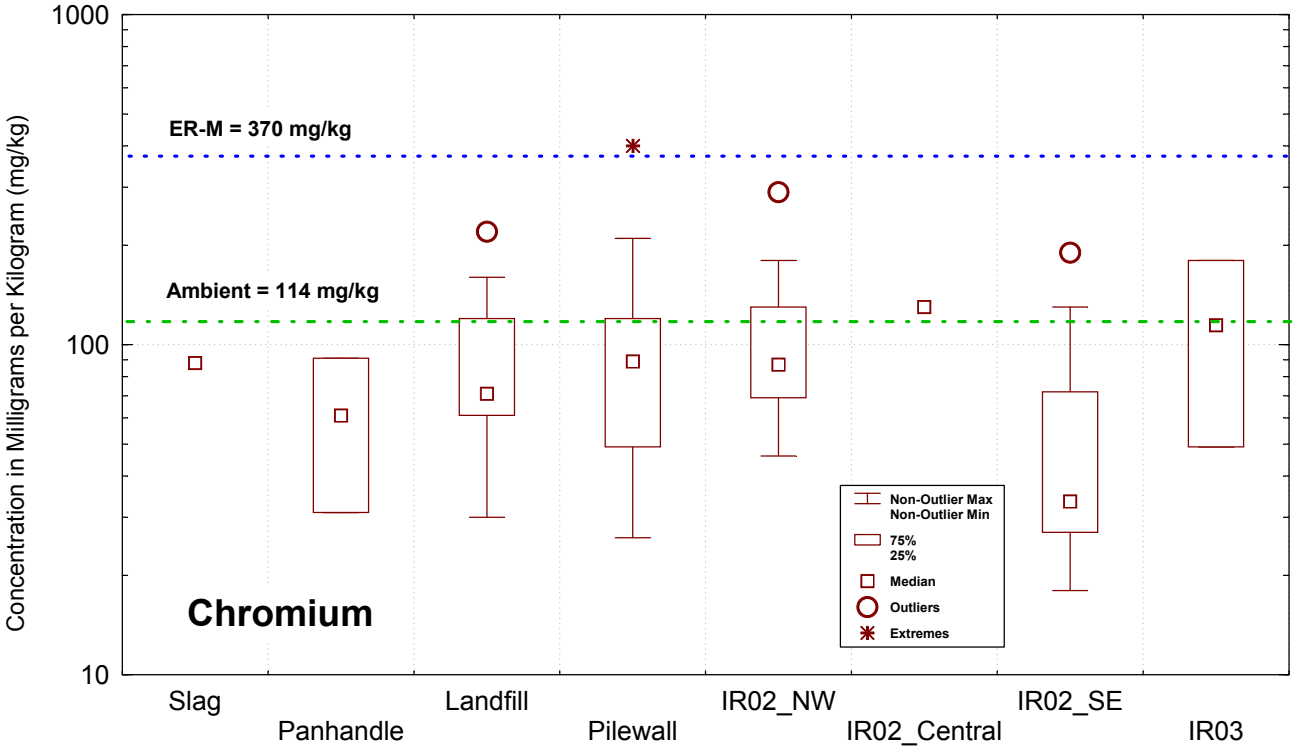
Attachment 2, Figure F2-3. Beryllium and Cadmium in Samples from Parcels E, E-2



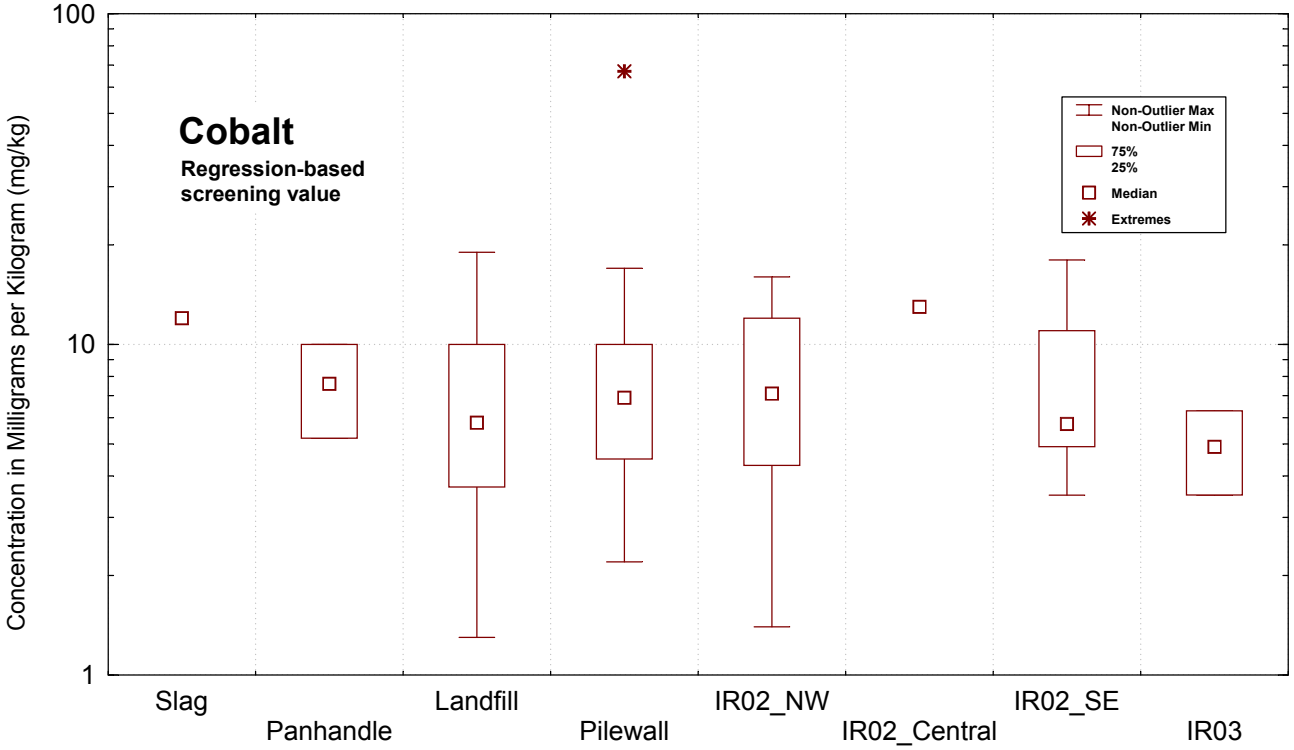


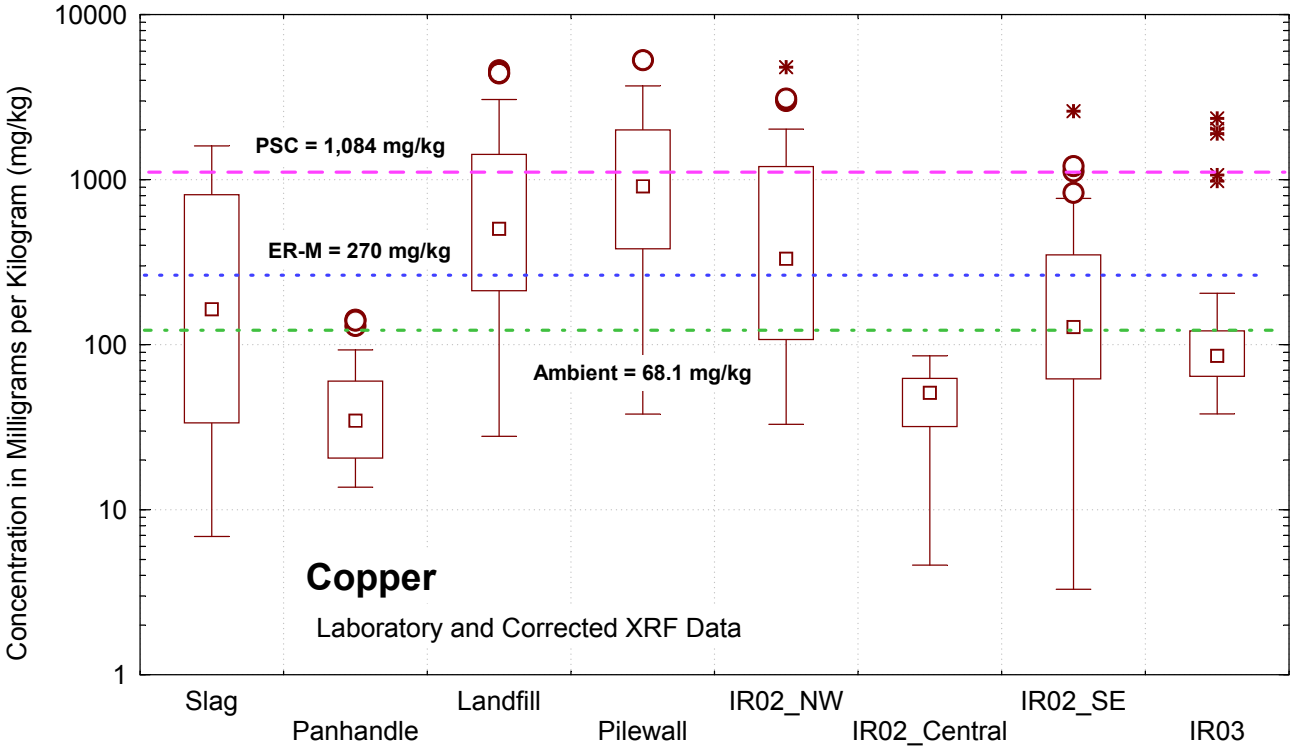
Attachment 2, Figure F2-4. Calcium and Chromium in Samples from Parcels E, E-2



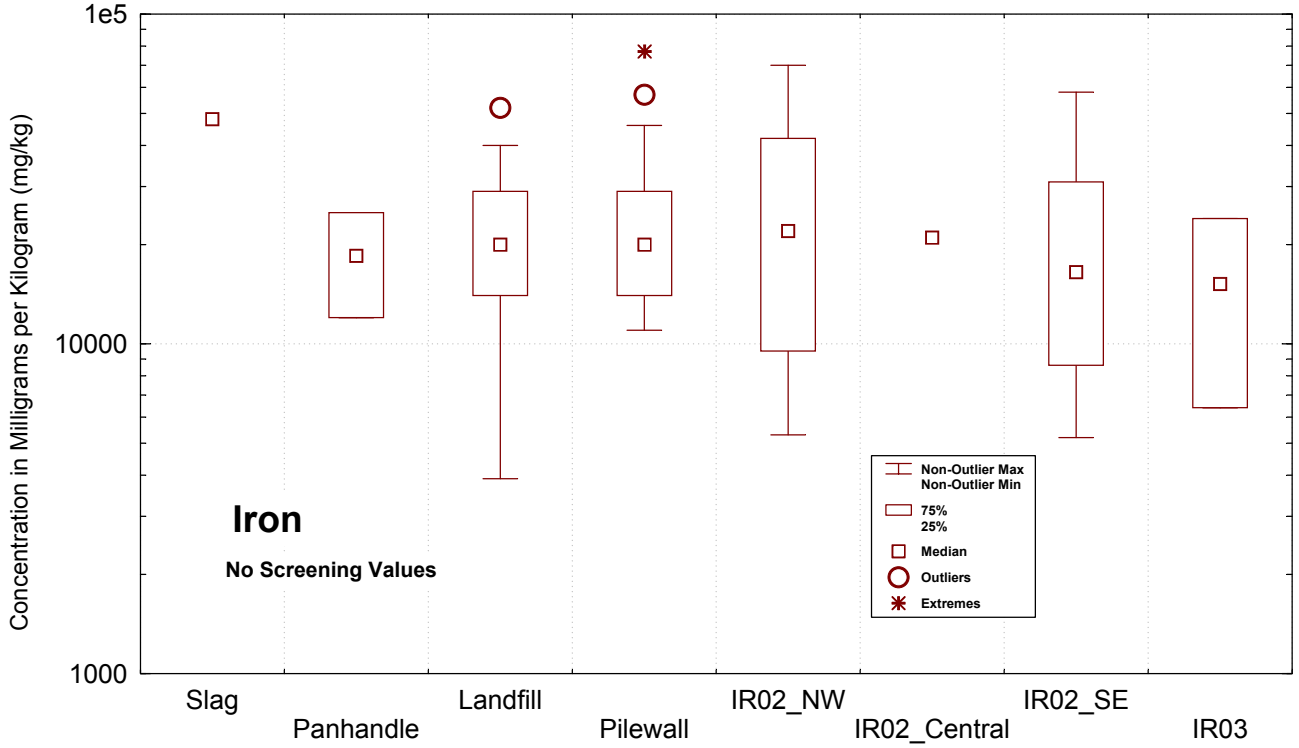


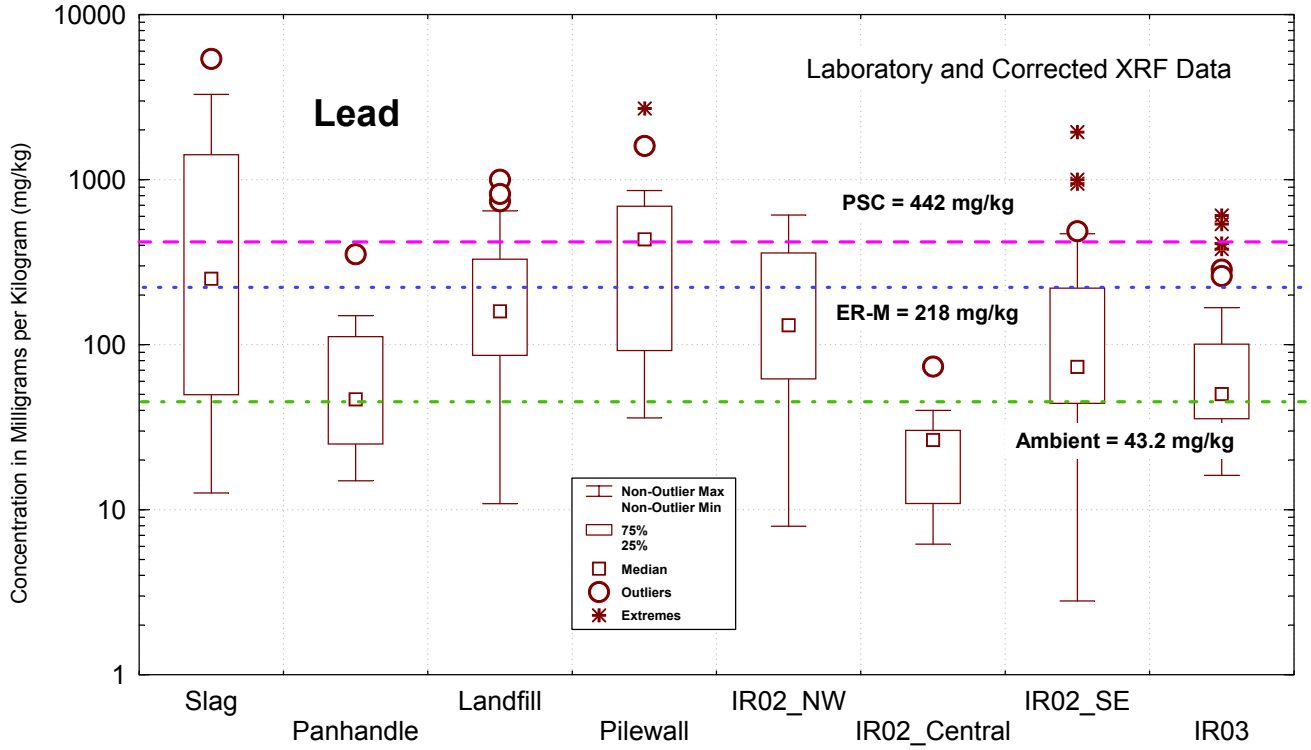
Attachment 2, Figure F2-5. Cobalt and Copper in Samples from Parcels E, E-2



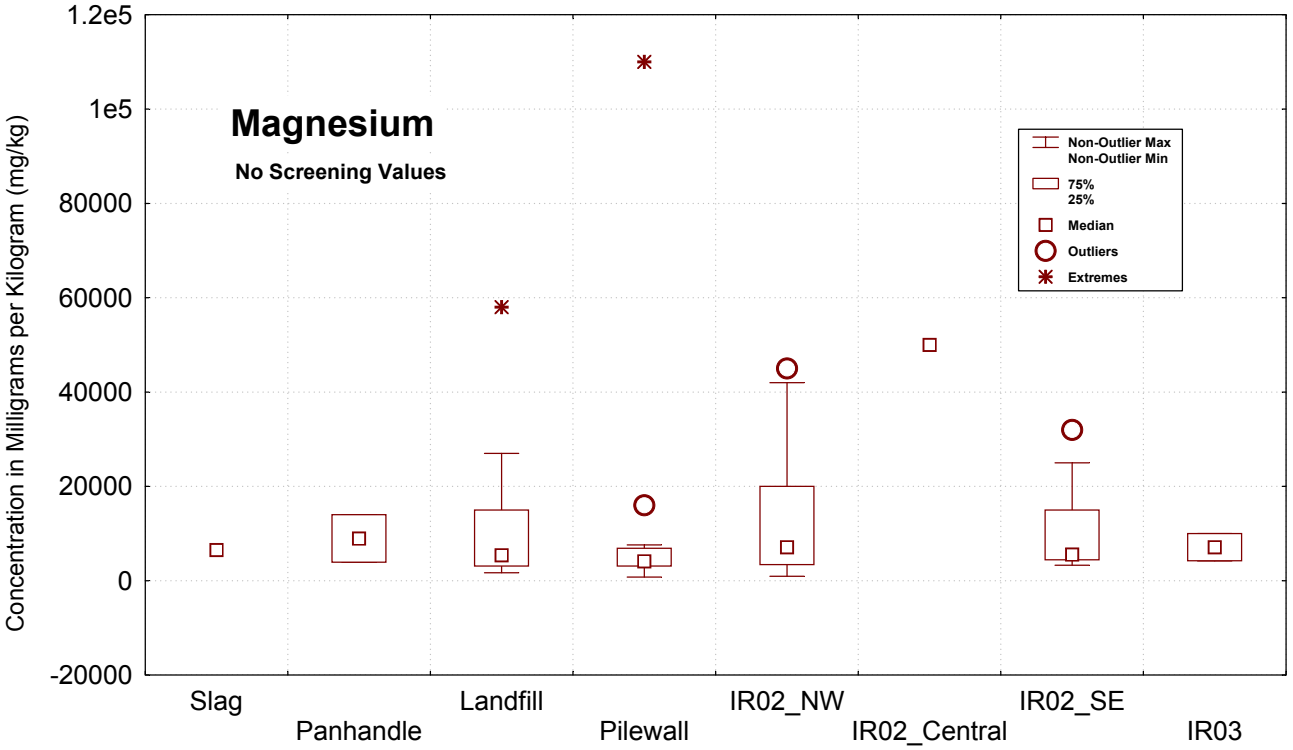


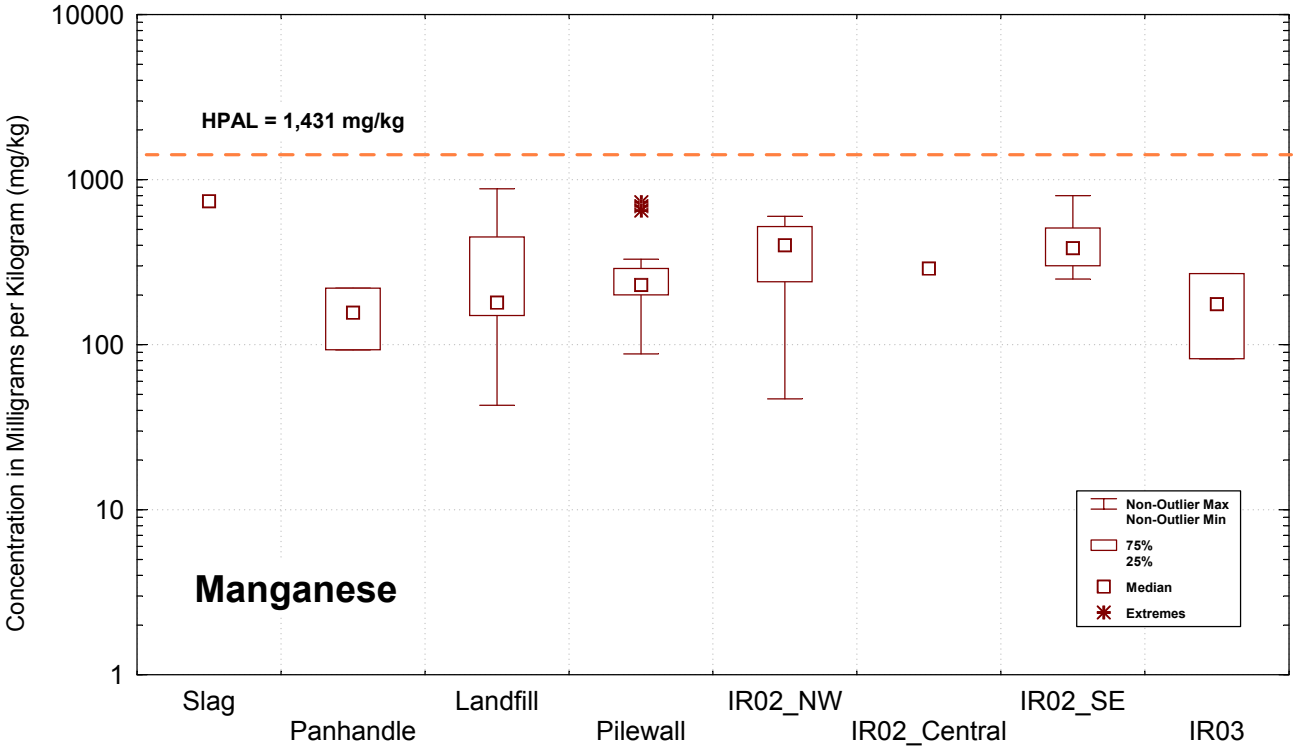
Attachment 2, Figure F2-6. Iron and Lead in Samples from Parcels E, E-2





Attachment 2, Figure F2-7. Magnesium and Manganese in Samples from Parcels E, E





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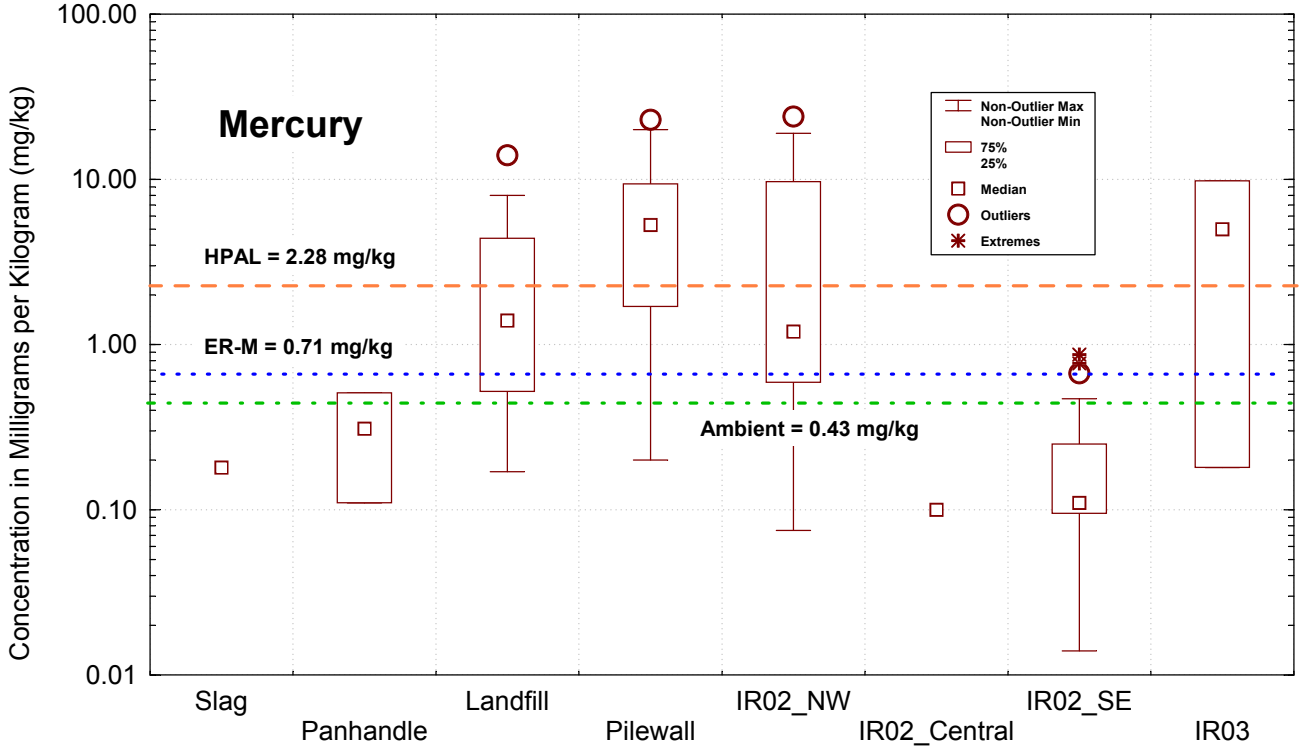

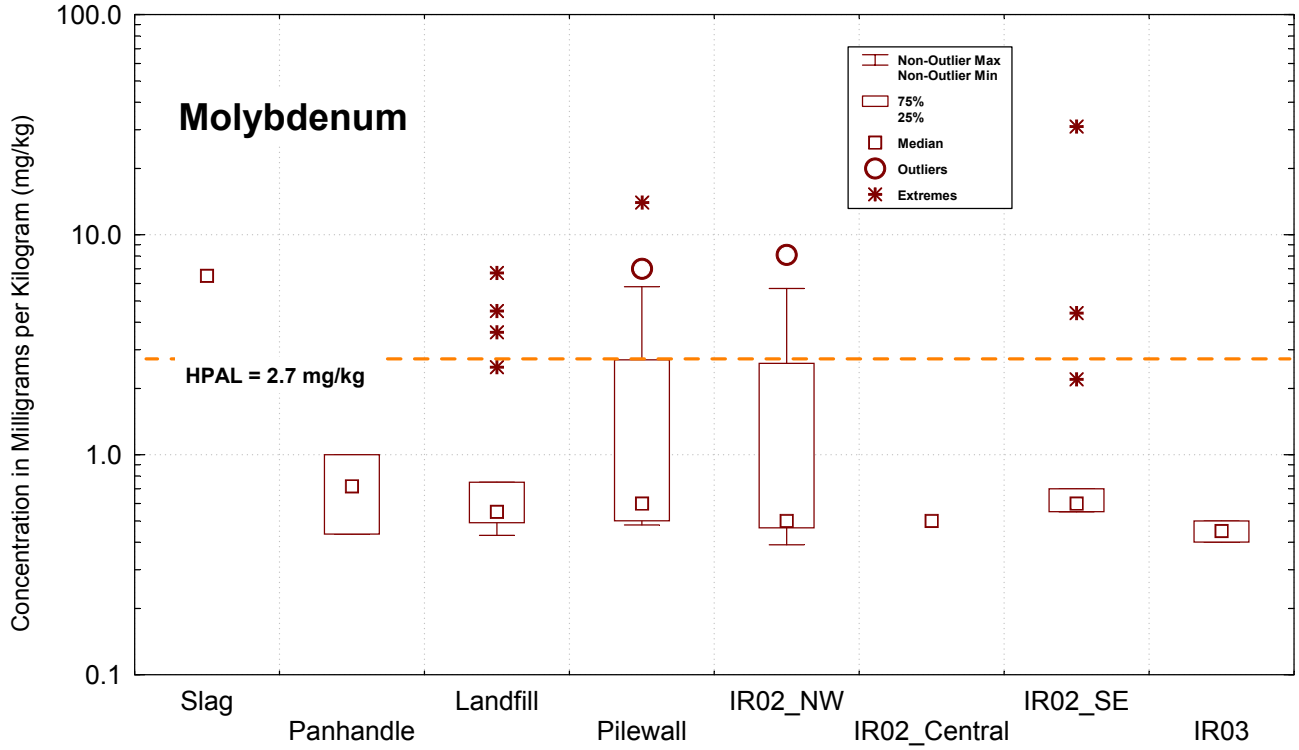

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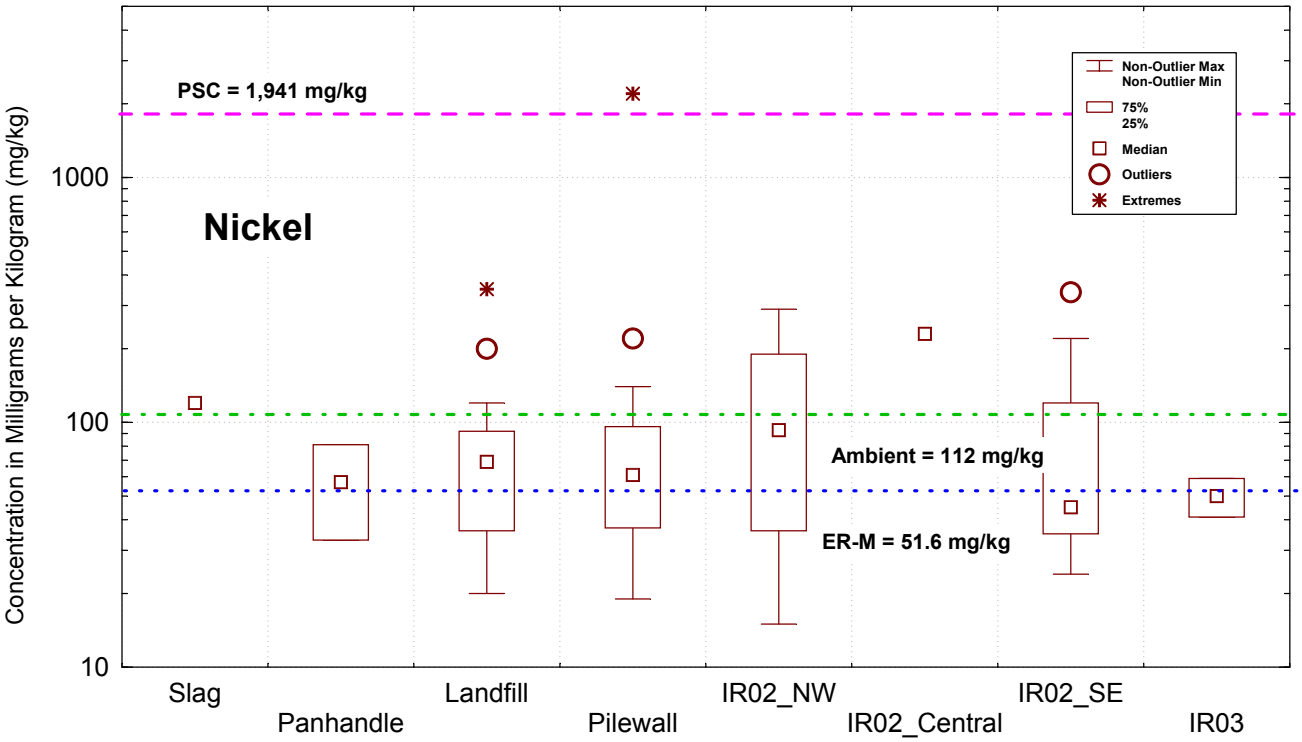
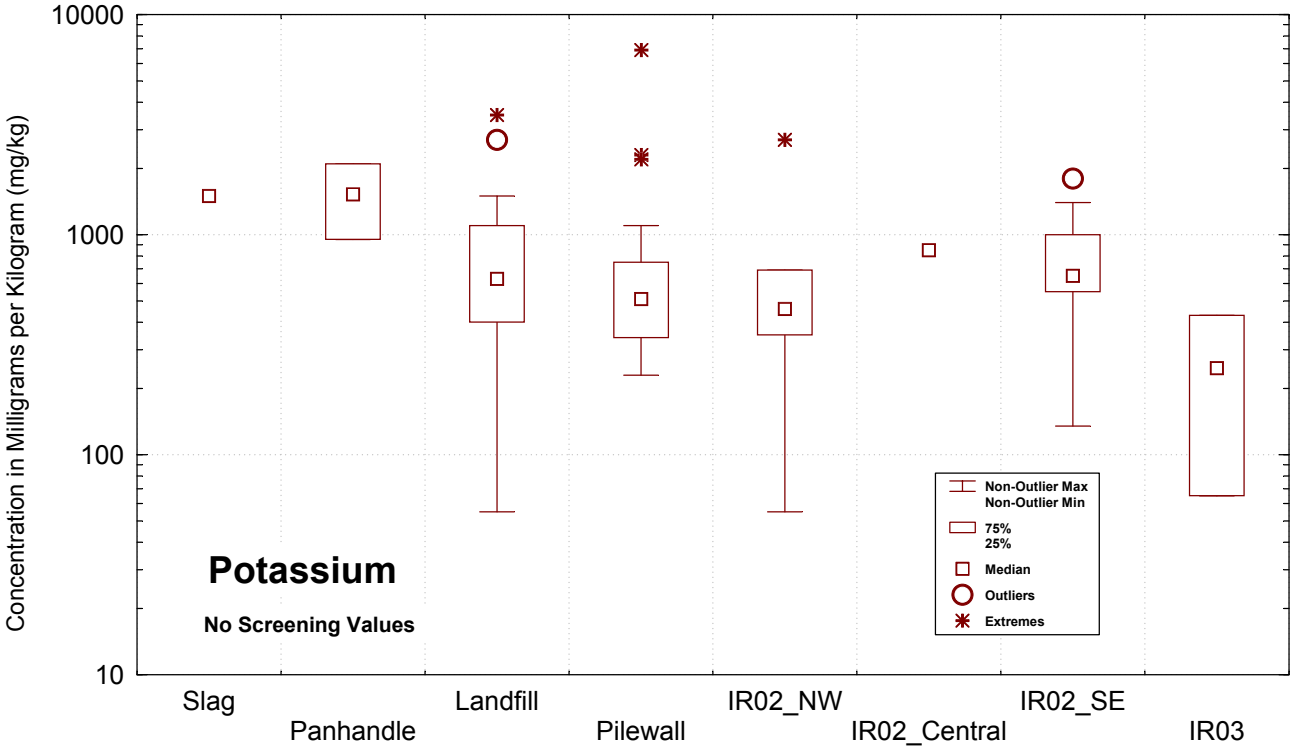
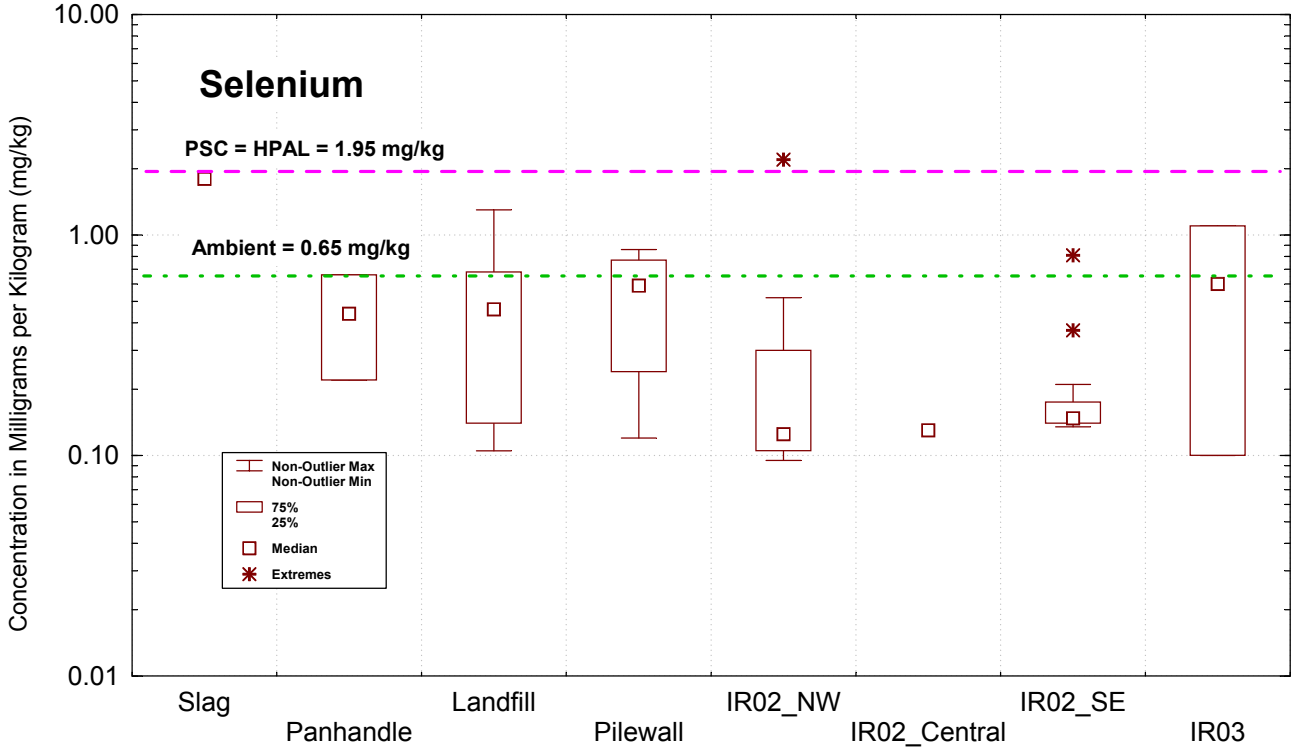
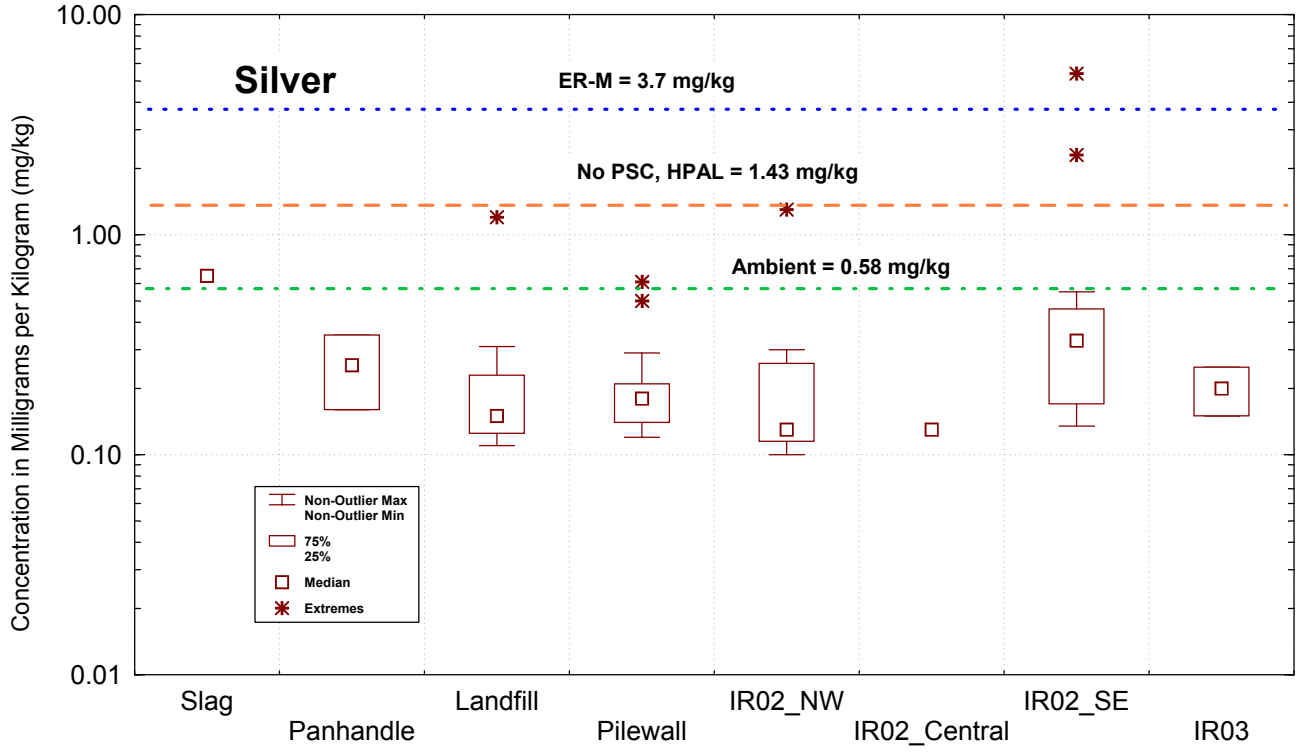


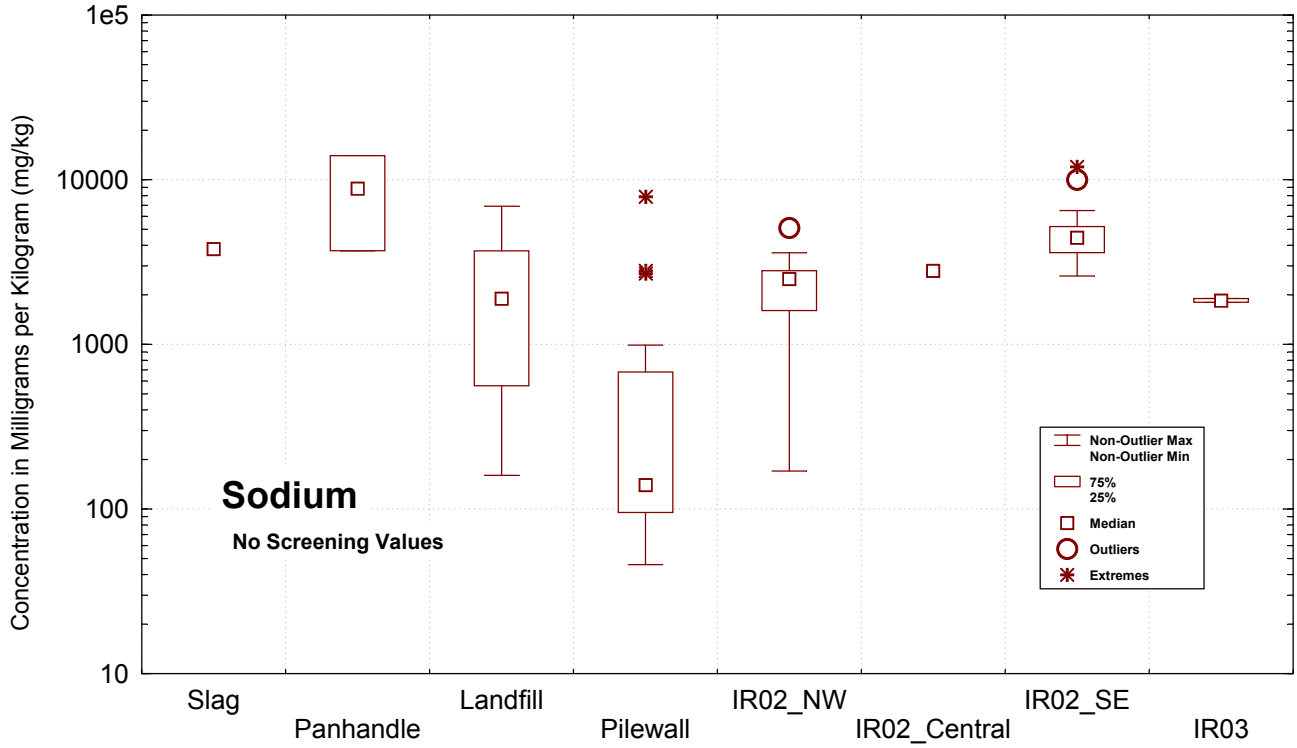


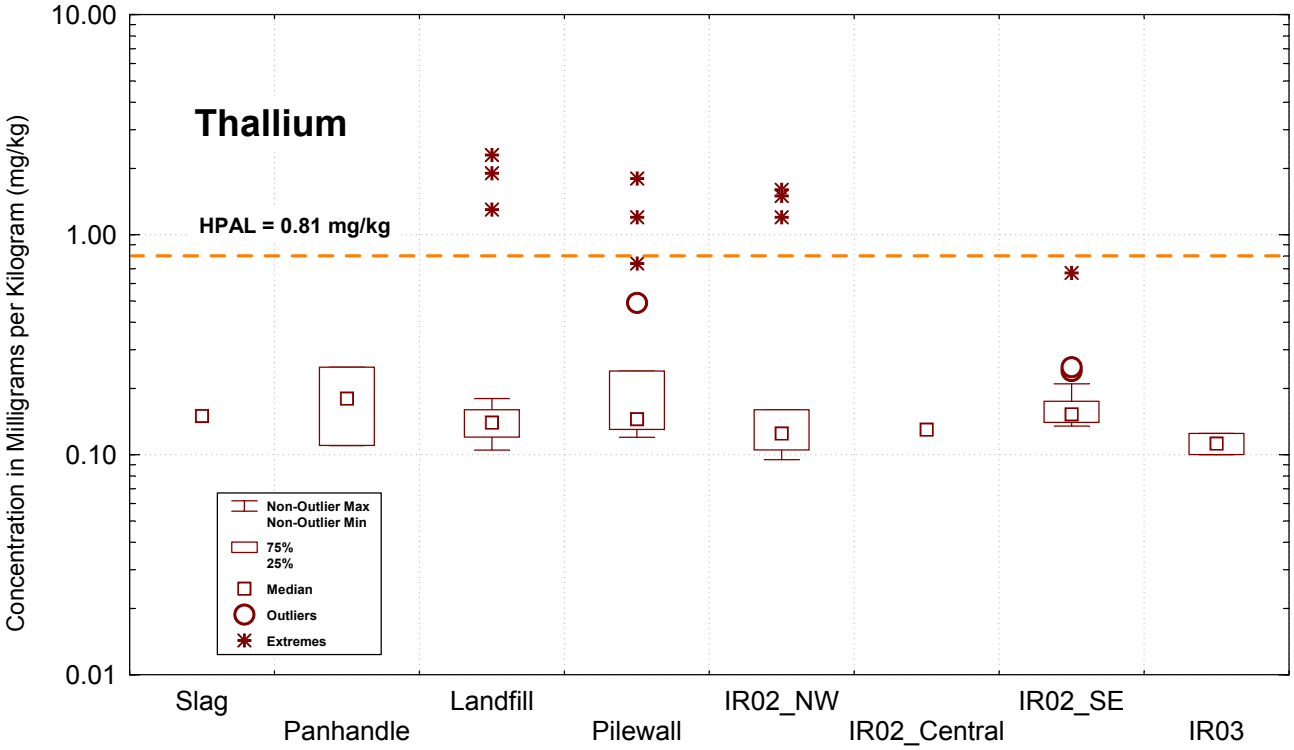
Attachment 2, Figure F2-10. Selenium and Silver in Samples from Parcels E, E-2



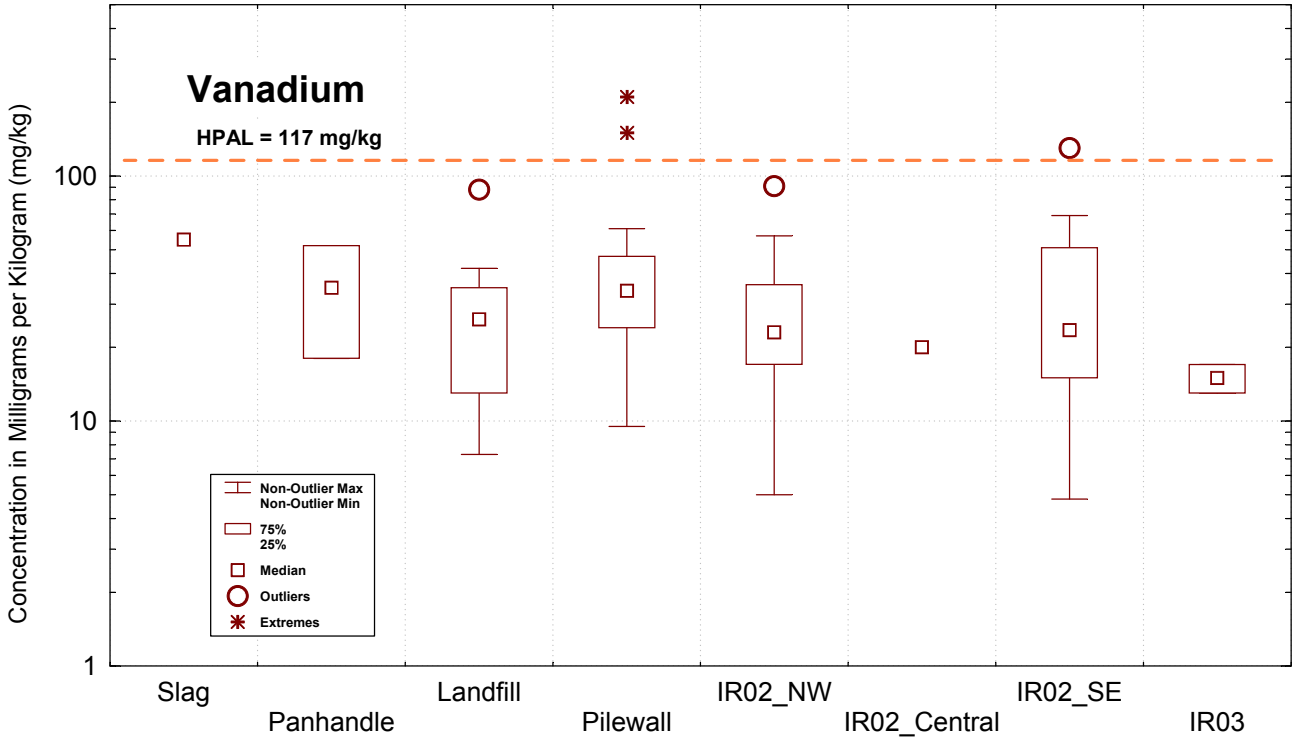


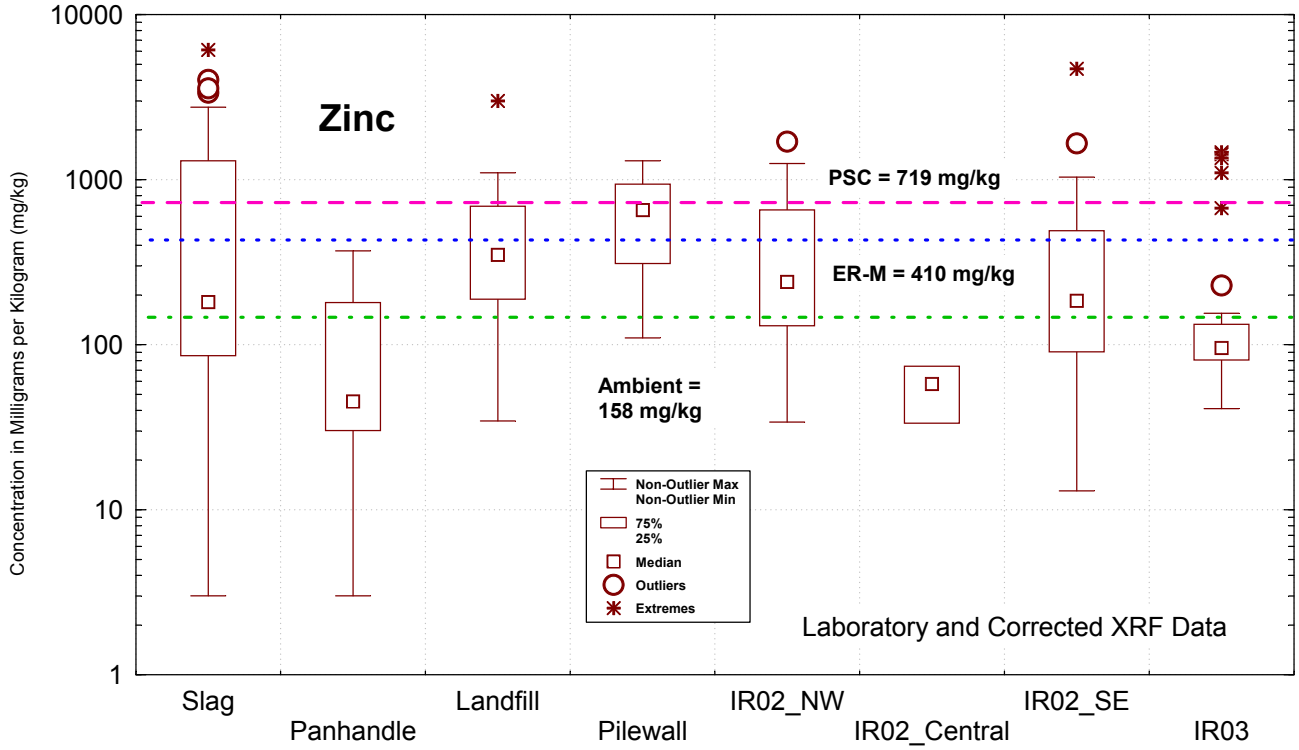
Attachment 2, Figure F2-11. Sodium and Thallium in Samples from Parcels E, E-2



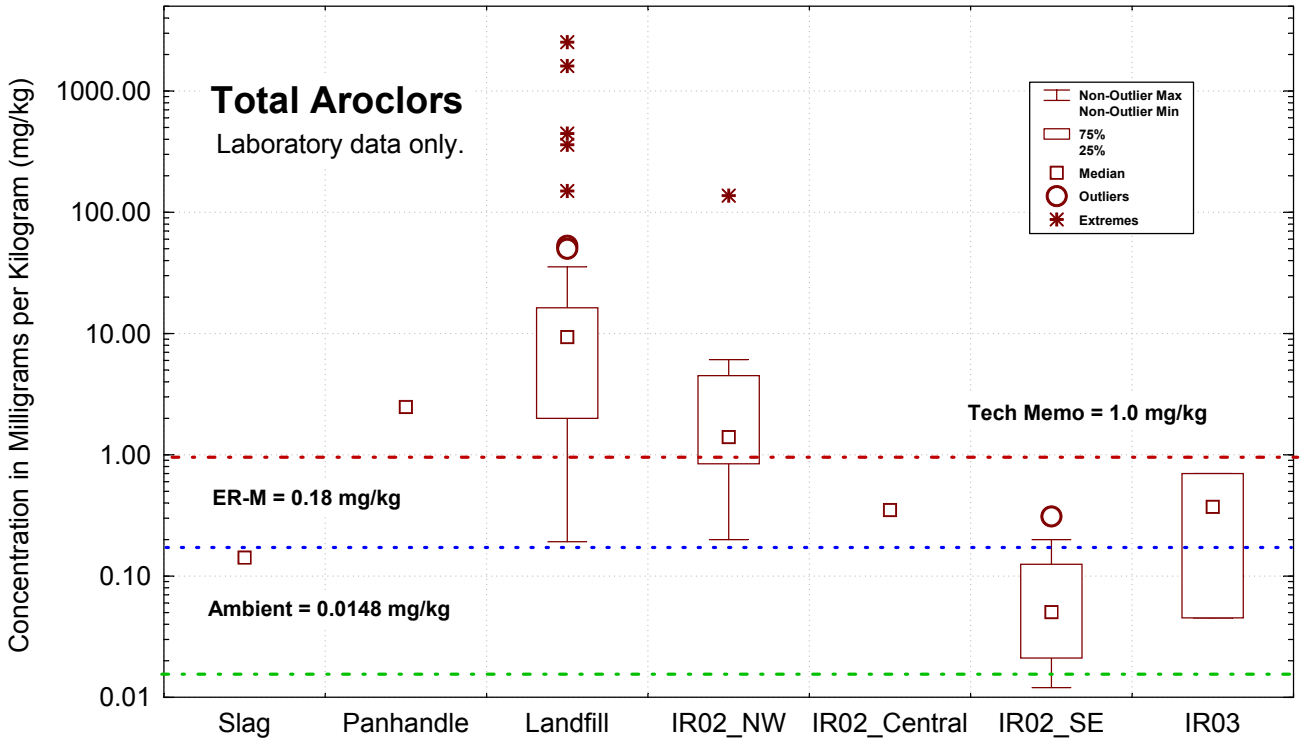


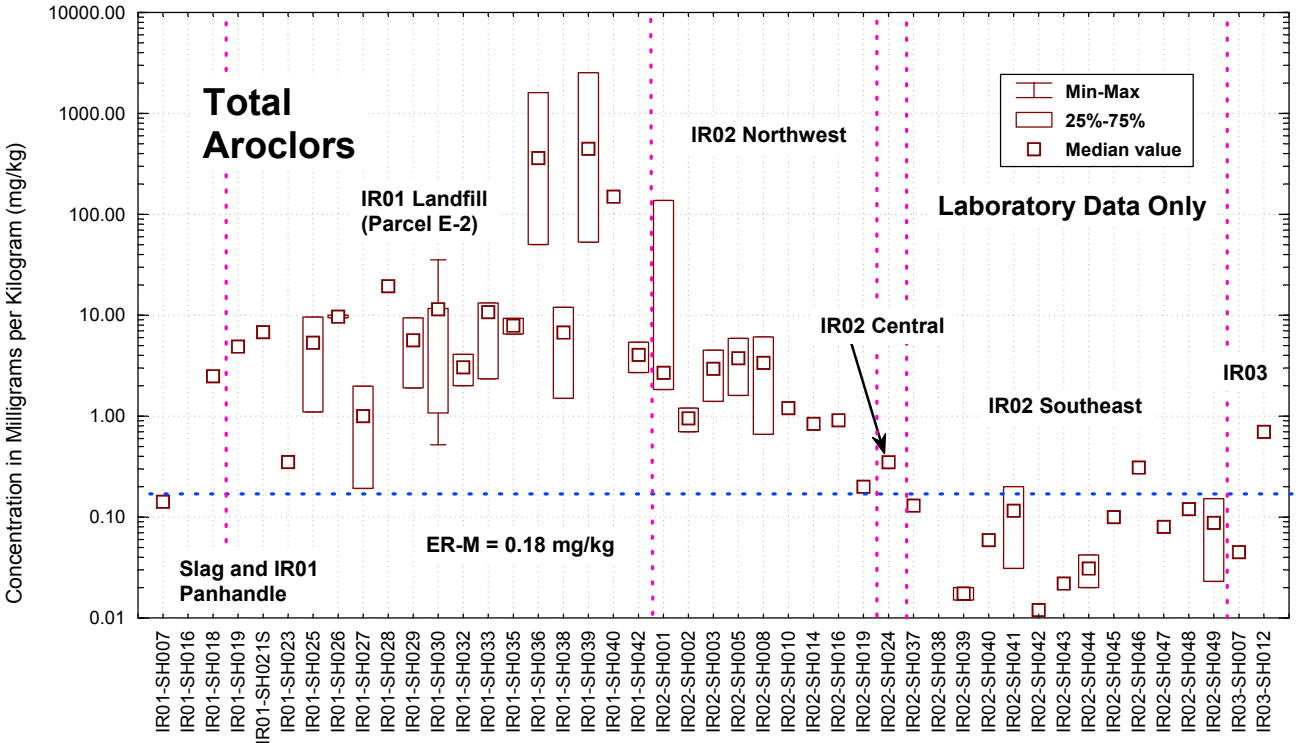
Attachment 2, Figure F2-12. Vanadium and Zinc in Samples from Parcels E, E-2





Attachment 2, Figure F2-13. Aroclors by Area and Location in Samples from Parcels E and E-2

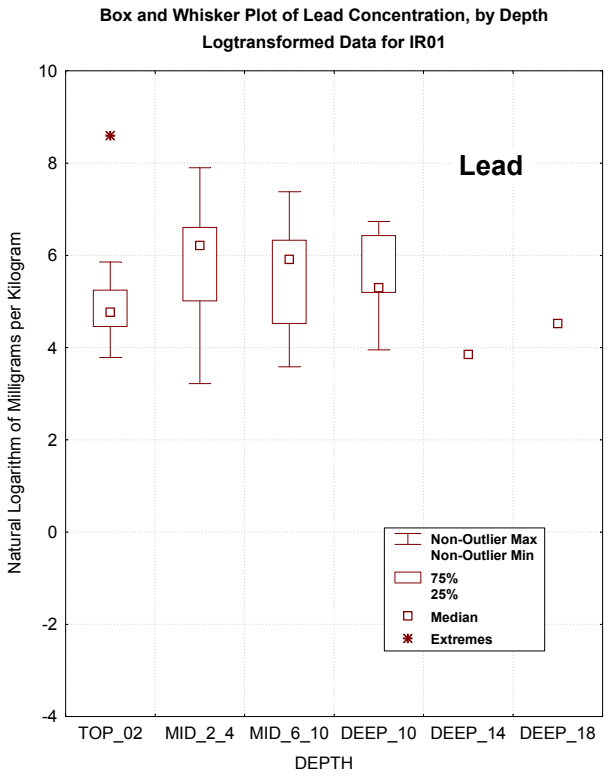


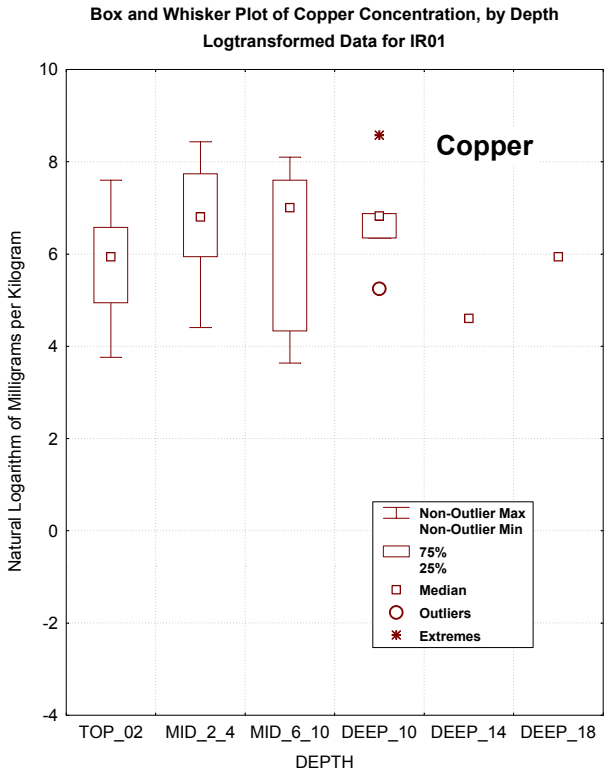


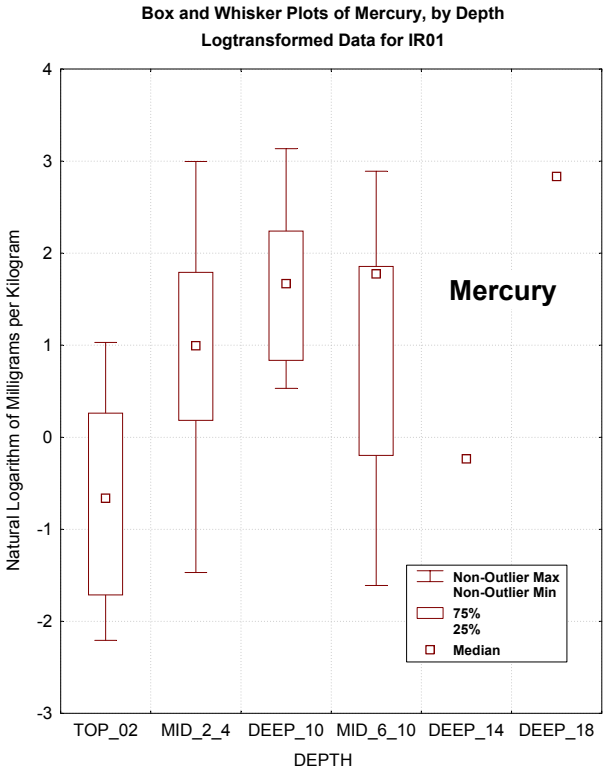
ATTACHMENT F-3
BOX-AND-WHISKER PLOTS OF CONCENTRATION VERSUS DEPTH FOR COPPER, LEAD, ZINC, AND TOTAL AROCLORS IN SUBAREAS OF PARCELS E AND E-2

(Provided on Compact Disc Only)

Figure F3-1. Concentration vs. Depth, Onshore Site IR01 for Lead, Copper, Mercury, and Total Aroclors







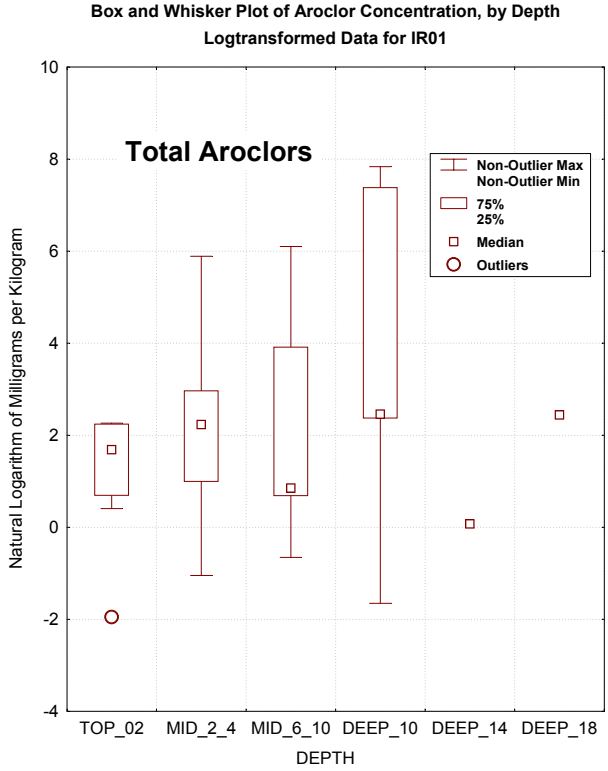
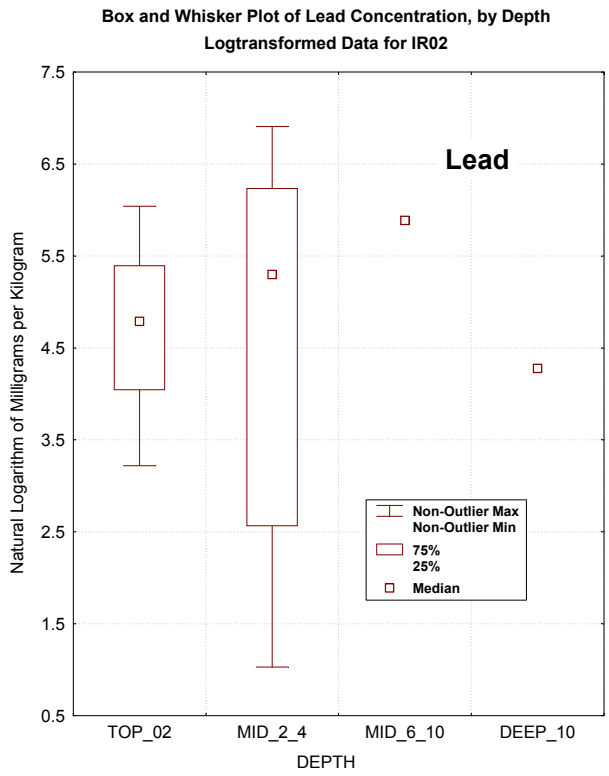
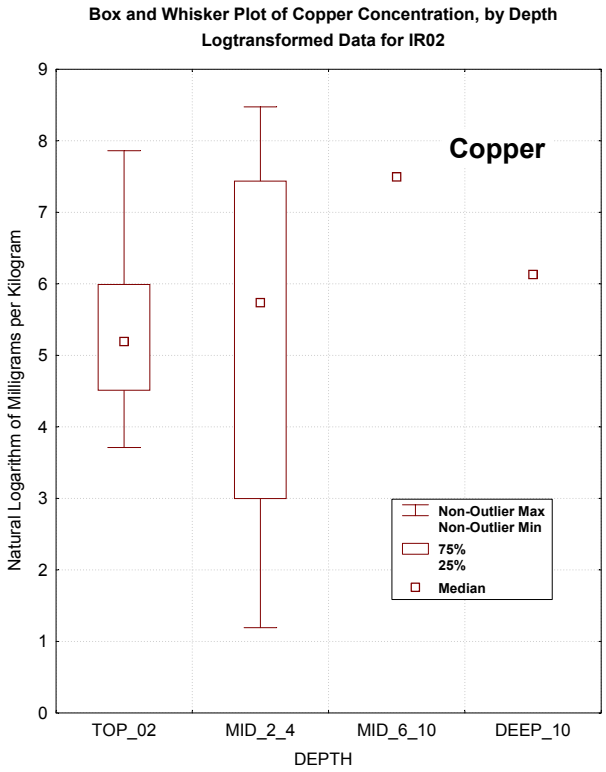
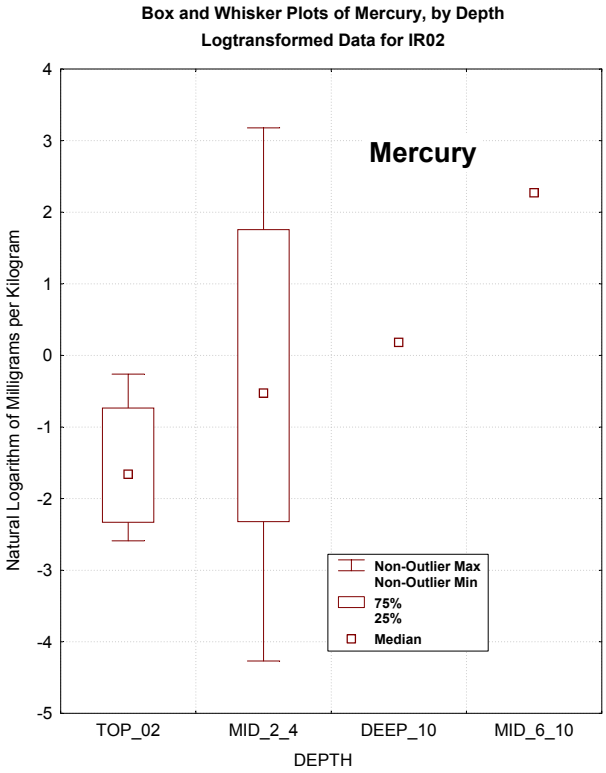


Figure F3-2. Concentration versus Depth, Onshore Site IR02 for Lead, Copper, Mercury, and Total Aroclors







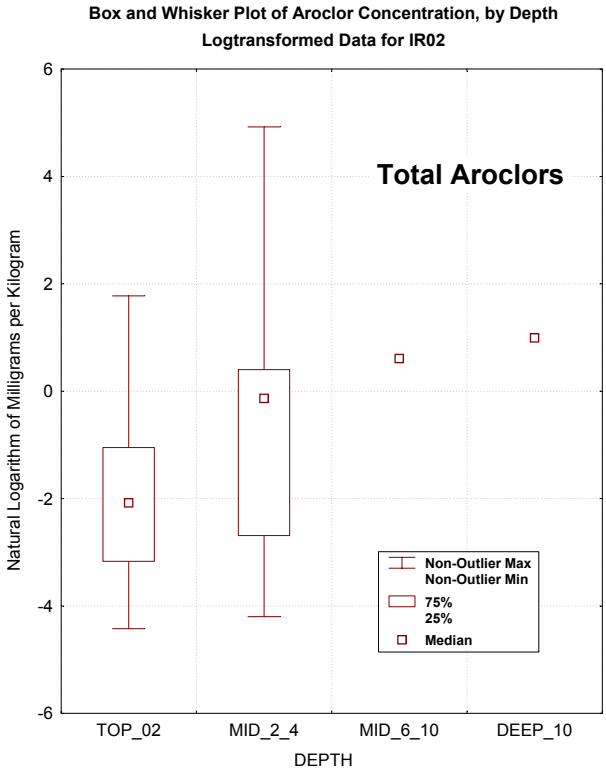
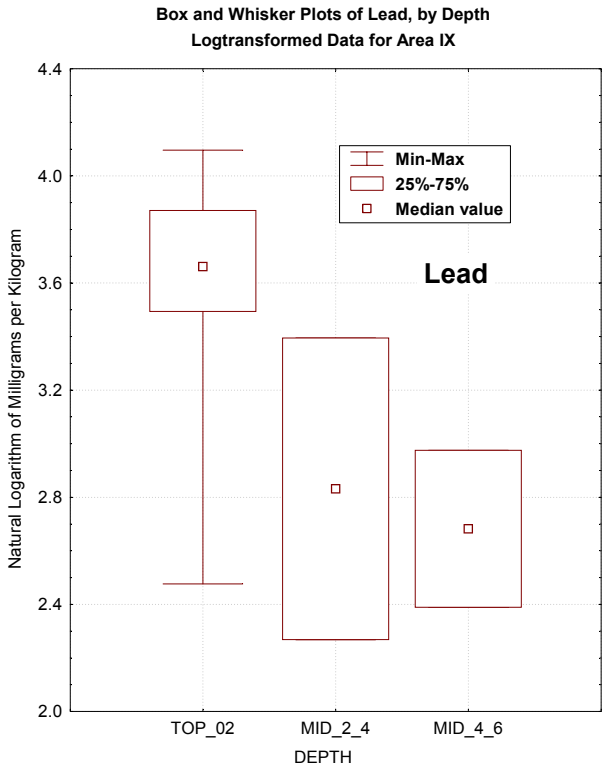
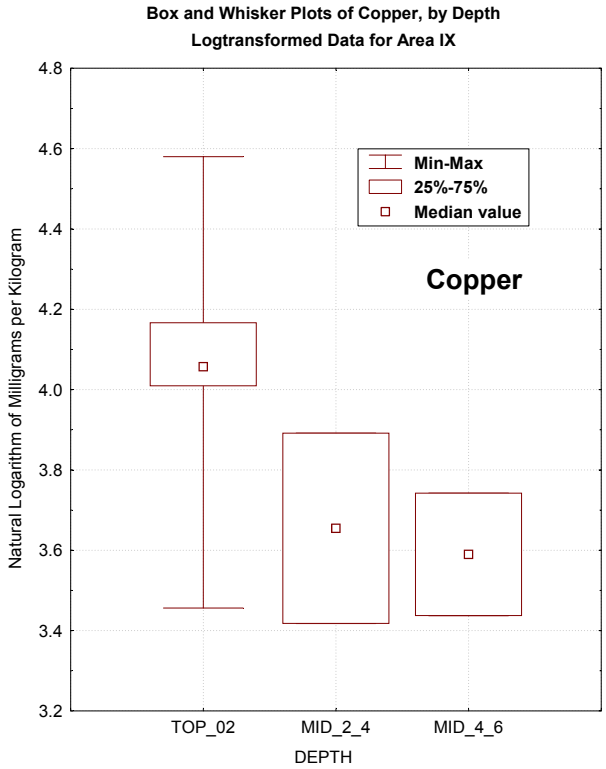
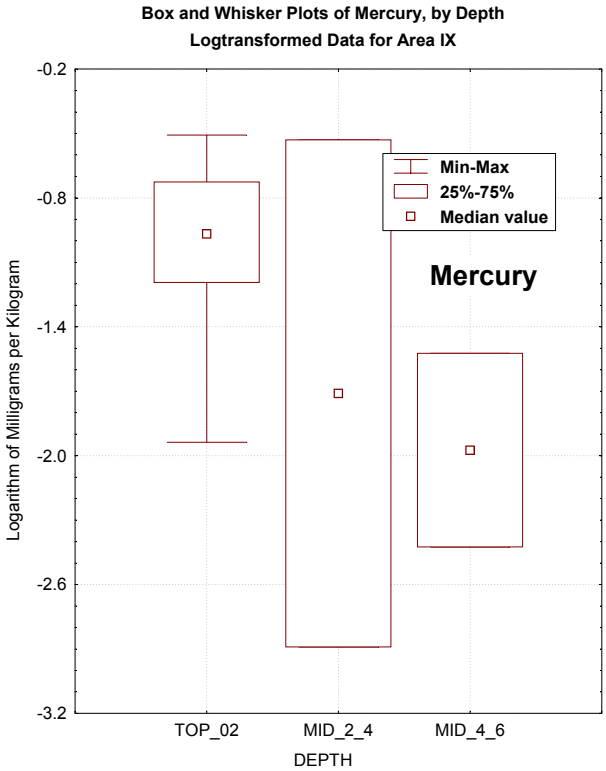


Figure F3-3. Concentration vs. Depth, Offshore Area IX for Lead, Copper, Mercury, and Total Aroclors







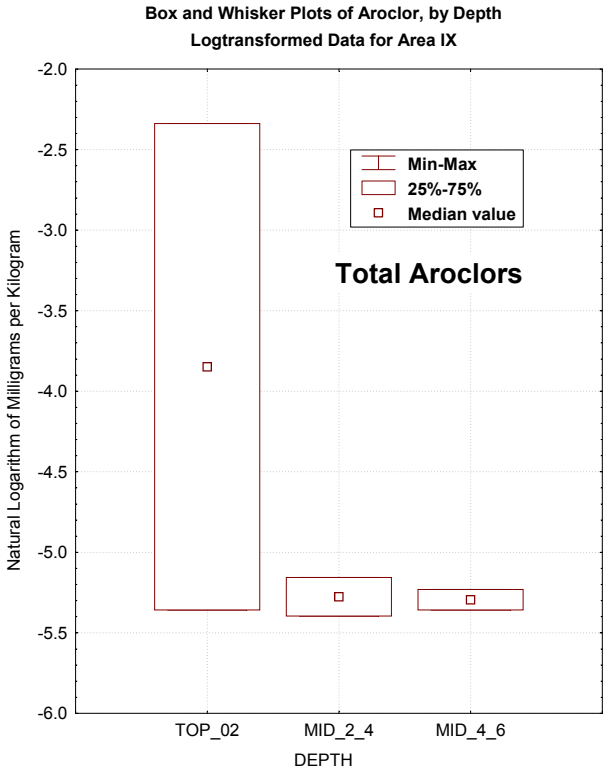
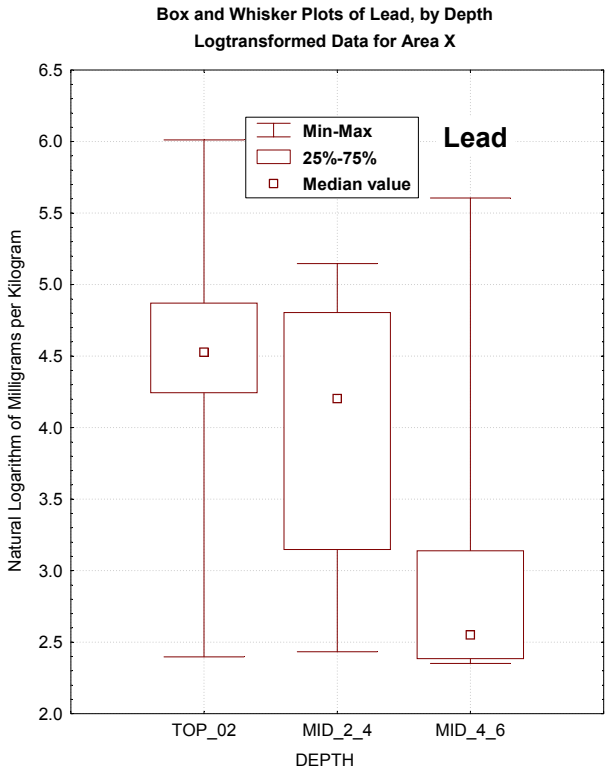
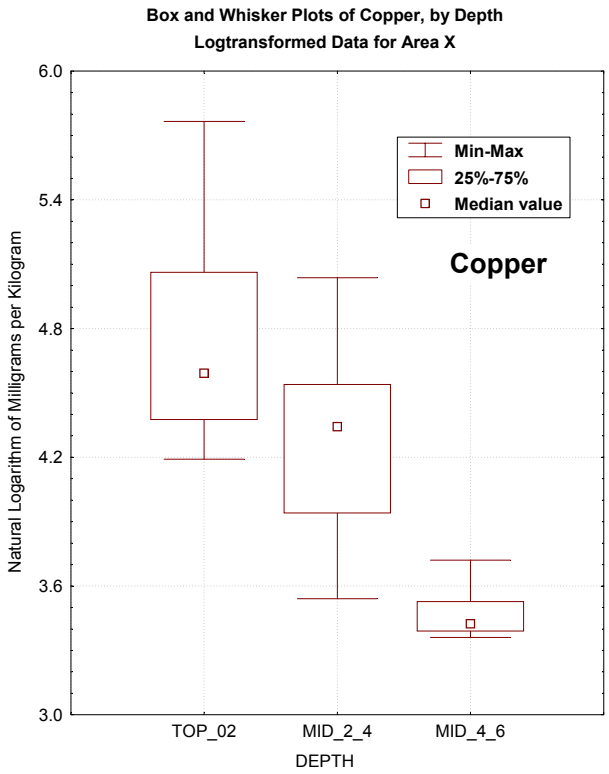
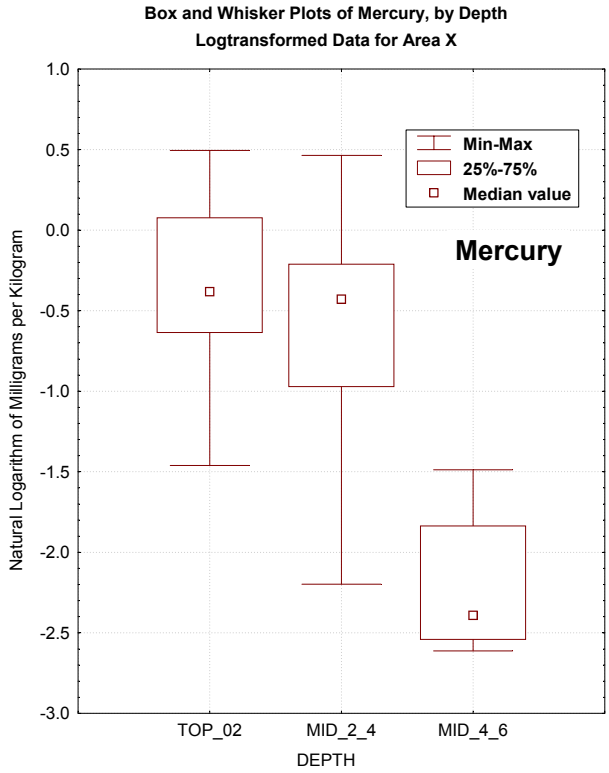
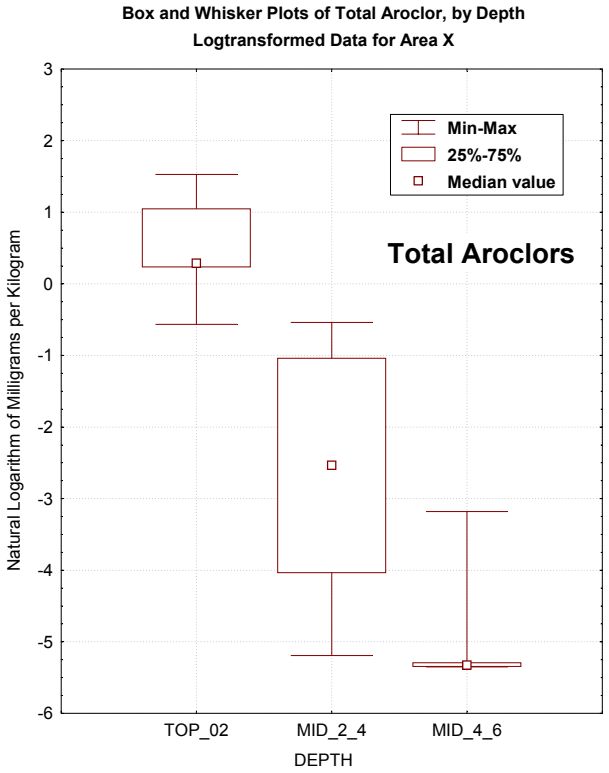


Figure F3-4. Concentration vs. Depth, Offshore Area X for Lead, Copper, Mercury, and Total Aroclors









APPENDIX G
SCREENING-LEVEL ECOLOGICAL RISK ASSESSMENT OF THE PARCELS E AND E-2 SHORELINE

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ACRONYMS AND ABBREVIATIONS

ATSDR	Agency for Toxic Substances and Disease Registry
BAF	Bioaccumulation factor
BERA	Baseline ecological risk assessment
bgs	Below ground surface
BTAG	Biological Technical Advisory Group
Cal/EPA	California Environmental Protection Agency
COPEC	Chemical of potential ecological concern
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
DOI	U.S. Department of the Interior
DQO	Data quality objective
EPA	U.S. Environmental Protection Agency
EPC	Exposure point concentration
ERA	Ecological risk assessment
ER-M	Effects range-median
g/g/day	Gram per gram per day
HPAL	Hunters Point ambient level
HPS	Hunters Point Shipyard
HQ	Hazard quotient
IR	Ingestion rate
IR-02	Installation Restoration Site 02
kg/day	Kilogram per day
LOAEL	Lowest observed adverse effect level
mg/kg	Milligram per kilogram
mg/kg-day	Milligram per kilogram per day
NOAEL	No observed adverse effect level
ORNL	Oak Ridge National Laboratory
PAH	Polynuclear aromatic hydrocarbon
PCB	Polychlorinated biphenyl

pH	Hydrogen ion concentration
SAP	Sampling and analysis plan
SDGI	Standard data gaps investigation
SLERA	Screening-level ecological risk assessment
SMDP	Scientific management decision point
SUF	Site use factor
Tetra Tech	Tetra Tech EM Inc.
TRV	Toxicity reference value
UCL_{95}	95 percent upper confidence limit
USFWS	U.S. Fish and Wildlife Service
USPHS	U.S. Public Health Service
Water Board	San Francisco Bay Regional Water Quality Control Board

1.0 INTRODUCTION

This appendix presents an evaluation of risk to ecological receptors exposed to sediment in the intertidal areas of the Parcels E and E-2 shoreline at Hunters Point Shipyard in San Francisco, California. It follows standard practice in developing a screening-level ecological risk assessment (SLERA), as described in guidance from U.S. Environmental Protection Agency (EPA) (1997). However, much of the background information on the Parcels E and E-2 shoreline, such as history, previous investigations, data collection and analysis, and other typical elements, is presented in the technical memorandum, of which this appendix is a part. As such, this appendix is not intended to stand alone, but is an integral part of the technical memorandum. In particular, it is best understood as a companion to Appendix F, Evaluation of Data for Polychlorinated Biphenyls (PCB) and Metals in the Parcels E and E-2 Shoreline.

This section provides an overview of the ecological risk assessment (ERA) process, data quality objectives (DQO), and the ecology and typical species present at the shoreline of Parcels E and E-2. Section 2.0 presents the problem formulation and approach to the SLERA. Section 3.0 summarizes risk to benthic invertebrates, and Section 4.0 summarizes risk to birds and mammals. Section 5.0 presents the risk characterization. Section 6.0 provides the references used to prepare this appendix. Figures and tables are included after Section 6.0.

1.1 OVERVIEW OF THE ECOLOGICAL RISK ASSESSMENT PROCESS

ERAs are intended to fulfill three basic functions under the Comprehensive Environmental Response, Compensation, and Liability Act.

1. Document whether actual or potential ecological risks exist at a site
2. Identify chemicals at a site that pose an ecological risk
3. Generate data to be used to evaluate cleanup options, if necessary

EPA separates the ERA process into the following eight steps (EPA 1997):

- Step 1: Screening-level problem formulation and evaluation of ecological effects
- Step 2: Screening-level preliminary exposure estimate and risk calculation
- Step 3: Baseline ecological risk assessment (BERA) problem formulation
- Step 4: Study design and DQOs
- Step 5: Field verification of sampling design
- Step 6: Site investigation and analysis of exposure and effects
- Step 7: Risk characterization
- Step 8: Risk management

The substantive elements of steps 1 and 2 make up the SLERA. This appendix extends the SLERA into the initial phase of Step 3, which corresponds to Step 3 "Refinement of Conservative Exposure Assumptions" of the Navy's ERA process (Navy 1999). Step 3 focuses on refining the list of chemicals of potential ecological concern (COPEC) based on comparison with ambient concentrations (EPA 2001). Risk and remedial options are being evaluated for different areas throughout Parcels E, E-2, and F (the adjacent offshore area). This SLERA characterizes the risk to ecological receptors exposed to the narrow "intertidal zone" of Parcel E. The intertidal zone is the area that is marked between the low- and high-water lines. This SLERA focuses on benthic invertebrates, birds, and mammals that forage in the Parcels E and E-2 shoreline in the intertidal zone.

Section 2.0 of the technical memorandum summarizes previous investigations conducted along the Parcels E and E-2 shoreline. In addition, Appendix F of this technical memorandum evaluates the distribution of metals and PCBs across this area of shoreline from a geochemical perspective. Those conclusions are incorporated into this SLERA, as appropriate.

1.2 DATA QUALITY OBJECTIVES

DQOs established for this investigation provided the framework for deciding (1) where and how data were collected along the Parcels E and E-2 shoreline, (2) what criteria were used to screen data, and (3) how screened data were evaluated to identify potential sources areas of contamination. The study questions were initially presented in the sampling and analysis plan (SAP) for the standard data gaps investigation (SDGI) and were developed from the DQOs identified in that report (Tetra Tech EM Inc. [Tetra Tech] 2002a). The first two study questions, which refer specifically to sources of metals and PCBs, are addressed in Appendix F. The third study question concerns risk and is addressed in this appendix.

1. Are concentrations of copper, lead, and PCBs in shoreline sediments present at sufficient concentrations to be considered a potential source of contamination to offshore sediments?

2. Do contaminated sediments in Parcel F show a distinct chemistry that can be linked to source areas within the Parcel E shoreline? That is, can contaminants in the offshore sediments be associated with potential source areas using the chemical characteristics and associations of metals and Aroclors?

3. Does contamination at suspected source areas along the shoreline of Parcels E and E-2 pose an unacceptable risk to ecological receptors exposed to sediment at the shoreline area?

For Parcels E and E-2, these study questions were addressed by conducting statistical evaluations of the concentrations of contaminants found in soil and sediment by location, comparing the contaminants in shoreline sediment samples with screening levels, and evaluating the data for contaminants in sediment for potential risk to ecological receptors in the intertidal zone.

Study question 3 focuses on risk to ecological receptors at the shoreline area exposed to contaminated sediment. To answer this question during the SLERA, concentrations of chemical contaminants in surface and subsurface sediment samples collected from the Parcels E and E-2 shoreline were screened against toxicological benchmarks for invertebrates, birds and mammals. Section 3.0 summarizes the evaluation of exposure to benthic invertebrates, and Section 4.0 summarizes the evaluation of risk to birds and mammals.

1.3 ECOLOGY AND TYPICAL SPECIES OF THE PARCELS E AND E-2 SHORELINE

The focus of this SLERA is the intertidal zone of the Parcels E and E-2 shoreline. Slightly more than 3 acres of intertidal wetlands are located along the Parcels E and E-2 shoreline (see Figure 2 in the technical memorandum) (Tetra Tech 2002c). These wetlands are bounded by a riprap wall and South Basin, which is contiguous with the Bay. Vegetation observed in the tidal wetlands includes halophytic plant species typically associated with tidal salt or nontidal salt marshes. The dominant plant species in salt marshes are the common pickleweed (*Salicornia virginica*) and salt grass (*Distichlis spicata*). Except for the ice plant (*Carpobrotis edulis*), very little vegetation was observed along the Parcels E and E-2 shoreline (Tetra Tech 2002c).

During sampling of the shoreline for the SDGI, it was observed that mainly invertebrates and birds use the shoreline habitat. Invertebrates included crustacean crabs and isopods that hide under rocks and feed on other small invertebrates. Mussels (mainly *Mytilus edulis*) and barnacles are visible on the rocks at low tide.

Intertidal and salt emergent wetlands may be used by shorebirds and wading birds such as the willet (*Catoptrophorus semipalmatus*), killdeer (*Charadrius vociferous*), great blue heron (*Ardea herodias*), and double-crested cormorant (*Phalacrocorax auritus*) (Harding Lawson Associates 1991). In addition, other bird species were reported or are considered to be present along the shoreline, including the black-bellied plover (*Pluvialis squatarola*), black turnstone (*Arenaria melanocephala*), sanderling (*Calidris alba*), long-billed curlew (*Numenius americanus*), dunlin (*Calidris alpine*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), and peregrine falcon (*Falco peregrinus*) (Tetra Tech and Levine-Fricke-Recon 2000). The surf scoter (*Melanitta perspicillata*) forages in both the intertidal and offshore areas of Parcels E and E-2.

Mammals observed along the Parcels E and E-2 shoreline include the California ground squirrel (*Spermophilus beecheyi*) using the riprap areas for burrows. In October 2001, an almost complete skeleton of a large male raccoon (*Procyon lotor*) was found along the shoreline of the Panhandle Area in Parcel E-2. In addition, the house mouse (*Mus musculus*) is expected to use the shoreline, especially in the Panhandle Area (Tetra Tech and Levine-Fricke-Recon 2000).

2.0 SCREENING-LEVEL PROBLEM FORMULATION AND ECOLOGICAL EFFECTS CHARACTERIZATION (STEP 1)

The SLERA described in steps 1 and 2 of EPA's eight-step process results in a list of "preliminary contaminants of concern for the baseline risk assessment" (EPA 1997, page 2-1). This section describes the screening methods used to identify COPECs in shoreline sediment based on comparison with toxicological benchmarks for particular groups of ecological receptors and ambient concentrations of chemicals.

2.1 GENERAL APPROACH TO SCREENING-LEVEL EVALUATION

All chemicals detected in sediment samples from the Parcels E and E-2 shoreline were screened to identify COPECs, except for essential mineral nutrients such as sodium, chloride, potassium, phosphorus, magnesium, and calcium. A toxicity-based approach was used to identify site-related chemicals that may pose risks to sensitive ecological receptors in the intertidal zone, including benthic invertebrates, birds, and mammals. Inorganic and organic chemicals were screened against toxicity benchmarks for each ecological receptor, as recommended by EPA (1997).

Sediment samples were evaluated in two spatial groups.

1. *Surface* shoreline samples: 0 to 0.5 feet below ground surface (bgs)
2. *Subsurface* shoreline samples: 2.0 to 2.5 feet bgs

The process and rationale for identifying COPECs are similar for all areas and ecological receptors. COPECs for benthic invertebrates were identified as those chemicals with concentrations exceeding the effects range-median (ER-M) values (see Section 3.0). In the evaluation of birds and mammals, chemicals were screened using food chain modeling against toxicity reference values (TRV) (see Section 4.0). In the risk characterization step, COPECs were refined by comparing Hunters Point ambient levels (HPAL) (PRC Environmental Management, Inc. 1995) and ambient sediment concentrations of selected chemicals in San Francisco Bay (see Section 5.0).

The site-specific data set used in this SLERA included (1) laboratory chemical analysis of sediment samples and (2) ecological surveys. Table G-1 summarizes the sediment samples collected from all locations along the Parcels E and E-2 shoreline. Sediment samples were analyzed for metals, PCBs, pesticides, semivolatile organic compounds, volatile organic compounds, total petroleum hydrocarbons, dioxins and furans, and organotins. Additionally, the evaluation of risk to birds and mammals used the following data.

- Wildlife surveys in Parcel E
- Bioaccumulation factors (BAF) derived from prey tissue collected in Parcels E, E-2, and F
- Protective soil concentrations for wildlife based on food chain modeling done in the terrestrial areas of Parcels E and E-2
- San Francisco Bay ambient sediment data

Early in the ecological investigation, rapid assessment of sediment samples was conducted using x-ray fluorescence and immunoassay techniques, as discussed in the SAP (Tetra Tech 2002a). However, results of these field measurements were not always corroborated by standard laboratory results. Appendix F of this technical memorandum describes the comparability of field screening results with laboratory analytical results. For some purposes, both types of data were combined; however, only laboratory data were evaluated in the SLERA.

For purposes of the SLERA, the entire shoreline of Parcels E and E-2 was considered intertidal habitat and the solid medium was defined as sediment. The rationale for choosing sampling locations and analytical methods is provided in the main text of this technical memorandum and in Appendix F. Complete analytical data are provided in Appendix A.

Tables G-2 and G-3 present descriptive statistics for chemicals analyzed in surface and subsurface sediment samples, respectively. Values in the tables were calculated using a distribution-dependent formula, following the approach illustrated on Figure G-1. For samples with at least 85 percent detected data, one-half the reporting limit was substituted for censored data (such as nondetected data qualified as "U"). Unbiased estimates of the mean and standard deviations were calculated using equations 13.3 and 13.5 in Gilbert (1987) for samples confirmed or assumed to follow a lognormal distribution. The 95 percent upper confidence limit (UCL_{95}) for lognormal distributions was calculated using Land's method, as discussed in Gilbert (1987) and EPA (1992c).

For samples with more than 15 percent censored data, population parameters were calculated using stochastic modeling, following the "bounding" approach described in EPA (2002) and illustrated on Figure G-2. This approach treats each censored datum as a random, uniform variable that can assume any value between zero and its respective reporting limit. Monte Carlo simulation is used to develop a distribution of the range of possible estimates for a UCL based on the selection of a particular mathematical form for the UCL. Random surrogate values between zero and the reporting limit are used for individual censored measurements in each calculation (default is 2,000 calculations) of the UCL. As a result, the distribution reflects the entire range of possible values that could be calculated for the UCL. Because substitution of random surrogate values is made for each censored measurement, this technique reflects the uncertainty contributed by varying levels of censored data, and is appropriate for samples with either single or multiple censoring limits. The maximum estimated value (from the distribution of all 2,000 estimates of the UCL_{95}) was used as a plausible upper bound for the

UCL_{95} of the mean. The mean and standard deviation were calculated based on the median values of the means and standard deviations used to calculate the 2,000 estimates of the UCL_{95}.

The median (50th percentile) and 95th percentile were calculated for all samples, regardless of detection frequency based on nonparametric assumptions (that is, based strictly on a rank ordering of the combined detected and censored measurements). Exposure point concentrations (EPC) were estimated as the lesser of the maximum detected concentration and the UCL_{95} for each chemical.

2.2 FATE AND TRANSPORT PATHWAYS

The primary sources of contaminants in sediment along the Parcels E and E-2 shoreline are described in Section 1.3 of the technical memorandum. Appendix F describes the potential pathways for contaminant mobilization and transport from the Parcels E and E-2 shoreline to the offshore areas (Parcel F). Chemicals associated with sediment in Parcels E and E-2 are transported to the bay when the sediment is suspended in water moving over the land. Metals present beneath the soil surface in Parcels E and E-2 are effectively immobile because they are not transported overland as dry particulate materials. Groundwater in contact with contaminated soils at depth in Parcels E and E-2 is unlikely to contribute to metals contamination in offshore sediments (see Appendix F for details).

Water from San Francisco Bay daily inundates the shoreline of Parcels E and E-2. The amount of sediment carried on incoming tides varies with tidal height, storm energy, and other dynamic factors. Most areas of the shoreline are accreting sediment, as described in Appendix F. Total concentrations of chemicals in sediment at the shoreline reflect both regional ambient and site-specific components. The transport pathways and processes and the potential for migration of chemicals from the Parcels E and E-2 shoreline are discussed in greater detail in the Parcel F validation study (Battelle, Entrix, and Neptune and Company 2002). The relevance of the potential exchange of sediment between the Parcels E and E-2 shoreline, and San Francisco Bay is discussed in Section 5.0 of this appendix for identifying site-related risk.

2.3 IDENTIFICATION OF COMPLETE EXPOSURE PATHWAYS AND GENERIC ASSESSMENT ENDPOINTS

At the screening level, exposure pathways were assumed to be complete to all ecological receptors that potentially occur in the shoreline area of Parcels E and E-2. EPA defines an assessment endpoint as an "explicit expression of an environmental value to be protected" (EPA 1997). Site-specific factors for Parcels E and E-2 influenced the selection of endpoints, including the occurrence, ecological significance, life and natural history characteristics, and potential toxicological susceptibility of receptors; the known and potential contaminants present and their mechanisms of toxicity; and the spatial and temporal patterns of potential exposure. Measurement endpoints are considered to be primary lines of evidence that have a direct relationship to the assessment endpoints defined for each receptor group.

2.3.1 Benthic Invertebrates

Benthic invertebrates may be exposed to chemicals in sediment and surface water across all areas of the shoreline at this site. Section 3.0 summarizes the evaluation of risk to benthic invertebrates in the intertidal zone of Parcels E and E-2. Benthic invertebrates are exposed to sediment in all shoreline subareas. The shoreline is affected by daily and annual tidal cycles, during which water quality has an unknown effect on ecological receptors. The assessment endpoint for benthic invertebrates is maintenance of sufficient rates of survival, growth, and reproduction to sustain populations of benthic invertebrates. The measurement endpoint for benthic invertebrates is exposure concentrations of chemicals in their home sediment.

The risk question addressed for benthic invertebrates was as follows: Do exposure concentrations of chemicals in sediments exceed the ER-M?

2.3.2 Birds and Mammals

Various birds and mammals forage in the intertidal habitat that characterizes the Parcels E and E-2 shoreline. Section 4.0 summarizes the evaluation of risk to birds and mammals using food chain modeling of ingested sediment and prey.

In food chain modeling, for each of the trophic or feeding guilds selected as assessment endpoints, representative or surrogate species were identified based on information available from bird and mammal surveys and natural history assessments conducted along the Parcels E and E-2 shoreline. The endpoints are sufficient rates of survival, growth, and reproduction to sustain populations of species representing the following trophic guilds.

- Diving ducks (represented by the surf scoter)
- Carnivorous shorebirds (represented by the willet)
- Raptors (represented by the red-tailed hawk)
- Omnivorous mammals (represented by the house mouse)

The measurement endpoints are daily ingested chemical doses and hazard quotients (HQ) calculated for each species using food chain modeling. Dose calculations incorporate several types of data, including (1) chemical concentrations in sediment, (2) estimated prey tissue concentrations based on biotransfer factors from terrestrial areas of Parcels E and E-2, (3) ecological field studies, and (4) natural history of selected receptors.

The risk question addressed for each endpoint was as follows: Do typical site-specific ingested doses of chemical concentrations exceed effects levels defined by the high TRVs?

2.4 SELECTION OF SCREENING ECOTOXICITY VALUES

Sediment samples collected from each location along the Parcels E and E-2 shoreline were evaluated using toxicological benchmarks appropriate for each of the generic assessment endpoints identified in Section 2.3. Toxicological benchmarks derived from the published scientific literature are available for benthic invertebrates exposed to sediment and birds and mammals exposed to chemicals in ingested sediment and prey. The exposure scenarios for benthic invertebrates and birds and mammals are discussed in Sections 2.4.1 and 2.4.2, respectively.

2.4.1 Toxicological Benchmarks for Benthic Invertebrates in Sediment

Estuarine sediment guidelines are based on chemical and toxicological effects data from numerous studies of invertebrates conducted in marine and estuarine sediments. ER-M values are widely used as guidelines to interpret and assess potential effects of chemicals on benthic invertebrates in coastal sediments (Long and others 1995; National Oceanic Atmospheric Administration 1991). Site-related chemicals with exposure concentrations (UCL_{95} or maximum concentration) in sediment exceeding the ER-M were considered COPECs for benthic invertebrates. Table G-4 lists the ER-M values.

No ER-M for tributyltin is available. However, EPA has provided recommended sediment screening values for tributyltin for Superfund sites in Puget Sound, Washington (EPA 1996). The EPA recommendations do not include calculations of apparent effects thresholds or effects range values but do include a sediment screening value for tributyltin that is considered protective of most marine organisms and life stages from most acute and chronic effects. Using sediment-water partitioning models and water quality criteria, EPA determined this sediment screening value to be 1,255 milligrams of tributyltin per kilogram of organic carbon.. Assuming 2 percent total organic carbon, this value is equivalent to 25.1 milligrams per kilogram (mg/kg) of tributyltin (dry weight) (EPA 1996).

2.4.2 TRVs for Birds and Mammals

The evaluation of risk to birds and mammals focused on ingestion of chemicals in sediment and prey by selected receptors (see Section 4.0). TRVs are daily doses consistent with no-observed-adverse-effects levels (NOAEL) and lowest-observed-adverse-effects levels (LOAEL) reported in laboratory toxicological studies on birds or mammals. TRVs are based on evaluation of published toxicological data derived from laboratory studies and are not specific to any geographical region. Risk to representative birds and mammals was evaluated quantitatively based on an HQ approach where the site-specific estimated dose was divided by the TRV. Food chain analysis was conducted for all inorganic and organic chemicals for which TRVs were available.

TRVs selected for this technical memorandum were compiled from two sources: (1) Navy and EPA Region 9 TRVs (Navy 1998), and (2) Oak Ridge National Laboratory (ORNL)

toxicological benchmarks for wildlife (Sample and others 1996). TRVs were derived for selected Navy installation-specific chemicals and receptors in a collaborative effort with the Navy, its contractors, and the EPA Region 9 Biological Technical Advisory Group (BTAG), which includes federal, state, and local regulatory agencies and resource trustees. The derivation of TRVs and the use of food chain analysis in the HQ approach were described in detail in "Development of Toxicity Reference Values for Conducting Ecological Risk Assessments at Naval Facilities in California, Interim Final Technical Memorandum" (Navy 1998).

High TRVs (LOAELs) and low TRVs (NOAELs) were derived for each chemical to reflect the variability of parameters within an ecological risk context. Specifically, the low TRV is considered a conservative value consistent with a chronic no-effect level. The high TRV is a less conservative value and represents a level at which ecologically significant adverse effects are likely to occur. Therefore, the high TRV is a value at which significant adverse effects have been demonstrated. When compared with site-specific doses ingested by receptors of concern, the high TRV (LOAEL) can be used to identify sites posing potential risk to birds or mammals. Conversely, the low TRV is a dose below which no adverse effects are expected.

ORNL toxicological benchmarks are similar to Navy and EPA TRVs in that they are ingestion-based NOAELs and LOAELs derived from published scientific literature. Both sets of TRVs carry the same sources of uncertainty, as detailed in Section 5.0. ORNL benchmarks carry an additional liability because their derivation is not fully documented. Primary literature citations are included in Section 6.0, but are not linked directly to any particular benchmark. Instead, values from the primary literature were incorporated into complex models, which resulted in separate TRVs for 9 mammal and 11 bird species. Table G-5 presents the unadjusted TRVs reported for test species (Navy 1998; Sample and others 1996). These TRVs were allometrically adjusted to reflect effect levels for the selected receptor species.

BTAG TRVs were available for this assessment for cadmium, copper, lead, zinc, organotins, PCBs, total dichlorodiphenyltrichloroethane (DDT), and polynuclear aromatic hydrocarbons (PAH) (Navy 1998). Bird and mammalian toxicological benchmarks were available for molybdenum, chlordane, and dieldrin (Sample and others 1996). Only mammal TRVs were available for antimony (Sample and others 1996).

2.5 CHEMICALS WITH NO SCREENING VALUES

Chemicals cannot be eliminated during the early stages of the risk assessment simply because no benchmarks are available (EPA 1997). Experience and common sense suggest that chemicals without benchmarks do not typically drive cleanup decisions. In most cases, the lack of a toxicological benchmark is due to inadequate exposure and effects data in the literature, as evaluated by the authors of published benchmarks (Long and others 1995; Efroymson and others 1997). In such cases, the Navy finds it indefensible to derive benchmarks based on an independent evaluation of the literature.

In steps 1 and 2 of the eight-step ERA framework, chemicals detected at the site were retained "by default" if no toxicological benchmark was available (EPA 1997). As a result, the potential for any of these chemicals to induce toxicity is unknown. The chemicals for which no valid toxicological benchmarks were available are not considered primary COPECs, and further consideration of these chemicals is limited to the uncertainty discussion (see Section 5.3). Primary COPECs are those that exceed available toxicological benchmarks.

2.6 EVALUATION OF DETECTION LIMITS

If detection limits are higher than toxicological benchmarks or regulatory screening criteria, nondetect data points cannot be used to evaluate risk (EPA 2001). Detection limits achieved with standard Contract Laboratory Program methods for most inorganic chemicals are usually lower than available benchmarks; however, detection limits achieved with Contract Laboratory Program methods for organic chemicals can be higher than available benchmarks. Chemicals for which detection limits were higher than benchmarks or screening values were retained as COPECs for this assessment.

Sediment samples from Parcels E and E-2 were analyzed using low detection limit methods for PAHs, pesticides, and PCBs to achieve detection limits below or near screening values. However, low detection limits were not always achieved because of high percent moisture and matrix interference in many samples. Summary statistics (median and range) of detection limits achieved during analysis of the sediment samples were compared with available toxicity guidance values to evaluate the adequacy of detection limits in the SLERA. Concentrations of PCBs, the principle organic COPEC, exceeded available screening values; detection limits are not considered a substantial source of uncertainty in this SLERA.

3.0 SCREENING-LEVEL ECOLOGICAL RISK ASSESSMENT FOR BENTHIC INVERTEBRATES (STEP 2)

In step 2 of the ERA framework (EPA 1997), site-specific EPCs are estimated for each ecological receptor identified as a generic assessment endpoint in Section 2.0. Risk estimates for each ecological receptor are calculated by dividing the EPCs by the most appropriate toxicological benchmarks, resulting in estimated site-specific HQs for each ecological receptor. A risk characterization is subsequently developed, which focuses on evaluating the distribution of HQs and the range of uncertainties in the exposure and risk estimates. This process was used for benthic invertebrates exposed to surface and subsurface sediment across the Parcels E and E-2 shoreline and is discussed in Section 3.1. Section 3.2 discusses the scientific management decision point (SMDP) signifying the end of Step 2 for benthic invertebrates.

The number of surface sediment samples (n = 30) and subsurface samples (n = 35) available for the Parcel E and E-2 shoreline met the requirements for calculating UCL_{95}s in most cases. As described in Section 2.1, either the UCL_{95} or the maximum site concentration was used as the EPC for the ecological receptors in this study. The UCL_{95} is considered an upper-bound estimate of the average exposure for normal or lognormal data sets, which is consistent with the human health risk assessment guidance for Superfund (EPA 1992c). When the data set did not meet the

requirements of the statistical procedure for calculating the UCL_{95}, or when the UCL_{95} exceeded the maximum detected value, the maximum concentration was used as the exposure concentration. Tables G-2 and G-3 present the descriptive statistics (frequency of detection, mean and median concentrations, minimum and maximum concentrations detected, and UCL_{95}s) for surface and subsurface sediment samples, respectively.

3.1 EXPOSURE ASSESSMENT FOR BENTHIC INVERTEBRATES ALONG THE PARCELS E AND E-2 SHORELINE

Generic assessment endpoints for the entire intertidal shoreline include protection of populations of benthic invertebrates. All detected inorganic and organic chemicals were evaluated. Sections 3.1.1 and 3.1.2 present screening-level exposure and risk estimates for benthic invertebrates in surface and subsurface sediments, respectively, along the Parcels E and E-2 shoreline. Section 3.1.3 summarizes the risk characterization, including selected COPECs, for benthic invertebrates.

3.1.1 Benthic Invertebrates in Surface Sediment

The SLERA assumes exposure pathways are complete for benthic invertebrates exposed to surface sediment along the Parcels E and E-2 shoreline.

Risk to benthic invertebrates from exposure to surface sediment in the intertidal zone was evaluated in the SLERA using ER-M values, as described in Section 2.3.1. ER-M values represent the cumulative exposure of benthic invertebrates to chemicals in sediment through dermal contact and ingestion. All detected inorganic and organic chemicals in sediment were carried through the toxicological screen (Step 2). Chemicals with HQs greater than 1.0 were considered COPECs for benthic invertebrates. Table G-6 presents HQs based on the ratio of EPCs in surface sediment to ER-M values.

HQs ranged from 1.30 for zinc to 3.19 for nickel for benthic invertebrates. No ER-M is available for molybdenum, so it was considered a COPEC by default. The HQ for cadmium was less than 1.0; therefore, it was eliminated as a COPEC for benthic invertebrates.

Exposure concentrations for 4,4'-dichlorodiphenyldichloroethane (DDD), 4,4'-dichloro-diphenyldichloroethene (DDE), 4,4'-DDT, total DDTs, and PCBs exceeded their respective ER-M values; therefore, they were retained as primary COPECs for benthic invertebrates (see Table G-6). HQs for these COPECs ranged from 1.19 (DDE) to 356.67 (total PCBs).

Detected organic chemicals for which no ER-M values were available were considered COPECs by default, but not COPECs for benthic invertebrates. Chemicals with HQs less than 1.0 were not considered COPECs for benthic invertebrates in the shoreline area (see Table G-6).

3.1.2 Risk Estimates for Benthic Invertebrates in Subsurface Sediment

Risk to benthic invertebrates from subsurface sediment was evaluated exactly as described above for surface sediment. Because most of the shoreline in Parcels E and E-2 is in depositional areas, exposure of benthic invertebrates to sediments at depths of 2.0 to 2.5 feet bgs is less likely than exposure to surface sediment (0 to 0.5 foot bgs). However, if sediment is disturbed, benthic invertebrates could be exposed to sediment that is at or below 2.5 feet bgs.

Chemicals with HQs greater than 1.0 were considered COPECs for benthic invertebrates. Table G-7 presents HQs based on the ratio of EPCs in subsurface sediment to ER-M values. HQs ranged from 1.12 for antimony to 65.46 for copper, as shown in Table G-7.

All detected organic chemicals in sediment were carried through the toxicological screen. Exposure concentrations for 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, total DDTs, dieldrin, endrin, and PCBs exceeded their respective ER-M values; therefore, they were retained as primary COPECs for benthic invertebrates (see Table G-7). HQs for these COPECs ranged from 2.9 (DDD) to 1,500 (total PCBs).

Detected organic chemicals for which no ER-M values were available were considered COPECs by default, but not COPECs for benthic invertebrates. Chemicals with HQs less than 1.0 were not considered COPECs for benthic invertebrates in the shoreline area (see Table G-7).

3.1.3 Summary of Risk Characterization for Benthic Invertebrates Along the Parcels E and E-2 Shoreline

Sediment in the intertidal area of the shoreline is perennially wet, and is assumed to provide year-round habitat to benthic invertebrates. Because the ER-M represents a probable effects concentration, any HQ greater than 1.0 is considered to warrant further evaluation.

Copper, lead, nickel, zinc, and PCBs were measured at concentrations that pose a potential risk to benthic invertebrates in surface and subsurface sediments at the Parcels E and E-2 shoreline. For all of these metals, EPCs were higher in the subsurface samples. Mercury is elevated in subsurface sediment samples, but not in surface sediment samples. Several HQs for pesticides in sediment indicated potential risk, especially DDT and dieldrin in the subsurface sediment samples.

Sediment concentrations were analyzed separately in eight subareas of the shoreline to support remedial decision-making associated with controlling sources of contamination (see Table G-1). Appendix F presents a detailed analysis of the spatial distribution of concentrations of metals and PCBs across the shoreline.

3.2 SCIENTIFIC MANAGEMENT DECISION POINT

The SMDP for a SLERA focuses on identifying whether further evaluation is necessary (EPA 1997, 2001). The data presented in Sections 2.0 and 3.0 of this appendix and in the technical memorandum indicated potential risk to benthic invertebrates in the Parcel E shoreline sediment cannot be ruled out. Some potentially toxic chemicals were detected at concentrations exceeding toxicological benchmarks and exposure pathways to receptors are complete.

4.0 SCREENING-LEVEL ECOLOGICAL RISK ASSESSMENT FOR BIRDS AND MAMMALS

This section presents the estimation of risk to birds and mammals that feed on benthic invertebrates and other prey species along the Parcels E and E-2 shoreline. This evaluation contains more site specific data, and thus fewer conservative assumptions than is typical of a SLERA. However, it does not contain enough data to be considered a BERA. This section expands on the formulation presented in the Parcel E validation study (Tetra Tech and Levine-Fricke-Recon 2000) and incorporates comments received from the regulatory agencies and natural resource trustees on the validation study. The purpose of the Parcel E validation study was to refine the SLERA for birds and mammals by using site-specific BAFs in the food chain model. An earlier version of the validation study used BAFs from the literature, which were thought to substantially overestimate ingested doses to receptors in Parcels E and E-2.

Section 4.1 presents the conceptual site model, which integrates information on the assessment and measurement endpoints with chemical stressors and exposure pathways. Section 4.2 presents the exposure parameters for birds and mammals.

4.1 CONCEPTUAL SITE MODEL

The conceptual site model is an important part of problem formulation because it defines the exposure pathways to be evaluated in the risk assessment. The model also provides other key information, such as contaminant sources, release and transport mechanisms, and the relative importance of each to specific measurement and assessment endpoints. The conceptual site model establishes whether a complete exposure pathway to an ecological receptor exists. The conceptual model also aids in identifying (1) missing information and (2) areas of uncertainty in understanding how chemical stressors may pose a risk to selected ecological receptors. The conceptual site model includes the following components: (1) chemical stressors, (2) exposure pathways and critical receptors, and (3) fate and transport.

A conceptual site model for the terrestrial portion of Parcel E was presented in the Parcel E validation study for Hunters Point Shipyard (HPS) (Tetra Tech and Levine-Fricke-Recon 2000). This conceptual site model was later refined during discussions between the Navy and the regulatory and trustee agencies. The conceptual site model provides details about exposure pathways for selected terrestrial receptor groups (see Figure G-3). The conceptual site model includes information about historical and current sources and release mechanisms, receiving

media, affected media, exposure pathways, and exposure mechanisms to receptors. The following sections review the components of the conceptual site model.

4.1.1 Chemical Stressors in Sediment

At Parcels E and E-2 shoreline, the principal inorganic chemical stressors to ecological receptors in surface sediment are copper, lead, nickel, and zinc; in subsurface sediment, mercury is also of concern. Most inorganic chemicals are assumed to have been released during standard operations or disposal, as outlined in the technical memorandum. PCBs are considered stressors in some, but not all, subareas of the shoreline, as detailed in Appendix F.

4.1.2 Exposure Pathways and Critical Receptors

Birds and mammals foraging at HPS may be exposed to site-related chemicals in sediment or prey. Bioavailable chemicals may be accumulated in the tissues of plants and animals and can be transferred to animals that eat them, as shown on Figure G-3. Most of the COPECs in shoreline sediments at Parcel E have the potential to bioaccumulate and biomagnify under certain conditions. The food chain evaluation directly addresses bioaccumulation and transfer from prey to predator.

Contaminants in plants may be transferred to herbivores, such as birds and mammals. Chemicals bioaccumulated by herbivores may be subsequently ingested by higher-level predators, resulting in secondary exposure.

Many species ingest sediment particles and detritus directly while feeding (for example, amphipods, bivalves, and shorebirds) or indirectly while capturing sediment-covered prey (for example, wading birds and raptors). Birds and mammals may incidentally ingest sediment during preening, grooming, or burrowing (Beyer and others 1994). These exposure routes are included in the dose equation discussed in Section 4.2.2.

4.1.3 Fate and Transport

The fate and transport of chemicals within and among environmental compartments is in part a function of their physicochemical properties. Cycles of inundation and drying affect the speciation and bioavailability of chemicals in soil and sediment.

Bioavailability and toxicity of inorganic chemicals in soil are influenced by hydrogen ion concentration (pH), particle size, moisture content, total organic carbon, cation exchange capacity, and other abiotic factors. During periods of inundation, water quality parameters such as hardness, temperature, conductivity, and total dissolved solids can also affect chemical speciation.

Appendix F provides a detailed analysis of these transport pathways and the potential for migration of chemicals from the Parcels E and E-2 shoreline. Figure G-3 provides a schematic diagram of exposure pathways and potential ecological receptors at the Parcels E and E-2 shoreline.

4.1.4 Approach for Evaluating Risk to Birds and Mammals

Available data for evaluating risk to representative birds and mammals included (1) measured concentrations of chemicals in sediment, (2) estimated concentrations in prey based on site-specific (Parcels E and E-2) BAFs, (3) ecological characterization field studies, and (4) natural history data for representative birds and mammals. Food chain models were used to assess the exposure of representative birds and mammals to ingested contaminants. Food chain models are one method of integrating ecological and chemical information into the risk assessment process, especially for contaminants that tend to bioconcentrate or bioaccumulate (Pascoe and others 1996). Food chain modeling using site-specific assumptions and values for model parameters was conducted for three birds (willet, surf scoter, and red-tailed hawk) and one mammal (house mouse) in this assessment.

4.2 EXPOSURE AND EFFECTS FOR BIRDS AND MAMMALS

Exposure estimates for higher-trophic-level vertebrates are usually based on estimating exposure through the ingestion pathway using food chain modeling. Values for important life history parameters are available in the literature for surrogate species, and TRVs can be derived from laboratory-based studies. However, calculating HQs based on food chain modeling still requires the following assumptions: (1) targeted vertebrate receptors forage at the site on the types of prey for which tissue concentrations are available, (2) chemicals in environmental media and prey are 100 percent assimilated, and (3) toxicological benchmarks represent effects that have relevance at the population level.

Although measurements of chemical concentrations in abiotic media represent potential exposure to ecological receptors, exposure of resident consumers is mediated in part by uptake of chemicals from the abiotic media by prey organisms. Food chain models address the transfer of chemicals from abiotic media to higher-trophic-level predators through diet and provide a more realistic estimate of exposure to and uptake of chemicals for ecological receptors such as birds and mammals.

Section 4.2.1 describes the approach to the exposure assessment. Section 4.2.2 presents the dose equation used in the food chain model to estimate exposure, and Section 4.2.3 lists some exposure parameters of the food chain model. Section 4.2.4 describes the chemical concentrations used in the dose estimate. Section 4.2.5 summarizes exposure parameters for the selected receptors.

4.2.1 Exposure Assessment

The evaluation of risk to birds and mammals focused on ingestion of chemicals in sediment and prey by the selected receptors. Site-specific estimated doses were compared with TRVs derived from peer-reviewed literature studies in an HQ approach. A TRV is a daily dose level derived from reported biological effects on laboratory animals. Risk to representative birds and mammals at the Parcels E and E-2 shoreline was evaluated quantitatively based on an HQ

approach where the dose was divided by the TRV. The derivation of TRVs and the use of food chain analysis in the HQ approach were described in detail in a technical memorandum (Navy 1998), and their previous use at HPS was documented in the Parcel E validation study (Tetra Tech and Levine-Fricke-Recon 2000). Section 4.3.1 summarizes the derivation and use of TRVs. Section 4.4 further describes the interpretation of TRVs and HQs.

Food chain analysis was conducted for all inorganic chemicals that exceeded HPALs and all detected organic chemicals for which TRVs were available. Ingestion of chemicals in sediment and prey was considered the most important exposure pathway for birds and mammals.

4.2.2 Food Chain Model Dose Equation

The exposure assessment for the SLERA evaluates potential effects to selected ecological receptors from chemicals in sediment at the Parcels E and E-2 shoreline. Receptor-specific natural history information, including diet composition, ingestion rates, body weights, and foraging ranges for each receptor, was used to evaluate the potential for exposure of receptors to chemicals at the shoreline.

The following basic dose equation was used to characterize exposure.

$$Dose_{total} = \frac{\left(\left[IR_{prey} \times C_{prey}\right] + \left[IR_{soil} \times C_{soil}\right]\right) \times SUF}{BW} \qquad (4\text{-}1)$$

where:

$Dose_{total}$	=	Estimated dose from ingestion (mg/kg body weight per day)
IR_{prey}	=	Ingestion rate of prey (kilogram per day [kg/day])
C_{prey}	=	Concentration of chemical in prey (mg/kg)
IR_{soil}	=	Ingestion rate of soil (kg/day)
C_{soil}	=	Concentration of chemical in soil (mg/kg)
SUF	=	Site use factor (unitless), which is a ratio of site-specific area to receptor's foraging range (unitless)
BW	=	Body weight (kilogram) of receptor

Exposure assumptions were adapted for conditions at Parcels E and E-2 to reduce uncertainty. However, sources of uncertainty may result from assumptions concerning bioavailability, diet proportions of receptors, food chain transfer, and other biological and physical factors and processes influencing exposure and toxicity at shoreline. Estimates of doses used values from relevant literature based on habitat, taxa, exposure route, and other ecological factors.

4.2.3 Exposure Parameters for Dose Model

Exposure models for birds and mammals are based on the assumption that exposure to chemicals is primarily through direct ingestion of prey and incidental ingestion of sediment during grooming, feeding, or burrowing activities (Beyer and others 1994). Exposure models estimate the mass of a chemical ingested daily by a receptor per kilogram of body weight (daily chemical dose). Estimates of exposure are generally based on knowledge of the spatial and temporal distribution of both chemicals and receptors and on specific natural and life history characteristics that influence exposure to chemicals. All doses calculated in this SLERA were based on a typical receptor and incorporated the following life history parameters.

- The *average* adult body weight found in the literature
- The *average* ingestion rate or the *average* adult body weight found in the literature to calculate the ingestion rate, using the appropriate equation from Nagy and others (2001)
- A reasonable estimate of SUF based on literature evaluation

The exposure parameters used in modeling each of ecological receptor are presented in Section 4.2.5. Tables G-8 through G-17 present the dose calculations for each ecological receptor. Hazard quotients for birds and mammals are summarized in Table G-18.

4.2.4 Chemical Concentrations in Sediment and Tissue Samples

EPCs of chemicals in sediment collected at the Parcels E and E-2 shoreline were used in the dose calculations. No prey tissue samples were collected from the shoreline. Instead, information on biotransfer factors from the terrestrial portion of Parcels E and E-2 documented in the Parcel E validation study was applied to the shoreline (Tetra Tech and Levine-Fricke-Recon 2000). This section focuses on estimates of tissue concentrations.

During the Parcel E validation study, organisms were targeted for tissue collection for the following reasons: (1) known occurrence in areas of interest, (2) diet and other life history parameters indicating likely exposure to soil, and (3) importance in diet of selected bird or mammal. Tissue samples included plant stems and leaves, soil invertebrates, lizards, and rodents. Tissue concentrations were converted from wet weight to dry weight using EPA's conversion factors (EPA 1993). BAFs were calculated based on site-specific soil and tissue concentrations. Those BAFs were used to estimate tissue concentrations in prey used in the dose estimates for birds and mammals of interest in the shoreline habitat. BAFs are provided in Table G-19.

To assess risk to selected species, dose were calculated based on the sediment EPC and tissue concentrations based on the surface and subsurface sediment sample, respectively. One-half the detection limit was used when a chemical was not detected.

4.2.5 Dose Parameters for Food Chain Model

For each bird and mammal, significant adverse effects on growth, survival, and reproduction or other endpoints that are critical to maintaining populations were the focus of this SLERA. The sections below discuss the natural history information and exposure parameters used in the screening assessment for the birds and mammals of interest along the Parcels E and E-2 shoreline in the intertidal zone. Tables G-8 through G-17 summarize the parameters used to calculate a dose for each bird and mammal under various exposure scenarios. Literature citations and the rationale for selection of each value are provided below.

4.2.5.1 Surf Scoter Dose Parameters

The surf scoter is a common winter resident of the San Francisco Bay from October through April. The surf scoter is common on large bays and marine waters along the entire California coast from late September to early May (Harvey and others 1992). They are 17 to 21 inches long and can usually be found resting in flocks on open ocean water beyond the surf or in large bays (Udvardy 1977).

Surf scoters are omnivorous. Their main food items include bivalve and gastropod mollusks, crustaceans, and miscellaneous invertebrates. Fish, aquatic insects, and plant material are also eaten at times. The typical amount of prey consumed is 115 grams per day (Kaufman 1996; Nagy 1987). Surf scoters feed by diving and taking food from the bottom of large bays or oceans just beyond breaking waves. Dives can be as shallow as 1.8 meters or as deep as 12 meters. Scoters primarily forage early and late in the day; however, some night foraging may occur (Zeiner and others 1990).

Surf scoters nest on dry land near quiet or slow-moving water in the northern lakes and tundra of Canada and Alaska (Palmer 1976). Brush or trees usually conceal nests. Scoters produce a single brood, with a clutch size ranging from five to nine eggs. Scoters can breed after 2 years (Zeiner and others 1990). The table below summarizes the parameters used in the dose calculations for the surf scoter.

Parameter	Average Adult	Unit	Reference(s) and Comments
IR_{total}	0.0909	kg/day	Calculated using an average adult body weight of 1.150 kg using the equation for intake of dry matter as food by marine birds of a= 0.880; b= 0.658 (Nagy 2001)
$IR_{sediment}$	0.00273	kg/day	3 percent of IR_{total} based on maximum grit for white-winged scoters from Vermeer and Bourne (1984)
$C_{sediment}$	Shoreline analytical data	mg/kg	Sediment data collected from Parcel E shoreline; EPC equals UCL_{95}
IR_{macoma}	0.0881	kg/day	97 percent of IR_{total} based on the sediment IR ($IR_{sediment}$) percentage
C_{macoma}	$C_{sediment}$ x BAF	mg/kg	Estimated using *Macoma* BAFs calculated for the Parcel F validation study using collocated data for *Macoma* tissue and sediment (Battelle, Entrix, and Neptune and Company 2002) (see Table G-19)

(Continued)

Parameter	Average Adult	Unit	Reference(s) and Comments
SUF	0.024	Unitless	Estimated based on the foraging range of the surf scoter of about 7 square kilometers (Mahaffy, Bennett, and Parsons 1995) and the area evaluated in the Parcel F validation study of approximately 0.17 square kilometers; ratio of estimated surf scoter foraging area is 0.024 (about 2.4 percent); Parcel F area used to calculate study area rather than the shoreline because surf scoters feed offshore
Body Weight	1.15	Kilogram	Average adult body weight from Ohlendorf and others (1985)

Total Ingestion Rate (IR_{total})

The IR_{total} for the surf scoter was calculated using an average adult body weight of 1.15 kilograms using the equation for intake of dry matter as food by marine birds of a= 0.880; b= 0.658 (Nagy 2001). The IR_{total} was 0.0909 kg/day.

Sediment Ingestion Rate ($IR_{sediment}$)

Species-specific information on the rate of incidental sediment ingestion was not available for the surf scoter; however, a field study on the closely related white-winged scoter (*Melanitta fusca deglandi*) measured grit in the stomach contents of birds from four locations in British Columbia (Vermeer and Bourne 1984). In this study, birds at three of the four stations had between 1.5 and 3.2 grams of grit in their guts, with a mean of 2.3 grams. At the fourth station, scientists measured 20.8 grams of grit comprising mostly gravel in the guts. The station (Cumshewa Inlet) where scoters contained the most grit also was the station with a gravel substrate. An incidental $IR_{sediment}$ for the scoter of 0.00273 kg/day was used in the exposure model.

Sediment Concentrations ($C_{sediment}$)

EPCs were estimated as the lesser of the maximum detected concentration and the UCL_{95} for each chemical.

Prey Ingestion Rate (IR_{macoma})

The $IR_{sediment}$ is 3 percent of the IR_{total} (Verneer and Bourne 1984); therefore, the average adult IR_{macoma} was calculated as being 97 percent of the IR_{total}, or 0.0881 kg/day.

Prey Concentrations (C_{macoma})

For each COPEC, prey concentrations (*Macoma)* were estimated by multiplying concentrations in sediment by site-specific and literature-based BAFs (see Table G-19). Site-specific BAFs were calculated using data for *Macoma* tissue and collocated sediment collected for the Parcel F

validation study (Battelle, Entrix, and Neptune and Company 2002). Literature BAFs were used where site-specific BAFs were not available.

Foraging Range and SUF

No bay-specific home range studies have been conducted for the scoter (Takekawa 2001); however, a 2-year radio telemetry study conducted in the Commencement Bay Area of Puget Sound found that wintering birds stayed within 9 to 11 kilometers of their capture location. Most birds used between two to seven locations (defined as areas 1 kilometer in diameter) 76 to 87 percent of the time studied (Mahaffy, Bennett, and Parsons 1995). It was assumed that, on average, scoters visit three locations most of the time. (The mean number of locations visited during the first tracking season was 2.5 and for the second year was 3.9.) Therefore, average diameter for a foraging area would be 3 kilometers, which would result in a foraging area of 7 square kilometers. The SLERA further assumes that the foraging area within this 7-square-kilometer area is similar to habitat near HPS (Mahaffy, Bennett, and Parsons 1995). The ratio of the Parcel F validation study area (about 0.17 square kilometer) to the estimated scoter foraging area (7 square kilometers) is 0.024 (about 2.4 percent). The Parcel F area was used to calculate the study area rather than the shoreline area because scoters feed offshore.

Body Weight

Male surf scoters are generally slightly heavier than females (Savard, Bordage, and Reed 1998). Data from wintering birds measured between 1986 and 1990 were evaluated to develop a reasonable average body weight (Savard, Bordage, and Reed 1998). The average body weight of adult males was 1.148 kilograms, and the average body weight of adult females was 1.047 kilograms, resulting in an average of 1.15 kilograms. This average is the same as was measured in scoters from British Columbia (Vermeer 1981).

4.2.5.2 Willet Dose Parameters

Shorebirds such as the willet feed on invertebrates by probing or plucking prey from shallow waters and sifting small crustaceans out of sandy sediments. Because shorebirds feed on prey that is in close contact with sediments, they may ingest chemicals in prey tissue as well as in sediment ingested incidentally while foraging.

Willets are common winter residents along the California coast in intertidal mudflat habitats; they are less common on sandy marine shores and inland habitats. They are most common in estuarine habitats, salt emergent wetlands, and salt ponds in July through April. They are found from April to August (during the breeding season) on wet meadows in Modoc, Lassen, and Plumas Counties in California. Some willets stay in coastal habitats during the breeding season but do not nest (Zeiner and others 1990).

Willets feed day or night during ebb, low, and floodtides in coastal estuaries with intertidal mudflats during the nonbreeding season (September to March). Willets feed by a peck-probe method, eating mainly small crustaceans and mollusks. Some fish, polychaete worms, larval and

pupal dipteran insects, and fish eggs are also sometimes eaten (Zeiner and others 1990). The table below summarizes the parameters used in the dose calculations for the willet.

Parameter	Average Adult	Unit	Reference(s) and Comments
IR_{total}	0.0301	kg/day	Calculated using average adult body weight of 0.215 kg using the equation for intake of dry matter as food by marine birds (a= 0.880; b= 0.658) (Nagy 2001)
$IR_{sediment}$	0.0009	kg/day	3 percent of IR_{total} (Hui and Beyer 1998)
$C_{sediment}$	Shoreline analytical data	mg/kg	Sediment data collected from Parcel E shoreline; EPC equals UCL_{95}
IR_{macoma} IR_{sbi}	0.0292	kg/day	97 percent of IR_{total} based on $IR_{sediment}$
C_{macoma} C_{sbi}	$C_{sediment}$ x BAF	mg/kg	Concentrations estimated using site-specific invertebrate tissue BAFs from Table G-19 multiplied by the concentration in sediment ($C_{sediment}$)
SUF	0.03	Unitless	Calculated using methodology presented in Kelly and Cogswell (1979); foraging range calculated using the equation for the area of a circle (3.14 x radius^2) and setting the radius equal to 1,000 meters; the study area in the Kelly and Cogswell study was about 6 kilometers of shoreline, with nearly adjacent roosts; the circular area calculated using a radius of 1,000 meters was divided by 2 because willets forage only in the intertidal area adjacent to their roosts (half of the circle) and not in adjacent on-shore areas, resulting in a foraging range of 1.57 square kilometers Area of potential habitat available at Parcel E shoreline determined to be 12.03 acres (0.0487 square kilometer); site range was divided by the calculated foraging range to derive a SUF of 0.03
Body Weight	0.215	Kilogram	Mean adult body weight from Dunning (1984)

Total Ingestion Rate (IR_{total})

The IR_{total} for the willet was calculated using an average adult body weight of 0.215 kilogram using the equation for intake of dry matter as food by marine birds of a = 0.880; b = 0.658 from Nagy (2001). The IR_{total} was 0.0301 kilograms per day (kg/day).

Sediment Ingestion Rate ($IR_{sediment}$)

A literature review conducted in September 1999 by the Navy's Sediment Work Group identified a study by Hui and Beyer (1998) that estimated an incidental $IR_{sediment}$ for the willet of 3 percent. This value was multiplied by the daily ingestion rate to calculate a species-specific incidental $IR_{sediment}$ of 0.0009 kg/day.

Sediment Concentrations ($C_{sediment}$)

EPCs were estimated as the lesser of the maximum detected concentration and the UCL_{95} for each chemical.

Prey Ingestion Rate (IR_{macoma} and IR_{sbi})

The $IR_{sediment}$ rate is 3 percent of the IR_{total} (Verneer and Bourne 1984); therefore, the average adult ingestion rate for prey (*Macoma* and soft-bodied invertebrates) was calculated as 97 percent of the IR_{total}. The prey ingestion rate (*Macoma* and soft-bodied invertebrates) was 0.0292 kg/day.

Prey Concentrations (C_{macoma} and C_{sbi})

Prey (*Macoma* and soft-bodied invertebrates) concentrations were estimated for each COPEC by multiplying concentrations in sediment by site-specific and literature-based BAFs (see Table G-19). Site-specific BAFs were calculated using data for *Macoma* and soft-bodied invertebrate tissue and collocated sediment collected for the Parcel F validation study (Battelle; Entrix, and Neptune and Company 2002). Literature BAFs were used where site-specific BAFs were not available. Data for *Macoma* and soft-bodied invertebrate tissue were not combined, rather doses were calculated for each.

Foraging Range and SUF

The SUF was based on a study in the bay that measured winter foraging ranges for the willet. This study found that the distance traveled between the roost and feeding area was approximately 1,000 meters one way (Kelly and Cogswell 1979). This distance is analogous to foraging area because the roosts of willets in the study were adjacent to the tidal mudflats where they were feeding. In a personal communication, Dr. Cogswell said that this feeding area contained a large amount of favorable habitat and indicated that willets could have much larger foraging areas when habitat was less favorable (Entrix, Inc. 1999). Thus, the foraging distance observed by Kelly and Cogswell (1979) is relevant and area-specific and represents a conservative estimate for the willet.

Based on the foraging distance presented in the Kelly and Cogswell (1979) study, a foraging range was calculated using the equation for the area of a circle ($3.14 \times \text{radius}^2$) and setting the radius equal to 1,000 meters. The area in the Kelly and Cogswell study was about 6 kilometers of shoreline, with nearly adjacent roosts. The circular area (calculated using a radius of 1,000 meters) was divided by 2 because the willets forage only in the intertidal area adjacent to the roosts (half of the circle) and not in adjacent onshore areas. This division results in a foraging range of 1.57 square kilometers for the willet.

The area of potential habitat available at the Parcel E shoreline was estimated at 12.03 acres (0.0487 square kilometer). The site range was divided by the calculated foraging range to derive a SUF for the willet of 0.03.

Body Weight

The dose model for the willet used a body weight of 0.215 kilogram and was based on a study of 41 adult willets of both sexes (Dunning 1984). Both male and female body weights fall within the range considered to be a realistic representation for the willet.

4.2.5.3 Red-Tailed Hawk Dose Parameters

Raptors may be exposed to chemicals in sediment in Parcel E shoreline while foraging on small mammal prey. The red-tailed hawk is known to occur in the area. It was selected as the representative raptor because it is the most common large raptor in the area and a substantial body of natural history and toxicological literature is available.

The red-tailed hawk is the most common hawk in North America, preferentially inhabiting open grasslands, woodlands, wetlands, and pastures with scattered trees and woods. Red-tailed hawks are swooping, pouncing carnivores with a diet that consists of small mammals, insects, earthworms, reptiles, and amphibians (Ehrlich, Dobkin, and Wheye 1988; Zeiner and others 1990). The table below summarizes the parameters used in the dose calculations for the red-tailed hawk.

Parameter	Average Adult	Unit	Reference(s) and Comments
IR_{total}	0.119	kg/day	Derived from EPA's "Wildlife Exposure Factors Handbook" (EPA 1993)
$IR_{sediment}$	0.00047	kg/day	0.4 percent of IR_{total} based on the rate for the American kestrel (Pascoe, Blanchet, and Linder 1996)
$C_{Sediment}$	Shoreline analytical data	mg/kg	Sediment data collected from Parcel E shoreline; EPC equals UCL_{95}
IR_{mouse}	0.1185	kg/day	99.6 percent of IR_{total} based on $IR_{sediment}$
C_{mouse}	$C_{sediment}$ x BAF	mg/kg	Concentrations estimated using site-specific mouse tissue BAFs
Tissue Moisture	68	%	Mouse tissue moisture intake from EPA (1993)
SUF	0.025	Unitless	Based on foraging range information and size of Parcel E shoreline area as developed for Parcel E ERA validation study (Tetra Tech and Levine-Fricke-Recon 2000)
Body Weight	1.204	Kilogram	Average body weight from EPA (1993)

Total Ingestion Rate (IR_{total})

The IR_{total} for the red-tailed hawk was derived from data in EPA's "Wildlife Exposure Factors Handbook" (EPA 1993). These values were used to calculate a mean IR of 0.099 gram per gram per day (g/g/day). The ingestion rate was converted to kg/day (IR_{total} [g/g/day] times body weight [grams] /1,000) using the mean female body weight (as discussed below). The IR_{total} for the red-tailed hawk is 0.119 kg/day.

Sediment Ingestion Rate ($IR_{sediment}$)

The incidental $IR_{sediment}$ for the red-tailed hawk was based on the value for the American kestrel as a percentage of the IR_{total}. The incidental soil IR for the American kestrel represents about 0.4 percent of its IR_{total}. The same percentage was used for the red-tailed hawk to derive an incidental $IR_{sediment}$ of 0.00047 kg/day.

Sediment Concentrations ($C_{sediment}$)

EPCs were estimated as the lesser of the maximum detected concentration and the UCL_{95} for each chemical.

Mouse Ingestion Rate (IR_{mouse})

The IR_{mouse} was calculated based on the IR_{total} and assuming that mammals represent 100 percent of the hawk's diet. The IR_{mouse} of 0.1185 kg/day represents the IR_{total} less the incidental $IR_{sediment}$.

Mouse Concentrations (Cmouse)

C_{mouse} values were estimated for each COPEC by multiplying concentrations in sediment by site-specific and literature-based BAFs (see Table G-19). Site-specific BAFs were calculated using data for mouse tissue and collocated sediment collected for the Parcel F validation study (Battelle, Entrix, and Neptune and Company 2002). Literature BAFs were used where site-specific BAFs were not available.

Foraging Range and SUF

The home range for this investigation was based on the home range used in the Parcel E ERA validation study because the home range of the red-tailed hawk extends beyond the shoreline area (Tetra Tech and Levine-Fricke-Recon 2000). The validation study assumes that the foraging range of the red-tailed hawk is the same as the home range (Tetra Tech and Levine-Fricke-Recon 2000); therefore, studies containing data either for home range or foraging range were used in selecting the home range value. A home-range size of 3,048 acres is identified in the validation study (Tetra Tech and Levine-Fricke-Recon 2000). This value represents the mean of the home range data presented in EPA's "Wildlife Exposure Factors Handbook" (EPA 1993). The combined total acreage of suitable habitat at Parcels E and E-2 is about 77.2 acres. Red-tailed hawks require a significantly larger acreage of appropriate foraging habitat; therefore, the home-range size for the red-tailed hawk foraging at Parcels E and E-2 is expected to include the nearest available contiguous habitat, which corresponds to San Bruno Mountain, located 2.5 miles from HPS. The foraging considerations discussed above result in a conservative estimate for home-range size of about 6,000 acres for a resident adult red-tailed hawk. Based on a personal communication with Mr. Fish of the Golden Gate Raptor Observatory, he confirmed that even during their first year, hawks tend to move over larger distances (about 50 miles a day), and home ranges have not been documented for this stage of their life (Fish 1999). The home range size of 3,048 acres is likely to be a conservatively large estimate of the red-tailed hawk's home range because of the lack of habitat at HPS.

Home range is not an exposure parameter directly incorporated into the exposure model; rather, it is used to estimate the SUF, which is a site- and receptor-specific exposure parameter that represents the ratio of suitable habitat acreage at a site to the home range acreage for a representative receptor. A single SUF was estimated for Parcels E and E-2. The acreage of these parcels was combined because red-tailed hawks are highly mobile and are expected to use

all areas with suitable habitat, including the shoreline. Consequently, a value of 0.025 was adopted for the red-tailed hawk SUF, which represents the ratio of suitable habitat acreage to the mean home range acreage.

Body Weight

A single value for the body weight of the red-tailed hawk was selected from the range of female body weight values presented in EPA's "Wildlife Exposure Factors Handbook" (EPA 1993). The mean female body weight used in the dose model was 1.204 kilograms.

4.2.5.4 House Mouse Dose Parameters

The house mouse is an omnivorous rodent that may be exposed to chemicals in sediment and food items in the Parcels E and E-2 shoreline. It is known to occur in Parcels E and E-2 based on small mammal trapping surveys conducted in 1998 (Tetra Tech and Levine-Fricke-Recon 2000).

The house mouse was selected as a representative receptor because it was the most common small mammal trapped during the surveys. The relevant natural history parameters of this species are well characterized in the literature, and adequate toxicological data are available.

House mice are small-bodied omnivores common throughout California, preferentially inhabiting buildings but also found in fields (Burt and Grossenheider 1980). The house mouse was selected for evaluating risks to mammals from ingestion of contaminated plants (seeds, leaves, and stems), invertebrates, and sediment. The table below summarizes the parameters used in the dose calculations for the house mouse.

Parameter	Average Adult	Unit	Reference(s) and Comments
IR_{total}	0.0045	kg/day	Calculated based on mean adult deer mouse ingestion rate of 0.268 g/g/day (EPA 1993); IR converted to kg/day using the following equation: IR_{total} (g/g/day) * BW (grams) / 1,000
$IR_{sediment}$	0.00009	kg/day	2.0 percent of IR_{total} (EPA 1999b)
$C_{sediment}$	Shoreline analytical data	mg/kg	Sediment data collected from site; EPC equals UCL_{95}
IR_{prey} (equal to IR_{seed} + IR_{stem} + IR_{invert})	0.0044	kg/day	98 percent of IR_{total} (EPA 1999b) 0.0035 kg/day = 79.54 percent IR_{seed} 0.00033 kg/day = 7.5 percent IR_{stem} 0.00057 kg/day = 12.95 percent IR_{invert}
C_{prey} (equal to C_{seed} + C_{stem} + C_{invert})	$C_{sediment}$ x BAF	mg/kg	Concentrations estimated using site-specific plant and invertebrate tissue BAFs from Table G-19 multiplied by $C_{sediment}$
Tissue Moisture	37.5	%	Site-specific seed tissue moisture from Tetra Tech and Levine-Fricke-Recon (2000)
	72.3		Site specific stem and leaf moisture from Tetra Tech and Levine-Fricke-Recon (2000)
	69		Invertebrate tissue moisture from EPA (1993)

Parameter	Average Adult	Unit	Reference(s) and Comments
SUF	1.0	Unitless	Based on home range information compared to size of Parcel E shoreline; home range = 0.435 acre (California Environmental Protection Agency [Cal/EPA] 1999)
Body Weight	0.01693	kg	Mean adult body weight from site-specific data (Tetra Tech and Levine-Fricke-Recon 2000)

Total Ingestion Rate (IR_{total})

The IR_{total} for the house mouse was calculated based on ingestion data for the deer mouse (EPA 1993). These ingestion rates are for breeding and nonbreeding males and females. The mean available deer mouse ingestion rate is 0.268 g/g/day. The IR_{total} was converted to kg/day by applying the following equation.

$$\frac{\text{Total IR (g/g/day)} \times \text{BW (grams)}}{1{,}000} \tag{4-2}$$

Body weight was obtained from field data. The resulting IR_{total} was 0.0045 kg/day for the adult house mouse.

Sediment Ingestion Rate ($IR_{sediment}$)

Incidental $IR_{sediment}$ was based on one study that measured the proportion of insoluble ash in the gastrointestinal tract and feces of rodents (EPA 1993). The incidental $IR_{sediment}$ was estimated at 2 percent of the IR_{total} for white-footed mice. This percentage was used to derive an incidental $IR_{sediment}$ of 0.00009 kg/day.

Sediment Concentrations ($C_{sediment}$)

EPCs were estimated as the lesser of the maximum detected concentration and the UCL_{95} for each chemical.

Prey Ingestion Rate ($IR_{prey} = IR_{seed} + IR_{stem} + IR_{invert}$)

The soil ingestion rate is 2 percent of the IR_{total} (EPA 1999b); therefore, the average adult IR_{prey} was calculated as being 98 percent of the IR_{total}.

The dose estimate model was refined so that the term "prey" specifically refers to plant seeds, stems, and leaves, and invertebrates to estimate the potential exposure of house mice to COPECs. Ingestion rates for these food types were calculated using data on dietary composition for the deer mouse from a study conducted in a Colorado grassland prairie (EPA 1993). The deer mouse study expressed dietary composition as percent volume of stomach contents. This SLERA assumed percent volume equaled percent mass; therefore, the percent volume from the deer mouse study was used to calculate ingestion rates for prey items.

Seeds are estimated to represent 42.65 percent of stomach contents by volume for the adult house mouse (averaged across four seasons). Based on this value and the IR_{total} of 0.0044 kg/day for adult house mice, the IR_{seed} is 0.0019 kg/day. Stem and leaf materials are estimated to represent 3.95 percent of stomach contents by volume (averaged across four seasons). Based on this value, IR_{stem} (including leaves) is 0.00018 kg/day. Invertebrates were estimated to represent 6.875 percent of the stomach contents by volume, resulting in a daily IR_{invert} of 0.00031 kg/day. The sum of ingestion rates of the various prey items (0.0025 kg/day) is less than the IR_{total} for the house mice (0.0045 kg/day). The unclassified portion of the ingestion rate (0.0045 kg/day minus 0.0025 kg/day equals 0.00202 kg/day) was prorated proportionately as a function of the relative percentage of stomach contents. Using this prorating method, the daily IR_{seed} is 0.0019 kg/day plus 0.00161 kg/day, or 0.0035 kg/day. The daily IR_{stem} (including leaves) is 0.00018 kg/day plus 0.00015 kg/day, or 0.00033 kg/day. The daily IR_{invert} is 0.00031 kg/day plus 0.00026 kg/day, or 0.00057 kg/day.

Prey Concentrations ($C_{prey} = C_{seed} + C_{stem} + C_{invert}$)

The house mouse is primarily omnivorous, with a diet that consists of terrestrial insects, fruits, and berries (Cal/EPA 1999). Concentrations of COPECs in tissues of plants and invertebrates were estimated by multiplying concentrations in soil by site-specific and literature-based BAFs (see Table G-19). Site-specific BAFs were calculated using data for plants and invertebrate tissue and collocated soil collected for the Parcel E ERA validation study (Tetra Tech and Levine-Fricke-Recon 2000). Literature BAFs were used where site-specific BAFs were not available.

Foraging Range and SUF

The SUF accounts for the size of the area of concern compared with the foraging range used by the receptor species. If the area of the habitat used in the area of concern is larger than the foraging range of the species, it is likely that individuals may spend 100 percent of their time there. The SUF is calculated by dividing the habitat area in the area of concern by the estimated home range. The home range of the house mouse, as reported by Cal/EPA (1999), is about 0.435 acre; therefore, the SUF for the house mouse was set at 1.0 acre for the dose calculation.

Body Weight

Mean weight calculations for the house mouse were derived from field data (Tetra Tech and Levine-Fricke-Recon 2000). House mice were identified as adults based on visual observations in the field, including general size and presence or absence of external genitalia in captured individuals. The body weight of each adult mouse collected in the field was used to calculate a mean adult body weight of 0.01693 kilogram.

4.3 TOXICITY REFERENCE VALUES AND HAZARD QUOTIENT INTERPRETATION

Site-specific daily dose estimates were compared with high and low TRVs to estimate the potential adverse biological effects on each receptor. Based on this comparison, the risk to representative receptors was characterized; this comparison was performed in a manner consistent with EPA's HQ methodology (EPA 1998), as follows:

$$HQ = \frac{Dose}{TRV} = \frac{(mg / kg - day)}{(mg / kg - day)} \quad (4\text{-}3)$$

where:

HQ	=	Hazard quotient (unitless)
Dose	=	Chemical-, receptor-, and site-specific daily dose estimate (mg/kg per day [mg/kg-day])
TRV	=	Chemical- and receptor-specific toxicity reference value (mg/kg-day)

4.3.1 TRVs

TRVs used in the SLERA were derived primarily from the Navy-BTAG working group (Navy 1998); when a TRV was not available from this source, TRVs from Sample and others (1996) were used. Each TRV represents a critical exposure level from a toxicological study and is supported by a data set of toxicological exposures and effects. A low TRV is a conservative value consistent with a chronic no-effects level. A high TRV represents a mid-range of LOAELs for a given chemical, where the endpoint of toxicity was ecologically relevant.

Raw TRVs derived for mammals and birds were adjusted for each site-specific receptor of concern based on body scaling (allometric conversion). The underlying assumption of allometric conversion is that physiological functions such as metabolic rates are a function of body size (Opresko and others 1993). Allometric conversions assume that smaller animals have higher metabolic rates and are typically able to detoxify or eliminate ingested chemicals more quickly than larger animals (Opresko and others 1993; Sample and others 1996). The following allometric conversion equations by Sample and Arenal (1999) were used for this food chain model.

Birds: $$TRV_{receptor} = TRV_{test\ organism}\ (Body\ Weight_{test\ organism} / Body\ Weight_{receptor})^{1 - 1.2} \quad (4\text{-}4)$$

Mammals: $$TRV_{receptor} = TRV_{test\ organism}\ (Body\ Weight_{test\ organism} / Body\ Weight_{receptor})^{1 - 0.94} \quad (4\text{-}5)$$

TRVs for each chemical were allometrically converted for each of the representative receptors using the appropriate equation for birds or mammals. Adjusted TRVs are shown in each dose calculation table (see Tables G-8 through G-17)

4.3.2 Hazard Quotient Approach

As discussed in the guidance (EPA 1998), receptors may be at risk if the HQ exceeds 1.0. Because of differences in the degree of conservatism in selecting TRVs for various chemicals and receptors, resulting HQ values should not be compared between chemicals or receptors or summed in a hazard index; instead, HQs should be considered individually.

Risk posed by typical site-specific dose estimates lower than the low TRV is not considered significant because the typical dose is designed to reflect risk to the average receptor at the site. Dose estimates between the low and high TRVs cannot be easily characterized. For inorganic chemicals, potential risk to the receptor was evaluated using the bioavailability of chemicals at the site.

Average values for exposure parameters such as body weight and ingestion rate were used because the assessment endpoint is the protection of populations rather than the individual. The interpretation of each HQ is summarized in the table below.

HQ = Dose/TRV	Low TRV	High TRV	Between Low and High TRV
Average Dose	$HQ_{(dose/low\ TRV)}$ <1.0 indicates little or no risk to average receptor	$HQ_{(dose/high\ TRV)}$ > 1.0 indicates potential significant risk to average receptor	$HQ_{(dose/high\ TRV)}$ < 1.0 and $HQ_{(dose/low\ TRV)}$ > 1.0 indicates potential for risk to average receptor

Tables G-8 through G-17 present the complete dose calculations for birds and mammals. Table G-18 summarizes the HQ information and identifies which chemical-receptor pairs have HQs greater than 1.0.

4.4 RISK ESTIMATES

This section presents the calculation of estimated risk to birds (see Section 4.4.1) and mammals (see Section 4.4.2).

4.4.1 Risk to Birds

Based on life history and foraging habits, daily chemical doses were estimated for the surf scoter, willet, and red-tailed hawk for the Parcels E and E-2 shoreline. Daily dose estimates for the average receptor for each chemical were then compared with low and high TRVs to calculate HQs. HQs were calculated for aluminum, barium, cadmium, chromium, copper, lead, manganese, mercury, molybdenum, nickel, selenium, thallium, vanadium, zinc, organotins, PCBs, total DDTs, alpha- and gamma-chlordane, dieldrin, and dioxins. No TRVs were available for antimony, cobalt, beryllium, magnesium, or silver. Tables G-8 through G-15 provide dose calculations for bird receptors under specific exposure scenarios. No doses exceeded any high TRVs for the surf scoter or red-tailed hawk. Doses that exceeded the high TRV for the willet are highlighted in the table below.

Summary of Hazard Quotients Exceeding 1.0 for Birds						
	Willet$_{Macoma}$		Willet$_{sbi}$			
	2 to 2.5 feet bgs		0 to 0.5 foot bgs		2 to 2.5 feet bgs	
Chemical	HQ (dose/high TRV)	HQ (dose/low TRV)	HQ (dose/high TRV)	HQ (dose/low TRV)	HQ (dose/high TRV)	HQ (dose/low TRV)
PCBs (congeners)	Not analyzed	Not analyzed	**1.93**	**23.3**	Not analyzed	Not analyzed
PCBs (Aroclors)	**2.36**	**28.6**	<1.0	**3.50**	**8.12**	**98.4**

Notes: Highlighted cells show HQ$_{(dose/high\ TRV)}$ values that exceed 1.0.

HQs $_{(dose/high\ TRV)}$ for the willet indicate potential significant risk to the average receptor from chemical exposure to PCBs at the Parcel E shoreline. No significant risk (HQ $_{(dose/high\ TRV)}$ exceeding 1.0) was indicated for the surf scoter or red-tailed hawk from any chemicals.

HQ$_{(dose/low\ TRV)}$ exceeded 1.0 for lead, and total DDTs for the surf scoter. Doses for the willet exceeded the low TRV for cadmium, copper, lead, mercury, PCBs, total DDTs, and dieldrin. For the red-tailed hawk, the low TRV HQ exceeded 1.0 for lead and PCBs. In general, HQs were higher for subsurface than surface sediments.

Significant risk to birds is indicated only for willet exposed to PCBs. Other chemicals for which potential risk to birds is suggested include cadmium, copper, lead, mercury, PCBs, total DDTs, and dieldrin. The paragraphs below discuss the chemicals posing risk and the chemicals that pose no significant risk to birds.

Chemicals Posing Risk

Significant risk to the willet from exposure to PCBs (as Aroclors) in subsurface sediment was indicated by the food chain modeling. The HQs based on the high TRV were 8.12 for soft-bodied invertebrate prey and 2.36 for *Macoma* prey. For PCBs reported as congeners, an HQ of 1.93 (high TRV) indicated some risk from exposure to surface sediments and the soft-bodied invertebrate diet.

The maximum PCB HQ $_{(dose/low\ TRV)}$ was 98.4 (as Aroclors) for willet feeding on *Macoma* in subsurface sediment.

Birds are less susceptible to the acute toxic effects of PCBs than are mammals. For example, dietary lethal concentrations that result in a 50 percent mortality rate for various bird species for total Aroclors ranged from 604 to 6,000 mg/kg of diet (Eisler 1986). Sub-lethal effects associated with exposure to PCBs include disruptions in normal patterns of growth and reproduction, metabolism, and behavior in birds. Dietary PCB concentrations of 10 mg/kg have resulted in lower hatchability and erratic incubation behavior in ringdoves, and concentrations of 40 mg/kg have inhibited nest building and reproduction in mourning doves and fewer intact eggs from mallard ducks (Eisler 1986).

Chemicals Posing No Significant Risk

Cadmium

$HQ_{(dose/high\ TRV)}$ values for cadmium were below 1.0 for all three bird species, indicating no significant risk to birds. Potential risk was predicted for the willet from exposure to cadmium in surface sediments ($HQ_{[dose/low\ TRV]}$ = 2.23).

Sub-lethal effects in birds include growth retardation, nephrotoxicity, anemia, damage to the testicles, absorptive epithelium of the duodenum, reduced egg production, and effects on calcium absorption (Scheuhammer 1987). Cadmium ingestion by mallards (*Anas platyrhynchos*) enhances alterations induced by food restriction, such as reduced plasma triiodothyronine and thyroxine concentrations and increased concentration of plasma nonesterified fatty acids and corticosterone. Cadmium ingestion by mallards also increases concentrations of copper and zinc in kidney (Di Giulio and Scanlon 1985). Three-week-old chicks fed 75 mg/kg of cadmium showed a decrease in hematocrit, hemoglobin, liver iron, and intestinal iron-59 absorption, pointing to a defect in iron metabolism (Freeland and Cousins 1973). Cadmium fed to young Japanese quails (*Coturnix coturnix*) at a level of 75 mg/kg of diet from hatching to 4 weeks of age produced gross, microscopic, and ultrastructural lesions in the proximal small intestine (Richardson and Spivey Fox 1974).

Copper

None of the estimated doses for any of the three birds exceeded the high TRV. No significant risk from copper is indicated.

The low TRV was exceeded only slightly for the willet exposed to copper in surface (HQ = 1.16) and subsurface sediments (HQ = 7.46) and for the red-tailed hawk in subsurface sediments (HQ = 1.09).

Copper can be toxic to birds. Mallards and adult chickens tolerated a daily dietary copper concentration of 29 mg/kg of body weight, and adult chickens tolerated a daily dietary copper concentration of 60 mg/kg of body weight. In adult chickens, pigeons, and ducks, minimum lethal doses of copper ranged from 300 to 1,500 mg/kg of body weight (Demayo, Taylor, and Taylor 1982). Diets that contain elevated levels of copper can slow growth rate, diminish egg production, and cause developmental abnormalities in various bird species. For example, chicks showed a slight reduction in weight gain at dietary copper concentrations of 350 mg/kg or higher; turkeys tolerated a diet with 676 mg/kg copper (Owen 1981).

Lead

None of the doses of lead to birds were higher than the high TRV. No significant risk to birds is indicated.

The low TRV was exceeded in both surface and subsurface sediments. The maximum HQ was 102 for the willet exposed to subsurface sediment ingesting soft-bodied invertebrate prey. All other HQs were less than 10.

Lead at the Parcels E and E-2 shoreline is likely present as a mixture of inorganic salts such as lead chloride, lead sulfate, lead carbonate, and various lead oxides. These forms are likely to be significantly less bioavailable and, thus, less toxic than lead acetate, the form of lead used as the basis for the TRV. Thus, risks to birds from lead may be overestimated by an order of magnitude or more. Uncertainty regarding the TRVs is discussed in more detail in Section 5.3.

Lead produces a variety of toxic effects in birds, including damage to the nervous system, muscular paralysis, inhibition of heme synthesis, damage to kidneys, damage to the liver, and death (Eisler 1988). Sub-lethal exposure to lead may also have adverse systemic and reproductive effects in some species by decreasing plasma calcium, inhibiting growth, and reducing the hatchability of chicks. Organic forms of lead are more toxic to bird receptors than are inorganic forms (Eisler 1988).

The TRV for lead was derived from a study (Edens and others 1976) that used a very soluble form of lead (lead acetate) fed to Japanese quails. Reproductive affects, including plasma calcium levels, eggshell thickness, and number of hatchlings, were measured. Japanese quails are one of the most sensitive species to reproductive effects. A comparable study was also used where the same form of lead was administered to American kestrels with similar endpoints to account for differences in the sensitivity of receptors to lead. In the study using kestrels, a raptor species, a dose of up to 50 mg/kg did not cause significant adverse reproductive effects on egg production, incubation, fertility, or eggshell thickness (Pattee 1984). In the TRV study, a dose as small as 10 mg/kg was sufficient to cause significant reduction in egg production in the Japanese quail (Edens and Garlich 1983). Considerable uncertainty is associated with the TRV.

Mercury

No significant risk to birds was indicated by food chain modeling for mercury. All HQs using the high TRV were less than 1.0.

Potential risk was predicted for the willet from exposure to mercury in subsurface sediments based on comparison with the low TRV. The HQs were 2.18 for the soft-bodied invertebrate diet and 1.09 for the *Macoma* diet.

Sub-lethal effects of mercury on birds include adverse effects on growth, development, the immune system, reproduction, blood and tissue chemistry, metabolism, and behavior (Peterle 1991; Spalding and Forrester 1991; Spalding and others 1994; Zillioux, Porcella, and Benoit 1993). Various biochemical and enzyme effects have also been reported (Wolfe and Norman 1998). These effects manifest themselves as abnormal feather loss, weight loss, progressive weakness in wings and legs, difficulty flying, inability to coordinate muscle movements, and reduced nesting and hatching success (Peterle 1991; Spalding and Forrester

1991; Becker, Henning, and Furness 1994; Bowerman and others 1994; Monteiro and Furness 1995; Monteiro, Furness, and del Novo 1995).

Inorganic mercury exerts its greatest effects on the kidneys, whereas methyl mercury is a potent embryo and nervous system toxicant (Spalding and others 1994; Monteiro and Furness 1995). Methyl mercury readily crosses the blood-brain barrier in birds, producing central nervous system dysfunction (Scheuhammer 1987).

Low doses of mercury can cause reproductive effects before overt signs of toxicity are apparent in adult birds (Scheuhammer 1987; Heinz and Hoffman 1998). Significant reproductive effects of chronic dietary exposure to inorganic mercury in birds include delayed testicular development, altered mating and nesting behavior, reduced fertility and clutch size, eggshell thinning, reduced survivability and growth in young birds, and gonadal atresia (Walsh 1990; Becker 1992; Peterle 1991; Spalding and Forrester 1991). In birds, mercury is transferred into the egg, where it has adverse effects on the developing embryo (Peterle 1991). Concentrations of mercury in the egg are good predictors of risk to bird reproduction. Concentrations ranging from 0.5 to 16 mg/kg are associated with adverse effects, including decreased hatchability.

Total DDTs

No significant risk to birds was indicated. All HQs using the high TRV were less than 1.0.

Potential risk ($HQ_{[dose/lowTRV]}$) was predicted for the surf scoter and willet from exposure to total DDTs in subsurface sediments. The HQ using the low TRV was 27 for the willet eating soft-bodied invertebrate prey in subsurface sediments. All other HQs based on low TRVs were less than 3.0.

Effects of DDT and its metabolites on bird reproduction have been well characterized. DDT and its metabolites can mimic estrogen by binding to specific estrogen receptors inside cells. Because of this mode of action, the toxicity of DDT primarily affects reproduction. Organochlorines, including DDT, have been implicated in the thinning of eggshells of at least 54 species and 10 orders of birds (Peterle 1991). DDT reduces the transport and transfer of calcium from females into the eggs, resulting in thin eggshells. Mallard hens fed 50 mg/kg of DDT produced eggshells weighing 12 percent less than control eggshells; their thickness was reduced by 18 percent. Two days after treatment, mallards exposed to a single dose of DDT (1,000 mg/kg) produced eggs with shells that were 28 percent thinner than the control eggs. Birds treated with DDE showed delayed egg laying, reduced nesting success, reduced hatchability, and abnormal egg size and weight (Peterle 1991; U.S. Department of the Interior [DOI] 1998).

Mean DDE residues in double-crested cormorant eggs collected in the early 1970s varied from 6.4 micrograms per gram in Lake Erie to 14.5 micrograms per gram in Lake Huron. Elevated concentrations of DDE in double-crested cormorant eggs caused severe shell thinning, leading in some cases to breakage during incubation. Custer and others (1999) measured the nesting success of double-crested cormorants more recently. Of 1,570 eggs laid, 32 percent did

not hatch and 0.4 percent had deformed embryos. Of 632 chicks monitored from hatching to 12 days of age, 9 percent were missing or found dead; no deformities were observed in the chicks (Custer and others 1999).

Dieldrin

No significant risk was shown for any bird exposed to dieldrin based on comparison to the high TRV. The maximum HQ using the low TRV was 1.08 for the willet.

Dieldrin adversely affects reproduction in birds. Japanese quail given dieldrin at a dose of 20 mg/kg of feed (approximately 2.5 mg/kg/day) for 9 weeks exhibited reduced parental and chick survival rates and laid fewer eggs. As with exposure to DDE, exposure of birds to dieldrin has been associated with eggshell thinning (Winn 1972 and Walker and others 1969, as cited in Beyer and others 1996).

Dieldrin was shown to pose potential risk to the willet based on the food-chain model; however, the potential risk to the willet was considered minimal because the $HQ_{(dose/high\ TRV)}$ did not exceed 1.0 and the $HQ_{(dose/low\ TRV)}$ was only slightly greater than 1.0 for exposure to subsurface sediment.

Summary of Risk to Birds

Significant risk ($HQ_{[dose/high\ TRV]}$) was indicated only for PCBs ingested by the willet. Doses modeled using both prey types (*Macoma* and soft-bodied invertebrates) resulted in unacceptable levels of risk. Because PCBs bioaccumulate and are known to occur in several subareas of the Parcels E and E-2 shoreline, this risk to the willet is considered to warrant further evaluation in a feasibility study.

4.4.2 Risk to Mammals

Based on life history and foraging habits, daily dose estimates were calculated for the house mouse for the Parcels E and E-2 shoreline. Daily dose estimates for the average receptor for each chemical were then compared with low and high TRVs to calculate HQs (see Tables G-16 and G-17). HQs were calculated for aluminum, antimony, barium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, molybdenum, nickel, selenium, thallium, vanadium, zinc, organotins, PCBs, total DDTs, alpha- and-gamma chlordane, dieldrin, PAHs, and dioxins. Table G-18 provides a complete summary of bird and mammalian HQs.

Significant risk may be indicated by HQs greater than 1.0 based on the high TRVs. Doses for PCBs, aluminum, antimony, and molybdenum indicated significant risk in both surface and subsurface sediment. Doses based on surface samples also exceeded the high TRV for cadmium, and vanadium. Subsurface doses exceeded the high TRV for copper and zinc. Doses exceeding the high TRV are summarized below. A complete set of HQs is in Table G-18.

Summary of Hazard Quotients Exceeding 1.0 for Mammals				
	House Mouse			
	0 to 0.5 foot bgs		2 to 2.5 feet bgs	
COPEC	HQ (dose/high TRV)	HQ (dose/low TRV)	HQ (dose/high TRV)	HQ (dose/low TRV)
Aluminum	3.06	87.5	7.72	77.2
Antimony	1.34	13.4	5.39	53.9
Cadmium	1.18	51.9	<1.0	20.9
Copper	<1.0	43.2	1.18	277
Molybdenum	2.91	29.1	1.80	1.80
Vanadium	1.30	13.0	<1.0	8.31
Zinc	<1.0	12.3	1.04	50.0
Total PCBs (congeners)	155	555	NA	NA
Total Aroclors	23.3	83.2	584	2,009

Note: Highlighted cells show $HQ_{(dose/high)}$ that exceed 1.0.

The paragraphs below discuss the chemicals posing risk and the chemicals posing no significant risk to the house mouse.

Chemicals Posing Risk

PCBs

Significant risk to the house mouse from PCBs was indicated by an HQ of 23.3 for surface sediment using total Aroclor as the chemical form. The high TRV HQ was 584 for subsurface sediment based on total PCB congeners. In surface sediment, PCBs were measured as congeners only; the resulting $HQ_{(dose/high\ TRV)}$ was 155.

Aluminum

The dose to the house mouse exceeded the high TRV for aluminum, indicating significant risk. The $HQ_{(dose/high\ TRV)}$ was 3.06 for surface sediments and 7.72 for subsurface sediment.

The toxicity of aluminum is mediated by pH. Aluminum is generally not bioavailable at a pH above 5.0, which is typical of the Parcels E and E-2 shoreline.

Relatively little information is available on exposure pathways or effects of aluminum on wildlife. The principal effects of elevated concentrations of aluminum on mammals include depressed food intake and decreased weight gain in young animals. In general, mammals appear to be at moderate to minimal risk from aluminum toxicity. Aluminum is not accumulated at sufficient levels in soft animal tissues to produce secondary toxicity in carnivores. Unless the soil is acidic, aluminum ingested with soil is probably insoluble and has low biological availability; gut pH and retention time are important in determining how much of this metal is assimilated. Soluble aluminum in acidic forest soils may pose a risk, but problems would largely be manifested as reduced feeding and weight gain (Sparling and Lowe 1996). Mulder, van

Grinsven, and van Breemen (1987) established the relationship between soil solution pH and demonstrated that soluble aluminum does not occur above a pH of 5.0. Thus, toxicity associated with aluminum in soils is not expected.

Antimony

Significant risk from antimony was indicated by HQs using the high TRV of 1.34 for surface sediments and 5.39 for subsurface sediment.

Chronic oral administration of antimony (5.0 mg/kg-day over 4 years) had no effect on Long Evans rats (Schroeder and Mitchener 1975); similarly, no adverse effects were observed in rats fed 168 mg/kg-day antimony for 2 weeks (Dieter and others 1991). Tests using various chemical forms of antimony also indicate that antimony is nontoxic to rats when administered in a chronic mode. For example, no effect was observed in mice exposed to 0.35 mg/kg-day as potassium antimony tartrate (Schroeder and others 1968). Similarly, no differences in number of pups per litter or macroscopic teratogenic effects were observed in offspring of rats treated with doses of 0.748 mg/kg-day antimony trichloride during gestation (Rossi and others 1987).

Cadmium

The HQ using the high TRV was 1.18 for surface sediments, indicating significant risk. The dose for subsurface sediment was less than the TRV.

Cadmium is a known developmental toxin, causing teratogenic and mutagenic effects. Parental doses of cadmium decrease testosterone and produce adverse effects on the testes and prostates of test animals. Prenatal exposure to cadmium has fetotoxic effects, such as reduced fetal weight (Agency for Toxic Substances and Disease Registry [ATSDR] 1993a) and can cause adverse effects during development of the lungs, brain, testes, eyes, and palate (Domingo 1994). Small amounts of cadmium could affect embryonic deoxyribonucleic acid and protein synthesis (Domingo 1994).

Chronic exposure of mice to 300 milligrams per liter of cadmium chloride in drinking water for 10 weeks resulted in a decrease of antibody synthesis. This immunosuppression persists and is more pronounced several weeks after exposure is discontinued (Koller and others 1975). Effects are produced at relatively low cadmium exposures (up to 50 micrograms per milliliter of cadmium for 3 weeks), suggesting that the immune system is vulnerable to the toxic effects of cadmium (Blakley 1984). Metabolic changes, histopathologic alterations, and liver necrosis have been observed in rats, mice, and rabbits after oral exposure to concentrations of cadmium ranging from 0.05 to 138 mg/kg-day (ATSDR 1993a). The estimated wildlife LOAELs for cadmium for mammals, presented in Sample, Opresko, and Suter (1996), ranged from 4.2 to 15.8 mg/kg-day. The daily dose calculated for the house mouse for the Parcels E and E-2 shoreline was 3.24 mg/kg-day.

Copper

Copper was shown to pose significant risk to the house mouse ingesting subsurface sediment (HQ = 1.18), but not surface sediment (HQ < 1.0).

Mammals are relatively tolerant to copper. The accumulation of copper in animal tissues is influenced by several factors, including the genetic make-up of the animal, the levels of dietary iron and zinc, the intake of molybdenum and sulfate or sulfide, the availability of pantothenic acid and vitamin E, the quantity and source of protein, and other factors that remain unidentified (Hill 1977). Copper is primarily stored in the liver, kidney, bone marrow, and hair (Talmage and Walton 1991). The toxic effects of copper on many animals have been studied, including cats, dogs, cattle, sheep, rats, mice, horses, guinea pigs, pigs, and monkeys. Different species of animals display varying levels of sensitivity to copper. The principal organ affected by exposure to copper is the liver, where copper primarily accumulates in subcellular organelles, ultimately causing liver cirrhosis in all mammals. Copper can also cause necrotic kidney tubules and brain damage (Owen 1981). The primary toxic effects of an acute copper dose given orally are gastrointestinal irritation, vomiting (including blood), low blood pressure, jaundice caused by liver necrosis, and coma. Other chronic signs include inhibition of growth, muscular dystrophy, anemia, impaired reproduction, and decreased longevity (DOI 1998; Demayo, Taylor, and Taylor 1982; Talmage and Walton 1991). Chronic exposure to copper causes accumulation of copper in the body, which in turn causes hemolytic anemia and lesions in the liver, brain, and eyes. Rat studies show liver, kidney, and stomach damage to be both short- and long-term effects caused by ingestion of copper (ATSDR 1990).

Copper is an essential nutrient required for normal enzymatic function. At high concentrations, copper may act as a catalyst for the production of free radicals (DOI 1998). Serum copper concentrations increase with age in both mice and humans, but renal and hepatic concentrations decline. Dietary copper influences the life span of mice. Aging in mice was accelerated when mice were fed copper (administered as copper gluconate in drinking water) at a concentration of 317 mg/kg (Massie and Aiello 1984).

The magnitude of copper toxicity varies with the ratio of copper to molybdenum in the diet for most animals. Low concentrations of molybdenum cause copper to accumulate at a faster rate and cause toxicity at lower concentrations (DOI 1998). Whole-body concentrations of copper in small mammals collected from various uncontaminated sites ranged from 8.3 to 13.4 mg/kg dry weight (Talmage and Walton 1991).

Molybdenum

Doses of molybdenum indicated significant risk to the house mouse, with an HQ of 2.91 in surface sediments and 1.80 in subsurface sediments.

Few studies describe the toxicity of molybdenum to wild mammals. Signs of molybdenosis in cattle include weight loss, reduced feeding, inhibited growth, hair loss, leg deformities, anemia, anorexia, lesions in connective tissue, diarrhea and other intestinal disturbances, brittle bones

prone to fracture, and milk reduction (DOI 1998). Younger animals and lactating cows appear to be the most susceptible. Because of the unique environment of the rumen, cattle and other ruminants are far more susceptible to the toxic effects of molybdenum than are other species (Eisler 1989). Toxicity generally occurs when cattle graze pastures where the forage contains 20 to 100 mg/kg molybdenum dry weight. Concentrations of molybdenum in cattle tissues are generally highest in the liver, followed by the kidneys, spleen, lungs, brain, and muscles. The ultimate sink for molybdenum in the body is bone (DOI 1998).

Vanadium

Vanadium may pose a significant risk to the house mouse exposed to surface sediment, as indicated by an HQ of 1.3 using the high TRV. The subsurface HQ was less than 1.0

The $HQ_{(dose/low\ TRV)}$ was greater than 1.0 for both surface and subsurface sediments.

Very little data exist on acute or chronic effects of vanadium in mammals, in part because of the extremely low absorption of vanadium from the gastrointestinal tract (Sittig 1991).

Zinc

The $HQ_{(dose/high\ TRV)}$ subsurface value for zinc was 1.04 for the house mouse, indicating significant risk. In subsurface sediment, the HQ was less than 1.0

Both surface and subsurface sediment resulted in HQs greater than 1.0, using the low TRV.

Excessive zinc intake adversely affects survival of all mammals tested and causes a wide variety of neurological, hematological, immunological, hepatic, renal, cardiovascular, developmental, and genotoxic effects (Eisler 1993). The adverse effects include growth retardation, testicular atrophy, changes in skin, and poor appetite (Eisler 1993; Prasad 1995). The pancreas and bone are primary areas of zinc deposition in mammals. Toxic effects of zinc after ingestion of objects that contain zinc has been observed in many domestic animals, including dogs, cats, ferrets, cattle, sheep, and horses (Eisler 1993). Elevated concentrations of zinc in the diet of pregnant rats and sheep caused an increased incidence of hypocuprosis, still births, and fetal resorptions (Domingo 1994).

Acute oral toxicity in rodents exposed to zinc is low, with lethal doses resulting in a 50 percent mortality rate ranging from 30 to 600 mg/kg body weight, depending on the zinc salt administered. Acute effects in rodents after inhalation or intratracheal instillation of zinc compounds include respiratory distress, pulmonary edema, and infiltration of the lung by leucocytes. Effects of zinc toxicity following short-term oral exposure to rodents include weakness, anorexia, anemia, diminished growth, loss of hair, and lowered food utilization. Zinc produced no adverse symptoms in rodents at about 160 mg/kg of body weight in rats (International Programme on Chemical Safety 1996).

Chemicals Indicating No Significant Risk

Lead

No significant risk was indicated for the house mouse exposed to lead in either surface or subsurface sediment. All high TRV HQs were less than 1.0.

HQs using the low TRV were 5.89 for surface sediments and 18.2 for subsurface sediments.

Lead can have multiple toxic effects in mammalian species. Lead may cause damage to the nervous system, hematological effects, kidney dysfunction, sterility, abortion, neonatal mortality, growth retardation, delays in maturation, and reduced body weight (Amdur, Doull, and Klaassen 1991; Eisler 1988). Younger mammals may have greater sensitivity to lead toxicity from their developing blood-brain barrier. In these cases, developing capillaries in the brain allow lead in the blood to be transported to newly formed components of the brain. Organic forms of lead are more toxic to mammals than are inorganic forms (Amdur, Doull, and Klaassen 1991).

Manganese

Manganese posed no significant risk to the house mouse in either surface or subsurface sediments. All HQs using the high TRV were less than 1.0.

Using the low TRV, the HQ was 1.66 for surface sediments and 1.76 for subsurface sediments.

Manganese is an essential trace element in mammals. Rats that ingested elevated levels of manganese exhibited decreased weight gain, increased physical activity, alterations of brain chemicals, insomnia, disorientation, slight irritation of the stomach, anxiety, memory loss, motor disturbances, transient rash, tremors, difficulty walking, alterations in brain chemistry, decreased fertility, and delayed testicular development (ATSDR 1991; Risk Assessment Information System 1995). Pregnant rats that drank water containing manganese bore young that weighed less than normal (ATSDR 1991). Monkeys that drank water containing manganese became weak, with rigid muscles (ATSDR 1991).

Nickel

No significant risk to the house mouse was posed by nickel in surface or subsurface sediment. All HQs using the high TRV were less than 1.0.

The maximum $HQ_{(dose/lowTRV)}$ for nickel was 18.3 in surface sediment.

The potential confounding problem of nutritional requirements for nickel versus concentrations associated with toxicosis must be recognized for wildlife. In domestic livestock, for example, adverse biological effects have been observed at dietary concentrations of 1,000 mg/kg (as nickel carbonate); these effects were primarily related to growth inhibition. In general, acute and chronic effects of nickel on wildlife must be inferred from the literature on animal science, which

suggests that concentrations of nickel associated with adverse biological effects are widely variable. Furthermore, the expression of toxicity is influenced by the age, reproductive status, nutritional content of the diet, and exposure duration, which must all be considered in interpreting the risk posed by nickel to terrestrial wildlife (National Academy of Sciences 1980). Recent studies of nickel levels in voles and rabbits living on land amended by sewage sludge did not indicate any accumulation of nickel in these herbivores or in the plants that they fed on (ATSDR 1993b; Alberici and others 1989).

Selenium

No significant risk was indicated for selenium in the diet of the house mouse exposed to sediment at the Parcel E shoreline. All HQs using the high TRV were less than 1.0.

Potential risk ($HQ_{[dose/lowTRV]}$) was predicted for the house mouse from exposure to selenium in both surface and subsurface sediments. The maximum $HQ_{(dose/lowTRV)}$ for selenium was 3.02 in subsurface sediment.

Chronic effects of selenium on mammals include reproductive abnormalities such as congenital malformations; reduced litter size; high mortality of young; infertility among surviving young in rats, mice, swine, and cattle; and intestinal lesions (Eisler 1985). Chronic selenosis may be induced by dietary exposure to natural selenite, selenate, or seleniferous feedstuffs at dietary concentrations between 1 mg/kg (rat) and 44 mg/kg (horse) or from water containing 0.5 to 2.0 mg/kg of selenium. Signs of chronic selenosis include skin lesions, lymph channel inflammation, loss of hair and nails, anemia, enlarged organs (spleen, pancreas, and liver), fatigue, lassitude, and dizziness.

Total DDTs

$HQ_{(dose/high\ TRV)}$ values for total DDTs were less than 1.0 for the house mouse, indicating no potential significant risk from exposure to sediment at the Parcel E shoreline.

Doses exceeded the low TRV in subsurface sediments, with an HQ of 8.44, indicating potential, but not significant risk.

Chronic exposure of rats and mink to DDT causes tremors and hyperirritability. Chronic exposure to DDT and organochlorines causes reproductive effects in mink, bats, shrews, and sea lions (Peterle 1991). DDT-induced developmental effects include decreased fetal body weight, decreased fetal brain and kidney weight, embryotoxicity, fetotoxicity, and neonatal mortality. Chronic exposure caused abortions, stillbirths, increased maternal and fetal mortality, delayed estrus, a reduction in male libido, and failure to develop mammary glands.

Chlordane

Chlordane doses were less than the high TRV for the house mouse, indicating no significant risk from exposure to sediment at the Parcel E shoreline.

Potential risk ($HQ_{[dose/lowTRV]}$) was predicted for the house mouse from exposure to chlordane in both surface and subsurface sediments. The maximum chlordane $HQ_{(dose/lowTRV)}$ of 3.81 was for subsurface sediment.

Chlordane is known to produce hepatic carcinomas in mice exposed to dietary levels of 50 mg/kg. Warm-blooded animals readily absorb chlordane through dermal contact, ingestion, and inhalation; residues concentrate in the fat, liver, kidney, brain, and muscle. Chronic dietary chlordane adversely affects physiology, growth, and fertility of laboratory mammals, including enlargement and increased pathology of the liver in rats and mice. It also elevated residues in cow's milk, reduced sexual activity and litter viability in rats, depressed growth and delayed development, decreased immune competence, and decreased the viability of offspring in mice (Eisler 1990).

High-Molecular-Weight PAHs

No significant risk to the house mouse from exposure to sediment at the Parcel E shoreline was indicated . All HQs using the high TRV were less than 1.0.

Potential risk ($HQ_{[dose/lowTRV]}$) was predicted for the house mouse from exposure to high-molecular-weight PAHs in subsurface sediment, with an $HQ_{(dose/lowTRV)}$ of 1.14. The $HQ_{(dose/lowTRV)}$ was less than 1.0 for surface sediment.

PAH compounds are distinct in their ability to produce tumors in skin and in most epithelial tissues of mammals. Impaired reproduction is frequently observed in chronic exposures, where ovotoxicity and antispermatogonic effects have been noted. Other systemic effects include adrenal necrosis as well as changes in the intestinal and respiratory epithelia. Many PAHs induce biotransforming enzymes, including the mixed-function oxidases present in the liver. Some PAHs and their metabolites also suppress the immune system. Immunosuppression results in decreased responsiveness to mitogens and an increased susceptibility to disease. Most available information on the toxicological properties of PAHs focuses on their carcinogenicity to mammals (Eisler 1987).

Summary of Risk to Mammals

The greatest significant risk ($HQ_{[dose/high\ TRV]}$) was indicated for PCBs ingested by the house mouse. Because PCBs bioaccumulate and are known to occur in several subareas of the Parcels E and E-2 shoreline, this risk to the house mouse is considered to warrant further evaluation in a feasibility study.

Doses also exceeded the high TRV for aluminum, antimony, cadmium, copper, molybdenum, vanadium, and zinc. These COPECs are evaluated in the context of regional ambient concentrations in Section 5.0.

5.0 RISK CHARACTERIZATION

Risk characterization is "a conscious and deliberate process to bring all important considerations about risk, both the likelihood of the risk but also the strengths and limitations of the assessment and a description of how others have assessed the risk into an integrated picture," as described in EPA's "Risk Characterization Handbook" (EPA 2000b). Risk characterization must summarize strengths and limitations and results of the risk assessment in a social, legal, and economic context to support negotiated agreements with other stakeholders, including the public (EPA 2000b). The risk characterization "conveys the risk assessor's judgment as to the nature and existence of (or lack of) ecological risks" (EPA 2000b). In addition, risk characterization must adhere to principles of transparency, clarity, consistency, and reasonableness.

Risk characterization integrates information from the exposure and effects assessments to evaluate relationships between chemical exposure and the expression of ecological effects (EPA 1997). This integration relies primarily on weight-of-evidence arguments that evaluate all lines of evidence introduced into the risk assessment. Discussion of uncertainties at each level of the risk assessment is another key aspect of risk characterization.

The two components of risk characterization are risk estimation and risk description. Risk estimation integrates exposure profiles for each receptor group with information on effects and summarizes the associated uncertainties. Risk description presents the information necessary for interpreting risk results and identifies appropriate thresholds for defining adverse effects for each assessment endpoint.

This section characterizes risk to all assessment endpoints at the Parcels E and E-2 shoreline. The key findings, assumptions, strengths, and limitations of the risk assessment attributable to exposure to chemical stressors at a site are discussed in the context of the ecological significance of predicted effects. Ecological significance is a measure of the degree to which eliminating an estimated risk will make a difference, given the other dynamic factors operating in the environment (EPA 2000b).

The risk characterization considers the science of risk assessment as well as the policy and other decisions that were made by the risk assessment team (EPA 2000b). Decisions about what to sample and where to collect samples along the Parcels E and E-2 shoreline were based in part on policy considerations, including limitations of time and budget. Likewise, some decisions deferred to standard practice in EPA Region IX, including development of HPALs, use of San Francisco Bay ambient concentrations, design of the Parcel E validation study, and the TRVs used in this risk assessment. However, most decisions were made specifically to achieve the highest level of confidence in the conclusions of the SLERA, within the context of previous and ongoing remedial work at HPS.

Section 5.1 discusses the ambient concentrations of chemicals in San Francisco Bay sediments and the HPALs to provide a context within which to characterize risk associated with the Parcels E and E-2 shoreline. Section 5.2 summarizes the risk characterization for the Parcels E and E-2 shoreline. Section 5.3 discusses uncertainty in the SLERA. Section 5.4 summarizes the

risk assessment conclusions based on ecological relevance and implications for risk management.

5.1 REFINEMENT OF CHEMICALS OF POTENTIAL ECOLOGICAL CONCERN

EPA guidance on conducting ERAs recommends that the list of COPECs be reevaluated in the problem formulation step of the BERA to account for site-specific and regional conditions (EPA 2001). In addition, Navy policy requires that COPECs be compared with regional ambient concentrations of chemicals during problem formulation of the BERA (Navy 2000). This appendix represents the initial step of the BERA problem formulation (Step 3a), as described in Section 1.0. This section discusses the refinement of COPECs based on comparison with (1) HPALs and (2) regional ambient chemical concentrations in San Francisco Bay. Section 5.1.1 summarizes the refinement of COPECs for benthic invertebrates, and Section 5.1.2 summarizes the refinement of COPECs for birds and mammals. Section 5.1.3 discusses the comparison of sediment concentrations with HPALs, and Section 5.1.4 discusses the evaluation of San Francisco Bay ambient concentrations.

5.1.1 Refinement of COPECs for Benthic Invertebrates

Risk to benthic invertebrates exposed to sediment at the Parcels E and E-2 shoreline was evaluated quantitatively by comparing the EPCs in surface and subsurface sediment with ER-M values. Chemicals that exceeded the ER-M were considered COPECs for benthic invertebrates.

5.1.1.1 Surface Sediment

In surface sediment, copper, lead, nickel, and zinc exceeded the ER-M values for 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, total DDTs, and PCBs exceeded their respective ER-M values. As a result, these chemicals were retained as primary COPECs for benthic invertebrates.

5.1.1.2 Subsurface Sediment

In subsurface sediment, antimony, copper, lead, nickel, mercury, and zinc exceeded ER-M values for 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, total DDTs, dieldrin, endrin, and PCBs exceeded their respective ER-M values. As a result, these chemicals were retained as primary COPECs for benthic invertebrates.

5.1.2 Refinement of COPECs for Birds and Mammals

Risk to birds and mammals was evaluated using food chain modeling of ingested chemicals, as described in Section 4.3. Significant risk was indicated for birds and mammals exposed to PCBs in both surface and subsurface sediment at the Parcels E and E-2 shoreline. No other chemicals were shown to pose a risk to birds. Doses to the house mouse also exceeded the high TRV for aluminum, antimony, cadmium, copper, molybdenum, vanadium, and zinc. Of these, aluminum, antimony, and vanadium were eliminated as COPECs because concentrations of these chemicals

were less than HPALs. In addition to PCBs, cadmium, copper, molybdenum, and zinc were retained as COPECs for the house mouse.

The ongoing validation study in Parcel F provides preliminary remediation goals for sediment based on exposure of the surf scoter to copper (135 mg/kg), mercury (0.94 mg/kg), and PCBs (0.62 mg/kg) (Battelle, Entrix, and Neptune and Company 2004). These sediment preliminary remediation goals were developed using collocated sediment and laboratory-exposed bivalve (*Macoma nasuta*) tissue data. These data provide a strong, direct link between sediment-associated contaminants and tissue.

EPCs in subsurface sediments exceeded the preliminary remediation goals for copper, mercury, and PCBs. In surface sediment, only concentrations of copper and PCBs exceeded the preliminary remediation goals.

5.1.3 Comparison of Sediment Concentrations with HPALs

The objective of the comparison of sediment concentrations with HPALs was to identify the inorganic chemicals present at the Parcels E and E-2 shoreline that could be considered sources of contamination requiring investigation under the Comprehensive Environmental Response, Compensation, and Liability Act. Sediment concentrations were compared with HPALs for inorganic chemicals in accordance with Navy guidance (Navy 2000).

EPCs of inorganic chemicals that exceeded HPALs and ER-M values were retained as COPECs. EPCs less than ambient concentrations were dropped from further consideration. Chemicals for which no ambient concentrations were available were considered to exceed ambient and retained by default.

Concentrations of cadmium, copper, lead, and zinc exceeded HPALs in surface and subsurface sediment samples at the Parcels E and E-2 shoreline. Other metals concentrations exceeded HPALs in some, but not all subareas. (Details of concentrations in subareas are in Appendix F.) Based on the EPCs for the entire shoreline data set, molybdenum was identified as a COPEC in surface, but not subsurface, sediment. In subsurface sediment samples, antimony and mercury were identified as COPECs. Beryllium was dropped as a COPEC because concentrations of beryllium were less than the HPAL in all subareas.

All organic chemicals detected in sediment at the Parcels E and E-2 shoreline were retained for toxicological screening; these chemicals are shown in Tables G-6 (surface sediment) and G-7 (subsurface sediment).

5.1.4 Evaluation of San Francisco Bay Ambient Sediment Concentrations

Sediment in the Parcels E and E-2 shoreline is in direct contact with surface water and sediment of San Francisco Bay through twice daily tidal exchange. To focus the risk assessment on chemicals that likely originated at the shoreline, EPCs in sediment at Parcels E and E-2 sediment

were compared with ambient concentrations in fine sediments of San Francisco Bay (San Francisco Bay Regional Water Quality Control Board [Water Board] 1998). Sediment above the ambient threshold concentration is considered contaminated (Water Board 1998). Ambient concentrations from the Water Board are available for 10 inorganic chemicals, total PAHs, PCBs, and selected chlorinated pesticides.

Concentrations for all COPECs in sediment were higher in sediment from the Parcels E and E-2 shoreline than in sediment from San Francisco Bay. As a result, no chemicals were eliminated as COPECs.

EPCs for copper, lead, and zinc exceeded HPALs, San Francisco Bay ambient concentrations, and ER-M values; therefore, they were considered COPECs for benthic invertebrates in surface and subsurface sediment. Concentrations of PCBs and DDTs exceeded San Francisco Bay ambient concentrations and ER-M values; therefore, they were considered COPECs for benthic invertebrates (see Table G-6).

In subsurface sediment, mercury concentrations exceeded the HPAL, the San Francisco Bay ambient concentration, and the ER-M values; therefore, it was considered a COPEC for benthic invertebrates (see Table G-7).

5.2 RISK CHARACTERIZATION FOR PARCEL E SHORELINE

Benthic invertebrates, birds, and mammals are at risk from exposure to PCBs in surface and subsurface sediment at the Parcels E and E-2 shoreline. No other chemicals were shown to pose a risk to birds.

Benthic invertebrates in surface and subsurface sediment may be adversely affected by exposure to copper, lead, zinc, and DDTs. In subsurface sediment, mercury may pose an additional risk to benthic invertebrates.

Ingestion of sediment and prey containing cadmium, copper, molybdenum, and zinc may pose a risk to the house mouse.

5.3 UNCERTAINTY IN THE SCREENING-LEVEL ECOLOGICAL RISK ASSESSMENT

Uncertainty plays an important role in risk-based decision-making; therefore, uncertainty is incorporated explicitly in the risk characterization in a SLERA. Although identifying known sources of uncertainty is more useful than using conservative default assumptions, many site-specific parameters cannot be determined easily, and the SLERA must rely on estimates. Uncertainty is generally defined as a component of risk or degree of hazard resulting from imperfect knowledge of the present or future state of the system under consideration (Suter 1993).

The following three sources of uncertainty in ERAs are described in Suter (1993).

1. Mistakes in execution of assessment activities such as errors, including incorrect measurements, data recording errors, and computational errors

2. Imperfect knowledge of factors that could be known such as lack of knowledge about some aspect of the ecosystem that may be relevant, including assumptions used in dose models; practical constraints on the ability to measure everything; and lack of knowledge on the toxicological effects of all chemicals on all species

3. Inherent randomness of the world such as stochasticity in physical or biological processes that may affect assumptions or actual risk, including variation in population parameters or rainfall patterns

The complexity of ecological systems tends to increase the level of uncertainty involved in ERAs compared with human health risk assessments. Using realistic assumptions and multiple lines of evidence is the best approach to reducing uncertainty associated with conclusions in an ERA. The sections below briefly review some sources of uncertainty identified for this SLERA.

5.3.1 Sample Data

Data collected from selected locations at the Parcels E and E-2 shoreline were used to evaluate conditions over the entire shoreline; therefore, all parameters measured are only estimates with associated error. Although the sample sizes of data sets for surface and subsurface sediment were adequate to support the SLERA, portions of the shoreline are not represented in the data sets. Overall, the required detection limits were achieved. Because the risk is so clearly driven by a few metals and PCBs, minor issues with detection limits for organic chemicals were not considered a significant source of uncertainty.

Data were validated and determined to be of high usability, and data computations and summary tables were double-checked. Data quality is not considered an important source of uncertainty, as identified and defined in the SAP (Tetra Tech 2002b).

5.3.2 Ambient Screening Concentrations

The data set used to develop ambient screening concentrations for 145 inorganic chemicals at HPS is considered of high quality and usable for risk assessment. However, HPALs for cobalt, chromium, and nickel were calculated using a regression equation based on concentrations of magnesium, as described in Appendix F. For these chemicals, uncertainty in the actual ambient concentration is greater.

5.3.3 Toxicological Benchmarks

Screening values (such as ER-M values and TRVs) used to identify COPECs and levels of risk to ecological receptors include multiple sources of uncertainty. Although these values were based on numerous studies, the relevance of any benchmark to a particular site is unknown. Effects on receptors at a site may be underestimated or overestimated based on this approach; however, the practice of using these values for screening chemicals in environmental media is widespread and is currently the best method available for preliminary screening. Screening values were not available for all chemicals detected in sediment from the Parcels E and E-2 shoreline; as a result, some COPECs could not be adequately evaluated given current knowledge. Most of the screening values are based on single chemical exposures or on single chemicals analyzed within the context of effects observed in complex chemical mixture exposures. The effect of multiple chemical stressors operating synergistically or antagonistically was not incorporated into this risk assessment.

Screening values are based on total concentrations and do not address uncertainty associated with individual chemical species (some forms are more toxic than others) or bioavailability potential. In some cases, screening benchmarks were used where they are not strictly appropriate. ER-M values are most appropriate for assessing risk to some groups of benthic receptors. However, these benchmarks were used to evaluate risk to all benthic invertebrates in the area. The lack of suitable screening values for some chemicals and groups of receptors is considered an important source of uncertainty in this SLERA.

5.3.4 Uncertainties Associated with Food Chain Modeling

This discussion highlights uncertainties associated with the food chain modeling used to evaluate risk to birds and mammals in Section 4.0. The overall effect of these uncertainties and conservative assumptions cannot be quantitatively calculated without site-specific information.

5.3.4.1 Tissue Residue Data

This source of uncertainty relates to the representativeness of BAFs developed from field-collected data. BAFs were developed for plants, mice, and soft- and hard-bodied invertebrates (*Macoma nasuta*). BAFs for plants and mice were developed from data collected for the Parcel E ERA validation study report (Tetra Tech and Levine-Fricke-Recon 2000). BAFs for soft- and hard-bodied invertebrates were developed for the Parcel F validation study (Battelle, Entrix, and Neptune and Company 2002). Uncertainty associated with tissue analysis reflects the assumption that samples collected at one time adequately reflect exposure of receptors to COPECs.

Two main sources of uncertainty are associated with development of BAFs for soft- and hard-bodied invertebrates (*Macoma nasuta*). The first source of uncertainty relates to BAFs developed from laboratory data for *Macoma nasuta* and whether they may underestimate uptake if steady-state conditions are not reached during the 28-day exposure period. Field-collected bivalves were shown to have concentrations in tissue similar to laboratory-reared *Macoma*

nasuta, supporting the contention that a 28-day exposure time is sufficient to reach steady state (Battelle, Entrix, and Neptune and Company 2002).

Second, it was unclear whether the soft-bodied invertebrate tissues collected in the field are a fair representation of the tissue burdens in polychaetes in the field. A preliminary evaluation suggests that the data collected in the field may overestimate concentrations in polychaete tissue (Battelle, Entrix, and Neptune and Company 2002). Additionally, only one composite sample was collected per area (five total), and these samples may not be representative of the entire offshore area. In addition, the composite sample in each area was collected over a large area and could not be collocated with specific locations where sediment samples were collected during the Parcel F validation study. This situation resulted in uncertainty associated with the concentrations in sediment that caused exposure to soft-bodied invertebrates in the field, potentially under- or over-estimating uptake.

Site-specific tissue residue data were not available for some chemicals and receptors, and prey concentrations were estimated based on literature BAFs and other parameters. This approach is generally associated with much more uncertainty than is one based on site-specific prey tissue concentrations. In particular, estimates of prey concentration do not include accurate predictors of assimilation and depuration of contaminants in the same way as time-averaged tissue concentrations. Additionally, a BAF of zero was used for chemicals where literature-based BAFs were not available.

5.3.4.2 Estimated Doses, Site Use Factors, and Other Parameters

Assumptions used in estimating ingested doses and model parameters are based mostly on scientific literature and may not accurately represent species or conditions at the site. Sources of uncertainty in dose estimates include inaccuracy in model parameters based on poor literature-derived data, population and individual variation in life history, and variation in dietary patterns of animals in the Parcels E and E-2 shoreline. In addition, the lack of empirical data for each receptor necessitated using simple scaling equations to estimate receptor-specific ingestion rates. These estimates may not accurately represent actual ingestion rates and are a source of uncertainty in dose calculation.

An additional source of uncertainty is introduced by the estimation of food ingestion rates. Allometric regression models were used to estimate food consumption based on metabolic rates derived by Nagy (2001) for various groups of birds and mammals. Food ingestion rates estimated using the allometric equations are expressed as kilograms of dry weight per day. Wildlife does not generally consume dry food (unless maintained in the laboratory); therefore, some investigators suggest converting food consumption rates to kilograms of fresh weight by adding the water content of the food. It was necessary to convert the tissue results to dry weight for mathematical consistency in the allometric equations used to estimate doses because both HPS tissue residue results from the analytical laboratories and recommended literature-derived BAFs are reported in wet weight (Sample, Opresko, and Suter 1996; EPA 1999a). Further reasoning behind the conversion from wet to dry weight is that the TRVs, which were used to calculate HQs and compare estimated doses to evaluate whether risk exists to

higher-trophic-level receptors, are also reported on the basis of dry weight. This conversion from wet to dry weight may overestimate chemical concentrations in tissue, potentially resulting in higher calculated risk.

The use of dose models as estimates of exposure assumes that exposure of the animal through other routes (such as dermal exposure or drinking of surface water) is minimal. In general, it is common practice in ERAs to focus on ingestion of contaminated prey and soil (Pascoe, Blanchet, and Linder 1996; EPA 1997), although ignoring other sources may lead to an underestimation of risk.

SUFs were based on receptor foraging distances presented in the literature and thus are not area-specific for the Parcels E and E-2 shoreline. Furthermore, carrying capacity and habitat quality were not considered in the estimation of the SUF.

Risk calculations used average exposure parameters reported for each ecological receptor. The ranges of reported body weights and ingestion rates vary significantly in the literature (EPA 1993; Dunning 1993; Nagy 1987). These values may not reflect the true attributes of receptors living at the Parcels E and E-2 shoreline.

5.3.4.3 Bioavailability

All COPECs were conservatively assumed to be 100 percent bioavailable to all receptors. However, bioavailability may be significantly less than 100 percent depending on the COPEC and receptor. For example, aluminum is bioavailable only at pH values of 4 or less (EPA 2000a); therefore, potential effects caused by exposure to aluminum may be significantly overestimated.

5.3.4.4 Development of TRVs

TRVs used in risk calculations were derived from literature studies. These studies were not conducted on the ecological receptors assessed in this SLERA. TRVs were extrapolated using uncertainty factors to account for differences between species. The effect of this uncertainty cannot be estimated. The use of assessment endpoint species as surrogates for other related or ecologically similar taxa is supported by current guidance (EPA 1992a, 1992b). However, it should be recognized that this type of analysis does not account for differences among taxa and that uncertainty exists with regard to assessments of risk to whole communities based on detailed analysis of relatively few taxa.

TRVs for antimony were unavailable for birds; therefore, risks to these receptors from exposure to antimony could not be evaluated. Only a low TRV for aluminum was available for birds; therefore, upper bounds on risk estimates could not be presented. The bird TRVs for lead were derived from a study that used a very soluble form of lead for the laboratory tests (Edens and Garlich 1983). Consequently, the overly conservative assumptions summarized below are associated with the TRVs for metals.

- The form of lead ingested by birds at the Parcels E and E-2 shoreline is the very soluble and bioavailable lead acetate,
- Birds ingest lead at the shoreline as lead acetate in drinking water.
- Site-specific soil and chemical conditions at the Parcels E and E-2 shoreline that would affect the bioavailability of the form of lead in sediment are the same as in the controlled laboratory conditions used to generate the TRVs.

Similarly, TRVs for methylmercury were used in the initial risk estimation, but it is unlikely that much, if any, on-site mercury is present in the methylated form.

5.3.4.5 Individual and Population Variation

Individuals within a population vary in several life history and behavioral traits. The dose models incorporated some of this variability by estimating typical values for most model parameters. However, these models focus on adult individuals and may not accurately represent ingestion of chemicals by juvenile stages that feed in a different manner or on different prey. Even among adults of the same population, considerable individual variation in exposure may occur.

5.3.4.6 Hazard Quotients

HQs resulting from comparison of site chemicals with screening values and ingested doses with TRVs are common in ERAs. An HQ greater than 1.0 is generally considered to indicate a potential for risk (EPA 1997). However, the HQ cannot be used to determine either the probability or the magnitude of effects, and caution should be exercised in the interpretation of HQs. HQs for different chemicals cannot be summed to assess cumulative risk because of the different modes of chemical action and different levels of confidence in the underlying TRVs.

5.3.4.7 Interspecies Extrapolation

The use of allometric conversions in interspecies extrapolations is discussed in Section 4.2.5. The use of assessment endpoint species as surrogates for other related or ecologically similar taxa is supported by current guidance (EPA 1997, 1999a). However, it should be recognized that differences among taxa are not accounted for in this type of analysis and uncertainty exists about risk assessments of whole communities based on detailed analysis of only a few species.

5.4 ECOLOGICAL RELEVANCE AND IMPLICATIONS FOR RISK MANAGEMENT

Most locations along the Parcel E-2 shoreline and near the metal slag area contain copper at concentrations exceeding the ER-M of 270 mg/kg. Concentrations of lead in the same locations also exceed the ER-M of 218 mg/kg along the Parcel E-2 shoreline.

Concentrations of total Aroclors showed a distribution that was similar, but not identical, to concentrations for copper and lead. In general, concentrations of total Aroclors exceeded 1.0 mg/kg in Parcel E-2. Samples collected from other areas of the Parcel E shoreline generally had concentrations of total Aroclors less than 1.0 mg/kg. See Appendix F for more details.

5.5 CONCLUSIONS AND RECOMMENDATIONS (FROM APPENDIX F)

Neither the Panhandle Area (in Parcel E-2) nor Installation Restoration Site 02 (IR-02) Central (in Parcel E) poses unacceptable risk to benthic invertebrates, birds, or mammals. Concentrations of total Aroclors are less than 1.0 mg/kg for samples collected from the tip of the Panhandle Area to location IR01SH017. Likewise, IR-02 Central contains concentrations of metals less than ER-M values and total Aroclors less than 1.0 mg/kg.

Results from this investigation showed that approximately 75 percent of the samples for IR-02 Southeast and IR-03 contained concentrations of metals less than ER-M values, so further investigation can focus on locations represented by the 25 percent of samples that exceeded ER-M values for metals. Concentrations of total Aroclors in IR-02 Southeast and IR-03 were less than 1.0 mg/kg in all samples. The highest concentrations of total Aroclors were found in samples from along the Parcel E-2 shoreline and the Parcel E shoreline in IR-02 Northwest.

5.6 CONCLUSIONS AND RECOMMENDATIONS OF THE SLERA

The SMDP for a SLERA focuses on a determination of whether further assessment is necessary (EPA 1997, 2001). The data presented in this appendix and in the entire technical memorandum indicate that neither the Panhandle Area (in Parcel E-2) nor IR-02 Central (in Parcel E) pose unacceptable risk to benthic invertebrates, birds, or mammals. Potential risk to benthic invertebrates, birds, and mammals from several metals and PCBs in sediment in IR-02 Southeast and IR-03 cannot be ruled out. In these areas, some potentially toxic chemicals were detected at concentrations exceeding ambient concentrations and toxicological benchmarks, with complete exposure pathways to receptors.

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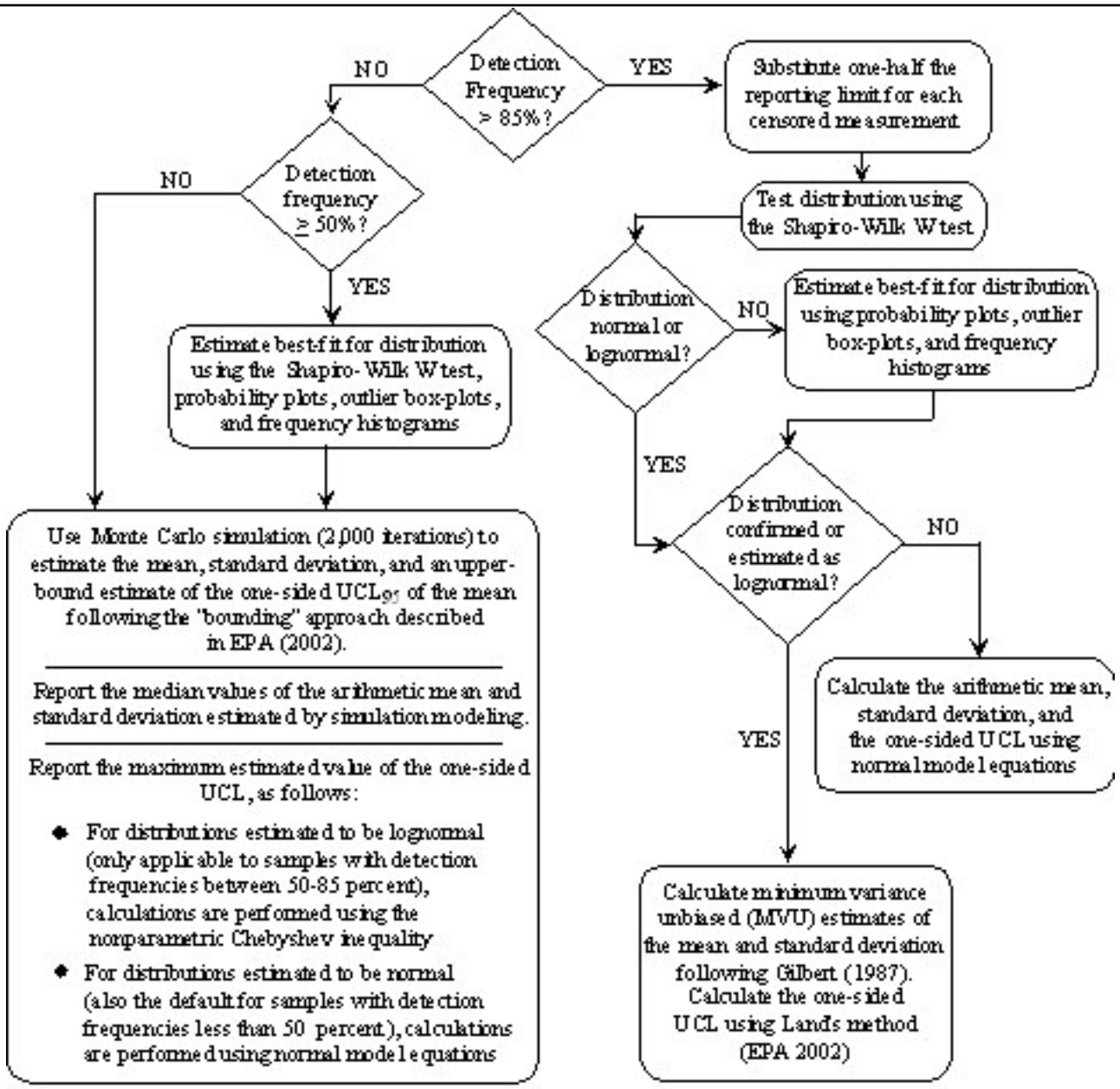
FIGURES



Notes:

UCL_{95} the one-sided upper 95 percent confidence limit of the mean

Details of the Monte Carlo model for estimating the mean, standard deviation, and upper-bound estimate of the one-side UCL provided in Figure G-2.

The exposure point concentration is equal to the lesser of the UCL_{95} and the maximum detected value

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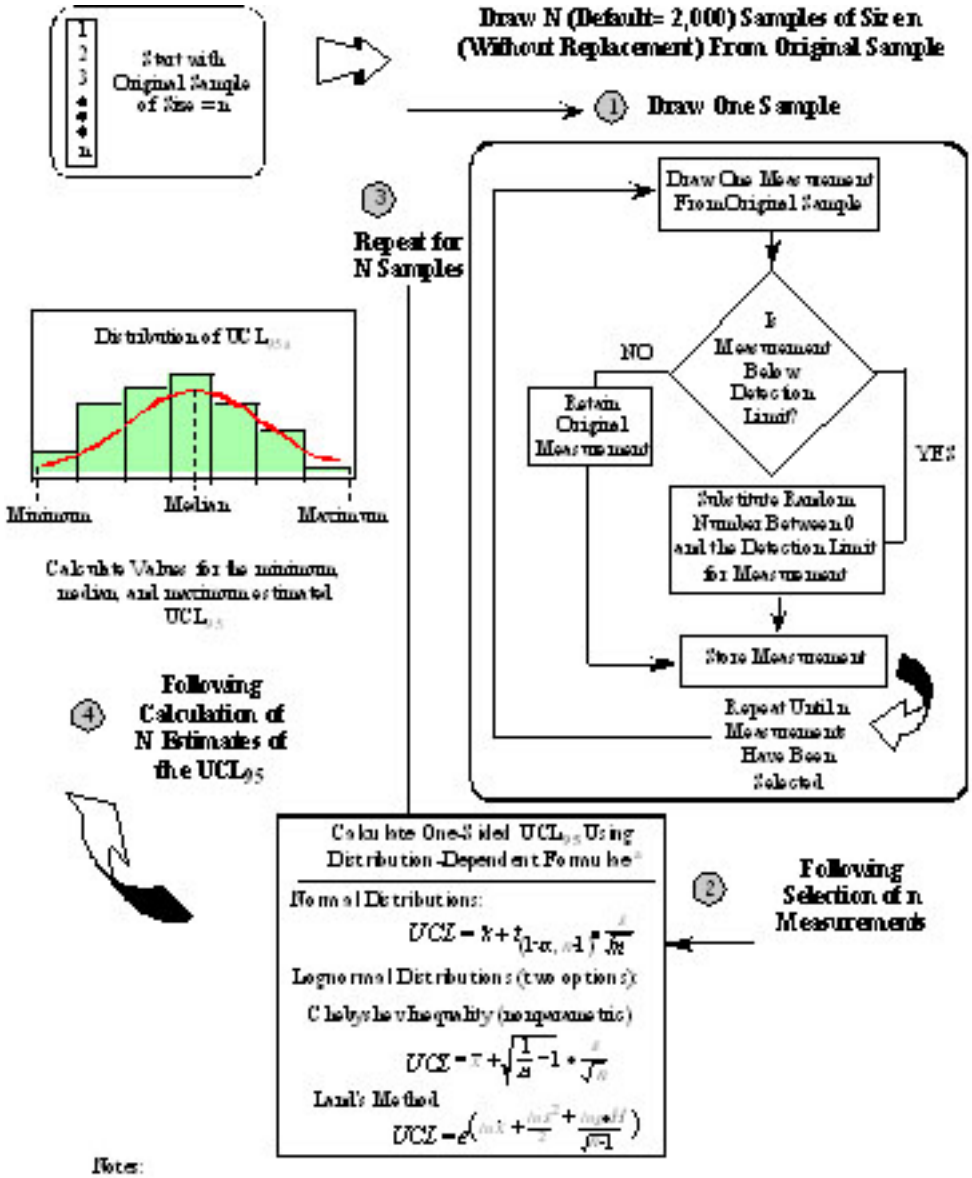
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE G-1
Summary of Methods for Calculating Descriptive Statistics and Exposure Point Concentrations

Parcels E and E-2 Shoreline Characterization
Technical Memorandum



Notes:

UCL_{95} One-sided 95 percent upper confidence limit of the mean

Source:

* U. S. Environmental Protection Agency (EPA). 2002. "Calculating Exposure Point Concentrations at Hazardous Waste Sites." OSWER 9285.6-10. December.

HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA
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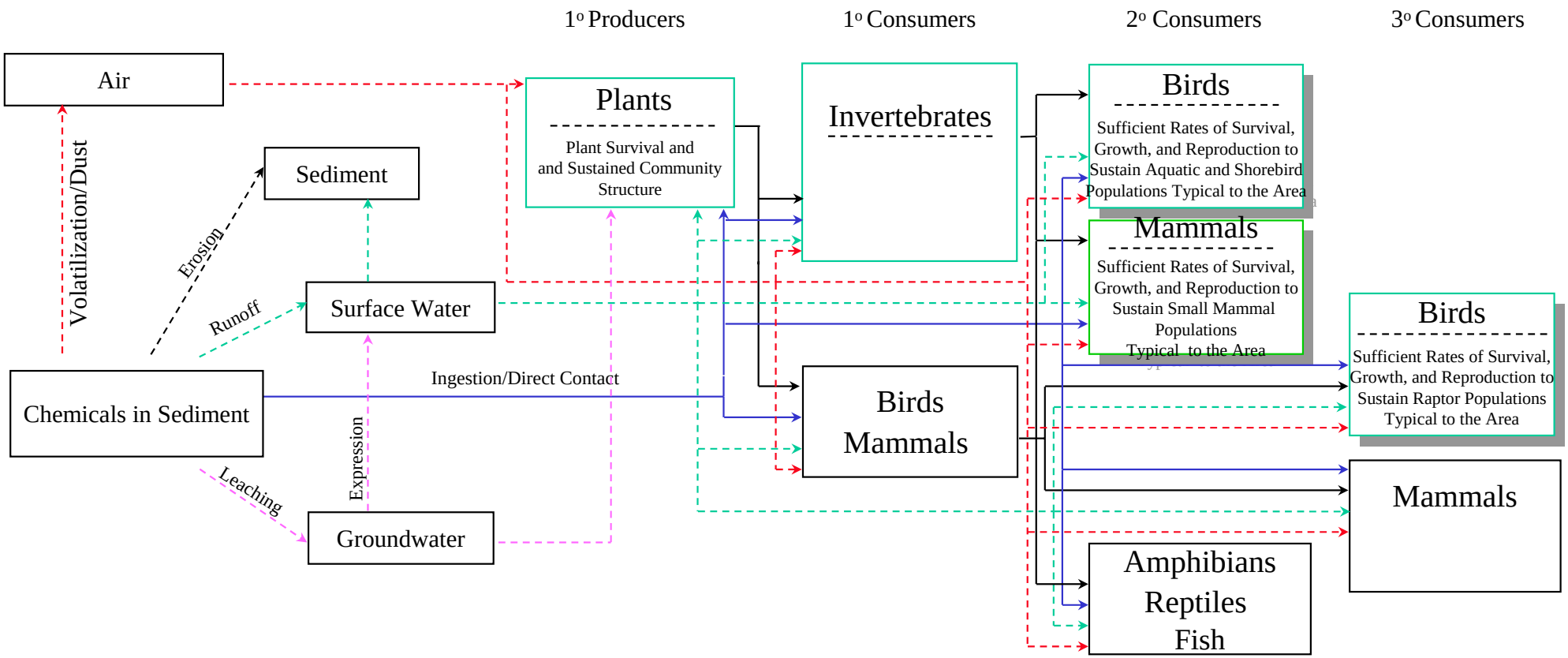
FIGURE G-2
Conceptual Model of Monte Carlo Approach for Estimating Upper Bound of the UCL for Samples with Censored Measurements

Parcels E and E-2 Shoreline Characterization Technical Memorandum



LEGEND

AIR PATHWAY

GROUNDWATER PATHWAY

SURFACE WATER PATHWAY

DIRECT CONTACT/SOIL INGESTION PATHWAY

FOOD INGESTION PATHWAY

(All Colors) INCOMPLETE OR MINOR PATHWAYS

ASSESSMENT ENDPOINTS

Measurement Endpoint(s)

Reproductive or physiological impacts to the Surf scoter (*Melanitta perspicillata* and Willet (*Catoptrophorus semipalmatus*)

Reproductive or physiological impacts to the House Mouse (*Mus musculus*)

Reproductive or physiological impacts to the Red-Tailed Hawk (*Buteo jamaicensis*)

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FIGURE G-3
CONCEPTUAL ECOLOGICAL SITE MODEL

Parcels E and E-2 Shoreline Characterization Technical Memorandum

TABLES

TABLE G-1: NUMBER AND TYPE OF ANALYSES BY SUBAREA

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Analysis	Metal Slag Area	Panhandle Area	Landfill	IR-02 Northwest	IR-02 Central	IR-02 Souteast	IR-03
Sediment (0 to 0.5 feet bgs)							
Number of samples	2	1	7	6	2	12	1
Metals	2	1	7	5	2	12	1
PCBs and Pesticides	2	1	7	6	2	12	1
SVOCs	2	1	7	5	2	12	1
VOCs	NA	NA	2	NA	NA	NA	NA
TPH	NA	NA	7	NA	NA	NA	NA
Dioxins/Furans	NA	NA	2[a]	3[a]	NA	NA	NA
Organotins	NA	NA	NA	3[b]			
Sediment (2.0 to 2.5 feet bgs)							
Number of samples	NC	NC	18	8	1	8	NC
Metals	NC	NC	17	8	1	8	NC
PCBs and Pesticides	NC	NC	17	8	1	8	NC
SVOCs	NC	NC	17	8	1	8	NC
VOCs	NC	NC	2	NA	NA	NA	NC
TPH	NC	NC	13	8	1	1	NC
Organotins	NC	NC	NA	2[b]	NA	NA	NC

Notes:

a One kiln brick sample in each subarea (n=2)

b Two black sand (sandblast waste) samples at each depth (n=4)

bgs Below ground surface
IR Installation Restoration
NA Not analyzed
NC Not collected
PCB Polychlorinated biphenyl
SVOC Semivolatile organic compound
TPH Total petroleum hydrocarbons
VOC Volatile organic compound

TABLE G-2: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (0 TO 0.5 FOOT BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

		Summary Statistics (mg/kg)													
		Sample Size		Detection Frequency (Percent)	Censored Data[a]		Detected Data		Detected and Censored Data						
Chemical	Distribution[b]	Detected[c]	Total		Minimum	Maximum	Minimum	Maximum	Median[d]	Q95[d]	Mean[e]	SD[d]	CV	UCL_{95}[f]	EPC[g]
Total Metals															
Aluminum	Lognormal	30	30	100	NA	NA	1,600	12,000	3,750	10,735	4,687.88	503.42	11	5,793.29	5,793.29
Antimony	Not Tested	11	29	38	2.20	6.30	1.40	27	3.80	22.0	4.56	6.23	137	6.98	6.98
Arsenic	Lognormal	30	30	100	NA	NA	2.10	13	4.85	12.45	5.54	0.47	8	6.51	6.51
Barium	Unknown[b]	30	30	100	NA	NA	11	1,300	30.5	739	59.76	12.35	21	95.46	95.46
Beryllium	Lognormal	22	30	73	0.11	0.22	0.06	0.36	0.12	0.33	0.12	0.07	62	0.19	0.19
Cadmium	Lognormal	29	30	97	0.54	0.54	0.13	17	3.15	14.25	4.84	1.18	24	8.64	8.64
Chromium	Lognormal	30	30	100	NA	NA	27.00	190	71.5	184.5	79.88	8.60	11	98.78	98.78
Chromium VI	Not Tested	1	15	7	0.05	0.09	0.06	0.06	0.06	0.09	0.03	0.02	59	0.07	0.06
Cobalt	Lognormal	30	30	100	NA	NA	3.50	19	8.1	17.9	9.07	0.79	9	10.71	10.71
Copper	Lognormal	30	30	100	NA	NA	41	2,600	210	2,270	430.46	101.11	23	747.76	747.76
Lead	Unknown[b]	30	30	100	NA	NA	25	5,400	115	2,661	197.71	42.67	22	324.32	324.32
Manganese	Lognormal	30	30	100	NA	NA	93	880	350	803	374.76	35.97	10	451.37	451.37
Mercury	Lognormal	30	30	100	NA	NA	0.08	2.80	0.23	2.31	0.47	0.10	21	0.76	0.76
Molybdenum	Not Tested	5	30	17	0.43	2.90	2.20	31	1.05	17.64	2.15	5.71	266	4.11	4.11
Nickel	Lognormal	30	30	100	NA	NA	33	350	92.50	344.5	124.62	16.86	14	164.50	164.5
Selenium	Not Tested	11	30	37	0.19	0.74	0.22	1.80	0.29	1.29	0.35	0.37	107	0.50	0.50
Silver	Unknown[b]	18	30	60	0.23	0.41	0.10	5.4	0.29	3.09	0.46	0.96	209	0.79	0.79
Thallium	Not Tested	6	30	20	0.19	1.00	0.25	2.3	0.32	1.92	0.40	0.53	135	0.64	0.64
Vanadium	Lognormal	30	30	100	NA	NA	13	130	29	95.9	33.52	3.7	11	41.60	41.6
Zinc	Lognormal	30	30	100	NA	NA	63	1,300	305	1,135	383.28	59.26	15	531.15	531.15
Pesticides															
4,4'-DDD	Not Tested	1	30	3	0.017	0.094	0.074	0.074	0.037	0.0830	0.02	0.0164	82	0.0319	0.03
4,4'-DDE	Not Tested	2	30	7	0.017	0.094	0.025	0.078	0.037	0.0852	0.0206	0.0168	82	0.0323	0.03
4,4'-DDT	Not Tested	11	30	37	0.019	0.45	0.04	0.85	0.072	0.7455	0.1463	0.2162	148	0.2368	0.24
Total DDT[h,i]	Not Tested	13	30	43	NA	NA	0.00	0.85	0.00	0.7455	0.1137	0.2216	195	0.1825	0.18
alpha-Chlordane	Not Tested	2	30	7	0.009	0.049	0.0047	0.027	0.0195	0.0419	0.0102	0.0077	76	0.0165	0.02
Endosulfan I	Not Tested	1	30	3	0.0089	0.049	0.04	0.036	0.019	0.0419	0.0102	0.0082	81	0.0163	0.02
Endrin	Not Tested	9	30	30	0.017	0.071	0.03	0.11	0.0415	0.1045	0.0335	0.0306	91	0.0476	0.05
gamma-Chlordane	Not Tested	3	30	10	0.0089	0.13	0.04	0.17	0.0195	0.148	0.0202	0.0357	177	0.0371	0.04
Heptachlor epoxide	Not Tested	1	30	3	0.0089	0.15	0.02	0.02	0.0195	0.1027	0.0127	0.0151	118	0.0266	0.02
SVOCs															
2-Methylnaphthalene	Not Tested	2	30	7	0.13	0.25	0.28	0.44	0.16	0.352	0.1000	0.0878	88	0.1529	0.15
Anthracene	Not Tested	5	30	17	0.13	0.25	0.11	1.0	0.15	0.5875	0.1169	0.1733	148	0.1941	0.19
Benzo(a)anthracene	Not Tested	9	30	30	0.13	0.25	0.085	1.4	0.16	1.235	0.1861	0.3022	162	0.2993	0.30
Benzo(a)pyrene	Not Tested	11	30	37	0.13	0.25	0.098	1.8	0.16	1.36	0.2040	0.3498	171	0.3316	0.33
Benzo(b)fluoranthene	Unknown[b]	15	30	50	0.14	0.25	0.079	4.3	0.17	2.65	0.3236	0.7893	244	0.5897	0.59
Benzo(g,h,i)perylene	Not Tested	6	30	20	0.13	0.25	0.077	0.39	0.16	0.3625	0.1029	0.0848	82	0.1548	0.15
Benzo(k)fluoranthene	Not Tested	8	30	27	0.13	0.25	0.11	1.9	0.16	1.46	0.1995	0.3754	188	0.3376	0.34
Chrysene	Not Tested	10	30	33	0.13	0.25	0.091	4.5	0.16	2.685	0.3086	0.8222	266	0.5834	0.58
Fluoranthene	Not Tested	11	30	37	0.13	0.25	0.18	1.8	0.17	1.745	0.2634	0.4302	163	0.4129	0.41

TABLE G-2: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

		Summary Statistics (mg/kg)													
		Sample Size		Detection Frequency (Percent)	Censored Data[a]		Detected Data		Detected and Censored Data						
Chemical	Distribution[b]	Detected[c]	Total		Minimum	Maximum	Minimum	Maximum	Median[d]	Q95[d]	Mean[e]	SD[d]	CV	UCL_{95}[f]	EPC[g]
SVOCs (Continued)															
Indeno(1,2,3-cd)pyrene	Not Tested	7	30	23	0.13	0.25	0.072	1.5	0.16	0.928	0.1484	0.2688	181	0.2557	0.26
Napthalene	Not Tested	3	30	10	0.13	0.28	0.17	0.35	0.16	0.3115	0.0989	0.0742	75	0.1468	0.15
Pentachlorophenol	Not Tested	2	30	7	1.30	2.90	0.77	1.4	1.60	2.680	0.8642	0.5139	59	1.6039	1.40
Phenanthrene	Not Tested	10	30	33	0.13	0.25	0.097	0.82	0.15	0.688	0.1481	0.1734	117	0.2248	0.22
Pyrene	Not Tested	12	30	40	0.13	0.25	0.13	2.3	0.16	1.805	0.2815	0.4749	169	0.6738	0.67
Total HMW PAH[i]	Lognormal	17	30	57	NA	NA	0.00	19.84	0.219	14.2355	2.4588	0.8099	33	5.7913	5.79
Total LMW PAH[i]	Not Tested	10	30	33	NA	NA	0.00	2.26	0.00	1.512	0.1932	0.4620	239	0.3365	0.34
VOCs															
1,4-Dichlorobenzene	Not Tested	2	2	100	NA	NA	0.0023	0.0026	0.0025	0.0026	0.0025	0.0002	9	0.0034	0.0026
4-Methyl-2-pentanone	Not Tested	1	2	50	0.013	0.0130	0.0041	0.0041	0.0086	0.013	0.0053	0.0023	43	0.0365	0.0041
Aroclors															
Aroclor-1016	Not Tested	1	29	3	0.013	0.17	0.014	0.014	0.018	0.165	0.0257	0.0344	134	0.0558	0.01
Aroclor-1221	Not Tested	1	30	3	0.025	0.34	0.028	0.028	0.035	0.3345	0.0504	0.0691	137	0.1544	0.03
Aroclor-1232	Not Tested	1	30	3	0.013	0.17	0.014	0.014	0.018	0.1645	0.025	0.0339	136	0.0522	0.01
Aroclor-1242	Not Tested	1	30	3	0.013	0.17	0.014	0.014	0.018	0.1645	0.0252	0.0341	135	0.0535	0.01
Aroclor-1248	Not Tested	1	30	3	0.013	0.17	0.014	0.014	0.018	0.1645	0.025	0.0341	136	0.0517	0.01
Aroclor-1254	Not Tested	3	30	10	0.013	0.17	0.056	3.5	0.018	1.949	0.1624	0.6424	396	0.6827	0.68
Aroclor-1260	Unknown[b]	28	29	97	0.017	0.017	0.012	9.4	0.2	9.4	3.0458	1.8816	62	23.231	9.40
Total Aroclors[i]	Unknown[b]	28	30	93	NA	NA	0.00	9.6	0.176	9.49	3.2914	1.936	59	21.4257	9.60
PCBs															
PCB-008	Not Tested	1	11	9	0.0001	0.043	0.01	0.01	0.0009	0.043	0.0041	0.0069	167	0.0139	0.01
PCB-018	Not Tested	5	12	42	0.000046	0.021	0.0002	0.11	0.0015	0.11	0.011	0.0314	287	0.0284	0.03
PCB-028	Not Tested	1	11	9	0.0001	0.03	0.0014	0.0014	0.0014	0.03	0.003	0.0051	167	0.0106	0.00
PCB-044	Lognormal	9	12	75	0.0016	0.026	0.0004	0.03	0.0021	0.03	0.0057	0.0089	158	0.0123	0.01
PCB-052	Unknown[b]	11	12	92	0.0017	0.0017	0.0011	2.34	0.0059	2.34	0.0611	0.0411	67	2.8881	2.34
PCB-101	Lognormal	12	12	100	NA	NA	0.005	1.72	0.0651	1.72	0.2604	0.1396	54	2.9006	1.72
PCB-114	Not Tested	4	12	33	0.0006	0.29	0.002	0.011	0.0084	0.29	0.0276	0.0474	172	0.0953	0.01
PCB-118	Lognormal	11	12	92	0.0300	0.03	0.0014	0.338	0.0086	0.338	0.034	0.0172	51	0.2927	0.29
PCB-126	Lognormal	10	12	83	0.0022	0.013	0.0014	0.11	0.0109	0.11	0.0234	0.0338	145	0.0414	0.04
PCB-128	Lognormal	12	12	100	NA	NA	0.0015	0.464	0.0147	0.464	0.0539	0.0288	53	0.5880	0.46
PCB-138	Lognormal	12	12	100	NA	NA	0.019	5.62	0.252	5.62	0.6818	0.3543	52	6.6069	5.62
PCB-153	Lognormal	12	12	100	NA	NA	0.025	7.2	0.313	7.2	1.1693	0.6404	55	14.3996	7.20
PCB-169	Not Tested	1	11	9	0.0006	0.29	0.027	0.027	0.0058	0.29	0.0269	0.0482	179	0.0975	0.03
PCB-170	Lognormal	12	12	100	NA	NA	0.0066	3.95	0.1225	3.95	0.4378	0.2509	57	6.8158	3.95
PCB-180	Lognormal	12	12	100	NA	NA	0.015	8.1	0.248	8.1	0.9157	0.5229	57	13.9689	8.10
PCB-187	Lognormal	12	12	100	NA	NA	0.009	3.65	0.1265	3.65	0.4914	0.2748	56	6.7173	3.65
PCB-189	Lognormal	12	12	100	NA	NA	0.0005	0.2	0.0047	0.2	0.0217	0.0119	55	0.2678	0.20
PCB-195	Lognormal	12	12	100	NA	NA	0.0017	74.2	0.0233	74.2	1.0579	0.9012	85	1,575.081	74.20
PCB-206	Lognormal	12	12	100	NA	NA	0.0007	0.221	0.0095	0.221	0.0362	0.0179	50	0.2886	0.22
PCB-209	Lognormal	9	12	75	0.0005	0.0043	0.0002	0.014	0.0025	0.014	0.0041	0.0047	114	0.0068	0.01

TABLE G-2: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

		Summary Statistics (mg/kg)[a,b]													
		Sample Size		Detection Frequency (Percent)	Censored Data		Detected Data		Detected and Censored Data						
Chemical	Distribution[c]	Detected	Total		Minimum	Maximum	Minimum	Maximum	Median[d]	Q95[d]	Mean[e]	Sde	CV	UCL_{95}[f]	EPC[g]
PCBs (Continued)															
PCB-81	Lognormal	7	11	64	0.0006	0.29	0.0030	0.38	0.006	0.38	0.0605	0.1167	193	0.2567	0.26
TOTAL PCBs[i]	Lognormal	12	12	100	NA	NA	0.1860	64.0200	2.3731	64.0200	9.1827	5.0909	55	120.0553	64.02
Dioxins															
1,2,3,4,6,7,8,9-OCDD	Not Tested	3	3	100	NA	NA	0.0006757	0.001883	0.0008178	0.001883	0.0011255	0.00065985	59	0.002238	0.0019
1,2,3,4,6,7,8,9-OCDF	Not Tested	3	3	100	NA	NA	0.0001653	0.0002565	0.0002504	0.0002565	0.00022407	0.00005098	23	0.00031	0.0003
1,2,3,4,6,7,8-HPCDD	Not Tested	3	3	100	NA	NA	0.00009641	0.0001649	0.0001284	0.0001649	0.0001299	0.00003427	26	0.000188	0.0002
1,2,3,4,6,7,8-HPCDF	Not Tested	3	3	100	NA	NA	0.00004065	0.00006793	0.00006439	0.00006793	0.00005766	0.00001483	26	0.000083	0.0001
1,2,3,4,7,8,9-HPCDF	Not Tested	3	3	100	NA	NA	0.00000408	0.0000166	0.00001457	0.0000166	0.00001175	0.00000672	57	0.000023	0.00002
1,2,3,4,7,8-HXCDD	Not Tested	3	3	100	NA	NA	0.00000153	0.00000375	0.00000178	0.00000375	0.00000235	0.00000122	52	0.000004	0.000004
1,2,3,4,7,8-HXCDF	Not Tested	3	3	100	NA	NA	0.00000704	0.00003598	0.00003096	0.00003598	0.00002466	0.00001546	63	0.000051	0.00004
1,2,3,6,7,8-HXCDD	Not Tested	3	3	100	NA	NA	0.0000051	0.00000615	0.00000582	0.00000615	0.00000569	0.00000054	9	0.000007	0.00001
1,2,3,6,7,8-HXCDF	Not Tested	3	3	100	NA	NA	0.00000578	0.00001178	0.00000871	0.00001178	0.00000876	0.0000030	34	0.000014	0.00001
1,2,3,7,8,9-HXCDD	Not Tested	3	3	100	NA	NA	0.00000333	0.00000667	0.00000375	0.00000667	0.00000458	0.00000182	40	0.000008	0.00001
1,2,3,7,8,9-HXCDF	Not Tested	1	3	33	0.00000023	0.00000062	0.00000145	0.00000145	0.00000062	0.00000145	0.00000062	0.00000073	117	0.000002	0.000001
1,2,3,7,8-PECDF	Not Tested	3	3	100	NA	NA	0.00000165	0.00000371	0.00000296	0.00000371	0.00000277	0.00000104	38	0.000005	0.000004
2,3,4,6,7,8-HXCDF	Not Tested	3	3	100	NA	NA	0.00000375	0.00000676	0.00000418	0.00000676	0.0000049	0.00000163	33	0.000008	0.00001
2,3,4,7,8-PECDF	Not Tested	3	3	100	NA	NA	0.00000368	0.00000762	0.00000655	0.00000762	0.00000595	0.00000204	34	0.000009	0.00001
2,3,7,8-TCDF	Not Tested	3	3	100	NA	NA	0.00000419	0.00000762	0.00000617	0.00000762	0.00000599	0.00000172	29	0.000009	0.00001
Total HPCDD	Not Tested	3	3	100	NA	NA	0.00017500	0.0003677	0.0002248	0.0003677	0.00025583	0.00010003	39	0.000424	0.0004
Total HPCDF	Not Tested	3	3	100	NA	NA	0.0001409	0.0001881	0.0001807	0.0001881	0.0001699	0.00002539	15	0.000213	0.0002
Total HXCDD	Not Tested	3	3	100	NA	NA	0.00002209	0.0000337	0.0000290	0.0000337	0.00002826	0.00000584	21	0.000038	0.00003
Total HXCDF	Not Tested	3	3	100	NA	NA	0.00006236	0.0001108	0.0001102	0.0001108	0.00009445	0.0000278	29	0.000141	0.0001
Total PECDD	Not Tested	1	3	33	0.0000003	0.0000016	0.00000141	0.00000141	0.00000141	0.00000162	0.00000079	0.00000068	86	0.000002	0.0000014
Total PECDF	Not Tested	3	3	100	NA	NA	0.00003628	0.00007965	0.00005713	0.00007965	0.00005769	0.00002169	38	0.000094	0.0001
Total TCDD	Not Tested	3	3	100	NA	NA	0.00000368	0.00000469	0.0000041	0.00000469	0.00000416	0.00000051	12	0.000005	0.000005
Total TCDF	Not Tested	3	3	100	NA	NA	0.00003597	0.0001559	0.00005623	0.0001559	0.0000827	0.0000642	78	0.000191	0.0002
TEQ[j]	Not Tested	3	3	100	NA	NA	0.0000069	0.00001428	0.00001177	0.00001428	0.00001098	0.00000376	34.2	0.00001731	0.00001
Organotins															
Dibutyltin	Not Tested	2	3	67	0.011	0.011	0.01	0.06	0.01	0.06	0.02	0.03	113	0.07	0.06
Tetrabutyltin	Not Tested	1	3	33	0.01	0.011	0.01	0.01	0.01	0.01	0.01	0.00	58	0.02	0.01
Tributyltin	Not Tested	2	3	67	0.011	0.011	0.03	0.30	0.03	0.30	0.11	0.16	144	0.39	0.30
TPHs (Extractable)															
Diesel-range organics	Normal	7	7	100	NA	NA	11.00	200.00	43.00	200.00	77.29	71.75	93	129.98	129.98
Motor oil-range organics	Normal	7	7	100	NA	NA	64.00	420.00	160.00	420.00	206.71	130.72	63	302.72	302.72

TABLE G-2: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Notes:

a	For samples with less than 15 percent censored data, one half the reporting limit was substituted for each nondetect measurement in all calculations.
b	Reported detection frequencies for total TEQs reflect the percentage of samples that contain at least one detected congener. For higher frequencies of censored data, all calculations were performed using stochastic modeling following the "bounding" approach presented in EPA (2002) as described below under notes d and e.
c	For all cases with at least 5 detected samples and a detection frequency greater than or equal to 50 percent, tested using the Shapiro-Wilk W test (alpha equal to 0.05). Distributions confirmed as normal or lognormal are listed as "Normal" or Lognormal." For cases where distribution testing was not conducted, the distribution is listed as "Not Tested." For cases in which distributions could not be confirmed using the Shapiro-Wilk W test, distributions were estimated using probability plots, box plots, and frequency histograms. Distributions estimated to be normal or lognormal are listed as Unknown [a} or Unknown[b], respectively.
d	Estimated for all samples using a nonparametric approach based on rank ordering of the data (reported values used for all censored data).
e	For all samples with at least one detection, SD was calculated using distribution-dependent formulae. For confirmed or estimated normal distributions with fewer than 15 percent censored data, SD was calculated using equations 4.3 (mean) and 4.4 (standard deviation) in Gilbert (1987). For confirmed or estimated lognormal distributions with fewer than 15 percent censored data, these are the minimum variance unbiased estimators in accordance with equations 13.3 (mean) and 13.5 (standard deviation) in Gilbert (1987). All other calculations use the median values generated from 2,000 iterations of a Monte Carlo model following the "bounding" approach described in EPA (2002) (see conceptual model and text in the methods section for more details). All calculations of the mean and SD for samples with greater than 15 percent censored data use normal model equations.
f	For confirmed or estimated normal distributions with fewer than 15 percent censored data, calculated using Equation 11.6 in Gilbert (1987). For confirmed or estimated lognormal distributions with fewer than 15 percent censored data, UCL_{95} were calculated using Land's method (EPA 1992a; Gilbert 1987). Calculations for all cases with greater than 15 percent censored data use the maximum value generated from 2,000 iterations of a Monte Carlo model following the "bounding" approach described in EPA (2002) (see conceptual model and text in the methods section for more details). Calculations are based on either normal or lognormal (nonparametric Chebyshev inequality) model equations. Normal model equations are the default for all distributions listed as "Not Tested."
g	The lesser of the UCL_{95} and the maximum detected concentration.
h	Total DDTs is the sum of the 4,4'- congeners for DDD, DDE, and DDT.
i	For the calculation of total DDTs, PCBs, Aroclors, HMW and LMW PAHs, and TEQs, zero was substituted for all nondetected congeners.

bgs	Below ground surface	OCDF	Octachlorodibenzofuran
CV	Coefficient of variation ([SD/mean]*100)	PAH	Polynuclear aromatic hydrocarbons
DDD	Dichlorodiphenyldichloroethane	PCB	Polychlorinated biphenyl
DDE	Dichlorodiphenyldichloroethene	PECDD	Pentachlorodibenzodioxin
DDT	Dichlorodiphenyltrichloroethane	PECDF	Pentachlorodibenzofuran
EPA	U.S. Environmental Protection Agency	Q95	95th percentile (quantile)
EPC	Exposure point concentration	SD	Standard deviation
HMW	High molecular-weight	SVOC	Semivolatile organic chemical
HPCDD	Heptachlorodibenzodioxin	TCDD	Tetrachlorodibenzofuran
HPCDF	Heptachlorodibenzofuran	TCDF	Tetrachlorodibenzofuran
HXCDD	Hexachlorodibenzodioxin	TEQ	Toxic Equivalences
HXCDF	Hexachlorodibenzofuran	TPH	Total petroleum hydrocarbon
LMW	Low molecular-weight	UCL_{95}	One-sided 95 percent upper confidence limit of the mean
mg/kg	Milligram per kilogram	Unknown[b]	Distribution assumed to be lognormal based on examination of probability plots and outlier box plots
NA	Not applicable	VOC	Volatile organic chemical
OCDD	Octachlorodibenzodioxin		

Sources:

Gilbert, R.O. 1987. *Statistical Methods for Environmental Pollution Monitoring*. John Wiley & Sons, Inc., New York, NY.

EPA. 1992a. "Supplemental Guidance to RAGS: Calculating the Concentration Term". Intermittent Bulletin, Volume 1, Number 1. Publication 9285.7-081.

EPA. 2002. "Calculating Exposure Point Concentrations at Hazardous Waste Sites. Draft." Office of Solid Waste and Emergency Response. 9285.6-10. Washington, DC. July .

TABLE G-3: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (2 TO 2.5 FEET BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

		Summary Statistics (mg/kg)[a,b]													
		Sample Size		Detection Frequency (Percent)	Censored Data		Detected Data		Detected and Censored Data						
Chemical	Distribution[c]	Detected	Total		Minimum	Maximum	Minimum	Maximum	Median[d]	Q95[d]	Mean[e]	SD[e]	CV	UCL_{95}[f]	EPC[g]
Total Metals															
Aluminum	Lognormal	35	35	100	NA	NA	900	14,000	3,000	14,000	3,867.3	527.35	14	5,113.55	5,113.55
Antimony	Not Tested	12	35	34	2.70	11.00	4.4	270	4.9	85.2	14.46	45.3	313	28.06	28.06
Arsenic	Unknown[b]	34	35	97	0.27	0.27	2.3	11	3.7	9.4	4.92	0.64	13	6.4	6.4
Barium	Lognormal	35	35	100	NA	NA	7.5	270	27	190	50.82	9.65	19	77.17	77.17
Beryllium	Unknown[b]	20	35	57	0.08	0.23	0.05	0.44	0.13	0.42	0.14	0.11	82	0.23	0.23
Cadmium	Lognormal	35	35	100	NA	NA	0.38	13	2.1	8.12	2.72	0.33	12	3.48	3.48
Chromium	Lognormal	35	35	100	NA	NA	18	400	77	312	96.36	13.91	14	129.95	129.95
Chromium VI	Not Tested	7	21	33	0.05	0.08	0.16	1.7	0.07	1.63	0.26	0.44	172	0.43	0.43
Cobalt	Lognormal	35	35	100	NA	NA	1.3	67	5.7	27.8	8.39	1.23	15	11.37	11.37
Copper	Unknown[b]	35	35	100	NA	NA	3.3	4,800	850	4,640	3,335.5	1,896.41	57	17,675.47	4,800
Lead	Unknown[b]	35	35	100	NA	NA	2.8	1,000	300	1,000	655.24	267.88	41	1,941.06	1,000
Manganese	Lognormal	35	35	100	NA	NA	43	800	270	752	351.52	51.89	15	477.87	477.87
Mercury	Unknown[b]	34	35	97	0.05	0.05	0.07	24	1.8	20.8	8.42	4.17	49	33.51	24
Molybdenum	Not Tested	10	35	29	0.88	2.10	2.5	8.1	1.5	7.22	1.78	2.1	118	2.54	2.54
Nickel	Unknown[b]	35	35	100	NA	NA	17	2,200	41	672	91.1	16.64	18	135.66	135.66
Selenium	Not Tested	15	35	43	0.13	0.34	0.21	2.2	0.29	1.48	0.4	0.45	114	0.55	0.55
Silver	Unknown[b]	18	35	51	0.16	0.36	0.15	2.3	0.27	1.5	0.3	0.41	139	0.62	0.62
Thallium	Not Tested	4	35	11	0.15	0.96	0.24	1.9	0.27	1.82	0.29	0.43	150	0.47	0.47
Vanadium	Lognormal	35	35	100	NA	NA	4.8	91	21	88.6	27.38	3.79	14	36.4	36.4
Zinc	Unknown[b]	35	35	100	NA	NA	13	4,700	530	3,340	929.79	309.81	33	2,160.91	2,160.91
Pesticides															
4,4'-DDD	Not Tested	3	35	9	0.019	1.4	0.016	0.058	0.042	0.456	0.0469	0.1173	250	0.1401	0.06
4,4'-DDE	Not Tested	6	35	17	0.019	1.4	0.023	0.28	0.042	0.528	0.0617	0.1235	200	0.1548	0.15
4,4'-DDT	Not Tested	5	35	14	0.020	5.1	0.12	30	0.120	10.08	1.1392	5.0518	443	2.7215	2.72
Total DDT[h,i]	Not Tested	11	35	31	NA	NA	0.00	30.00	0.00	6.696	0.9288	5.062	545	2.376	2.38
alpha-Chlordane	Not Tested	4	35	11	0.0098	0.7	0.011	0.095	0.022	0.216	0.0247	0.0597	242	0.0695	0.07
beta-BHC	Not Tested	4	35	11	0.0098	0.7	0.008	0.074	0.022	0.26	0.0281	0.06	213	0.0748	0.07
Dieldrin	Not Tested	3	35	9	0.019	13.0	0.077	0.80	0.072	3.24	0.2974	1.08	363	1.1277	0.80
Endosulfan I	Not Tested	1	35	3	0.0098	0.7	0.015	0.015	0.021	0.212	0.0224	0.0604	270	0.0679	0.02
Endrin	Not Tested	9	35	26	0.0190	1.4	0.041	1.30	0.045	1.32	0.1209	0.2581	213	0.2358	0.24
gamma-BHC	Not Tested	1	35	3	0.0098	0.7	0.032	0.032	0.021	0.452	0.0273	0.0684	251	0.0808	0.03
gamma-Chlordane	Not Tested	5	35	14	0.0098	0.7	0.017	0.54	0.022	0.70	0.0532	0.1239	233	0.1247	0.12
Heptachlor epoxide	Not Tested	1	35	3	0.0098	0.7	0.049	0.049	0.023	0.532	0.0364	0.0814	223	0.0961	0.05
Methoxychlor	Not Tested	5	35	14	0.0980	7.0	0.12	0.79	0.22	2.12	0.2473	0.571	231	0.7029	0.70
SVOCs															
2-Methylnaphthalene	Not Tested	4	35	11	0.13	2.8	0.096	0.28	0.17	0.784	0.1369	0.2252	165	0.3235	0.28
4-Nitrophenol	Not Tested	1	35	3	1.40	28	0.83	0.83	1.70	7.84	1.2299	2.2577	184	3.105	0.83
Acenaphthene	Not Tested	2	35	6	0.13	2.8	0.13	0.14	0.17	0.784	0.126	0.2282	181	0.315	0.14
Anthracene	Not Tested	8	35	23	0.13	2.8	0.086	0.68	0.17	1.104	0.1628	0.2491	153	0.3509	0.35
Benzo(a)anthracene	Unknown[b]	20	35	57	0.14	0.28	0.11	1.6	0.20	1.44	0.2983	0.3667	123	0.5806	0.58

TABLE G-3: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (2 TO 2.5 FEET BGS) (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

		Summary Statistics (mg/kg)													
		Sample Size		Detection Frequency (Percent)	Censored Data[a]		Detected Data		Detected and Censored Data						
Chemical	Distribution[b]	Detected[c]	Total		Minimum	Maximum	Minimum	Maximum	Median[d]	Q95[d]	Mean[e]	SD[d]	CV	UCL_{95}[f]	EPC[g]
SVOCs (Continued)															
Benzo(a)pyrene	Unknown[b]	23	35	66	0.16	2.8	0.10	1.2	0.22	1.52	0.3294	0.3142	95	0.7362	0.74
Benzo(b)fluoranthene	Unknown[b]	26	35	74	0.17	0.28	0.12	3.8	0.28	2.28	0.5388	0.7272	135	1.083	1.08
Benzo(g,h,i)perylene	Not Tested	9	35	26	0.14	2.8	0.097	0.88	0.17	1.264	0.1904	0.2689	141	0.3862	0.39
Benzo(k)fluoranthene	Unknown[b]	18	35	51	0.14	2.8	0.15	1.2	0.21	1.52	0.3108	0.3309	106	0.73	0.73
Carbazole	Not Tested	1	35	3	0.68	14	0.69	0.69	0.85	3.92	0.6281	1.1659	186	1.5982	0.69
Chrysene	Unknown[b]	22	35	63	0.14	0.28	0.09	2.2	0.30	1.72	0.4653	0.5128	110	0.8514	0.85
Dibenz(a,h)anthracene	Not Tested	3	34	9	0.14	2.8	0.099	0.26	0.17	0.91	0.1323	0.2316	175	0.3259	0.26
Fluoranthene	Unknown[b]	21	35	60	0.14	0.28	0.15	2.8	0.24	2.32	0.4417	0.5952	135	0.8903	0.89
Fluorene	Not Tested	2	35	6	0.13	2.8	0.072	0.14	0.17	0.784	0.1255	0.2301	183	0.3049	0.14
Indeno(1,2,3-cd)pyrene	Unknown[b]	18	34	53	0.14	2.8	0.11	0.83	0.21	1.323	0.2642	0.2687	102	0.6689	0.67
Napthalene	Not Tested	3	35	9	0.13	2.8	0.31	0.35	0.17	0.84	0.1427	0.2285	160	0.3349	0.33
Pentachlorophenol	Not Tested	1	35	3	1.40	28	0.99	0.99	1.70	7.84	1.2326	2.2002	178	3.1256	0.99
Phenanthrene	Unknown[b]	20	35	57	0.14	0.22	0.078	2.0	0.17	1.36	0.2498	0.3866	155	0.5505	0.55
Phenol	Not Tested	4	35	11	0.70	14	0.46	0.73	0.85	3.92	0.6464	1.1489	178	1.5534	0.73
Pyrene	Unknown[b]	25	35	71	0.14	0.28	0.12	3.9	0.31	2.70	0.661	0.8459	128	1.2919	1.29
Total HMW PAH[i]	Lognormal	29	35	83	NA	NA	0.00	14.3	2.22	13.62	4.1676	1.0411	25	7.5105	7.51
Total LMW PAH[i]	Lognormal	20	35	57	NA	NA	0.00	2.0	0.11	1.76	0.6355	0.137	22	1.0369	1.04
VOCs															
1,3-Dichlorobenzene	Not Tested	1	2	50	0.006	0.006	0.0032	0.0032	0.0046	0.006	0.003	0.0011	37	0.0134	0.0032
1,4-Dichlorobenzene	Not Tested	2	2	100	NA	NA	0.0088	0.017	0.0129	0.017	0.0129	0.0041	32	0.0343	0.02
4-Methyl-2-Pentanone	Not Tested	1	2	50	0.012	0.012	0.0022	0.0022	0.0071	0.012	0.004	0.0026	64	0.038	0.0022
Carbon Disulfide	Not Tested	1	2	50	0.0052	0.0052	0.0017	0.0017	0.0035	0.0052	0.0021	0.0009	42	0.0145	0.0017
Aroclors															
Aroclor-1016	Not Tested	2	35	6	0.013	13.0000	0.013	0.017	0.033	4.6	0.3198	1.1309	354	1.2017	0.02
Aroclor-1221	Not Tested	2	35	6	0.027	26.0000	0.026	0.034	0.065	9.2	0.6499	2.2933	353	2.4223	0.03
Aroclor-1232	Not Tested	2	35	6	0.013	13.0000	0.013	0.017	0.033	4.6	0.322	1.1249	349	1.2122	0.02
Aroclor-1242	Not Tested	2	35	6	0.013	13.0000	0.013	0.017	0.033	4.6	0.3308	1.1612	351	1.202	0.02
Aroclor-1248	Not Tested	2	35	6	0.013	13.0000	0.013	0.017	0.033	4.6	0.3278	1.1772	359	1.1921	0.02
Aroclor-1254	Not Tested	2	35	6	0.370	13.0000	0.013	13	0.034	13	0.6949	2.4197	348	1.8159	1.82
Aroclor-1260	Unknown[b]	30	35	86	0.016	0.0190	0.015	270	1.4	174	58.4061	48.2695	83	1,639.01	270
Total Aroclors[i]	Lognormal	30	35	86	NA	NA	0.00	270	1.4	174	39.928	26.9199	67	349.37	270
Organotins															
Tributyltin	Not Tested	1	2	50	0.011	0.011	0.009	0.009	0.010	0.011	0.0073	0.0025	34	0.0329	0.01
TPH (Extractable)															
Diesel-Range Organics	Lognormal	17	17	100	NA	NA	22	1,700	410	1,700	679.58	279.21	41	2,607.73	1,700
Motor Oil-Range Organics	Lognormal	17	17	100	NA	NA	73	2,800	710	2,800	966.81	277.08	29	2,110.48	2,110.48
TPH (Purgeable)															
Gasoline-Range Organics	Not Tested	5	17	29	0.18	5.2	0.15	820	0.25	820	48.8	198.74	407	133.13	133.13

TABLE G-3: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (2 TO 2.5 FEET BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Notes:

a	For samples with less than 15 percent censored data, one half the reporting limit was substituted for each non-detect measurement in all calculations.
b	Reported detection frequencies for total TEQs reflect the percentage of samples that contain at least one detected congener. For higher frequencies of censored data, all calculations were performed using stochastic modeling following the "bounding" approach presented in EPA (2002) as described below under notes d and e.
c	For all cases with at least 5 detected samples and a detection frequency greater than or equal to 50 percent, tested using the Shapiro-Wilk W test (alpha equal to 0.05). Distribution confirmed as normal or lognormal are listed as "Normal" or Lognormal." For cases where distribution testing was not conducted, the distribution is listed as "Not Tested." For cases in which distributions could not be confirmed using Shapiro-Wilk W test, distributions were estimated using probability plots, box plots, and frequency histograms. Distributions estimated to be normal or lognormal are listed as Unknown [a] or Unknown [b], respectively.
d	Estimated for all samples using a nonparametric approach based on rank ordering of the data (reported values used for all censored data)
e	For all samples with at least one detection, SD was calculated using distribution-dependent formulae. For confirmed or estimated normal distributions with fewer than 15 percent censored data, SD was calculated using equations 4.3 (mean) and 4.4 (standard deviation) in Gilbert (1987). For confirmed or estimated lognormal distributions with fewer than 15 percent censored data, these are the minimum variance unbiased estimators in accordance with equations 13.3 (mean) and 13.5 (standard deviation) in Gilbert (1987). All other calculations use the median values generated from 2,000 iterations of a Monte Carlo model following the "bounding" approach described in EPA (2002) (see conceptual model and text in the methods section for more details). All calculations of the mean and SD for samples with greater than 15 percent censored data use normal model equations.
f	For confirmed or estimated normal distributions with fewer than 15 percent censored data, calculated using Equation 11.6 in Gilbert (1987). For confirmed or estimated lognormal distributions with fewer than 15 percent censored data, UCL_{95} were calculated using Land's method (EPA 1992a; Gilbert 1987). Calculations for all cases with greater than 15 percent censored data use the maximum value generated from 2,000 iterations of a Monte Carlo model following the "bounding" approach described in EPA (2002) (see conceptual model and text in the methods section for more details). Calculations are based on either normal or lognormal (nonparametric Chebyshev inequality) model equations. Normal model equations are the default for all distributions listed as "Not Tested."
g	The lesser of the UCL_{95} and the maximum detected concentration.
h	Total DDTs is the sum of the 4,4'- congeners for DDD, DDE, and DDT.
i	For the calculation of total DDTs, PCBs, Aroclors, HMW and LMW PAHs, and TEQs, zero was substituted for all nondetected congeners.
bgs	Below ground surface
BHC	Benzene hexachloride
CV	Coefficient of variation ([SD/mean]*100)
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
EPA	U.S. Environmental Protection Agency
EPC	Exposure point concentration
HMW	High molecular-weight
LMW	Low molecular-weight
NA	Not applicable
PAH	Polynuclear aromatic hydrocarbons
Q95	95th percentile (quantile)
SD	Standard deviation
SVOC	Semivolatile organic chemical
TEQ	Toxic equivalent
TPH	Total petroleum hydrocarbon
UCL_{95}	The one-sided 95 percent upper confidence limit of the mean
Unknown[b]	Distribution assumed to be lognormal based on examination of probability plots and outlier box plots
VOC	Volatile organic chemical

Sources:

Gilbert, R. O. 1987. *Statistical Methods for Environmental Pollution Monitoring* . John Wiley & Sons, Inc., New York, NY.

EPA. 1992a. "Supplemental Guidance to RAGS: Calculating the Concentration Term". Intermittent Bulletin, Volume 1, Number 1. Publication 9285.7-081.

EPA. 2002. "Calculating Exposure Point Concentrations at Hazardous Waste Sites. Draft." Office of Solid Waste and Emergency Response. 9285.6-10. Washington, D.C. July .

TABLE G-4: SCREENING CONCENTRATIONS FOR BENTHIC INVERTEBRATES

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Chemical	Other Proposed Screening Value	Screening Criteria			Detection Information			
		ER-L (mg/kg)	ER-M (mg/kg)	SFBA[a] (mg/kg)	Range (mg/kg)	Area with Highest Detected Values	Detection Frequency (%)	Sampling Locations
Inorganics								
Aluminum	NA	NA	NA	NA	900 to 14,000	Landfill area bayward of sheet-pile wall	100	All area
Antimony	NA	2[b]	25[b]	NA	1.40 to 270	Landfill area bayward of sheet-pile wall	38	All areas except black sand area
Arsenic	NA	8.2[c]	70[c]	15.3	1.10 to 13.0	Metal debris reef area	99	All areas
Barium	NA	NA	NA	NA	7.50 to 1,300	Landfill area bayward of sheet-pile wall	100	All areas
Beryllium	NA	NA	NA	NA	0.05 to 0.72	Landfill area bayward of sheet-pile wall	70	Most areas
Cadmium	NA	1.2[c]	9.6[c]	0.33	0.13 to 17.0	Panhandle area	99	All areas
Chromium	NA	81[c]	3702	114	18 to 400	Landfill area bayward of sheet-pile wall	100	All areas
Cobalt	NA	NA	NA	NA	1.30 to 67	Landfill area bayward of sheet-pile wall	100	All areas
Copper	NA	34[c]	270[c]	68.1	3.30 to 5,300	Landfill area bayward of sheet-pile wall	100	All areas
Lead	NA	46.7[c]	218[c]	43.2	2.80 to 5,400	Panhandle area	100	All areas
Magnesium	NA	NA	NA	NA	790 to 110,000	Landfill area bayward of sheet-pile wall	100	All areas
Manganese	NA	NA	NA	NA	43 to 880	Landfill area bayward of sheet-pile wall	100	All areas
Mercury	NA	0.15[c]	0.71[c]	0.43	0.07 to 24.0	Kiln brick area	99	All areas
Molybdenum	NA	NA	NA	NA	2.2 to 3.1	Metal debris reef area	23	All areas
Nickel	NA	20.9[c]	51.6[c]	112	15 to 2,200	Landfill area bayward of sheet-pile wall	100	All areas
Selenium	NA	NA	NA	0.65	0.21 to 2.2	Landfill bayward of sheet-pile wall	47	All areas
Silver	NA	1[c]	3.7[c]	0.58	0.10 to 5.4	Metal debris reef area	52	All areas
Thallium	NA	NA	NA	NA	0.24 to 2.3	Landfill area bayward of sheet-pile wall	18	All except kiln brick area
Vanadium	NA	NA	NA	NA	4.8 to 210	Landfill area bayward of sheet-pile wall	100	All areas
Zinc	NA	150[c]	410[c]	158	13 to 4,700	Metal debris reef area	100	All areas

TABLE G-4: SCREENING CONCENTRATIONS FOR BENTHIC INVERTEBRATES (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Chemical	Other Proposed Screening Value	Screening Criteria			Detection Information			
		ER-L (mg/kg)	ER-M (mg/kg)	SFBA[a] (mg/kg)	Range (mg/kg)	Area with Highest Detected Values	Detection Frequency (%)	Sampling Locations
Organics								
LMW PAHs[f]	NA	0.552[c]	3.16[c]	0.434	0.00 to 25.7	Landfill area bayward of sheet-pile wall	NA	All areas
HMW PAHs[g]	NA	1.7[c]	9.6[c]	3.06	0.00 to 26.27	Landfill area bayward of sheet-pile wall	NA	All areas
Total PAHs[h]	NA	4.022[c]	44.792[c]	3.39	0.00 to 51.97	Landfill area bayward of sheet-pile wall	NA	All areas
Total DDTs[i]	NA	0.00158[c]	0.046[c]	0.007	0.00 to 40.0	Landfill area bayward of sheet-pile wall	Na	All areas
Dieldrin	NA	0.00002[b]	0.008[b]	0.00044	0.077 to 0.8	Landfill area bayward of sheet-pile wall	5	Limited
Endrin	NA	0.0002[b]	0.045[b]	NA	0.025 to 1.3	Landfill area bayward of sheet-pile wall	27	Limited
Alpha BHC	NA	NA	NA	NA	0.056 to 0.08	Landfill area bayward of sheet-pile wall	2[d]	Limited
Beta BHC	NA	NA	NA	NA	0.008 to 0.07	Landfill area bayward of sheet-pile wall	5[d]	Limited
Gamma BHC	NA	NA	NA	NA	0.032 to 0.03	Landfill area bayward of sheet-pile wall	1[d]	Limited
Endosulfan I	NA	NA	NA	NA	0.015 to 0.04	Landfill area bayward of sheet-pile wall	2[d]	Limited
Heptachlor epoxide	NA	NA	NA	NA	0.02 to 0.05	Landfill area bayward of sheet-pile wall	2[d]	Limited
Methoxychlor	NA	NA	NA	NA	0.12 to 24.0	Landfill area bayward of sheet-pile wall	9[d]	Limited
Total Aroclors[j]	NA	0.0227[c]	0.18[c]	0.0148	0.012 to 1,900	Landfill area bayward of sheet-pile wall	92	All areas
Total PCBs[k]	NA	0.0227[c]	0.18[c]	0.0148	0.0001 to 64.02	Landfill area bayward of sheet-pile wall	100	All areas
Dibutyltin	0.025[e]	NA	NA	NA	0.01 to 0.06	Black sand (sandblast waste) area	40	Black sand (sandblast waste) area
Tributyltin	0.025[e]	NA	NA	NA	0.01 to 0.30	Black sand (sandblast waste) area	60	Black sand (sandblast waste) area
Dioxins and Furans	NA	NA	NA	NA	0.0001 to 0.0000118	Kiln brick area	100	Kiln brick area

TABLE G-4: SCREENING CONCENTRATIONS FOR BENTHIC INVERTEBRATES (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Notes:

a	Ambient concentration based on the 85th percentile of 100 percent fines
b	Values based on Long and Morgan (1991)
c	Values based on Long and others (1995)
d	Value represents actual number of detections and not percentage of detections
e	EPA recommended value (EPA 1996)
f	LMW PAHs represents the sum of acenapthylene, acenapthylene, anthracene, 2-methylnaphthalene, fluorene, naphthalene, and phenanthrene concentrations
g	HMW PAHs represents the sum of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, and pyrene concentrations
h	Sum of the LMW and HMW PAH concentrations
i	Sum of DDD, DDE, and DDT concentrations
j	Sum of seven individual Aroclor concentrations
k	Two times the sum of the concentrations of the 18 congeners

BHC	Benzene hexachloride
COPEC	Chemical of potential ecological concern
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
EPA	U.S. Environmental Protection Agency
ER-L	Effects range-low
E-M	Effects range-median
HMW	High molecular-weight
LMW	Low molecular-weight
mg/kg	Milligram per kilogram
NA	Not applicable
PAH	Polynuclear aromatic hydrocarbon
SFBA	San Francisco Bay ambient

Sources:

EPA. 1996. "EcoTox Thresholds." *Eco Update*. Volume 3. Number 2. EPA 540/F-95/038.

Long, E.R., D.D. MacDonald, S.L. Smith, and F.D. Calder. 1995. "Incidence of Adverse Biological Effects Within Ranges of Chemical Concentrations in Marine and Estuarine Sediments." *Environmental Management*. Volume 19. Number 1. Pages 81 to 97.

Long, E.R, and L.G. Morgan. 1991. "The Potential for Biological Effects of Sediment-Sorbed Contaminants Tested in the National Status and Trends Administration Program." National Oceanic and Atmospheric Administration, Technical Memorandum NOS OMA 52. Seattle, Washington. March

TABLE G-5: TOXICITY REFERENCE VALUES FOR BIRDS AND MAMMALS
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Chemical	Birds		Mammals	
	High TRV	Low TRV	High TRV	Low TRV
Inorganic Chemicals (mg/kg-day)				
Aluminum[a]	--	109.7	19.3	1.93
Antimony[a]	--	--	1.25	0.125
Arsenic[b]	22.01	5.5	4.7	0.32
Barium[a]	41.7	20.8	19.8	5.1
Beryllium[a]	--	--	--	0.66
Cadmium[b]	10.43	0.08	2.64	0.06
Chromium III[a]	5.0	1.0	--	2737.0
Cobalt[b]	--	--	20.0	1.2
Copper[b]	52.26	2.3	631.58	2.67
Lead[b]	8.75	0.014	240.64	0.0015
Manganese[b]	776	77.6	159.09	13.7
Mercury[b]	0.18	0.039	4.0 (rodents) 0.27 (large mammal)	0.25 (rodents) 0.027 (large mammal)
Nickel[b]	55.16	1.38	31.6	0.133
Selenium[b]	0.93	0.23	1.21	0.05
Thallium[b]	--	--	1.43	0.48
Vanadium[a]	--	11.4	2.1	0.21
Zinc[b]	172	17.2	411.43	9.608
Organic Chemicals (mg/kg-day)				
Bis(2-ethylhexyl)phthalate[a]	--	1.1	183	18.3
Diethylphthalate[a]	--	--	--	4583
Benzo(a)pyrene[b]	--	--	32.79	1.31
Naphthalene[b]	--	--	150.0	50.0
DDTs[b]	DDT = 1.5 DDE = 0.6	0.009	16.0	0.8
Aldrin[b]	--	--	1.0	0.1
Chlordane[a]	10.7	2.14	9.2	4.6
Dieldrin[a]	--	0.077	0.2	0.02
Lindane	20.0[a]	2.0[a]	3.75[b]	0.05[b]
Heptachlor[b]	--	--	6.8	0.13
Methoxychlor[b]	--	--	50.0	2.5
PCBs[b]	1.27	0.09	1.28	0.36

TABLE G-5: TOXICITY REFERENCE VALUES FOR BIRDS AND MAMMALS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum
Hunters Point Shipyard, San Francisco, California

Notes:	All TRVs are reported in mg/kg-day.
a	TRVs are from *Toxicological Benchmarks for Wildlife* (Sample and others 1996).
b	TRVs are from "Development of Toxicity Reference Values for Conducting Ecological Risk Assessments at Naval Facilities in California, Interim Final Technical Memorandum" (Navy 1998).
--	Not enough data available to support the selection of a TRV.
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
mg/kg-day	Milligram of chemical per kilogram body weight per day
PCB	Polychlorinated biphenyl
TRV	Toxicity reference value

Sources:

Navy. 1998. "Development of Toxicity Reference Values for Conducting Ecological Risk Assessments at Naval Facilities in California, Interim Final Technical Memorandum." Prepared by Naval Facilities Engineering Command, Engineering Field Activity West. San Bruno, California. September.

Sample, B.E., and others. 1996. Toxicological Benchmarks for Wildlife: 1996 Revision." Oak Ridge National Laboratory. June.

TABLE G-6: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (0 TO 0.5 FOOT BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

	Summary Statistics (mg/kg)							Ratio of EPC to Screening Criterion		
	Sample Size			Censored Data[a]	Detected Data	Detected and Censored				
Chemical	Detected[b]	Total	Detection Frequency (Percent)[c]	Maximum	Maximum	UCL_{95}[d]	EPC[e]	HPAL-HQ	ER-M-HQ	SFBA-HQ
Total Metals										
Aluminum	30	30	100	NA	12,000	5,793.29	5,793.29			
Antimony	11	29	38	6.30	27	6.98	6.98	0.77	0.28	
Arsenic	30	30	100	NA	13	6.51	6.51	0.59	0.09	0.43
Barium	30	30	100	NA	1,300	95.46	95.46	0.30		
Beryllium	22	30	73	0.22	0.36	0.19	0.19	0.26		
Cadmium	29	30	97	0.54	17	8.64	8.64	2.75	0.90	26.19
Chromium	30	30	100	NA	190	98.78	98.78		0.27	0.87
Chromium VI	1	15	7	0.09	0.06	0.07	0.06			
Cobalt	30	30	100	NA	19	10.71	10.71			
Copper	30	30	100	NA	2,600	747.76	747.76	6.03	2.77	10.98
Lead	30	30	100	NA	5,400	324.32	324.32	36.04	1.49	7.51
Manganese	30	30	100	NA	880	451.37	451.37			
Mercury	30	30	100	NA	2.80	0.76	0.76	0.33	1.07	1.77
Molybdenum	5	30	17	2.90	31	4.11	4.11	1.52		
Nickel	30	30	100	NA	350	164.50	164.5		3.19	1.47
Selenium	11	30	37	0.74	1.80	0.50	0.50	0.26		0.77
Silver	18	30	60	0.41	5.4	0.79	0.79	0.55	0.21	1.36
Thallium	6	30	20	1.00	2.3	0.64	0.64	0.79		
Vanadium	30	30	100	NA	130	41.60	41.6	0.36		
Zinc	30	30	100	NA	1,300	531.15	531.15	4.83	1.30	3.36
Pesticides										
4,4'-DDD	1	30	3	0.094	0.074	0.0319	0.03		1.593	
4,4'-DDE	2	30	7	0.094	0.078	0.0323	0.03		1.195	
4,4'-DDT	11	30	37	0.45	0.85	0.2368	0.24		33.829	
Total DDT[f,g]	13	30	43	NA	0.85	0.1825	0.18		3.967	26.07
alpha-Chlordane	2	30	7	0.049	0.027	0.0165	0.02			
Endosulfan I	1	30	3	0.049	0.036	0.0163	0.02			
Endrin	9	30	30	0.071	0.11	0.0476	0.05		1.057	
gamma-Chlordane	3	30	10	0.13	0.17	0.0371	0.04			
Heptachlor epoxide	1	30	3	0.15	0.02	0.0266	0.02			

TABLE G-6: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Chemical	Summary Statistics (mg/kg)						EPC[e]	Ratio of EPC to Screening Criterion		
	Sample Size		Detection Frequency (Percent)[c]	Censored Data[a]	Detected Data	Detected and Censored				
	Detected[b]	Total		Maximum	Maximum	UCL_{95}[d]		HPAL-HQ	ER-M-HQ	SFBA-HQ
SVOCs										
2-Methylnaphthalene	2	30	7	0.25	0.44	0.1529	0.15		0.2282	
Anthracene	5	30	17	0.25	1.0	0.1941	0.19		0.1764	2.21
Benzo(a)anthracene	9	30	30	0.25	1.4	0.2993	0.30		0.1871	1.23
Benzo(a)pyrene	11	30	37	0.25	1.8	0.3316	0.33		0.2072	0.80
Benzo(b)fluoranthene	15	30	50	0.25	4.3	0.5897	0.59			1.59
Benzo(g,h,i)perylene	6	30	20	0.25	0.39	0.1548	0.15			0.50
Benzo(k)fluoranthene	8	30	27	0.25	1.9	0.3376	0.34			1.31
Chrysene	10	30	33	0.25	4.5	0.5834	0.58		208.3710	2.02
Fluoranthene	11	30	37	0.25	1.8	0.4129	0.41		82.5880	0.80
Indeno(1,2,3-cd)pyrene	7	30	23	0.25	1.5	0.2557	0.26			0.67
Napthalene	3	30	10	0.28	0.35	0.1468	0.15		73.4010	0.26
Pentachlorophenol	2	30	7	2.90	1.4	1.6039	1.40			
Phenanthrene	10	30	33	0.25	0.82	0.2248	0.22		224.7557	0.95
Pyrene	12	30	40	0.25	2.3	0.6738	0.67		259.1487	1.01
Total HMW PAH[g]	17	30	57	NA	19.84	5.7913	5.79		603.258	1.89
Total LMW PAH[g]	10	30	33	NA	2.26	0.3365	0.34		106.5004	0.78
VOCs										
1,4-Dichlorobenzene	2	2	100	NA	0.0026	0.0034	0.0026			
4-Methyl-2-pentanone	1	2	50	0.0130	0.0041	0.0365	0.0041			
Aroclors										
Aroclor-1016	1	29	3	0.17	0.014	0.0558	0.01			
Aroclor-1221	1	30	3	0.34	0.028	0.1544	0.03			
Aroclor-1232	1	30	3	0.17	0.014	0.0522	0.01			
Aroclor-1242	1	30	3	0.17	0.014	0.0535	0.01			
Aroclor-1248	1	30	3	0.17	0.014	0.0517	0.01			
Aroclor-1254	3	30	10	0.17	3.5	0.6827	0.68			
Aroclor-1260	28	29	97	0.017	9.4	23.231	9.40			
Total Aroclors[g]	28	30	93	NA	9.6	21.4257	9.60			

TABLE G-6: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

	Summary Statistics (mg/kg)									
	Sample Size			Censored Data[a]	Detected Data	Detected and Censored		Ratio of EPC to Screening Criterion		
Chemical	Detected[b]	Total	Detection Frequency (Percent)[c]	Maximum	Maximum	UCL_{95}[d]	EPC[e]	HPAL-HQ	ER-M-HQ	SFBA-HQ
PCBs										
PCB-008	1	11	9	0.043	0.01	0.0139	0.01			
PCB-018	5	12	42	0.021	0.11	0.0284	0.03			
PCB-028	1	11	9	0.03	0.0014	0.0106	0.00			
PCB-044	9	12	75	0.026	0.03	0.0123	0.01			
PCB-052	11	12	92	0.0017	2.34	2.8881	2.34			
PCB-101	12	12	100	NA	1.72	2.9006	1.72			
PCB-114	4	12	33	0.29	0.011	0.0953	0.01			
PCB-118	11	12	92	0.03	0.338	0.2927	0.29			
PCB-126	10	12	83	0.013	0.11	0.0414	0.04			
PCB-128	12	12	100	NA	0.464	0.5880	0.46			
PCB-138	12	12	100	NA	5.62	6.6069	5.62			
PCB-153	12	12	100	NA	7.2	14.3996	7.20			
PCB-169	1	11	9	0.29	0.027	0.0975	0.03			
PCB-170	12	12	100	NA	3.95	6.8158	3.95			
PCB-180	12	12	100	NA	8.1	13.9689	8.10			
PCB-187	12	12	100	NA	3.7	6.7173	3.65			
PCB-189	12	12	100	NA	0.2	0.2678	0.20			
PCB-195	12	12	100	NA	74.2	1,575.081	74.20			
PCB-206	12	12	100	NA	0.221	0.2886	0.22			
PCB-209	9	12	75	0.00	0.014	0.0068	0.01			
PCB-81	7	11	64	0.29	0.38	0.2567	0.26			
TOTAL PCBs[g]	12	12	100	NA	64.0200	120.0553	64.02		355.667	4,325.68
Dioxins										
1,2,3,4,6,7,8,9-OCDD	3	3	100	NA	0.001883	0.002238	0.0019			
1,2,3,4,6,7,8,9-OCDF	3	3	100	NA	0.0002565	0.00031	0.0003			
1,2,3,4,6,7,8-HPCDD	3	3	100	NA	0.0001649	0.000188	0.0002			
1,2,3,4,6,7,8-HPCDF	3	3	100	NA	0.00006793	0.000083	0.0001			
1,2,3,4,7,8,9-HPCDF	3	3	100	NA	0.0000166	0.000023	0.00002			
1,2,3,4,7,8-HXCDD	3	3	100	NA	0.00000375	0.000004	0.000004			
1,2,3,4,7,8-HXCDF	3	3	100	NA	0.00003598	0.000051	0.00004			
1,2,3,6,7,8-HXCDD	3	3	100	NA	0.00000615	0.000007	0.00001			
1,2,3,6,7,8-HXCDF	3	3	100	NA	0.00001178	0.000014	0.00001			

TABLE G-6: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

	Summary Statistics (mg/kg)									
	Sample Size			Censored Data[a]	Detected Data	Detected and Censored		Ratio of EPC to Screening Criterion		
Chemical	Detected[b]	Total	Detection Frequency (Percent)[c]	Maximum	Maximum	UCL_{95}[d]	EPC[e]	HPAL-HQ	ER-M-HQ	SFBA-HQ
Dioxins (Continued)										
1,2,3,7,8,9-HXCDD	3	3	100	NA	0.00000667	0.000008	0.00001			
1,2,3,7,8,9-HXCDF	1	3	33	0.00000062	0.00000145	0.000002	0.000001			
1,2,3,7,8-PECDF	3	3	100	NA	0.00000371	0.000005	0.000004			
2,3,4,6,7,8-HXCDF	3	3	100	NA	0.00000676	0.000008	0.00001			
2,3,4,7,8-PECDF	3	3	100	NA	0.00000762	0.000009	0.00001			
2,3,7,8-TCDF	3	3	100	NA	0.00000762	0.000009	0.00001			
Total HPCDD	3	3	100	NA	0.0003677	0.000424	0.0004			
Total HPCDF	3	3	100	NA	0.0001881	0.000213	0.0002			
Total HXCDD	3	3	100	NA	0.0000337	0.000038	0.00003			
Total HXCDF	3	3	100	NA	0.0001108	0.000141	0.0001			
Total PECDD	1	3	33	0.0000016	0.00000141	0.000002	0.0000014			
Total PECDF	3	3	100	NA	0.00007965	0.000094	0.0001			
Total TCDD	3	3	100	NA	0.00000469	0.000005	0.000005			
Total TCDF	3	3	100	NA	0.0001559	0.000191	0.0002			
TEQ[g]	3	3	100	NA	0.00001428	0.00001731	0.00001			
Organotins										
Dibutyltin	2	3	67	0.011	0.06	0.07	0.06			
Tetrabutyltin	1	3	33	0.011	0.01	0.02	0.01			
Tributyltin	2	3	67	0.011	0.30	0.39	0.30			
TPHs (Extractable)										
Diesel-range organics	7	7	100	NA	200.00	129.98	129.98			
Motor oil-range organics	7	7	100	NA	420.00	302.72	302.72			

TABLE G-6: SUMMARY OF DESCRIPTIVE STATISTICS FOR SHORELINE SEDIMENT (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Notes:

a Reported detection frequencies for total TEQs reflect the percentage of samples that contain at least one detected congener. For higher frequencies of censored data, all calculations were performed using stochastic modeling following the "bounding" approach presented in EPA (2002) as described below under notes c and d.

b For all cases with at least 5 detected samples and a detection frequency greater than or equal to 50 percent, tested using the Shapiro-Wilk W test (alpha equal to 0.05). Distributions confirmed as normal or lognormal are listed as "Normal" or Lognormal." For cases where distribution testing was not conducted, the distribution is listed as "Not Tested." For cases in which distributions could not be confirmed using the Shapiro-Wilk W test, distributions were estimated using probability plots, box plots, and frequency histograms. Distributions estimated to be normal or lognormal are listed as Unknown [a} or Unknown[b], respectively.

c For all samples with at least one detection, SD was calculated using distribution-dependent formulae. For confirmed or estimated normal distributions with fewer than 15 percent censored data, SD was calculated using equations 4.3 (mean) and 4.4 (standard deviation) in Gilbert (1987). For confirmed or estimated lognormal distributions with fewer than 15 percent censored data, these are the minimum variance unbiased estimators in accordance with equations 13.3 (mean) and 13.5 (standard deviation) in Gilbert (1987). All other calculations use the median values generated from 2,000 iterations of a Monte Carlo model following the "bounding" approach described in EPA (2002) (see conceptual model and text in the methods section for more details). All calculations of the mean and SD for samples with greater than 15 percent censored data use normal model equations.

d For confirmed or estimated normal distributions with fewer than 15 percent censored data, calculated using Equation 11.6 in Gilbert (1987). For confirmed or estimated lognormal distributions with fewer than 15 percent censored data, UCL_{95} were calculated using Land's method (EPA 1992a; Gilbert 1987). Calculations for all cases with greater than 15 percent censored data use the maximum value generated from 2,000 iterations of a Monte Carlo model following the "bounding" approach described in EPA (2002) (see conceptual model and text in the methods section for more details). Calculations are based on either normal or lognormal (nonparametric Chebyshev inequality) model equations. Normal model equations are the default for all distributions listed as "Not Tested."

e The lesser of the UCL_{95} and the maximum detected concentration.

f Total DDTs is the sum of the 4,4'- congeners for DDD, DDE, and DDT.

g For the calculation of total DDTs, PCBs, Aroclors, HMW and LMW PAHs, and TEQs, zero was substituted for all nondetected congeners.

bgs	Below ground surface	OCDD	Octochlorodibenzodioxin
DDD	Dichlorodiphenyldichloroethane	OCDF	Octochlorodibenzofuran
DDE	Dichlorodiphenyldichloroethylene	PAH	Polynuclear aromatic hydrocarbons
DDT	Dichlorodiphenyltrichloroethane	PCB	Polychlorinated biphenyl
EPA	U.S. Environmental Protection Agency	PECDD	Pentachlorodibenzodioxin
EPC	Exposure point concentration	PECDF	Pentachloroibenzofuran
ERM	Effects range-median	PSC	Protective soil concentration
HMW	High molecular-weight	SD	Standard deviation
HPAL	Hunters Point ambient level	SFBA	San Francisco Bay Ambient
HPCDD	Heptachlorodibenzodioxin	SVOC	Semivolatile organic chemical
HPCDF	Heptachlorodibenzofuran	TCDD	Tetrachlorodibenzodioxin
HQ	Hazard quotient	TCDF	Tetrachlorodibenzofuran
HXCDD	Hexachlorodibenzodioxin	TEQ	Toxic equivalent
HXCDF	Hexachlorodibenzofuran	TPH	Total petroleum hydrocarbon
LMW	Low molecular-weight	UCL_{95}	One-sided 95 percent upper confidence limit of the mean
mg/kg	Milligram per kilogram	VOC	Volatile organic compound
NA	Not applicable		

Sources:

Gilbert, R.O. 1987. *Statistical Methods for Environmental Pollution Monitoring* . John Wiley & Sons, Inc., New York, NY.

EPA. 1992a. "Supplemental Guidance to RAGS: Calculating the Concentration Term". Intermittent Bulletin, Volume 1, Number 1. Publication 9285.7-081.

EPA. 2002. "Calculating Exposure Point Concentrations at Hazardous Waste Sites. Draft." Office of Solid Waste and Emergency Response. 9285.6-10. Washington, DC. July .

TABLE G-7: COMPARISON OF SHORELINE SUBSURFACE SEDIMENT (2 TO 2.5 FEET BGS)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

	Summary Statistics (mg/kg)[a,b,c]									
	Sample Size		Detection Frequency (Percent)	Censored Data	Detected Data	Detected and Sensored				
Chemical	Detected	Total		Maximum	Maximum	UCL_{95d}	EPC[e]	HPAL-HQ	ER-M-HQ	SFBA-HQ
Total Metals										
Aluminum	35	35	100	NA	14,000	5,113.55	5,113.55			
Antimony	12	35	34	11.00	270	28.06	28.06	3.10	1.12	
Arsenic	34	35	97	0.27	11	6.4	6.4	0.58	0.09	0.42
Barium	35	35	100	NA	270	77.17	77.17	0.25		
Beryllium	20	35	57	0.23	0.44	0.23	0.23	0.33		
Cadmium	35	35	100	NA	13	3.48	3.48	1.11	0.36	10.53
Chromium	35	35	100	NA	400	129.95	129.95		0.35	1.14
Chromium VI	7	21	33	0.08	1.7	0.43	0.43			
Cobalt	35	35	100	NA	67	11.37	11.37			
Copper	35	35	100	NA	4,800	17,675.47	4,800	38.71	65.46	70.48
Lead	35	35	100	NA	1,000	1,941.06	1,000	111.11	8.90	23.15
Manganese	35	35	100	NA	800	477.87	477.87			
Mercury	34	35	97	0.05	24	33.51	24	10.53	47.20	55.81
Molybdenum	10	35	29	2.10	8.1	2.54	2.54	0.94		
Nickel	35	35	100	NA	2,200	135.66	135.66		2.63	1.21
Selenium	15	35	43	0.34	2.2	0.55	0.55	0.28		0.84
Silver	18	35	51	0.36	2.3	0.62	0.62	0.44	0.17	1.08
Thallium	4	35	11	0.96	1.9	0.47	0.47	0.58		
Vanadium	35	35	100	NA	91	36.4	36.4	0.31		
Zinc	35	35	100	NA	4,700	2,160.91	2,160.91	19.64	5.27	13.68
Pesticides										
4,4'-DDD	3	35	9	1.4	0.058	0.1401	0.06		2.900	
4,4'-DDE	6	35	17	1.4	0.28	0.1548	0.15		5.732	
4,4'-DDT	5	35	14	5.1	30	2.7215	2.72		388.786	
Total DDT[h,i]	11	35	31	NA	30.00	2.376	2.38		51.652	339.43
alpha-Chlordane	4	35	11	0.7	0.095	0.0695	0.07			
beta-BHC	4	35	11	0.7	0.074	0.0748	0.07			
Dieldrin	3	35	9	13.0	0.80	1.1277	0.80		100.000	2000.00
Endosulfan I	1	35	3	0.7	0.015	0.0679	0.02			
Endrin	9	35	26	1.4	1.30	0.2358	0.24		5.241	
gamma-BHC	1	35	3	0.7	0.032	0.0808	0.03			
gamma-Chlordane	5	35	14	0.7	0.54	0.1247	0.12			
Heptachlor epoxide	1	35	3	0.7	0.049	0.0961	0.05			
Methoxychlor	5	35	14	7.0	0.79	0.7029	0.70			
SVOCs										
2-Methylnaphthalene	4	35	11	2.8	0.28	0.3235	0.28		0.418	
4-Nitrophenol	1	35	3	28	0.83	3.105	0.83			
Acenaphthene	2	35	6	2.8	0.14	0.315	0.14		0.280	
Anthracene	8	35	23	2.8	0.68	0.3509	0.35		0.319	
Benzo(a)anthracene	20	35	57	0.28	1.6	0.5806	0.58		0.363	
Benzo(a)pyrene	23	35	66	2.8	1.2	0.7362	0.74		0.4601	
Benzo(b)fluoranthene	26	35	74	0.28	3.8	1.083	1.08			
Benzo(g,h,i)perylene	9	35	26	2.8	0.88	0.3862	0.39			
Benzo(k)fluoranthene	18	35	51	2.8	1.2	0.73	0.7300483e			
Carbazole	1	35	3	14	0.69	1.5982	0.69			
Chrysene	22	35	63	0.28	2.2	0.8514	0.85		0.3041	
Dibenz(a,h)anthracene	3	34	9	2.8	0.26	0.3259	0.26		1.0000	
Fluoranthene	21	35	60	0.28	2.8	0.8903	0.89		0.1746	
Fluorene	2	35	6	2.8	0.14	0.3049	0.14		0.2593	
Indeno(1,2,3-cd)pyrene	18	34	53	2.8	0.83	0.6689	0.67			
Napthalene	3	35	9	2.8	0.35	0.3349	0.33		0.1595	
Pentachlorophenol	1	35	3	28	0.99	3.1256	0.99			
Phenanthrene	20	35	57	0.22	2.0	0.5505	0.55		0.3670	
Phenol	4	35	11	14	0.73	1.5534	0.73			
Pyrene	25	35	71	0.28	3.9	1.2919	1.29		0.4969	

TABLE G-7: COMPARISON OF SHORELINE SUBSURFACE SEDIMENT (2 TO 2.5 FEET BGS) (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

	Summary Statistics (mg/kg)[a,b,c]									
	Sample Size		Detection Frequency (Percent)	Censored Data	Detected Data	Detected and Sensored				
Chemical	Detected	Total		Maximum	Maximum	UCL_{95d}	EPC[e]	HPAL-HQ	ER-M-HQ	SFBA-HQ
SVOCs (Continued)										
Total HMW PAH[i]	29	35	83	NA	14.3	7.5105	7.51		0.7823	
Total LMW PAH[i]	20	35	57	NA	2.0	1.0369	1.04		0.3281	
VOCs										
1,3-Dichlorobenzene	1	2	50	0.006	0.0032	0.0134	0.0032			
1,4-Dichlorobenzene	2	2	100	NA	0.017	0.0343	0.02			
4-Methyl-2-Pentanone	1	2	50	0.012	0.0022	0.038	0.0022			
Carbon Disulfide	1	2	50	0.0052	0.0017	0.0145	0.0017			
Aroclors										
Aroclor-1016	2	35	6	13.0000	0.017	1.2017	0.02			
Aroclor-1221	2	35	6	26.0000	0.034	2.4223	0.03			
Aroclor-1232	2	35	6	13.0000	0.017	1.2122	0.02			
Aroclor-1242	2	35	6	13.0000	0.017	1.202	0.02			
Aroclor-1248	2	35	6	13.0000	0.017	1.1921	0.02			
Aroclor-1254	2	35	6	13.0000	13	1.8159	1.82			
Aroclor-1260	30	35	86	0.0190	270	1,639.01	270			
Total Aroclors[j]	30	35	86	NA	270	349.37	270		1500.0	
Organotins										
Tributyltin	1	2	50	0.011	0.009	0.0329	0.01			
TPH (Extractable)										
Diesel-Range Organics	17	17	100	NA	1,700	2,607.73	1,700			
Motor Oil-Range Organics	17	17	100	NA	2,800	2,110.48	2,110.48			
TPH (Purgeable)										
Gasoline-Range Organics	5	17	29	5.2	820	133.13	133.13			

Notes:

a Reported detection frequencies for total TEQs reflect the percentage of samples that contain at least one detected congener. For higher frequencies of censored data, all calculations were performed using stochastic modeling following the "bounding" approach presented in EPA (2002) as described below under notes d and e.

b For all cases with at least 5 detected samples and a detection frequency greater than or equal to 50 percent, tested using the Shapiro-Wilk W test (alpha equal to 0.05). Distribution confirmed as normal or lognormal are listed as "Normal" or Lognormal." For cases where distribution testing was not conducted, the distribution is listed as "Not Tested." For cases in which distributions could not be confirmed using Shapiro-Wilk W test, distributions were estimated using probability plots, box plots, and frequency histograms. Distributions estimated to be normal or lognormal are listed as Unknown [a] or Unknown [b], respectively.

c For all samples with at least one detection, SD was calculated using distribution-dependent formulae. For confirmed or estimated normal distributions with fewer than 15 percent censored data, SD was calculated using equations 4.3 (mean) and 4.4 (standard deviation) in Gilbert (1987). For confirmed or estimated lognormal distributions with fewer than 15 percent censored data, these are the minimum variance unbiased estimators in accordance with equations 13.3 (mean) and 13.5 (standard deviation) in Gilbert (1987). All other calculations use the median values generated from 2,000 iterations of a Monte Carlo model following the "bounding" approach described in EPA (2002) (see conceptual model and text in the methods section for more details). All calculations of the mean and SD for samples with greater than 15 percent censored data use normal model equations.

d For confirmed or estimated normal distributions with fewer than 15 percent censored data, calculated using Equation 11.6 in Gilbert (1987). For confirmed or estimated lognormal distributions with fewer than 15 percent censored data, UCL_{95} were calculated using Land's method (EPA 1992a; Gilbert 1987). Calculations for all cases with greater than 15 percent censored data use the maximum value generated from 2,000 iterations of a Monte Carlo model following the "bounding" approach described in EPA (2002) (see conceptual model and text in the methods section for more details). Calculations are based on either normal or lognormal (nonparametric Chebyshev inequality) model equations. Normal model equations are the default for all distributions listed as "Not Tested."

e The lesser of the UCL_{95} and the maximum detected concentration.

bgs	Below ground surface
BHC	Benzene hexachloride
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
EPA	U.S. Environmental Protection Agency
EPC	Exposure point concentration
ER-M	Effects range-media
HMW	High molecular weight
HPAL	Hunters Point ambient level
HQ	Hazard quotient
LMW	Low molecular weight
mg/kg	Milligram per kilogram
NA	Not applicable
PSC	Protective soil concentration
SFBA	San Francisco Bay ambient
SVOC	Semivolatile organic carbon
TEQ	Toxic equivalent
TPH	Total petroleum hydrocarbons
VOC	Volatile organic carbon
UCL_{95}	95 percent upper confidence limit of the mean

Sources:

Gilbert, R. O. 1987. *Statistical Methods for Environmental Pollution Monitoring* . John Wiley & Sons, Inc., New York, NY.
EPA. 1992a. "Supplemental Guidance to RAGS: Calculating the Concentration Term". Intermittent Bulletin, Volume 1, Number 1. Publication 9285.7-081.
EPA. 2002. "Calculating Exposure Point Concentrations at Hazardous Waste Sites. Draft." Office of Solid Waste and Emergency Response. 9285.6-10. Washington, D.C. July .

TABLE G-8: SURF SCOTER DOSE CALCULATIONS AND HAZARD QUOTIENTS (0 TO 0.5 FOOT BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS																	
Aluminum																	
Dose/High TRV	9.09E-02	8.81E-02	2.35E-02	NA	1.36E+02	1.20E+01	2.73E-03	5.79E+03	1.58E+01	2.40E-02	1.15E+00	5.80E-01	1.10E+03	1.55E-01	1.64E+03	3.54E-04	Calculated[o]
Dose/Low TRV	9.09E-02	8.81E-02	2.35E-02	NA	1.36E+02	1.20E+01	2.73E-03	5.79E+03	1.58E+01	2.40E-02	1.15E+00	5.80E-01	1.10E+02	1.55E-01	1.64E+02	3.54E-03	Sample and others 1996
Antimony																	
Dose/High TRV	9.09E-02	8.81E-02	1.02E-01	NA	7.09E-01	6.25E-02	2.73E-03	6.98E+00	1.90E-02	2.40E-02	1.15E+00	1.70E-03	No TRV	No TRV	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	1.02E-01	NA	7.09E-01	6.25E-02	2.73E-03	6.98E+00	1.90E-02	2.40E-02	1.15E+00	1.70E-03	No TRV	No TRV	No TRV[n]	No TRV[n]	No TRV[n]
Barium																	
Dose/High TRV	9.09E-02	8.81E-02	3.32E-02	NA	3.17E+00	2.79E-01	2.73E-03	9.55E+01	2.60E-01	2.40E-02	1.15E+00	1.13E-02	4.17E+01	1.21E-01	6.54E+01	1.72E-04	Sample and others 1996
Dose/Low TRV	9.09E-02	8.81E-02	3.32E-02	NA	3.17E+00	2.79E-01	2.73E-03	9.55E+01	2.60E-01	2.40E-02	1.15E+00	1.13E-02	2.08E+01	1.21E-01	3.26E+01	3.45E-04	Sample and others 1996
Beryllium																	
Dose/High TRV	9.09E-02	8.81E-02	2.20E-01	4.18E-02	2.32E-01	2.05E-02	2.73E-03	1.90E-01	5.18E-04	2.40E-02	1.15E+00	4.38E-04	No TRV	No TRV	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	2.20E-01	4.18E-02	2.32E-01	2.05E-02	2.73E-03	1.90E-01	5.18E-04	2.40E-02	1.15E+00	4.38E-04	No TRV	No TRV	No TRV[n]	No TRV[n]	No TRV[n]
Cadmium																	
Dose/High TRV	9.09E-02	8.81E-02	1.08E+00	NA	9.35E+00	8.24E-01	2.73E-03	8.64E+00	2.36E-02	2.40E-02	1.15E+00	1.77E-02	1.04E+01	8.40E-02	1.76E+01	1.00E-03	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	1.08E+00	NA	9.35E+00	8.24E-01	2.73E-03	8.64E+00	2.36E-02	2.40E-02	1.15E+00	1.77E-02	8.00E-02	7.99E-01	8.61E-02	2.05E-01	Navy 1998
Chromium																	
Dose/High TRV	9.09E-02	8.81E-02	5.91E-02	NA	5.83E+00	5.14E-01	2.73E-03	9.88E+01	2.69E-01	2.40E-02	1.15E+00	1.64E-02	5.00E+00	1.25E+00	4.92E+00	3.33E-03	Sample and others 1996
Dose/Low TRV	9.09E-02	8.81E-02	5.91E-02	NA	5.83E+00	5.14E-01	2.73E-03	9.88E+01	2.69E-01	2.40E-02	1.15E+00	1.64E-02	1.00E+00	1.25E+00	9.83E-01	1.66E-02	Sample and others 1996
Cobalt																	
Dose/High TRV	9.09E-02	8.81E-02	1.34E-01	NA	1.44E+00	1.26E-01	2.73E-03	1.07E+01	2.92E-02	2.40E-02	1.15E+00	3.25E-03	No TRV	No TRV	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	1.34E-01	NA	1.44E+00	1.26E-01	2.73E-03	1.07E+01	2.92E-02	2.40E-02	1.15E+00	3.25E-03	No TRV	No TRV	No TRV[n]	No TRV[n]	No TRV[n]
Copper																	
Dose/High TRV	9.09E-02	8.81E-02	2.20E-01	NA	1.65E+02	1.45E+01	2.73E-03	7.48E+02	2.04E+00	2.40E-02	1.15E+00	3.46E-01	5.23E+01	4.09E-01	6.43E+01	5.38E-03	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	2.20E-01	NA	1.65E+02	1.45E+01	2.73E-03	7.48E+02	2.04E+00	2.40E-02	1.15E+00	3.46E-01	2.30E+00	6.39E-01	2.59E+00	1.34E-01	Navy 1998
Lead																	
Dose/High TRV	9.09E-02	8.81E-02	8.42E-02	NA	2.73E+01	2.41E+00	2.73E-03	3.24E+02	8.84E-01	2.40E-02	1.15E+00	6.87E-02	8.75E+00	8.00E-01	9.41E+00	7.30E-03	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	8.42E-02	NA	2.73E+01	2.41E+00	2.73E-03	3.24E+02	8.84E-01	2.40E-02	1.15E+00	6.87E-02	1.40E-02	8.40E-02	2.36E-02	2.91E+00	Navy 1998
Magnesium																	
Dose/High TRV	9.09E-02	8.81E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	No TRV	No TRV	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	No TRV	No TRV	No TRV[n]	No TRV[n]	No TRV[n]
Manganese																	
Dose/High TRV	9.09E-02	8.81E-02	6.79E-02	NA	3.06E+01	2.70E+00	2.73E-03	4.51E+02	1.23E+00	2.40E-02	1.15E+00	8.21E-02	7.76E+02	1.97E-01	1.10E+03	7.43E-05	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	6.79E-02	NA	3.06E+01	2.70E+00	2.73E-03	4.51E+02	1.23E+00	2.40E-02	1.15E+00	8.21E-02	7.76E+01	1.97E-01	1.10E+02	7.43E-04	Navy 1998
Mercury																	
Dose/High TRV	9.09E-02	8.81E-02	2.88E-01	NA	2.19E-01	1.93E-02	2.73E-03	7.60E-01	2.07E-03	2.40E-02	1.15E+00	4.46E-04	1.80E-01	1.00E+00	1.85E-01	2.41E-03	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	2.88E-01	NA	2.19E-01	1.93E-02	2.73E-03	7.60E-01	2.07E-03	2.40E-02	1.15E+00	4.46E-04	3.90E-02	1.00E+00	4.01E-02	1.11E-02	Navy 1998
Molybdenum																	
Dose/High TRV	9.09E-02	8.81E-02	2.86E+00	NA	1.17E+01	1.03E+00	2.73E-03	4.11E+00	1.12E-02	2.40E-02	1.15E+00	2.18E-02	3.53E+01	1.50E+00	3.35E+01	6.52E-04	Sample and others 1996
Dose/Low TRV	9.09E-02	8.81E-02	2.86E+00	NA	1.17E+01	1.03E+00	2.73E-03	4.11E+00	1.12E-02	2.40E-02	1.15E+00	2.18E-02	3.50E+00	1.50E+00	3.32E+00	6.58E-03	Sample and others 1996
Nickel																	
Dose/High TRV	9.09E-02	8.81E-02	7.52E-02	NA	1.24E+01	1.09E+00	2.73E-03	1.65E+02	4.48E-01	2.40E-02	1.15E+00	3.21E-02	5.52E+01	5.80E-01	6.33E+01	5.08E-04	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	7.52E-02	NA	1.24E+01	1.09E+00	2.73E-03	1.65E+02	4.48E-01	2.40E-02	1.15E+00	3.21E-02	1.38E+00	6.14E-01	1.56E+00	2.05E-02	Navy 1998
Selenium																	
Dose/High TRV	9.09E-02	8.81E-02	1.40E+01	NA	7.02E+00	6.19E-01	2.73E-03	5.00E-01	1.36E-03	2.40E-02	1.15E+00	1.29E-02	9.30E-01	1.11E+00	9.37E-01	1.38E-02	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	1.40E+01	NA	7.02E+00	6.19E-01	2.73E-03	5.00E-01	1.36E-03	2.40E-02	1.15E+00	1.29E-02	2.30E-01	1.11E+00	2.32E-01	5.59E-02	Navy 1998

TABLE G-8: SURF SCOTER DOSE CALCULATIONS AND HAZARD QUOTIENTS (0 TO 0.5 FOOT BGS) (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d](mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS (Continued)																	
Silver																	
Dose/High TRV	9.09E-02	8.81E-02	4.52E-01	NA	3.57E-01	3.15E-02	2.73E-03	7.90E-01	2.15E-03	2.40E-02	1.15E+00	7.02E-04	No TRV	No TRV	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	4.52E-01	NA	3.57E-01	3.15E-02	2.73E-03	7.90E-01	2.15E-03	2.40E-02	1.15E+00	7.02E-04	No TRV	No TRV	No TRV[n]	No TRV[n]	No TRV[n]
Thallium																	
Dose/High TRV	9.09E-02	8.81E-02	2.20E-01	NA	1.41E-01	1.24E-02	2.73E-03	6.40E-01	1.74E-03	2.40E-02	1.15E+00	2.95E-04	3.50E-01	7.63E-02	6.02E-01	4.91E-04	EPA 1999
Dose/Low TRV	9.09E-02	8.81E-02	2.20E-01	NA	1.41E-01	1.24E-02	2.73E-03	6.40E-01	1.74E-03	2.40E-02	1.15E+00	2.95E-04	3.50E-01	7.63E-02	6.02E-01	4.91E-04	EPA 1999
Vanadium																	
Dose/High TRV	9.09E-02	8.81E-02	5.58E-02	NA	2.32E+00	2.04E-01	2.73E-03	4.16E+01	1.13E-01	2.40E-02	1.15E+00	6.63E-03	1.14E+02	1.17E+00	1.14E+02	5.84E-05	Calculated[o]
Dose/Low TRV	9.09E-02	8.81E-02	5.58E-02	NA	2.32E+00	2.04E-01	2.73E-03	4.16E+01	1.13E-01	2.40E-02	1.15E+00	6.63E-03	1.14E+01	1.17E+00	1.14E+01	5.84E-04	Sample and others 1996
Zinc																	
Dose/High TRV	9.09E-02	8.81E-02	7.34E-01	NA	3.90E+02	3.44E+01	2.73E-03	5.31E+02	1.45E+00	2.40E-02	1.15E+00	7.48E-01	1.72E+02	9.55E-01	1.79E+02	4.19E-03	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	7.34E-01	NA	3.90E+02	3.44E+01	2.73E-03	5.31E+02	1.45E+00	2.40E-02	1.15E+00	7.48E-01	1.72E+01	9.55E-01	1.79E+01	4.19E-02	Navy 1998
ORGANOTINS																	
Dibutyltin																	
Dose/High TRV	9.09E-02	8.81E-02	1.91E+00	NA	1.15E-01	1.01E-02	2.73E-03	6.00E-02	1.64E-04	2.40E-02	1.15E+00	2.15E-04	4.59E+01	9.65E-02	7.53E+01	2.85E-06	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	1.91E+00	NA	1.15E-01	1.01E-02	2.73E-03	6.00E-02	1.64E-04	2.40E-02	1.15E+00	2.15E-04	7.30E-01	9.65E-02	1.20E+00	1.79E-04	Navy 1998
Monobutyltin																	
Dose/High TRV	9.09E-02	8.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	4.59E+01	9.65E-02	7.53E+01	0.00E+00	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	7.30E-01	9.65E-02	1.20E+00	0.00E+00	Navy 1998
Tetrabutyltin																	
Dose/High TRV	9.09E-02	8.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03	1.00E-02	2.73E-05	2.40E-02	1.15E+00	5.69E-07	4.59E+01	9.65E-02	7.53E+01	7.56E-09	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03	1.00E-02	2.73E-05	2.40E-02	1.15E+00	5.69E-07	7.30E-01	9.65E-02	1.20E+00	4.75E-07	Navy 1998
Tributyltin																	
Dose/High TRV	9.09E-02	8.81E-02	4.92E+00	NA	1.48E+00	1.30E-01	2.73E-03	3.00E-01	8.18E-04	2.40E-02	1.15E+00	2.73E-03	4.59E+01	9.65E-02	7.53E+01	3.63E-05	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	4.92E+00	NA	1.48E+00	1.30E-01	2.73E-03	3.00E-01	8.18E-04	2.40E-02	1.15E+00	2.73E-03	7.30E-01	9.65E-02	1.20E+00	2.28E-03	Navy 1998
PCBs																	
Total PCBs (Congeners)																	
Dose/High TRV	9.09E-02	8.81E-02	1.77E+00	NA	1.13E+02	9.96E+00	2.73E-03	6.40E+01	1.75E-01	2.40E-02	1.15E+00	2.12E-01	1.27E+00	1.72E+00	1.17E+00	1.80E-01	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	1.77E+00	NA	1.13E+02	9.96E+00	2.73E-03	6.40E+01	1.75E-01	2.40E-02	1.15E+00	2.12E-01	9.00E-02	8.00E-01	9.68E-02	2.19E+00	Navy 1998
Total Aroclors																	
Dose/High TRV	9.09E-02	8.81E-02	1.77E+00	NA	1.69E+01	1.49E+00	2.73E-03	9.60E+00	2.62E-02	2.40E-02	1.15E+00	3.17E-02	1.27E+00	1.72E+00	1.17E+00	2.71E-02	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	1.77E+00	NA	1.69E+01	1.49E+00	2.73E-03	9.60E+00	2.62E-02	2.40E-02	1.15E+00	3.17E-02	9.00E-02	8.00E-01	9.68E-02	3.28E-01	Navy 1998
PESTICIDES																	
Total DDTs																	
Dose/High TRV	9.09E-02	8.81E-02	3.49E+00	NA	6.37E-01	5.62E-02	2.73E-03	1.83E-01	4.98E-04	2.40E-02	1.15E+00	1.18E-03	1.50E+00	1.00E+00	1.54E+00	7.67E-04	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	3.49E+00	NA	6.37E-01	5.62E-02	2.73E-03	1.83E-01	4.98E-04	2.40E-02	1.15E+00	1.18E-03	9.00E-03	3.50E+00	7.20E-03	1.64E-01	Navy 1998
alpha-Chlordane																	
Dose/High TRV	9.09E-02	8.81E-02	3.62E+00	NA	5.98E-02	5.27E-03	2.73E-03	1.65E-02	4.50E-05	2.40E-02	1.15E+00	1.11E-04	1.07E+01	6.40E-02	1.91E+01	5.82E-06	Sample and others 1996
Dose/Low TRV	9.09E-02	8.81E-02	3.62E+00	NA	5.98E-02	5.27E-03	2.73E-03	1.65E-02	4.50E-05	2.40E-02	1.15E+00	1.11E-04	2.14E+00	6.40E-02	3.81E+00	2.91E-05	Sample and others 1996
gamma-Chlordane																	
Dose/High TRV	9.09E-02	8.81E-02	3.16E+00	NA	1.17E-01	1.03E-02	2.73E-03	3.71E-02	1.01E-04	2.40E-02	1.15E+00	2.17E-04	1.07E+01	6.40E-02	1.91E+01	1.14E-05	Sample and others 1996
Dose/Low TRV	9.09E-02	8.81E-02	3.16E+00	NA	1.17E-01	1.03E-02	2.73E-03	3.71E-02	1.01E-04	2.40E-02	1.15E+00	2.17E-04	2.14E+00	6.40E-02	3.81E+00	5.70E-05	Sample and others 1996
Dieldrin																	
Dose/High TRV	9.09E-02	8.81E-02	4.97E+00	NA	4.67E-01	4.11E-02	2.73E-03	9.40E-02	2.56E-04	2.40E-02	1.15E+00	8.64E-04	7.70E-01	4.66E-01	9.22E-01	9.37E-04	Calculated[o]
Dose/Low TRV	9.09E-02	8.81E-02	4.97E+00	NA	4.67E-01	4.11E-02	2.73E-03	9.40E-02	2.56E-04	2.40E-02	1.15E+00	8.64E-04	7.70E-02	4.66E-01	9.22E-02	9.37E-03	Sample and others 1996
DIOXINS/FURANS																	
Dose/High TRV	9.09E-02	8.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03	1.43E-05	3.90E-08	2.40E-02	1.15E+00	8.14E-10	1.40E-04	1.10E+00	1.41E-04	5.76E-06	Calculated[o]
Dose/Low TRV	9.09E-02	8.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03	1.43E-05	3.90E-08	2.40E-02	1.15E+00	8.14E-10	1.40E-07	1.10E+00	1.41E-07	5.76E-03	EPA 1999

TABLE G-8: SURF SCOTER DOSE CALCULATIONS AND HAZARD QUOTIENTS (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d](mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
LMW PAH																	
Dose/High TRV	9.09E-02	8.81E-02	1.13E-01	NA	3.80E-02	3.35E-03	2.73E-03	3.37E-01	9.17E-04	2.40E-02	1.15E+00	8.90E-05	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	1.13E-01	NA	3.80E-02	3.35E-03	2.73E-03	3.37E-01	9.17E-04	2.40E-02	1.15E+00	8.90E-05	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
HMW PAH																	
Dose/High TRV	9.09E-02	8.81E-02	2.08E-01	NA	1.21E+00	1.06E-01	2.73E-03	5.79E+00	1.58E-02	2.40E-02	1.15E+00	2.55E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	2.08E-01	NA	1.21E+00	1.06E-01	2.73E-03	5.79E+00	1.58E-02	2.40E-02	1.15E+00	2.55E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]

Notes:

a Total ingestion rate was calculated with an average adult body weight of 1,150 grams using the Nagy (2001) dry matter intake food requirement equation for marine birds (a=0.880; b=0.658).

b Prey ingestion rate equals 97.0 percent of the total ingestion rate, based on a sediment ingestion rate equal to 3.0 percent of the total ingestion rate.

c HPS site-specific mean BAFs for *Macoma* (Parcel F) were used to calculate prey concentrations. EPA's 1999 BCFs for sediment-to-aquatic invertebrate were used as a default if no HPS *Macoma* BAFs was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used. *Macoma* BAF's were in dry weight.

d For literature BAFs, wet weight prey concentration was calculated by multiplying the sediment concentration by the BAF. Prey concentrations were then converted to dry weight using the formula: dry weight concentration = (wet weight concentration) / (1% of water in medium). Percent tissue moisture used to convert wet weight prey concentrations to dry weight was 68% following (EPA 1993). Site-specific BAFs already in dry weight.

e Prey daily dose was calculated by multiplying the prey ingestion rate by the dry weight prey concentration.

f Sediment ingestion rate equals 3.0 percent of the total ingestion rate; based on maximum grit for White-winged Scoters from Vermeer and Bourne (1984).

g Sediment concentration for dose calculations equals the 95 percent upper confidence limit of the arithmetic mean for all site-collected sediment samples. Nondetects shown as 0.

h Sediment daily dose was calculated by multiplying the sediment ingestion rate by the sediment concentration.

i Average adult surf scoter body weight from Ohlendorf and others (1985).

j Total daily dose is calculated using the following equation: total daily dose = [(sediment daily dose + prey daily dose)*SUF]/receptor species body weight.

k The derivation of TRVs is described in Navy (1998) and Sample and others (1996).

l Allometrically adjusted TRVs were calculated using the following equation: receptor species TRV = (test species TRV) x (test species body weight / receptor species body weight)$^{(1-1.2)}$.

m The HQ was calculated using total daily dose/allometrically adjusted TRV.

n Sufficient data are unavailable to derive a TRV. This chemical was evaluated qualitatively.

o "Calculated" indicates that a high TRV was unavailable in Navy (1998) or Sample and others (1996); in those cases, an uncertainty factor of 10 was applied to the low TRV to derive a high TRV.

BAF	Bioaccumulation factor	LMW	Low molecular-weight
BCF	Bioconcentration factor	mg/day	Milligram per day
bgs	Below ground surface	mg/kg	Milligram per kilogram
COPEC	Chemical of potential ecological concern	mg/kg/day	Milligram per kilogram per day
DDT	Dichlorodiphenyltrichloroethane	NA	Not available
EPA	U.S. Environmental Protection Agency	Navy	U.S. Department of the Navy
HMW	High molecular-weight	PAH	Polynuclear aromatic hydrocarbon
HPS	Hunters Point Shipyard	PCB	Polychlorinated biphenyl
HQ	Hazard quotient	SUF	Site use factor
kg	Kilogram	TRV	Toxicity reference value
kg/day	Kilogram per day		

Sources:

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TABLE G-9: SURF SCOTER DOSE CALCULATIONS AND HAZARD QUOTIENTS (2 TO 2.5 FEET BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS																	
Aluminum																	
Dose/High TRV	9.09E-02	8.81E-02	2.35E-02	NA	1.20E+02	1.06E+01	2.73E-03	5.11E+03	1.39E+01	2.40E-02	1.15E+00	5.12E-01	1.10E+03	1.55E-01	1.64E+03	3.13E-04	Calculated[o]
Dose/Low TRV	9.09E-02	8.81E-02	2.35E-02	NA	1.20E+02	1.06E+01	2.73E-03	5.11E+03	1.39E+01	2.40E-02	1.15E+00	5.12E-01	1.10E+02	1.55E-01	1.64E+02	3.13E-03	Sample and others 1996
Antimony																	
Dose/High TRV	9.09E-02	8.81E-02	1.02E-01	NA	2.85E+00	2.51E-01	2.73E-03	2.81E+01	7.65E-02	2.40E-02	1.15E+00	6.84E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	1.02E-01	NA	2.85E+00	2.51E-01	2.73E-03	2.81E+01	7.65E-02	2.40E-02	1.15E+00	6.84E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Barium																	
Dose/High TRV	9.09E-02	8.81E-02	3.32E-02	NA	2.56E+00	2.26E-01	2.73E-03	7.72E+01	2.10E-01	2.40E-02	1.15E+00	9.10E-03	4.17E+01	1.21E-01	6.54E+01	1.39E-04	Sample and others 1996
Dose/Low TRV	9.09E-02	8.81E-02	3.32E-02	NA	2.56E+00	2.26E-01	2.73E-03	7.72E+01	2.10E-01	2.40E-02	1.15E+00	9.10E-03	2.08E+01	1.21E-01	3.26E+01	2.79E-04	Sample and others 1996
Beryllium																	
Dose/High TRV	9.09E-02	8.81E-02	2.20E-01	5.06E-02	2.81E-01	2.48E-02	2.73E-03	2.30E-01	6.27E-04	2.40E-02	1.15E+00	5.30E-04	No TRV	No TRV	No TRV	No TRV	No TRV
Dose/Low TRV	9.09E-02	8.81E-02	2.20E-01	5.06E-02	2.81E-01	2.48E-02	2.73E-03	2.30E-01	6.27E-04	2.40E-02	1.15E+00	5.30E-04	No TRV	No TRV	No TRV	No TRV	No TRV
Cadmium																	
Dose/High TRV	9.09E-02	8.81E-02	1.08E+00	NA	3.76E+00	3.32E-01	2.73E-03	3.48E+00	9.49E-03	2.40E-02	1.15E+00	7.12E-03	1.04E+01	8.40E-02	1.76E+01	4.05E-04	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	1.08E+00	NA	3.76E+00	3.32E-01	2.73E-03	3.48E+00	9.49E-03	2.40E-02	1.15E+00	7.12E-03	8.00E-02	7.99E-01	8.61E-02	8.28E-02	Navy 1998
Chromium																	
Dose/High TRV	9.09E-02	8.81E-02	5.91E-02	NA	7.67E+00	6.76E-01	2.73E-03	1.30E+02	3.54E-01	2.40E-02	1.15E+00	2.15E-02	5.00E+00	1.25E+00	4.92E+00	4.37E-03	Sample and others 1996
Dose/Low TRV	9.09E-02	8.81E-02	5.91E-02	NA	7.67E+00	6.76E-01	2.73E-03	1.30E+02	3.54E-01	2.40E-02	1.15E+00	2.15E-02	1.00E+00	1.25E+00	9.83E-01	2.19E-02	Sample and others 1996
Cobalt																	
Dose/High TRV	9.09E-02	8.81E-02	1.34E-01	NA	1.52E+00	1.34E-01	2.73E-03	1.14E+01	3.10E-02	2.40E-02	1.15E+00	3.45E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	1.34E-01	NA	1.52E+00	1.34E-01	2.73E-03	1.14E+01	3.10E-02	2.40E-02	1.15E+00	3.45E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Copper																	
Dose/High TRV	9.09E-02	8.81E-02	2.20E-01	NA	1.06E+03	9.33E+01	2.73E-03	4.80E+03	1.31E+01	2.40E-02	1.15E+00	2.22E+00	5.23E+01	4.09E-01	6.43E+01	3.45E-02	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	2.20E-01	NA	1.06E+03	9.33E+01	2.73E-03	4.80E+03	1.31E+01	2.40E-02	1.15E+00	2.22E+00	2.30E+00	6.39E-01	2.59E+00	8.58E-01	Navy 1998
Lead																	
Dose/High TRV	9.09E-02	8.81E-02	8.42E-02	NA	8.42E+01	7.42E+00	2.73E-03	1.00E+03	2.73E+00	2.40E-02	1.15E+00	2.12E-01	8.75E+00	8.00E-01	9.41E+00	2.25E-02	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	8.42E-02	NA	8.42E+01	7.42E+00	2.73E-03	1.00E+03	2.73E+00	2.40E-02	1.15E+00	2.12E-01	1.40E-02	8.40E-02	2.36E-02	8.96E+00	Navy 1998
Magnesium																	
Dose/High TRV	9.09E-02	8.81E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Manganese																	
Dose/High TRV	9.09E-02	8.81E-02	6.79E-02	NA	3.24E+01	2.86E+00	2.73E-03	4.78E+02	1.30E+00	2.40E-02	1.15E+00	8.69E-02	7.76E+02	1.97E-01	1.10E+03	7.86E-05	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	6.79E-02	NA	3.24E+01	2.86E+00	2.73E-03	4.78E+02	1.30E+00	2.40E-02	1.15E+00	8.69E-02	7.76E+01	1.97E-01	1.10E+02	7.86E-04	Navy 1998
Mercury																	
Dose/High TRV	9.09E-02	8.81E-02	2.88E-01	NA	6.92E+00	6.10E-01	2.73E-03	2.40E+01	6.54E-02	2.40E-02	1.15E+00	1.41E-02	1.80E-01	1.00E+00	1.85E-01	7.62E-02	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	2.88E-01	NA	6.92E+00	6.10E-01	2.73E-03	2.40E+01	6.54E-02	2.40E-02	1.15E+00	1.41E-02	3.90E-02	1.00E+00	4.01E-02	3.51E-01	Navy 1998
Molybdenum																	
Dose/High TRV	9.09E-02	8.81E-02	2.86E+00	NA	7.26E+00	6.40E-01	2.73E-03	2.54E+00	6.92E-03	2.40E-02	1.15E+00	1.35E-02	3.53E+01	1.50E+00	3.35E+01	4.03E-04	Sample and others 1996
Dose/Low TRV	9.09E-02	8.81E-02	2.86E+00	NA	7.26E+00	6.40E-01	2.73E-03	2.54E+00	6.92E-03	2.40E-02	1.15E+00	1.35E-02	3.50E+00	1.50E+00	3.32E+00	4.07E-03	Sample and others 1996
Nickel																	
Dose/High TRV	9.09E-02	8.81E-02	7.52E-02	NA	1.02E+01	9.00E-01	2.73E-03	1.36E+02	3.70E-01	2.40E-02	1.15E+00	2.65E-02	5.52E+01	5.80E-01	6.33E+01	4.19E-04	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	7.52E-02	NA	1.02E+01	9.00E-01	2.73E-03	1.36E+02	3.70E-01	2.40E-02	1.15E+00	2.65E-02	1.38E+00	6.14E-01	1.56E+00	1.69E-02	Navy 1998
Selenium																	
Dose/High TRV	9.09E-02	8.81E-02	1.40E+01	NA	7.72E+00	6.81E-01	2.73E-03	5.50E-01	1.50E-03	2.40E-02	1.15E+00	1.42E-02	9.30E-01	1.11E+00	9.37E-01	1.52E-02	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	1.40E+01	NA	7.72E+00	6.81E-01	2.73E-03	5.50E-01	1.50E-03	2.40E-02	1.15E+00	1.42E-02	2.30E-01	1.11E+00	2.32E-01	6.14E-02	Navy 1998
Silver																	
Dose/High TRV	9.09E-02	8.81E-02	4.52E-01	NA	2.80E-01	2.47E-02	2.73E-03	6.20E-01	1.69E-03	2.40E-02	1.15E+00	5.51E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	4.52E-01	NA	2.80E-01	2.47E-02	2.73E-03	6.20E-01	1.69E-03	2.40E-02	1.15E+00	5.51E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Thallium																	
Dose/High TRV	9.09E-02	8.81E-02	2.20E-01	NA	1.03E-01	9.11E-03	2.73E-03	4.70E-01	1.28E-03	2.40E-02	1.15E+00	2.17E-04	3.50E-01	7.63E-02	6.02E-01	3.60E-04	EPA 1999
Dose/Low TRV	9.09E-02	8.81E-02	2.20E-01	NA	1.03E-01	9.11E-03	2.73E-03	4.70E-01	1.28E-03	2.40E-02	1.15E+00	2.17E-04	3.50E-01	7.63E-02	6.02E-01	3.60E-04	EPA 1999
Vanadium																	
Dose/High TRV	9.09E-02	8.81E-02	5.58E-02	NA	2.03E+00	1.79E-01	2.73E-03	3.64E+01	9.92E-02	2.40E-02	1.15E+00	5.80E-03	1.14E+02	1.17E+00	1.14E+02	5.11E-05	Calculated[o]
Dose/Low TRV	9.09E-02	8.81E-02	5.58E-02	NA	2.03E+00	1.79E-01	2.73E-03	3.64E+01	9.92E-02	2.40E-02	1.15E+00	5.80E-03	1.14E+01	1.17E+00	1.14E+01	5.11E-04	Sample and others 1996

TABLE G-9: SURF SCOTER DOSE CALCULATIONS AND HAZARD QUOTIENTS (2 TO 2.5 FEET BGS) (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS (Continued)																	
Zinc																	
Dose/High TRV	9.09E-02	8.81E-02	7.34E-01	NA	1.59E+03	1.40E+02	2.73E-03	2.16E+03	5.89E+00	2.40E-02	1.15E+00	3.04E+00	1.72E+02	9.55E-01	1.79E+02	1.70E-02	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	7.34E-01	NA	1.59E+03	1.40E+02	2.73E-03	2.16E+03	5.89E+00	2.40E-02	1.15E+00	3.04E+00	1.72E+01	9.55E-01	1.79E+01	1.70E-01	Navy 1998
ORGANOTINS																	
Dibutyltin																	
Dose/High TRV	9.09E-02	8.81E-02	1.91E+00	NA	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	4.59E+01	9.65E-02	7.53E+01	0.00E+00	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	1.91E+00	NA	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	7.30E-01	9.65E-02	1.20E+00	0.00E+00	Navy 1998
Monobutyltin																	
Dose/High TRV	9.09E-02	8.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	4.59E+01	9.65E-02	7.53E+01	0.00E+00	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	7.30E-01	9.65E-02	1.20E+00	0.00E+00	Navy 1998
Tetrabutyltin																	
Dose/High TRV	9.09E-02	8.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	4.59E+01	9.65E-02	7.53E+01	0.00E+00	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	2.40E-02	1.15E+00	0.00E+00	7.30E-01	9.65E-02	1.20E+00	0.00E+00	Navy 1998
Tributyltin																	
Dose/High TRV	9.09E-02	8.81E-02	4.92E+00	NA	4.43E-02	3.90E-03	2.73E-03	9.00E-03	2.45E-05	2.40E-02	1.15E+00	8.20E-05	4.59E+01	9.65E-02	7.53E+01	1.09E-06	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	4.92E+00	NA	4.43E-02	3.90E-03	2.73E-03	9.00E-03	2.45E-05	2.40E-02	1.15E+00	8.20E-05	7.30E-01	9.65E-02	1.20E+00	6.84E-05	Navy 1998
PCBs																	
Total Aroclors																	
Dose/High TRV	9.09E-02	8.81E-02	1.77E+00	NA	4.77E+02	4.20E+01	2.73E-03	2.70E+02	7.36E-01	2.40E-02	1.15E+00	8.92E-01	1.27E+00	1.72E+00	1.17E+00	7.61E-01	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	1.77E+00	NA	4.77E+02	4.20E+01	2.73E-03	2.70E+02	7.36E-01	2.40E-02	1.15E+00	8.92E-01	9.00E-02	8.00E-01	9.68E-02	9.22E+00	Navy 1998
PESTICIDES																	
Total DDTs																	
Dose/High TRV	9.09E-02	8.81E-02	3.49E+00	NA	8.31E+00	7.33E-01	2.73E-03	2.38E+00	6.49E-03	2.40E-02	1.15E+00	1.54E-02	1.50E+00	1.00E+00	1.54E+00	1.00E-02	Navy 1998
Dose/Low TRV	9.09E-02	8.81E-02	3.49E+00	NA	8.31E+00	7.33E-01	2.73E-03	2.38E+00	6.49E-03	2.40E-02	1.15E+00	1.54E-02	9.00E-03	3.50E+00	7.20E-03	2.14E+00	Navy 1998
alpha-Chlordane																	
Dose/High TRV	9.09E-02	8.81E-02	3.62E+00	NA	2.52E-01	2.22E-02	2.73E-03	6.95E-02	1.89E-04	2.40E-02	1.15E+00	4.67E-04	1.07E+01	6.40E-02	1.91E+01	2.45E-05	Sample and others 1996
Dose/Low TRV	9.09E-02	8.81E-02	3.62E+00	NA	2.52E-01	2.22E-02	2.73E-03	6.95E-02	1.89E-04	2.40E-02	1.15E+00	4.67E-04	2.14E+00	6.40E-02	3.81E+00	1.23E-04	Sample and others 1996
gamma-Chlordane																	
Dose/High TRV	9.09E-02	8.81E-02	3.16E+00	NA	3.93E-01	3.47E-02	2.73E-03	1.25E-01	3.40E-04	2.40E-02	1.15E+00	7.31E-04	1.07E+01	6.40E-02	1.91E+01	3.83E-05	Sample and others 1996
Dose/Low TRV	9.09E-02	8.81E-02	3.16E+00	NA	3.93E-01	3.47E-02	2.73E-03	1.25E-01	3.40E-04	2.40E-02	1.15E+00	7.31E-04	2.14E+00	6.40E-02	3.81E+00	1.92E-04	Sample and others 1996
Dieldrin																	
Dose/High TRV	9.09E-02	8.81E-02	4.97E+00	NA	3.97E+00	3.50E-01	2.73E-03	8.00E-01	2.18E-03	2.40E-02	1.15E+00	7.35E-03	7.70E-01	4.66E-01	9.22E-01	7.97E-03	Calculated[o]
Dose/Low TRV	9.09E-02	8.81E-02	4.97E+00	NA	3.97E+00	3.50E-01	2.73E-03	8.00E-01	2.18E-03	2.40E-02	1.15E+00	7.35E-03	7.70E-02	4.66E-01	9.22E-02	7.97E-02	Sample and others 1996
LMW PAH																	
Dose/High TRV	9.09E-02	8.81E-02	1.13E-01	NA	1.17E-01	1.03E-02	2.73E-03	1.04E+00	2.83E-03	2.40E-02	1.15E+00	2.74E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	1.13E-01	NA	1.17E-01	1.03E-02	2.73E-03	1.04E+00	2.83E-03	2.40E-02	1.15E+00	2.74E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
HMW PAH																	
Dose/High TRV	9.09E-02	8.81E-02	2.08E-01	NA	1.57E+00	1.38E-01	2.73E-03	7.51E+00	2.05E-02	2.40E-02	1.15E+00	3.31E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	9.09E-02	8.81E-02	2.08E-01	NA	1.57E+00	1.38E-01	2.73E-03	7.51E+00	2.05E-02	2.40E-02	1.15E+00	3.31E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]

TABLE G-9: SURF SCOTER DOSE CALCULATIONS AND HAZARD QUOTIENTS (2 TO 2.5 FEET BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Notes:

a	Total ingestion rate was calculated with an average adult body weight of 1,150 grams using the Nagy (2001) dry matter intake food requirement equation for marine birds (a=0.880; b=0.658).
b	Prey ingestion rate equals 97.0 percent of the total ingestion rate, based on a sediment ingestion rate equal to 3.0 percent of the total ingestion rate.
c	HPS site-specific mean BAFs for *Macoma* (Parcel F) were used to calculate prey concentrations. EPA's 1999 BCFs for sediment-to-aquatic invertebrate were used as a default if no HPS *Macoma* BAFs was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used. *Macoma* BAF's were in dry weight.
d	For literature BAFs, wet weight prey concentration was calculated by multiplying the sediment concentration by the BAF. Prey concentrations were then converted to dry weight using the formula: dry weight concentration = (wet weight concentration) / (1% of water in medium). Percent tissue moisture used to convert wet weight prey concentrations to dry weight was 68% following (EPA 1993). Site-specific BAFs were already in dry weight.
e	Prey daily dose was calculated by multiplying the prey ingestion rate by the dry weight prey concentration.
f	Sediment ingestion rate equals 3.0 percent of the total ingestion rate; based on maximum grit for White-winged Scoters from Vermeer and Bourne (1984).
g	Sediment concentration for dose calculations equals the 95 percent upper confidence limit of the arithmetic mean for all site-collected sediment samples. Nondetects shown as 0.
h	Sediment daily dose was calculated by multiplying the sediment ingestion rate by the sediment concentration.
i	Average adult surf scoter body weight from Ohlendorf and others (1985).
j	Total daily dose is calculated using the following equation: total daily dose = [(sediment daily dose + prey daily dose)*SUF]/receptor species body weight.
k	The derivation of TRVs is described in Navy (1998) and Sample and others (1996).
l	Allometrically adjusted TRVs were calculated using the following equation: receptor species TRV = (test species TRV) x (test species body weight / receptor species body weight)$^{(1-1.2)}$.
m	The HQ was calculated using total daily dose/allometrically adjusted TRV.
n	Sufficient data are unavailable to derive a TRV. This chemical was evaluated qualitatively.
o	"Calculated" indicates that a high TRV was unavailable in Navy (1998) or Sample and others (1996); in those cases, an uncertainty factor of 10 was applied to the low TRV to derive a high TRV.

BAF	Bioaccumulation factor
BCF	Bioconcentration factor
bgs	Below ground surface
COPEC	Chemical of potential ecological concern
DDT	Dichlorodiphenyltrichloroethane
EPA	U.S. Environmental Protection Agency
HMW	High molecular-weight
HPS	Hunters Point Shipyard
HQ	Hazard quotient
kg	Kilogram
kg/day	Kilogram per day
LMW	Low molecular-weight
mg/day	Milligram per day
mg/kg	Milligram per kilogram
mg/kg/day	Milligram per kilogram per day
NA	Not available
Navy	U.S. Department of the Navy
PAH	Polynuclear aromatic hydrocarbon
PCB	Polychlorinated biphenyl
SUF	Site use factor
TRV	Toxicity reference value

Sources:

EPA. 1993. "Wildlife Exposure Factor Handbook; Volumes I and II." Office of Research and Development. Washington D.C. EPA/600/R-93/187a. December.

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TABLE G-10: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON SOFT-BODIED INVERTEBRATE PREY (0 TO 0.5 FOOT BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS																	
Aluminum																	
Dose/High TRV	3.01E-02	2.92E-02	3.33E-01	NA	1.93E+03	5.63E+01	9.04E-04	5.79E+03	5.24E+00	3.00E-02	2.15E-01	8.59E+00	1.10E+03	1.55E-01	1.17E+03	7.34E-03	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	3.33E-01	NA	1.93E+03	5.63E+01	9.04E-04	5.79E+03	5.24E+00	3.00E-02	2.15E-01	8.59E+00	1.10E+02	1.55E-01	1.17E+02	7.34E-02	Sample and others 1996
Antimony																	
Dose/High TRV	3.01E-02	2.92E-02	3.33E-01	NA	2.32E+00	6.79E-02	9.04E-04	6.98E+00	6.31E-03	3.00E-02	2.15E-01	1.04E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	3.33E-01	NA	2.32E+00	6.79E-02	9.04E-04	6.98E+00	6.31E-03	3.00E-02	2.15E-01	1.04E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Barium																	
Dose/High TRV	3.01E-02	2.92E-02	2.83E-01	NA	2.70E+01	7.89E-01	9.04E-04	9.55E+01	8.63E-02	3.00E-02	2.15E-01	1.22E-01	4.17E+01	1.21E-01	4.68E+01	2.61E-03	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	2.83E-01	NA	2.70E+01	7.89E-01	9.04E-04	9.55E+01	8.63E-02	3.00E-02	2.15E-01	1.22E-01	2.08E+01	1.21E-01	2.33E+01	5.23E-03	Sample and others 1996
Beryllium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	4.18E-02	2.32E-01	6.79E-03	9.04E-04	1.90E-01	1.72E-04	3.00E-02	2.15E-01	9.71E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	4.18E-02	2.32E-01	6.79E-03	9.04E-04	1.90E-01	1.72E-04	3.00E-02	2.15E-01	9.71E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Cadmium																	
Dose/High TRV	3.01E-02	2.92E-02	3.86E+00	NA	3.33E+01	9.75E-01	9.04E-04	8.64E+00	7.81E-03	3.00E-02	2.15E-01	1.37E-01	1.04E+01	8.40E-02	1.26E+01	1.09E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	3.86E+00	NA	3.33E+01	9.75E-01	9.04E-04	8.64E+00	7.81E-03	3.00E-02	2.15E-01	1.37E-01	8.00E-02	7.99E-01	6.15E-02	2.23E+00	Navy 1998
Chromium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	NA	2.18E+01	6.36E-01	9.04E-04	9.88E+01	8.93E-02	3.00E-02	2.15E-01	1.01E-01	5.00E+00	1.25E+00	3.52E+00	2.88E-02	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	NA	2.18E+01	6.36E-01	9.04E-04	9.88E+01	8.93E-02	3.00E-02	2.15E-01	1.01E-01	1.00E+00	1.25E+00	7.03E-01	1.44E-01	Sample and others 1996
Cobalt																	
Dose/High TRV	3.01E-02	2.92E-02	3.93E-01	NA	4.21E+00	1.23E-01	9.04E-04	1.07E+01	9.69E-03	3.00E-02	2.15E-01	1.85E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	3.93E-01	NA	4.21E+00	1.23E-01	9.04E-04	1.07E+01	9.69E-03	3.00E-02	2.15E-01	1.85E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Copper																	
Dose/High TRV	3.01E-02	2.92E-02	6.73E-01	NA	5.04E+02	1.47E+01	9.04E-04	7.48E+02	6.76E-01	3.00E-02	2.15E-01	2.15E+00	5.23E+01	4.09E-01	4.60E+01	4.68E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	6.73E-01	NA	5.04E+02	1.47E+01	9.04E-04	7.48E+02	6.76E-01	3.00E-02	2.15E-01	2.15E+00	2.30E+00	6.39E-01	1.85E+00	1.16E+00	Navy 1998
Lead																	
Dose/High TRV	3.01E-02	2.92E-02	3.91E-01	NA	1.27E+02	3.70E+00	9.04E-04	3.24E+02	2.93E-01	3.00E-02	2.15E-01	5.58E-01	8.75E+00	8.00E-01	6.73E+00	8.29E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	3.91E-01	NA	1.27E+02	3.70E+00	9.04E-04	3.24E+02	2.93E-01	3.00E-02	2.15E-01	5.58E-01	1.40E-02	8.40E-02	1.69E-02	3.30E+01	Navy 1998
Magnesium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Manganese																	
Dose/High TRV	3.01E-02	2.92E-02	4.05E-01	NA	1.83E+02	5.35E+00	9.04E-04	4.51E+02	4.08E-01	3.00E-02	2.15E-01	8.03E-01	7.76E+02	1.97E-01	7.90E+02	1.02E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	4.05E-01	NA	1.83E+02	5.35E+00	9.04E-04	4.51E+02	4.08E-01	3.00E-02	2.15E-01	8.03E-01	7.76E+01	1.97E-01	7.90E+01	1.02E-02	Navy 1998
Mercury																	
Dose/High TRV	3.01E-02	2.92E-02	6.09E-01	NA	4.63E-01	1.35E-02	9.04E-04	7.60E-01	6.87E-04	3.00E-02	2.15E-01	1.98E-03	1.80E-01	1.00E+00	1.32E-01	1.50E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	6.09E-01	NA	4.63E-01	1.35E-02	9.04E-04	7.60E-01	6.87E-04	3.00E-02	2.15E-01	1.98E-03	3.90E-02	1.00E+00	2.87E-02	6.92E-02	Navy 1998
Molybdenum																	
Dose/High TRV	3.01E-02	2.92E-02	1.75E+00	NA	7.19E+00	2.10E-01	9.04E-04	4.11E+00	3.72E-03	3.00E-02	2.15E-01	2.99E-02	3.53E+01	1.50E+00	2.39E+01	1.25E-03	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	1.75E+00	NA	7.19E+00	2.10E-01	9.04E-04	4.11E+00	3.72E-03	3.00E-02	2.15E-01	2.99E-02	3.50E+00	1.50E+00	2.37E+00	1.26E-02	Sample and others 1996
Nickel																	
Dose/High TRV	3.01E-02	2.92E-02	2.92E-01	NA	4.80E+01	1.40E+00	9.04E-04	1.65E+02	1.49E-01	3.00E-02	2.15E-01	2.16E-01	5.52E+01	5.80E-01	4.52E+01	4.79E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	2.92E-01	NA	4.80E+01	1.40E+00	9.04E-04	1.65E+02	1.49E-01	3.00E-02	2.15E-01	2.16E-01	1.38E+00	6.14E-01	1.12E+00	1.93E-01	Navy 1998

TABLE G-10: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON SOFT-BODIED INVERTEBRATE PREY (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS (Continued)																	
Selenium																	
Dose/High TRV	3.01E-02	2.92E-02	2.00E+01	NA	1.00E+01	2.93E-01	9.04E-04	5.00E-01	4.52E-04	3.00E-02	2.15E-01	4.09E-02	9.30E-01	1.11E+00	6.70E-01	6.10E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	2.00E+01	NA	1.00E+01	2.93E-01	9.04E-04	5.00E-01	4.52E-04	3.00E-02	2.15E-01	4.09E-02	2.30E-01	1.11E+00	1.66E-01	2.47E-01	Navy 1998
Silver																	
Dose/High TRV	3.01E-02	2.92E-02	1.11E+00	NA	8.79E-01	2.57E-02	9.04E-04	7.90E-01	7.14E-04	3.00E-02	2.15E-01	3.69E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	1.11E+00	NA	8.79E-01	2.57E-02	9.04E-04	7.90E-01	7.14E-04	3.00E-02	2.15E-01	3.69E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Thallium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.41E-01	4.12E-03	9.04E-04	6.40E-01	5.79E-04	3.00E-02	2.15E-01	6.55E-04	3.50E-01	7.63E-02	4.31E-01	1.52E-03	EPA 1999
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.41E-01	4.12E-03	9.04E-04	6.40E-01	5.79E-04	3.00E-02	2.15E-01	6.55E-04	3.50E-01	7.63E-02	4.31E-01	1.52E-03	EPA 1999
Vanadium																	
Dose/High TRV	3.01E-02	2.92E-02	2.92E-01	NA	1.21E+01	3.55E-01	9.04E-04	4.16E+01	3.76E-02	3.00E-02	2.15E-01	5.48E-02	1.14E+02	1.17E+00	8.12E+01	6.74E-04	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	2.92E-01	NA	1.21E+01	3.55E-01	9.04E-04	4.16E+01	3.76E-02	3.00E-02	2.15E-01	5.48E-02	1.14E+01	1.17E+00	8.12E+00	6.74E-03	Sample and others 1996
Zinc																	
Dose/High TRV	3.01E-02	2.92E-02	8.41E-01	NA	4.46E+02	1.31E+01	9.04E-04	5.31E+02	4.80E-01	3.00E-02	2.15E-01	1.89E+00	1.72E+02	9.55E-01	1.28E+02	1.48E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	8.41E-01	NA	4.46E+02	1.31E+01	9.04E-04	5.31E+02	4.80E-01	3.00E-02	2.15E-01	1.89E+00	1.72E+01	9.55E-01	1.28E+01	1.48E-01	Navy 1998
ORGANOTINS																	
Dibutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	1.41E+01	NA	8.45E-01	2.47E-02	9.04E-04	6.00E-02	5.43E-05	3.00E-02	2.15E-01	3.45E-03	4.59E+01	9.65E-02	5.38E+01	6.42E-05	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.41E+01	NA	8.45E-01	2.47E-02	9.04E-04	6.00E-02	5.43E-05	3.00E-02	2.15E-01	3.45E-03	7.30E-01	9.65E-02	8.57E-01	4.03E-03	Navy 1998
Monobutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	#REF!	NA	#REF!	#REF!	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	#REF!	4.59E+01	9.65E-02	5.38E+01	#REF!	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	#REF!	NA	#REF!	#REF!	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	#REF!	7.30E-01	9.65E-02	8.57E-01	#REF!	Navy 1998
Tetrabutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	#REF!	#REF!	#REF!	#REF!	9.04E-04	1.00E-02	9.04E-06	3.00E-02	2.15E-01	#REF!	4.59E+01	9.65E-02	5.38E+01	#REF!	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	#REF!	#REF!	#REF!	#REF!	9.04E-04	1.00E-02	9.04E-06	3.00E-02	2.15E-01	#REF!	7.30E-01	9.65E-02	8.57E-01	#REF!	Navy 1998
Tributyltin																	
Dose/High TRV	3.01E-02	2.92E-02	1.01E+01	NA	3.04E+00	8.88E-02	9.04E-04	3.00E-01	2.71E-04	3.00E-02	2.15E-01	1.24E-02	4.59E+01	9.65E-02	5.38E+01	2.31E-04	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.01E+01	NA	3.04E+00	8.88E-02	9.04E-04	3.00E-01	2.71E-04	3.00E-02	2.15E-01	1.24E-02	7.30E-01	9.65E-02	8.57E-01	1.45E-02	Navy 1998
PCBs																	
Total PCBs (Congeners)																	
Dose/High TRV	3.01E-02	2.92E-02	6.15E+00	NA	3.94E+02	1.15E+01	9.04E-04	6.40E+01	5.79E-02	3.00E-02	2.15E-01	1.61E+00	1.27E+00	1.72E+00	8.38E-01	1.93E+00	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	6.15E+00	NA	3.94E+02	1.15E+01	9.04E-04	6.40E+01	5.79E-02	3.00E-02	2.15E-01	1.61E+00	9.00E-02	8.00E-01	6.92E-02	2.33E+01	Navy 1998
Total Aroclors																	
Dose/High TRV	3.01E-02	2.92E-02	6.15E+00	NA	5.91E+01	1.73E+00	9.04E-04	9.60E+00	8.68E-03	3.00E-02	2.15E-01	2.42E-01	1.27E+00	1.72E+00	8.38E-01	2.89E-01	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	6.15E+00	NA	5.91E+01	1.73E+00	9.04E-04	9.60E+00	8.68E-03	3.00E-02	2.15E-01	2.42E-01	9.00E-02	8.00E-01	6.92E-02	3.50E+00	Navy 1998
PESTICIDES																	
Total DDTs																	
Dose/High TRV	3.01E-02	2.92E-02	1.43E+01	NA	2.61E+00	7.62E-02	9.04E-04	1.83E-01	1.65E-04	3.00E-02	2.15E-01	1.07E-02	1.50E+00	1.00E+00	1.10E+00	9.66E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.43E+01	NA	2.61E+00	7.62E-02	9.04E-04	1.83E-01	1.65E-04	3.00E-02	2.15E-01	1.07E-02	9.00E-03	3.50E+00	5.15E-03	2.07E+00	Navy 1998
alpha-Chlordane																	
Dose/High TRV	3.01E-02	2.92E-02	5.82E+00	NA	9.60E-02	2.81E-03	9.04E-04	1.65E-02	1.49E-05	3.00E-02	2.15E-01	3.94E-04	1.07E+01	6.40E-02	1.36E+01	2.89E-05	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	5.82E+00	NA	9.60E-02	2.81E-03	9.04E-04	1.65E-02	1.49E-05	3.00E-02	2.15E-01	3.94E-04	2.14E+00	6.40E-02	2.73E+00	1.44E-04	Sample and others 1996

TABLE G-10: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON SOFT-BODIED INVERTEBRATE PREY (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
PESTICIDES (Continued)																	
gamma-Chlordane																	
Dose/High TRV	3.01E-02	2.92E-02	4.16E+00	NA	1.54E-01	4.52E-03	9.04E-04	3.71E-02	3.36E-05	3.00E-02	2.15E-01	6.35E-04	1.07E+01	6.40E-02	1.36E+01	4.66E-05	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	4.16E+00	NA	1.54E-01	4.52E-03	9.04E-04	3.71E-02	3.36E-05	3.00E-02	2.15E-01	6.35E-04	2.14E+00	6.40E-02	2.73E+00	2.33E-04	Sample and others 1996
Dieldrin																	
Dose/High TRV	3.01E-02	2.92E-02	2.17E+01	NA	2.04E+00	5.97E-02	9.04E-04	9.40E-02	8.50E-05	3.00E-02	2.15E-01	8.34E-03	7.70E-01	4.66E-01	6.60E-01	1.26E-02	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	2.17E+01	NA	2.04E+00	5.97E-02	9.04E-04	9.40E-02	8.50E-05	3.00E-02	2.15E-01	8.34E-03	7.70E-02	4.66E-01	6.60E-02	1.26E-01	Sample and others 1996
DIOXINS/FURANS																	
Dose/High TRV	3.01E-02	2.92E-02	0.00E+00	NA	0.00E+00	0.00E+00	9.04E-04	1.43E-05	1.29E-08	3.00E-02	2.15E-01	1.81E-09	1.40E-04	1.10E+00	1.01E-04	1.79E-05	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	0.00E+00	NA	0.00E+00	0.00E+00	9.04E-04	1.43E-05	1.29E-08	3.00E-02	2.15E-01	1.81E-09	1.40E-07	1.10E+00	1.01E-07	1.79E-02	Sample and others 1996
LMW PAH																	
Dose/High TRV	3.01E-02	2.92E-02	6.86E-01	NA	2.31E-01	6.75E-03	9.04E-04	3.37E-01	3.04E-04	3.00E-02	2.15E-01	9.84E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	6.86E-01	NA	2.31E-01	6.75E-03	9.04E-04	3.37E-01	3.04E-04	3.00E-02	2.15E-01	9.84E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
HMW PAH																	
Dose/High TRV	3.01E-02	2.92E-02	6.29E-01	NA	3.64E+00	1.06E-01	9.04E-04	5.79E+00	5.24E-03	3.00E-02	2.15E-01	1.56E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	6.29E-01	NA	3.64E+00	1.06E-01	9.04E-04	5.79E+00	5.24E-03	3.00E-02	2.15E-01	1.56E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]

Notes:

a Total ingestion rate was calculated with an average adult body weight of 215 grams using the Nagy (2001) dry matter intake food requirement equation for marine birds (a=0.880; b=0.658).

b Prey ingestion rate equals 97.0 percent of the total ingestion rate, based on a sediment ingestion rate equal to 3.0 percent of the total ingestion rate.

c HPS site-specific mean BAFs for soft-bodied invertebrates (Parcel F) were used to calculate prey concentrations. EPA's 1999 BCFs for sediment-to-aquatic invertebrate were used as a default if no HPS SBI BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used. SBI BAFs were in dry weight.

d For literature BAFs, wet weight prey concentration was calculated by multiplying the sediment concentration by the BAF. Prey concentrations were then converted to dry weight using the formula: dry weight concentration = (wet weight concentration) / (1% of water in medium). Percent tissue moisture used to convert wet weight prey concentrations to dry weight was 68% (EPA 1993). Site-specific BAFs were already in dry weight.

e Prey daily dose was calculated by multiplying the prey ingestion rate by the dry weight prey concentration.

f Sediment ingestion rate equals 3.0 percent of the total ingestion rate; based on study by Hui and Beyer (1998).

g Sediment concentration for dose calculations equals the 95 percent upper confidence limit of the arithmetic mean for all site-collected sediment samples. Nondetects shown as 0.

h Sediment daily dose was calculated by multiplying the sediment ingestion rate by the sediment concentration.

i Mean adult body weight from Dunning 1984.

j Total daily dose is calculated using the following equation: total daily dose = [(sediment daily dose + prey daily dose)*SUF]/receptor species body weight.

k The derivation of TRVs is described in Navy (1998) and Sample and others (1996).

l Allometrically adjusted TRVs were calculated using the following equation: receptor species TRV = (test species TRV) x (test species body weight / receptor species body weight) $^{(1-1.2)}$.

m The HQ was calculated using total daily dose/allometrically adjusted TRV.

n Sufficient data are unavailable to derive a TRV. This chemical was evaluated qualitatively.

o "Calculated" indicates that a high TRV was unavailable in Navy (1998) or Sample and others (1996); in those cases, an uncertainty factor of 10 was applied to the low TRV to derive a high TRV.

BAF	Bioaccumulation factor	HMW	High molecular-weight	mg/day	Milligram per day	PAH	Polynuclear aromatic hydrocarbon
BCF	Bioconcentration factor	HPS	Hunters Point Shipyard	mg/kg	Milligram per kilogram	PCB	Polychlorinated biphenyl
bgs	Below ground surface	HQ	Hazard quotient	mg/kg/day	Milligram per kilogram per day	SBI	Soft bodied invertebrate
COPEC	Chemical of potential ecological concern	kg	Kilogram	NA	Not available	SUF	Site use factor
DDT	Dichlorodiphenyltrichloroethane	kg/day	Kilogram per day	Navy	U.S. Department of the Navy	TRV	Toxicity reference value
EPA	U.S. Environmental Protection Agency	LMW	Low molecular-weight				

Sources:

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TABLE G-11: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON SOFT-BODIED INVERTEBRATE PREY (2 TO 2.5 FEET BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS																	
Aluminum																	
Dose/High TRV	3.01E-02	2.92E-02	3.33E-01	NA	1.70E+03	4.97E+01	9.04E-04	5.11E+03	4.62E+00	3.00E-02	2.15E-01	7.58E+00	1.10E+03	1.55E-01	1.17E+03	6.48E-03	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	3.33E-01	NA	1.70E+03	4.97E+01	9.04E-04	5.11E+03	4.62E+00	3.00E-02	2.15E-01	7.58E+00	1.10E+02	1.55E-01	1.17E+02	6.48E-02	Sample and others 1996
Antimony																	
Dose/High TRV	3.01E-02	2.92E-02	3.33E-01	NA	9.33E+00	2.73E-01	9.04E-04	2.81E+01	2.54E-02	3.00E-02	2.15E-01	4.16E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	3.33E-01	NA	9.33E+00	2.73E-01	9.04E-04	2.81E+01	2.54E-02	3.00E-02	2.15E-01	4.16E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Barium																	
Dose/High TRV	3.01E-02	2.92E-02	2.83E-01	NA	2.18E+01	6.38E-01	9.04E-04	7.72E+01	6.98E-02	3.00E-02	2.15E-01	9.87E-02	4.17E+01	1.21E-01	4.68E+01	2.11E-03	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	2.83E-01	NA	2.18E+01	6.38E-01	9.04E-04	7.72E+01	6.98E-02	3.00E-02	2.15E-01	9.87E-02	2.08E+01	1.21E-01	2.33E+01	4.23E-03	Sample and others 1996
Beryllium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	5.06E-02	2.81E-01	8.22E-03	9.04E-04	2.30E-01	2.08E-04	3.00E-02	2.15E-01	1.18E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	5.06E-02	2.81E-01	8.22E-03	9.04E-04	2.30E-01	2.08E-04	3.00E-02	2.15E-01	1.18E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Cadmium																	
Dose/High TRV	3.01E-02	2.92E-02	3.86E+00	NA	1.34E+01	3.93E-01	9.04E-04	3.48E+00	3.15E-03	3.00E-02	2.15E-01	5.52E-02	1.04E+01	8.40E-02	1.26E+01	4.39E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	3.86E+00	NA	1.34E+01	3.93E-01	9.04E-04	3.48E+00	3.15E-03	3.00E-02	2.15E-01	5.52E-02	8.00E-02	7.99E-01	6.15E-02	8.98E-01	Navy 1998
Chromium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	NA	2.86E+01	8.37E-01	9.04E-04	1.30E+02	1.18E-01	3.00E-02	2.15E-01	1.33E-01	5.00E+00	1.25E+00	3.52E+00	3.79E-02	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	NA	2.86E+01	8.37E-01	9.04E-04	1.30E+02	1.18E-01	3.00E-02	2.15E-01	1.33E-01	1.00E+00	1.25E+00	7.03E-01	1.89E-01	Sample and others 1996
Cobalt																	
Dose/High TRV	3.01E-02	2.92E-02	3.93E-01	NA	4.47E+00	1.31E-01	9.04E-04	1.14E+01	1.03E-02	3.00E-02	2.15E-01	1.97E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	3.93E-01	NA	4.47E+00	1.31E-01	9.04E-04	1.14E+01	1.03E-02	3.00E-02	2.15E-01	1.97E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Copper																	
Dose/High TRV	3.01E-02	2.92E-02	6.73E-01	NA	3.23E+03	9.45E+01	9.04E-04	4.80E+03	4.34E+00	3.00E-02	2.15E-01	1.38E+01	5.23E+01	4.09E-01	4.60E+01	3.00E-01	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	6.73E-01	NA	3.23E+03	9.45E+01	9.04E-04	4.80E+03	4.34E+00	3.00E-02	2.15E-01	1.38E+01	2.30E+00	6.39E-01	1.85E+00	7.46E+00	Navy 1998
Lead																	
Dose/High TRV	3.01E-02	2.92E-02	3.91E-01	NA	3.91E+02	1.14E+01	9.04E-04	1.00E+03	9.04E-01	3.00E-02	2.15E-01	1.72E+00	8.75E+00	8.00E-01	6.73E+00	2.56E-01	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	3.91E-01	NA	3.91E+02	1.14E+01	9.04E-04	1.00E+03	9.04E-01	3.00E-02	2.15E-01	1.72E+00	1.40E-02	8.40E-02	1.69E-02	1.02E+02	Navy 1998
Magnesium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Manganese																	
Dose/High TRV	3.01E-02	2.92E-02	4.05E-01	NA	1.94E+02	5.66E+00	9.04E-04	4.78E+02	4.32E-01	3.00E-02	2.15E-01	8.50E-01	7.76E+02	1.97E-01	7.90E+02	1.08E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	4.05E-01	NA	1.94E+02	5.66E+00	9.04E-04	4.78E+02	4.32E-01	3.00E-02	2.15E-01	8.50E-01	7.76E+01	1.97E-01	7.90E+01	1.08E-02	Navy 1998
Mercury																	
Dose/High TRV	3.01E-02	2.92E-02	6.09E-01	NA	1.46E+01	4.27E-01	9.04E-04	2.40E+01	2.17E-02	3.00E-02	2.15E-01	6.26E-02	1.80E-01	1.00E+00	1.32E-01	4.73E-01	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	6.09E-01	NA	1.46E+01	4.27E-01	9.04E-04	2.40E+01	2.17E-02	3.00E-02	2.15E-01	6.26E-02	3.90E-02	1.00E+00	2.87E-02	2.18E+00	Navy 1998
Molybdenum																	
Dose/High TRV	3.01E-02	2.92E-02	1.75E+00	NA	4.45E+00	1.30E-01	9.04E-04	2.54E+00	2.30E-03	3.00E-02	2.15E-01	1.85E-02	3.53E+01	1.50E+00	2.39E+01	7.71E-04	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	1.75E+00	NA	4.45E+00	1.30E-01	9.04E-04	2.54E+00	2.30E-03	3.00E-02	2.15E-01	1.85E-02	3.50E+00	1.50E+00	2.37E+00	7.78E-03	Sample and others 1996
Nickel																	
Dose/High TRV	3.01E-02	2.92E-02	2.92E-01	NA	3.96E+01	1.16E+00	9.04E-04	1.36E+02	1.23E-01	3.00E-02	2.15E-01	1.79E-01	5.52E+01	5.80E-01	4.52E+01	3.95E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	2.92E-01	NA	3.96E+01	1.16E+00	9.04E-04	1.36E+02	1.23E-01	3.00E-02	2.15E-01	1.79E-01	1.38E+00	6.14E-01	1.12E+00	1.60E-01	Navy 1998

TABLE G-11: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON SOFT-BODIED INVERTEBRATE PREY (2 TO 2.5 FEET BGS) (CONTINUED)
Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS (Continued)																	
Selenium																	
Dose/High TRV	3.01E-02	2.92E-02	2.00E+01	NA	1.10E+01	3.22E-01	9.04E-04	5.50E-01	4.97E-04	3.00E-02	2.15E-01	4.50E-02	9.30E-01	1.11E+00	6.70E-01	6.71E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	2.00E+01	NA	1.10E+01	3.22E-01	9.04E-04	5.50E-01	4.97E-04	3.00E-02	2.15E-01	4.50E-02	2.30E-01	1.11E+00	1.66E-01	2.71E-01	Navy 1998
Silver																	
Dose/High TRV	3.01E-02	2.92E-02	1.11E+00	NA	6.90E-01	2.02E-02	9.04E-04	6.20E-01	5.61E-04	3.00E-02	2.15E-01	2.89E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	1.11E+00	NA	6.90E-01	2.02E-02	9.04E-04	6.20E-01	5.61E-04	3.00E-02	2.15E-01	2.89E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Thallium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.03E-01	3.02E-03	9.04E-04	4.70E-01	4.25E-04	3.00E-02	2.15E-01	4.81E-04	3.50E-01	7.63E-02	4.31E-01	1.12E-03	EPA 1999
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.03E-01	3.02E-03	9.04E-04	4.70E-01	4.25E-04	3.00E-02	2.15E-01	4.81E-04	3.50E-01	7.63E-02	4.31E-01	1.12E-03	EPA 1999
Vanadium																	
Dose/High TRV	3.01E-02	2.92E-02	2.92E-01	NA	1.06E+01	3.11E-01	9.04E-04	3.64E+01	3.29E-02	3.00E-02	2.15E-01	4.79E-02	1.14E+02	1.17E+00	8.12E+01	5.90E-04	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	2.92E-01	NA	1.06E+01	3.11E-01	9.04E-04	3.64E+01	3.29E-02	3.00E-02	2.15E-01	4.79E-02	1.14E+01	1.17E+00	8.12E+00	5.90E-03	Sample and others 1996
Zinc																	
Dose/High TRV	3.01E-02	2.92E-02	8.41E-01	NA	1.82E+03	5.31E+01	9.04E-04	2.16E+03	1.95E+00	3.00E-02	2.15E-01	7.68E+00	1.72E+02	9.55E-01	1.28E+02	6.02E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	8.41E-01	NA	1.82E+03	5.31E+01	9.04E-04	2.16E+03	1.95E+00	3.00E-02	2.15E-01	7.68E+00	1.72E+01	9.55E-01	1.28E+01	6.02E-01	Navy 1998
ORGANOTINS																	
Dibutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	1.41E+01	NA	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	4.59E+01	9.65E-02	5.38E+01	0.00E+00	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.41E+01	NA	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	7.30E-01	9.65E-02	8.57E-01	0.00E+00	Navy 1998
Monobutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	4.59E+01	9.65E-02	5.38E+01	0.00E+00	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	7.30E-01	9.65E-02	8.57E-01	0.00E+00	Navy 1998
Tetrabutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	4.59E+01	9.65E-02	5.38E+01	0.00E+00	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	7.30E-01	9.65E-02	8.57E-01	0.00E+00	Navy 1998
Tributyltin																	
Dose/High TRV	3.01E-02	2.92E-02	1.01E+01	NA	9.11E-02	2.67E-03	9.04E-04	9.00E-03	8.14E-06	3.00E-02	2.15E-01	3.73E-04	4.59E+01	9.65E-02	5.38E+01	6.93E-06	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.01E+01	NA	9.11E-02	2.67E-03	9.04E-04	9.00E-03	8.14E-06	3.00E-02	2.15E-01	3.73E-04	7.30E-01	9.65E-02	8.57E-01	4.35E-04	Navy 1998
PCBs																	
Total Aroclors																	
Dose/High TRV	3.01E-02	2.92E-02	6.15E+00	NA	1.66E+03	4.86E+01	9.04E-04	2.70E+02	2.44E-01	3.00E-02	2.15E-01	6.81E+00	1.27E+00	1.72E+00	8.38E-01	8.12E+00	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	6.15E+00	NA	1.66E+03	4.86E+01	9.04E-04	2.70E+02	2.44E-01	3.00E-02	2.15E-01	6.81E+00	9.00E-02	8.00E-01	6.92E-02	9.84E+01	Navy 1998
PESTICIDES																	
Total DDTs																	
Dose/High TRV	3.01E-02	2.92E-02	1.43E+01	NA	3.40E+01	9.94E-01	9.04E-04	2.38E+00	2.15E-03	3.00E-02	2.15E-01	1.39E-01	1.50E+00	1.00E+00	1.10E+00	1.26E-01	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.43E+01	NA	3.40E+01	9.94E-01	9.04E-04	2.38E+00	2.15E-03	3.00E-02	2.15E-01	1.39E-01	9.00E-03	3.50E+00	5.15E-03	2.70E+01	Navy 1998
alpha-Chlordane																	
Dose/High TRV	3.01E-02	2.92E-02	5.82E+00	NA	4.04E-01	1.18E-02	9.04E-04	6.95E-02	6.29E-05	3.00E-02	2.15E-01	1.66E-03	1.07E+01	6.40E-02	1.36E+01	1.22E-04	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	5.82E+00	NA	4.04E-01	1.18E-02	9.04E-04	6.95E-02	6.29E-05	3.00E-02	2.15E-01	1.66E-03	2.14E+00	6.40E-02	2.73E+00	6.08E-04	Sample and others 1996
gamma-Chlordane																	
Dose/High TRV	3.01E-02	2.92E-02	4.16E+00	NA	5.19E-01	1.52E-02	9.04E-04	1.25E-01	1.13E-04	3.00E-02	2.15E-01	2.13E-03	1.07E+01	6.40E-02	1.36E+01	1.57E-04	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	4.16E+00	NA	5.19E-01	1.52E-02	9.04E-04	1.25E-01	1.13E-04	3.00E-02	2.15E-01	2.13E-03	2.14E+00	6.40E-02	2.73E+00	7.83E-04	Sample and others 1996

TABLE G-11: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON SOFT-BODIED INVERTEBRATE PREY (2 TO 2.5 FEET BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
PESTICIDES (Continued)																	
Dieldrin																	
Dose/High TRV	3.01E-02	2.92E-02	2.17E+01	NA	1.74E+01	5.08E-01	9.04E-04	8.00E-01	7.23E-04	3.00E-02	2.15E-01	7.09E-02	7.70E-01	4.66E-01	6.60E-01	1.08E-01	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	2.17E+01	NA	1.74E+01	5.08E-01	9.04E-04	8.00E-01	7.23E-04	3.00E-02	2.15E-01	7.09E-02	7.70E-02	4.66E-01	6.60E-02	1.08E+00	Sample and others 1996
LMW PAH																	
Dose/High TRV	3.01E-02	2.92E-02	6.86E-01	NA	7.11E-01	2.08E-02	9.04E-04	1.04E+00	9.38E-04	3.00E-02	2.15E-01	3.03E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	6.86E-01	NA	7.11E-01	2.08E-02	9.04E-04	1.04E+00	9.38E-04	3.00E-02	2.15E-01	3.03E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
HMW PAH																	
Dose/High TRV	3.01E-02	2.92E-02	6.29E-01	NA	4.72E+00	1.38E-01	9.04E-04	7.51E+00	6.79E-03	3.00E-02	2.15E-01	2.02E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	6.29E-01	NA	4.72E+00	1.38E-01	9.04E-04	7.51E+00	6.79E-03	3.00E-02	2.15E-01	2.02E-02	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]

Notes:

a Total ingestion rate was calculated with an average adult body weight of 215 grams using the Nagy (2001) dry matter intake food requirement equation for marine birds (a=0.880; b=0.658).

b Prey ingestion rate equals 97.0 percent of the total ingestion rate, based on a sediment ingestion rate equal to 3.0 percent of the total ingestion rate.

c HPS site-specific mean BAFs for soft-bodied invertebrates (Parcel F) were used to calculate prey concentrations. EPA's 1999 BCFs for sediment-to-aquatic invertebrate were used as a default if no HPS SBI BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used. SBI BAFs were in dry weight.

d For literature BAFs, wet weight prey concentration was calculated by multiplying the sediment concentration by the BAF. Prey concentrations were then converted to dry weight using the formula: dry weight concentration = (wet weight concentration) / (1 percent of water in medium). Percent tissue moisture used to convert wet weight prey concentrations to dry weight was 68 percent (EPA 1993). Site-specific BAFs were already in dry weight.

e Prey daily dose was calculated by multiplying the prey ingestion rate by the dry weight prey concentration.

f Sediment ingestion rate equals 3.0 percent of the total ingestion rate; based on study by Hui and Beyer (1998).

g Sediment concentration for dose calculations equals the 95 percent upper confidence limit of the arithmetic mean for all site-collected sediment samples. Nondetects shown as 0.

h Sediment daily dose was calculated by multiplying the sediment ingestion rate by the sediment concentration.

i Mean adult body weight from Dunning 1984.

j Total daily dose is calculated using the following equation: total daily dose = [(sediment daily dose + prey daily dose)*SUF]/receptor species body weight.

k The derivation of TRVs is described in Navy (1998) and Sample and others (1996).

l Allometrically adjusted TRVs were calculated using the following equation: receptor species TRV = (test species TRV) x (test species body weight / receptor species body weight)$^{(1-1.2)}$.

m The HQ was calculated using total daily dose/allometrically adjusted TRV.

n Sufficient data are unavailable to derive a TRV. This chemical was evaluated qualitatively.

o "Calculated" indicates that a high TRV was unavailable in Navy (1998) or Sample and others (1996); in those cases, an uncertainty factor of 10 was applied to the low TRV to derive a high TRV.

BAF	Bioaccumulation factor	HQ	Hazard quotient	NA	Not available
BCF	Bioconcentration factor	kg	Kilogram	Navy	U.S. Department of the Navy
bgs	Below ground surface	kg/day	Kilogram per day	PAH	Polynuclear aromatic hydrocarbon
COPEC	Chemical of potential ecological concern	LMW	Low molecular-weight	PCB	Polychlorinated biphenyl
DDT	Dichlorodiphenyltrichloroethane	mg/day	Milligram per day	SBI	Soft bodied invertebrate
EPA	U.S. Environmental Protection Agency	mg/kg	Milligram per kilogram	SUF	Site use factor
HMW	High molecular-weight	mg/kg/day	Milligram per kilogram per day	TRV	Toxicity reference value
HPS	Hunters Point Shipyard				

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TABLE G-12: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON *MACOMA* AS PREY (0 TO 0.5 FOOT BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS																	
Aluminum																	
Dose/High TRV	3.01E-02	2.92E-02	2.35E-02	NA	1.36E+02	3.98E+00	9.04E-04	5.79E+03	5.24E+00	3.00E-02	2.15E-01	1.29E+00	1.10E+03	1.55E-01	1.17E+03	1.10E-03	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	2.35E-02	NA	1.36E+02	3.98E+00	9.04E-04	5.79E+03	5.24E+00	3.00E-02	2.15E-01	1.29E+00	1.10E+02	1.55E-01	1.17E+02	1.10E-02	Sample and others 1996
Antimony																	
Dose/High TRV	3.01E-02	2.92E-02	1.02E-01	NA	7.09E-01	2.07E-02	9.04E-04	6.98E+00	6.31E-03	3.00E-02	2.15E-01	3.77E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	1.02E-01	NA	7.09E-01	2.07E-02	9.04E-04	6.98E+00	6.31E-03	3.00E-02	2.15E-01	3.77E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Barium																	
Dose/High TRV	3.01E-02	2.92E-02	3.32E-02	NA	3.17E+00	9.27E-02	9.04E-04	9.55E+01	8.63E-02	3.00E-02	2.15E-01	2.50E-02	4.17E+01	1.21E-01	4.68E+01	5.34E-04	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	3.32E-02	NA	3.17E+00	9.27E-02	9.04E-04	9.55E+01	8.63E-02	3.00E-02	2.15E-01	2.50E-02	2.08E+01	1.21E-01	2.33E+01	1.07E-03	Sample and others 1996
Beryllium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	4.18E-02	2.32E-01	6.79E-03	9.04E-04	1.90E-01	1.72E-04	3.00E-02	2.15E-01	9.71E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	4.18E-02	2.32E-01	6.79E-03	9.04E-04	1.90E-01	1.72E-04	3.00E-02	2.15E-01	9.71E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Cadmium																	
Dose/High TRV	3.01E-02	2.92E-02	1.08E+00	NA	9.35E+00	2.73E-01	9.04E-04	8.64E+00	7.81E-03	3.00E-02	2.15E-01	3.92E-02	1.04E+01	8.40E-02	1.26E+01	3.12E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.08E+00	NA	9.35E+00	2.73E-01	9.04E-04	8.64E+00	7.81E-03	3.00E-02	2.15E-01	3.92E-02	8.00E-02	7.99E-01	6.15E-02	6.37E-01	Navy 1998
Chromium																	
Dose/High TRV	3.01E-02	2.92E-02	5.91E-02	NA	5.83E+00	1.71E-01	9.04E-04	9.88E+01	8.93E-02	3.00E-02	2.15E-01	3.63E-02	5.00E+00	1.25E+00	3.52E+00	1.03E-02	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	5.91E-02	NA	5.83E+00	1.71E-01	9.04E-04	9.88E+01	8.93E-02	3.00E-02	2.15E-01	3.63E-02	1.00E+00	1.25E+00	7.03E-01	5.16E-02	Sample and others 1996
Cobalt																	
Dose/High TRV	3.01E-02	2.92E-02	1.34E-01	NA	1.44E+00	4.20E-02	9.04E-04	1.07E+01	9.69E-03	3.00E-02	2.15E-01	7.21E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	1.34E-01	NA	1.44E+00	4.20E-02	9.04E-04	1.07E+01	9.69E-03	3.00E-02	2.15E-01	7.21E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Copper																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.65E+02	4.82E+00	9.04E-04	7.48E+02	6.76E-01	3.00E-02	2.15E-01	7.67E-01	5.23E+01	4.09E-01	4.60E+01	1.67E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.65E+02	4.82E+00	9.04E-04	7.48E+02	6.76E-01	3.00E-02	2.15E-01	7.67E-01	2.30E+00	6.39E-01	1.85E+00	4.15E-01	Navy 1998
Lead																	
Dose/High TRV	3.01E-02	2.92E-02	8.42E-02	NA	2.73E+01	7.98E-01	9.04E-04	3.24E+02	2.93E-01	3.00E-02	2.15E-01	1.52E-01	8.75E+00	8.00E-01	6.73E+00	2.26E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	8.42E-02	NA	2.73E+01	7.98E-01	9.04E-04	3.24E+02	2.93E-01	3.00E-02	2.15E-01	1.52E-01	1.40E-02	8.40E-02	1.69E-02	9.02E+00	Navy 1998
Magnesium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Manganese																	
Dose/High TRV	3.01E-02	2.92E-02	6.79E-02	NA	3.06E+01	8.96E-01	9.04E-04	4.51E+02	4.08E-01	3.00E-02	2.15E-01	1.82E-01	7.76E+02	1.97E-01	7.90E+02	2.30E-04	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	6.79E-02	NA	3.06E+01	8.96E-01	9.04E-04	4.51E+02	4.08E-01	3.00E-02	2.15E-01	1.82E-01	7.76E+01	1.97E-01	7.90E+01	2.30E-03	Navy 1998
Mercury																	
Dose/High TRV	3.01E-02	2.92E-02	2.88E-01	NA	2.19E-01	6.41E-03	9.04E-04	7.60E-01	6.87E-04	3.00E-02	2.15E-01	9.90E-04	1.80E-01	1.00E+00	1.32E-01	7.48E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	2.88E-01	NA	2.19E-01	6.41E-03	9.04E-04	7.60E-01	6.87E-04	3.00E-02	2.15E-01	9.90E-04	3.90E-02	1.00E+00	2.87E-02	3.45E-02	Navy 1998
Molybdenum																	
Dose/High TRV	3.01E-02	2.92E-02	2.86E+00	NA	1.17E+01	3.43E-01	9.04E-04	4.11E+00	3.72E-03	3.00E-02	2.15E-01	4.84E-02	3.53E+01	1.50E+00	2.39E+01	2.02E-03	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	2.86E+00	NA	1.17E+01	3.43E-01	9.04E-04	4.11E+00	3.72E-03	3.00E-02	2.15E-01	4.84E-02	3.50E+00	1.50E+00	2.37E+00	2.04E-02	Sample and others 1996
Nickel																	
Dose/High TRV	3.01E-02	2.92E-02	7.52E-02	NA	1.24E+01	3.62E-01	9.04E-04	1.65E+02	1.49E-01	3.00E-02	2.15E-01	7.13E-02	5.52E+01	5.80E-01	4.52E+01	1.58E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	7.52E-02	NA	1.24E+01	3.62E-01	9.04E-04	1.65E+02	1.49E-01	3.00E-02	2.15E-01	7.13E-02	1.38E+00	6.14E-01	1.12E+00	6.37E-02	Navy 1998
Selenium																	
Dose/High TRV	3.01E-02	2.92E-02	8.42E-02	NA	4.21E-02	1.23E-03	9.04E-04	5.00E-01	4.52E-04	3.00E-02	2.15E-01	2.35E-04	9.30E-01	1.11E+00	6.70E-01	3.50E-04	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	8.42E-02	NA	4.21E-02	1.23E-03	9.04E-04	5.00E-01	4.52E-04	3.00E-02	2.15E-01	2.35E-04	2.30E-01	1.11E+00	1.66E-01	1.42E-03	Navy 1998

TABLE G-12: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON *MACOMA* AS PREY (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS (Continued)																	
Silver																	
Dose/High TRV	3.01E-02	2.92E-02	4.52E-01	NA	3.57E-01	1.04E-02	9.04E-04	7.90E-01	7.14E-04	3.00E-02	2.15E-01	1.56E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	4.52E-01	NA	3.57E-01	1.04E-02	9.04E-04	7.90E-01	7.14E-04	3.00E-02	2.15E-01	1.56E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Thallium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.41E-01	4.12E-03	9.04E-04	6.40E-01	5.79E-04	3.00E-02	2.15E-01	6.55E-04	3.50E-01	7.63E-02	4.31E-01	1.52E-03	EPA 1999
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.41E-01	4.12E-03	9.04E-04	6.40E-01	5.79E-04	3.00E-02	2.15E-01	6.55E-04	3.50E-01	7.63E-02	4.31E-01	1.52E-03	EPA 1999
Vanadium																	
Dose/High TRV	3.01E-02	2.92E-02	5.58E-02	NA	2.32E+00	6.78E-02	9.04E-04	4.16E+01	3.76E-02	3.00E-02	2.15E-01	1.47E-02	1.14E+02	1.17E+00	8.12E+01	1.81E-04	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	5.58E-02	NA	2.32E+00	6.78E-02	9.04E-04	4.16E+01	3.76E-02	3.00E-02	2.15E-01	1.47E-02	1.14E+01	1.17E+00	8.12E+00	1.81E-03	Sample and others 1996
Zinc																	
Dose/High TRV	3.01E-02	2.92E-02	7.34E-01	NA	3.90E+02	1.14E+01	9.04E-04	5.31E+02	4.80E-01	3.00E-02	2.15E-01	1.66E+00	1.72E+02	9.55E-01	1.28E+02	1.30E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	7.34E-01	NA	3.90E+02	1.14E+01	9.04E-04	5.31E+02	4.80E-01	3.00E-02	2.15E-01	1.66E+00	1.72E+01	9.55E-01	1.28E+01	1.30E-01	Navy 1998
ORGANOTINS																	
Dibutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	1.91E+00	NA	1.15E-01	3.36E-03	9.04E-04	6.00E-02	5.43E-05	3.00E-02	2.15E-01	4.76E-04	4.59E+01	9.65E-02	5.38E+01	8.85E-06	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.91E+00	NA	1.15E-01	3.36E-03	9.04E-04	6.00E-02	5.43E-05	3.00E-02	2.15E-01	4.76E-04	7.30E-01	9.65E-02	8.57E-01	5.56E-04	Navy 1998
Monobutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	4.59E+01	9.65E-02	5.38E+01	0.00E+00	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	7.30E-01	9.65E-02	8.57E-01	0.00E+00	Navy 1998
Tetrabutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	1.00E-02	9.04E-06	3.00E-02	2.15E-01	1.26E-06	4.59E+01	9.65E-02	5.38E+01	2.34E-08	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	1.00E-02	9.04E-06	3.00E-02	2.15E-01	1.26E-06	7.30E-01	9.65E-02	8.57E-01	1.47E-06	Navy 1998
Tributyltin																	
Dose/High TRV	3.01E-02	2.92E-02	4.92E+00	NA	1.48E+00	4.32E-02	9.04E-04	3.00E-01	2.71E-04	3.00E-02	2.15E-01	6.06E-03	4.59E+01	9.65E-02	5.38E+01	1.13E-04	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	4.92E+00	NA	1.48E+00	4.32E-02	9.04E-04	3.00E-01	2.71E-04	3.00E-02	2.15E-01	6.06E-03	7.30E-01	9.65E-02	8.57E-01	7.07E-03	Navy 1998
PCBs																	
Total PCBs (Congeners)																	
Dose/High TRV	3.01E-02	2.92E-02	1.77E+00	NA	1.13E+02	3.30E+00	9.04E-04	6.40E+01	5.79E-02	3.00E-02	2.15E-01	4.69E-01	1.27E+00	1.72E+00	8.38E-01	5.60E-01	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.77E+00	NA	1.13E+02	3.30E+00	9.04E-04	6.40E+01	5.79E-02	3.00E-02	2.15E-01	4.69E-01	9.00E-02	8.00E-01	6.92E-02	6.78E+00	Navy 1998
Total Aroclors																	
Dose/High TRV	3.01E-02	2.92E-02	1.77E+00	NA	1.69E+01	4.96E-01	9.04E-04	9.60E+00	8.68E-03	3.00E-02	2.15E-01	7.04E-02	1.27E+00	1.72E+00	8.38E-01	8.39E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.77E+00	NA	1.69E+01	4.96E-01	9.04E-04	9.60E+00	8.68E-03	3.00E-02	2.15E-01	7.04E-02	9.00E-02	8.00E-01	6.92E-02	1.02E+00	Navy 1998
PESTICIDES																	
Total Dichlorodiphenyltrichloroethanes																	
Dose/High TRV	3.01E-02	2.92E-02	3.49E+00	NA	6.37E-01	1.86E-02	9.04E-04	1.83E-01	1.65E-04	3.00E-02	2.15E-01	2.62E-03	1.50E+00	1.00E+00	1.10E+00	2.38E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	3.49E+00	NA	6.37E-01	1.86E-02	9.04E-04	1.83E-01	1.65E-04	3.00E-02	2.15E-01	2.62E-03	9.00E-03	3.50E+00	5.15E-03	5.09E-01	Navy 1998
alpha-Chlordane																	
Dose/High TRV	3.01E-02	2.92E-02	6.79E-02	NA	1.12E-03	3.28E-05	9.04E-04	1.65E-02	1.49E-05	3.00E-02	2.15E-01	6.65E-06	1.07E+01	6.40E-02	1.36E+01	4.88E-07	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	6.79E-02	NA	1.12E-03	3.28E-05	9.04E-04	1.65E-02	1.49E-05	3.00E-02	2.15E-01	6.65E-06	2.14E+00	6.40E-02	2.73E+00	2.44E-06	Sample and others 1996
gamma-Chlordane																	
Dose/High TRV	3.01E-02	2.92E-02	2.86E+00	NA	1.06E-01	3.10E-03	9.04E-04	3.71E-02	3.36E-05	3.00E-02	2.15E-01	4.37E-04	1.07E+01	6.40E-02	1.36E+01	3.21E-05	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	2.86E+00	NA	1.06E-01	3.10E-03	9.04E-04	3.71E-02	3.36E-05	3.00E-02	2.15E-01	4.37E-04	2.14E+00	6.40E-02	2.73E+00	1.60E-04	Sample and others 1996

TABLE G-12: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON *MACOMA* AS PREY (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
PESTICIDES (Continued)																	
Dieldrin																	
Dose/High TRV	3.01E-02	2.92E-02	4.97E+00	NA	4.67E-01	1.36E-02	9.04E-04	9.40E-02	8.50E-05	3.00E-02	2.15E-01	1.92E-03	7.70E-01	4.66E-01	6.60E-01	2.90E-03	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	4.97E+00	NA	4.67E-01	1.36E-02	9.04E-04	9.40E-02	8.50E-05	3.00E-02	2.15E-01	1.92E-03	7.70E-02	4.66E-01	6.60E-02	2.90E-02	Sample and others 1996
Dioxin/Furan																	
Dose/High TRV	3.01E-02	2.92E-02	0.00E+00	NA	0.00E+00	0.00E+00	9.04E-04	1.43E-05	1.29E-08	3.00E-02	2.15E-01	1.81E-09	1.40E-04	1.10E+00	1.01E-04	1.79E-05	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	0.00E+00	NA	0.00E+00	0.00E+00	9.04E-04	1.43E-05	1.29E-08	3.00E-02	2.15E-01	1.81E-09	1.40E-07	1.10E+00	1.01E-07	1.79E-02	Sample and others 1996
LMW PAH																	
Dose/High TRV	3.01E-02	2.92E-02	1.13E-01	3.80E-02	3.80E-02	1.11E-03	9.04E-04	3.37E-01	3.04E-04	3.00E-02	2.15E-01	1.97E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	1.13E-01	3.80E-02	3.80E-02	1.11E-03	9.04E-04	3.37E-01	3.04E-04	3.00E-02	2.15E-01	1.97E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
HMW PAH																	
Dose/High TRV	3.01E-02	2.92E-02	2.08E-01	NA	1.21E+00	3.53E-02	9.04E-04	5.79E+00	5.24E-03	3.00E-02	2.15E-01	5.65E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	2.08E-01	NA	1.21E+00	3.53E-02	9.04E-04	5.79E+00	5.24E-03	3.00E-02	2.15E-01	5.65E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]

Notes:

a Total ingestion rate was calculated with an average adult body weight of 215 grams using the Nagy (2001) dry matter intake food requirement equation for marine birds (a=0.880; b=0.658).
b Prey ingestion rate equals 97.0 percent of the total ingestion rate, based on a sediment ingestion rate equal to 3.0 percent of the total ingestion rate.
c HPS site-specific mean BAFs for soft-bodied invertebrates (Parcel F) were used to calculate prey concentrations. EPA's 1999 BCFs for sediment-to-aquatic invertebrate were used as a default if no HPS SBI BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used. SBI BAFs were in dry weight.
d For literature BAFs, wet weight prey concentration was calculated by multiplying the sediment concentration by the BAF. Prey concentrations were then converted to dry weight using the formula: dry weight concentration = (wet weight concentration) / (% of water in medium). Percent tissue moisture used to convert wet weight prey concentrations to dry weight was 68% (EPA 1993). Site-specific BAFs were already in dry weight.
e Prey daily dose was calculated by multiplying the prey ingestion rate by the dry weight prey concentration.
f Sediment ingestion rate equals 3.0 percent of the total ingestion rate; based on study by Hui and Beyer (1998).
g Sediment concentration for dose calculations equals the 95 percent upper confidence limit of the arithmetic mean for all site-collected sediment samples. Nondetects shown as 0.
h Sediment daily dose was calculated by multiplying the sediment ingestion rate by the sediment concentration.
i Mean adult body weight from Dunning 1984.
j Total daily dose is calculated using the following equation: total daily dose = [(sediment daily dose + prey daily dose)*SUF]/receptor species body weight.
k The derivation of TRVs is described in Navy (1998) and Sample and others (1996).
l Allometrically adjusted TRVs were calculated using the following equation: receptor species TRV = (test species TRV) x (test species body weight / receptor species body weight) $^{(1-1.2)}$.
m The HQ was calculated using total daily dose/allometrically adjusted TRV.
n Sufficient data are unavailable to derive a TRV. This chemical was evaluated qualitatively.
o "Calculated" indicates that a high TRV was unavailable in Navy (1998) or Sample and others (1996); in those cases, an uncertainty factor of 10 was applied to the low TRV to derive a high TRV.

BAF	Bioaccumulation factor	HQ	Hazard quotient	NA	Not available
BCF	Bioconcentration factor	kg	Kilogram	Navy	U.S. Department of the Navy
bgs	Below ground surface	kg/day	Kilogram per day	PAH	Polynuclear aromatic hydrocarbon
COPEC	Chemical of potential ecological concern	LMW	Low molecular-weight	PCB	Polychlorinated biphenyl
EPA	U.S. Environmental Protection Agency	mg/day	Milligram per day	SBI	Soft bodied invertebrate
HMW	High molecular-weight	mg/kg	Milligram per kilogram	SUF	Site use factor
HPS	Hunters Point Shipyard	mg/kg/day	Milligram per kilogram per day	TRV	Toxicity reference value

Sources:

Dunning, J.B. 1984. "Body Weights of 686 Species of North American Birds." Western Bird Banding Association, Monograph No. 1

EPA. 1993. "Wildlife Exposure Factor Handbook; Volumes I and II." Office of Research and Development. Washington D.C. EPA/600/R-93/187a.

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Navy. 1998. "Development of Toxicity Reference Values for Conducting Ecological Risk Assessments at Naval Facilities in California, Interim Final." Prepared by Naval Facilities Engineering Command, Engineering Field Activity West. San Bruno, California.

Sample, B.E., D.M. Opresko, G.W. Suter, II. 1996. "Toxicological Benchmarks for Wildlife: 1996 Revision." ES/ER/TM-86/R3. Oak Ridge National Laboratory. Oak Ridge, Tennessee.

TABLE G-13: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON *M ACOMA* AS PREY (2 TO 2.5 FEET BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS																	
Aluminum																	
Dose/High TRV	3.01E-02	2.92E-02	2.35E-02	NA	1.20E+02	3.51E+00	9.04E-04	5.11E+03	4.62E+00	3.00E-02	2.15E-01	1.14E+00	1.10E+03	1.55E-01	1.17E+03	9.69E-04	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	2.35E-02	NA	1.20E+02	3.51E+00	9.04E-04	5.11E+03	4.62E+00	3.00E-02	2.15E-01	1.14E+00	1.10E+02	1.55E-01	1.17E+02	9.69E-03	Sample and others 1996
Antimony																	
Dose/High TRV	3.01E-02	2.92E-02	1.02E-01	NA	2.85E+00	8.33E-02	9.04E-04	2.81E+01	2.54E-02	3.00E-02	2.15E-01	1.52E-02	No TRV	No TRV	No TRV	No TRV	No TRV
Dose/Low TRV	3.01E-02	2.92E-02	1.02E-01	NA	2.85E+00	8.33E-02	9.04E-04	2.81E+01	2.54E-02	3.00E-02	2.15E-01	1.52E-02	No TRV	No TRV	No TRV	No TRV	No TRV
Barium																	
Dose/High TRV	3.01E-02	2.92E-02	3.32E-02	NA	2.56E+00	7.49E-02	9.04E-04	7.72E+01	6.98E-02	3.00E-02	2.15E-01	2.02E-02	4.17E+01	1.21E-01	4.68E+01	4.32E-04	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	3.32E-02	NA	2.56E+00	7.49E-02	9.04E-04	7.72E+01	6.98E-02	3.00E-02	2.15E-01	2.02E-02	2.08E+01	1.21E-01	2.33E+01	8.65E-04	Sample and others 1996
Beryllium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	5.06E-02	2.81E-01	8.22E-03	9.04E-04	2.30E-01	2.08E-04	3.00E-02	2.15E-01	1.18E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	5.06E-02	2.81E-01	8.22E-03	9.04E-04	2.30E-01	2.08E-04	3.00E-02	2.15E-01	1.18E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Cadmium																	
Dose/High TRV	3.01E-02	2.92E-02	1.08E+00	NA	3.76E+00	1.10E-01	9.04E-04	3.48E+00	3.15E-03	3.00E-02	2.15E-01	1.58E-02	1.04E+01	8.40E-02	1.26E+01	1.26E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.08E+00	NA	3.76E+00	1.10E-01	9.04E-04	3.48E+00	3.15E-03	3.00E-02	2.15E-01	1.58E-02	8.00E-02	7.99E-01	6.15E-02	2.57E-01	Navy 1998
Chromium																	
Dose/High TRV	3.01E-02	2.92E-02	5.91E-02	NA	7.67E+00	2.24E-01	9.04E-04	1.30E+02	1.18E-01	3.00E-02	2.15E-01	4.77E-02	5.00E+00	1.25E+00	3.52E+00	1.36E-02	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	5.91E-02	NA	7.67E+00	2.24E-01	9.04E-04	1.30E+02	1.18E-01	3.00E-02	2.15E-01	4.77E-02	1.00E+00	1.25E+00	7.03E-01	6.78E-02	Sample and others 1996
Cobalt																	
Dose/High TRV	3.01E-02	2.92E-02	1.34E-01	NA	1.52E+00	4.45E-02	9.04E-04	1.14E+01	1.03E-02	3.00E-02	2.15E-01	7.65E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	1.34E-01	NA	1.52E+00	4.45E-02	9.04E-04	1.14E+01	1.03E-02	3.00E-02	2.15E-01	7.65E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Copper																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.06E+03	3.09E+01	9.04E-04	4.80E+03	4.34E+00	3.00E-02	2.15E-01	4.92E+00	5.23E+01	4.09E-01	4.60E+01	1.07E-01	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.06E+03	3.09E+01	9.04E-04	4.80E+03	4.34E+00	3.00E-02	2.15E-01	4.92E+00	2.30E+00	6.39E-01	1.85E+00	2.66E+00	Navy 1998
Lead																	
Dose/High TRV	3.01E-02	2.92E-02	8.42E-02	NA	8.42E+01	2.46E+00	9.04E-04	1.00E+03	9.04E-01	3.00E-02	2.15E-01	4.70E-01	8.75E+00	8.00E-01	6.73E+00	6.98E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	8.42E-02	NA	8.42E+01	2.46E+00	9.04E-04	1.00E+03	9.04E-01	3.00E-02	2.15E-01	4.70E-01	1.40E-02	8.40E-02	1.69E-02	2.78E+01	Navy 1998
Magnesium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Manganese																	
Dose/High TRV	3.01E-02	2.92E-02	6.79E-02	NA	3.24E+01	9.49E-01	9.04E-04	4.78E+02	4.32E-01	3.00E-02	2.15E-01	1.93E-01	7.76E+02	1.97E-01	7.90E+02	2.44E-04	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	6.79E-02	NA	3.24E+01	9.49E-01	9.04E-04	4.78E+02	4.32E-01	3.00E-02	2.15E-01	1.93E-01	7.76E+01	1.97E-01	7.90E+01	2.44E-03	Navy 1998
Mercury																	
Dose/High TRV	3.01E-02	2.92E-02	2.88E-01	NA	6.92E+00	2.02E-01	9.04E-04	2.40E+01	2.17E-02	3.00E-02	2.15E-01	3.13E-02	1.80E-01	1.00E+00	1.32E-01	2.36E-01	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	2.88E-01	NA	6.92E+00	2.02E-01	9.04E-04	2.40E+01	2.17E-02	3.00E-02	2.15E-01	3.13E-02	3.90E-02	1.00E+00	2.87E-02	1.09E+00	Navy 1998
Molybdenum																	
Dose/High TRV	3.01E-02	2.92E-02	2.86E+00	NA	7.26E+00	2.12E-01	9.04E-04	2.54E+00	2.30E-03	3.00E-02	2.15E-01	2.99E-02	3.53E+01	1.50E+00	2.39E+01	1.25E-03	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	2.86E+00	NA	7.26E+00	2.12E-01	9.04E-04	2.54E+00	2.30E-03	3.00E-02	2.15E-01	2.99E-02	3.50E+00	1.50E+00	2.37E+00	1.26E-02	Sample and others 1996
Nickel																	
Dose/High TRV	3.01E-02	2.92E-02	7.52E-02	NA	1.02E+01	2.98E-01	9.04E-04	1.36E+02	1.23E-01	3.00E-02	2.15E-01	5.88E-02	5.52E+01	5.80E-01	4.52E+01	1.30E-03	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	7.52E-02	NA	1.02E+01	2.98E-01	9.04E-04	1.36E+02	1.23E-01	3.00E-02	2.15E-01	5.88E-02	1.38E+00	6.14E-01	1.12E+00	5.25E-02	Navy 1998
Selenium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.21E-01	3.55E-03	9.04E-04	5.50E-01	4.97E-04	3.00E-02	2.15E-01	5.64E-04	9.30E-01	1.11E+00	6.70E-01	8.42E-04	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.21E-01	3.55E-03	9.04E-04	5.50E-01	4.97E-04	3.00E-02	2.15E-01	5.64E-04	2.30E-01	1.11E+00	1.66E-01	3.40E-03	Navy 1998

TABLE G-13: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON *MACOMA* AS PREY (2 TO 2.5 FEET BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS (Continued)																	
Silver																	
Dose/High TRV	3.01E-02	2.92E-02	5.58E-02	NA	3.46E-02	1.01E-03	9.04E-04	6.20E-01	5.61E-04	3.00E-02	2.15E-01	2.19E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	5.58E-02	NA	3.46E-02	1.01E-03	9.04E-04	6.20E-01	5.61E-04	3.00E-02	2.15E-01	2.19E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Thallium																	
Dose/High TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.03E-01	3.02E-03	9.04E-04	4.70E-01	4.25E-04	3.00E-02	2.15E-01	4.81E-04	3.50E-01	7.63E-02	4.31E-01	1.12E-03	EPA 1999
Dose/Low TRV	3.01E-02	2.92E-02	2.20E-01	NA	1.03E-01	3.02E-03	9.04E-04	4.70E-01	4.25E-04	3.00E-02	2.15E-01	4.81E-04	3.50E-01	7.63E-02	4.31E-01	1.12E-03	EPA 1999
Vanadium																	
Dose/High TRV	3.01E-02	2.92E-02	5.58E-02	NA	2.03E+00	5.94E-02	9.04E-04	3.64E+01	3.29E-02	3.00E-02	2.15E-01	1.29E-02	1.14E+02	1.17E+00	8.12E+01	1.58E-04	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	5.58E-02	NA	2.03E+00	5.94E-02	9.04E-04	3.64E+01	3.29E-02	3.00E-02	2.15E-01	1.29E-02	1.14E+01	1.17E+00	8.12E+00	1.58E-03	Sample and others 1996
Zinc																	
Dose/High TRV	3.01E-02	2.92E-02	7.34E-01	NA	1.59E+03	4.64E+01	9.04E-04	2.16E+03	1.95E+00	3.00E-02	2.15E-01	6.75E+00	1.72E+02	9.55E-01	1.28E+02	5.29E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	7.34E-01	NA	1.59E+03	4.64E+01	9.04E-04	2.16E+03	1.95E+00	3.00E-02	2.15E-01	6.75E+00	1.72E+01	9.55E-01	1.28E+01	5.29E-01	Navy 1998
ORGANOTINS																	
Dibutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	1.91E+00	NA	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	4.59E+01	9.65E-02	5.38E+01	0.00E+00	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.91E+00	NA	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	7.30E-01	9.65E-02	8.57E-01	0.00E+00	Navy 1998
Monobutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	4.59E+01	9.65E-02	5.38E+01	0.00E+00	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	7.30E-01	9.65E-02	8.57E-01	0.00E+00	Navy 1998
Tetrabutyltin																	
Dose/High TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	4.59E+01	9.65E-02	5.38E+01	0.00E+00	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	3.00E-02	2.15E-01	0.00E+00	7.30E-01	9.65E-02	8.57E-01	0.00E+00	Navy 1998
Tributyltin																	
Dose/High TRV	3.01E-02	2.92E-02	4.92E+00	NA	4.43E-02	1.30E-03	9.04E-04	9.00E-03	8.14E-06	3.00E-02	2.15E-01	1.82E-04	4.59E+01	9.65E-02	5.38E+01	3.38E-06	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	4.92E+00	NA	4.43E-02	1.30E-03	9.04E-04	9.00E-03	8.14E-06	3.00E-02	2.15E-01	1.82E-04	7.30E-01	9.65E-02	8.57E-01	2.12E-04	Navy 1998
PCBs																	
Total Aroclors																	
Dose/High TRV	3.01E-02	2.92E-02	1.77E+00	NA	4.77E+02	1.39E+01	9.04E-04	2.70E+02	2.44E-01	3.00E-02	2.15E-01	1.98E+00	1.27E+00	1.72E+00	8.38E-01	2.36E+00	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	1.77E+00	NA	4.77E+02	1.39E+01	9.04E-04	2.70E+02	2.44E-01	3.00E-02	2.15E-01	1.98E+00	9.00E-02	8.00E-01	6.92E-02	2.86E+01	Navy 1998
PESTICIDES																	
Total Dichlorodiphenyltrichloroethanes																	
Dose/High TRV	3.01E-02	2.92E-02	3.49E+00	NA	8.31E+00	2.43E-01	9.04E-04	2.38E+00	2.15E-03	3.00E-02	2.15E-01	3.42E-02	1.50E+00	1.00E+00	1.10E+00	3.10E-02	Navy 1998
Dose/Low TRV	3.01E-02	2.92E-02	3.49E+00		8.31E+00	2.43E-01	9.04E-04	2.38E+00	2.15E-03	3.00E-02	2.15E-01	3.42E-02	9.00E-03	3.50E+00	5.15E-03	6.64E+00	Navy 1998
alpha-Chlordane																	
Dose/High TRV	3.01E-02	2.92E-02	3.62E+00	NA	2.52E-01	7.36E-03	9.04E-04	6.95E-02	6.29E-05	3.00E-02	2.15E-01	1.04E-03	1.07E+01	6.40E-02	1.36E+01	7.60E-05	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	3.62E+00	NA	2.52E-01	7.36E-03	9.04E-04	6.95E-02	6.29E-05	3.00E-02	2.15E-01	1.04E-03	2.14E+00	6.40E-02	2.73E+00	3.80E-04	Sample and others 1996
gamma-Chlordane																	
Dose/High TRV	3.01E-02	2.92E-02	3.16E+00	NA	3.93E-01	1.15E-02	9.04E-04	1.25E-01	1.13E-04	3.00E-02	2.15E-01	1.62E-03	1.07E+01	6.40E-02	1.36E+01	1.19E-04	Sample and others 1996
Dose/Low TRV	3.01E-02	2.92E-02	3.16E+00	NA	3.93E-01	1.15E-02	9.04E-04	1.25E-01	1.13E-04	3.00E-02	2.15E-01	1.62E-03	2.14E+00	6.40E-02	2.73E+00	5.95E-04	Sample and others 1996
Dieldrin																	
Dose/High TRV	3.01E-02	2.92E-02	4.97E+00	NA	3.97E+00	1.16E-01	9.04E-04	8.00E-01	7.23E-04	3.00E-02	2.15E-01	1.63E-02	7.70E-01	4.66E-01	6.60E-01	2.47E-02	Calculated[o]
Dose/Low TRV	3.01E-02	2.92E-02	4.97E+00	NA	3.97E+00	1.16E-01	9.04E-04	8.00E-01	7.23E-04	3.00E-02	2.15E-01	1.63E-02	7.70E-02	4.66E-01	6.60E-02	2.47E-01	Sample and others 1996

TABLE G-13: WILLET DOSE CALCULATIONS AND HAZARD QUOTIENTS BASED ON *M ACOMA* AS PREY (2 TO 2.5 FEET BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
LMW PAH																	
Dose/High TRV	3.01E-02	2.92E-02	1.13E-01	NA	1.17E-01	3.42E-03	9.04E-04	1.04E+00	9.38E-04	3.00E-02	2.15E-01	6.08E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	1.13E-01	NA	1.17E-01	3.42E-03	9.04E-04	1.04E+00	9.38E-04	3.00E-02	2.15E-01	6.08E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
HMW PAH																	
Dose/High TRV	3.01E-02	2.92E-02	2.08E-01	NA	1.57E+00	4.58E-02	9.04E-04	7.51E+00	6.79E-03	3.00E-02	2.15E-01	7.33E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	3.01E-02	2.92E-02	2.08E-01	NA	1.57E+00	4.58E-02	9.04E-04	7.51E+00	6.79E-03	3.00E-02	2.15E-01	7.33E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]

Notes:

a Total ingestion rate was calculated with an average adult body weight of 215 grams using the Nagy (2001) dry matter intake food requirement equation for marine birds (a=0.880; b=0.658).

b Prey ingestion rate equals 97.0 percent of the total ingestion rate, based on a sediment ingestion rate equal to 3.0 percent of the total ingestion rate.

c HPS site-specific mean BAFs for soft-bodied invertebrates (Parcel F) were used to calculate prey concentrations. EPA's 1999 BCFs for sediment-to-aquatic invertebrate were used as a default if no HPS SBI BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used. SBI BAFs were in dry weight.

d For literature BAFs, wet weight prey concentration was calculated by multiplying the sediment concentration by the BAF. Prey concentrations were then converted to dry weight using the formula: dry weight concentration = (wet weight concentration) / (1% of water in medium). Percent tissue moisture used to convert wet weight prey concentrations to dry weight was 68% (EPA 1993). Site-specific BAFs were already in dry weight

e Prey daily dose was calculated by multiplying the prey ingestion rate by the dry weight prey concentration.

f Sediment ingestion rate equals 3.0 percent of the total ingestion rate; based on study by Hui and Beyer (1998).

g Sediment concentration for dose calculations equals the 95 percent upper confidence limit of the arithmetic mean for all site-collected sediment samples. Nondetects shown as 0.

h Sediment daily dose was calculated by multiplying the sediment ingestion rate by the sediment concentration.

i Mean adult body weight from Dunning 1984.

j Total daily dose is calculated using the following equation: total daily dose = [(sediment daily dose + prey daily dose)*SUF]/receptor species body weight.

k The derivation of TRVs is described in Navy (1998) and Sample and others (1996).

l Allometrically adjusted TRVs were calculated using the following equation: receptor species TRV = (test species TRV) x (test species body weight / receptor species body weight) $^{(1-1.2)}$.

m The HQ was calculated using total daily dose/allometrically adjusted TRV.

n Sufficient data are unavailable to derive a TRV. This chemical was evaluated qualitatively.

o "Calculated" indicates that a high TRV was unavailable in Navy (1998) or Sample and others (1996); in those cases, an uncertainty factor of 10 was applied to the low TRV to derive a high TRV.

BAF	Bioaccumulation factor	HQ	Hazard quotient	NA	Not available
BCF	Bioconcentration factor	kg	Kilogram	Navy	U.S. Department of the Navy
bgs	Below ground surface	kg/day	Kilogram per day	PAH	Polynuclear aromatic hydrocarbon
COPEC	Chemical of potential ecological concern	LMW	Low molecular-weight	PCB	Polychlorinated biphenyl
EPA	U.S. Environmental Protection Agency	mg/day	Milligram per day	SBI	Soft bodied invertebrate
HMW	High molecular-weight	mg/kg	Milligram per kilogram	SUF	Site use factor
HPS	Hunters Point Shipyard	mg/kg/day	Milligram per kilogram per day	TRV	Toxicity reference value

Sources:

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TABLE G-14: RED-TAILED HAWK DOSE CALCULATIONS AND HAZARD QUOTIENTS (0 TO 0.5 FOOT BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[j] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS																	
Aluminum																	
Dose/High TRV	1.19E-01	1.19E-01	6.50E-06	3.77E-02	1.18E-01	1.39E-02	4.76E-04	5.79E+03	2.76E+00	2.50E-02	1.20E+00	5.75E-02	1.10E+03	1.55E-01	1.65E+03	3.48E-05	Calculated[o]
Dose/Low TRV	1.19E-01	1.19E-01	6.50E-06	3.77E-02	1.18E-01	1.39E-02	4.76E-04	5.79E+03	2.76E+00	2.50E-02	1.20E+00	5.75E-02	1.10E+02	1.55E-01	1.65E+02	3.48E-04	Sample and others 1996
Antimony																	
Dose/High TRV	1.19E-01	1.19E-01	1.30E-02	9.10E-02	2.84E-01	3.37E-02	4.76E-04	6.98E+00	3.32E-03	2.50E-02	1.20E+00	7.69E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	1.30E-02	9.10E-02	2.84E-01	3.37E-02	4.76E-04	6.98E+00	3.32E-03	2.50E-02	1.20E+00	7.69E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Barium																	
Dose/High TRV	1.19E-01	1.19E-01	6.50E-06	6.20E-04	1.94E-03	2.30E-04	4.76E-04	9.55E+01	4.54E-02	2.50E-02	1.20E+00	9.48E-04	4.17E+01	1.21E-01	6.60E+01	1.44E-05	Sample and others 1996
Dose/Low TRV	1.19E-01	1.19E-01	6.50E-06	6.20E-04	1.94E-03	2.30E-04	4.76E-04	9.55E+01	4.54E-02	2.50E-02	1.20E+00	9.48E-04	2.08E+01	1.21E-01	3.29E+01	2.88E-05	Sample and others 1996
Beryllium																	
Dose/High TRV	1.19E-01	1.19E-01	2.20E-01	4.18E-02	1.31E-01	1.55E-02	4.76E-04	1.90E-01	9.04E-05	2.50E-02	1.20E+00	3.23E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	2.20E-01	4.18E-02	1.31E-01	1.55E-02	4.76E-04	1.90E-01	9.04E-05	2.50E-02	1.20E+00	3.23E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Cadmium																	
Dose/High TRV	1.19E-01	1.19E-01	8.89E-03	7.68E-02	2.40E-01	2.84E-02	4.76E-04	8.64E+00	4.11E-03	2.50E-02	1.20E+00	6.76E-04	1.04E+01	8.40E-02	1.78E+01	3.80E-05	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	8.89E-03	7.68E-02	2.40E-01	2.84E-02	4.76E-04	8.64E+00	4.11E-03	2.50E-02	1.20E+00	6.76E-04	8.00E-02	7.99E-01	8.68E-02	7.78E-03	Navy 1998
Chromium																	
Dose/High TRV	1.19E-01	1.19E-01	7.91E-06	7.81E-04	2.44E-03	2.89E-04	4.76E-04	9.88E+01	4.70E-02	2.50E-02	1.20E+00	9.82E-04	5.00E+00	1.25E+00	4.96E+00	1.98E-04	Sample and others 1996
Dose/Low TRV	1.19E-01	1.19E-01	7.91E-06	7.81E-04	2.44E-03	2.89E-04	4.76E-04	9.88E+01	4.70E-02	2.50E-02	1.20E+00	9.82E-04	1.00E+00	1.25E+00	9.93E-01	9.90E-04	Sample and others 1996
Cobalt																	
Dose/High TRV	1.19E-01	1.19E-01	6.50E-06	6.96E-05	2.18E-04	2.58E-05	4.76E-04	1.07E+01	5.10E-03	2.50E-02	1.20E+00	1.06E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	6.50E-06	6.96E-05	2.18E-04	2.58E-05	4.76E-04	1.07E+01	5.10E-03	2.50E-02	1.20E+00	1.06E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Copper																	
Dose/High TRV	1.19E-01	1.19E-01	7.55E-02	5.65E+01	1.76E+02	2.09E+01	4.76E-04	7.48E+02	3.56E-01	2.50E-02	1.20E+00	4.42E-01	5.23E+01	4.09E-01	6.49E+01	6.81E-03	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	7.55E-02	5.65E+01	1.76E+02	2.09E+01	4.76E-04	7.48E+02	3.56E-01	2.50E-02	1.20E+00	4.42E-01	2.30E+00	6.39E-01	2.61E+00	1.69E-01	Navy 1998
Lead																	
Dose/High TRV	1.19E-01	1.19E-01	3.34E-02	1.08E+01	3.39E+01	4.02E+00	4.76E-04	3.24E+02	1.54E-01	2.50E-02	1.20E+00	8.66E-02	8.75E+00	8.00E-01	9.50E+00	9.12E-03	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	3.34E-02	1.08E+01	3.39E+01	4.02E+00	4.76E-04	3.24E+02	1.54E-01	2.50E-02	1.20E+00	8.66E-02	1.40E-02	8.40E-02	2.38E-02	3.63E+00	Navy 1998
Magnesium																	
Dose/High TRV	1.19E-01	1.19E-01	2.20E-01	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	2.20E-01	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Manganese																	
Dose/High TRV	1.19E-01	1.19E-01	1.82E-02	8.20E+00	2.56E+01	3.04E+00	4.76E-04	4.51E+02	2.15E-01	2.50E-02	1.20E+00	6.75E-02	7.76E+02	1.97E-01	1.12E+03	6.05E-05	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	1.82E-02	8.20E+00	2.56E+01	3.04E+00	4.76E-04	4.51E+02	2.15E-01	2.50E-02	1.20E+00	6.75E-02	7.76E+01	1.97E-01	1.12E+02	6.05E-04	Navy 1998
Mercury																	
Dose/High TRV	1.19E-01	1.19E-01	8.63E-03	6.56E-03	2.05E-02	2.43E-03	4.76E-04	7.60E-01	3.62E-04	2.50E-02	1.20E+00	5.80E-05	1.80E-01	1.00E+00	1.87E-01	3.10E-04	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	8.63E-03	6.56E-03	2.05E-02	2.43E-03	4.76E-04	7.60E-01	3.62E-04	2.50E-02	1.20E+00	5.80E-05	3.90E-02	1.00E+00	4.05E-02	1.43E-03	Navy 1998
Molybdenum																	
Dose/High TRV	1.19E-01	1.19E-01	8.35E-01	3.43E+00	1.07E+01	1.27E+00	4.76E-04	4.11E+00	1.96E-03	2.50E-02	1.20E+00	2.64E-02	3.53E+01	1.50E+00	3.38E+01	7.82E-04	Sample and others 1996
Dose/Low TRV	1.19E-01	1.19E-01	8.35E-01	3.43E+00	1.07E+01	1.27E+00	4.76E-04	4.11E+00	1.96E-03	2.50E-02	1.20E+00	2.64E-02	3.50E+00	1.50E+00	3.35E+00	7.89E-03	Sample and others 1996
Nickel																	
Dose/High TRV	1.19E-01	1.19E-01	3.40E-04	5.59E-02	1.75E-01	2.07E-02	4.76E-04	1.65E+02	7.83E-02	2.50E-02	1.20E+00	2.06E-03	5.52E+01	5.80E-01	6.38E+01	3.22E-05	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	3.40E-04	5.59E-02	1.75E-01	2.07E-02	4.76E-04	1.65E+02	7.83E-02	2.50E-02	1.20E+00	2.06E-03	1.38E+00	6.14E-01	1.58E+00	1.30E-03	Navy 1998

TABLE G-14: RED-TAILED HAWK DOSE CALCULATIONS AND HAZARD QUOTIENTS (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[j] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS																	
Selenium																	
Dose/High TRV	1.19E-01	1.19E-01	1.06E+00	5.32E-01	1.66E+00	1.97E-01	4.76E-04	5.00E-01	2.38E-04	2.50E-02	1.20E+00	4.10E-03	9.30E-01	1.11E+00	9.46E-01	4.33E-03	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	1.06E+00	5.32E-01	1.66E+00	1.97E-01	4.76E-04	5.00E-01	2.38E-04	2.50E-02	1.20E+00	4.10E-03	2.30E-01	1.11E+00	2.34E-01	1.75E-02	Navy 1998
Silver																	
Dose/High TRV	1.19E-01	1.19E-01	2.24E-02	1.77E-02	5.54E-02	6.56E-03	4.76E-04	7.90E-01	3.76E-04	2.50E-02	1.20E+00	1.44E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	2.24E-02	1.77E-02	5.54E-02	6.56E-03	4.76E-04	7.90E-01	3.76E-04	2.50E-02	1.20E+00	1.44E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Thallium																	
Dose/High TRV	1.19E-01	1.19E-01	2.20E-01	1.41E-01	4.40E-01	5.22E-02	4.76E-04	6.40E-01	3.05E-04	2.50E-02	1.20E+00	1.09E-03	3.50E-01	7.63E-02	6.08E-01	1.79E-03	EPA 1999
Dose/Low TRV	1.19E-01	1.19E-01	2.20E-01	1.41E-01	4.40E-01	5.22E-02	4.76E-04	6.40E-01	3.05E-04	2.50E-02	1.20E+00	1.09E-03	3.50E-01	7.63E-02	6.08E-01	1.79E-03	EPA 1999
Vanadium																	
Dose/High TRV	1.19E-01	1.19E-01	6.50E-06	2.70E-04	8.45E-04	1.00E-04	4.76E-04	4.16E+01	1.98E-02	2.50E-02	1.20E+00	4.13E-04	1.14E+02	1.17E+00	1.15E+02	3.60E-06	Calculated[o]
Dose/Low TRV	1.19E-01	1.19E-01	6.50E-06	2.70E-04	8.45E-04	1.00E-04	4.76E-04	4.16E+01	1.98E-02	2.50E-02	1.20E+00	4.13E-04	1.14E+01	1.17E+00	1.15E+01	3.60E-05	Sample and others 1996
Zinc																	
Dose/High TRV	1.19E-01	1.19E-01	1.27E-01	6.75E+01	2.11E+02	2.50E+01	4.76E-04	5.31E+02	2.53E-01	2.50E-02	1.20E+00	5.24E-01	1.72E+02	9.55E-01	1.80E+02	2.91E-03	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	1.27E-01	6.75E+01	2.11E+02	2.50E+01	4.76E-04	5.31E+02	2.53E-01	2.50E-02	1.20E+00	5.24E-01	1.72E+01	9.55E-01	1.80E+01	2.91E-02	Navy 1998
ORGANOTINS																	
Dibutyltin																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	6.00E-02	2.86E-05	2.50E-02	1.20E+00	5.93E-07	4.59E+01	9.65E-02	7.60E+01	7.81E-09	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	6.00E-02	2.86E-05	2.50E-02	1.20E+00	5.93E-07	7.30E-01	9.65E-02	1.21E+00	4.90E-07	Navy 1998
Monobutyltin																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	4.59E+01	9.65E-02	7.60E+01	0.00E+00	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	7.30E-01	9.65E-02	1.21E+00	0.00E+00	Navy 1998
Tetrabutyltin																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	1.00E-02	4.76E-06	2.50E-02	1.20E+00	9.88E-08	4.59E+01	9.65E-02	7.60E+01	1.30E-09	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	1.00E-02	4.76E-06	2.50E-02	1.20E+00	9.88E-08	7.30E-01	9.65E-02	1.21E+00	8.17E-08	Navy 1998
Tributyltin																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	3.00E-01	1.43E-04	2.50E-02	1.20E+00	2.97E-06	4.59E+01	9.65E-02	7.60E+01	3.90E-08	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	3.00E-01	1.43E-04	2.50E-02	1.20E+00	2.97E-06	7.30E-01	9.65E-02	1.21E+00	2.45E-06	Navy 1998
PCBs																	
Total PCBs (Congeners)																	
Dose/High TRV	1.19E-01	1.19E-01	5.99E-02	3.84E+00	1.20E+01	1.42E+00	4.76E-04	6.40E+01	3.05E-02	2.50E-02	1.20E+00	3.01E-02	1.27E+00	1.72E+00	1.18E+00	2.55E-02	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	5.99E-02	3.84E+00	1.20E+01	1.42E+00	4.76E-04	6.40E+01	3.05E-02	2.50E-02	1.20E+00	3.01E-02	9.00E-02	8.00E-01	9.77E-02	3.09E-01	Navy 1998
Total Aroclors																	
Dose/High TRV	1.19E-01	1.19E-01	5.99E-02	5.75E-01	1.80E+00	2.13E-01	4.76E-04	9.60E+00	4.57E-03	2.50E-02	1.20E+00	4.52E-03	1.27E+00	1.72E+00	1.18E+00	3.82E-03	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	5.99E-02	5.75E-01	1.80E+00	2.13E-01	4.76E-04	9.60E+00	4.57E-03	2.50E-02	1.20E+00	4.52E-03	9.00E-02	8.00E-01	9.77E-02	4.63E-02	Navy 1998
PESTICIDES																	
Total DDTs																	
Dose/High TRV	1.19E-01	1.19E-01	1.88E-02	3.42E-03	1.07E-02	1.27E-03	4.76E-04	1.83E-01	8.69E-05	2.50E-02	1.20E+00	2.81E-05	1.50E+00	1.00E+00	1.56E+00	1.81E-05	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	1.88E-02	3.42E-03	1.07E-02	1.27E-03	4.76E-04	1.83E-01	8.69E-05	2.50E-02	1.20E+00	2.81E-05	9.00E-03	3.50E+00	7.27E-03	3.87E-03	Navy 1998
alpha-Chlordane																	
Dose/High TRV	1.19E-01	1.19E-01	9.49E-02	1.57E-03	4.89E-03	5.80E-04	4.76E-04	1.65E-02	7.85E-06	2.50E-02	1.20E+00	1.22E-05	1.07E+01	6.40E-02	1.92E+01	6.34E-07	Sample and others 1996
Dose/Low TRV	1.19E-01	1.19E-01	9.49E-02	1.57E-03	4.89E-03	5.80E-04	4.76E-04	1.65E-02	7.85E-06	2.50E-02	1.20E+00	1.22E-05	2.14E+00	6.40E-02	3.85E+00	3.17E-06	Sample and others 1996
gamma-Chlordane																	
Dose/High TRV	1.19E-01	1.19E-01	9.49E-02	3.52E-03	1.10E-02	1.30E-03	4.76E-04	3.71E-02	1.77E-05	2.50E-02	1.20E+00	2.74E-05	1.07E+01	6.40E-02	1.92E+01	1.43E-06	Sample and others 1996
Dose/Low TRV	1.19E-01	1.19E-01	9.49E-02	3.52E-03	1.10E-02	1.30E-03	4.76E-04	3.71E-02	1.77E-05	2.50E-02	1.20E+00	2.74E-05	2.14E+00	6.40E-02	3.85E+00	7.13E-06	Sample and others 1996

TABLE G-14: RED-TAILED HAWK DOSE CALCULATIONS AND HAZARD QUOTIENTS (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
Dieldrin																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	9.40E-02	4.47E-05	2.50E-02	1.20E+00	9.29E-07	7.70E-01	4.66E-01	9.31E-01	9.98E-07	Calculated[o]
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	9.40E-02	4.47E-05	2.50E-02	1.20E+00	9.29E-07	7.70E-02	4.66E-01	9.31E-02	9.98E-06	Sample and others 1996
DIOXINS/FURANS																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	1.43E-05	6.81E-09	2.50E-02	1.20E+00	1.41E-10	1.40E-04	1.10E+00	1.43E-04	9.92E-07	Calculated[o]
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	1.43E-05	6.81E-09	2.50E-02	1.20E+00	1.41E-10	1.40E-07	1.10E+00	1.43E-07	9.92E-04	EPA 1999
LMW PAH																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	3.37E-01	1.60E-04	2.50E-02	1.20E+00	3.33E-06	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	3.37E-01	1.60E-04	2.50E-02	1.20E+00	3.33E-06	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
HMW PAH																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	5.79E+00	2.76E-03	2.50E-02	1.20E+00	5.72E-05	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	5.79E+00	2.76E-03	2.50E-02	1.20E+00	5.72E-05	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]

Notes:

a Total ingestion rate was derived from red-tailed hawk data in EPA's wildlife exposure factors handbook (EPA 1993).

b 99.6 percent of total ingestion rate, based on sediment ingestion.

c HPS site-specific mean BAFs for small mammals were used to calculate prey concentrations. EPA's 1999 BCFs for soil-to-small mammal were used as a default if no HPS mean mammal BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used.

d Wet weight prey concentration was calculated by multiplying the BAF (see note 3) by sediment concentration (see note 7). Wet weight converted to dry weight using 68 percent moisture, which was derived from small mammal data in EPA's wildlife exposure factors handbook (EPA 1993).

e Prey ingestion rate (0.1190 kg/day) * prey concentration (mg/kg dry weight).

f 0.4 percent of total ingestion rate, based on the rate for the American Kestrel (Pascoe and others 1996).

g Sediment concentration for dose calculations equals the 95 percent upper confidence limit of the arithmetic mean for all site-collected sediment samples. Non detects shown as 0.

h Sediment ingestion rate (0.00048 kg/day * sediment concentration [mg/kg]).

i Average body weight of red-tailed hawk from EPA (1993).

j Total daily dose is calculated using the following equation: total daily dose = ([soil daily dose + prey daily dose]*SUF)/receptor species body weight.

k The derivation of TRVs is described in Navy (1998) and Sample and others (1996).

l Allometrically adjusted TRVs were calculated using the following equation: receptor species TRV = (test species TRV) x (test species body weight / receptor species body weight) (1-1.2).

m The HQ was calculated using total daily dose/allometrically adjusted TRV.

n Sufficient data are unavailable to derive a TRV. This chemical was evaluated qualitatively.

o "Calculated" indicates that a high TRV was unavailable in Navy (1998) or Sample and others (1996); in those cases, an uncertainty factor of 10 was applied to the low TRV to derive a high TRV.

BAF	Bioaccumulation factor	HMW	High molecular-weight	mg/day	Milligram per day	PCB	Polychlorinated biphenyl
BCF	Bioconcentration factor	HPS	Hunters Point Shipyard	mg/kg	Milligram per kilogram	SUF	Site use factor
bgs	Below ground surface	HQ	Hazard quotient	mg/kg/day	Milligram per kilogram per day	TRV	Toxicity reference value
COPEC	Chemical of potential ecological concern	kg	Kilogram	NA	Not available		
DDT	Dichlorodiphenyltrichloroethane	kg/day	Kilogram per day	Navy	U.S. Department of the Navy		
EPA	U.S. Environmental Protection Agency	LMW	Low molecular-weight	PAH	Polynuclear aromatic hydrocarbon		

Sources:

EPA. 1993. "Wildlife Exposure Factor Handbook; Volumes I and II." Office of Research and Development. Washington D.C. EPA/600/R-93/187a.

EPA. 1999. "Screening Level Ecological Risk Assessment Protocol." EPA Region 6, Office of Solid Waste, Center for Combustion Science and Engineering. August.

Pascoe, G.A., R.J. Blanchet, and G. Linder. 1996. "Food-Chain Analysis of Exposures and Risks to Wildlife at a Metals-Contaminated Wetland." *Archives of Environmental Contamination and Toxicology.* Volume 30. Pages 306 to 318.

Navy. 1998. "Development of Toxicity Reference Values for Conducting Ecological Risk Assessments at Naval Facilities in California, Interim Final." Prepared by Naval Facilities Engineering Command, Engineering Field Activity West. San Bruno, California.

Sample, B.E., D.M. Opresko, G.W. Suter, II. 1996. "Toxicological Benchmarks for Wildlife: 1996 Revision." ES/ER/TM-86/R3. Oak Ridge National Laboratory. Oak Ridge, Tennessee.

TABLE G-15: RED-TAILED HAWK DOSE CALCULATIONS AND HAZARD QUOTIENTS (2 TO 2.5 FEET BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS																	
Aluminum																	
Dose/High TRV	1.19E-01	1.19E-01	6.50E-06	3.32E-02	1.04E-01	1.23E-02	4.76E-04	5.11E+03	2.43E+00	2.50E-02	1.20E+00	5.08E-02	1.10E+03	1.55E-01	1.65E+03	3.07E-05	Calculated[o]
Dose/Low TRV	1.19E-01	1.19E-01	6.50E-06	3.32E-02	1.04E-01	1.23E-02	4.76E-04	5.11E+03	2.43E+00	2.50E-02	1.20E+00	5.08E-02	1.10E+02	1.55E-01	1.65E+02	3.07E-04	Sample and others 1996
Antimony																	
Dose/High TRV	1.19E-01	1.19E-01	1.30E-02	3.66E-01	1.14E+00	1.35E-01	4.76E-04	2.81E+01	1.34E-02	2.50E-02	1.20E+00	3.09E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	1.30E-02	3.66E-01	1.14E+00	1.35E-01	4.76E-04	2.81E+01	1.34E-02	2.50E-02	1.20E+00	3.09E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Barium																	
Dose/High TRV	1.19E-01	1.19E-01	6.50E-06	5.02E-04	1.57E-03	1.86E-04	4.76E-04	7.72E+01	3.67E-02	2.50E-02	1.20E+00	7.67E-04	4.17E+01	1.21E-01	6.60E+01	1.16E-05	Sample and others 1996
Dose/Low TRV	1.19E-01	1.19E-01	6.50E-06	5.02E-04	1.57E-03	1.86E-04	4.76E-04	7.72E+01	3.67E-02	2.50E-02	1.20E+00	7.67E-04	2.08E+01	1.21E-01	3.29E+01	2.33E-05	Sample and others 1996
Beryllium																	
Dose/High TRV	1.19E-01	1.19E-01	2.20E-01	5.06E-02	1.58E-01	1.87E-02	4.76E-04	2.30E-01	1.09E-04	2.50E-02	1.20E+00	3.91E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	2.20E-01	5.06E-02	1.58E-01	1.87E-02	4.76E-04	2.30E-01	1.09E-04	2.50E-02	1.20E+00	3.91E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Cadmium																	
Dose/High TRV	1.19E-01	1.19E-01	8.89E-03	3.09E-02	9.66E-02	1.15E-02	4.76E-04	3.48E+00	1.66E-03	2.50E-02	1.20E+00	2.72E-04	1.04E+01	8.40E-02	1.78E+01	1.53E-05	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	8.89E-03	3.09E-02	9.66E-02	1.15E-02	4.76E-04	3.48E+00	1.66E-03	2.50E-02	1.20E+00	2.72E-04	8.00E-02	7.99E-01	8.68E-02	3.13E-03	Navy 1998
Chromium																	
Dose/High TRV	1.19E-01	1.19E-01	7.91E-06	1.03E-03	3.21E-03	3.81E-04	4.76E-04	1.30E+02	6.19E-02	2.50E-02	1.20E+00	1.29E-03	5.00E+00	1.25E+00	4.96E+00	2.60E-04	Sample and others 1996
Dose/Low TRV	1.19E-01	1.19E-01	7.91E-06	1.03E-03	3.21E-03	3.81E-04	4.76E-04	1.30E+02	6.19E-02	2.50E-02	1.20E+00	1.29E-03	1.00E+00	1.25E+00	9.93E-01	1.30E-03	Sample and others 1996
Cobalt																	
Dose/High TRV	1.19E-01	1.19E-01	6.50E-06	7.39E-05	2.31E-04	2.74E-05	4.76E-04	1.14E+01	5.41E-03	2.50E-02	1.20E+00	1.13E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	6.50E-06	7.39E-05	2.31E-04	2.74E-05	4.76E-04	1.14E+01	5.41E-03	2.50E-02	1.20E+00	1.13E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Copper																	
Dose/High TRV	1.19E-01	1.19E-01	7.55E-02	3.63E+02	1.13E+03	1.34E+02	4.76E-04	4.80E+03	2.28E+00	2.50E-02	1.20E+00	2.84E+00	5.23E+01	4.09E-01	6.49E+01	4.37E-02	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	7.55E-02	3.63E+02	1.13E+03	1.34E+02	4.76E-04	4.80E+03	2.28E+00	2.50E-02	1.20E+00	2.84E+00	2.30E+00	6.39E-01	2.61E+00	1.09E+00	Navy 1998
Lead																	
Dose/High TRV	1.19E-01	1.19E-01	3.34E-02	3.34E+01	1.04E+02	1.24E+01	4.76E-04	1.00E+03	4.76E-01	2.50E-02	1.20E+00	2.67E-01	8.75E+00	8.00E-01	9.50E+00	2.81E-02	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	3.34E-02	3.34E+01	1.04E+02	1.24E+01	4.76E-04	1.00E+03	4.76E-01	2.50E-02	1.20E+00	2.67E-01	1.40E-02	8.40E-02	2.38E-02	1.12E+01	Navy 1998
Magnesium																	
Dose/High TRV	1.19E-01	1.19E-01	2.20E-01	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	2.20E-01	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Manganese																	
Dose/High TRV	1.19E-01	1.19E-01	1.82E-02	8.68E+00	2.71E+01	3.21E+00	4.76E-04	4.78E+02	2.27E-01	2.50E-02	1.20E+00	7.15E-02	7.76E+02	1.97E-01	1.12E+03	6.41E-05	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	1.82E-02	8.68E+00	2.71E+01	3.21E+00	4.76E-04	4.78E+02	2.27E-01	2.50E-02	1.20E+00	7.15E-02	7.76E+01	1.97E-01	1.12E+02	6.41E-04	Navy 1998
Mercury																	
Dose/High TRV	1.19E-01	1.19E-01	8.63E-03	2.07E-01	6.47E-01	7.67E-02	4.76E-04	2.40E+01	1.14E-02	2.50E-02	1.20E+00	1.83E-03	1.80E-01	1.00E+00	1.87E-01	9.80E-03	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	8.63E-03	2.07E-01	6.47E-01	7.67E-02	4.76E-04	2.40E+01	1.14E-02	2.50E-02	1.20E+00	1.83E-03	3.90E-02	1.00E+00	4.05E-02	4.52E-02	Navy 1998
Molybdenum																	
Dose/High TRV	1.19E-01	1.19E-01	8.35E-01	2.12E+00	6.63E+00	7.85E-01	4.76E-04	2.54E+00	1.21E-03	2.50E-02	1.20E+00	1.63E-02	3.53E+01	1.50E+00	3.38E+01	4.83E-04	Sample and others 1996
Dose/Low TRV	1.19E-01	1.19E-01	8.35E-01	2.12E+00	6.63E+00	7.85E-01	4.76E-04	2.54E+00	1.21E-03	2.50E-02	1.20E+00	1.63E-02	3.50E+00	1.50E+00	3.35E+00	4.88E-03	Sample and others 1996
Nickel																	
Dose/High TRV	1.19E-01	1.19E-01	3.40E-04	4.61E-02	1.44E-01	1.71E-02	4.76E-04	1.36E+02	6.46E-02	2.50E-02	1.20E+00	1.70E-03	5.52E+01	5.80E-01	6.38E+01	2.66E-05	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	3.40E-04	4.61E-02	1.44E-01	1.71E-02	4.76E-04	1.36E+02	6.46E-02	2.50E-02	1.20E+00	1.70E-03	1.38E+00	6.14E-01	1.58E+00	1.07E-03	Navy 1998
Selenium																	
Dose/High TRV	1.19E-01	1.19E-01	1.06E+00	5.85E-01	1.83E+00	2.17E-01	4.76E-04	5.50E-01	2.62E-04	2.50E-02	1.20E+00	4.51E-03	9.30E-01	1.11E+00	9.46E-01	4.76E-03	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	1.06E+00	5.85E-01	1.83E+00	2.17E-01	4.76E-04	5.50E-01	2.62E-04	2.50E-02	1.20E+00	4.51E-03	2.30E-01	1.11E+00	2.34E-01	1.93E-02	Navy 1998
Silver																	
Dose/High TRV	1.19E-01	1.19E-01	2.24E-02	1.39E-02	4.35E-02	5.15E-03	4.76E-04	6.20E-01	2.95E-04	2.50E-02	1.20E+00	1.13E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	2.24E-02	1.39E-02	4.35E-02	5.15E-03	4.76E-04	6.20E-01	2.95E-04	2.50E-02	1.20E+00	1.13E-04	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Thallium																	
Dose/High TRV	1.19E-01	1.19E-01	2.20E-01	1.03E-01	3.23E-01	3.83E-02	4.76E-04	4.70E-01	2.24E-04	2.50E-02	1.20E+00	8.00E-04	3.50E-01	7.63E-02	6.08E-01	1.32E-03	EPA 1999
Dose/Low TRV	1.19E-01	1.19E-01	2.20E-01	1.03E-01	3.23E-01	3.83E-02	4.76E-04	4.70E-01	2.24E-04	2.50E-02	1.20E+00	8.00E-04	3.50E-01	7.63E-02	6.08E-01	1.32E-03	EPA 1999
Vanadium																	
Dose/High TRV	1.19E-01	1.19E-01	6.50E-06	2.37E-04	7.39E-04	8.76E-05	4.76E-04	3.64E+01	1.73E-02	2.50E-02	1.20E+00	3.62E-04	1.14E+02	1.17E+00	1.15E+02	3.15E-06	Calculated[o]
Dose/Low TRV	1.19E-01	1.19E-01	6.50E-06	2.37E-04	7.39E-04	8.76E-05	4.76E-04	3.64E+01	1.73E-02	2.50E-02	1.20E+00	3.62E-04	1.14E+01	1.17E+00	1.15E+01	3.15E-05	Sample and others 1996
Zinc																	
Dose/High TRV	1.19E-01	1.19E-01	1.27E-01	2.75E+02	8.58E+02	1.02E+02	4.76E-04	2.16E+03	1.03E+00	2.50E-02	1.20E+00	2.13E+00	1.72E+02	9.55E-01	1.80E+02	1.18E-02	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	1.27E-01	2.75E+02	8.58E+02	1.02E+02	4.76E-04	2.16E+03	1.03E+00	2.50E-02	1.20E+00	2.13E+00	1.72E+01	9.55E-01	1.80E+01	1.18E-01	Navy 1998

TABLE G-15: RED-TAILED HAWK DOSE CALCULATIONS AND HAZARD QUOTIENTS (2 TO 2.5 FEET BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Prey Ingestion Rate[b] (mg/kg)	BAF[c] (unitless)	Prey Concentration[d] (mg/kg wet weight)	Prey Concentration[d] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
ORGANOTINS																	
Dibutyltin																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	4.59E+01	9.65E-02	7.60E+01	0.00E+00	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	7.30E-01	9.65E-02	1.21E+00	0.00E+00	Navy 1998
Monobutyltin																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	4.59E+01	9.65E-02	7.60E+01	0.00E+00	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	7.30E-01	9.65E-02	1.21E+00	0.00E+00	Navy 1998
Tetrabutyltin																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	4.59E+01	9.65E-02	7.60E+01	0.00E+00	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	2.50E-02	1.20E+00	0.00E+00	7.30E-01	9.65E-02	1.21E+00	0.00E+00	Navy 1998
Tributyltin																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	9.00E-03	4.28E-06	2.50E-02	1.20E+00	8.90E-08	4.59E+01	9.65E-02	7.60E+01	1.17E-09	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	9.00E-03	4.28E-06	2.50E-02	1.20E+00	8.90E-08	7.30E-01	9.65E-02	1.21E+00	7.36E-08	Navy 1998
PCBs																	
Total Aroclors																	
Dose/High TRV	1.19E-01	1.19E-01	5.99E-02	1.62E+01	5.06E+01	5.99E+00	4.76E-04	2.70E+02	1.29E-01	2.50E-02	1.20E+00	1.27E-01	1.27E+00	1.72E+00	1.18E+00	1.07E-01	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	5.99E-02	1.62E+01	5.06E+01	5.99E+00	4.76E-04	2.70E+02	1.29E-01	2.50E-02	1.20E+00	1.27E-01	9.00E-02	8.00E-01	9.77E-02	1.30E+00	Navy 1998
PESTICIDES																	
Total DDTs																	
Dose/High TRV	1.19E-01	1.19E-01	1.88E-02	4.47E-02	1.40E-01	1.65E-02	4.76E-04	2.38E+00	1.13E-03	2.50E-02	1.20E+00	3.67E-04	1.50E+00	1.00E+00	1.56E+00	2.36E-04	Navy 1998
Dose/Low TRV	1.19E-01	1.19E-01	1.88E-02	4.47E-02	1.40E-01	1.65E-02	4.76E-04	2.38E+00	1.13E-03	2.50E-02	1.20E+00	3.67E-04	9.00E-03	3.50E+00	7.27E-03	5.05E-02	Navy 1998
alpha-Chlordane																	
Dose/High TRV	1.19E-01	1.19E-01	9.49E-02	6.60E-03	2.06E-02	2.44E-03	4.76E-04	6.95E-02	3.31E-05	2.50E-02	1.20E+00	5.14E-05	1.07E+01	6.40E-02	1.92E+01	2.67E-06	Sample and others 1996
Dose/Low TRV	1.19E-01	1.19E-01	9.49E-02	6.60E-03	2.06E-02	2.44E-03	4.76E-04	6.95E-02	3.31E-05	2.50E-02	1.20E+00	5.14E-05	2.14E+00	6.40E-02	3.85E+00	1.34E-05	Sample and others 1996
gamma-Chlordane																	
Dose/High TRV	1.19E-01	1.19E-01	9.49E-02	1.18E-02	3.70E-02	4.38E-03	4.76E-04	1.25E-01	5.94E-05	2.50E-02	1.20E+00	9.23E-05	1.07E+01	6.40E-02	1.92E+01	4.79E-06	Sample and others 1996
Dose/Low TRV	1.19E-01	1.19E-01	9.49E-02	1.18E-02	3.70E-02	4.38E-03	4.76E-04	1.25E-01	5.94E-05	2.50E-02	1.20E+00	9.23E-05	2.14E+00	6.40E-02	3.85E+00	2.40E-05	Sample and others 1996
Dieldrin																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	8.00E-01	3.81E-04	2.50E-02	1.20E+00	7.91E-06	7.70E-01	4.66E-01	9.31E-01	8.49E-06	Calculated[1o]
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	8.00E-01	3.81E-04	2.50E-02	1.20E+00	7.91E-06	7.70E-02	4.66E-01	9.31E-02	8.49E-05	Sample and others 1996
LMW PAH																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	1.04E+00	4.94E-04	2.50E-02	1.20E+00	1.02E-05	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	1.04E+00	4.94E-04	2.50E-02	1.20E+00	1.02E-05	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
HMW PAH																	
Dose/High TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	7.51E+00	3.57E-03	2.50E-02	1.20E+00	7.42E-05	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	1.19E-01	1.19E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	7.51E+00	3.57E-03	2.50E-02	1.20E+00	7.42E-05	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]

Notes:

a Total ingestion rate was derived from red-tailed hawk data in EPA's wildlife exposure factors handbook (EPA 1993).
b 99.6 percent of total ingestion rate, based on sediment ingestion.
c HPS site-specific mean BAFs for small mammals were used to calculate prey concentrations. EPA's 1999 BCFs for soil-to-small mammal were used as a default if no HPS mean mammal BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used.
d Wet weight prey concentration was calculated by multiplying the BAF (see note 3) by sediment concentration (see note 7). Wet weight converted to dry weight using 68 percent moisture, which was derived from small mammal data in EPA's wildlife exposure factors handbook (EPA 1993).
e Prey ingestion rate (0.1190 kg/day) * prey concentration (mg/kg dry weight).
f 0.4 percent of total ingestion rate, based on the rate for the American Kestrel (Pascoe and others 1996).
g Sediment concentration for dose calculations equals the 95 percent upper confidence limit of the arithmetic mean for all site-collected sediment samples. Non detects shown as 0.
h Sediment ingestion rate (0.00048 kg/day * sediment concentration [mg/kg]).
i Average body weight of red-tailed hawk from EPA (1993).
j Total daily dose is calculated using the following equation: total daily dose = ([soil daily dose + prey daily dose]*SUF)/receptor species body weight.
k The derivation of TRVs is described in Navy (1998) and Sample and others (1996).
l Allometrically adjusted TRVs were calculated using the following equation: receptor species TRV = (test species TRV) x (test species body weight / receptor species body weight)$^{(1-1.2)}$.
m The HQ was calculated using total daily dose/allometrically adjusted TRV.
n Sufficient data are unavailable to derive a TRV. This chemical was evaluated qualitatively.
o "Calculated" indicates that a high TRV was unavailable in Navy (1998) or Sample and others (1996); in those cases, an uncertainty factor of 10 was applied to the low TRV to derive a high TRV.

BAF	Bioaccumulation factor	HMW	High molecular-weight	LMW	Low molecular-weight	Navy	U.S. Department of the Navy
BCF	Bioconcentration factor	HPS	Hunters Point Shipyard	mg/day	Milligram per day	PAH	Polynuclear aromatic hydrocarbon
bgs	Below ground surface	HQ	Hazard quotient	mg/kg	Milligram per kilogram	PCB	Polychlorinated biphenyl
COPEC	Chemical of potential ecological concern	kg	Kilogram	mg/kg/day	Milligram per kilogram per day	SUF	Site use factor
DDT	Dichlorodiphenyltrichloroethane	kg/day	Kilogram per day	NA	Not available	TRV	Toxicity reference value
EPA	U.S. Environmental Protection Agency						

Sources:

EPA. 1993. "Wildlife Exposure Factor Handbook; Volumes I and II." Office of Research and Development. Washington D.C. EPA/600/R-93/187a.

EPA. 1999. "Screening Level Ecological Risk Assessment Protocol." EPA Region 6, Office of Solid Waste, Center for Combustion Science and Engineering. August.

Pascoe, G.A., R.J. Blanchet, and G. Linder. 1996. "Food-Chain Analysis of Exposures and Risks to Wildlife at a Metals-Contaminated Wetland." *Archives of Environmental Contamination and Toxicology.* Volume 30. Pages 306 to 318.

Navy. 1998. "Development of Toxicity Reference Values for Conducting Ecological Risk Assessments at Naval Facilities in California, Interim Final." Prepared by Naval Facilities Engineering Command, Engineering Field Activity West. San Bruno, California.

Sample, B.E., D.M. Opresko, G.W. Suter, II. 1996. "Toxicological Benchmarks for Wildlife: 1996 Revision." ES/ER/TM-86/R3. Oak Ridge National Laboratory. Oak Ridge, Tennessee.

TABLE G-16: HOUSE MOUSE DOSE CALCULATIONS AND HAZARD QUOTIENTS (0 TO 0.5 FOOT BGS)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Total Prey Ingestion Rate[b] (mg/kg)	Seed Ingestion Rate[c] (mg/kg)	Stem/Leaf Ingestion Rate[d] (mg/kg)	Invertebrate Ingestion Rate[e] (mg/kg)	Seed BAF[f] (unitless)	Stem/Leaf BAF[g] (unitless)	Invertebrate BAF[h] (unitless)	Seed Concentration[i] (mg/kg dry weight)	Stem/Leaf Concentration[i] (mg/kg dry weight)	Invertebrate Prey Concentration[i] (mg/kg dry weight)	Prey Daily Dose[j] (mg/day)	Sediment Ingestion Rate[k] (kg/day)	Sediment Concentration[l] (mg/kg)	Sediment Daily Dose[m] (mg/day)	SUF	Receptor Body Weight[n] (kg)	Total Daily Dose[o] (mg/kg/day)	TRV[p] (mg/kg/day)	Test Species Body Weight[p] (kg)	Allometrically Adjusted TRV[q] (mg/kg/day)	HQ[r] (based on adjusted TRV)	Source of TRV
METALS																							
Aluminum																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.00E-03	4.00E-03	2.20E-01	2.32E+01	2.32E+01	4.11E+03	5.12E-01	9.00E-05	5.79E+03	5.21E-01	1.00E+00	1.69E-02	6.11E+01	1.93E+01	3.00E-02	2.00E+01	3.06E+00	Calculated[t]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.00E-03	4.00E-03	2.20E-01	2.32E+01	2.32E+01	4.11E+03	2.44E+00	9.00E-05	5.79E+03	5.21E-01	1.00E+00	1.69E-02	1.75E+02	1.93E+00	3.00E-02	2.00E+00	8.75E+01	Sample and others 1996
Antimony																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.88E-01	6.67E-01	9.27E-01	3.22E+00	1.68E+01	2.09E+01	2.88E-02	9.00E-05	6.98E+00	6.28E-04	1.00E+00	1.69E-02	1.74E+00	1.25E+00	3.00E-02	1.29E+00	1.34E+00	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.88E-01	6.67E-01	9.27E-01	3.22E+00	1.68E+01	2.09E+01	2.88E-02	9.00E-05	6.98E+00	6.28E-04	1.00E+00	1.69E-02	1.74E+00	1.25E-01	3.00E-02	1.29E-01	1.34E+01	Sample and others 1996
Barium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.50E-01	1.50E-01	2.20E-01	1.43E+01	1.43E+01	6.77E+01	9.37E-02	9.00E-05	9.55E+01	8.59E-03	1.00E+00	1.69E-02	6.04E+00	1.98E+01	3.50E-01	2.37E+01	2.54E-01	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.50E-01	1.50E-01	2.20E-01	1.43E+01	1.43E+01	6.77E+01	9.37E-02	9.00E-05	9.55E+01	8.59E-03	1.00E+00	1.69E-02	6.04E+00	5.10E+00	4.35E-01	6.20E+00	9.75E-01	Sample and others 1996
Beryllium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.00E-02	1.00E-02	2.20E-01	1.90E-03	1.90E-03	1.35E-01	8.43E-05	9.00E-05	1.90E-01	1.71E-05	1.00E+00	1.69E-02	5.99E-03	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.00E-02	1.00E-02	2.20E-01	1.90E-03	1.90E-03	1.35E-01	8.43E-05	9.00E-05	1.90E-01	1.71E-05	1.00E+00	1.69E-02	5.99E-03	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]
Cadmium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	7.91E-01	7.45E-01	5.01E-01	1.09E+01	2.32E+01	1.40E+01	5.40E-02	9.00E-05	8.64E+00	7.78E-04	1.00E+00	1.69E-02	3.24E+00	2.64E+00	3.14E-02	2.74E+00	1.18E+00	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	7.91E-01	7.45E-01	5.01E-01	1.09E+01	2.32E+01	1.40E+01	5.40E-02	9.00E-05	8.64E+00	7.78E-04	1.00E+00	1.69E-02	3.24E+00	6.00E-02	3.22E-02	6.24E-02	5.19E+01	Navy 1998
Chromium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	7.50E-03	7.50E-03	1.00E-02	7.41E-01	7.41E-01	3.19E+00	4.66E-03	9.00E-05	9.88E+01	8.89E-03	1.00E+00	1.69E-02	8.01E-01	2.74E+04	3.50E-01	3.28E+04	2.44E-05	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	7.50E-03	7.50E-03	1.00E-02	7.41E-01	7.41E-01	3.19E+00	4.66E-03	9.00E-05	9.88E+01	8.89E-03	1.00E+00	1.69E-02	8.01E-01	2.74E+03	3.50E-01	3.28E+03	2.44E-04	Sample and others 1996
Cobalt																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.60E-02	2.60E-02	7.00E-02	4.46E-01	1.01E+00	2.42E+00	3.28E-03	9.00E-05	1.07E+01	9.64E-04	1.00E+00	1.69E-02	2.50E-01	2.00E+01	2.00E-01	2.32E+01	1.08E-02	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.60E-02	2.60E-02	7.00E-02	4.46E-01	1.01E+00	2.42E+00	3.28E-03	9.00E-05	1.07E+01	9.64E-04	1.00E+00	1.69E-02	2.50E-01	1.20E+00	2.75E-01	1.42E+00	1.77E-01	Sample and others 1996
Copper																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.65E-01	1.82E-01	7.96E-01	1.97E+02	4.91E+02	1.92E+03	1.95E+00	9.00E-05	7.48E+02	6.73E-02	1.00E+00	1.69E-02	1.19E+02	6.32E+02	2.47E-02	6.46E+02	1.85E-01	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.65E-01	1.82E-01	7.96E-01	1.97E+02	4.91E+02	1.92E+03	1.95E+00	9.00E-05	7.48E+02	6.73E-02	1.00E+00	1.69E-02	1.19E+02	2.67E+00	3.00E-02	2.76E+00	4.32E+01	Navy 1998
Lead																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.70E-02	3.20E-02	7.40E-02	8.82E+00	3.75E+01	7.74E+01	8.76E-02	9.00E-05	3.24E+02	2.92E-02	1.00E+00	1.69E-02	6.90E+00	2.41E+02	1.87E-02	2.42E+02	2.85E-02	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.70E-02	3.20E-02	7.40E-02	8.82E+00	3.75E+01	7.74E+01	8.76E-02	9.00E-05	3.24E+02	2.92E-02	1.00E+00	1.69E-02	6.90E+00	1.00E+00	2.35E-01	1.17E+00	5.89E+00	DTSC 2002
Magnesium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.00E-02	1.00E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.00E-02	1.00E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]
Manganese																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	9.90E-02	1.07E-01	6.40E-02	7.15E+01	1.74E+02	9.32E+01	3.62E-01	9.00E-05	4.51E+02	4.06E-02	1.00E+00	1.69E-02	2.38E+01	1.59E+02	2.97E-02	1.65E+02	1.44E-01	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	9.90E-02	1.07E-01	6.40E-02	7.15E+01	1.74E+02	9.32E+01	3.62E-01	9.00E-05	4.51E+02	4.06E-02	1.00E+00	1.69E-02	2.38E+01	1.37E+01	3.46E-02	1.43E+01	1.66E+00	Navy 1998
Mercury																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.17E-01	1.37E-01	6.24E-01	1.42E-01	3.76E-01	1.53E+00	1.50E-03	9.00E-05	7.60E-01	6.84E-05	1.00E+00	1.69E-02	9.25E-02	4.00E+00	4.28E-01	4.86E+00	1.90E-02	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.17E-01	1.37E-01	6.24E-01	1.42E-01	3.76E-01	1.53E+00	1.50E-03	9.00E-05	7.60E-01	6.84E-05	1.00E+00	1.69E-02	9.25E-02	2.50E-01	1.88E-01	2.89E-01	3.20E-01	Navy 1998
Molybdenum																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.04E+00	4.26E+00	2.39E+00	2.66E+01	6.32E+01	3.16E+01	1.32E-01	9.00E-05	4.11E+00	3.70E-04	1.00E+00	1.69E-02	7.83E+00	2.60E+00	3.00E-02	2.69E+00	2.91E+00	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.04E+00	4.26E+00	2.39E+00	2.66E+01	6.32E+01	3.16E+01	1.32E-01	9.00E-05	4.11E+00	3.70E-04	1.00E+00	1.69E-02	7.83E+00	2.60E-01	3.00E-02	2.69E-01	2.91E+01	Sample and others 1996
Nickel																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.50E-02	2.60E-02	1.80E-02	6.58E+00	1.54E+01	9.55E+00	3.36E-02	9.00E-05	1.65E+02	1.48E-02	1.00E+00	1.69E-02	2.86E+00	3.16E+01	2.49E-01	3.71E+01	7.71E-02	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.50E-02	2.60E-02	1.80E-02	6.58E+00	1.54E+01	9.55E+00	3.36E-02	9.00E-05	1.65E+02	1.48E-02	1.00E+00	1.69E-02	2.86E+00	1.33E-01	2.49E-01	1.56E-01	1.83E+01	Navy 1998
Selenium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.54E+00	1.50E+00	9.17E+00	1.24E+00	2.71E+00	1.48E+01	1.37E-02	9.00E-05	5.00E-01	4.50E-05	1.00E+00	1.69E-02	8.10E-01	9.30E-01	1.11E+00	1.20E+00	6.78E-01	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.54E+00	1.50E+00	9.17E+00	1.24E+00	2.71E+00	1.48E+01	1.37E-02	9.00E-05	5.00E-01	4.50E-05	1.00E+00	1.69E-02	8.10E-01	2.30E-01	1.11E+00	2.96E-01	2.74E+00	Navy 1998
Silver																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.34E+00	4.96E+00	1.89E+00	2.96E+00	1.42E+01	4.82E+00	1.78E-02	9.00E-05	7.90E-01	7.11E-05	1.00E+00	1.69E-02	1.06E+00	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.34E+00	4.96E+00	1.89E+00	2.96E+00	1.42E+01	4.82E+00	1.78E-02	9.00E-05	7.90E-01	7.11E-05	1.00E+00	1.69E-02	1.06E+00	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]	No TRV[s]
Thallium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.00E-03	4.00E-03	2.20E-01	4.10E-03	9.25E-03	4.54E-01	2.77E-04	9.00E-05	6.40E-01	5.76E-05	1.00E+00	1.69E-02	1.98E-02	1.43E+00	6.50E-02	1.55E+00	1.27E-02	EPA 1999
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.00E-03	4.00E-03	2.20E-01	4.10E-03	9.25E-03	4.54E-01	2.77E-04	9.00E-05	6.40E-01	5.76E-05	1.00E+00	1.69E-02	1.98E-02	4.80E-01	6.50E-02	5.20E-01	3.80E-02	EPA 1999
Vanadium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.20E-01	1.20E-01	2.20E-01	7.99E+00	1.80E+01	2.95E+01	5.08E-02	9.00E-05	4.16E+01	3.74E-03	1.00E+00	1.69E-02	3.22E+00	2.10E+00	2.60E-01	2.47E+00	1.30E+00	Calculated[t]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.20E-01	1.20E-01	2.20E-01	7.99E+00	1.80E+01	2.95E+01	5.08E-02	9.00E-05	4.16E+01	3.74E-03	1.00E+00	1.69E-02	3.22E+00	2.10E-01	2.60E-01	2.47E-01	1.30E+01	Sample and others 1996
Zinc																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.85E-01	5.48E-01	8.21E-01	2.42E+02	1.05E+03	1.41E+03	2.00E+00	9.00E-05	5.31E+02	4.78E-02	1.00E+00	1.69E-02	1.21E+02	4.11E+02	1.75E-01	4.73E+02	2.56E-01	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.85E-01	5.48E-01	8.21E-01	2.42E+02	1.05E+03	1.41E+03	2.00E+00	9.00E-05	5.31E+02	4.78E-02	1.00E+00	1.69E-02	1.21E+02	9.60E+00	2.55E-02	9.84E+00	1.23E+01	Navy 1998
ORGANOTINS																							
Dibutyltin																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	6.00E-02	5.40E-06	1.00E+00	1.69E-02	3.19E-04	1.50E+01	2.41E-01	1.76E+01	1.81E-05	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	6.00E-02	5.40E-06	1.00E+00	1.69E-02	3.19E-04	2.50E-01	1.88E-01	2.89E-01	1.10E-03	Navy 1998
Monobutyltin																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	1.50E+01	2.41E-01	1.76E+01	0.00E+00	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	2.50E-01	1.88E-01	2.89E-01	0.00E+00	Navy 1998
Tetrabutyltin																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	1.00E-02	9.00E-07	1.00E+00	1.69E-02	5.32E-05	1.50E+01	2.41E-01	1.76E+01	3.02E-06	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	1.00E-02	9.00E-07	1.00E+00	1.69E-02	5.32E-05	2.50E-01	1.88E-01	2.89E-01	1.84E-04	Navy 1998
Tributyltin																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	3.00E-01	2.70E-05	1.00E+00	1.69E-02	1.59E-03	1.50E+01	2.41E-01	1.76E+01	9.07E-05	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	3.00E-01	2.70E-05	1.00E+00	1.69E-02	1.59E-03	2.50E-01	1.88E-01	2.89E-01	5.52E-03	Navy 1998

TABLE G-16: HOUSE MOUSE DOSE CALCULATIONS AND HAZARD QUOTIENTS (0 TO 0.5 FOOT BGS) (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Total Prey Ingestion Rate[b] (mg/kg)	Seed Ingestion Rate[c] (mg/kg)	Stem/Leaf Ingestion Rate[d] (mg/kg)	Invertebrate Ingestion Rate[e] (mg/kg)	Seed BAF[f] (unitless)	Stem/Leaf BAF[g] (unitless)	Invertebrate BAF[h] (unitless)	Seed Concentration[i] (mg/kg dry weight)	Stem/Leaf Concentration[i] (mg/kg dry weight)	Invertebrate Prey Concentration[i] (mg/kg dry weight)	Prey Daily Dose[j] (mg/day)	Sediment Ingestion Rate[k] (kg/day)	Sediment Concentration[l] (mg/kg)	Sediment Daily Dose[m] (mg/day)	SUF	Receptor Body Weight[n] (kg)	Total Daily Dose[o] (mg/kg/day)	TRV[p] (mg/kg/day)	Test Species Body Weight[p] (kg)	Allometrically Adjusted TRV[q] (mg/kg/day)	HQ[r] (based on adjusted TRV)	Source of TRV
PCBs																							
Total PCBs (Congeners)																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.59E+00	7.54E+00	1.62E+01	2.65E+02	1.74E+03	3.35E+03	3.42E+00	9.00E-05	6.40E+01	5.76E-03	1.00E+00	1.69E-02	2.02E+02	1.28E+00	2.29E-02	1.30E+00	1.55E+02	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.59E+00	7.54E+00	1.62E+01	2.65E+02	1.74E+03	3.35E+03	3.42E+00	9.00E-05	6.40E+01	5.76E-03	1.00E+00	1.69E-02	2.02E+02	3.60E-01	2.06E-02	3.64E-01	5.55E+02	Navy 1998
Total Aroclors																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.59E+00	7.54E+00	1.62E+01	3.97E+01	2.61E+02	5.02E+02	5.12E-01	9.00E-05	9.60E+00	8.64E-04	1.00E+00	1.69E-02	3.03E+01	1.28E+00	2.29E-02	1.30E+00	2.33E+01	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.59E+00	7.54E+00	1.62E+01	3.97E+01	2.61E+02	5.02E+02	5.12E-01	9.00E-05	9.60E+00	8.64E-04	1.00E+00	1.69E-02	3.03E+01	3.60E-01	2.06E-02	3.64E-01	8.32E+01	Navy 1998
PESTICIDES																							
Total DDTs																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	3.78E+00	9.96E+00	1.31E+01	1.10E+00	6.57E+00	7.70E+00	1.04E-02	9.00E-05	1.83E-01	1.64E-05	1.00E+00	1.69E-02	6.18E-01	1.60E+01	3.20E-01	1.91E+01	3.24E-02	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	3.78E+00	9.96E+00	1.31E+01	1.10E+00	6.57E+00	7.70E+00	1.04E-02	9.00E-05	1.83E-01	1.64E-05	1.00E+00	1.69E-02	6.18E-01	8.00E-01	3.20E-01	9.54E-01	6.47E-01	Navy 1998
alpha-Chlordane																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.05E+00	1.01E+01	2.17E+01	1.07E-01	6.02E-01	1.16E+00	1.23E-03	9.00E-05	1.65E-02	1.49E-06	1.00E+00	1.69E-02	7.30E-02	6.80E+00	2.04E-01	7.90E+00	9.25E-03	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.05E+00	1.01E+01	2.17E+01	1.07E-01	6.02E-01	1.16E+00	1.23E-03	9.00E-05	1.65E-02	1.49E-06	1.00E+00	1.69E-02	7.30E-02	1.30E-01	1.00E-01	1.45E-01	5.05E-01	Sample and others 1996
gamma-Chlordane																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.05E+00	1.01E+01	2.17E+01	2.41E-01	1.35E+00	2.60E+00	2.78E-03	9.00E-05	3.71E-02	3.34E-06	1.00E+00	1.69E-02	1.64E-01	6.80E+00	2.04E-01	7.90E+00	2.08E-02	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.05E+00	1.01E+01	2.17E+01	2.41E-01	1.35E+00	2.60E+00	2.78E-03	9.00E-05	3.71E-02	3.34E-06	1.00E+00	1.69E-02	1.64E-01	1.30E-01	1.00E-01	1.45E-01	1.13E+00	Sample and others 1996
Dieldrin																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	9.40E-02	8.46E-06	1.00E+00	1.69E-02	5.00E-04	2.00E-01	3.50E-01	2.40E-01	2.08E-03	Calculated[d]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	9.40E-02	8.46E-06	1.00E+00	1.69E-02	5.00E-04	2.00E-02	3.50E-01	2.40E-02	2.08E-02	Sample and others 1996
DIOXINS/FURANS																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	1.43E-05	1.29E-09	1.00E+00	1.69E-02	7.61E-08	1.00E-05	4.30E-01	1.21E-05	6.27E-03	Calculated[d]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	1.43E-05	1.29E-09	1.00E+00	1.69E-02	7.61E-08	1.00E-07	4.30E-01	1.21E-07	6.27E-01	Sample and others 1996
LMW PAH																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.38E+00	2.31E+00	1.89E+00	7.43E-01	2.80E+00	2.05E+00	4.71E-03	9.00E-05	3.37E-01	3.03E-05	1.00E+00	1.69E-02	2.80E-01	1.50E+02	2.70E-01	1.77E+02	1.58E-03	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.38E+00	2.31E+00	1.89E+00	7.43E-01	2.80E+00	2.05E+00	4.71E-03	9.00E-05	3.37E-01	3.03E-05	1.00E+00	1.69E-02	2.80E-01	5.00E+01	2.77E-01	5.91E+01	4.73E-03	Navy 1998
HMW PAH																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	3.46E-01	5.34E-01	4.41E-01	3.21E+00	1.12E+01	8.24E+00	1.96E-02	9.00E-05	5.79E+00	5.21E-04	1.00E+00	1.69E-02	1.19E+00	3.28E+01	3.05E-02	3.40E+01	3.51E-02	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	3.46E-01	5.34E-01	4.41E-01	3.21E+00	1.12E+01	8.24E+00	1.96E-02	9.00E-05	5.79E+00	5.21E-04	1.00E+00	1.69E-02	1.19E+00	1.31E+00	3.05E-02	1.36E+00	8.78E-01	Navy 1998

Notes:

a Total ingestion rate (0.0045 kg/day) was calculated using an average adult body weight of 1.69 grams (based on site-specific data) and EPA (1993) mean adult deer mouse ingestion rate (0.268 grams per gram per day).

b Prey ingestion rate equals 98 percent of the total ingestion rate, based on a sediment ingestion rate equal to 2 percent of the total ingestion rate.

b.1 Seed ingestion equals 79.54 percent of the prey ingestion.

b.2 Stem and leaf ingestion equals 7.5 percent of the prey ingestion.

b.3 Invertebrate ingestion equals 12.95 percent of the prey ingestion.

c Calculated HPS mean BAFs for seeds were used to calculate seed concentrations. EPA's 1999 BCFs for soil-to-plants were used as default if no HPS mean seed BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used.

c.1 Calculated HPS mean BAFs for stems and leaves were used to calculate stem and leaf concentrations. EPA's 1999 BCFs for soil-to-plants were used as default if no HPS mean seed BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used.

c.2 Calculated HPS mean BAFs for seeds were used to calculate invertebrate prey concentrations. EPA's 1999 BCFs for soil-to-invertebrate were used as default if no HPS mean seed BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used.

d The prey concentration was calculated by multiplying the sediment concentration by the respective BAF.

e Prey daily dose was calculated by multiplying: (Seed IR rate x seed conc) + (Stem & leaf IR * Stem and leaf conc) + (Invertebrate IR * Invertebrate conc).

f Sediment ingestion rate equals 3 percent of the total ingestion rate; based on EPA (1999).

g Sediment concentration for dose calculations equals 95 percent upper confidence limit of arithmetic mean for all site-collected sediment samples. Non detects shown as 0.

h Sediment daily dose was calculated by multiplying the sediment ingestion rate by the sediment concentration.

i Average adult house mouse body weight based on HPS site collected mouse data.

j Total daily dose is calculated using the following equation: total daily dose = ([sediment daily dose + prey daily dose]*SUF)/receptor species body weight.

k The derivation of TRVs is described in Navy (1998) and Sample and others (1996).

l Allometrically adjusted TRVs were calculated using the following equation: receptor species TRV = (test species TRV) x (test species body weight / receptor species body weight)$^{(1-0.94)}$.

m The HQ was calculated using total daily dose/allometrically adjusted TRV.

n Sufficient data are unavailable to derive a TRV. This chemical was evaluated qualitatively.

o "Calculated" indicates that a high TRV was unavailable in Navy (1998) or Sample and others (1996); in those cases, an uncertainty factor of 10 was applied to the low TRV to derive a high TRV.

BAF	Bioaccumulation factor	kg	Kilogram
BCF	Bioconcentration factor	kg/day	Kilogram per day
bgs	Below ground surface	LMW	Low molecular-weight
COPEC	Chemical of potential ecological concern	mg/day	Milligram per day
DDT	Dichlorodiphenyltrichloroethane	mg/kg	Milligram per kilogram
DTSC	Department of Toxic Substance Control	mg/kg/day	Milligram per kilogram per day
EPA	U.S. Environmental Protection Agency	Navy	U.S. Department of the Navy
HMW	High molecular-weight	PAH	Polynuclear aromatic hydrocarbon
HPS	Hunters Point Shipyard	PCB	Polychlorinated biphenyl
HQ	Hazard quotient	SUF	Site use factor
IR	Ingestion Rate	TRV	Toxicity reference value

Sources:

DTSC. 2002. "ECO Note 5. Revised EPA Region 9 Biological Technical Assisstance Group Mammalian TRV for Lead: Justificantion and Rationale." Human and Ecological Risk Division. November 21.

EPA. 1993. "Wildlife Exposure Factor Handbook; Volumes I and II." Office of Research and Development. Washington D.C. EPA/600/R-93/187a.

EPA. 1999. "Screening Level Ecological Risk Assessment Protocol." EPA Region 6, Office of Solid Waste, Center for Combustion Science and Engineering. August.

Navy. 1998. "Development of Toxicity Reference Values for Conducting Ecological Risk Assessments at Naval Facilities in California, Interim Final." Prepared by Naval Facilities Engineering Command, Engineering Field Activity West. San Bruno, California.

Sample, B.E., D.M. Opresko, G.W. Suter, II. 1996. "Toxicological Benchmarks for Wildlife: 1996 Revision." ES/ER/TM-86/R3. Oak Ridge National Laboratory. Oak Ridge, Tennessee.

TABLE G-17: HOUSE MOUSE DOSE CALCULATIONS AND HAZARD QUOTIENTS (2 TO 2.5 FEET BGS)

Draft Parcel E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Total Prey Ingestion Rate[b] (mg/kg)	Seed Ingestion Rate[b.1] (mg/kg)	Stem/Leaf Ingestion Rate[b.2] (mg/kg)	Invertebrate Ingestion Rate[b.3] (mg/kg)	Seed BAF[c] (unitless)	Stem/Leaf BAF[c.1] (unitless)	Invertebrate BAF[c.2] (unitless)	Seed Concentration[d] (mg/kg dry weight)	Stem/Leaf Concentration[d.1] (mg/kg dry weight)	Invertebrate Prey Concentration[d.2] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[j] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[k] (kg)	Allometrically Adjusted TRV[l] (mg/kg/day)	HQ[m] (based on adjusted TRV)	Source of TRV
METALS																							
Aluminum																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.00E-03	4.00E-03	2.20E-01	2.05E+01	2.05E+01	3.63E+03	2.15E+00	9.00E-05	5.11E+03	4.60E-01	1.00E+00	1.69E-02	1.54E+02	1.93E+01	3.00E-02	2.00E+01	7.72E+00	Calculated[15]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.00E-03	4.00E-03	2.20E-01	2.05E+01	2.05E+01	3.63E+03	2.15E+00	9.00E-05	5.11E+03	4.60E-01	1.00E+00	1.69E-02	1.54E+02	1.93E+00	3.00E-02	2.00E+00	7.72E+01	Sample and others 1996
Antimony																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.88E-01	6.67E-01	9.27E-01	1.29E+01	6.76E+01	8.39E+01	1.16E-01	9.00E-05	2.81E+01	2.53E-03	1.00E+00	1.69E-02	6.98E+00	1.25E+00	3.00E-02	1.29E+00	5.39E+00	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.88E-01	6.67E-01	9.27E-01	1.29E+01	6.76E+01	8.39E+01	1.16E-01	9.00E-05	2.81E+01	2.53E-03	1.00E+00	1.69E-02	6.98E+00	1.25E-01	3.00E-02	1.29E-01	5.39E+01	Sample and others 1996
Barium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.50E-01	1.50E-01	2.20E-01	1.16E+01	1.16E+01	5.48E+01	7.57E-02	9.00E-05	7.72E+01	6.95E-03	1.00E+00	1.69E-02	4.88E+00	1.98E+01	3.50E-01	2.37E+01	2.06E-01	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.50E-01	1.50E-01	2.20E-01	1.16E+01	1.16E+01	5.48E+01	7.57E-02	9.00E-05	7.72E+01	6.95E-03	1.00E+00	1.69E-02	4.88E+00	5.10E+00	4.35E-01	6.20E+00	7.88E-01	Sample and others 1996
Beryllium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.00E-02	1.00E-02	2.20E-01	2.30E-03	2.30E-03	1.63E-01	1.02E-04	9.00E-05	2.30E-01	2.07E-05	1.00E+00	1.69E-02	7.25E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.00E-02	1.00E-02	2.20E-01	2.30E-03	2.30E-03	1.63E-01	1.02E-04	9.00E-05	2.30E-01	2.07E-05	1.00E+00	1.69E-02	7.25E-03	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Cadmium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	7.91E-01	7.45E-01	5.01E-01	4.40E+00	9.36E+00	5.62E+00	2.18E-02	9.00E-05	3.48E+00	3.13E-04	1.00E+00	1.69E-02	1.30E+00	2.64E+00	3.14E-02	2.74E+00	4.76E-01	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	7.91E-01	7.45E-01	5.01E-01	4.40E+00	9.36E+00	5.62E+00	2.18E-02	9.00E-05	3.48E+00	3.13E-04	1.00E+00	1.69E-02	1.30E+00	6.00E-02	3.22E-02	6.24E-02	2.09E+01	Navy 1998
Chromium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	7.50E-03	7.50E-03	1.00E-02	9.75E-01	9.75E-01	4.19E+00	6.14E-03	9.00E-05	1.30E+02	1.17E-02	1.00E+00	1.69E-02	1.05E+00	2.74E+04	3.50E-01	3.28E+04	3.21E-05	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	7.50E-03	7.50E-03	1.00E-02	9.75E-01	9.75E-01	4.19E+00	6.14E-03	9.00E-05	1.30E+02	1.17E-02	1.00E+00	1.69E-02	1.05E+00	2.74E+03	3.50E-01	3.28E+03	3.21E-04	Sample and others 1996
Cobalt																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.60E-02	2.60E-02	7.00E-02	4.73E-01	1.07E+00	2.57E+00	3.48E-03	9.00E-05	1.14E+01	1.02E-03	1.00E+00	1.69E-02	2.66E-01	2.00E+01	2.00E-01	2.32E+01	1.15E-02	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.60E-02	2.60E-02	7.00E-02	4.73E-01	1.07E+00	2.57E+00	3.48E-03	9.00E-05	1.14E+01	1.02E-03	1.00E+00	1.69E-02	2.66E-01	1.20E+00	2.75E-01	1.42E+00	1.87E-01	Sample and others 1996
Copper																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.65E-01	1.82E-01	7.96E-01	1.27E+03	3.15E+03	1.23E+04	1.25E+01	9.00E-05	4.80E+03	4.32E-01	1.00E+00	1.69E-02	7.65E+02	6.32E+02	2.47E-02	6.46E+02	1.18E+00	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.65E-01	1.82E-01	7.96E-01	1.27E+03	3.15E+03	1.23E+04	1.25E+01	9.00E-05	4.80E+03	4.32E-01	1.00E+00	1.69E-02	7.65E+02	2.67E+00	3.00E-02	2.76E+00	2.77E+02	Navy 1998
Lead																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.70E-02	3.20E-02	7.40E-02	2.72E+01	1.16E+02	2.39E+02	2.70E-01	9.00E-05	1.00E+03	9.00E-02	1.00E+00	1.69E-02	2.13E+01	2.41E+02	1.87E-02	2.42E+02	8.78E-02	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.70E-02	3.20E-02	7.40E-02	2.72E+01	1.16E+02	2.39E+02	2.70E-01	9.00E-05	1.00E+03	9.00E-02	1.00E+00	1.69E-02	2.13E+01	1.00E+00	2.35E-01	1.17E+00	1.82E+01	DTSC 2002
Magnesium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.00E-02	1.00E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.00E-02	1.00E-02	2.20E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Manganese																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	9.90E-02	1.07E-01	6.40E-02	7.57E+01	1.85E+02	9.87E+01	3.83E-01	9.00E-05	4.78E+02	4.30E-02	1.00E+00	1.69E-02	2.52E+01	1.59E+02	2.97E-02	1.65E+02	1.53E-01	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	9.90E-02	1.07E-01	6.40E-02	7.57E+01	1.85E+02	9.87E+01	3.83E-01	9.00E-05	4.78E+02	4.30E-02	1.00E+00	1.69E-02	2.52E+01	1.37E+01	3.46E-02	1.43E+01	1.76E+00	Navy 1998
Mercury																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.17E-01	1.37E-01	6.24E-01	4.49E+00	1.19E+01	4.83E+01	4.73E-02	9.00E-05	2.40E+01	2.16E-03	1.00E+00	1.69E-02	2.92E+00	4.00E+00	4.28E-01	4.86E+00	6.01E-01	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.17E-01	1.37E-01	6.24E-01	4.49E+00	1.19E+01	4.83E+01	4.73E-02	9.00E-05	2.40E+01	2.16E-03	1.00E+00	1.69E-02	2.92E+00	2.50E-01	1.88E-01	2.89E-01	1.01E+01	Navy 1998
Molybdenum																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.04E+00	4.26E+00	2.39E+00	1.64E+01	3.91E+01	1.95E+01	8.17E-02	9.00E-05	2.54E+00	2.29E-04	1.00E+00	1.69E-02	4.84E+00	2.60E+00	3.00E-02	2.69E+00	1.80E+00	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.04E+00	4.26E+00	2.39E+00	1.64E+01	3.91E+01	1.95E+01	8.17E-02	9.00E-05	2.54E+00	2.29E-04	1.00E+00	1.69E-02	4.84E+00	2.60E-01	3.00E-02	2.69E-01	1.80E+01	Sample and others 1996
Nickel																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.50E-02	2.60E-02	1.80E-02	5.43E+00	1.27E+01	7.88E+00	2.77E-02	9.00E-05	1.36E+02	1.22E-02	1.00E+00	1.69E-02	2.36E+00	3.16E+01	2.49E-01	3.71E+01	6.36E-02	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.50E-02	2.60E-02	1.80E-02	5.43E+00	1.27E+01	7.88E+00	2.77E-02	9.00E-05	1.36E+02	1.22E-02	1.00E+00	1.69E-02	2.36E+00	1.33E-01	2.49E-01	1.56E-01	1.51E+01	Navy 1998
Selenium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.54E+00	1.50E+00	9.17E+00	1.36E+00	2.99E+00	1.63E+01	1.50E-02	9.00E-05	5.50E-01	4.95E-05	1.00E+00	1.69E-02	8.91E-01	9.30E-01	1.11E+00	1.20E+00	7.46E-01	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.54E+00	1.50E+00	9.17E+00	1.36E+00	2.99E+00	1.63E+01	1.50E-02	9.00E-05	5.50E-01	4.95E-05	1.00E+00	1.69E-02	8.91E-01	2.30E-01	1.11E+00	2.96E-01	3.02E+00	Navy 1998
Silver																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.34E+00	4.96E+00	1.89E+00	2.32E+00	1.11E+01	3.78E+00	1.40E-02	9.00E-05	6.20E-01	5.58E-05	1.00E+00	1.69E-02	8.29E-01	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.34E+00	4.96E+00	1.89E+00	2.32E+00	1.11E+01	3.78E+00	1.40E-02	9.00E-05	6.20E-01	5.58E-05	1.00E+00	1.69E-02	8.29E-01	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]	No TRV[n]
Thallium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.00E-03	4.00E-03	2.20E-01	1.88E-03	1.88E-03	3.34E-01	1.98E-04	9.00E-05	4.70E-01	4.23E-05	1.00E+00	1.69E-02	1.42E-02	1.43E+00	6.50E-02	1.55E+00	9.14E-03	EPA 1999
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.00E-03	4.00E-03	2.20E-01	1.88E-03	1.88E-03	3.34E-01	1.98E-04	9.00E-05	4.70E-01	4.23E-05	1.00E+00	1.69E-02	1.42E-02	4.80E-01	6.50E-02	5.20E-01	2.72E-02	EPA 1999
Vanadium																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.20E-01	1.20E-01	2.20E-01	4.37E+00	4.37E+00	2.58E+01	3.15E-02	9.00E-05	3.64E+01	3.28E-03	1.00E+00	1.69E-02	2.06E+00	2.10E+00	2.60E-01	2.47E+00	8.31E-01	Calculated[o]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.20E-01	1.20E-01	2.20E-01	4.37E+00	4.37E+00	2.58E+01	3.15E-02	9.00E-05	3.64E+01	3.28E-03	1.00E+00	1.69E-02	2.06E+00	2.10E-01	2.60E-01	2.47E-01	8.31E+00	Sample and others 1996
Zinc																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.85E-01	5.48E-01	8.21E-01	9.85E+02	4.28E+03	5.72E+03	8.14E+00	9.00E-05	2.16E+03	1.94E-01	1.00E+00	1.69E-02	4.92E+02	4.11E+02	1.75E-01	4.73E+02	1.04E+00	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.85E-01	5.48E-01	8.21E-01	9.85E+02	4.28E+03	5.72E+03	8.14E+00	9.00E-05	2.16E+03	1.94E-01	1.00E+00	1.69E-02	4.92E+02	9.60E+00	2.55E-02	9.84E+00	5.00E+01	Navy 1998
ORGANOTINS																							
Dibutyltin																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	1.50E+01	2.41E-01	1.76E+01	0.00E+00	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	2.50E-01	1.88E-01	2.89E-01	0.00E+00	Navy 1998
Monobutyltin																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	1.50E+01	2.41E-01	1.76E+01	0.00E+00	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	2.50E-01	1.88E-01	2.89E-01	0.00E+00	Navy 1998
Tetrabutyltin																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	1.50E+01	2.41E-01	1.76E+01	0.00E+00	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	1.00E+00	1.69E-02	0.00E+00	2.50E-01	1.88E-01	2.89E-01	0.00E+00	Navy 1998
Tributyltin																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	9.00E-03	8.10E-07	1.00E+00	1.69E-02	4.78E-05	1.50E+01	2.41E-01	1.76E+01	2.72E-06	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	9.00E-03	8.10E-07	1.00E+00	1.69E-02	4.78E-05	2.50E-01	1.88E-01	2.89E-01	1.66E-04	Navy 1998
PCBs																							
Total Aroclors																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.59E+00	7.54E+00	1.31E+01	1.12E+03	7.35E+03	1.14E+04	1.29E+01	9.00E-05	2.70E+02	2.43E-02	1.00E+00	1.69E-02	7.61E+02	1.28E+00	2.29E-02	1.30E+00	5.84E+02	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	2.59E+00	7.54E+00	1.31E+01	1.12E+03	7.35E+03	1.14E+04	1.29E+01	9.00E-05	2.70E+02	2.43E-02	1.00E+00	1.69E-02	7.61E+02	3.60E-01	2.06E-02	3.64E-01	2.09E+03	Navy 1998

TABLE G-17: HOUSE MOUSE DOSE CALCULATIONS AND HAZARD QUOTIENTS (2 TO 2.5 FEET BGS) (CONTINUED)

Draft Parcel E and E-2 Shoreline Characterization Techniical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Total Ingestion Rate[a] (kg/day)	Total Prey Ingestion Rate[b] (mg/kg)	Seed Ingestion Rate[b.1] (mg/kg)	Stem/Leaf Ingestion Rate[b.2] (mg/kg)	Invertebrate Ingestion Rate[b.3] (mg/kg)	Seed BAF[c] (unitless)	Stem/Leaf BAF[c.1] (unitless)	Invertebrate BAF[c.2] (unitless)	Seed Concentration[d] (mg/kg dry weight)	Stem/Leaf Concentration[d.1] (mg/kg dry weight)	Invertebrate Prey Concentration[d.2] (mg/kg dry weight)	Prey Daily Dose[e] (mg/day)	Sediment Ingestion Rate[f] (kg/day)	Sediment Concentration[g] (mg/kg)	Sediment Daily Dose[h] (mg/day)	SUF	Receptor Body Weight[i] (kg)	Total Daily Dose[j] (mg/kg/day)	TRV[k] (mg/kg/day)	Test Species Body Weight[l] (kg)	Allometrically Adjusted TRV[m] (mg/kg/day)	HQ[n] (based on adjusted TRV)	Source of TRV
PESTICIDES																							
Total DDTs																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	3.78E+00	9.96E+00	1.31E+01	1.44E+01	8.56E+01	1.00E+02	1.36E-01	9.00E-05	2.38E+00	2.14E-04	1.00E+00	1.69E-02	8.06E+00	1.60E+01	3.20E-01	1.91E+01	4.22E-01	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	3.78E+00	9.96E+00	1.31E+01	1.44E+01	8.56E+01	1.00E+02	1.36E-01	9.00E-05	2.38E+00	2.14E-04	1.00E+00	1.69E-02	8.06E+00	8.00E-01	3.20E-01	9.54E-01	8.44E+00	Navy 1998
alpha-Chlordane																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.05E+00	1.01E+01	2.17E+01	4.51E-01	2.53E+00	4.87E+00	5.20E-03	9.00E-05	6.95E-02	6.26E-06	1.00E+00	1.69E-02	3.07E-01	6.80E+00	2.04E-01	7.90E+00	3.89E-02	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.05E+00	1.01E+01	2.17E+01	4.51E-01	2.53E+00	4.87E+00	5.20E-03	9.00E-05	6.95E-02	6.26E-06	1.00E+00	1.69E-02	3.07E-01	1.30E-01	1.00E-01	1.45E-01	2.13E+00	Sample and others 1996
gamma-Chlordane																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.05E+00	1.01E+01	2.17E+01	8.08E-01	4.55E+00	8.74E+00	9.33E-03	9.00E-05	1.25E-01	1.12E-05	1.00E+00	1.69E-02	5.52E-01	6.80E+00	2.04E-01	7.90E+00	6.99E-02	Sample and others 1996
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	4.05E+00	1.01E+01	2.17E+01	8.08E-01	4.55E+00	8.74E+00	9.33E-03	9.00E-05	1.25E-01	1.12E-05	1.00E+00	1.69E-02	5.52E-01	1.30E-01	1.00E-01	1.45E-01	3.81E+00	Sample and others 1996
Dieldrin																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	8.00E-01	7.20E-05	1.00E+00	1.69E-02	4.25E-03	2.00E-01	3.50E-01	2.40E-01	1.77E-02	Calculated[o]
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	8.00E-01	7.20E-05	1.00E+00	1.69E-02	4.25E-03	2.00E-02	3.50E-01	2.40E-02	1.77E-01	Sample and others 1996
LMW PAH																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.38E+00	2.31E+00	1.89E+00	2.29E+00	8.64E+00	6.33E+00	1.45E-02	9.00E-05	1.04E+00	9.33E-05	1.00E+00	1.69E-02	8.62E-01	1.50E+02	2.70E-01	1.77E+02	4.87E-03	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	1.38E+00	2.31E+00	1.89E+00	2.29E+00	8.64E+00	6.33E+00	1.45E-02	9.00E-05	1.04E+00	9.33E-05	1.00E+00	1.69E-02	8.62E-01	5.00E+01	2.77E-01	5.91E+01	1.46E-02	Navy 1998
HMW PAH																							
Dose/High TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	3.46E-01	5.34E-01	4.41E-01	4.16E+00	1.45E+01	1.07E+01	2.55E-02	9.00E-05	7.51E+00	6.76E-04	1.00E+00	1.69E-02	1.54E+00	3.28E+01	3.05E-02	3.40E+01	4.55E-02	Navy 1998
Dose/Low TRV	4.50E-03	4.41E-03	3.51E-03	3.31E-04	5.71E-04	3.46E-01	5.34E-01	4.41E-01	4.16E+00	1.45E+01	1.07E+01	2.55E-02	9.00E-05	7.51E+00	6.76E-04	1.00E+00	1.69E-02	1.54E+00	1.31E+00	3.05E-02	1.36E+00	1.14E+00	Navy 1998

Notes:

a	Total ingestion rate (0.0045 kg/day) was calculated using an average adult body weight of 1.69 grams (based on site-specific data) and EPA (1993) mean adult deer mouse ingestion rate (0.268 g/g/day).
b	Prey ingestion rate equals 98 percent of the total ingestion rate, based on a sediment ingestion rate equal to 2 percent of the total ingestion rate.
b.1	Seed ingestion equals 79.54 percent of the prey ingestion.
b.2	Stem and leaf ingestion equals 7.5 percent of the prey ingestion.
b.3	Invertebrate ingestion equals 12.95 percent of the prey ingestion.
c	Calculated HPS mean BAFs for seeds were used to calculate seed concentrations. EPA's 1999 BCFs for soil-to-plants were used as default if no HPS mean seed BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used.
c.1	Calculated HPS mean BAFs for stems and leaves were used to calculate stem and leaf concentrations. EPA's 1999 BCFs for soil-to-plants were used as default if no HPS mean seed BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used.
c.2	Calculated HPS mean BAFs for seeds were used to calculate invertebrate prey concentrations. EPA's 1999 BCFs for soil-to-invertebrate were used as default if no HPS mean seed BAF was available. If these sources did not yield a BAF for the COPEC, a value of 0 was used.
d	The prey concentration was calculated by multiplying the sediment concentration by the respective BAF.
e	Prey daily dose was calculated by multiplying: (Seed IR rate x seed conc) + (Stem & leaf IR * Stem and leaf conc) + (Invertebrate IR * Invertebrate conc).
f	Sediment ingestion rate equals 3 percent of the total ingestion rate; based on EPA (1999).
g	Sediment concentration for dose calculations equals 95 percent upper confidence limit of arithmetic mean for all site-collected sediment samples. Non detects shown as 0.
h	Sediment daily dose was calculated by multiplying the sediment ingestion rate by the sediment concentration.
I	Average adult house mouse body weight based on HPS site collected mouse data.
j	Total daily dose is calculated using the following equation: total daily dose = ([sediment daily dose + prey daily dose]*SUF)/receptor species body weight.
k	The derivation of TRVs is described in Navy (1998) and Sample and others (1996).
l	Allometrically adjusted TRVs were calculated using the following equation: receptor species TRV = (test species TRV) x (test species body weight / receptor species body weight) (1-0.94).
m	The HQ was calculated using total daily dose/allometrically adjusted TRV.
n	Sufficient data are unavailable to derive a TRV. This chemical was evaluated qualitatively.
o	"Calculated" indicates that a high TRV was unavailable in Navy (1998) or Sample and others (1996); in those cases, an uncertainty factor of 10 was applied to the low TRV to derive a high TRV.

BAF	Bioaccumulation factor
BCF	Bioconcentration factor
bgs	Below ground surface
COPEC	Chemical of potential ecological concern
DDT	Dichlorodiphenyltrichloroethane
DTSC	Department of Toxic Substances Control
EPA	U.S. Environmental Protection Agency
HMW	High molecular-weight
HPS	Hunters Point Shipyard
HQ	Hazard quotient
IR	Ingestion rate
kg	Kilogram
kg/day	Kilogram per day
LMW	Low molecular-weight
mg/day	Milligram per day
mg/kg	Milligram per kilogram
mg/kg/day	Milligram per kilogram per day
NA	Not available
Navy	U.S. Department of the Navy
PAH	Polynuclear aromatic hydrocarbon
PCB	Polychlorinated biphenyl
SUF	Site use factor
TRV	Toxicity reference value

Sources:

DTSC. 2002. "ECO Note 5. Revised EPA Region 9 Biological Technical Assisstance Group Mammalian TRV for Lead: Justificantion and Rationale." Human and Ecological Risk Division. November 21.

EPA. 1993. "Wildlife Exposure Factor Handbook; Volumes I and II." Office of Research and Development. Washington D.C. EPA/600/R-93/187a.

EPA. 1999. "Screening Level Ecological Risk Assessment Protocol." EPA Region 6, Office of Solid Waste, Center for Combustion Science and Engineering. August.

Navy. 1998. "Development of Toxicity Reference Values for Conducting Ecological Risk Assessments at Naval Facilities in California, Interim Final." Prepared by Naval Facilities Engineering Command, Engineering Field Activity West. San Bruno, California.

Sample, B.E., D.M. Opresko, G.W. Suter, II. 1996. "Toxicological Benchmarks for Wildlife: 1996 Revision." ES/ER/TM-86/R3. Oak Ridge National Laboratory. Oak Ridge, Tennessee.

TABLE G-18: SUMMARY OF BIRD AND MAMMAL HAZARD QUOTIENTS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Surf Scoter		Willet (SBI)		Willet (*Macoma*)		Red-Tailed Hawk		House Mouse	
	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)
METALS										
Aluminum										
Dose/High TRV	3.54E-04	3.13E-04	7.34E-03	6.48E-03	1.10E-03	9.69E-04	3.48E-05	3.07E-05	3.06E+00	7.72E+00
Dose/Low TRV	3.54E-03	3.13E-03	7.34E-02	6.48E-02	1.10E-02	9.69E-03	3.48E-04	3.07E-04	8.75E+01	7.72E+01
Antimony										
Dose/High TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	1.34E+00	5.39E+00
Dose/Low TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	1.34E+01	5.39E+01
Barium										
Dose/High TRV	1.72E-04	1.39E-04	2.61E-03	2.11E-03	5.34E-04	4.32E-04	1.44E-05	1.16E-05	2.54E-01	2.06E-01
Dose/Low TRV	3.45E-04	2.79E-04	5.23E-03	4.23E-03	1.07E-03	8.65E-04	2.88E-05	2.33E-05	9.75E-01	7.88E-01
Beryllium										
Dose/High TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV
Dose/Low TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV
Cadmium										
Dose/High TRV	1.00E-03	4.05E-04	1.09E-02	4.39E-03	3.12E-03	1.26E-03	3.80E-05	1.53E-05	1.18E+00	4.76E-01
Dose/Low TRV	2.05E-01	8.28E-02	2.23E+00	8.98E-01	6.37E-01	2.57E-01	7.78E-03	3.13E-03	5.19E+01	2.09E+01
Chromium										
Dose/High TRV	3.33E-03	4.37E-03	2.88E-02	3.79E-02	1.03E-02	1.36E-02	1.98E-04	2.60E-04	2.44E-05	3.21E-05
Dose/Low TRV	1.66E-02	2.19E-02	1.44E-01	1.89E-01	5.16E-02	6.78E-02	9.90E-04	1.30E-03	2.44E-04	3.21E-04
Cobalt										
Dose/High TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	1.08E-02	1.15E-02
Dose/Low TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	1.77E-01	1.87E-01
Copper										
Dose/High TRV	5.38E-03	3.45E-02	4.68E-02	3.00E-01	1.67E-02	1.07E-01	6.81E-03	4.37E-02	1.85E-01	1.18E+00
Dose/Low TRV	1.34E-01	8.58E-01	1.16E+00	7.46E+00	4.15E-01	2.66E+00	1.69E-01	1.09E+00	4.32E+01	2.77E+02
Lead										
Dose/High TRV	7.30E-03	2.25E-02	8.29E-02	2.56E-01	2.26E-02	6.98E-02	9.12E-03	2.81E-02	2.85E-02	8.78E-02
Dose/Low TRV	2.91E+00	8.96E+00	3.30E+01	1.02E+02	9.02E+00	2.78E+01	3.63E+00	1.12E+01	5.89E+00	1.82E+01
Magnesium										
Dose/High TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV
Dose/Low TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV
Manganese										
Dose/High TRV	7.43E-05	7.86E-05	1.02E-03	1.08E-03	2.30E-04	2.44E-04	6.05E-05	6.41E-05	1.44E-01	1.53E-01
Dose/Low TRV	7.43E-04	7.86E-04	1.02E-02	1.08E-02	2.30E-03	2.44E-03	6.05E-04	6.41E-04	1.66E+00	1.76E+00
Nickel										
Dose/High TRV	5.08E-04	4.19E-04	4.79E-03	3.95E-03	1.58E-03	1.30E-03	3.22E-05	2.66E-05	7.71E-02	6.36E-02
Dose/Low TRV	2.05E-02	1.69E-02	1.93E-01	1.60E-01	6.37E-02	5.25E-02	1.30E-03	1.07E-03	1.83E+01	1.51E+01

TABLE G-18: SUMMARY OF BIRD AND MAMMAL HAZARD QUOTIENTS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Surf Scoter		Willet (SBI)		Willet (*Macoma*)		Red-Tailed Hawk		House Mouse	
	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)
METALS (Continued)										
Selenium										
Dose/High TRV	1.38E-02	1.52E-02	6.10E-02	6.71E-02	4.29E-02	4.71E-02	4.33E-03	4.76E-03	6.78E-01	7.46E-01
Dose/Low TRV	5.59E-02	6.14E-02	2.47E-01	2.71E-01	1.73E-01	1.91E-01	1.75E-02	1.93E-02	2.74E+00	3.02E+00
Silver										
Dose/High TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV
Dose/Low TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV
Thallium										
Dose/High TRV	4.91E-04	3.60E-04	1.52E-03	1.12E-03	1.52E-03	1.12E-03	1.79E-03	1.32E-03	1.27E-02	9.14E-03
Dose/Low TRV	4.91E-04	3.60E-04	1.52E-03	1.12E-03	1.52E-03	1.12E-03	1.79E-03	1.32E-03	3.80E-02	2.72E-02
Vanadium										
Dose/High TRV	5.84E-05	5.11E-05	6.74E-04	5.90E-04	1.81E-04	1.58E-04	3.60E-06	3.15E-06	1.30E+00	8.31E-01
Dose/Low TRV	5.84E-04	5.11E-04	6.74E-03	5.90E-03	1.81E-03	1.58E-03	3.60E-05	3.15E-05	1.30E+01	8.31E+00
Zinc										
Dose/High TRV	4.19E-03	1.70E-02	1.48E-02	6.02E-02	1.30E-02	5.29E-02	2.91E-03	1.18E-02	2.56E-01	1.04E+00
Dose/Low TRV	4.19E-02	1.70E-01	1.48E-01	6.02E-01	1.30E-01	5.29E-01	2.91E-02	1.18E-01	1.23E+01	5.00E+01
ORGANOTINS										
Dibutyltin										
Dose/High TRV	2.85E-06	ND	6.42E-05	ND	8.85E-06	ND	7.81E-09	ND	1.81E-05	ND
Dose/Low TRV	1.79E-04	ND	4.03E-03	ND	5.56E-04	ND	4.90E-07	ND	1.10E-03	ND
Monobutyltin										
Dose/High TRV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dose/Low TRV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrabutyltin										
Dose/High TRV	7.56E-09	ND	2.34E-08	ND	2.34E-08	ND	1.30E-09	ND	3.02E-06	ND
Dose/Low TRV	4.75E-07	ND	1.47E-06	ND	1.47E-06	ND	8.17E-08	ND	1.84E-04	ND
Tributyltin										
Dose/High TRV	3.63E-05	1.09E-06	2.31E-04	6.93E-06	1.13E-04	3.38E-06	3.90E-08	1.17E-09	9.07E-05	2.72E-06
Dose/Low TRV	2.28E-03	6.84E-05	1.45E-02	4.35E-04	7.07E-03	2.12E-04	2.45E-06	7.36E-08	5.52E-03	1.66E-04
PCBs										
Total PCBs (Congeners)										
Dose/High TRV	1.80E-01	NA	1.93E+00	NA	5.60E-01	NA	2.55E-02	NA	1.55E+02	NA
Dose/Low TRV	2.19E+00	NA	2.33E+01	NA	6.78E+00	NA	3.09E-01	NA	5.55E+02	NA

TABLE G-18: SUMMARY OF BIRD AND MAMMAL HAZARD QUOTIENTS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

COPEC	Surf Scoter		Willet (SBI)		Willet (*Macoma*)		Red-Tailed Hawk		House Mouse	
	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)	(0 - 0.5 foot)	(2 - 2.5 feet)
PCBs (Continued)										
Total Aroclors										
Dose/High TRV	2.71E-02	7.61E-01	2.89E-01	8.12E+00	8.39E-02	2.36E+00	3.82E-03	1.07E-01	2.33E+01	5.84E+02
Dose/Low TRV	3.28E-01	9.22E+00	3.50E+00	9.84E+01	1.02E+00	2.86E+01	4.63E-02	1.30E+00	8.32E+01	2.09E+03
PESTICIDES										
Total DDTs										
Dose/High TRV	7.67E-04	1.00E-02	9.66E-03	1.26E-01	2.38E-03	3.10E-02	1.81E-05	2.36E-04	3.24E-02	4.22E-01
Dose/Low TRV	1.64E-01	2.14E+00	2.07E+00	2.70E+01	5.09E-01	6.64E+00	3.87E-03	5.05E-02	6.47E-01	8.44E+00
alpha-Chlordane										
Dose/High TRV	5.82E-06	2.45E-05	2.89E-05	1.22E-04	1.80E-05	7.60E-05	6.34E-07	2.67E-06	9.25E-03	3.89E-02
Dose/Low TRV	2.91E-05	1.23E-04	1.44E-04	6.08E-04	9.02E-05	3.80E-04	3.17E-06	1.34E-05	5.05E-01	2.13E+00
Gamma Chlordane										
Dose/High TRV	1.14E-05	3.83E-05	4.66E-05	1.57E-04	3.54E-05	1.19E-04	1.43E-06	4.79E-06	2.08E-02	6.99E-02
Dose/Low TRV	5.70E-05	1.92E-04	2.33E-04	7.83E-04	1.77E-04	5.95E-04	7.13E-06	2.40E-05	1.13E+00	3.81E+00
Dieldrin										
Dose/High TRV	9.37E-04	7.97E-03	1.26E-02	1.08E-01	2.90E-03	2.47E-02	9.98E-07	8.49E-06	2.08E-03	1.77E-02
Dose/Low TRV	9.37E-03	7.97E-02	1.26E-01	1.08E+00	2.90E-02	2.47E-01	9.98E-06	8.49E-05	2.08E-02	1.77E-01
DIOXINS/FURANS										
Dose/High TRV	5.76E-06	NA	1.79E-05	NA	1.79E-05	NA	9.98E-07	NA	6.27E-03	NA
Dose/Low TRV	5.76E-03	NA	1.79E-02	NA	1.79E-02	NA	9.98E-06	NA	6.27E-01	NA
PAHs										
LMW PAH										
Dose/High TRV	NO TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	1.58E-03	4.87E-03
Dose/Low TRV	NO TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	4.73E-03	1.46E-02
HMW PAH										
Dose/High TRV	NO TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	3.51E-02	4.55E-02
Dose/Low TRV	NO TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	No TRV	8.78E-01	1.14E+00

Notes:

bgs	Below ground surface	ND	Not detected
COPEC	Chemical of potential ecological concern	PAH	Polynuclear aromatic hydrocarbon
DDT	Dichlorodiphenyltrichloroethane	PCB	Polychlorinated biphenyl
HMW	High molecular-weight	SBI	Soft-bodied invertebrate
LMW	Low molecular-weight	TRV	Toxicity reference value
NA	Not applicable		

TABLE G-19: BIOACCUMULATION FACTORS

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Analyte	*Macoma* BAF (mg dry tissue/kg dry sediment)[a]	Soft Bodied Aquatic Invertebrate BAF (mg dry tissue/kg dry sediment)[a,b]	Terrestrial Invertebrate BAF (mg wet tissue/kg dry sediment)[c,d,e]	Soil-to-Seed BAF (mg wet tissue/kg dry sediment[c,d,f]	Soil-to-Stem/ Leaf BAF (mg wet tissue/kg wet sediment[c,d,f]	Mouse BAF (mg wet tissue/kg dry soil or sediment) [c,d,g]
Aluminum	0.02	0.33	0.22	0.004	0.004	0.00001
Antimony	0.10	0.33	0.927	0.288	0.667	0.01303
Arsenic	1.92	1.53	0.297	0.095	0.228	0.31080
Barium	0.03	0.28	0.22	0.150	0.150	0.00001
Cadmium	1.08	3.86	0.501	0.791	0.745	0.00889
Chromium	0.06	0.22	0.010	0.008	0.008	0.00001
Cobalt	0.13	0.39	0.07	0.026	0.026	0.00001
Copper	0.22	0.67	0.796	0.165	0.182	0.07553
Lead	0.08	0.39	0.074	0.017	0.032	0.03344
Manganese	0.07	0.41	0.064	0.099	0.107	0.01816
Mercury	0.29	0.61	0.624	0.117	0.137	0.00863
Molybdenum	2.86	1.75	2.386	4.044	4.258	0.83483
Nickel	0.08	0.29	0.018	0.025	0.026	0.00034
Selenium	14.04	20.01	9.165	1.544	1.503	1.06383
Silver	0.45	1.11	1.892	2.339	4.961	0.02244
Vanadium	0.06	0.29	0.22	0.120	0.120	0.00001
Zinc	0.73	0.84	0.821	0.285	0.548	0.12710
Alpha-chlordane	3.62	5.82	21.716	4.052	10.099	0.09491
Dieldrin	4.97	21.70	0	0	0	0
Gamma-chlordane	3.16	4.16	21.716	4.052	10.099	0.09491
Dibutyltin tin	1.91	14.08	0	0	0	0
Tributyltin tin	4.92	10.13	0	0	0	0
Total DDT	3.49	14.28	13.084	3.781	9.964	0.01877
HMW PAH	0.21	0.63	0.441	0.346	0.534	0.00000
LMW PAH	0.11	0.69	1.892	1.38	2.307	0.00000
Total PCB	1.77	6.15	16.203	2.586	7.541	0.05993

TABLE G-19: BIOACCUMULATION FACTORS (CONTINUED)

Draft Parcels E and E-2 Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California

Notes:

a	Site-specific BAFs from Parcel F VS report (Battelle, Entrix, Inc., and Neptune and Company 2002).
b	Point Avisadero tissue and sediment data excluded from BAF calculation of mercury and total PCBs.
c	Site-specific BAFs from Parcel E ERA VS report (Tetra Tech and LFR 2000)
d	Site-specific BAFs for aluminum, barium, chromium, and vanadium not available. Literature based BAFs (EPA 1999) were used for these chemicals.
e	For invertebrates, wet weight was converted to dry weight using 69 percent moisture from EPA 1993.
f	For plants, wet weight was converted to dry weight using site specific percent moisture data (37.75 percent for seeds and 72.31 for leaves and stems. Site-specific percent moisture for seeds and stems was taken from HPS Parcel E VS. Literature based BAFs (aluminum, barium, chromium, and vanadium) were already in dry weight, thus no conversion was necessary).
g	For mammals, wet weight was converted to dry weight using percent moisture from EPA 1999 (68 percent).

BAF	Bioaccumulation factor
DDT	Dichlorodiphenyltrichloroethane
EPA	U.S. Environmental Protection Agency
ERA	Ecological risk assessment
LFR	Levine-Fricke-Recon
LMW	Low molecular weight
HMW	High molecular weight
mg/kg	Milligram per kilogram
PAH	Polynuclear aromatic hydrocarbon
PCB	Polychlorinated biphenyl
Tetra Tech	Tetra Tech EM Inc.
VS	Validation study

Sources:

Battelle, Entrix, Inc., and Neptune and Company. 2002. "Draft Hunters Point Shipyard Parce E Validation Study Report, San Francisco, California." April 25.
EPA. 1993. "Wildlife Exposure Factors Handbook; Volumes I and II." EPA 600/R-93/187a. December.
EPA. 1999c. "Issuance of Final Guidance: Ecological Risk Assessment and Risk Management Principles for Superfund Sites." EPA, Office of Solid Waste and Emergency Response. Washington, DC. Directive 9285.7-28P. October.
Tetra Tech and LFR. 2000. "Ecological Risk Assessment Validation Study Report, Parcel E, Hunters Point Shipyard, San Francisco, California, Draft Final." March 14.

ATTACHMENT 1
PARCEL F DATA FROM BATTELLE (PROVIDED ON COMPACT DISC ONLY)

SAMP_ID	CLIENT_S	FIELD_	STATION	AREA_NAME	MEDIA	DATE_STA	TOP	BOT
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB107E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB106E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5

AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB124E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB108E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB105E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5

AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB125E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB116E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB117E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5

AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB148E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB143E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB122E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5

AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB121E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB141E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB120E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5

AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB119E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB115E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5

AAB145E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB144E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB139E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5

AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB140E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB154E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB113E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5

AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB138E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB114E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB112E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5

AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB146E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB100E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB101E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5

AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB109E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB102E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB111E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5

AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB099E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5

DEP_UNIT	PC	GROUP	RESULT	QUAL	CONC2	MDL	UNIT
CM	Ag	METALS	0.066	U	0.033	0.066	MG/KG
CM	Al	METALS	45000		45000	2.39	MG/KG
CM	As	METALS	5.18		5.18	0.068	MG/KG
CM	Ba	METALS	335		335	0.018	MG/KG
CM	Cd	METALS	0.247	J	0.247	0.0175	MG/KG
CM	Co	METALS	12.7		12.7	0.0527	MG/KG
CM	Cr	METALS	400		400	0.51	MG/KG
CM	Cu	METALS	32.9		32.9	0.24	MG/KG
CM	Fe	METALS	28800		28800	0.564	MG/KG
CM	Hg	METALS	0.0808		0.0808	0.00208	MG/KG
CM	Mn	METALS	567		567	0.074	MG/KG
CM	Mo	METALS	0.641		0.641	0.0391	MG/KG
CM	Ni	METALS	62.8		62.8	0.0386	MG/KG
CM	Pb	METALS	20.6		20.6	0.198	MG/KG
CM	Sb	METALS	1.41		1.41	0.0297	MG/KG
CM	Se	METALS	0.126	U	0.063	0.126	MG/KG
CM	V	METALS	87.2		87.2	0.345	MG/KG
CM	Zn	METALS	89.8		89.8	0.107	MG/KG
CM	Ag	METALS	0.0839	J	0.0839	0.066	MG/KG
CM	Al	METALS	47500		47500	2.39	MG/KG
CM	As	METALS	6.27		6.27	0.068	MG/KG
CM	Ba	METALS	386		386	0.018	MG/KG
CM	Cd	METALS	0.154	J	0.154	0.0175	MG/KG
CM	Co	METALS	12.7		12.7	0.0527	MG/KG
CM	Cr	METALS	491		491	0.51	MG/KG
CM	Cu	METALS	32.5		32.5	0.24	MG/KG
CM	Fe	METALS	33900		33900	0.564	MG/KG
CM	Hg	METALS	0.148		0.148	0.00208	MG/KG
CM	Mn	METALS	589		589	0.074	MG/KG
CM	Mo	METALS	0.578		0.578	0.0391	MG/KG
CM	Ni	METALS	74.9		74.9	0.0386	MG/KG
CM	Pb	METALS	21.3		21.3	0.198	MG/KG
CM	Sb	METALS	7.8		7.8	0.0297	MG/KG
CM	Se	METALS	0.126	U	0.063	0.126	MG/KG
CM	V	METALS	84.1		84.1	0.345	MG/KG
CM	Zn	METALS	125		125	0.107	MG/KG
CM	Ag	METALS	0.0732	J	0.0732	0.066	MG/KG
CM	Al	METALS	43500		43500	2.39	MG/KG
CM	As	METALS	6.12		6.12	0.068	MG/KG
CM	Ba	METALS	372		372	0.018	MG/KG
CM	Cd	METALS	0.264	J	0.264	0.0175	MG/KG
CM	Co	METALS	12.8		12.8	0.0527	MG/KG
CM	Cr	METALS	225		225	0.51	MG/KG
CM	Cu	METALS	20.8		20.8	0.24	MG/KG
CM	Fe	METALS	27200		27200	0.564	MG/KG
CM	Hg	METALS	0.142		0.142	0.00208	MG/KG
CM	Mn	METALS	579		579	0.074	MG/KG
CM	Mo	METALS	0.494		0.494	0.0391	MG/KG
CM	Ni	METALS	59.6		59.6	0.0386	MG/KG
CM	Pb	METALS	18.5		18.5	0.198	MG/KG

CM	Sb	METALS	3.64		3.64	0.0297	MG/KG
CM	Se	METALS	0.126	U	0.063	0.126	MG/KG
CM	V	METALS	82.6		82.6	0.345	MG/KG
CM	Zn	METALS	79.5		79.5	0.107	MG/KG
CM	Ag	METALS	0.0841	J	0.0841	0.066	MG/KG
CM	Al	METALS	50000		50000	2.39	MG/KG
CM	As	METALS	6.55		6.55	0.068	MG/KG
CM	Ba	METALS	384		384	0.018	MG/KG
CM	Cd	METALS	0.189	J	0.189	0.0175	MG/KG
CM	Co	METALS	13.2		13.2	0.0527	MG/KG
CM	Cr	METALS	300		300	0.51	MG/KG
CM	Cu	METALS	19.9		19.9	0.24	MG/KG
CM	Fe	METALS	30900		30900	0.564	MG/KG
CM	Hg	METALS	0.093		0.093	0.00208	MG/KG
CM	Mn	METALS	540		540	0.074	MG/KG
CM	Mo	METALS	0.381		0.381	0.0391	MG/KG
CM	Ni	METALS	63.4		63.4	0.0386	MG/KG
CM	Pb	METALS	17.3		17.3	0.198	MG/KG
CM	Sb	METALS	0.874		0.874	0.0297	MG/KG
CM	Se	METALS	0.126	U	0.063	0.126	MG/KG
CM	V	METALS	81.4		81.4	0.345	MG/KG
CM	Zn	METALS	84.7		84.7	0.107	MG/KG
CM	Ag	METALS	0.0768	J	0.0768	0.066	MG/KG
CM	Al	METALS	47800		47800	2.39	MG/KG
CM	As	METALS	6.35		6.35	0.068	MG/KG
CM	Ba	METALS	370		370	0.018	MG/KG
CM	Cd	METALS	0.195	J	0.195	0.0175	MG/KG
CM	Co	METALS	13.1		13.1	0.0527	MG/KG
CM	Cr	METALS	246		246	0.51	MG/KG
CM	Cu	METALS	21.5		21.5	0.24	MG/KG
CM	Fe	METALS	27200		27200	0.564	MG/KG
CM	Hg	METALS	0.0914		0.0914	0.00208	MG/KG
CM	Mn	METALS	474		474	0.074	MG/KG
CM	Mo	METALS	0.447		0.447	0.0391	MG/KG
CM	Ni	METALS	64.9		64.9	0.0386	MG/KG
CM	Pb	METALS	15.7		15.7	0.198	MG/KG
CM	Sb	METALS	0.642		0.642	0.0297	MG/KG
CM	Se	METALS	0.126	U	0.063	0.126	MG/KG
CM	V	METALS	82.5		82.5	0.345	MG/KG
CM	Zn	METALS	69.3		69.3	0.107	MG/KG
CM	Ag	METALS	0.356		0.356	0.066	MG/KG
CM	Al	METALS	57300		57300	2.39	MG/KG
CM	As	METALS	10.9		10.9	0.068	MG/KG
CM	Ba	METALS	381		381	0.018	MG/KG
CM	Cd	METALS	0.341	J	0.341	0.0175	MG/KG
CM	Co	METALS	19.8		19.8	0.0527	MG/KG
CM	Cr	METALS	434		434	0.51	MG/KG
CM	Cu	METALS	97.5		97.5	0.24	MG/KG
CM	Fe	METALS	45600		45600	0.564	MG/KG
CM	Hg	METALS	0.484		0.484	0.00208	MG/KG
CM	Mn	METALS	624		624	0.074	MG/KG

CM	Mo	METALS	1.41		1.41	0.0391	MG/KG
CM	Ni	METALS	160		160	0.0386	MG/KG
CM	Pb	METALS	60.1		60.1	0.198	MG/KG
CM	Sb	METALS	2.38		2.38	0.0297	MG/KG
CM	Se	METALS	0.239	J	0.239	0.126	MG/KG
CM	V	METALS	134		134	0.345	MG/KG
CM	Zn	METALS	179		179	0.107	MG/KG
CM	Ag	METALS	0.397		0.397	0.066	MG/KG
CM	Al	METALS	68300		68300	2.39	MG/KG
CM	As	METALS	13.6		13.6	0.068	MG/KG
CM	Ba	METALS	396		396	0.018	MG/KG
CM	Cd	METALS	0.399	J	0.399	0.0175	MG/KG
CM	Co	METALS	19.4		19.4	0.0527	MG/KG
CM	Cr	METALS	254		254	0.51	MG/KG
CM	Cu	METALS	86.4		86.4	0.24	MG/KG
CM	Fe	METALS	48700		48700	0.564	MG/KG
CM	Hg	METALS	0.602		0.602	0.00208	MG/KG
CM	Mn	METALS	505		505	0.074	MG/KG
CM	Mo	METALS	1.68		1.68	0.0391	MG/KG
CM	Ni	METALS	116		116	0.0386	MG/KG
CM	Pb	METALS	48		48	0.198	MG/KG
CM	Sb	METALS	2.35		2.35	0.0297	MG/KG
CM	Se	METALS	0.341	J	0.341	0.126	MG/KG
CM	V	METALS	154		154	0.345	MG/KG
CM	Zn	METALS	159		159	0.107	MG/KG
CM	Ag	METALS	0.415		0.415	0.066	MG/KG
CM	Al	METALS	66400		66400	2.39	MG/KG
CM	As	METALS	12.7		12.7	0.068	MG/KG
CM	Ba	METALS	376		376	0.018	MG/KG
CM	Cd	METALS	0.359	J	0.359	0.0175	MG/KG
CM	Co	METALS	18.3		18.3	0.0527	MG/KG
CM	Cr	METALS	464		464	0.51	MG/KG
CM	Cu	METALS	64.5		64.5	0.24	MG/KG
CM	Fe	METALS	47400		47400	0.564	MG/KG
CM	Hg	METALS	0.451		0.451	0.00208	MG/KG
CM	Mn	METALS	485		485	0.074	MG/KG
CM	Mo	METALS	1.71		1.71	0.0391	MG/KG
CM	Ni	METALS	121		121	0.0386	MG/KG
CM	Pb	METALS	51.4		51.4	0.198	MG/KG
CM	Sb	METALS	3.17		3.17	0.0297	MG/KG
CM	Se	METALS	0.357	J	0.357	0.126	MG/KG
CM	V	METALS	149		149	0.345	MG/KG
CM	Zn	METALS	145		145	0.107	MG/KG
CM	Ag	METALS	0.523		0.523	0.066	MG/KG
CM	Al	METALS	61900		61900	2.39	MG/KG
CM	As	METALS	8.15		8.15	0.068	MG/KG
CM	Ba	METALS	501		501	0.018	MG/KG
CM	Cd	METALS	0.845		0.845	0.0175	MG/KG
CM	Co	METALS	12.7		12.7	0.0527	MG/KG
CM	Cr	METALS	202		202	0.51	MG/KG
CM	Cu	METALS	69.8		69.8	0.24	MG/KG

CM	Fe	METALS	36200		36200	0.564	MG/KG
CM	Hg	METALS	0.553		0.553	0.00208	MG/KG
CM	Mn	METALS	437		437	0.074	MG/KG
CM	Mo	METALS	1.18		1.18	0.0391	MG/KG
CM	Ni	METALS	76.6		76.6	0.0386	MG/KG
CM	Pb	METALS	121		121	0.198	MG/KG
CM	Sb	METALS	1.61		1.61	0.0297	MG/KG
CM	Se	METALS	0.227	J	0.227	0.126	MG/KG
CM	V	METALS	101		101	0.345	MG/KG
CM	Zn	METALS	188		188	0.107	MG/KG
CM	Ag	METALS	0.491		0.491	0.066	MG/KG
CM	Al	METALS	69800		69800	2.39	MG/KG
CM	As	METALS	9.23		9.23	0.068	MG/KG
CM	Ba	METALS	474		474	0.018	MG/KG
CM	Cd	METALS	0.63		0.63	0.0175	MG/KG
CM	Co	METALS	14.5		14.5	0.0527	MG/KG
CM	Cr	METALS	189		189	0.51	MG/KG
CM	Cu	METALS	85.1		85.1	0.24	MG/KG
CM	Fe	METALS	43100		43100	0.564	MG/KG
CM	Hg	METALS	0.559		0.559	0.00208	MG/KG
CM	Mn	METALS	416		416	0.074	MG/KG
CM	Mo	METALS	1.15		1.15	0.0391	MG/KG
CM	Ni	METALS	92.9		92.9	0.0386	MG/KG
CM	Pb	METALS	94.3		94.3	0.198	MG/KG
CM	Sb	METALS	1.56		1.56	0.0297	MG/KG
CM	Se	METALS	0.387	J	0.387	0.126	MG/KG
CM	V	METALS	121		121	0.345	MG/KG
CM	Zn	METALS	189		189	0.107	MG/KG
CM	Ag	METALS	0.425		0.425	0.066	MG/KG
CM	Al	METALS	73200		73200	2.39	MG/KG
CM	As	METALS	9.33		9.33	0.068	MG/KG
CM	Ba	METALS	445		445	0.018	MG/KG
CM	Cd	METALS	0.371		0.371	0.0175	MG/KG
CM	Co	METALS	15.3		15.3	0.0527	MG/KG
CM	Cr	METALS	171		171	0.51	MG/KG
CM	Cu	METALS	74.4		74.4	0.24	MG/KG
CM	Fe	METALS	45800		45800	0.564	MG/KG
CM	Hg	METALS	0.466		0.466	0.00208	MG/KG
CM	Mn	METALS	404		404	0.074	MG/KG
CM	Mo	METALS	1.27		1.27	0.0391	MG/KG
CM	Ni	METALS	104		104	0.0386	MG/KG
CM	Pb	METALS	69.3		69.3	0.198	MG/KG
CM	Sb	METALS	1.5		1.5	0.0297	MG/KG
CM	Se	METALS	0.41	J	0.41	0.126	MG/KG
CM	V	METALS	131		131	0.345	MG/KG
CM	Zn	METALS	164		164	0.107	MG/KG
CM	Ag	METALS	0.455		0.455	0.066	MG/KG
CM	Al	METALS	74000		74000	2.39	MG/KG
CM	As	METALS	8.52		8.52	0.068	MG/KG
CM	Ba	METALS	456		456	0.018	MG/KG
CM	Cd	METALS	0.323		0.323	0.0175	MG/KG

CM	Co	METALS	15.3		15.3	0.0527	MG/KG
CM	Cr	METALS	185		185	0.51	MG/KG
CM	Cu	METALS	74		74	0.24	MG/KG
CM	Fe	METALS	46500		46500	0.564	MG/KG
CM	Hg	METALS	0.447		0.447	0.00208	MG/KG
CM	Mn	METALS	416		416	0.074	MG/KG
CM	Mo	METALS	1.13		1.13	0.0391	MG/KG
CM	Ni	METALS	103		103	0.0386	MG/KG
CM	Pb	METALS	67.2		67.2	0.198	MG/KG
CM	Sb	METALS	1.62		1.62	0.0297	MG/KG
CM	Se	METALS	0.386	J	0.386	0.126	MG/KG
CM	V	METALS	130		130	0.345	MG/KG
CM	Zn	METALS	166		166	0.107	MG/KG
CM	Ag	METALS	0.544		0.544	0.066	MG/KG
CM	Al	METALS	73900		73900	2.39	MG/KG
CM	As	METALS	11.3		11.3	0.068	MG/KG
CM	Ba	METALS	458		458	0.018	MG/KG
CM	Cd	METALS	0.413	J	0.413	0.0175	MG/KG
CM	Co	METALS	17.8		17.8	0.0527	MG/KG
CM	Cr	METALS	189		189	0.51	MG/KG
CM	Cu	METALS	78		78	0.24	MG/KG
CM	Fe	METALS	47200		47200	0.564	MG/KG
CM	Hg	METALS	0.595		0.595	0.00208	MG/KG
CM	Mn	METALS	412		412	0.074	MG/KG
CM	Mo	METALS	1.47		1.47	0.0391	MG/KG
CM	Ni	METALS	105		105	0.0386	MG/KG
CM	Pb	METALS	65.4		65.4	0.198	MG/KG
CM	Sb	METALS	1.56		1.56	0.0297	MG/KG
CM	Se	METALS	0.444	J	0.444	0.126	MG/KG
CM	V	METALS	157		157	0.345	MG/KG
CM	Zn	METALS	205		205	0.107	MG/KG
CM	Ag	METALS	0.566		0.566	0.066	MG/KG
CM	Al	METALS	71600		71600	2.39	MG/KG
CM	As	METALS	10.8		10.8	0.068	MG/KG
CM	Ba	METALS	400		400	0.018	MG/KG
CM	Cd	METALS	0.36	J	0.36	0.0175	MG/KG
CM	Co	METALS	17.2		17.2	0.0527	MG/KG
CM	Cr	METALS	198		198	0.51	MG/KG
CM	Cu	METALS	76.9		76.9	0.24	MG/KG
CM	Fe	METALS	46800		46800	0.564	MG/KG
CM	Hg	METALS	0.497		0.497	0.00208	MG/KG
CM	Mn	METALS	431		431	0.074	MG/KG
CM	Mo	METALS	1.05		1.05	0.0391	MG/KG
CM	Ni	METALS	104		104	0.0386	MG/KG
CM	Pb	METALS	65.3		65.3	0.198	MG/KG
CM	Sb	METALS	1.73		1.73	0.0297	MG/KG
CM	Se	METALS	0.322	J	0.322	0.126	MG/KG
CM	V	METALS	153		153	0.345	MG/KG
CM	Zn	METALS	185		185	0.107	MG/KG
CM	Ag	METALS	0.504		0.504	0.066	MG/KG
CM	Al	METALS	70500		70500	2.39	MG/KG

CM	As	METALS	10.6		10.6	0.068	MG/KG
CM	Ba	METALS	475		475	0.018	MG/KG
CM	Cd	METALS	0.467		0.467	0.0175	MG/KG
CM	Co	METALS	15.5		15.5	0.0527	MG/KG
CM	Cr	METALS	209		209	0.51	MG/KG
CM	Cu	METALS	80.1		80.1	0.24	MG/KG
CM	Fe	METALS	45600		45600	0.564	MG/KG
CM	Hg	METALS	0.647		0.647	0.00208	MG/KG
CM	Mn	METALS	430		430	0.074	MG/KG
CM	Mo	METALS	1.34		1.34	0.0391	MG/KG
CM	Ni	METALS	104		104	0.0386	MG/KG
CM	Pb	METALS	88.9		88.9	0.198	MG/KG
CM	Sb	METALS	2.08		2.08	0.0297	MG/KG
CM	Se	METALS	0.364	J	0.364	0.126	MG/KG
CM	V	METALS	126		126	0.345	MG/KG
CM	Zn	METALS	186		186	0.107	MG/KG
CM	Ag	METALS	0.538		0.538	0.066	MG/KG
CM	Al	METALS	74100		74100	2.39	MG/KG
CM	As	METALS	11.7		11.7	0.068	MG/KG
CM	Ba	METALS	434		434	0.018	MG/KG
CM	Cd	METALS	0.348	J	0.348	0.0175	MG/KG
CM	Co	METALS	17.1		17.1	0.0527	MG/KG
CM	Cr	METALS	202		202	0.51	MG/KG
CM	Cu	METALS	80.9		80.9	0.24	MG/KG
CM	Fe	METALS	47800		47800	0.564	MG/KG
CM	Hg	METALS	0.491		0.491	0.00208	MG/KG
CM	Mn	METALS	439		439	0.074	MG/KG
CM	Mo	METALS	0.963		0.963	0.0391	MG/KG
CM	Ni	METALS	107		107	0.0386	MG/KG
CM	Pb	METALS	76.4		76.4	0.198	MG/KG
CM	Sb	METALS	2.2		2.2	0.0297	MG/KG
CM	Se	METALS	0.321	J	0.321	0.126	MG/KG
CM	V	METALS	151		151	0.345	MG/KG
CM	Zn	METALS	182		182	0.107	MG/KG
CM	Ag	METALS	0.423		0.423	0.066	MG/KG
CM	Al	METALS	57500		57500	2.39	MG/KG
CM	As	METALS	10.5		10.5	0.068	MG/KG
CM	Ba	METALS	543		543	0.018	MG/KG
CM	Cd	METALS	0.624		0.624	0.0175	MG/KG
CM	Co	METALS	14.2		14.2	0.0527	MG/KG
CM	Cr	METALS	219		219	0.51	MG/KG
CM	Cu	METALS	75.5		75.5	0.24	MG/KG
CM	Fe	METALS	35600		35600	0.564	MG/KG
CM	Hg	METALS	0.266		0.266	0.00208	MG/KG
CM	Mn	METALS	468		468	0.074	MG/KG
CM	Mo	METALS	1.83		1.83	0.0391	MG/KG
CM	Ni	METALS	81.6		81.6	0.0386	MG/KG
CM	Pb	METALS	118		118	0.198	MG/KG
CM	Sb	METALS	4.55		4.55	0.0297	MG/KG
CM	Se	METALS	0.304	J	0.304	0.126	MG/KG
CM	V	METALS	106		106	0.345	MG/KG

CM	Zn	METALS	210		210	0.107	MG/KG
CM	Ag	METALS	0.315		0.315	0.066	MG/KG
CM	Al	METALS	62100		62100	2.39	MG/KG
CM	As	METALS	14.3		14.3	0.068	MG/KG
CM	Ba	METALS	560		560	0.018	MG/KG
CM	Cd	METALS	0.219	J	0.219	0.0175	MG/KG
CM	Co	METALS	21.7		21.7	0.0527	MG/KG
CM	Cr	METALS	251		251	0.51	MG/KG
CM	Cu	METALS	110		110	0.24	MG/KG
CM	Fe	METALS	38200		38200	0.564	MG/KG
CM	Hg	METALS	1.32		1.32	0.00208	MG/KG
CM	Mn	METALS	465		465	0.074	MG/KG
CM	Mo	METALS	1.08		1.08	0.0391	MG/KG
CM	Ni	METALS	128		128	0.0386	MG/KG
CM	Pb	METALS	29.3		29.3	0.198	MG/KG
CM	Sb	METALS	0.824		0.824	0.0297	MG/KG
CM	Se	METALS	0.378	J	0.378	0.126	MG/KG
CM	V	METALS	154		154	0.345	MG/KG
CM	Zn	METALS	242		242	0.107	MG/KG
CM	Ag	METALS	0.709		0.709	0.066	MG/KG
CM	Al	METALS	69600		69600	2.39	MG/KG
CM	As	METALS	13.1		13.1	0.068	MG/KG
CM	Ba	METALS	514		514	0.018	MG/KG
CM	Cd	METALS	0.636		0.636	0.0175	MG/KG
CM	Co	METALS	18.5		18.5	0.0527	MG/KG
CM	Cr	METALS	232		232	0.51	MG/KG
CM	Cu	METALS	111		111	0.24	MG/KG
CM	Fe	METALS	43600		43600	0.564	MG/KG
CM	Hg	METALS	0.719		0.719	0.00208	MG/KG
CM	Mn	METALS	451		451	0.074	MG/KG
CM	Mo	METALS	1.39		1.39	0.0391	MG/KG
CM	Ni	METALS	109		109	0.0386	MG/KG
CM	Pb	METALS	114		114	0.198	MG/KG
CM	Sb	METALS	3.46		3.46	0.0297	MG/KG
CM	Se	METALS	0.411	J	0.411	0.126	MG/KG
CM	V	METALS	152		152	0.345	MG/KG
CM	Zn	METALS	221		221	0.107	MG/KG
CM	Ag	METALS	0.572		0.572	0.066	MG/KG
CM	Al	METALS	70800		70800	2.39	MG/KG
CM	As	METALS	12.1		12.1	0.068	MG/KG
CM	Ba	METALS	477		477	0.018	MG/KG
CM	Cd	METALS	0.441	J	0.441	0.0175	MG/KG
CM	Co	METALS	18.1		18.1	0.0527	MG/KG
CM	Cr	METALS	205		205	0.51	MG/KG
CM	Cu	METALS	91.7		91.7	0.24	MG/KG
CM	Fe	METALS	44900		44900	0.564	MG/KG
CM	Hg	METALS	0.623		0.623	0.00208	MG/KG
CM	Mn	METALS	435		435	0.074	MG/KG
CM	Mo	METALS	1.26		1.26	0.0391	MG/KG
CM	Ni	METALS	105		105	0.0386	MG/KG
CM	Pb	METALS	89.4		89.4	0.198	MG/KG

CM	Sb	METALS	2.68		2.68	0.0297	MG/KG
CM	Se	METALS	0.427	J	0.427	0.126	MG/KG
CM	V	METALS	155		155	0.345	MG/KG
CM	Zn	METALS	189		189	0.107	MG/KG
CM	Ag	METALS	0.615		0.615	0.066	MG/KG
CM	Al	METALS	71100		71100	2.39	MG/KG
CM	As	METALS	12.5		12.5	0.068	MG/KG
CM	Ba	METALS	483		483	0.018	MG/KG
CM	Cd	METALS	0.522	J	0.522	0.0175	MG/KG
CM	Co	METALS	17.5		17.5	0.0527	MG/KG
CM	Cr	METALS	212		212	0.51	MG/KG
CM	Cu	METALS	95.5		95.5	0.24	MG/KG
CM	Fe	METALS	45000		45000	0.564	MG/KG
CM	Hg	METALS	0.62		0.62	0.00208	MG/KG
CM	Mn	METALS	440		440	0.074	MG/KG
CM	Mo	METALS	1.09		1.09	0.0391	MG/KG
CM	Ni	METALS	107		107	0.0386	MG/KG
CM	Pb	METALS	90.8		90.8	0.198	MG/KG
CM	Sb	METALS	2.69		2.69	0.0297	MG/KG
CM	Se	METALS	0.418	J	0.418	0.126	MG/KG
CM	V	METALS	146		146	0.345	MG/KG
CM	Zn	METALS	199		199	0.107	MG/KG
CM	Ag	METALS	0.583		0.583	0.066	MG/KG
CM	Al	METALS	72100		72100	2.39	MG/KG
CM	As	METALS	11.6		11.6	0.068	MG/KG
CM	Ba	METALS	432		432	0.018	MG/KG
CM	Cd	METALS	0.454	J	0.454	0.0175	MG/KG
CM	Co	METALS	17.8		17.8	0.0527	MG/KG
CM	Cr	METALS	207		207	0.51	MG/KG
CM	Cu	METALS	94.9		94.9	0.24	MG/KG
CM	Fe	METALS	46800		46800	0.564	MG/KG
CM	Hg	METALS	0.617		0.617	0.00208	MG/KG
CM	Mn	METALS	457		457	0.074	MG/KG
CM	Mo	METALS	1		1	0.0391	MG/KG
CM	Ni	METALS	110		110	0.0386	MG/KG
CM	Pb	METALS	84.2		84.2	0.198	MG/KG
CM	Sb	METALS	2.52		2.52	0.0297	MG/KG
CM	Se	METALS	0.331	J	0.331	0.126	MG/KG
CM	V	METALS	150		150	0.345	MG/KG
CM	Zn	METALS	189		189	0.107	MG/KG
CM	Ag	METALS	2.8		2.8	0.066	MG/KG
CM	Al	METALS	71700		71700	2.39	MG/KG
CM	As	METALS	11.7		11.7	0.068	MG/KG
CM	Ba	METALS	472		472	0.018	MG/KG
CM	Cd	METALS	0.403	J	0.403	0.0175	MG/KG
CM	Co	METALS	17.9		17.9	0.0527	MG/KG
CM	Cr	METALS	205		205	0.51	MG/KG
CM	Cu	METALS	89.1		89.1	0.24	MG/KG
CM	Fe	METALS	45500		45500	0.564	MG/KG
CM	Hg	METALS	0.571		0.571	0.00208	MG/KG
CM	Mn	METALS	468		468	0.074	MG/KG

CM	Mo	METALS	0.988		0.988	0.0391	MG/KG
CM	Ni	METALS	107		107	0.0386	MG/KG
CM	Pb	METALS	86.3		86.3	0.198	MG/KG
CM	Sb	METALS	2.4		2.4	0.0297	MG/KG
CM	Se	METALS	0.399	J	0.399	0.126	MG/KG
CM	V	METALS	147		147	0.345	MG/KG
CM	Zn	METALS	181		181	0.107	MG/KG
CM	Ag	METALS	0.521		0.521	0.066	MG/KG
CM	Al	METALS	73500		73500	2.39	MG/KG
CM	As	METALS	11.4		11.4	0.068	MG/KG
CM	Ba	METALS	414		414	0.018	MG/KG
CM	Cd	METALS	0.272	J	0.272	0.0175	MG/KG
CM	Co	METALS	17.7		17.7	0.0527	MG/KG
CM	Cr	METALS	197		197	0.51	MG/KG
CM	Cu	METALS	78.8		78.8	0.24	MG/KG
CM	Fe	METALS	47800		47800	0.564	MG/KG
CM	Hg	METALS	0.506		0.506	0.00208	MG/KG
CM	Mn	METALS	437		437	0.074	MG/KG
CM	Mo	METALS	1.24		1.24	0.0391	MG/KG
CM	Ni	METALS	109		109	0.0386	MG/KG
CM	Pb	METALS	70		70	0.198	MG/KG
CM	Sb	METALS	2.03		2.03	0.0297	MG/KG
CM	Se	METALS	0.333	J	0.333	0.126	MG/KG
CM	V	METALS	155		155	0.345	MG/KG
CM	Zn	METALS	171		171	0.107	MG/KG
CM	Ag	METALS	0.683		0.683	0.066	MG/KG
CM	Al	METALS	53900		53900	2.39	MG/KG
CM	As	METALS	11.3		11.3	0.068	MG/KG
CM	Ba	METALS	490		490	0.018	MG/KG
CM	Cd	METALS	0.705		0.705	0.0175	MG/KG
CM	Co	METALS	19.4		19.4	0.0527	MG/KG
CM	Cr	METALS	451		451	0.51	MG/KG
CM	Cu	METALS	173		173	0.24	MG/KG
CM	Fe	METALS	39200		39200	0.564	MG/KG
CM	Hg	METALS	0.79		0.79	0.00208	MG/KG
CM	Mn	METALS	580		580	0.074	MG/KG
CM	Mo	METALS	1.03		1.03	0.0391	MG/KG
CM	Ni	METALS	199		199	0.0386	MG/KG
CM	Pb	METALS	139		139	0.198	MG/KG
CM	Sb	METALS	10.6		10.6	0.0297	MG/KG
CM	Se	METALS	0.225	J	0.225	0.126	MG/KG
CM	V	METALS	112		112	0.345	MG/KG
CM	Zn	METALS	228		228	0.107	MG/KG
CM	Ag	METALS	0.412		0.412	0.066	MG/KG
CM	Al	METALS	65000		65000	2.39	MG/KG
CM	As	METALS	11.2		11.2	0.068	MG/KG
CM	Ba	METALS	458		458	0.018	MG/KG
CM	Cd	METALS	0.278	J	0.278	0.0175	MG/KG
CM	Co	METALS	21.3		21.3	0.0527	MG/KG
CM	Cr	METALS	273		273	0.51	MG/KG
CM	Cu	METALS	102		102	0.24	MG/KG

CM	Fe	METALS	42400		42400	0.564	MG/KG
CM	Hg	METALS	0.769		0.769	0.00208	MG/KG
CM	Mn	METALS	499		499	0.074	MG/KG
CM	Mo	METALS	1.12		1.12	0.0391	MG/KG
CM	Ni	METALS	162		162	0.0386	MG/KG
CM	Pb	METALS	73.6		73.6	0.198	MG/KG
CM	Sb	METALS	5.77		5.77	0.0297	MG/KG
CM	Se	METALS	0.34	J	0.34	0.126	MG/KG
CM	V	METALS	121		121	0.345	MG/KG
CM	Zn	METALS	195		195	0.107	MG/KG
CM	Ag	METALS	0.257		0.257	0.066	MG/KG
CM	Al	METALS	49200		49200	2.39	MG/KG
CM	As	METALS	5.86		5.86	0.068	MG/KG
CM	Ba	METALS	458		458	0.018	MG/KG
CM	Cd	METALS	0.428	J	0.428	0.0175	MG/KG
CM	Co	METALS	11.3		11.3	0.0527	MG/KG
CM	Cr	METALS	175		175	0.51	MG/KG
CM	Cu	METALS	66.1		66.1	0.24	MG/KG
CM	Fe	METALS	25500		25500	0.564	MG/KG
CM	Hg	METALS	0.232		0.232	0.00208	MG/KG
CM	Mn	METALS	357		357	0.074	MG/KG
CM	Mo	METALS	0.704		0.704	0.0391	MG/KG
CM	Ni	METALS	92.8		92.8	0.0386	MG/KG
CM	Pb	METALS	122		122	0.198	MG/KG
CM	Sb	METALS	3.95		3.95	0.0297	MG/KG
CM	Se	METALS	0.151	J	0.151	0.126	MG/KG
CM	V	METALS	77.5		77.5	0.345	MG/KG
CM	Zn	METALS	209		209	0.107	MG/KG
CM	Ag	METALS	0.139		0.139	0.066	MG/KG
CM	Al	METALS	39100		39100	2.39	MG/KG
CM	As	METALS	11.5		11.5	0.068	MG/KG
CM	Ba	METALS	893		893	0.018	MG/KG
CM	Cd	METALS	0.252	J	0.252	0.0175	MG/KG
CM	Co	METALS	18.4		18.4	0.0527	MG/KG
CM	Cr	METALS	167		167	0.51	MG/KG
CM	Cu	METALS	285		285	0.24	MG/KG
CM	Fe	METALS	15700		15700	0.564	MG/KG
CM	Hg	METALS	0.959		0.959	0.00208	MG/KG
CM	Mn	METALS	271		271	0.074	MG/KG
CM	Mo	METALS	0.875		0.875	0.0391	MG/KG
CM	Ni	METALS	72.5		72.5	0.0386	MG/KG
CM	Pb	METALS	11		11	0.198	MG/KG
CM	Sb	METALS	0.485		0.485	0.0297	MG/KG
CM	Se	METALS	0.126	U	0.063	0.126	MG/KG
CM	V	METALS	146		146	0.345	MG/KG
CM	Zn	METALS	175		175	0.107	MG/KG
CM	Ag	METALS	0.634		0.634	0.066	MG/KG
CM	Al	METALS	68600		68600	2.39	MG/KG
CM	As	METALS	11.3		11.3	0.068	MG/KG
CM	Ba	METALS	469		469	0.018	MG/KG
CM	Cd	METALS	0.682		0.682	0.0175	MG/KG

CM	Co	METALS	17.6		17.6	0.0527	MG/KG
CM	Cr	METALS	225		225	0.51	MG/KG
CM	Cu	METALS	133		133	0.24	MG/KG
CM	Fe	METALS	44600		44600	0.564	MG/KG
CM	Hg	METALS	1.06		1.06	0.00208	MG/KG
CM	Mn	METALS	444		444	0.074	MG/KG
CM	Mo	METALS	1.14		1.14	0.0391	MG/KG
CM	Ni	METALS	118		118	0.0386	MG/KG
CM	Pb	METALS	106		106	0.198	MG/KG
CM	Sb	METALS	4.29		4.29	0.0297	MG/KG
CM	Se	METALS	0.457	J	0.457	0.126	MG/KG
CM	V	METALS	139		139	0.345	MG/KG
CM	Zn	METALS	215		215	0.107	MG/KG
CM	Ag	METALS	0.144		0.144	0.066	MG/KG
CM	Al	METALS	46400		46400	2.39	MG/KG
CM	As	METALS	9.95		9.95	0.068	MG/KG
CM	Ba	METALS	761		761	0.018	MG/KG
CM	Cd	METALS	0.262	J	0.262	0.0175	MG/KG
CM	Co	METALS	21.9		21.9	0.0527	MG/KG
CM	Cr	METALS	338		338	0.51	MG/KG
CM	Cu	METALS	319		319	0.24	MG/KG
CM	Fe	METALS	31000		31000	0.564	MG/KG
CM	Hg	METALS	1.47		1.47	0.00208	MG/KG
CM	Mn	METALS	453		453	0.074	MG/KG
CM	Mo	METALS	0.773		0.773	0.0391	MG/KG
CM	Ni	METALS	161		161	0.0386	MG/KG
CM	Pb	METALS	11.8		11.8	0.198	MG/KG
CM	Sb	METALS	0.654		0.654	0.0297	MG/KG
CM	Se	METALS	0.178	J	0.178	0.126	MG/KG
CM	V	METALS	172		172	0.345	MG/KG
CM	Zn	METALS	297		297	0.107	MG/KG
CM	Ag	METALS	0.695		0.695	0.066	MG/KG
CM	Al	METALS	65300		65300	2.39	MG/KG
CM	As	METALS	12.9		12.9	0.068	MG/KG
CM	Ba	METALS	459		459	0.018	MG/KG
CM	Cd	METALS	0.567	J	0.567	0.0175	MG/KG
CM	Co	METALS	18.2		18.2	0.0527	MG/KG
CM	Cr	METALS	256		256	0.51	MG/KG
CM	Cu	METALS	163		163	0.24	MG/KG
CM	Fe	METALS	42600		42600	0.564	MG/KG
CM	Hg	METALS	1.26		1.26	0.00208	MG/KG
CM	Mn	METALS	446		446	0.074	MG/KG
CM	Mo	METALS	1.5		1.5	0.0391	MG/KG
CM	Ni	METALS	130		130	0.0386	MG/KG
CM	Pb	METALS	142		142	0.198	MG/KG
CM	Sb	METALS	7.43		7.43	0.0297	MG/KG
CM	Se	METALS	0.363	J	0.363	0.126	MG/KG
CM	V	METALS	141		141	0.345	MG/KG
CM	Zn	METALS	243		243	0.107	MG/KG
CM	Ag	METALS	0.37		0.37	0.066	MG/KG
CM	Al	METALS	47900		47900	2.39	MG/KG

CM	As	METALS	7.03		7.03	0.068	MG/KG
CM	Ba	METALS	726		726	0.018	MG/KG
CM	Cd	METALS	0.395	J	0.395	0.0175	MG/KG
CM	Co	METALS	10.5		10.5	0.0527	MG/KG
CM	Cr	METALS	292		292	0.51	MG/KG
CM	Cu	METALS	277		277	0.24	MG/KG
CM	Fe	METALS	21000		21000	0.564	MG/KG
CM	Hg	METALS	0.844		0.844	0.00208	MG/KG
CM	Mn	METALS	305		305	0.074	MG/KG
CM	Mo	METALS	0.826		0.826	0.0391	MG/KG
CM	Ni	METALS	123		123	0.0386	MG/KG
CM	Pb	METALS	114		114	0.198	MG/KG
CM	Sb	METALS	7.26		7.26	0.0297	MG/KG
CM	Se	METALS	0.199	J	0.199	0.126	MG/KG
CM	V	METALS	50.9		50.9	0.345	MG/KG
CM	Zn	METALS	212		212	0.107	MG/KG

SAMP_ID	CLIENT_SAMP_I	STYPE	STATION_	AREA_NAME	MEDIA	TOP	BOT
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-157-LE	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-098-E	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5

AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-156-LE	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-E	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-104-E	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5

AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-095-E	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-E	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-124-E	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5

AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-E	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-097-E	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-E	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5

AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-142-E	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-158-LE	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-160-LE	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5

AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-159-LE	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-129-LE	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5

AAB-130-LE	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-161-LE	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-163-LE	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5

AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-125-E	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-103-E	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-116-E	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5

AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-E	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-096-E	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-E	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5

AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-123-E	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-133-LE	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-128-LE	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5

AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-155-LE	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-132-LE	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-092-LE	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5

AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-086-LE	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-087-LE	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5

AAB-091-LE	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-126-LE	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-127-LE	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5

AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-089-LE	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-088-LE	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-083-LE	AAB-083	GRAB	PA-49	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5

AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-094-LE	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-085-LE	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-084-LE	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5

AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-090-LE	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-137-LE	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-136-LE	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5

AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-135-LE	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-162-LE	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-165-LE	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5

AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-148-E	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-143-E	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5

AAB-122-E	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-121-E	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-141-E	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5

AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-120-E	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-119-E	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-115-E	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5

AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-145-E	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-144-E	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-139-E	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5

AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-140-E	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-154-E	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-113-E	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5

AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-138-E	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-114-E	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-112-E	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5

AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-146-E	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-100-E	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5

AAB-101-E	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-109-E	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-102-E	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5

AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-111-E	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-099-E	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-084-G	AAB-084	GRAB	PA-52	Point Avisadero Area	SEDIMENT	0	5
AAB-085-G	AAB-085	GRAB	PA-51	Point Avisadero Area	SEDIMENT	0	5
AAB-086-G	AAB-086	GRAB	PA-42	Point Avisadero Area	SEDIMENT	0	5
AAB-087-G	AAB-087	GRAB	PA-43	Point Avisadero Area	SEDIMENT	0	5
AAB-088-G	AAB-088	GRAB	PA-48	Point Avisadero Area	SEDIMENT	0	5
AAB-089-G	AAB-089	GRAB	PA-47	Point Avisadero Area	SEDIMENT	0	5
AAB-090-G	AAB-090	GRAB	PA-53	Point Avisadero Area	SEDIMENT	0	5
AAB-091-G	AAB-091	GRAB	PA-44	Point Avisadero Area	SEDIMENT	0	5
AAB-092-G	AAB-092	GRAB	PA-41	Point Avisadero Area	SEDIMENT	0	5
AAB-094-G	AAB-094	GRAB	PA-50	Point Avisadero Area	SEDIMENT	0	5
AAB-095-G	AAB-095	GRAB	EW-32	Eastern Wetland Area	SEDIMENT	0	5
AAB-096-G	AAB-096	GRAB	OR-28	Oil Reclamation Area	SEDIMENT	0	5
AAB-097-G	AAB-097	GRAB	EW-35	Eastern Wetland Area	SEDIMENT	0	5
AAB-098-G	AAB-098	GRAB	AL-64	Alcatraz Environs	SEDIMENT	0	5
AAB-099-G	AAB-099	GRAB	SB-23	South Basin Area X	SEDIMENT	0	5
AAB-100-G	AAB-100	GRAB	SB-18	South Basin Area X	SEDIMENT	0	5
AAB-101-G	AAB-101	GRAB	SB-19	South Basin Area X	SEDIMENT	0	5
AAB-102-G	AAB-102	GRAB	SB-21	South Basin Area X	SEDIMENT	0	5
AAB-103-G	AAB-103	GRAB	OR-25	Oil Reclamation Area	SEDIMENT	0	5
AAB-104-G	AAB-104	GRAB	EW-31	Eastern Wetland Area	SEDIMENT	0	5
AAB-105-G	AAB-105	GRAB	EW-36	Eastern Wetland Area	SEDIMENT	0	5
AAB-106-G	AAB-106	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-107-G	AAB-107	GRAB	EW-30	Eastern Wetland Area	SEDIMENT	0	5
AAB-108-G	AAB-108	GRAB	EW-34	Eastern Wetland Area	SEDIMENT	0	5
AAB-109-G	AAB-109	GRAB	SB-20	South Basin Area X	SEDIMENT	0	5
AAB-111-G	AAB-111	GRAB	SB-22	South Basin Area X	SEDIMENT	0	5
AAB-112-G	AAB-112	GRAB	SB-16	South Basin Area X	SEDIMENT	0	5
AAB-113-G	AAB-113	GRAB	SB-13	South Basin Area X	SEDIMENT	0	5
AAB-114-G	AAB-114	GRAB	SB-15	South Basin Area X	SEDIMENT	0	5

AAB-115-G	AAB-115	GRAB	SB-08	South Basin Area X	SEDIMENT	0	5
AAB-116-G	AAB-116	GRAB	OR-26	Oil Reclamation Area	SEDIMENT	0	5
AAB-117-G	AAB-117	GRAB	OR-27	Oil Reclamation Area	SEDIMENT	0	5
AAB-118-G	AAB-118	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-119-G	AAB-119	GRAB	SB-07	South Basin Area X	SEDIMENT	0	5
AAB-120-G	AAB-120	GRAB	SB-06	South Basin Area X	SEDIMENT	0	5
AAB-121-G	AAB-121	GRAB	SB-04	South Basin Area X	SEDIMENT	0	5
AAB-122-G	AAB-122	GRAB	SB-03	South Basin Area X	SEDIMENT	0	5
AAB-123-G	AAB-123	GRAB	OR-29	Oil Reclamation Area	SEDIMENT	0	5
AAB-124-G	AAB-124	GRAB	EW-33	Eastern Wetland Area	SEDIMENT	0	5
AAB-125-G	AAB-125	GRAB	OR-24	Oil Reclamation Area	SEDIMENT	0	5
AAB-126-G	AAB-126	GRAB	PA-45	Point Avisadero Area	SEDIMENT	0	5
AAB-127-G	AAB-127	GRAB	PA-46	Point Avisadero Area	SEDIMENT	0	5
AAB-128-G	AAB-128	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-129-G	AAB-129	GRAB	IB-57	India Basin Area I	SEDIMENT	0	5
AAB-130-G	AAB-130	GRAB	IB-58	India Basin Area I	SEDIMENT	0	5
AAB-132-G	AAB-132	GRAB	PA-40	Point Avisadero Area	SEDIMENT	0	5
AAB-133-G	AAB-133	GRAB	PA-38	Point Avisadero Area	SEDIMENT	0	5
AAB-135-G	AAB-135	GRAB	PA-72	Point Avisadero Area	SEDIMENT	0	5
AAB-136-G	AAB-136	GRAB	PA-71	Point Avisadero Area	SEDIMENT	0	5
AAB-137-G	AAB-137	GRAB	PA-70	Point Avisadero Area	SEDIMENT	0	5
AAB-138-G	AAB-138	GRAB	SB-14	South Basin Area X	SEDIMENT	0	5
AAB-139-G	AAB-139	GRAB	SB-11	South Basin Area X	SEDIMENT	0	5
AAB-140-G	AAB-140	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-141-G	AAB-141	GRAB	SB-05	South Basin Area X	SEDIMENT	0	5
AAB-142-G	AAB-142	GRAB	EW-37	Eastern Wetland Area	SEDIMENT	0	5
AAB-143-G	AAB-143	GRAB	SB-02	South Basin Area X	SEDIMENT	0	5
AAB-144-G	AAB-144	GRAB	SB-10	South Basin Area X	SEDIMENT	0	5
AAB-145-G	AAB-145	GRAB	SB-09	South Basin Area X	SEDIMENT	0	5
AAB-146-G	AAB-146	GRAB	SB-17	South Basin Area X	SEDIMENT	0	5
AAB-148-G	AAB-148	GRAB	SB-01	South Basin Area X	SEDIMENT	0	5
AAB-154-G	AAB-154	GRAB	SB-12	South Basin Area X	SEDIMENT	0	5
AAB-155-G	AAB-155	GRAB	PA-39	Point Avisadero Area	SEDIMENT	0	5
AAB-156-G	AAB-156	GRAB	BF-66	Bay Farm Borrow Pit	SEDIMENT	0	5
AAB-157-G	AAB-157	GRAB	AB-67	Alameda Buoy	SEDIMENT	0	5
AAB-158-G	AAB-158	GRAB	IB-54	India Basin Area I	SEDIMENT	0	5
AAB-159-G	AAB-159	GRAB	IB-56	India Basin Area I	SEDIMENT	0	5
AAB-160-G	AAB-160	GRAB	IB-55	India Basin Area I	SEDIMENT	0	5
AAB-161-G	AAB-161	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-162-G	AAB-162	GRAB	PC-63	Paradise Cove	SEDIMENT	0	5
AAB-163-G	AAB-163	GRAB	IB-59	India Basin Area I	SEDIMENT	0	5
AAB-165-G	AAB-165	GRAB	RR-65	Red Rock	SEDIMENT	0	5

DEP_UNIT	PC	GROUP	RESULT	QUAL	VALQUAL	MDL	RDL	UNIT
CM	Se	METALS	0.412	J		0.126	1.3	MG/KG
CM	Ag	METALS	0.538		J	0.066	0.13	MG/KG
CM	Hg	METALS	0.384		J	0.00208	0.006	MG/KG
CM	Pb	METALS	29.7			0.198	0.16	MG/KG
CM	Mo	METALS	0.851			0.0391	0.25	MG/KG
CM	Sb	METALS	0.929			0.0297	0.03	MG/KG
CM	As	METALS	10.8			0.068	1.3	MG/KG
CM	Cd	METALS	0.447	J		0.0175	0.6	MG/KG
CM	Co	METALS	17.8			0.0527	0.13	MG/KG
CM	V	METALS	148			0.345	0.6	MG/KG
CM	Al	METALS	69700			2.39	15.9	MG/KG
CM	Fe	METALS	42100			0.564	32	MG/KG
CM	Mn	METALS	448			0.074	0.3	MG/KG
CM	Ni	METALS	85.8			0.0386	1	MG/KG
CM	Ba	METALS	428			0.018	0.19	MG/KG
CM	Cr	METALS	176			0.51	1.3	MG/KG
CM	Cu	METALS	42.7			0.24	0.3	MG/KG
CM	Zn	METALS	115			0.107	1.3	MG/KG
CM	Hg	METALS	0.0252		J	0.00208	0.006	MG/KG
CM	Pb	METALS	12.3		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.293			0.0391	0.25	MG/KG
CM	Sb	METALS	0.361			0.0297	0.03	MG/KG
CM	As	METALS	6.69			0.068	1.3	MG/KG
CM	Cd	METALS	0.841		J	0.0175	0.6	MG/KG
CM	Co	METALS	10.3			0.0527	0.13	MG/KG
CM	V	METALS	62.7			0.345	0.6	MG/KG
CM	Al	METALS	44300			2.39	15.9	MG/KG
CM	Fe	METALS	20600			0.564	32	MG/KG
CM	Mn	METALS	390			0.074	0.3	MG/KG
CM	Ni	METALS	39.8			0.0386	1	MG/KG
CM	Ba	METALS	501			0.018	0.19	MG/KG
CM	Cr	METALS	103			0.51	1.3	MG/KG
CM	Cu	METALS	16.5		J	0.24	0.3	MG/KG
CM	Zn	METALS	42.5		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.066	U	UJ	0.066	0.13	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	Hg	METALS	0.303		J	0.00208	0.006	MG/KG
CM	Pb	METALS	27.8			0.198	0.16	MG/KG
CM	Mo	METALS	0.782			0.0391	0.25	MG/KG
CM	Sb	METALS	0.854			0.0297	0.03	MG/KG
CM	As	METALS	12.1			0.068	1.3	MG/KG
CM	Cd	METALS	0.156	J		0.0175	0.6	MG/KG
CM	Co	METALS	18.4			0.0527	0.13	MG/KG
CM	V	METALS	159			0.345	0.6	MG/KG
CM	Al	METALS	75900			2.39	15.9	MG/KG
CM	Fe	METALS	49500			0.564	32	MG/KG
CM	Mn	METALS	577			0.074	0.3	MG/KG
CM	Ni	METALS	101			0.0386	1	MG/KG
CM	Ba	METALS	405			0.018	0.19	MG/KG
CM	Cr	METALS	161			0.51	1.3	MG/KG

CM	Cu	METALS	47.9			0.24	0.3	MG/KG
CM	Zn	METALS	130			0.107	1.3	MG/KG
CM	Ag	METALS	0.342		J	0.066	0.13	MG/KG
CM	Se	METALS	0.498	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.0808		J	0.00208	0.006	MG/KG
CM	Pb	METALS	20.6			0.198	0.16	MG/KG
CM	Mo	METALS	0.641			0.0391	0.25	MG/KG
CM	Sb	METALS	1.41			0.0297	0.03	MG/KG
CM	As	METALS	5.18			0.068	1.3	MG/KG
CM	Cd	METALS	0.247	J		0.0175	0.6	MG/KG
CM	Co	METALS	12.7			0.0527	0.13	MG/KG
CM	V	METALS	87.2			0.345	0.6	MG/KG
CM	Al	METALS	45000			2.39	15.9	MG/KG
CM	Fe	METALS	28800			0.564	32	MG/KG
CM	Mn	METALS	567			0.074	0.3	MG/KG
CM	Ni	METALS	62.8			0.0386	1	MG/KG
CM	Ba	METALS	335			0.018	0.19	MG/KG
CM	Cr	METALS	400			0.51	1.3	MG/KG
CM	Cu	METALS	32.9			0.24	0.3	MG/KG
CM	Zn	METALS	89.8			0.107	1.3	MG/KG
CM	Ag	METALS	0.066	U	UJ	0.066	0.13	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	Hg	METALS	0.0988		J	0.00208	0.006	MG/KG
CM	Pb	METALS	19.5		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.693			0.0391	0.25	MG/KG
CM	Sb	METALS	0.68			0.0297	0.03	MG/KG
CM	As	METALS	10.4			0.068	1.3	MG/KG
CM	Cd	METALS	0.184	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	18.8			0.0527	0.13	MG/KG
CM	V	METALS	128			0.345	0.6	MG/KG
CM	Al	METALS	42000			2.39	15.9	MG/KG
CM	Fe	METALS	22100			0.564	32	MG/KG
CM	Mn	METALS	483			0.074	0.3	MG/KG
CM	Ni	METALS	62.2			0.0386	1	MG/KG
CM	Ba	METALS	332			0.018	0.19	MG/KG
CM	Cr	METALS	158			0.51	1.3	MG/KG
CM	Cu	METALS	12		J	0.24	0.3	MG/KG
CM	Zn	METALS	47		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.235		J	0.066	0.13	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	Hg	METALS	0.286			0.00208	0.006	MG/KG
CM	Pb	METALS	29.8		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.17			0.0391	0.25	MG/KG
CM	Sb	METALS	0.946			0.0297	0.03	MG/KG
CM	As	METALS	11.1			0.068	1.3	MG/KG
CM	Cd	METALS	0.271	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	18.4			0.0527	0.13	MG/KG
CM	V	METALS	162			0.345	0.6	MG/KG
CM	Al	METALS	74900			2.39	15.9	MG/KG
CM	Fe	METALS	46500			0.564	32	MG/KG
CM	Mn	METALS	445			0.074	0.3	MG/KG

CM	Ni	METALS	97.5		J	0.0386	1	MG/KG
CM	Ba	METALS	458			0.018	0.19	MG/KG
CM	Cr	METALS	169			0.51	1.3	MG/KG
CM	Cu	METALS	52.8		J	0.24	0.3	MG/KG
CM	Zn	METALS	127			0.107	1.3	MG/KG
CM	Ag	METALS	0.397			0.066	0.13	MG/KG
CM	Se	METALS	0.407	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.148		J	0.00208	0.006	MG/KG
CM	Al	METALS	47500			2.39	15.9	MG/KG
CM	Fe	METALS	33900			0.564	32	MG/KG
CM	Mn	METALS	589			0.074	0.3	MG/KG
CM	Ni	METALS	74.9			0.0386	1	MG/KG
CM	Ba	METALS	386			0.018	0.19	MG/KG
CM	Cr	METALS	491			0.51	1.3	MG/KG
CM	Cu	METALS	32.5			0.24	0.3	MG/KG
CM	Zn	METALS	125			0.107	1.3	MG/KG
CM	Ag	METALS	0.0839	J	J	0.066	0.13	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	Pb	METALS	21.3			0.198	0.16	MG/KG
CM	Mo	METALS	0.578			0.0391	0.25	MG/KG
CM	Sb	METALS	7.8			0.0297	0.03	MG/KG
CM	As	METALS	6.27			0.068	1.3	MG/KG
CM	Cd	METALS	0.154	J		0.0175	0.6	MG/KG
CM	Co	METALS	12.7			0.0527	0.13	MG/KG
CM	V	METALS	84.1			0.345	0.6	MG/KG
CM	Hg	METALS	0.142		J	0.00208	0.006	MG/KG
CM	Pb	METALS	18.5			0.198	0.16	MG/KG
CM	Mo	METALS	0.494			0.0391	0.25	MG/KG
CM	Sb	METALS	3.64			0.0297	0.03	MG/KG
CM	As	METALS	6.12			0.068	1.3	MG/KG
CM	Cd	METALS	0.264	J		0.0175	0.6	MG/KG
CM	Co	METALS	12.8			0.0527	0.13	MG/KG
CM	V	METALS	82.6			0.345	0.6	MG/KG
CM	Al	METALS	43500			2.39	15.9	MG/KG
CM	Fe	METALS	27200			0.564	32	MG/KG
CM	Mn	METALS	579			0.074	0.3	MG/KG
CM	Ni	METALS	59.6			0.0386	1	MG/KG
CM	Ba	METALS	372			0.018	0.19	MG/KG
CM	Cr	METALS	225			0.51	1.3	MG/KG
CM	Cu	METALS	20.8			0.24	0.3	MG/KG
CM	Zn	METALS	79.5			0.107	1.3	MG/KG
CM	Ag	METALS	0.0732	J	J	0.066	0.13	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	Hg	METALS	0.093		J	0.00208	0.006	MG/KG
CM	Pb	METALS	17.3			0.198	0.16	MG/KG
CM	Mo	METALS	0.381		J	0.0391	0.25	MG/KG
CM	Sb	METALS	0.874		J	0.0297	0.03	MG/KG
CM	As	METALS	6.55		J	0.068	1.3	MG/KG
CM	Cd	METALS	0.189	J		0.0175	0.6	MG/KG
CM	Co	METALS	13.2			0.0527	0.13	MG/KG
CM	V	METALS	81.4			0.345	0.6	MG/KG

CM	Al	METALS	50000			2.39	15.9	MG/KG
CM	Fe	METALS	30900			0.564	32	MG/KG
CM	Mn	METALS	540			0.074	0.3	MG/KG
CM	Ni	METALS	63.4			0.0386	1	MG/KG
CM	Ba	METALS	384			0.018	0.19	MG/KG
CM	Cr	METALS	300			0.51	1.3	MG/KG
CM	Cu	METALS	19.9			0.24	0.3	MG/KG
CM	Zn	METALS	84.7			0.107	1.3	MG/KG
CM	Ag	METALS	0.0841	J	J	0.066	0.13	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	Hg	METALS	0.276			0.00208	0.006	MG/KG
CM	Pb	METALS	27.7		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.16			0.0391	0.25	MG/KG
CM	Sb	METALS	0.814			0.0297	0.03	MG/KG
CM	As	METALS	10.5			0.068	1.3	MG/KG
CM	Cd	METALS	0.257	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	18.4			0.0527	0.13	MG/KG
CM	V	METALS	159			0.345	0.6	MG/KG
CM	Al	METALS	71600			2.39	15.9	MG/KG
CM	Fe	METALS	44200			0.564	32	MG/KG
CM	Mn	METALS	428			0.074	0.3	MG/KG
CM	Ni	METALS	96.6		J	0.0386	1	MG/KG
CM	Ba	METALS	442			0.018	0.19	MG/KG
CM	Cr	METALS	170			0.51	1.3	MG/KG
CM	Cu	METALS	49.6		J	0.24	0.3	MG/KG
CM	Zn	METALS	123			0.107	1.3	MG/KG
CM	Ag	METALS	0.347			0.066	0.13	MG/KG
CM	Se	METALS	0.471	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.0914		J	0.00208	0.006	MG/KG
CM	Pb	METALS	15.7			0.198	0.16	MG/KG
CM	Mo	METALS	0.447			0.0391	0.25	MG/KG
CM	Sb	METALS	0.642			0.0297	0.03	MG/KG
CM	As	METALS	6.35			0.068	1.3	MG/KG
CM	Cd	METALS	0.195	J		0.0175	0.6	MG/KG
CM	Co	METALS	13.1			0.0527	0.13	MG/KG
CM	V	METALS	82.5			0.345	0.6	MG/KG
CM	Al	METALS	47800			2.39	15.9	MG/KG
CM	Fe	METALS	27200			0.564	32	MG/KG
CM	Mn	METALS	474			0.074	0.3	MG/KG
CM	Ni	METALS	64.9			0.0386	1	MG/KG
CM	Ba	METALS	370			0.018	0.19	MG/KG
CM	Cr	METALS	246			0.51	1.3	MG/KG
CM	Cu	METALS	21.5			0.24	0.3	MG/KG
CM	Zn	METALS	69.3			0.107	1.3	MG/KG
CM	Ag	METALS	0.0768	J	J	0.066	0.13	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	Al	METALS	65600			2.39	15.9	MG/KG
CM	Fe	METALS	39900			0.564	32	MG/KG
CM	Mn	METALS	441			0.074	0.3	MG/KG
CM	Ni	METALS	85.5		J	0.0386	1	MG/KG
CM	Ba	METALS	439			0.018	0.19	MG/KG

CM	Cr	METALS	217			0.51	1.3	MG/KG
CM	Cu	METALS	39		J	0.24	0.3	MG/KG
CM	Zn	METALS	104			0.107	1.3	MG/KG
CM	Ag	METALS	0.247			0.066	0.13	MG/KG
CM	Se	METALS	0.305	J		0.126	1.3	MG/KG
CM	Pb	METALS	21.8		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.919			0.0391	0.25	MG/KG
CM	Sb	METALS	0.705			0.0297	0.03	MG/KG
CM	As	METALS	8.76			0.068	1.3	MG/KG
CM	Cd	METALS	0.263	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	16.7			0.0527	0.13	MG/KG
CM	V	METALS	135			0.345	0.6	MG/KG
CM	Hg	METALS	0.216			0.00208	0.006	MG/KG
CM	Hg	METALS	0.241			0.00208	0.006	MG/KG
CM	Pb	METALS	23.1		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.15			0.0391	0.25	MG/KG
CM	Sb	METALS	0.726			0.0297	0.03	MG/KG
CM	As	METALS	9.69			0.068	1.3	MG/KG
CM	Cd	METALS	0.218	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	15.5			0.0527	0.13	MG/KG
CM	V	METALS	140			0.345	0.6	MG/KG
CM	Al	METALS	72500			2.39	15.9	MG/KG
CM	Fe	METALS	42600			0.564	32	MG/KG
CM	Mn	METALS	411			0.074	0.3	MG/KG
CM	Ni	METALS	93.6		J	0.0386	1	MG/KG
CM	Ba	METALS	459			0.018	0.19	MG/KG
CM	Cr	METALS	163			0.51	1.3	MG/KG
CM	Cu	METALS	45.3		J	0.24	0.3	MG/KG
CM	Zn	METALS	122			0.107	1.3	MG/KG
CM	Ag	METALS	0.291			0.066	0.13	MG/KG
CM	Se	METALS	0.328	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.407			0.00208	0.006	MG/KG
CM	Pb	METALS	126		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.858			0.0391	0.25	MG/KG
CM	Sb	METALS	1.07			0.0297	0.03	MG/KG
CM	As	METALS	10.3			0.068	1.3	MG/KG
CM	Cd	METALS	0.264	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	16.9			0.0527	0.13	MG/KG
CM	V	METALS	121			0.345	0.6	MG/KG
CM	Al	METALS	63500			2.39	15.9	MG/KG
CM	Fe	METALS	39800			0.564	32	MG/KG
CM	Mn	METALS	441			0.074	0.3	MG/KG
CM	Ni	METALS	172		J	0.0386	1	MG/KG
CM	Ba	METALS	533			0.018	0.19	MG/KG
CM	Cr	METALS	319			0.51	1.3	MG/KG
CM	Cu	METALS	65.7		J	0.24	0.3	MG/KG
CM	Zn	METALS	130			0.107	1.3	MG/KG
CM	Ag	METALS	0.286			0.066	0.13	MG/KG
CM	Se	METALS	0.273	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.312			0.00208	0.006	MG/KG
CM	Pb	METALS	25.4		J	0.198	0.16	MG/KG

CM	Mo	METALS	1.63			0.0391	0.25	MG/KG
CM	Sb	METALS	0.807			0.0297	0.03	MG/KG
CM	As	METALS	10.6			0.068	1.3	MG/KG
CM	Cd	METALS	0.228	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	15.8			0.0527	0.13	MG/KG
CM	V	METALS	141			0.345	0.6	MG/KG
CM	Al	METALS	71400			2.39	15.9	MG/KG
CM	Fe	METALS	42400			0.564	32	MG/KG
CM	Mn	METALS	421			0.074	0.3	MG/KG
CM	Ni	METALS	89.8		J	0.0386	1	MG/KG
CM	Ba	METALS	462			0.018	0.19	MG/KG
CM	Cr	METALS	163			0.51	1.3	MG/KG
CM	Cu	METALS	43.7		J	0.24	0.3	MG/KG
CM	Zn	METALS	111			0.107	1.3	MG/KG
CM	Ag	METALS	0.268			0.066	0.13	MG/KG
CM	Se	METALS	0.39	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.34			0.00208	0.006	MG/KG
CM	Pb	METALS	21.6		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.841			0.0391	0.25	MG/KG
CM	Sb	METALS	0.911			0.0297	0.03	MG/KG
CM	As	METALS	10.2			0.068	1.3	MG/KG
CM	Cd	METALS	0.2	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	15.3			0.0527	0.13	MG/KG
CM	V	METALS	136			0.345	0.6	MG/KG
CM	Al	METALS	71300			2.39	15.9	MG/KG
CM	Fe	METALS	41200			0.564	32	MG/KG
CM	Mn	METALS	421			0.074	0.3	MG/KG
CM	Ni	METALS	83.6		J	0.0386	1	MG/KG
CM	Ba	METALS	468			0.018	0.19	MG/KG
CM	Cr	METALS	163			0.51	1.3	MG/KG
CM	Cu	METALS	40		J	0.24	0.3	MG/KG
CM	Zn	METALS	120			0.107	1.3	MG/KG
CM	Ag	METALS	0.253			0.066	0.13	MG/KG
CM	Se	METALS	0.289	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.251			0.00208	0.006	MG/KG
CM	Pb	METALS	22.4		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.763			0.0391	0.25	MG/KG
CM	Sb	METALS	0.7			0.0297	0.03	MG/KG
CM	As	METALS	10.8			0.068	1.3	MG/KG
CM	Cd	METALS	0.201	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	15.9			0.0527	0.13	MG/KG
CM	V	METALS	138			0.345	0.6	MG/KG
CM	Al	METALS	70200			2.39	15.9	MG/KG
CM	Fe	METALS	41300			0.564	32	MG/KG
CM	Mn	METALS	424			0.074	0.3	MG/KG
CM	Ni	METALS	87.1		J	0.0386	1	MG/KG
CM	Ba	METALS	456			0.018	0.19	MG/KG
CM	Cr	METALS	156			0.51	1.3	MG/KG
CM	Cu	METALS	41.4		J	0.24	0.3	MG/KG
CM	Zn	METALS	115			0.107	1.3	MG/KG
CM	Ag	METALS	0.257			0.066	0.13	MG/KG

CM	Se	METALS	0.311	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.318			0.00208	0.006	MG/KG
CM	Pb	METALS	28.2		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.925			0.0391	0.25	MG/KG
CM	Sb	METALS	1.24			0.0297	0.03	MG/KG
CM	As	METALS	11.4			0.068	1.3	MG/KG
CM	Cd	METALS	0.24	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	21.4			0.0527	0.13	MG/KG
CM	V	METALS	141			0.345	0.6	MG/KG
CM	Al	METALS	66400			2.39	15.9	MG/KG
CM	Fe	METALS	43700			0.564	32	MG/KG
CM	Mn	METALS	450			0.074	0.3	MG/KG
CM	Ni	METALS	232		J	0.0386	1	MG/KG
CM	Ba	METALS	438			0.018	0.19	MG/KG
CM	Cr	METALS	271			0.51	1.3	MG/KG
CM	Cu	METALS	117		J	0.24	0.3	MG/KG
CM	Zn	METALS	136			0.107	1.3	MG/KG
CM	Ag	METALS	0.321			0.066	0.13	MG/KG
CM	Se	METALS	0.43	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.327			0.00208	0.006	MG/KG
CM	Pb	METALS	29.7		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.999			0.0391	0.25	MG/KG
CM	Sb	METALS	1.07			0.0297	0.03	MG/KG
CM	As	METALS	11.3			0.068	1.3	MG/KG
CM	Cd	METALS	0.28	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	20.5			0.0527	0.13	MG/KG
CM	V	METALS	138			0.345	0.6	MG/KG
CM	Al	METALS	62600			2.39	15.9	MG/KG
CM	Fe	METALS	42500			0.564	32	MG/KG
CM	Mn	METALS	446			0.074	0.3	MG/KG
CM	Ni	METALS	231		J	0.0386	1	MG/KG
CM	Ba	METALS	404			0.018	0.19	MG/KG
CM	Cr	METALS	224			0.51	1.3	MG/KG
CM	Cu	METALS	54.5		J	0.24	0.3	MG/KG
CM	Zn	METALS	130			0.107	1.3	MG/KG
CM	Ag	METALS	0.327			0.066	0.13	MG/KG
CM	Se	METALS	0.268	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.484		J	0.00208	0.006	MG/KG
CM	Pb	METALS	60.1			0.198	0.16	MG/KG
CM	Mo	METALS	1.41		J	0.0391	0.25	MG/KG
CM	Sb	METALS	2.38		J	0.0297	0.03	MG/KG
CM	As	METALS	10.9		J	0.068	1.3	MG/KG
CM	Cd	METALS	0.341	J		0.0175	0.6	MG/KG
CM	Co	METALS	19.8			0.0527	0.13	MG/KG
CM	V	METALS	134			0.345	0.6	MG/KG
CM	Al	METALS	57300			2.39	15.9	MG/KG
CM	Fe	METALS	45600			0.564	32	MG/KG
CM	Mn	METALS	624			0.074	0.3	MG/KG
CM	Ni	METALS	160			0.0386	1	MG/KG
CM	Ba	METALS	381			0.018	0.19	MG/KG
CM	Cr	METALS	434			0.51	1.3	MG/KG

CM	Cu	METALS	97.5			0.24	0.3	MG/KG
CM	Zn	METALS	179			0.107	1.3	MG/KG
CM	Ag	METALS	0.356		J	0.066	0.13	MG/KG
CM	Se	METALS	0.239	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.38		J	0.00208	0.006	MG/KG
CM	Pb	METALS	11.9		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.83			0.0391	0.25	MG/KG
CM	Sb	METALS	0.587			0.0297	0.03	MG/KG
CM	As	METALS	10.6			0.068	1.3	MG/KG
CM	Cd	METALS	0.223	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	22.6			0.0527	0.13	MG/KG
CM	V	METALS	171			0.345	0.6	MG/KG
CM	Al	METALS	73000			2.39	15.9	MG/KG
CM	Fe	METALS	42400			0.564	32	MG/KG
CM	Mn	METALS	386			0.074	0.3	MG/KG
CM	Ni	METALS	100			0.0386	1	MG/KG
CM	Ba	METALS	450			0.018	0.19	MG/KG
CM	Cr	METALS	167			0.51	1.3	MG/KG
CM	Cu	METALS	55.1		J	0.24	0.3	MG/KG
CM	Zn	METALS	125		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.12	J	J	0.066	0.13	MG/KG
CM	Se	METALS	0.348	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.602		J	0.00208	0.006	MG/KG
CM	Pb	METALS	48			0.198	0.16	MG/KG
CM	Mo	METALS	1.68		J	0.0391	0.25	MG/KG
CM	Sb	METALS	2.35		J	0.0297	0.03	MG/KG
CM	As	METALS	13.6		J	0.068	1.3	MG/KG
CM	Cd	METALS	0.399	J		0.0175	0.6	MG/KG
CM	Co	METALS	19.4			0.0527	0.13	MG/KG
CM	V	METALS	154			0.345	0.6	MG/KG
CM	Al	METALS	68300			2.39	15.9	MG/KG
CM	Fe	METALS	48700			0.564	32	MG/KG
CM	Mn	METALS	505			0.074	0.3	MG/KG
CM	Ni	METALS	116			0.0386	1	MG/KG
CM	Ba	METALS	396			0.018	0.19	MG/KG
CM	Cr	METALS	254			0.51	1.3	MG/KG
CM	Cu	METALS	86.4			0.24	0.3	MG/KG
CM	Zn	METALS	159			0.107	1.3	MG/KG
CM	Ag	METALS	0.397		J	0.066	0.13	MG/KG
CM	Se	METALS	0.341	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.451		J	0.00208	0.006	MG/KG
CM	Pb	METALS	51.4			0.198	0.16	MG/KG
CM	Mo	METALS	1.71		J	0.0391	0.25	MG/KG
CM	Sb	METALS	3.17		J	0.0297	0.03	MG/KG
CM	As	METALS	12.7		J	0.068	1.3	MG/KG
CM	Cd	METALS	0.359	J		0.0175	0.6	MG/KG
CM	Co	METALS	18.3			0.0527	0.13	MG/KG
CM	V	METALS	149			0.345	0.6	MG/KG
CM	Al	METALS	66400			2.39	15.9	MG/KG
CM	Fe	METALS	47400			0.564	32	MG/KG
CM	Mn	METALS	485			0.074	0.3	MG/KG

CM	Ni	METALS	121		0.0386	1	MG/KG
CM	Ba	METALS	376		0.018	0.19	MG/KG
CM	Cr	METALS	464		0.51	1.3	MG/KG
CM	Cu	METALS	64.5		0.24	0.3	MG/KG
CM	Zn	METALS	145		0.107	1.3	MG/KG
CM	Ag	METALS	0.415	J	0.066	0.13	MG/KG
CM	Se	METALS	0.357 J		0.126	1.3	MG/KG
CM	Hg	METALS	0.371		0.00208	0.006	MG/KG
CM	Pb	METALS	38.9	J	0.198	0.16	MG/KG
CM	Mo	METALS	1.39		0.0391	0.25	MG/KG
CM	Sb	METALS	1.36		0.0297	0.03	MG/KG
CM	As	METALS	11.2		0.068	1.3	MG/KG
CM	Cd	METALS	0.384 J	J	0.0175	0.6	MG/KG
CM	Co	METALS	18.4		0.0527	0.13	MG/KG
CM	V	METALS	163		0.345	0.6	MG/KG
CM	Al	METALS	71900		2.39	15.9	MG/KG
CM	Fe	METALS	44200		0.564	32	MG/KG
CM	Mn	METALS	400		0.074	0.3	MG/KG
CM	Ni	METALS	100	J	0.0386	1	MG/KG
CM	Ba	METALS	458		0.018	0.19	MG/KG
CM	Cr	METALS	187		0.51	1.3	MG/KG
CM	Cu	METALS	57.8	J	0.24	0.3	MG/KG
CM	Zn	METALS	133		0.107	1.3	MG/KG
CM	Ag	METALS	0.435		0.066	0.13	MG/KG
CM	Se	METALS	0.406 J		0.126	1.3	MG/KG
CM	Hg	METALS	0.303	J	0.00208	0.006	MG/KG
CM	Pb	METALS	32.9		0.198	0.16	MG/KG
CM	Mo	METALS	1.08	J	0.0391	0.25	MG/KG
CM	Sb	METALS	2.25	J	0.0297	0.03	MG/KG
CM	As	METALS	8.9	J	0.068	1.3	MG/KG
CM	Cd	METALS	0.297 J		0.0175	0.6	MG/KG
CM	Co	METALS	17.5		0.0527	0.13	MG/KG
CM	V	METALS	139		0.345	0.6	MG/KG
CM	Al	METALS	52000		2.39	15.9	MG/KG
CM	Fe	METALS	41200		0.564	32	MG/KG
CM	Mn	METALS	567		0.074	0.3	MG/KG
CM	Ni	METALS	94.9		0.0386	1	MG/KG
CM	Ba	METALS	293		0.018	0.19	MG/KG
CM	Cr	METALS	414		0.51	1.3	MG/KG
CM	Cu	METALS	55.1		0.24	0.3	MG/KG
CM	Zn	METALS	114		0.107	1.3	MG/KG
CM	Ag	METALS	0.229	J	0.066	0.13	MG/KG
CM	Se	METALS	0.233 J		0.126	1.3	MG/KG
CM	Hg	METALS	0.287	J	0.00208	0.006	MG/KG
CM	Pb	METALS	32.9		0.198	0.16	MG/KG
CM	Mo	METALS	1.08	J	0.0391	0.25	MG/KG
CM	Sb	METALS	1.35	J	0.0297	0.03	MG/KG
CM	As	METALS	9.18	J	0.068	1.3	MG/KG
CM	Cd	METALS	0.301 J		0.0175	0.6	MG/KG
CM	Co	METALS	18.8		0.0527	0.13	MG/KG
CM	V	METALS	149		0.345	0.6	MG/KG

CM	Al	METALS	54400			2.39	15.9	MG/KG
CM	Fe	METALS	43900			0.564	32	MG/KG
CM	Mn	METALS	586			0.074	0.3	MG/KG
CM	Ni	METALS	103			0.0386	1	MG/KG
CM	Ba	METALS	302			0.018	0.19	MG/KG
CM	Cr	METALS	505			0.51	1.3	MG/KG
CM	Cu	METALS	52.5			0.24	0.3	MG/KG
CM	Zn	METALS	113			0.107	1.3	MG/KG
CM	Ag	METALS	0.207		J	0.066	0.13	MG/KG
CM	Se	METALS	0.311	J		0.126	1.3	MG/KG
CM	Se	METALS	0.525	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.441			0.00208	0.006	MG/KG
CM	Pb	METALS	29.2		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.957			0.0391	0.25	MG/KG
CM	Sb	METALS	0.964			0.0297	0.03	MG/KG
CM	As	METALS	10.9			0.068	1.3	MG/KG
CM	Cd	METALS	0.287	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	16.7			0.0527	0.13	MG/KG
CM	V	METALS	139			0.345	0.6	MG/KG
CM	Al	METALS	70500			2.39	15.9	MG/KG
CM	Fe	METALS	40700			0.564	32	MG/KG
CM	Mn	METALS	439			0.074	0.3	MG/KG
CM	Ni	METALS	88.7		J	0.0386	1	MG/KG
CM	Ba	METALS	496			0.018	0.19	MG/KG
CM	Cr	METALS	194			0.51	1.3	MG/KG
CM	Cu	METALS	95.4		J	0.24	0.3	MG/KG
CM	Zn	METALS	122			0.107	1.3	MG/KG
CM	Ag	METALS	0.287			0.066	0.13	MG/KG
CM	Hg	METALS	1		J	0.00208	0.006	MG/KG
CM	Pb	METALS	27.1			0.198	0.16	MG/KG
CM	Mo	METALS	1.01			0.0391	0.25	MG/KG
CM	Sb	METALS	1.09			0.0297	0.03	MG/KG
CM	As	METALS	10.7			0.068	1.3	MG/KG
CM	Cd	METALS	0.244	J		0.0175	0.6	MG/KG
CM	Co	METALS	17.7			0.0527	0.13	MG/KG
CM	V	METALS	134			0.345	0.6	MG/KG
CM	Al	METALS	68400			2.39	15.9	MG/KG
CM	Fe	METALS	39900			0.564	32	MG/KG
CM	Mn	METALS	423			0.074	0.3	MG/KG
CM	Ni	METALS	95.4			0.0386	1	MG/KG
CM	Ba	METALS	438			0.018	0.19	MG/KG
CM	Cr	METALS	165			0.51	1.3	MG/KG
CM	Cu	METALS	57.7			0.24	0.3	MG/KG
CM	Zn	METALS	112			0.107	1.3	MG/KG
CM	Ag	METALS	0.316		J	0.066	0.13	MG/KG
CM	Se	METALS	0.337	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.959			0.00208	0.006	MG/KG
CM	Pb	METALS	27.2		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.875			0.0391	0.25	MG/KG
CM	Sb	METALS	0.964			0.0297	0.03	MG/KG
CM	As	METALS	10.5			0.068	1.3	MG/KG

CM	Cd	METALS	0.23	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	17			0.0527	0.13	MG/KG
CM	V	METALS	133			0.345	0.6	MG/KG
CM	Al	METALS	67500			2.39	15.9	MG/KG
CM	Fe	METALS	39000			0.564	32	MG/KG
CM	Mn	METALS	448			0.074	0.3	MG/KG
CM	Ni	METALS	91.8		J	0.0386	1	MG/KG
CM	Ba	METALS	447			0.018	0.19	MG/KG
CM	Cr	METALS	159			0.51	1.3	MG/KG
CM	Cu	METALS	105		J	0.24	0.3	MG/KG
CM	Zn	METALS	114			0.107	1.3	MG/KG
CM	Ag	METALS	0.276			0.066	0.13	MG/KG
CM	Se	METALS	0.333	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.257			0.00208	0.006	MG/KG
CM	Pb	METALS	23.6		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.897			0.0391	0.25	MG/KG
CM	Sb	METALS	0.779			0.0297	0.03	MG/KG
CM	As	METALS	11.2			0.068	1.3	MG/KG
CM	Cd	METALS	0.222	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	16.6			0.0527	0.13	MG/KG
CM	V	METALS	144			0.345	0.6	MG/KG
CM	Al	METALS	72000			2.39	15.9	MG/KG
CM	Fe	METALS	42500			0.564	32	MG/KG
CM	Mn	METALS	476			0.074	0.3	MG/KG
CM	Ni	METALS	90.5		J	0.0386	1	MG/KG
CM	Ba	METALS	471			0.018	0.19	MG/KG
CM	Cr	METALS	163			0.51	1.3	MG/KG
CM	Cu	METALS	57.7		J	0.24	0.3	MG/KG
CM	Zn	METALS	115			0.107	1.3	MG/KG
CM	Ag	METALS	0.285			0.066	0.13	MG/KG
CM	Se	METALS	0.367	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.478			0.00208	0.006	MG/KG
CM	Pb	METALS	109		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.12			0.0391	0.25	MG/KG
CM	Sb	METALS	1.09			0.0297	0.03	MG/KG
CM	As	METALS	11.3			0.068	1.3	MG/KG
CM	Cd	METALS	0.329	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	16.5			0.0527	0.13	MG/KG
CM	V	METALS	128			0.345	0.6	MG/KG
CM	Al	METALS	66500			2.39	15.9	MG/KG
CM	Fe	METALS	42500			0.564	32	MG/KG
CM	Mn	METALS	494			0.074	0.3	MG/KG
CM	Ni	METALS	119		J	0.0386	1	MG/KG
CM	Ba	METALS	568			0.018	0.19	MG/KG
CM	Cr	METALS	349			0.51	1.3	MG/KG
CM	Cu	METALS	525		J	0.24	0.3	MG/KG
CM	Zn	METALS	207			0.107	1.3	MG/KG
CM	Ag	METALS	0.293			0.066	0.13	MG/KG
CM	Se	METALS	0.51	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.425		J	0.00208	0.006	MG/KG
CM	Pb	METALS	30.4			0.198	0.16	MG/KG

CM	Mo	METALS	1.47			0.0391	0.25	MG/KG
CM	Sb	METALS	1.23			0.0297	0.03	MG/KG
CM	As	METALS	10.7			0.068	1.3	MG/KG
CM	Cd	METALS	0.209	J		0.0175	0.6	MG/KG
CM	Co	METALS	16.2			0.0527	0.13	MG/KG
CM	V	METALS	121			0.345	0.6	MG/KG
CM	Al	METALS	62800			2.39	15.9	MG/KG
CM	Fe	METALS	40000			0.564	32	MG/KG
CM	Mn	METALS	502			0.074	0.3	MG/KG
CM	Ni	METALS	88.7			0.0386	1	MG/KG
CM	Ba	METALS	469			0.018	0.19	MG/KG
CM	Cr	METALS	277			0.51	1.3	MG/KG
CM	Cu	METALS	397			0.24	0.3	MG/KG
CM	Zn	METALS	110			0.107	1.3	MG/KG
CM	Ag	METALS	0.276		J	0.066	0.13	MG/KG
CM	Se	METALS	0.347	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.145			0.00208	0.006	MG/KG
CM	Pb	METALS	18.9		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.877			0.0391	0.25	MG/KG
CM	Sb	METALS	0.554			0.0297	0.03	MG/KG
CM	As	METALS	8.74			0.068	1.3	MG/KG
CM	Cd	METALS	0.185	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	14			0.0527	0.13	MG/KG
CM	V	METALS	108			0.345	0.6	MG/KG
CM	Al	METALS	65600			2.39	15.9	MG/KG
CM	Fe	METALS	39500			0.564	32	MG/KG
CM	Mn	METALS	516			0.074	0.3	MG/KG
CM	Ni	METALS	84		J	0.0386	1	MG/KG
CM	Ba	METALS	448			0.018	0.19	MG/KG
CM	Cr	METALS	189			0.51	1.3	MG/KG
CM	Cu	METALS	89.4		J	0.24	0.3	MG/KG
CM	Zn	METALS	97.1			0.107	1.3	MG/KG
CM	Ag	METALS	0.177			0.066	0.13	MG/KG
CM	Se	METALS	0.3	J		0.126	1.3	MG/KG
CM	Se	METALS	0.306	J		0.126	1.3	MG/KG
CM	Hg	METALS	1.51			0.00208	0.006	MG/KG
CM	Pb	METALS	25.9		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.07			0.0391	0.25	MG/KG
CM	Sb	METALS	16.8			0.0297	0.03	MG/KG
CM	As	METALS	14.3			0.068	1.3	MG/KG
CM	Cd	METALS	0.282	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	16.8			0.0527	0.13	MG/KG
CM	V	METALS	127			0.345	0.6	MG/KG
CM	Al	METALS	64800			2.39	15.9	MG/KG
CM	Fe	METALS	39600			0.564	32	MG/KG
CM	Mn	METALS	531			0.074	0.3	MG/KG
CM	Ni	METALS	93.6		J	0.0386	1	MG/KG
CM	Ba	METALS	497			0.018	0.19	MG/KG
CM	Cr	METALS	275			0.51	1.3	MG/KG
CM	Cu	METALS	163		J	0.24	0.3	MG/KG
CM	Zn	METALS	108			0.107	1.3	MG/KG

CM	Ag	METALS	0.326			0.066	0.13	MG/KG
CM	Ag	METALS	0.299		J	0.066	0.13	MG/KG
CM	Se	METALS	0.313	J		0.126	1.3	MG/KG
CM	Al	METALS	59100			2.39	15.9	MG/KG
CM	Fe	METALS	41900			0.564	32	MG/KG
CM	Mn	METALS	520			0.074	0.3	MG/KG
CM	Ni	METALS	242			0.0386	1	MG/KG
CM	Ba	METALS	404			0.018	0.19	MG/KG
CM	Cr	METALS	351			0.51	1.3	MG/KG
CM	Cu	METALS	157			0.24	0.3	MG/KG
CM	Zn	METALS	109			0.107	1.3	MG/KG
CM	Hg	METALS	0.691		J	0.00208	0.006	MG/KG
CM	Pb	METALS	33.8			0.198	0.16	MG/KG
CM	Mo	METALS	0.855			0.0391	0.25	MG/KG
CM	Sb	METALS	0.706			0.0297	0.03	MG/KG
CM	As	METALS	10.7			0.068	1.3	MG/KG
CM	Cd	METALS	0.255	J		0.0175	0.6	MG/KG
CM	Co	METALS	21.6			0.0527	0.13	MG/KG
CM	V	METALS	127			0.345	0.6	MG/KG
CM	Hg	METALS	1.07		J	0.00208	0.006	MG/KG
CM	Pb	METALS	54.8			0.198	0.16	MG/KG
CM	Mo	METALS	1.11			0.0391	0.25	MG/KG
CM	Sb	METALS	1.85			0.0297	0.03	MG/KG
CM	As	METALS	12.5			0.068	1.3	MG/KG
CM	Cd	METALS	0.359	J		0.0175	0.6	MG/KG
CM	Co	METALS	20			0.0527	0.13	MG/KG
CM	V	METALS	127			0.345	0.6	MG/KG
CM	Al	METALS	61200			2.39	15.9	MG/KG
CM	Fe	METALS	46500			0.564	32	MG/KG
CM	Mn	METALS	546			0.074	0.3	MG/KG
CM	Ni	METALS	250			0.0386	1	MG/KG
CM	Ba	METALS	431			0.018	0.19	MG/KG
CM	Cr	METALS	391			0.51	1.3	MG/KG
CM	Cu	METALS	289			0.24	0.3	MG/KG
CM	Zn	METALS	156			0.107	1.3	MG/KG
CM	Ag	METALS	0.272		J	0.066	0.13	MG/KG
CM	Se	METALS	0.329	J		0.126	1.3	MG/KG
CM	Hg	METALS	7.47			0.00208	0.006	MG/KG
CM	Pb	METALS	275		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.03			0.0391	0.25	MG/KG
CM	Sb	METALS	2.14			0.0297	0.03	MG/KG
CM	As	METALS	18.2			0.068	1.3	MG/KG
CM	Cd	METALS	0.76		J	0.0175	0.6	MG/KG
CM	Co	METALS	18.2			0.0527	0.13	MG/KG
CM	V	METALS	128			0.345	0.6	MG/KG
CM	Al	METALS	62300			2.39	15.9	MG/KG
CM	Fe	METALS	40600			0.564	32	MG/KG
CM	Mn	METALS	506			0.074	0.3	MG/KG
CM	Ni	METALS	117		J	0.0386	1	MG/KG
CM	Ba	METALS	470			0.018	0.19	MG/KG
CM	Cr	METALS	291			0.51	1.3	MG/KG

CM	Cu	METALS	1050		J	0.24	0.3	MG/KG
CM	Zn	METALS	322			0.107	1.3	MG/KG
CM	Ag	METALS	0.434			0.066	0.13	MG/KG
CM	Se	METALS	0.365	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.827			0.00208	0.006	MG/KG
CM	Pb	METALS	23.6		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.06			0.0391	0.25	MG/KG
CM	Sb	METALS	0.824			0.0297	0.03	MG/KG
CM	As	METALS	12.1			0.068	1.3	MG/KG
CM	Cd	METALS	0.237	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	17.6			0.0527	0.13	MG/KG
CM	V	METALS	139			0.345	0.6	MG/KG
CM	Al	METALS	67500			2.39	15.9	MG/KG
CM	Fe	METALS	40800			0.564	32	MG/KG
CM	Mn	METALS	615			0.074	0.3	MG/KG
CM	Ni	METALS	87.7		J	0.0386	1	MG/KG
CM	Ba	METALS	467			0.018	0.19	MG/KG
CM	Cr	METALS	245			0.51	1.3	MG/KG
CM	Cu	METALS	40.6		J	0.24	0.3	MG/KG
CM	Zn	METALS	101			0.107	1.3	MG/KG
CM	Ag	METALS	0.223			0.066	0.13	MG/KG
CM	Se	METALS	0.269	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.661		J	0.00208	0.006	MG/KG
CM	Pb	METALS	18.9			0.198	0.16	MG/KG
CM	Mo	METALS	0.814			0.0391	0.25	MG/KG
CM	Sb	METALS	0.604			0.0297	0.03	MG/KG
CM	As	METALS	11.4			0.068	1.3	MG/KG
CM	Cd	METALS	0.213	J		0.0175	0.6	MG/KG
CM	Co	METALS	17.1			0.0527	0.13	MG/KG
CM	V	METALS	135			0.345	0.6	MG/KG
CM	Al	METALS	65700			2.39	15.9	MG/KG
CM	Fe	METALS	40100			0.564	32	MG/KG
CM	Mn	METALS	565			0.074	0.3	MG/KG
CM	Ni	METALS	86.6			0.0386	1	MG/KG
CM	Ba	METALS	425			0.018	0.19	MG/KG
CM	Cr	METALS	187			0.51	1.3	MG/KG
CM	Cu	METALS	32.7			0.24	0.3	MG/KG
CM	Zn	METALS	94.9			0.107	1.3	MG/KG
CM	Ag	METALS	0.249		J	0.066	0.13	MG/KG
CM	Se	METALS	0.314	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.396			0.00208	0.006	MG/KG
CM	Pb	METALS	28.8		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.881			0.0391	0.25	MG/KG
CM	Sb	METALS	0.778			0.0297	0.03	MG/KG
CM	As	METALS	11.6			0.068	1.3	MG/KG
CM	Cd	METALS	0.266	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	19.5			0.0527	0.13	MG/KG
CM	V	METALS	157			0.345	0.6	MG/KG
CM	Al	METALS	71200			2.39	15.9	MG/KG
CM	Fe	METALS	43500			0.564	32	MG/KG
CM	Mn	METALS	500			0.074	0.3	MG/KG

CM	Ni	METALS	100		J	0.0386	1	MG/KG
CM	Ba	METALS	474			0.018	0.19	MG/KG
CM	Cr	METALS	203			0.51	1.3	MG/KG
CM	Cu	METALS	42.2		J	0.24	0.3	MG/KG
CM	Zn	METALS	113			0.107	1.3	MG/KG
CM	Ag	METALS	0.267			0.066	0.13	MG/KG
CM	Se	METALS	0.362	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.214		J	0.00208	0.006	MG/KG
CM	Pb	METALS	18.1			0.198	0.16	MG/KG
CM	Mo	METALS	0.7			0.0391	0.25	MG/KG
CM	Sb	METALS	0.586			0.0297	0.03	MG/KG
CM	As	METALS	11.3			0.068	1.3	MG/KG
CM	Cd	METALS	0.194	J		0.0175	0.6	MG/KG
CM	Co	METALS	17.2			0.0527	0.13	MG/KG
CM	V	METALS	130			0.345	0.6	MG/KG
CM	Al	METALS	64300			2.39	15.9	MG/KG
CM	Fe	METALS	38700			0.564	32	MG/KG
CM	Mn	METALS	502			0.074	0.3	MG/KG
CM	Ni	METALS	86.8			0.0386	1	MG/KG
CM	Ba	METALS	415			0.018	0.19	MG/KG
CM	Cr	METALS	173			0.51	1.3	MG/KG
CM	Cu	METALS	36.6			0.24	0.3	MG/KG
CM	Zn	METALS	90.8			0.107	1.3	MG/KG
CM	Ag	METALS	0.22		J	0.066	0.13	MG/KG
CM	Se	METALS	0.222	J		0.126	1.3	MG/KG
CM	Se	METALS	0.288	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.407		J	0.00208	0.006	MG/KG
CM	Pb	METALS	18.2			0.198	0.16	MG/KG
CM	Mo	METALS	0.611			0.0391	0.25	MG/KG
CM	Sb	METALS	0.722			0.0297	0.03	MG/KG
CM	As	METALS	11			0.068	1.3	MG/KG
CM	Cd	METALS	0.204	J		0.0175	0.6	MG/KG
CM	Co	METALS	16.8			0.0527	0.13	MG/KG
CM	V	METALS	124			0.345	0.6	MG/KG
CM	Al	METALS	66100			2.39	15.9	MG/KG
CM	Fe	METALS	39000			0.564	32	MG/KG
CM	Mn	METALS	501			0.074	0.3	MG/KG
CM	Ni	METALS	85.1			0.0386	1	MG/KG
CM	Ba	METALS	428			0.018	0.19	MG/KG
CM	Cr	METALS	170			0.51	1.3	MG/KG
CM	Cu	METALS	34.1			0.24	0.3	MG/KG
CM	Zn	METALS	94.3			0.107	1.3	MG/KG
CM	Ag	METALS	0.211		J	0.066	0.13	MG/KG
CM	Hg	METALS	0.234			0.00208	0.006	MG/KG
CM	Pb	METALS	20		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.675			0.0391	0.25	MG/KG
CM	Sb	METALS	0.696			0.0297	0.03	MG/KG
CM	As	METALS	12			0.068	1.3	MG/KG
CM	Cd	METALS	0.228	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	16.4			0.0527	0.13	MG/KG
CM	V	METALS	128			0.345	0.6	MG/KG

CM	Al	METALS	69000			2.39	15.9	MG/KG
CM	Fe	METALS	40700			0.564	32	MG/KG
CM	Mn	METALS	475			0.074	0.3	MG/KG
CM	Ni	METALS	89.6		J	0.0386	1	MG/KG
CM	Ba	METALS	476			0.018	0.19	MG/KG
CM	Cr	METALS	178			0.51	1.3	MG/KG
CM	Cu	METALS	53.5		J	0.24	0.3	MG/KG
CM	Zn	METALS	102			0.107	1.3	MG/KG
CM	Ag	METALS	0.252			0.066	0.13	MG/KG
CM	Se	METALS	0.273	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.402			0.00208	0.006	MG/KG
CM	Pb	METALS	29.6		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.889			0.0391	0.25	MG/KG
CM	Sb	METALS	0.701			0.0297	0.03	MG/KG
CM	As	METALS	10.7			0.068	1.3	MG/KG
CM	Cd	METALS	0.305	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	16			0.0527	0.13	MG/KG
CM	V	METALS	135			0.345	0.6	MG/KG
CM	Al	METALS	71100			2.39	15.9	MG/KG
CM	Fe	METALS	41300			0.564	32	MG/KG
CM	Mn	METALS	458			0.074	0.3	MG/KG
CM	Ni	METALS	93.2		J	0.0386	1	MG/KG
CM	Ba	METALS	481			0.018	0.19	MG/KG
CM	Cr	METALS	176			0.51	1.3	MG/KG
CM	Cu	METALS	50.1		J	0.24	0.3	MG/KG
CM	Zn	METALS	109			0.107	1.3	MG/KG
CM	Ag	METALS	0.262			0.066	0.13	MG/KG
CM	Se	METALS	0.855	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.274			0.00208	0.006	MG/KG
CM	Pb	METALS	23.5		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.16			0.0391	0.25	MG/KG
CM	Sb	METALS	0.842			0.0297	0.03	MG/KG
CM	As	METALS	11.6			0.068	1.3	MG/KG
CM	Cd	METALS	0.219	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	17.9			0.0527	0.13	MG/KG
CM	V	METALS	150			0.345	0.6	MG/KG
CM	Al	METALS	71200			2.39	15.9	MG/KG
CM	Fe	METALS	41500			0.564	32	MG/KG
CM	Mn	METALS	449			0.074	0.3	MG/KG
CM	Ni	METALS	86.3		J	0.0386	1	MG/KG
CM	Ba	METALS	476			0.018	0.19	MG/KG
CM	Cr	METALS	163			0.51	1.3	MG/KG
CM	Cu	METALS	46.4		J	0.24	0.3	MG/KG
CM	Zn	METALS	109			0.107	1.3	MG/KG
CM	Ag	METALS	0.286			0.066	0.13	MG/KG
CM	Se	METALS	0.396	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.268			0.00208	0.006	MG/KG
CM	Pb	METALS	24.3		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.864			0.0391	0.25	MG/KG
CM	Sb	METALS	0.764			0.0297	0.03	MG/KG
CM	As	METALS	11.6			0.068	1.3	MG/KG

CM	Cd	METALS	0.238	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	17.8			0.0527	0.13	MG/KG
CM	V	METALS	150			0.345	0.6	MG/KG
CM	Al	METALS	71900			2.39	15.9	MG/KG
CM	Fe	METALS	42900			0.564	32	MG/KG
CM	Mn	METALS	458			0.074	0.3	MG/KG
CM	Ni	METALS	89		J	0.0386	1	MG/KG
CM	Ba	METALS	463			0.018	0.19	MG/KG
CM	Cr	METALS	162			0.51	1.3	MG/KG
CM	Cu	METALS	42.6		J	0.24	0.3	MG/KG
CM	Zn	METALS	108			0.107	1.3	MG/KG
CM	Ag	METALS	0.274			0.066	0.13	MG/KG
CM	Se	METALS	0.357	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.289			0.00208	0.006	MG/KG
CM	Pb	METALS	21.6		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.821			0.0391	0.25	MG/KG
CM	Sb	METALS	0.773			0.0297	0.03	MG/KG
CM	As	METALS	11.5			0.068	1.3	MG/KG
CM	Cd	METALS	0.192	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	17.2			0.0527	0.13	MG/KG
CM	V	METALS	139			0.345	0.6	MG/KG
CM	Al	METALS	72100			2.39	15.9	MG/KG
CM	Fe	METALS	41200			0.564	32	MG/KG
CM	Mn	METALS	554			0.074	0.3	MG/KG
CM	Ni	METALS	86.9		J	0.0386	1	MG/KG
CM	Ba	METALS	472			0.018	0.19	MG/KG
CM	Cr	METALS	161			0.51	1.3	MG/KG
CM	Cu	METALS	40.1		J	0.24	0.3	MG/KG
CM	Zn	METALS	105			0.107	1.3	MG/KG
CM	Ag	METALS	0.242			0.066	0.13	MG/KG
CM	Se	METALS	0.292	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.0716		J	0.00208	0.006	MG/KG
CM	Pb	METALS	15.9			0.198	0.16	MG/KG
CM	Mo	METALS	0.461			0.0391	0.25	MG/KG
CM	Sb	METALS	0.398			0.0297	0.03	MG/KG
CM	As	METALS	9.65			0.068	1.3	MG/KG
CM	Cd	METALS	0.18	J		0.0175	0.6	MG/KG
CM	Co	METALS	22.6			0.0527	0.13	MG/KG
CM	V	METALS	142			0.345	0.6	MG/KG
CM	Al	METALS	59700			2.39	15.9	MG/KG
CM	Fe	METALS	40900			0.564	32	MG/KG
CM	Mn	METALS	634			0.074	0.3	MG/KG
CM	Ni	METALS	78.3			0.0386	1	MG/KG
CM	Ba	METALS	417			0.018	0.19	MG/KG
CM	Cr	METALS	169			0.51	1.3	MG/KG
CM	Cu	METALS	19.2			0.24	0.3	MG/KG
CM	Zn	METALS	81.3			0.107	1.3	MG/KG
CM	Ag	METALS	0.123	J	J	0.066	0.13	MG/KG
CM	Se	METALS	0.124	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.553		J	0.00208	0.006	MG/KG
CM	Pb	METALS	121			0.198	0.16	MG/KG

CM	Mo	METALS	1.18		0.0391	0.25	MG/KG
CM	Sb	METALS	1.61		0.0297	0.03	MG/KG
CM	As	METALS	8.15		0.068	1.3	MG/KG
CM	Cd	METALS	0.845		0.0175	0.6	MG/KG
CM	Co	METALS	12.7		0.0527	0.13	MG/KG
CM	V	METALS	101		0.345	0.6	MG/KG
CM	Al	METALS	61900		2.39	15.9	MG/KG
CM	Fe	METALS	36200		0.564	32	MG/KG
CM	Mn	METALS	437		0.074	0.3	MG/KG
CM	Ni	METALS	76.6		0.0386	1	MG/KG
CM	Ba	METALS	501		0.018	0.19	MG/KG
CM	Cr	METALS	202		0.51	1.3	MG/KG
CM	Cu	METALS	69.8		0.24	0.3	MG/KG
CM	Zn	METALS	188		0.107	1.3	MG/KG
CM	Ag	METALS	0.523	J	0.066	0.13	MG/KG
CM	Se	METALS	0.227 J		0.126	1.3	MG/KG
CM	Hg	METALS	0.559	J	0.00208	0.006	MG/KG
CM	Pb	METALS	94.3		0.198	0.16	MG/KG
CM	Mo	METALS	1.15		0.0391	0.25	MG/KG
CM	Sb	METALS	1.56		0.0297	0.03	MG/KG
CM	As	METALS	9.23		0.068	1.3	MG/KG
CM	Cd	METALS	0.63		0.0175	0.6	MG/KG
CM	Co	METALS	14.5		0.0527	0.13	MG/KG
CM	V	METALS	121		0.345	0.6	MG/KG
CM	Al	METALS	69800		2.39	15.9	MG/KG
CM	Fe	METALS	43100		0.564	32	MG/KG
CM	Mn	METALS	416		0.074	0.3	MG/KG
CM	Ni	METALS	92.9		0.0386	1	MG/KG
CM	Ba	METALS	474		0.018	0.19	MG/KG
CM	Cr	METALS	189		0.51	1.3	MG/KG
CM	Cu	METALS	85.1		0.24	0.3	MG/KG
CM	Zn	METALS	189		0.107	1.3	MG/KG
CM	Ag	METALS	0.491	J	0.066	0.13	MG/KG
CM	Se	METALS	0.387 J		0.126	1.3	MG/KG
CM	Hg	METALS	0.466	J	0.00208	0.006	MG/KG
CM	Pb	METALS	69.3		0.198	0.16	MG/KG
CM	Mo	METALS	1.27		0.0391	0.25	MG/KG
CM	Sb	METALS	1.5		0.0297	0.03	MG/KG
CM	As	METALS	9.33		0.068	1.3	MG/KG
CM	Cd	METALS	0.371		0.0175	0.6	MG/KG
CM	Co	METALS	15.3		0.0527	0.13	MG/KG
CM	V	METALS	131		0.345	0.6	MG/KG
CM	Al	METALS	73200		2.39	15.9	MG/KG
CM	Fe	METALS	45800		0.564	32	MG/KG
CM	Mn	METALS	404		0.074	0.3	MG/KG
CM	Ni	METALS	104		0.0386	1	MG/KG
CM	Ba	METALS	445		0.018	0.19	MG/KG
CM	Cr	METALS	171		0.51	1.3	MG/KG
CM	Cu	METALS	74.4		0.24	0.3	MG/KG
CM	Zn	METALS	164		0.107	1.3	MG/KG
CM	Ag	METALS	0.425	J	0.066	0.13	MG/KG

CM	Se	METALS	0.41	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.447		J	0.00208	0.006	MG/KG
CM	Pb	METALS	67.2			0.198	0.16	MG/KG
CM	Mo	METALS	1.13			0.0391	0.25	MG/KG
CM	Sb	METALS	1.62			0.0297	0.03	MG/KG
CM	As	METALS	8.52			0.068	1.3	MG/KG
CM	Cd	METALS	0.323			0.0175	0.6	MG/KG
CM	Co	METALS	15.3			0.0527	0.13	MG/KG
CM	V	METALS	130			0.345	0.6	MG/KG
CM	Al	METALS	74000			2.39	15.9	MG/KG
CM	Fe	METALS	46500			0.564	32	MG/KG
CM	Mn	METALS	416			0.074	0.3	MG/KG
CM	Ni	METALS	103			0.0386	1	MG/KG
CM	Ba	METALS	456			0.018	0.19	MG/KG
CM	Cr	METALS	185			0.51	1.3	MG/KG
CM	Cu	METALS	74			0.24	0.3	MG/KG
CM	Zn	METALS	166			0.107	1.3	MG/KG
CM	Ag	METALS	0.455		J	0.066	0.13	MG/KG
CM	Se	METALS	0.386	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.595			0.00208	0.006	MG/KG
CM	Pb	METALS	65.4		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.47			0.0391	0.25	MG/KG
CM	Sb	METALS	1.56			0.0297	0.03	MG/KG
CM	As	METALS	11.3			0.068	1.3	MG/KG
CM	Cd	METALS	0.413	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	17.8			0.0527	0.13	MG/KG
CM	V	METALS	157			0.345	0.6	MG/KG
CM	Al	METALS	73900			2.39	15.9	MG/KG
CM	Fe	METALS	47200			0.564	32	MG/KG
CM	Mn	METALS	412			0.074	0.3	MG/KG
CM	Ni	METALS	105		J	0.0386	1	MG/KG
CM	Ba	METALS	458			0.018	0.19	MG/KG
CM	Cr	METALS	189			0.51	1.3	MG/KG
CM	Cu	METALS	78		J	0.24	0.3	MG/KG
CM	Zn	METALS	205			0.107	1.3	MG/KG
CM	Ag	METALS	0.544			0.066	0.13	MG/KG
CM	Se	METALS	0.444	J		0.126	1.3	MG/KG
CM	Pb	METALS	65.3			0.198	0.16	MG/KG
CM	Mo	METALS	1.05		J	0.0391	0.25	MG/KG
CM	Sb	METALS	1.73		J	0.0297	0.03	MG/KG
CM	As	METALS	10.8		J	0.068	1.3	MG/KG
CM	Cd	METALS	0.36	J		0.0175	0.6	MG/KG
CM	Co	METALS	17.2			0.0527	0.13	MG/KG
CM	V	METALS	153			0.345	0.6	MG/KG
CM	Al	METALS	71600			2.39	15.9	MG/KG
CM	Fe	METALS	46800			0.564	32	MG/KG
CM	Mn	METALS	431			0.074	0.3	MG/KG
CM	Ni	METALS	104			0.0386	1	MG/KG
CM	Ba	METALS	400			0.018	0.19	MG/KG
CM	Cr	METALS	198			0.51	1.3	MG/KG
CM	Cu	METALS	76.9			0.24	0.3	MG/KG

CM	Zn	METALS	185		0.107	1.3	MG/KG
CM	Ag	METALS	0.566	J	0.066	0.13	MG/KG
CM	Se	METALS	0.322 J		0.126	1.3	MG/KG
CM	Hg	METALS	0.497	J	0.00208	0.006	MG/KG
CM	Hg	METALS	0.647	J	0.00208	0.006	MG/KG
CM	Pb	METALS	88.9		0.198	0.16	MG/KG
CM	Mo	METALS	1.34		0.0391	0.25	MG/KG
CM	Sb	METALS	2.08		0.0297	0.03	MG/KG
CM	As	METALS	10.6		0.068	1.3	MG/KG
CM	Cd	METALS	0.467		0.0175	0.6	MG/KG
CM	Co	METALS	15.5		0.0527	0.13	MG/KG
CM	V	METALS	126		0.345	0.6	MG/KG
CM	Al	METALS	70500		2.39	15.9	MG/KG
CM	Fe	METALS	45600		0.564	32	MG/KG
CM	Mn	METALS	430		0.074	0.3	MG/KG
CM	Ni	METALS	104		0.0386	1	MG/KG
CM	Ba	METALS	475		0.018	0.19	MG/KG
CM	Cr	METALS	209		0.51	1.3	MG/KG
CM	Cu	METALS	80.1		0.24	0.3	MG/KG
CM	Zn	METALS	186		0.107	1.3	MG/KG
CM	Ag	METALS	0.504	J	0.066	0.13	MG/KG
CM	Se	METALS	0.364 J		0.126	1.3	MG/KG
CM	Hg	METALS	0.491	J	0.00208	0.006	MG/KG
CM	Pb	METALS	76.4		0.198	0.16	MG/KG
CM	Mo	METALS	0.963	J	0.0391	0.25	MG/KG
CM	Sb	METALS	2.2	J	0.0297	0.03	MG/KG
CM	As	METALS	11.7	J	0.068	1.3	MG/KG
CM	Cd	METALS	0.348 J		0.0175	0.6	MG/KG
CM	Co	METALS	17.1		0.0527	0.13	MG/KG
CM	V	METALS	151		0.345	0.6	MG/KG
CM	Al	METALS	74100		2.39	15.9	MG/KG
CM	Fe	METALS	47800		0.564	32	MG/KG
CM	Mn	METALS	439		0.074	0.3	MG/KG
CM	Ni	METALS	107		0.0386	1	MG/KG
CM	Ba	METALS	434		0.018	0.19	MG/KG
CM	Cr	METALS	202		0.51	1.3	MG/KG
CM	Cu	METALS	80.9		0.24	0.3	MG/KG
CM	Zn	METALS	182		0.107	1.3	MG/KG
CM	Ag	METALS	0.538	J	0.066	0.13	MG/KG
CM	Se	METALS	0.321 J		0.126	1.3	MG/KG
CM	Hg	METALS	0.266	J	0.00208	0.006	MG/KG
CM	Pb	METALS	118	J	0.198	0.16	MG/KG
CM	Mo	METALS	1.83		0.0391	0.25	MG/KG
CM	Sb	METALS	4.55		0.0297	0.03	MG/KG
CM	As	METALS	10.5		0.068	1.3	MG/KG
CM	Cd	METALS	0.624	J	0.0175	0.6	MG/KG
CM	Co	METALS	14.2		0.0527	0.13	MG/KG
CM	V	METALS	106		0.345	0.6	MG/KG
CM	Al	METALS	57500		2.39	15.9	MG/KG
CM	Fe	METALS	35600		0.564	32	MG/KG
CM	Mn	METALS	468		0.074	0.3	MG/KG

CM	Ni	METALS	81.6			0.0386	1	MG/KG
CM	Ba	METALS	543			0.018	0.19	MG/KG
CM	Cr	METALS	219			0.51	1.3	MG/KG
CM	Cu	METALS	75.5		J	0.24	0.3	MG/KG
CM	Zn	METALS	210		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.423		J	0.066	0.13	MG/KG
CM	Se	METALS	0.304	J		0.126	1.3	MG/KG
CM	Hg	METALS	1.32		J	0.00208	0.006	MG/KG
CM	Pb	METALS	29.3		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.08			0.0391	0.25	MG/KG
CM	Sb	METALS	0.824			0.0297	0.03	MG/KG
CM	As	METALS	14.3			0.068	1.3	MG/KG
CM	Cd	METALS	0.219	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	21.7			0.0527	0.13	MG/KG
CM	V	METALS	154			0.345	0.6	MG/KG
CM	Al	METALS	62100			2.39	15.9	MG/KG
CM	Fe	METALS	38200			0.564	32	MG/KG
CM	Mn	METALS	465			0.074	0.3	MG/KG
CM	Ni	METALS	128			0.0386	1	MG/KG
CM	Ba	METALS	560			0.018	0.19	MG/KG
CM	Cr	METALS	251			0.51	1.3	MG/KG
CM	Cu	METALS	110		J	0.24	0.3	MG/KG
CM	Zn	METALS	242		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.315		J	0.066	0.13	MG/KG
CM	Se	METALS	0.378	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.719			0.00208	0.006	MG/KG
CM	Pb	METALS	114		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.39			0.0391	0.25	MG/KG
CM	Sb	METALS	3.46			0.0297	0.03	MG/KG
CM	As	METALS	13.1			0.068	1.3	MG/KG
CM	Cd	METALS	0.636		J	0.0175	0.6	MG/KG
CM	Co	METALS	18.5			0.0527	0.13	MG/KG
CM	V	METALS	152			0.345	0.6	MG/KG
CM	Al	METALS	69600			2.39	15.9	MG/KG
CM	Fe	METALS	43600			0.564	32	MG/KG
CM	Mn	METALS	451			0.074	0.3	MG/KG
CM	Ni	METALS	109		J	0.0386	1	MG/KG
CM	Ba	METALS	514			0.018	0.19	MG/KG
CM	Cr	METALS	232			0.51	1.3	MG/KG
CM	Cu	METALS	111		J	0.24	0.3	MG/KG
CM	Zn	METALS	221			0.107	1.3	MG/KG
CM	Ag	METALS	0.709			0.066	0.13	MG/KG
CM	Se	METALS	0.411	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.623			0.00208	0.006	MG/KG
CM	Pb	METALS	89.4		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.26			0.0391	0.25	MG/KG
CM	Sb	METALS	2.68			0.0297	0.03	MG/KG
CM	As	METALS	12.1			0.068	1.3	MG/KG
CM	Cd	METALS	0.441	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	18.1			0.0527	0.13	MG/KG
CM	V	METALS	155			0.345	0.6	MG/KG

CM	Al	METALS	70800			2.39	15.9	MG/KG
CM	Fe	METALS	44900			0.564	32	MG/KG
CM	Mn	METALS	435			0.074	0.3	MG/KG
CM	Ni	METALS	105		J	0.0386	1	MG/KG
CM	Ba	METALS	477			0.018	0.19	MG/KG
CM	Cr	METALS	205			0.51	1.3	MG/KG
CM	Cu	METALS	91.7		J	0.24	0.3	MG/KG
CM	Zn	METALS	189			0.107	1.3	MG/KG
CM	Ag	METALS	0.572			0.066	0.13	MG/KG
CM	Se	METALS	0.427	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.62			0.00208	0.006	MG/KG
CM	Pb	METALS	90.8		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.09			0.0391	0.25	MG/KG
CM	Sb	METALS	2.69			0.0297	0.03	MG/KG
CM	As	METALS	12.5			0.068	1.3	MG/KG
CM	Cd	METALS	0.522	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	17.5			0.0527	0.13	MG/KG
CM	V	METALS	146			0.345	0.6	MG/KG
CM	Al	METALS	71100			2.39	15.9	MG/KG
CM	Fe	METALS	45000			0.564	32	MG/KG
CM	Mn	METALS	440			0.074	0.3	MG/KG
CM	Ni	METALS	107		J	0.0386	1	MG/KG
CM	Ba	METALS	483			0.018	0.19	MG/KG
CM	Cr	METALS	212			0.51	1.3	MG/KG
CM	Cu	METALS	95.5		J	0.24	0.3	MG/KG
CM	Zn	METALS	199			0.107	1.3	MG/KG
CM	Ag	METALS	0.615			0.066	0.13	MG/KG
CM	Se	METALS	0.418	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.617		J	0.00208	0.006	MG/KG
CM	Pb	METALS	84.2			0.198	0.16	MG/KG
CM	Mo	METALS	1		J	0.0391	0.25	MG/KG
CM	Sb	METALS	2.52		J	0.0297	0.03	MG/KG
CM	As	METALS	11.6		J	0.068	1.3	MG/KG
CM	Cd	METALS	0.454	J		0.0175	0.6	MG/KG
CM	Co	METALS	17.8			0.0527	0.13	MG/KG
CM	V	METALS	150			0.345	0.6	MG/KG
CM	Al	METALS	72100			2.39	15.9	MG/KG
CM	Fe	METALS	46800			0.564	32	MG/KG
CM	Mn	METALS	457			0.074	0.3	MG/KG
CM	Ni	METALS	110			0.0386	1	MG/KG
CM	Ba	METALS	432			0.018	0.19	MG/KG
CM	Cr	METALS	207			0.51	1.3	MG/KG
CM	Cu	METALS	94.9			0.24	0.3	MG/KG
CM	Zn	METALS	189			0.107	1.3	MG/KG
CM	Ag	METALS	0.583		J	0.066	0.13	MG/KG
CM	Se	METALS	0.331	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.571			0.00208	0.006	MG/KG
CM	Pb	METALS	86.3		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.988			0.0391	0.25	MG/KG
CM	Sb	METALS	2.4			0.0297	0.03	MG/KG
CM	As	METALS	11.7			0.068	1.3	MG/KG

CM	Cd	METALS	0.403	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	17.9			0.0527	0.13	MG/KG
CM	V	METALS	147			0.345	0.6	MG/KG
CM	Al	METALS	71700			2.39	15.9	MG/KG
CM	Fe	METALS	45500			0.564	32	MG/KG
CM	Mn	METALS	468			0.074	0.3	MG/KG
CM	Ni	METALS	107		J	0.0386	1	MG/KG
CM	Ba	METALS	472			0.018	0.19	MG/KG
CM	Cr	METALS	205			0.51	1.3	MG/KG
CM	Cu	METALS	89.1		J	0.24	0.3	MG/KG
CM	Zn	METALS	181			0.107	1.3	MG/KG
CM	Ag	METALS	2.8			0.066	0.13	MG/KG
CM	Se	METALS	0.399	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.506		J	0.00208	0.006	MG/KG
CM	Pb	METALS	70			0.198	0.16	MG/KG
CM	Mo	METALS	1.24		J	0.0391	0.25	MG/KG
CM	Sb	METALS	2.03		J	0.0297	0.03	MG/KG
CM	As	METALS	11.4		J	0.068	1.3	MG/KG
CM	Cd	METALS	0.272	J		0.0175	0.6	MG/KG
CM	Co	METALS	17.7			0.0527	0.13	MG/KG
CM	V	METALS	155			0.345	0.6	MG/KG
CM	Al	METALS	73500			2.39	15.9	MG/KG
CM	Fe	METALS	47800			0.564	32	MG/KG
CM	Mn	METALS	437			0.074	0.3	MG/KG
CM	Ni	METALS	109			0.0386	1	MG/KG
CM	Ba	METALS	414			0.018	0.19	MG/KG
CM	Cr	METALS	197			0.51	1.3	MG/KG
CM	Cu	METALS	78.8			0.24	0.3	MG/KG
CM	Zn	METALS	171			0.107	1.3	MG/KG
CM	Ag	METALS	0.521		J	0.066	0.13	MG/KG
CM	Se	METALS	0.333	J		0.126	1.3	MG/KG
CM	Se	METALS	0.225	J		0.126	1.3	MG/KG
CM	Ag	METALS	0.683		J	0.066	0.13	MG/KG
CM	Hg	METALS	0.79		J	0.00208	0.006	MG/KG
CM	Pb	METALS	139			0.198	0.16	MG/KG
CM	Mo	METALS	1.03		J	0.0391	0.25	MG/KG
CM	Sb	METALS	10.6		J	0.0297	0.03	MG/KG
CM	As	METALS	11.3		J	0.068	1.3	MG/KG
CM	Cd	METALS	0.705			0.0175	0.6	MG/KG
CM	Co	METALS	19.4			0.0527	0.13	MG/KG
CM	V	METALS	112			0.345	0.6	MG/KG
CM	Al	METALS	53900			2.39	15.9	MG/KG
CM	Fe	METALS	39200			0.564	32	MG/KG
CM	Mn	METALS	580			0.074	0.3	MG/KG
CM	Ni	METALS	199			0.0386	1	MG/KG
CM	Ba	METALS	490			0.018	0.19	MG/KG
CM	Cr	METALS	451			0.51	1.3	MG/KG
CM	Cu	METALS	173			0.24	0.3	MG/KG
CM	Zn	METALS	228			0.107	1.3	MG/KG
CM	Pb	METALS	73.6		J	0.198	0.16	MG/KG
CM	Mo	METALS	1.12			0.0391	0.25	MG/KG

CM	Sb	METALS	5.77			0.0297	0.03	MG/KG
CM	As	METALS	11.2			0.068	1.3	MG/KG
CM	Cd	METALS	0.278	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	21.3			0.0527	0.13	MG/KG
CM	V	METALS	121			0.345	0.6	MG/KG
CM	Al	METALS	65000			2.39	15.9	MG/KG
CM	Fe	METALS	42400			0.564	32	MG/KG
CM	Mn	METALS	499			0.074	0.3	MG/KG
CM	Ni	METALS	162			0.0386	1	MG/KG
CM	Ba	METALS	458			0.018	0.19	MG/KG
CM	Cr	METALS	273			0.51	1.3	MG/KG
CM	Cu	METALS	102		J	0.24	0.3	MG/KG
CM	Zn	METALS	195		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.412		J	0.066	0.13	MG/KG
CM	Se	METALS	0.34	J		0.126	1.3	MG/KG
CM	Hg	METALS	0.769		J	0.00208	0.006	MG/KG
CM	Hg	METALS	0.232		J	0.00208	0.006	MG/KG
CM	Pb	METALS	122		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.704			0.0391	0.25	MG/KG
CM	Sb	METALS	3.95			0.0297	0.03	MG/KG
CM	As	METALS	5.86			0.068	1.3	MG/KG
CM	Cd	METALS	0.428	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	11.3			0.0527	0.13	MG/KG
CM	V	METALS	77.5			0.345	0.6	MG/KG
CM	Al	METALS	49200			2.39	15.9	MG/KG
CM	Fe	METALS	25500			0.564	32	MG/KG
CM	Mn	METALS	357			0.074	0.3	MG/KG
CM	Ni	METALS	92.8			0.0386	1	MG/KG
CM	Ba	METALS	458			0.018	0.19	MG/KG
CM	Cr	METALS	175			0.51	1.3	MG/KG
CM	Cu	METALS	66.1		J	0.24	0.3	MG/KG
CM	Zn	METALS	209		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.257		J	0.066	0.13	MG/KG
CM	Se	METALS	0.151	J		0.126	1.3	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	Ag	METALS	0.139		J	0.066	0.13	MG/KG
CM	Hg	METALS	0.959		J	0.00208	0.006	MG/KG
CM	Pb	METALS	11		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.875			0.0391	0.25	MG/KG
CM	Sb	METALS	0.485			0.0297	0.03	MG/KG
CM	As	METALS	11.5			0.068	1.3	MG/KG
CM	Cd	METALS	0.252	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	18.4			0.0527	0.13	MG/KG
CM	V	METALS	146			0.345	0.6	MG/KG
CM	Al	METALS	39100			2.39	15.9	MG/KG
CM	Fe	METALS	15700			0.564	32	MG/KG
CM	Mn	METALS	271			0.074	0.3	MG/KG
CM	Ni	METALS	72.5			0.0386	1	MG/KG
CM	Ba	METALS	893			0.018	0.19	MG/KG
CM	Cr	METALS	167			0.51	1.3	MG/KG
CM	Cu	METALS	285		J	0.24	0.3	MG/KG

CM	Zn	METALS	175		J	0.107	1.3	MG/KG
CM	Hg	METALS	1.06		J	0.00208	0.006	MG/KG
CM	Pb	METALS	106			0.198	0.16	MG/KG
CM	Mo	METALS	1.14		J	0.0391	0.25	MG/KG
CM	Sb	METALS	4.29		J	0.0297	0.03	MG/KG
CM	As	METALS	11.3		J	0.068	1.3	MG/KG
CM	Cd	METALS	0.682			0.0175	0.6	MG/KG
CM	Co	METALS	17.6			0.0527	0.13	MG/KG
CM	V	METALS	139			0.345	0.6	MG/KG
CM	Al	METALS	68600			2.39	15.9	MG/KG
CM	Fe	METALS	44600			0.564	32	MG/KG
CM	Mn	METALS	444			0.074	0.3	MG/KG
CM	Ni	METALS	118			0.0386	1	MG/KG
CM	Ba	METALS	469			0.018	0.19	MG/KG
CM	Cr	METALS	225			0.51	1.3	MG/KG
CM	Cu	METALS	133			0.24	0.3	MG/KG
CM	Zn	METALS	215			0.107	1.3	MG/KG
CM	Ag	METALS	0.634		J	0.066	0.13	MG/KG
CM	Se	METALS	0.457	J		0.126	1.3	MG/KG
CM	Hg	METALS	1.47		J	0.00208	0.006	MG/KG
CM	Pb	METALS	11.8		J	0.198	0.16	MG/KG
CM	Mo	METALS	0.773			0.0391	0.25	MG/KG
CM	Sb	METALS	0.654			0.0297	0.03	MG/KG
CM	As	METALS	9.95			0.068	1.3	MG/KG
CM	Cd	METALS	0.262	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	21.9			0.0527	0.13	MG/KG
CM	V	METALS	172			0.345	0.6	MG/KG
CM	Al	METALS	46400			2.39	15.9	MG/KG
CM	Fe	METALS	31000			0.564	32	MG/KG
CM	Mn	METALS	453			0.074	0.3	MG/KG
CM	Ni	METALS	161			0.0386	1	MG/KG
CM	Ba	METALS	761			0.018	0.19	MG/KG
CM	Cr	METALS	338			0.51	1.3	MG/KG
CM	Cu	METALS	319		J	0.24	0.3	MG/KG
CM	Zn	METALS	297		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.144		J	0.066	0.13	MG/KG
CM	Se	METALS	0.178	J		0.126	1.3	MG/KG
CM	Hg	METALS	1.26		J	0.00208	0.006	MG/KG
CM	Pb	METALS	142			0.198	0.16	MG/KG
CM	Mo	METALS	1.5		J	0.0391	0.25	MG/KG
CM	Sb	METALS	7.43		J	0.0297	0.03	MG/KG
CM	As	METALS	12.9		J	0.068	1.3	MG/KG
CM	Cd	METALS	0.567	J		0.0175	0.6	MG/KG
CM	Co	METALS	18.2			0.0527	0.13	MG/KG
CM	V	METALS	141			0.345	0.6	MG/KG
CM	Al	METALS	65300			2.39	15.9	MG/KG
CM	Fe	METALS	42600			0.564	32	MG/KG
CM	Mn	METALS	446			0.074	0.3	MG/KG
CM	Ni	METALS	130			0.0386	1	MG/KG
CM	Ba	METALS	459			0.018	0.19	MG/KG
CM	Cr	METALS	256			0.51	1.3	MG/KG

CM	Cu	METALS	163		0.24	0.3	MG/KG
CM	Zn	METALS	243		0.107	1.3	MG/KG
CM	Ag	METALS	0.695	J	0.066	0.13	MG/KG
CM	Se	METALS	0.363 J		0.126	1.3	MG/KG
CM	Hg	METALS	0.844	J	0.00208	0.006	MG/KG
CM	Pb	METALS	114	J	0.198	0.16	MG/KG
CM	Mo	METALS	0.826		0.0391	0.25	MG/KG
CM	Sb	METALS	7.26		0.0297	0.03	MG/KG
CM	As	METALS	7.03		0.068	1.3	MG/KG
CM	Cd	METALS	0.395 J	J	0.0175	0.6	MG/KG
CM	Co	METALS	10.5		0.0527	0.13	MG/KG
CM	V	METALS	50.9		0.345	0.6	MG/KG
CM	Al	METALS	47900		2.39	15.9	MG/KG
CM	Fe	METALS	21000		0.564	32	MG/KG
CM	Mn	METALS	305		0.074	0.3	MG/KG
CM	Ni	METALS	123		0.0386	1	MG/KG
CM	Ba	METALS	726		0.018	0.19	MG/KG
CM	Cr	METALS	292		0.51	1.3	MG/KG
CM	Cu	METALS	277	J	0.24	0.3	MG/KG
CM	Zn	METALS	212	J	0.107	1.3	MG/KG
CM	Ag	METALS	0.37	J	0.066	0.13	MG/KG
CM	Se	METALS	0.199 J		0.126	1.3	MG/KG
CM	TOC	TOC	8810		76.8	100	MG/KG
CM	TOC	TOC	9500		76.8	100	MG/KG
CM	TOC	TOC	9430		76.8	100	MG/KG
CM	TOC	TOC	9180		76.8	100	MG/KG
CM	TOC	TOC	9010		76.8	100	MG/KG
CM	TOC	TOC	11100		76.8	100	MG/KG
CM	TOC	TOC	11400	J	76.8	100	MG/KG
CM	TOC	TOC	8430	J	76.8	100	MG/KG
CM	TOC	TOC	11200	J	76.8	100	MG/KG
CM	TOC	TOC	11900	J	76.8	100	MG/KG
CM	TOC	TOC	12800		76.8	100	MG/KG
CM	TOC	TOC	13200		76.8	100	MG/KG
CM	TOC	TOC	12100		76.8	100	MG/KG
CM	TOC	TOC	650		76.8	100	MG/KG
CM	TOC	TOC	6960		76.8	100	MG/KG
CM	TOC	TOC	4340		76.8	100	MG/KG
CM	TOC	TOC	3260		76.8	100	MG/KG
CM	TOC	TOC	6890		76.8	100	MG/KG
CM	TOC	TOC	11900		76.8	100	MG/KG
CM	TOC	TOC	3320		76.8	100	MG/KG
CM	TOC	TOC	6340	J	76.8	100	MG/KG
CM	TOC	TOC	6190	J	76.8	100	MG/KG
CM	TOC	TOC	2030	J	76.8	100	MG/KG
CM	TOC	TOC	8450	J	76.8	100	MG/KG
CM	TOC	TOC	16300	J	76.8	100	MG/KG
CM	TOC	TOC	17000	J	76.8	100	MG/KG
CM	TOC	TOC	13600	J	76.8	100	MG/KG
CM	TOC	TOC	15800	J	76.8	100	MG/KG
CM	TOC	TOC	15700	J	76.8	100	MG/KG

CM	TOC	TOC	15900	J	76.8	100 MG/KG
CM	TOC	TOC	14300	J	76.8	100 MG/KG
CM	TOC	TOC	13000	J	76.8	100 MG/KG
CM	TOC	TOC	24600	J	76.8	100 MG/KG
CM	TOC	TOC	13800	J	76.8	100 MG/KG
CM	TOC	TOC	16400	J	76.8	100 MG/KG
CM	TOC	TOC	15600	J	76.8	100 MG/KG
CM	TOC	TOC	18700	J	76.8	100 MG/KG
CM	TOC	TOC	13800	J	76.8	100 MG/KG
CM	TOC	TOC	8940	J	76.8	100 MG/KG
CM	TOC	TOC	17500	J	76.8	100 MG/KG
CM	TOC	TOC	7770		76.8	100 MG/KG
CM	TOC	TOC	10400		76.8	100 MG/KG
CM	TOC	TOC	8770		76.8	100 MG/KG
CM	TOC	TOC	10500		76.8	100 MG/KG
CM	TOC	TOC	10700		76.8	100 MG/KG
CM	TOC	TOC	11300	J	76.8	100 MG/KG
CM	TOC	TOC	11000	J	76.8	100 MG/KG
CM	TOC	TOC	12500	J	76.8	100 MG/KG
CM	TOC	TOC	10700	J	76.8	100 MG/KG
CM	TOC	TOC	11100	J	76.8	100 MG/KG
CM	TOC	TOC	15200		76.8	100 MG/KG
CM	TOC	TOC	17000		76.8	100 MG/KG
CM	TOC	TOC	15600		76.8	100 MG/KG
CM	TOC	TOC	15200		76.8	100 MG/KG
CM	TOC	TOC	10400		76.8	100 MG/KG
CM	TOC	TOC	15300	J	76.8	100 MG/KG
CM	TOC	TOC	11100		76.8	100 MG/KG
CM	TOC	TOC	7860		76.8	100 MG/KG
CM	TOC	TOC	12600		76.8	100 MG/KG
CM	TOC	TOC	13500	J	76.8	100 MG/KG
CM	TOC	TOC	16800		76.8	100 MG/KG
CM	TOC	TOC	10300		76.8	100 MG/KG
CM	TOC	TOC	14700		76.8	100 MG/KG
CM	TOC	TOC	8880		76.8	100 MG/KG
CM	TOC	TOC	11600		76.8	100 MG/KG
CM	TOC	TOC	9640		76.8	100 MG/KG
CM	TOC	TOC	12900		76.8	100 MG/KG
CM	TOC	TOC	14100		76.8	100 MG/KG
CM	TOC	TOC	9950	J	76.8	100 MG/KG
CM	TOC	TOC	14500	J	76.8	100 MG/KG
CM	TOC	TOC	3720		76.8	100 MG/KG

CONC2

SAMP_ID	CLIENT_S	FIELD_	STATION	AREA_NAME	MEDIA	DATE_STA	TOP	BOT
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-107-E	AAB-107	SA	EW-30	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-106-E	AAB-106	DU	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5

AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-124-E	AAB-124	SA	EW-33	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-108-E	AAB-108	SA	EW-34	Eastern Wetland Area	SEDIMENT	5/20/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-105-E	AAB-105	SA	EW-36	Eastern Wetland Area	SEDIMENT	5/19/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5

AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-125-E	AAB-125	SA	OR-24	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-116-E	AAB-116	SA	OR-26	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-117-E	AAB-117	SA	OR-27	Oil Reclamation Area	SEDIMENT	5/21/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5

AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-148-E	AAB-148	SA	SB-01	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-143-E	AAB-143	SA	SB-02	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-122-E	AAB-122	SA	SB-03	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5

AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-121-E	AAB-121	SA	SB-04	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-141-E	AAB-141	SA	SB-05	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-120-E	AAB-120	SA	SB-06	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5

AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-119-E	AAB-119	SA	SB-07	South Basin Area X	SEDIMENT	5/22/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-115-E	AAB-115	SA	SB-08	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5

AAB-145-E	AAB-145	SA	SB-09	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-144-E	AAB-144	SA	SB-10	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-139-E	AAB-139	SA	SB-11	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5

AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-140-E	AAB-140	DU	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-154-E	AAB-154	SA	SB-12	South Basin Area X	SEDIMENT	5/15/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-113-E	AAB-113	SA	SB-13	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5

AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-138-E	AAB-138	SA	SB-14	South Basin Area X	SEDIMENT	5/14/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-114-E	AAB-114	SA	SB-15	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-112-E	AAB-112	SA	SB-16	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5

AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-146-E	AAB-146	SA	SB-17	South Basin Area X	SEDIMENT	5/18/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-100-E	AAB-100	SA	SB-18	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-101-E	AAB-101	SA	SB-19	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5

AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-109-E	AAB-109	SA	SB-20	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-102-E	AAB-102	SA	SB-21	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-111-E	AAB-111	SA	SB-22	South Basin Area X	SEDIMENT	5/20/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5

AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5
AAB-099-E	AAB-099	SA	SB-23	South Basin Area X	SEDIMENT	5/17/2001	0	5

DEP_UNIT	PC	GROUP	RESULT	QUAL	VALQUAL	MDL	RDL	UNIT
CM	Ag	METALS	0.066	U	UJ	0.066	0.13	MG/KG
CM	Al	METALS	45000			2.39	15.9	MG/KG
CM	As	METALS	5.18			0.068	1.3	MG/KG
CM	Ba	METALS	335			0.018	0.19	MG/KG
CM	Cd	METALS	0.247	J		0.0175	0.6	MG/KG
CM	Co	METALS	12.7			0.0527	0.13	MG/KG
CM	Cr	METALS	400			0.51	1.3	MG/KG
CM	Cu	METALS	32.9			0.24	0.3	MG/KG
CM	Fe	METALS	28800			0.564	32	MG/KG
CM	Hg	METALS	0.0808		J	0.00208	0.006	MG/KG
CM	Mn	METALS	567			0.074	0.3	MG/KG
CM	Mo	METALS	0.641			0.0391	0.25	MG/KG
CM	Ni	METALS	62.8			0.0386	1	MG/KG
CM	Pb	METALS	20.6			0.198	0.16	MG/KG
CM	Sb	METALS	1.41			0.0297	0.03	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	V	METALS	87.2			0.345	0.6	MG/KG
CM	Zn	METALS	89.8			0.107	1.3	MG/KG
CM	Ag	METALS	0.0839	J	J	0.066	0.13	MG/KG
CM	Al	METALS	47500			2.39	15.9	MG/KG
CM	As	METALS	6.27			0.068	1.3	MG/KG
CM	Ba	METALS	386			0.018	0.19	MG/KG
CM	Cd	METALS	0.154	J		0.0175	0.6	MG/KG
CM	Co	METALS	12.7			0.0527	0.13	MG/KG
CM	Cr	METALS	491			0.51	1.3	MG/KG
CM	Cu	METALS	32.5			0.24	0.3	MG/KG
CM	Fe	METALS	33900			0.564	32	MG/KG
CM	Hg	METALS	0.148		J	0.00208	0.006	MG/KG
CM	Mn	METALS	589			0.074	0.3	MG/KG
CM	Mo	METALS	0.578			0.0391	0.25	MG/KG
CM	Ni	METALS	74.9			0.0386	1	MG/KG
CM	Pb	METALS	21.3			0.198	0.16	MG/KG
CM	Sb	METALS	7.8			0.0297	0.03	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	V	METALS	84.1			0.345	0.6	MG/KG
CM	Zn	METALS	125			0.107	1.3	MG/KG
CM	Ag	METALS	0.0732	J	J	0.066	0.13	MG/KG
CM	Al	METALS	43500			2.39	15.9	MG/KG
CM	As	METALS	6.12			0.068	1.3	MG/KG
CM	Ba	METALS	372			0.018	0.19	MG/KG
CM	Cd	METALS	0.264	J		0.0175	0.6	MG/KG
CM	Co	METALS	12.8			0.0527	0.13	MG/KG
CM	Cr	METALS	225			0.51	1.3	MG/KG
CM	Cu	METALS	20.8			0.24	0.3	MG/KG
CM	Fe	METALS	27200			0.564	32	MG/KG
CM	Hg	METALS	0.142		J	0.00208	0.006	MG/KG
CM	Mn	METALS	579			0.074	0.3	MG/KG
CM	Mo	METALS	0.494			0.0391	0.25	MG/KG
CM	Ni	METALS	59.6			0.0386	1	MG/KG
CM	Pb	METALS	18.5			0.198	0.16	MG/KG

CM	Sb	METALS	3.64			0.0297	0.03	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	V	METALS	82.6			0.345	0.6	MG/KG
CM	Zn	METALS	79.5			0.107	1.3	MG/KG
CM	Ag	METALS	0.0841	J	J	0.066	0.13	MG/KG
CM	Al	METALS	50000			2.39	15.9	MG/KG
CM	As	METALS	6.55		J	0.068	1.3	MG/KG
CM	Ba	METALS	384			0.018	0.19	MG/KG
CM	Cd	METALS	0.189	J		0.0175	0.6	MG/KG
CM	Co	METALS	13.2			0.0527	0.13	MG/KG
CM	Cr	METALS	300			0.51	1.3	MG/KG
CM	Cu	METALS	19.9			0.24	0.3	MG/KG
CM	Fe	METALS	30900			0.564	32	MG/KG
CM	Hg	METALS	0.093		J	0.00208	0.006	MG/KG
CM	Mn	METALS	540			0.074	0.3	MG/KG
CM	Mo	METALS	0.381		J	0.0391	0.25	MG/KG
CM	Ni	METALS	63.4			0.0386	1	MG/KG
CM	Pb	METALS	17.3			0.198	0.16	MG/KG
CM	Sb	METALS	0.874		J	0.0297	0.03	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	V	METALS	81.4			0.345	0.6	MG/KG
CM	Zn	METALS	84.7			0.107	1.3	MG/KG
CM	Ag	METALS	0.0768	J	J	0.066	0.13	MG/KG
CM	Al	METALS	47800			2.39	15.9	MG/KG
CM	As	METALS	6.35			0.068	1.3	MG/KG
CM	Ba	METALS	370			0.018	0.19	MG/KG
CM	Cd	METALS	0.195	J		0.0175	0.6	MG/KG
CM	Co	METALS	13.1			0.0527	0.13	MG/KG
CM	Cr	METALS	246			0.51	1.3	MG/KG
CM	Cu	METALS	21.5			0.24	0.3	MG/KG
CM	Fe	METALS	27200			0.564	32	MG/KG
CM	Hg	METALS	0.0914		J	0.00208	0.006	MG/KG
CM	Mn	METALS	474			0.074	0.3	MG/KG
CM	Mo	METALS	0.447			0.0391	0.25	MG/KG
CM	Ni	METALS	64.9			0.0386	1	MG/KG
CM	Pb	METALS	15.7			0.198	0.16	MG/KG
CM	Sb	METALS	0.642			0.0297	0.03	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	V	METALS	82.5			0.345	0.6	MG/KG
CM	Zn	METALS	69.3			0.107	1.3	MG/KG
CM	Ag	METALS	0.356		J	0.066	0.13	MG/KG
CM	Al	METALS	57300			2.39	15.9	MG/KG
CM	As	METALS	10.9		J	0.068	1.3	MG/KG
CM	Ba	METALS	381			0.018	0.19	MG/KG
CM	Cd	METALS	0.341	J		0.0175	0.6	MG/KG
CM	Co	METALS	19.8			0.0527	0.13	MG/KG
CM	Cr	METALS	434			0.51	1.3	MG/KG
CM	Cu	METALS	97.5			0.24	0.3	MG/KG
CM	Fe	METALS	45600			0.564	32	MG/KG
CM	Hg	METALS	0.484		J	0.00208	0.006	MG/KG
CM	Mn	METALS	624			0.074	0.3	MG/KG

CM	Mo	METALS	1.41	J	0.0391	0.25	MG/KG
CM	Ni	METALS	160		0.0386	1	MG/KG
CM	Pb	METALS	60.1		0.198	0.16	MG/KG
CM	Sb	METALS	2.38	J	0.0297	0.03	MG/KG
CM	Se	METALS	0.239 J		0.126	1.3	MG/KG
CM	V	METALS	134		0.345	0.6	MG/KG
CM	Zn	METALS	179		0.107	1.3	MG/KG
CM	Ag	METALS	0.397	J	0.066	0.13	MG/KG
CM	Al	METALS	68300		2.39	15.9	MG/KG
CM	As	METALS	13.6	J	0.068	1.3	MG/KG
CM	Ba	METALS	396		0.018	0.19	MG/KG
CM	Cd	METALS	0.399 J		0.0175	0.6	MG/KG
CM	Co	METALS	19.4		0.0527	0.13	MG/KG
CM	Cr	METALS	254		0.51	1.3	MG/KG
CM	Cu	METALS	86.4		0.24	0.3	MG/KG
CM	Fe	METALS	48700		0.564	32	MG/KG
CM	Hg	METALS	0.602	J	0.00208	0.006	MG/KG
CM	Mn	METALS	505		0.074	0.3	MG/KG
CM	Mo	METALS	1.68	J	0.0391	0.25	MG/KG
CM	Ni	METALS	116		0.0386	1	MG/KG
CM	Pb	METALS	48		0.198	0.16	MG/KG
CM	Sb	METALS	2.35	J	0.0297	0.03	MG/KG
CM	Se	METALS	0.341 J		0.126	1.3	MG/KG
CM	V	METALS	154		0.345	0.6	MG/KG
CM	Zn	METALS	159		0.107	1.3	MG/KG
CM	Ag	METALS	0.415	J	0.066	0.13	MG/KG
CM	Al	METALS	66400		2.39	15.9	MG/KG
CM	As	METALS	12.7	J	0.068	1.3	MG/KG
CM	Ba	METALS	376		0.018	0.19	MG/KG
CM	Cd	METALS	0.359 J		0.0175	0.6	MG/KG
CM	Co	METALS	18.3		0.0527	0.13	MG/KG
CM	Cr	METALS	464		0.51	1.3	MG/KG
CM	Cu	METALS	64.5		0.24	0.3	MG/KG
CM	Fe	METALS	47400		0.564	32	MG/KG
CM	Hg	METALS	0.451	J	0.00208	0.006	MG/KG
CM	Mn	METALS	485		0.074	0.3	MG/KG
CM	Mo	METALS	1.71	J	0.0391	0.25	MG/KG
CM	Ni	METALS	121		0.0386	1	MG/KG
CM	Pb	METALS	51.4		0.198	0.16	MG/KG
CM	Sb	METALS	3.17	J	0.0297	0.03	MG/KG
CM	Se	METALS	0.357 J		0.126	1.3	MG/KG
CM	V	METALS	149		0.345	0.6	MG/KG
CM	Zn	METALS	145		0.107	1.3	MG/KG
CM	Ag	METALS	0.523	J	0.066	0.13	MG/KG
CM	Al	METALS	61900		2.39	15.9	MG/KG
CM	As	METALS	8.15		0.068	1.3	MG/KG
CM	Ba	METALS	501		0.018	0.19	MG/KG
CM	Cd	METALS	0.845		0.0175	0.6	MG/KG
CM	Co	METALS	12.7		0.0527	0.13	MG/KG
CM	Cr	METALS	202		0.51	1.3	MG/KG
CM	Cu	METALS	69.8		0.24	0.3	MG/KG

CM	Fe	METALS	36200			0.564	32	MG/KG
CM	Hg	METALS	0.553		J	0.00208	0.006	MG/KG
CM	Mn	METALS	437			0.074	0.3	MG/KG
CM	Mo	METALS	1.18			0.0391	0.25	MG/KG
CM	Ni	METALS	76.6			0.0386	1	MG/KG
CM	Pb	METALS	121			0.198	0.16	MG/KG
CM	Sb	METALS	1.61			0.0297	0.03	MG/KG
CM	Se	METALS	0.227	J		0.126	1.3	MG/KG
CM	V	METALS	101			0.345	0.6	MG/KG
CM	Zn	METALS	188			0.107	1.3	MG/KG
CM	Ag	METALS	0.491		J	0.066	0.13	MG/KG
CM	Al	METALS	69800			2.39	15.9	MG/KG
CM	As	METALS	9.23			0.068	1.3	MG/KG
CM	Ba	METALS	474			0.018	0.19	MG/KG
CM	Cd	METALS	0.63			0.0175	0.6	MG/KG
CM	Co	METALS	14.5			0.0527	0.13	MG/KG
CM	Cr	METALS	189			0.51	1.3	MG/KG
CM	Cu	METALS	85.1			0.24	0.3	MG/KG
CM	Fe	METALS	43100			0.564	32	MG/KG
CM	Hg	METALS	0.559		J	0.00208	0.006	MG/KG
CM	Mn	METALS	416			0.074	0.3	MG/KG
CM	Mo	METALS	1.15			0.0391	0.25	MG/KG
CM	Ni	METALS	92.9			0.0386	1	MG/KG
CM	Pb	METALS	94.3			0.198	0.16	MG/KG
CM	Sb	METALS	1.56			0.0297	0.03	MG/KG
CM	Se	METALS	0.387	J		0.126	1.3	MG/KG
CM	V	METALS	121			0.345	0.6	MG/KG
CM	Zn	METALS	189			0.107	1.3	MG/KG
CM	Ag	METALS	0.425		J	0.066	0.13	MG/KG
CM	Al	METALS	73200			2.39	15.9	MG/KG
CM	As	METALS	9.33			0.068	1.3	MG/KG
CM	Ba	METALS	445			0.018	0.19	MG/KG
CM	Cd	METALS	0.371			0.0175	0.6	MG/KG
CM	Co	METALS	15.3			0.0527	0.13	MG/KG
CM	Cr	METALS	171			0.51	1.3	MG/KG
CM	Cu	METALS	74.4			0.24	0.3	MG/KG
CM	Fe	METALS	45800			0.564	32	MG/KG
CM	Hg	METALS	0.466		J	0.00208	0.006	MG/KG
CM	Mn	METALS	404			0.074	0.3	MG/KG
CM	Mo	METALS	1.27			0.0391	0.25	MG/KG
CM	Ni	METALS	104			0.0386	1	MG/KG
CM	Pb	METALS	69.3			0.198	0.16	MG/KG
CM	Sb	METALS	1.5			0.0297	0.03	MG/KG
CM	Se	METALS	0.41	J		0.126	1.3	MG/KG
CM	V	METALS	131			0.345	0.6	MG/KG
CM	Zn	METALS	164			0.107	1.3	MG/KG
CM	Ag	METALS	0.455		J	0.066	0.13	MG/KG
CM	Al	METALS	74000			2.39	15.9	MG/KG
CM	As	METALS	8.52			0.068	1.3	MG/KG
CM	Ba	METALS	456			0.018	0.19	MG/KG
CM	Cd	METALS	0.323			0.0175	0.6	MG/KG

CM	Co	METALS	15.3			0.0527	0.13	MG/KG
CM	Cr	METALS	185			0.51	1.3	MG/KG
CM	Cu	METALS	74			0.24	0.3	MG/KG
CM	Fe	METALS	46500			0.564	32	MG/KG
CM	Hg	METALS	0.447		J	0.00208	0.006	MG/KG
CM	Mn	METALS	416			0.074	0.3	MG/KG
CM	Mo	METALS	1.13			0.0391	0.25	MG/KG
CM	Ni	METALS	103			0.0386	1	MG/KG
CM	Pb	METALS	67.2			0.198	0.16	MG/KG
CM	Sb	METALS	1.62			0.0297	0.03	MG/KG
CM	Se	METALS	0.386	J		0.126	1.3	MG/KG
CM	V	METALS	130			0.345	0.6	MG/KG
CM	Zn	METALS	166			0.107	1.3	MG/KG
CM	Ag	METALS	0.544			0.066	0.13	MG/KG
CM	Al	METALS	73900			2.39	15.9	MG/KG
CM	As	METALS	11.3			0.068	1.3	MG/KG
CM	Ba	METALS	458			0.018	0.19	MG/KG
CM	Cd	METALS	0.413	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	17.8			0.0527	0.13	MG/KG
CM	Cr	METALS	189			0.51	1.3	MG/KG
CM	Cu	METALS	78		J	0.24	0.3	MG/KG
CM	Fe	METALS	47200			0.564	32	MG/KG
CM	Hg	METALS	0.595			0.00208	0.006	MG/KG
CM	Mn	METALS	412			0.074	0.3	MG/KG
CM	Mo	METALS	1.47			0.0391	0.25	MG/KG
CM	Ni	METALS	105		J	0.0386	1	MG/KG
CM	Pb	METALS	65.4		J	0.198	0.16	MG/KG
CM	Sb	METALS	1.56			0.0297	0.03	MG/KG
CM	Se	METALS	0.444	J		0.126	1.3	MG/KG
CM	V	METALS	157			0.345	0.6	MG/KG
CM	Zn	METALS	205			0.107	1.3	MG/KG
CM	Ag	METALS	0.566		J	0.066	0.13	MG/KG
CM	Al	METALS	71600			2.39	15.9	MG/KG
CM	As	METALS	10.8		J	0.068	1.3	MG/KG
CM	Ba	METALS	400			0.018	0.19	MG/KG
CM	Cd	METALS	0.36	J		0.0175	0.6	MG/KG
CM	Co	METALS	17.2			0.0527	0.13	MG/KG
CM	Cr	METALS	198			0.51	1.3	MG/KG
CM	Cu	METALS	76.9			0.24	0.3	MG/KG
CM	Fe	METALS	46800			0.564	32	MG/KG
CM	Hg	METALS	0.497		J	0.00208	0.006	MG/KG
CM	Mn	METALS	431			0.074	0.3	MG/KG
CM	Mo	METALS	1.05		J	0.0391	0.25	MG/KG
CM	Ni	METALS	104			0.0386	1	MG/KG
CM	Pb	METALS	65.3			0.198	0.16	MG/KG
CM	Sb	METALS	1.73		J	0.0297	0.03	MG/KG
CM	Se	METALS	0.322	J		0.126	1.3	MG/KG
CM	V	METALS	153			0.345	0.6	MG/KG
CM	Zn	METALS	185			0.107	1.3	MG/KG
CM	Ag	METALS	0.504		J	0.066	0.13	MG/KG
CM	Al	METALS	70500			2.39	15.9	MG/KG

CM	As	METALS	10.6			0.068	1.3	MG/KG
CM	Ba	METALS	475			0.018	0.19	MG/KG
CM	Cd	METALS	0.467			0.0175	0.6	MG/KG
CM	Co	METALS	15.5			0.0527	0.13	MG/KG
CM	Cr	METALS	209			0.51	1.3	MG/KG
CM	Cu	METALS	80.1			0.24	0.3	MG/KG
CM	Fe	METALS	45600			0.564	32	MG/KG
CM	Hg	METALS	0.647		J	0.00208	0.006	MG/KG
CM	Mn	METALS	430			0.074	0.3	MG/KG
CM	Mo	METALS	1.34			0.0391	0.25	MG/KG
CM	Ni	METALS	104			0.0386	1	MG/KG
CM	Pb	METALS	88.9			0.198	0.16	MG/KG
CM	Sb	METALS	2.08			0.0297	0.03	MG/KG
CM	Se	METALS	0.364	J		0.126	1.3	MG/KG
CM	V	METALS	126			0.345	0.6	MG/KG
CM	Zn	METALS	186			0.107	1.3	MG/KG
CM	Ag	METALS	0.538		J	0.066	0.13	MG/KG
CM	Al	METALS	74100			2.39	15.9	MG/KG
CM	As	METALS	11.7		J	0.068	1.3	MG/KG
CM	Ba	METALS	434			0.018	0.19	MG/KG
CM	Cd	METALS	0.348	J		0.0175	0.6	MG/KG
CM	Co	METALS	17.1			0.0527	0.13	MG/KG
CM	Cr	METALS	202			0.51	1.3	MG/KG
CM	Cu	METALS	80.9			0.24	0.3	MG/KG
CM	Fe	METALS	47800			0.564	32	MG/KG
CM	Hg	METALS	0.491		J	0.00208	0.006	MG/KG
CM	Mn	METALS	439			0.074	0.3	MG/KG
CM	Mo	METALS	0.963		J	0.0391	0.25	MG/KG
CM	Ni	METALS	107			0.0386	1	MG/KG
CM	Pb	METALS	76.4			0.198	0.16	MG/KG
CM	Sb	METALS	2.2		J	0.0297	0.03	MG/KG
CM	Se	METALS	0.321	J		0.126	1.3	MG/KG
CM	V	METALS	151			0.345	0.6	MG/KG
CM	Zn	METALS	182			0.107	1.3	MG/KG
CM	Ag	METALS	0.423		J	0.066	0.13	MG/KG
CM	Al	METALS	57500			2.39	15.9	MG/KG
CM	As	METALS	10.5			0.068	1.3	MG/KG
CM	Ba	METALS	543			0.018	0.19	MG/KG
CM	Cd	METALS	0.624		J	0.0175	0.6	MG/KG
CM	Co	METALS	14.2			0.0527	0.13	MG/KG
CM	Cr	METALS	219			0.51	1.3	MG/KG
CM	Cu	METALS	75.5		J	0.24	0.3	MG/KG
CM	Fe	METALS	35600			0.564	32	MG/KG
CM	Hg	METALS	0.266		J	0.00208	0.006	MG/KG
CM	Mn	METALS	468			0.074	0.3	MG/KG
CM	Mo	METALS	1.83			0.0391	0.25	MG/KG
CM	Ni	METALS	81.6			0.0386	1	MG/KG
CM	Pb	METALS	118		J	0.198	0.16	MG/KG
CM	Sb	METALS	4.55			0.0297	0.03	MG/KG
CM	Se	METALS	0.304	J		0.126	1.3	MG/KG
CM	V	METALS	106			0.345	0.6	MG/KG

CM	Zn	METALS	210		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.315		J	0.066	0.13	MG/KG
CM	Al	METALS	62100			2.39	15.9	MG/KG
CM	As	METALS	14.3			0.068	1.3	MG/KG
CM	Ba	METALS	560			0.018	0.19	MG/KG
CM	Cd	METALS	0.219	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	21.7			0.0527	0.13	MG/KG
CM	Cr	METALS	251			0.51	1.3	MG/KG
CM	Cu	METALS	110		J	0.24	0.3	MG/KG
CM	Fe	METALS	38200			0.564	32	MG/KG
CM	Hg	METALS	1.32		J	0.00208	0.006	MG/KG
CM	Mn	METALS	465			0.074	0.3	MG/KG
CM	Mo	METALS	1.08			0.0391	0.25	MG/KG
CM	Ni	METALS	128			0.0386	1	MG/KG
CM	Pb	METALS	29.3		J	0.198	0.16	MG/KG
CM	Sb	METALS	0.824			0.0297	0.03	MG/KG
CM	Se	METALS	0.378	J		0.126	1.3	MG/KG
CM	V	METALS	154			0.345	0.6	MG/KG
CM	Zn	METALS	242		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.709			0.066	0.13	MG/KG
CM	Al	METALS	69600			2.39	15.9	MG/KG
CM	As	METALS	13.1			0.068	1.3	MG/KG
CM	Ba	METALS	514			0.018	0.19	MG/KG
CM	Cd	METALS	0.636		J	0.0175	0.6	MG/KG
CM	Co	METALS	18.5			0.0527	0.13	MG/KG
CM	Cr	METALS	232			0.51	1.3	MG/KG
CM	Cu	METALS	111		J	0.24	0.3	MG/KG
CM	Fe	METALS	43600			0.564	32	MG/KG
CM	Hg	METALS	0.719			0.00208	0.006	MG/KG
CM	Mn	METALS	451			0.074	0.3	MG/KG
CM	Mo	METALS	1.39			0.0391	0.25	MG/KG
CM	Ni	METALS	109		J	0.0386	1	MG/KG
CM	Pb	METALS	114		J	0.198	0.16	MG/KG
CM	Sb	METALS	3.46			0.0297	0.03	MG/KG
CM	Se	METALS	0.411	J		0.126	1.3	MG/KG
CM	V	METALS	152			0.345	0.6	MG/KG
CM	Zn	METALS	221			0.107	1.3	MG/KG
CM	Ag	METALS	0.572			0.066	0.13	MG/KG
CM	Al	METALS	70800			2.39	15.9	MG/KG
CM	As	METALS	12.1			0.068	1.3	MG/KG
CM	Ba	METALS	477			0.018	0.19	MG/KG
CM	Cd	METALS	0.441	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	18.1			0.0527	0.13	MG/KG
CM	Cr	METALS	205			0.51	1.3	MG/KG
CM	Cu	METALS	91.7		J	0.24	0.3	MG/KG
CM	Fe	METALS	44900			0.564	32	MG/KG
CM	Hg	METALS	0.623			0.00208	0.006	MG/KG
CM	Mn	METALS	435			0.074	0.3	MG/KG
CM	Mo	METALS	1.26			0.0391	0.25	MG/KG
CM	Ni	METALS	105		J	0.0386	1	MG/KG
CM	Pb	METALS	89.4		J	0.198	0.16	MG/KG

CM	Sb	METALS	2.68			0.0297	0.03	MG/KG
CM	Se	METALS	0.427	J		0.126	1.3	MG/KG
CM	V	METALS	155			0.345	0.6	MG/KG
CM	Zn	METALS	189			0.107	1.3	MG/KG
CM	Ag	METALS	0.615			0.066	0.13	MG/KG
CM	Al	METALS	71100			2.39	15.9	MG/KG
CM	As	METALS	12.5			0.068	1.3	MG/KG
CM	Ba	METALS	483			0.018	0.19	MG/KG
CM	Cd	METALS	0.522	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	17.5			0.0527	0.13	MG/KG
CM	Cr	METALS	212			0.51	1.3	MG/KG
CM	Cu	METALS	95.5		J	0.24	0.3	MG/KG
CM	Fe	METALS	45000			0.564	32	MG/KG
CM	Hg	METALS	0.62			0.00208	0.006	MG/KG
CM	Mn	METALS	440			0.074	0.3	MG/KG
CM	Mo	METALS	1.09			0.0391	0.25	MG/KG
CM	Ni	METALS	107		J	0.0386	1	MG/KG
CM	Pb	METALS	90.8		J	0.198	0.16	MG/KG
CM	Sb	METALS	2.69			0.0297	0.03	MG/KG
CM	Se	METALS	0.418	J		0.126	1.3	MG/KG
CM	V	METALS	146			0.345	0.6	MG/KG
CM	Zn	METALS	199			0.107	1.3	MG/KG
CM	Ag	METALS	0.583		J	0.066	0.13	MG/KG
CM	Al	METALS	72100			2.39	15.9	MG/KG
CM	As	METALS	11.6		J	0.068	1.3	MG/KG
CM	Ba	METALS	432			0.018	0.19	MG/KG
CM	Cd	METALS	0.454	J		0.0175	0.6	MG/KG
CM	Co	METALS	17.8			0.0527	0.13	MG/KG
CM	Cr	METALS	207			0.51	1.3	MG/KG
CM	Cu	METALS	94.9			0.24	0.3	MG/KG
CM	Fe	METALS	46800			0.564	32	MG/KG
CM	Hg	METALS	0.617		J	0.00208	0.006	MG/KG
CM	Mn	METALS	457			0.074	0.3	MG/KG
CM	Mo	METALS	1		J	0.0391	0.25	MG/KG
CM	Ni	METALS	110			0.0386	1	MG/KG
CM	Pb	METALS	84.2			0.198	0.16	MG/KG
CM	Sb	METALS	2.52		J	0.0297	0.03	MG/KG
CM	Se	METALS	0.331	J		0.126	1.3	MG/KG
CM	V	METALS	150			0.345	0.6	MG/KG
CM	Zn	METALS	189			0.107	1.3	MG/KG
CM	Ag	METALS	2.8			0.066	0.13	MG/KG
CM	Al	METALS	71700			2.39	15.9	MG/KG
CM	As	METALS	11.7			0.068	1.3	MG/KG
CM	Ba	METALS	472			0.018	0.19	MG/KG
CM	Cd	METALS	0.403	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	17.9			0.0527	0.13	MG/KG
CM	Cr	METALS	205			0.51	1.3	MG/KG
CM	Cu	METALS	89.1		J	0.24	0.3	MG/KG
CM	Fe	METALS	45500			0.564	32	MG/KG
CM	Hg	METALS	0.571			0.00208	0.006	MG/KG
CM	Mn	METALS	468			0.074	0.3	MG/KG

CM	Mo	METALS	0.988			0.0391	0.25	MG/KG
CM	Ni	METALS	107		J	0.0386	1	MG/KG
CM	Pb	METALS	86.3		J	0.198	0.16	MG/KG
CM	Sb	METALS	2.4			0.0297	0.03	MG/KG
CM	Se	METALS	0.399	J		0.126	1.3	MG/KG
CM	V	METALS	147			0.345	0.6	MG/KG
CM	Zn	METALS	181			0.107	1.3	MG/KG
CM	Ag	METALS	0.521		J	0.066	0.13	MG/KG
CM	Al	METALS	73500			2.39	15.9	MG/KG
CM	As	METALS	11.4		J	0.068	1.3	MG/KG
CM	Ba	METALS	414			0.018	0.19	MG/KG
CM	Cd	METALS	0.272	J		0.0175	0.6	MG/KG
CM	Co	METALS	17.7			0.0527	0.13	MG/KG
CM	Cr	METALS	197			0.51	1.3	MG/KG
CM	Cu	METALS	78.8			0.24	0.3	MG/KG
CM	Fe	METALS	47800			0.564	32	MG/KG
CM	Hg	METALS	0.506		J	0.00208	0.006	MG/KG
CM	Mn	METALS	437			0.074	0.3	MG/KG
CM	Mo	METALS	1.24		J	0.0391	0.25	MG/KG
CM	Ni	METALS	109			0.0386	1	MG/KG
CM	Pb	METALS	70			0.198	0.16	MG/KG
CM	Sb	METALS	2.03		J	0.0297	0.03	MG/KG
CM	Se	METALS	0.333	J		0.126	1.3	MG/KG
CM	V	METALS	155			0.345	0.6	MG/KG
CM	Zn	METALS	171			0.107	1.3	MG/KG
CM	Ag	METALS	0.683		J	0.066	0.13	MG/KG
CM	Al	METALS	53900			2.39	15.9	MG/KG
CM	As	METALS	11.3		J	0.068	1.3	MG/KG
CM	Ba	METALS	490			0.018	0.19	MG/KG
CM	Cd	METALS	0.705			0.0175	0.6	MG/KG
CM	Co	METALS	19.4			0.0527	0.13	MG/KG
CM	Cr	METALS	451			0.51	1.3	MG/KG
CM	Cu	METALS	173			0.24	0.3	MG/KG
CM	Fe	METALS	39200			0.564	32	MG/KG
CM	Hg	METALS	0.79		J	0.00208	0.006	MG/KG
CM	Mn	METALS	580			0.074	0.3	MG/KG
CM	Mo	METALS	1.03		J	0.0391	0.25	MG/KG
CM	Ni	METALS	199			0.0386	1	MG/KG
CM	Pb	METALS	139			0.198	0.16	MG/KG
CM	Sb	METALS	10.6		J	0.0297	0.03	MG/KG
CM	Se	METALS	0.225	J		0.126	1.3	MG/KG
CM	V	METALS	112			0.345	0.6	MG/KG
CM	Zn	METALS	228			0.107	1.3	MG/KG
CM	Ag	METALS	0.412		J	0.066	0.13	MG/KG
CM	Al	METALS	65000			2.39	15.9	MG/KG
CM	As	METALS	11.2			0.068	1.3	MG/KG
CM	Ba	METALS	458			0.018	0.19	MG/KG
CM	Cd	METALS	0.278	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	21.3			0.0527	0.13	MG/KG
CM	Cr	METALS	273			0.51	1.3	MG/KG
CM	Cu	METALS	102		J	0.24	0.3	MG/KG

CM	Fe	METALS	42400			0.564	32	MG/KG
CM	Hg	METALS	0.769		J	0.00208	0.006	MG/KG
CM	Mn	METALS	499			0.074	0.3	MG/KG
CM	Mo	METALS	1.12			0.0391	0.25	MG/KG
CM	Ni	METALS	162			0.0386	1	MG/KG
CM	Pb	METALS	73.6		J	0.198	0.16	MG/KG
CM	Sb	METALS	5.77			0.0297	0.03	MG/KG
CM	Se	METALS	0.34	J		0.126	1.3	MG/KG
CM	V	METALS	121			0.345	0.6	MG/KG
CM	Zn	METALS	195		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.257		J	0.066	0.13	MG/KG
CM	Al	METALS	49200			2.39	15.9	MG/KG
CM	As	METALS	5.86			0.068	1.3	MG/KG
CM	Ba	METALS	458			0.018	0.19	MG/KG
CM	Cd	METALS	0.428	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	11.3			0.0527	0.13	MG/KG
CM	Cr	METALS	175			0.51	1.3	MG/KG
CM	Cu	METALS	66.1		J	0.24	0.3	MG/KG
CM	Fe	METALS	25500			0.564	32	MG/KG
CM	Hg	METALS	0.232		J	0.00208	0.006	MG/KG
CM	Mn	METALS	357			0.074	0.3	MG/KG
CM	Mo	METALS	0.704			0.0391	0.25	MG/KG
CM	Ni	METALS	92.8			0.0386	1	MG/KG
CM	Pb	METALS	122		J	0.198	0.16	MG/KG
CM	Sb	METALS	3.95			0.0297	0.03	MG/KG
CM	Se	METALS	0.151	J		0.126	1.3	MG/KG
CM	V	METALS	77.5			0.345	0.6	MG/KG
CM	Zn	METALS	209		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.139		J	0.066	0.13	MG/KG
CM	Al	METALS	39100			2.39	15.9	MG/KG
CM	As	METALS	11.5			0.068	1.3	MG/KG
CM	Ba	METALS	893			0.018	0.19	MG/KG
CM	Cd	METALS	0.252	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	18.4			0.0527	0.13	MG/KG
CM	Cr	METALS	167			0.51	1.3	MG/KG
CM	Cu	METALS	285		J	0.24	0.3	MG/KG
CM	Fe	METALS	15700			0.564	32	MG/KG
CM	Hg	METALS	0.959		J	0.00208	0.006	MG/KG
CM	Mn	METALS	271			0.074	0.3	MG/KG
CM	Mo	METALS	0.875			0.0391	0.25	MG/KG
CM	Ni	METALS	72.5			0.0386	1	MG/KG
CM	Pb	METALS	11		J	0.198	0.16	MG/KG
CM	Sb	METALS	0.485			0.0297	0.03	MG/KG
CM	Se	METALS	0.126	U		0.126	1.3	MG/KG
CM	V	METALS	146			0.345	0.6	MG/KG
CM	Zn	METALS	175		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.634		J	0.066	0.13	MG/KG
CM	Al	METALS	68600			2.39	15.9	MG/KG
CM	As	METALS	11.3		J	0.068	1.3	MG/KG
CM	Ba	METALS	469			0.018	0.19	MG/KG
CM	Cd	METALS	0.682			0.0175	0.6	MG/KG

CM	Co	METALS	17.6			0.0527	0.13	MG/KG
CM	Cr	METALS	225			0.51	1.3	MG/KG
CM	Cu	METALS	133			0.24	0.3	MG/KG
CM	Fe	METALS	44600			0.564	32	MG/KG
CM	Hg	METALS	1.06		J	0.00208	0.006	MG/KG
CM	Mn	METALS	444			0.074	0.3	MG/KG
CM	Mo	METALS	1.14		J	0.0391	0.25	MG/KG
CM	Ni	METALS	118			0.0386	1	MG/KG
CM	Pb	METALS	106			0.198	0.16	MG/KG
CM	Sb	METALS	4.29		J	0.0297	0.03	MG/KG
CM	Se	METALS	0.457	J		0.126	1.3	MG/KG
CM	V	METALS	139			0.345	0.6	MG/KG
CM	Zn	METALS	215			0.107	1.3	MG/KG
CM	Ag	METALS	0.144		J	0.066	0.13	MG/KG
CM	Al	METALS	46400			2.39	15.9	MG/KG
CM	As	METALS	9.95			0.068	1.3	MG/KG
CM	Ba	METALS	761			0.018	0.19	MG/KG
CM	Cd	METALS	0.262	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	21.9			0.0527	0.13	MG/KG
CM	Cr	METALS	338			0.51	1.3	MG/KG
CM	Cu	METALS	319		J	0.24	0.3	MG/KG
CM	Fe	METALS	31000			0.564	32	MG/KG
CM	Hg	METALS	1.47		J	0.00208	0.006	MG/KG
CM	Mn	METALS	453			0.074	0.3	MG/KG
CM	Mo	METALS	0.773			0.0391	0.25	MG/KG
CM	Ni	METALS	161			0.0386	1	MG/KG
CM	Pb	METALS	11.8		J	0.198	0.16	MG/KG
CM	Sb	METALS	0.654			0.0297	0.03	MG/KG
CM	Se	METALS	0.178	J		0.126	1.3	MG/KG
CM	V	METALS	172			0.345	0.6	MG/KG
CM	Zn	METALS	297		J	0.107	1.3	MG/KG
CM	Ag	METALS	0.695		J	0.066	0.13	MG/KG
CM	Al	METALS	65300			2.39	15.9	MG/KG
CM	As	METALS	12.9		J	0.068	1.3	MG/KG
CM	Ba	METALS	459			0.018	0.19	MG/KG
CM	Cd	METALS	0.567	J		0.0175	0.6	MG/KG
CM	Co	METALS	18.2			0.0527	0.13	MG/KG
CM	Cr	METALS	256			0.51	1.3	MG/KG
CM	Cu	METALS	163			0.24	0.3	MG/KG
CM	Fe	METALS	42600			0.564	32	MG/KG
CM	Hg	METALS	1.26		J	0.00208	0.006	MG/KG
CM	Mn	METALS	446			0.074	0.3	MG/KG
CM	Mo	METALS	1.5		J	0.0391	0.25	MG/KG
CM	Ni	METALS	130			0.0386	1	MG/KG
CM	Pb	METALS	142			0.198	0.16	MG/KG
CM	Sb	METALS	7.43		J	0.0297	0.03	MG/KG
CM	Se	METALS	0.363	J		0.126	1.3	MG/KG
CM	V	METALS	141			0.345	0.6	MG/KG
CM	Zn	METALS	243			0.107	1.3	MG/KG
CM	Ag	METALS	0.37		J	0.066	0.13	MG/KG
CM	Al	METALS	47900			2.39	15.9	MG/KG

CM	As	METALS	7.03			0.068	1.3	MG/KG
CM	Ba	METALS	726			0.018	0.19	MG/KG
CM	Cd	METALS	0.395	J	J	0.0175	0.6	MG/KG
CM	Co	METALS	10.5			0.0527	0.13	MG/KG
CM	Cr	METALS	292			0.51	1.3	MG/KG
CM	Cu	METALS	277		J	0.24	0.3	MG/KG
CM	Fe	METALS	21000			0.564	32	MG/KG
CM	Hg	METALS	0.844		J	0.00208	0.006	MG/KG
CM	Mn	METALS	305			0.074	0.3	MG/KG
CM	Mo	METALS	0.826			0.0391	0.25	MG/KG
CM	Ni	METALS	123			0.0386	1	MG/KG
CM	Pb	METALS	114		J	0.198	0.16	MG/KG
CM	Sb	METALS	7.26			0.0297	0.03	MG/KG
CM	Se	METALS	0.199	J		0.126	1.3	MG/KG
CM	V	METALS	50.9			0.345	0.6	MG/KG
CM	Zn	METALS	212		J	0.107	1.3	MG/KG

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CLIENT_SAM	FIELD_SAMP	FIELD_QC_C	STATION_ID	AREA_NAME	MEDIA	DATE_STAR	DATE_END	DEPTH_TOP	DEPTH_BOT	DEPTH_UNIT	WATER_DEP	WATER_DEP	LATITUDE	LONGITUDE
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-143	GRAB	SA	SB-02	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4	FT	37.7213	122.3808
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-144	GRAB	SA	SB-10	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2.5	FT	37.7239	122.3779
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788

CLIENT_SAM	FIELD_SAMP	FIELD_QC_C	STATION_ID	AREA_NAME	MEDIA	DATE_STAR	DATE_END	DEPTH_TOP	DEPTH_BOT	DEPTH_UNIT	WATER_DEP	WATER_DEP	LATITUDE	LONGITUDE
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-145	GRAB	SA	SB-09	South Basin A	SEDIMENT	5/18/2001		0	5	CM	2	FT	37.7234	122.3788
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-146	GRAB	SA	SB-17	South Basin A	SEDIMENT	5/18/2001		0	5	CM	4.2	FT	37.7216	122.3762
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815

CLIENT_SAM	FIELD_SAMP	FIELD_QC_C	STATION_ID	AREA_NAME	MEDIA	DATE_STAR	DATE_END	DEPTH_TOP	DEPTH_BOT	DEPTH_UNIT	WATER_DEP	WATER_DEP	LATITUDE	LONGITUDE
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-148	GRAB	SA	SB-01	South Basin A	SEDIMENT	5/22/2001		0	5	CM	4.25	FT	37.7213	122.3815
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-154	GRAB	SA	SB-12	South Basin A	SEDIMENT	5/15/2001		0	5	CM	2.9	FT	37.7231	122.3775
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-155	GRAB	DU	PA-39	Point Avisade	SEDIMENT	5/6/2001		0	5	CM	8.7	FT	37.7303	122.3610
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775

CLIENT_SAM	FIELD_SAMP	FIELD_QC_C	STATION_ID	AREA_NAME	MEDIA	DATE_STAR	DATE_END	DEPTH_TOP	DEPTH_BOT	DEPTH_UNIT	WATER_DEP	WATER_DEP	LATITUDE	LONGITUDE
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-156	GRAB	SA	BF-66	Bay Farm Bor	SEDIMENT	5/5/2001		0	5	CM	31.57	FT	37.7401	122.2775
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-157	GRAB	SA	AB-67	Alameda Buo	SEDIMENT	5/6/2001		0	5	CM	32.9	FT	37.7474	122.3233
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693

CLIENT_SAM	FIELD_SAMP	FIELD_QC_C	STATION_ID	AREA_NAME	MEDIA	DATE_STAR	DATE_END	DEPTH_TOP	DEPTH_BOT	DEPTH_UNIT	WATER_DEP	WATER_DEP	LATITUDE	LONGITUDE
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-158	GRAB	SA	IB-54	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	2.5	FT	37.7332	122.3693
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-159	GRAB	SA	IB-56	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	3.3	FT	37.7327	122.3685
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692

CLIENT_SAM	FIELD_SAMP	FIELD_QC_C	STATION_ID	AREA_NAME	MEDIA	DATE_STAR	DATE_END	DEPTH_TOP	DEPTH_BOT	DEPTH_UNIT	WATER_DEP	WATER_DEP	LATITUDE	LONGITUDE
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-160	GRAB	SA	IB-55	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	5.5	FT	37.7321	122.3692
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-161	GRAB	SA	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-162	GRAB	SA	PC-63	Paradise Cov	SEDIMENT	5/8/2001		0	5	CM	9.4	FT	37.8990	122.4637
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671

CLIENT_SAM	FIELD_SAMP	FIELD_QC_C	STATION_ID	AREA_NAME	MEDIA	DATE_STAR	DATE_END	DEPTH_TOP	DEPTH_BOT	DEPTH_UNIT	WATER_DEP	WATER_DEP	LATITUDE	LONGITUDE
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-163	GRAB	DU	IB-59	India Basin Ar	SEDIMENT	5/7/2001		0	5	CM	7.4	FT	37.7323	122.3671
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328
AAB-165	GRAB	SA	RR-65	Red Rock	SEDIMENT	5/2/2001		0	5	CM	34.1	FT	37.9167	122.4328

X_Y_DATUM	LAB	LAB_BATCH	ANALYSIS_M	METHOD_CITATI	SAMP_TYPE	ANALYSIS_DATE	PERCENT_M	DILUTION	PARAM_COD	DESCR	CLASS	RESULT	LAB_QUAL
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	2051-24-3	CI10(209)	PCB	0.38	J
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	32598-10-0	CI4(66)	PCB	0.1	U
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	32598-13-3	CI4(77)	PCB	0.15	U
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	32598-14-4	CI5(105)	PCB	7.33	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	34883-43-7	CI2(8)	PCB	1.12	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	35065-30-6	CI7(170)	PCB	18.69	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	35693-99-3	CI4(52)	PCB	11.21	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	37680-65-2	CI3(18)	PCB	0.96	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	38380-07-3	CI6(128)	PCB	6.93	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	40186-72-9	CI9(206)	PCB	1.29	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	41464-39-5	CI4(44)	PCB	8.3	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	52663-78-2	CI8(195)	PCB	2.95	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	55215-18-4	CI6(129)	PCB	0.07	U
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	57465-28-8	CI5(126)	PCB	0.13	U
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	1.667	7012-37-5	CI3(28)	PCB	1.74	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	8.335	31508-00-6	CI5(118)	PCB	27.32	D
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	8.335	35065-27-1	CI6(153)	PCB	133.13	D
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	8.335	35065-28-2	CI6(138)	PCB	71.22	D
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	8.335	35065-29-3	CI7(180)	PCB	59.62	D
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	8.335	37680-73-2	CI5(101)	PCB	41.13	D
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	8.335	38380-03-9	CI5(110)	PCB	30.43	D
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	45.66	8.335	52663-68-0	CI7(187)	PCB	45.21	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	2051-24-3	CI10(209)	PCB	7.01	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	32598-10-0	CI4(66)	PCB	3.17	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	32598-13-3	CI4(77)	PCB	0.14	U
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	32598-14-4	CI5(105)	PCB	6.05	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	34883-43-7	CI2(8)	PCB	0.89	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	35693-99-3	CI4(52)	PCB	7.59	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	37680-65-2	CI3(18)	PCB	0.57	J
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	38380-07-3	CI6(128)	PCB	5.89	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	40186-72-9	CI9(206)	PCB	3.09	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	41464-39-5	CI4(44)	PCB	3.9	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	52663-78-2	CI8(195)	PCB	4.74	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	55215-18-4	CI6(129)	PCB	0.07	U
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	57465-28-8	CI5(126)	PCB	0.12	U
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	1.667	7012-37-5	CI3(28)	PCB	1.23	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	8.335	31508-00-6	CI5(118)	PCB	19.67	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	8.335	35065-27-1	CI6(153)	PCB	78.98	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	8.335	35065-28-2	CI6(138)	PCB	61	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	8.335	35065-29-3	CI7(180)	PCB	50.66	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	8.335	35065-30-6	CI7(170)	PCB	27.65	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	8.335	37680-73-2	CI5(101)	PCB	26.55	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	8.335	38380-03-9	CI5(110)	PCB	24.03	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	42.23	8.335	52663-68-0	CI7(187)	PCB	28.83	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	2051-24-3	CI10(209)	PCB	0.73	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	31508-00-6	CI5(118)	PCB	13.15	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	32598-10-0	CI4(66)	PCB	2.07	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	32598-13-3	CI4(77)	PCB	0.13	U
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	32598-14-4	CI5(105)	PCB	4.35	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	34883-43-7	CI2(8)	PCB	0.22	J
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	35065-29-3	CI7(180)	PCB	17.17	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	35065-30-6	CI7(170)	PCB	8.99	

X_Y_DATUM	LAB	LAB_BATCH	ANALYSIS_M	METHOD_CITATI	SAMP_TYPE	ANALYSIS_DATE	PERCENT_M	DILUTION	PARAM_COD	DESCR	CLASS	RESULT	LAB_QUAL
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	35693-99-3	CI4(52)	PCB	5.41	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	37680-65-2	CI3(18)	PCB	0.25	J
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	37680-73-2	CI5(101)	PCB	18.81	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	38380-03-9	CI5(110)	PCB	15.13	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	38380-07-3	CI6(128)	PCB	3.71	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	40186-72-9	CI9(206)	PCB	1.18	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	41464-39-5	CI4(44)	PCB	2.66	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	52663-68-0	CI7(187)	PCB	9.74	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	52663-78-2	CI8(195)	PCB	1.73	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	55215-18-4	CI6(129)	PCB	0.06	U
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	57465-28-8	CI5(126)	PCB	0.11	U
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	1.667	7012-37-5	CI3(28)	PCB	0.51	J
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	8.335	35065-27-1	CI6(153)	PCB	39.91	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/25/2001 0:00	34.72	8.335	35065-28-2	CI6(138)	PCB	30.1	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	2051-24-3	CI10(209)	PCB	3.3	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	31508-00-6	CI5(118)	PCB	11.73	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	32598-10-0	CI4(66)	PCB	0.12	U
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	32598-13-3	CI4(77)	PCB	0.17	U
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	32598-14-4	CI5(105)	PCB	4.07	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	34883-43-7	CI2(8)	PCB	0.33	J
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	35065-30-6	CI7(170)	PCB	43.09	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	35693-99-3	CI4(52)	PCB	3.54	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	37680-65-2	CI3(18)	PCB	0.31	J
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	37680-73-2	CI5(101)	PCB	24.16	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	38380-03-9	CI5(110)	PCB	16.38	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	38380-07-3	CI6(128)	PCB	6.25	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	40186-72-9	CI9(206)	PCB	5.78	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	41464-39-5	CI4(44)	PCB	1.58	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	52663-68-0	CI7(187)	PCB	44.18	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	52663-78-2	CI8(195)	PCB	8.67	
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	55215-18-4	CI6(129)	PCB	0.08	U
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	57465-28-8	CI5(126)	PCB	0.14	U
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	1.667	7012-37-5	CI3(28)	PCB	0.56	J
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	8.335	35065-27-1	CI6(153)	PCB	108.77	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	8.335	35065-28-2	CI6(138)	PCB	77.98	D
NAD83_WGS	BDO	01-230	BDO SOP 5-1	LAUEN_AND_CA	SA	6/22/2001 0:00	49.22	8.335	35065-29-3	CI7(180)	PCB	85.17	D
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	2051-24-3	CI10(209)	PCB	0.46	J
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	31508-00-6	CI5(118)	PCB	17.15	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	32598-10-0	CI4(66)	PCB	0.13	U
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	32598-13-3	CI4(77)	PCB	0.18	U
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	32598-14-4	CI5(105)	PCB	4.31	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	34883-43-7	CI2(8)	PCB	1.29	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	35065-30-6	CI7(170)	PCB	15.07	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	35693-99-3	CI4(52)	PCB	6.34	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	37680-65-2	CI3(18)	PCB	0.58	J
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	37680-73-2	CI5(101)	PCB	23.62	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	38380-03-9	CI5(110)	PCB	19.1	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	38380-07-3	CI6(128)	PCB	4.67	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	40186-72-9	CI9(206)	PCB	1.17	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	41464-39-5	CI4(44)	PCB	4.74	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	52663-68-0	CI7(187)	PCB	23.84	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	52663-78-2	CI8(195)	PCB	2.39	

X_Y_DATUM	LAB	LAB_BATCH	ANALYSIS_M	METHOD_CITATI	SAMP_TYPE	ANALYSIS_DATE	PERCENT_M	DILUTION	PARAM_COD	DESCR	CLASS	RESULT	LAB_QUAL
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	55215-18-4	Cl6(129)	PCB	0.09	U
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	57465-28-8	Cl5(126)	PCB	0.15	U
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	1.667	7012-37-5	Cl3(28)	PCB	1.35	
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	8.335	35065-27-1	Cl6(153)	PCB	72.27	D
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	8.335	35065-28-2	Cl6(138)	PCB	43.2	D
NAD83_WGS	BDO	01-240	BDO SOP 5-1	LAUEN_AND_CA	SA	7/2/2001 0:00	52.54	8.335	35065-29-3	Cl7(180)	PCB	36.76	D
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	2051-24-3	Cl10(209)	PCB	0.65	J
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	32598-10-0	Cl4(66)	PCB	2.58	
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	32598-13-3	Cl4(77)	PCB	0.19	U
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	32598-14-4	Cl5(105)	PCB	5.3	
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	34883-43-7	Cl2(8)	PCB	0.67	J
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	35065-28-2	Cl6(138)	PCB	54.83	
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	35693-99-3	Cl4(52)	PCB	6.57	
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	37680-65-2	Cl3(18)	PCB	0.35	J
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	38380-07-3	Cl6(128)	PCB	7.26	
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	40186-72-9	Cl9(206)	PCB	1.79	
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	41464-39-5	Cl4(44)	PCB	3.4	
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	52663-78-2	Cl8(195)	PCB	4.11	
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	55215-18-4	Cl6(129)	PCB	0.09	U
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	57465-28-8	Cl5(126)	PCB	0.16	U
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	1.667	7012-37-5	Cl3(28)	PCB	1.01	
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	16.67	31508-00-6	Cl5(118)	PCB	19	D
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	16.67	35065-27-1	Cl6(153)	PCB	74.79	D
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	16.67	35065-29-3	Cl7(180)	PCB	51.21	D
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	16.67	35065-30-6	Cl7(170)	PCB	29.31	D
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	16.67	37680-73-2	Cl5(101)	PCB	27.54	D
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	16.67	38380-03-9	Cl5(110)	PCB	21.13	D
NAD83_WGS	BDO	01-229	BDO SOP 5-1	LAUEN_AND_CA	SA	6/23/2001 0:00	56.02	16.67	52663-68-0	Cl7(187)	PCB	29.09	D
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	2051-24-3	Cl10(209)	PCB	0.72	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	31508-00-6	Cl5(118)	PCB	2.43	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	32598-10-0	Cl4(66)	PCB	0.13	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	32598-13-3	Cl4(77)	PCB	0.18	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	32598-14-4	Cl5(105)	PCB	0.1	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	34883-43-7	Cl2(8)	PCB	0.18	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	35065-27-1	Cl6(153)	PCB	33.96	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	35065-28-2	Cl6(138)	PCB	22.69	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	35065-29-3	Cl7(180)	PCB	25.09	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	35065-30-6	Cl7(170)	PCB	12.53	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	35693-99-3	Cl4(52)	PCB	1.42	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	37680-65-2	Cl3(18)	PCB	0.08	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	37680-73-2	Cl5(101)	PCB	7.62	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	38380-03-9	Cl5(110)	PCB	4.59	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	38380-07-3	Cl6(128)	PCB	1.33	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	40186-72-9	Cl9(206)	PCB	1.1	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	41464-39-5	Cl4(44)	PCB	0.34	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	52663-68-0	Cl7(187)	PCB	12.56	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	52663-78-2	Cl8(195)	PCB	2.46	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	55215-18-4	Cl6(129)	PCB	0.09	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	57465-28-8	Cl5(126)	PCB	0.16	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.25	1.667	7012-37-5	Cl3(28)	PCB	0.26	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	2051-24-3	Cl10(209)	PCB	0.12	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	31508-00-6	Cl5(118)	PCB	0.55	J

X_Y_DATUM	LAB	LAB_BATCH	ANALYSIS_M	METHOD_CITATI	SAMP_TYPE	ANALYSIS_DATE	PERCENT_M	DILUTION	PARAM_COD	DESCR	CLASS	RESULT	LAB_QUAL
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	32598-10-0	CI4(66)	PCB	0.15	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	32598-13-3	CI4(77)	PCB	0.21	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	32598-14-4	CI5(105)	PCB	0.15	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	34883-43-7	CI2(8)	PCB	0.21	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	35065-27-1	CI6(153)	PCB	1.09	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	35065-28-2	CI6(138)	PCB	1.17	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	35065-29-3	CI7(180)	PCB	1.54	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	35065-30-6	CI7(170)	PCB	0.14	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	35693-99-3	CI4(52)	PCB	0.25	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	37680-65-2	CI3(18)	PCB	0.1	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	37680-73-2	CI5(101)	PCB	0.4	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	38380-03-9	CI5(110)	PCB	0.75	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	38380-07-3	CI6(128)	PCB	0.24	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	40186-72-9	CI9(206)	PCB	0.11	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	41464-39-5	CI4(44)	PCB	0.15	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	52663-68-0	CI7(187)	PCB	0.38	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	52663-78-2	CI8(195)	PCB	0.11	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	55215-18-4	CI6(129)	PCB	0.11	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	57465-28-8	CI5(126)	PCB	0.19	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	62.5	1.667	7012-37-5	CI3(28)	PCB	0.2	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	2051-24-3	CI10(209)	PCB	0.81	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	31508-00-6	CI5(118)	PCB	1.35	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	32598-10-0	CI4(66)	PCB	0.14	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	32598-13-3	CI4(77)	PCB	0.17	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	32598-14-4	CI5(105)	PCB	0.41	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	34883-43-7	CI2(8)	PCB	0.16	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	35065-27-1	CI6(153)	PCB	4.06	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	35065-28-2	CI6(138)	PCB	3.27	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	35065-29-3	CI7(180)	PCB	2.31	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	35065-30-6	CI7(170)	PCB	1.16	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	35693-99-3	CI4(52)	PCB	0.64	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	37680-65-2	CI3(18)	PCB	0.21	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	37680-73-2	CI5(101)	PCB	1.67	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	38380-03-9	CI5(110)	PCB	1.75	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	38380-07-3	CI6(128)	PCB	0.19	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	40186-72-9	CI9(206)	PCB	0.84	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	41464-39-5	CI4(44)	PCB	0.43	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	52663-68-0	CI7(187)	PCB	1.54	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	52663-78-2	CI8(195)	PCB	0.23	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	55215-18-4	CI6(129)	PCB	0.08	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	57465-28-8	CI5(126)	PCB	0.14	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	48.99	1.667	7012-37-5	CI3(28)	PCB	0.41	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	2051-24-3	CI10(209)	PCB	0.62	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	31508-00-6	CI5(118)	PCB	0.57	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	32598-10-0	CI4(66)	PCB	0.17	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	32598-13-3	CI4(77)	PCB	0.19	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	32598-14-4	CI5(105)	PCB	0.2	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	34883-43-7	CI2(8)	PCB	0.19	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	35065-27-1	CI6(153)	PCB	1.55	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	35065-28-2	CI6(138)	PCB	1.07	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	35065-29-3	CI7(180)	PCB	1.22	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	35065-30-6	CI7(170)	PCB	0.44	J

X_Y_DATUM	LAB	LAB_BATCH	ANALYSIS_M	METHOD_CITATI	SAMP_TYPE	ANALYSIS_DATE	PERCENT_M	DILUTION	PARAM_COD	DESCR	CLASS	RESULT	LAB_QUAL
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	35693-99-3	Cl4(52)	PCB	0.24	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	37680-65-2	Cl3(18)	PCB	0.09	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	37680-73-2	Cl5(101)	PCB	0.49	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	38380-03-9	Cl5(110)	PCB	0.77	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	38380-07-3	Cl6(128)	PCB	0.22	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	40186-72-9	Cl9(206)	PCB	0.29	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	41464-39-5	Cl4(44)	PCB	0.13	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	52663-68-0	Cl7(187)	PCB	0.63	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	52663-78-2	Cl8(195)	PCB	0.16	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	55215-18-4	Cl6(129)	PCB	0.09	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	57465-28-8	Cl5(126)	PCB	0.16	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	57.23	1.667	7012-37-5	Cl3(28)	PCB	0.12	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	2051-24-3	Cl10(209)	PCB	0.34	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	31508-00-6	Cl5(118)	PCB	0.4	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	32598-10-0	Cl4(66)	PCB	0.14	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	32598-13-3	Cl4(77)	PCB	0.19	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	32598-14-4	Cl5(105)	PCB	0.17	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	34883-43-7	Cl2(8)	PCB	0.19	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	35065-27-1	Cl6(153)	PCB	1.38	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	35065-28-2	Cl6(138)	PCB	1.26	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	35065-29-3	Cl7(180)	PCB	1.12	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	35065-30-6	Cl7(170)	PCB	0.28	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	35693-99-3	Cl4(52)	PCB	0.36	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	37680-65-2	Cl3(18)	PCB	0.09	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	37680-73-2	Cl5(101)	PCB	0.88	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	38380-03-9	Cl5(110)	PCB	0.86	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	38380-07-3	Cl6(128)	PCB	0.22	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	40186-72-9	Cl9(206)	PCB	0.23	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	41464-39-5	Cl4(44)	PCB	0.14	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	52663-68-0	Cl7(187)	PCB	0.56	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	52663-78-2	Cl8(195)	PCB	0.13	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	55215-18-4	Cl6(129)	PCB	0.09	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	57465-28-8	Cl5(126)	PCB	0.16	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	55.71	1.667	7012-37-5	Cl3(28)	PCB	0.23	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	2051-24-3	Cl10(209)	PCB	3.05	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	31508-00-6	Cl5(118)	PCB	1.92	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	32598-10-0	Cl4(66)	PCB	0.25	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	32598-13-3	Cl4(77)	PCB	0.18	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	32598-14-4	Cl5(105)	PCB	0.79	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	34883-43-7	Cl2(8)	PCB	0.18	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	35065-27-1	Cl6(153)	PCB	9.81	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	35065-28-2	Cl6(138)	PCB	6.12	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	35065-29-3	Cl7(180)	PCB	5.73	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	35065-30-6	Cl7(170)	PCB	2.62	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	35693-99-3	Cl4(52)	PCB	1.08	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	37680-65-2	Cl3(18)	PCB	0.17	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	37680-73-2	Cl5(101)	PCB	2.75	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	38380-03-9	Cl5(110)	PCB	3.38	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	38380-07-3	Cl6(128)	PCB	0.57	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	40186-72-9	Cl9(206)	PCB	0.75	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	41464-39-5	Cl4(44)	PCB	0.6	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	52663-68-0	Cl7(187)	PCB	4.08	

X_Y_DATUM	LAB	LAB_BATCH	ANALYSIS_M	METHOD_CITATI	SAMP_TYPE	ANALYSIS_DATE	PERCENT_M	DILUTION	PARAM_COD	DESCR	CLASS	RESULT	LAB_QUAL
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	52663-78-2	CI8(195)	PCB	0.69	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	55215-18-4	CI6(129)	PCB	0.09	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	57465-28-8	CI5(126)	PCB	0.16	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/19/2001 0:00	53.42	1.667	7012-37-5	CI3(28)	PCB	0.23	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	2051-24-3	CI10(209)	PCB	1.71	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	31508-00-6	CI5(118)	PCB	1.18	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	32598-10-0	CI4(66)	PCB	0.19	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	32598-13-3	CI4(77)	PCB	0.19	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	32598-14-4	CI5(105)	PCB	0.7	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	34883-43-7	CI2(8)	PCB	0.19	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	35065-27-1	CI6(153)	PCB	8.43	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	35065-28-2	CI6(138)	PCB	5.25	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	35065-29-3	CI7(180)	PCB	6.37	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	35065-30-6	CI7(170)	PCB	3.15	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	35693-99-3	CI4(52)	PCB	0.62	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	37680-65-2	CI3(18)	PCB	0.14	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	37680-73-2	CI5(101)	PCB	1.53	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	38380-03-9	CI5(110)	PCB	2.38	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	38380-07-3	CI6(128)	PCB	0.34	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	40186-72-9	CI9(206)	PCB	0.97	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	41464-39-5	CI4(44)	PCB	0.32	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	52663-68-0	CI7(187)	PCB	4.17	
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	52663-78-2	CI8(195)	PCB	0.71	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	55215-18-4	CI6(129)	PCB	0.09	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	57465-28-8	CI5(126)	PCB	0.17	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/20/2001 0:00	56.92	1.667	7012-37-5	CI3(28)	PCB	0.3	J
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	2051-24-3	CI10(209)	PCB	0.1	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	31508-00-6	CI5(118)	PCB	0.33	J
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	32598-10-0	CI4(66)	PCB	0.13	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	32598-13-3	CI4(77)	PCB	0.18	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	32598-14-4	CI5(105)	PCB	0.11	J
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	34883-43-7	CI2(8)	PCB	0.17	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	35065-27-1	CI6(153)	PCB	0.59	J
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	35065-28-2	CI6(138)	PCB	0.56	J
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	35065-29-3	CI7(180)	PCB	0.42	J
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	35065-30-6	CI7(170)	PCB	0.22	J
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	35693-99-3	CI4(52)	PCB	0.11	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	37680-65-2	CI3(18)	PCB	0.08	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	37680-73-2	CI5(101)	PCB	0.29	J
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	38380-03-9	CI5(110)	PCB	0.35	J
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	38380-07-3	CI6(128)	PCB	0.2	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	40186-72-9	CI9(206)	PCB	0.09	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	41464-39-5	CI4(44)	PCB	0.11	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	52663-68-0	CI7(187)	PCB	0.17	J
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	52663-78-2	CI8(195)	PCB	0.09	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	55215-18-4	CI6(129)	PCB	0.09	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	57465-28-8	CI5(126)	PCB	0.15	U
NAD83_WGS	BDO	01-333	BDO SOP 5-1	LAUEN_AND_CA	SA1	8/24/2001 0:00	52.17	1.667	7012-37-5	CI3(28)	PCB	0.12	U
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	2051-24-3	CI10(209)	PCB	0.11	U
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	31508-00-6	CI5(118)	PCB	0.88	J
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	32598-10-0	CI4(66)	PCB	0.14	U
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	32598-13-3	CI4(77)	PCB	0.19	U

X_Y_DATUM	LAB	LAB_BATCH	ANALYSIS_M	METHOD_CITATI	SAMP_TYPE	ANALYSIS_DATE	PERCENT_M	DILUTION	PARAM_COD	DESCR	CLASS	RESULT	LAB_QUAL
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	32598-14-4	CI5(105)	PCB	0.76	J
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	34883-43-7	CI2(8)	PCB	0.19	U
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	35065-27-1	CI6(153)	PCB	6.01	
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	35065-28-2	CI6(138)	PCB	3.38	
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	35065-29-3	CI7(180)	PCB	6.46	
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	35065-30-6	CI7(170)	PCB	3.02	
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	35693-99-3	CI4(52)	PCB	1.01	J
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	37680-65-2	CI3(18)	PCB	0.15	J
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	37680-73-2	CI5(101)	PCB	2.04	
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	38380-03-9	CI5(110)	PCB	1.53	
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	38380-07-3	CI6(128)	PCB	0.41	J
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	40186-72-9	CI9(206)	PCB	0.45	J
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	41464-39-5	CI4(44)	PCB	0.87	J
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	52663-68-0	CI7(187)	PCB	3.72	
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	52663-78-2	CI8(195)	PCB	0.72	J
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	55215-18-4	CI6(129)	PCB	0.09	U
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	57465-28-8	CI5(126)	PCB	0.17	U
NAD83_WGS	BDO	01-213	BDO SOP 5-1	LAUEN_AND_CA	SA	6/18/2001 0:00	56.35	1.667	7012-37-5	CI3(28)	PCB	0.51	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	2051-24-3	CI10(209)	PCB	0.07	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	31508-00-6	CI5(118)	PCB	0.08	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	32598-10-0	CI4(66)	PCB	0.08	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	32598-13-3	CI4(77)	PCB	0.12	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	32598-14-4	CI5(105)	PCB	0.06	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	34883-43-7	CI2(8)	PCB	0.12	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	35065-27-1	CI6(153)	PCB	0.25	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	35065-28-2	CI6(138)	PCB	0.21	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	35065-29-3	CI7(180)	PCB	0.07	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	35065-30-6	CI7(170)	PCB	0.07	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	35693-99-3	CI4(52)	PCB	0.19	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	37680-65-2	CI3(18)	PCB	0.05	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	37680-73-2	CI5(101)	PCB	0.16	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	38380-03-9	CI5(110)	PCB	0.13	J
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	38380-07-3	CI6(128)	PCB	0.13	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	40186-72-9	CI9(206)	PCB	0.06	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	41464-39-5	CI4(44)	PCB	0.07	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	52663-68-0	CI7(187)	PCB	0.07	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	52663-78-2	CI8(195)	PCB	0.06	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	55215-18-4	CI6(129)	PCB	0.06	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	57465-28-8	CI5(126)	PCB	0.1	U
NAD83_WGS	BDO	01-212	BDO SOP 5-1	LAUEN_AND_CA	SA	6/17/2001 0:00	28.8	1.667	7012-37-5	CI3(28)	PCB	0.08	U

FINAL_QUAL	MDL	RDL	UNIT
	0.08	0.79	UG/KG_DRY\
	0.1	0.79	UG/KG_DRY\
	0.15	0.79	UG/KG_DRY\
	0.08	0.79	UG/KG_DRY\
J	0.14	0.79	UG/KG_DRY\
J	0.09	0.79	UG/KG_DRY\
	0.09	0.8	UG/KG_DRY\
	0.07	0.79	UG/KG_DRY\
	0.17	0.8	UG/KG_DRY\
J	0.08	0.79	UG/KG_DRY\
	0.09	0.79	UG/KG_DRY\
	0.08	0.79	UG/KG_DRY\
	0.07	0.79	UG/KG_DRY\
	0.13	0.79	UG/KG_DRY\
	0.1	0.79	UG/KG_DRY\
	1.03	7.92	UG/KG_DRY\
	1.28	7.92	UG/KG_DRY\
	0.86	7.92	UG/KG_DRY\
	0.9	7.94	UG/KG_DRY\
	0.91	7.94	UG/KG_DRY\
	1.01	7.94	UG/KG_DRY\
	0.83	7.91	UG/KG_DRY\
J	0.08	0.74	UG/KG_DRY\
	0.1	0.74	UG/KG_DRY\
	0.14	0.74	UG/KG_DRY\
	0.07	0.74	UG/KG_DRY\
J	0.14	0.74	UG/KG_DRY\
	0.09	0.74	UG/KG_DRY\
J	0.06	0.74	UG/KG_DRY\
	0.16	0.74	UG/KG_DRY\
J	0.07	0.74	UG/KG_DRY\
	0.08	0.74	UG/KG_DRY\
J	0.07	0.74	UG/KG_DRY\
	0.07	0.74	UG/KG_DRY\
	0.12	0.74	UG/KG_DRY\
	0.09	0.74	UG/KG_DRY\
	0.48	3.7	UG/KG_DRY\
	0.6	3.7	UG/KG_DRY\
	0.4	3.7	UG/KG_DRY\
	0.42	3.71	UG/KG_DRY\
	0.4	3.71	UG/KG_DRY\
	0.42	3.71	UG/KG_DRY\
J	0.47	3.71	UG/KG_DRY\
	0.39	3.69	UG/KG_DRY\
J	0.07	0.68	UG/KG_DRY\
	0.09	0.68	UG/KG_DRY\
	0.09	0.68	UG/KG_DRY\
	0.13	0.69	UG/KG_DRY\
	0.07	0.68	UG/KG_DRY\
J	0.12	0.68	UG/KG_DRY\
	0.08	0.69	UG/KG_DRY\
	0.07	0.69	UG/KG_DRY\

FINAL_QUAL	MDL	RDL	UNIT
	0.08	0.69	UG/KG_DRY\
J	0.06	0.68	UG/KG_DRY\
	0.08	0.69	UG/KG_DRY\
J	0.09	0.69	UG/KG_DRY\
	0.14	0.69	UG/KG_DRY\
J	0.07	0.68	UG/KG_DRY\
	0.08	0.68	UG/KG_DRY\
	0.07	0.68	UG/KG_DRY\
J	0.07	0.69	UG/KG_DRY\
	0.06	0.68	UG/KG_DRY\
	0.11	0.68	UG/KG_DRY\
	0.09	0.68	UG/KG_DRY\
	0.55	3.42	UG/KG_DRY\
	0.37	3.42	UG/KG_DRY\
J	0.09	0.89	UG/KG_DRY\
	0.12	0.89	UG/KG_DRY\
	0.12	0.89	UG/KG_DRY\
	0.17	0.9	UG/KG_DRY\
	0.09	0.89	UG/KG_DRY\
J	0.16	0.89	UG/KG_DRY\
	0.1	0.9	UG/KG_DRY\
	0.11	0.9	UG/KG_DRY\
J	0.08	0.89	UG/KG_DRY\
	0.1	0.9	UG/KG_DRY\
J	0.11	0.9	UG/KG_DRY\
	0.19	0.9	UG/KG_DRY\
J	0.09	0.89	UG/KG_DRY\
	0.1	0.89	UG/KG_DRY\
	0.09	0.89	UG/KG_DRY\
J	0.09	0.9	UG/KG_DRY\
	0.08	0.89	UG/KG_DRY\
	0.14	0.89	UG/KG_DRY\
	0.11	0.89	UG/KG_DRY\
	0.72	4.47	UG/KG_DRY\
	0.48	4.47	UG/KG_DRY\
	0.51	4.48	UG/KG_DRY\
	0.1	0.95	UG/KG_DRY\
J	0.12	0.95	UG/KG_DRY\
	0.13	0.95	UG/KG_DRY\
	0.18	0.95	UG/KG_DRY\
	0.1	0.95	UG/KG_DRY\
J	0.17	0.95	UG/KG_DRY\
J	0.1	0.95	UG/KG_DRY\
J	0.11	0.96	UG/KG_DRY\
	0.08	0.95	UG/KG_DRY\
J	0.11	0.95	UG/KG_DRY\
	0.12	0.95	UG/KG_DRY\
	0.2	0.96	UG/KG_DRY\
J	0.09	0.95	UG/KG_DRY\
	0.11	0.95	UG/KG_DRY\
J	0.1	0.95	UG/KG_DRY\
	0.09	0.95	UG/KG_DRY\

FINAL_QUAL	MDL	RDL	UNIT
	0.09	0.95	UG/KG_DRY\
	0.15	0.95	UG/KG_DRY\
J	0.12	0.95	UG/KG_DRY\
J	0.77	4.76	UG/KG_DRY\
J	0.52	4.76	UG/KG_DRY\
	0.54	4.77	UG/KG_DRY\
	0.11	1	UG/KG_DRY\
	0.13	1	UG/KG_DRY\
	0.19	1	UG/KG_DRY\
	0.1	1	UG/KG_DRY\
J	0.18	1	UG/KG_DRY\
	0.11	1	UG/KG_DRY\
	0.12	1.01	UG/KG_DRY\
	0.09	1	UG/KG_DRY\
	0.21	1.01	UG/KG_DRY\
J	0.1	1	UG/KG_DRY\
	0.11	1	UG/KG_DRY\
J	0.1	1	UG/KG_DRY\
	0.09	1	UG/KG_DRY\
	0.16	1	UG/KG_DRY\
	0.13	1	UG/KG_DRY\
	1.31	10.02	UG/KG_DRY\
	1.62	10.02	UG/KG_DRY\
	1.14	10.04	UG/KG_DRY\
	1.08	10.04	UG/KG_DRY\
	1.15	10.04	UG/KG_DRY\
	1.27	10.04	UG/KG_DRY\
	1.05	10	UG/KG_DRY\
J	0.1	0.97	UG/KG_DRY\
	0.13	0.97	UG/KG_DRY\
	0.13	0.97	UG/KG_DRY\
	0.18	0.97	UG/KG_DRY\
	0.1	0.97	UG/KG_DRY\
UJ	0.18	0.97	UG/KG_DRY\
	0.16	0.97	UG/KG_DRY\
	0.11	0.97	UG/KG_DRY\
	0.11	0.97	UG/KG_DRY\
	0.1	0.97	UG/KG_DRY\
	0.12	0.97	UG/KG_DRY\
UJ	0.08	0.97	UG/KG_DRY\
	0.11	0.97	UG/KG_DRY\
J	0.12	0.97	UG/KG_DRY\
	0.21	0.97	UG/KG_DRY\
J	0.09	0.97	UG/KG_DRY\
	0.11	0.97	UG/KG_DRY\
	0.1	0.97	UG/KG_DRY\
J	0.1	0.97	UG/KG_DRY\
	0.09	0.97	UG/KG_DRY\
	0.16	0.97	UG/KG_DRY\
	0.12	0.97	UG/KG_DRY\
UJ	0.12	1.15	UG/KG_DRY\
	0.15	1.16	UG/KG_DRY\

FINAL_QUAL	MDL	RDL	UNIT
	0.15	1.15	UG/KG_DRY\
	0.21	1.16	UG/KG_DRY\
	0.12	1.15	UG/KG_DRY\
UJ	0.21	1.16	UG/KG_DRY\
	0.19	1.16	UG/KG_DRY\
	0.13	1.16	UG/KG_DRY\
	0.13	1.16	UG/KG_DRY\
	0.12	1.16	UG/KG_DRY\
	0.14	1.16	UG/KG_DRY\
UJ	0.1	1.16	UG/KG_DRY\
	0.13	1.16	UG/KG_DRY\
J	0.15	1.16	UG/KG_DRY\
	0.24	1.16	UG/KG_DRY\
UJ	0.11	1.16	UG/KG_DRY\
	0.13	1.15	UG/KG_DRY\
	0.12	1.15	UG/KG_DRY\
UJ	0.11	1.16	UG/KG_DRY\
	0.11	1.15	UG/KG_DRY\
	0.19	1.15	UG/KG_DRY\
	0.15	1.15	UG/KG_DRY\
J	0.09	0.89	UG/KG_DRY\
	0.12	0.9	UG/KG_DRY\
	0.12	0.89	UG/KG_DRY\
	0.17	0.9	UG/KG_DRY\
	0.09	0.89	UG/KG_DRY\
UJ	0.16	0.9	UG/KG_DRY\
	0.15	0.9	UG/KG_DRY\
	0.1	0.9	UG/KG_DRY\
	0.1	0.9	UG/KG_DRY\
	0.1	0.9	UG/KG_DRY\
	0.11	0.9	UG/KG_DRY\
	0.08	0.9	UG/KG_DRY\
	0.1	0.9	UG/KG_DRY\
J	0.11	0.9	UG/KG_DRY\
	0.19	0.9	UG/KG_DRY\
J	0.09	0.9	UG/KG_DRY\
	0.1	0.89	UG/KG_DRY\
	0.09	0.89	UG/KG_DRY\
J	0.09	0.9	UG/KG_DRY\
	0.08	0.89	UG/KG_DRY\
	0.14	0.89	UG/KG_DRY\
J	0.11	0.89	UG/KG_DRY\
J	0.11	1.02	UG/KG_DRY\
	0.13	1.02	UG/KG_DRY\
	0.13	1.02	UG/KG_DRY\
	0.19	1.02	UG/KG_DRY\
	0.1	1.02	UG/KG_DRY\
UJ	0.19	1.02	UG/KG_DRY\
	0.17	1.02	UG/KG_DRY\
	0.11	1.02	UG/KG_DRY\
	0.12	1.02	UG/KG_DRY\
	0.11	1.02	UG/KG_DRY\

FINAL_QUAL	MDL	RDL	UNIT
	0.12	1.02	UG/KG_DRY\
UJ	0.09	1.02	UG/KG_DRY\
	0.12	1.02	UG/KG_DRY\
J	0.13	1.02	UG/KG_DRY\
	0.22	1.02	UG/KG_DRY\
J	0.1	1.02	UG/KG_DRY\
	0.11	1.02	UG/KG_DRY\
	0.11	1.02	UG/KG_DRY\
J	0.1	1.02	UG/KG_DRY\
	0.09	1.02	UG/KG_DRY\
	0.16	1.02	UG/KG_DRY\
	0.13	1.02	UG/KG_DRY\
J	0.11	1.02	UG/KG_DRY\
	0.13	1.02	UG/KG_DRY\
	0.14	1.02	UG/KG_DRY\
	0.19	1.02	UG/KG_DRY\
	0.1	1.02	UG/KG_DRY\
UJ	0.19	1.02	UG/KG_DRY\
	0.17	1.02	UG/KG_DRY\
	0.11	1.02	UG/KG_DRY\
	0.12	1.02	UG/KG_DRY\
	0.11	1.02	UG/KG_DRY\
	0.12	1.02	UG/KG_DRY\
UJ	0.09	1.02	UG/KG_DRY\
	0.12	1.02	UG/KG_DRY\
J	0.13	1.02	UG/KG_DRY\
	0.22	1.02	UG/KG_DRY\
J	0.1	1.02	UG/KG_DRY\
	0.11	1.02	UG/KG_DRY\
	0.11	1.02	UG/KG_DRY\
J	0.1	1.02	UG/KG_DRY\
	0.09	1.02	UG/KG_DRY\
	0.16	1.02	UG/KG_DRY\
	0.13	1.02	UG/KG_DRY\
J	0.1	0.98	UG/KG_DRY\
	0.13	0.98	UG/KG_DRY\
	0.13	0.98	UG/KG_DRY\
	0.18	0.98	UG/KG_DRY\
	0.1	0.98	UG/KG_DRY\
UJ	0.18	0.98	UG/KG_DRY\
	0.16	0.98	UG/KG_DRY\
	0.11	0.98	UG/KG_DRY\
	0.11	0.98	UG/KG_DRY\
	0.11	0.98	UG/KG_DRY\
	0.12	0.98	UG/KG_DRY\
J	0.08	0.98	UG/KG_DRY\
	0.11	0.98	UG/KG_DRY\
J	0.12	0.98	UG/KG_DRY\
	0.21	0.98	UG/KG_DRY\
J	0.1	0.98	UG/KG_DRY\
	0.11	0.98	UG/KG_DRY\
	0.1	0.98	UG/KG_DRY\

FINAL_QUAL	MDL	RDL	UNIT
J	0.1	0.98	UG/KG_DRY\
	0.09	0.98	UG/KG_DRY\
	0.16	0.98	UG/KG_DRY\
	0.12	0.98	UG/KG_DRY\
J	0.11	1.03	UG/KG_DRY\
	0.13	1.03	UG/KG_DRY\
	0.14	1.03	UG/KG_DRY\
	0.19	1.03	UG/KG_DRY\
	0.1	1.03	UG/KG_DRY\
UJ	0.19	1.03	UG/KG_DRY\
	0.17	1.03	UG/KG_DRY\
	0.11	1.03	UG/KG_DRY\
	0.12	1.03	UG/KG_DRY\
	0.11	1.03	UG/KG_DRY\
	0.12	1.03	UG/KG_DRY\
J	0.09	1.03	UG/KG_DRY\
	0.12	1.03	UG/KG_DRY\
J	0.13	1.03	UG/KG_DRY\
	0.22	1.03	UG/KG_DRY\
J	0.1	1.03	UG/KG_DRY\
	0.12	1.03	UG/KG_DRY\
	0.11	1.03	UG/KG_DRY\
J	0.1	1.03	UG/KG_DRY\
	0.09	1.03	UG/KG_DRY\
	0.17	1.03	UG/KG_DRY\
	0.13	1.03	UG/KG_DRY\
UJ	0.1	0.96	UG/KG_DRY\
J	0.13	0.96	UG/KG_DRY\
UJ	0.13	0.96	UG/KG_DRY\
UJ	0.18	0.96	UG/KG_DRY\
J	0.1	0.96	UG/KG_DRY\
UJ	0.17	0.96	UG/KG_DRY\
J	0.16	0.96	UG/KG_DRY\
J	0.1	0.96	UG/KG_DRY\
J	0.11	0.96	UG/KG_DRY\
J	0.1	0.96	UG/KG_DRY\
UJ	0.11	0.96	UG/KG_DRY\
UJ	0.08	0.96	UG/KG_DRY\
J	0.11	0.96	UG/KG_DRY\
J	0.12	0.96	UG/KG_DRY\
UJ	0.2	0.96	UG/KG_DRY\
UJ	0.09	0.96	UG/KG_DRY\
UJ	0.11	0.96	UG/KG_DRY\
J	0.1	0.96	UG/KG_DRY\
UJ	0.09	0.96	UG/KG_DRY\
UJ	0.09	0.96	UG/KG_DRY\
UJ	0.15	0.96	UG/KG_DRY\
UJ	0.12	0.96	UG/KG_DRY\
	0.11	1.03	UG/KG_DRY\
	0.13	1.03	UG/KG_DRY\
	0.14	1.03	UG/KG_DRY\
	0.19	1.04	UG/KG_DRY\

FINAL_QUAL	MDL	RDL	UNIT
	0.1	1.03	UG/KG_DRYV
UJ	0.19	1.03	UG/KG_DRYV
	0.17	1.03	UG/KG_DRYV
	0.11	1.03	UG/KG_DRYV
	0.12	1.04	UG/KG_DRYV
	0.11	1.04	UG/KG_DRYV
	0.12	1.04	UG/KG_DRYV
	0.09	1.03	UG/KG_DRYV
	0.12	1.04	UG/KG_DRYV
J	0.13	1.04	UG/KG_DRYV
	0.22	1.04	UG/KG_DRYV
	0.1	1.03	UG/KG_DRYV
J	0.12	1.03	UG/KG_DRYV
	0.11	1.03	UG/KG_DRYV
J	0.1	1.04	UG/KG_DRYV
	0.09	1.03	UG/KG_DRYV
	0.17	1.03	UG/KG_DRYV
	0.13	1.03	UG/KG_DRYV
UJ	0.07	0.63	UG/KG_DRYV
	0.08	0.63	UG/KG_DRYV
	0.08	0.63	UG/KG_DRYV
	0.12	0.63	UG/KG_DRYV
	0.06	0.63	UG/KG_DRYV
UJ	0.12	0.63	UG/KG_DRYV
	0.1	0.63	UG/KG_DRYV
	0.07	0.63	UG/KG_DRYV
	0.07	0.63	UG/KG_DRYV
	0.07	0.63	UG/KG_DRYV
	0.08	0.63	UG/KG_DRYV
UJ	0.05	0.63	UG/KG_DRYV
	0.07	0.63	UG/KG_DRYV
J	0.08	0.63	UG/KG_DRYV
	0.13	0.63	UG/KG_DRYV
UJ	0.06	0.63	UG/KG_DRYV
	0.07	0.63	UG/KG_DRYV
	0.07	0.63	UG/KG_DRYV
UJ	0.06	0.63	UG/KG_DRYV
	0.06	0.63	UG/KG_DRYV
	0.1	0.63	UG/KG_DRYV
	0.08	0.63	UG/KG_DRYV

SAMP_ID	CLIENT_SAMI	STYPE	STATION_	AREA_NAME	MEDIA	TOI	BOT	DEP_
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-196-E	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-197-E	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6	FT

AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-198-E	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-199-E	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-200-E	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT

AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-201-E	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-202-E	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-203-E	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT

AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-204-E	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-205-E	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-206-E	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT

AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-207-E	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-208-E	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-209-E	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT

AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-210-E	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-220-E	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT

AAB-221-E	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-222-E	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-223-E	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT

AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-224-E	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-225-E	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-226-E	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2	FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4	FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4	FT

AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-227-E	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-228-E	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-229-E	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT

AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-230-E	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-231-E	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-232-E	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT

AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-233-E	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-234-E	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-235-E	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT

AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-236-E	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-237-E	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT

AAB-238-E	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-239-E	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-240-E	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT

AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-241-E	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-242-E	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-243-E	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT

AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-244-E	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-245-E	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-247-E	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT

AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-248-E	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-249-E	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-250-E	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT

AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-251-E	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-252-E	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-253-E	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT

AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-254-E	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-255-E	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT

AAB-256-E	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-257-E	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-258-E	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT

AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-259-E	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-260-E	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-261-E	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT

AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-262-E	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-263-E	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-264-E	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-238-G	AAB-238	core	EW-31	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-239-G	AAB-239	core	EW-31	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-240-G	AAB-240	core	EW-31	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-262-G	AAB-262	core	EW-36	Eastern Wetland Area	SEDIMENT	0	2 FT
AAB-263-G	AAB-263	core	EW-36	Eastern Wetland Area	SEDIMENT	2	4 FT
AAB-264-G	AAB-264	core	EW-36	Eastern Wetland Area	SEDIMENT	4	6 FT
AAB-205-G	AAB-205	core	IB-56	India Basin Area I	SEDIMENT	0	2 FT
AAB-206-G	AAB-206	core	IB-56	India Basin Area I	SEDIMENT	2	4 FT

AAB-207-G	AAB-207	core	IB-56	India Basin Area I	SEDIMENT	4	6 FT
AAB-247-G	AAB-247	core	IB-59	India Basin Area I	SEDIMENT	0	2 FT
AAB-248-G	AAB-248	core	IB-59	India Basin Area I	SEDIMENT	2	4 FT
AAB-249-G	AAB-249	core	IB-59	India Basin Area I	SEDIMENT	4	6 FT
AAB-241-G	AAB-241	core	OR-24	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-242-G	AAB-242	core	OR-24	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-243-G	AAB-243	core	OR-24	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-220-G	AAB-220	core	OR-28	Oil Reclamation Area	SEDIMENT	0	2 FT
AAB-221-G	AAB-221	core	OR-28	Oil Reclamation Area	SEDIMENT	2	4 FT
AAB-222-G	AAB-222	core	OR-28	Oil Reclamation Area	SEDIMENT	4	6 FT
AAB-244-G	AAB-244	core	PA-40	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-245-G	AAB-245	core	PA-40	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-196-G	AAB-196	core	PA-41	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-197-G	AAB-197	core	PA-41	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-198-G	AAB-198	core	PA-41	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-226-G	AAB-226	core	PA-44	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-227-G	AAB-227	core	PA-44	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-228-G	AAB-228	core	PA-44	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-223-G	AAB-223	core	PA-47	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-224-G	AAB-224	core	PA-47	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-225-G	AAB-225	core	PA-47	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-232-G	AAB-232	core	PA-49	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-233-G	AAB-233	core	PA-49	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-234-G	AAB-234	core	PA-49	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-229-G	AAB-229	core	PA-52	Point Avisadero Area	SEDIMENT	0	2 FT
AAB-230-G	AAB-230	core	PA-52	Point Avisadero Area	SEDIMENT	2	4 FT
AAB-231-G	AAB-231	core	PA-52	Point Avisadero Area	SEDIMENT	4	6 FT
AAB-259-G	AAB-259	core	SB-01	South Basin Area X	SEDIMENT	0	2 FT
AAB-260-G	AAB-260	core	SB-01	South Basin Area X	SEDIMENT	2	4 FT
AAB-261-G	AAB-261	core	SB-01	South Basin Area X	SEDIMENT	4	6 FT
AAB-208-G	AAB-208	core	SB-03	South Basin Area X	SEDIMENT	0	2 FT
AAB-209-G	AAB-209	core	SB-03	South Basin Area X	SEDIMENT	2	4 FT
AAB-210-G	AAB-210	core	SB-03	South Basin Area X	SEDIMENT	4	6 FT
AAB-202-G	AAB-202	core	SB-06	South Basin Area X	SEDIMENT	0	2 FT
AAB-203-G	AAB-203	core	SB-06	South Basin Area X	SEDIMENT	2	4 FT
AAB-204-G	AAB-204	core	SB-06	South Basin Area X	SEDIMENT	4	6 FT
AAB-235-G	AAB-235	core	SB-07	South Basin Area X	SEDIMENT	0	2 FT
AAB-236-G	AAB-236	core	SB-07	South Basin Area X	SEDIMENT	2	4 FT
AAB-237-G	AAB-237	core	SB-07	South Basin Area X	SEDIMENT	4	6 FT
AAB-199-G	AAB-199	core	SB-12	South Basin Area X	SEDIMENT	0	2 FT
AAB-200-G	AAB-200	core	SB-12	South Basin Area X	SEDIMENT	2	4 FT
AAB-201-G	AAB-201	core	SB-12	South Basin Area X	SEDIMENT	4	6 FT
AAB-256-G	AAB-256	core	SB-16	South Basin Area X	SEDIMENT	0	2 FT
AAB-257-G	AAB-257	core	SB-16	South Basin Area X	SEDIMENT	2	4 FT
AAB-258-G	AAB-258	core	SB-16	South Basin Area X	SEDIMENT	4	6 FT
AAB-250-G	AAB-250	core	SB-20	South Basin Area X	SEDIMENT	0	2 FT
AAB-251-G	AAB-251	core	SB-20	South Basin Area X	SEDIMENT	2	4 FT
AAB-252-G	AAB-252	core	SB-20	South Basin Area X	SEDIMENT	4	6 FT
AAB-253-G	AAB-253	core	SB-22	South Basin Area X	SEDIMENT	0	2 FT
AAB-254-G	AAB-254	core	SB-22	South Basin Area X	SEDIMENT	2	4 FT
AAB-255-G	AAB-255	core	SB-22	South Basin Area X	SEDIMENT	4	6 FT

PC	GROUP	RESULT	QUAL	VALQUAL	MDL	RDL	UNIT	CONC2
Hg	METALS	2.09			0.00208		MG/KG	
Pb	METALS	153			0.198		MG/KG	
Mo	METALS	1.97			0.0391		MG/KG	
Sb	METALS	3.97			0.0297		MG/KG	
As	METALS	14.4			0.068		MG/KG	
Cd	METALS	0.667			0.0175		MG/KG	
Co	METALS	22.9			0.0527		MG/KG	
V	METALS	137			0.345		MG/KG	
Al	METALS	70800			2.39		MG/KG	
Fe	METALS	46200			0.564		MG/KG	
Mn	METALS	541			0.074		MG/KG	
Ni	METALS	153			0.0386		MG/KG	
Ba	METALS	823			0.018		MG/KG	
Cr	METALS	430			0.51		MG/KG	
Cu	METALS	1980			0.24		MG/KG	
Zn	METALS	557			0.107		MG/KG	
Ag	METALS	0.58			0.066		MG/KG	
Se	METALS	0.47	J		0.126		MG/KG	
Hg	METALS	1.84			0.00208		MG/KG	
Pb	METALS	103			0.198		MG/KG	
Mo	METALS	1.17			0.0391		MG/KG	
Sb	METALS	6.27			0.0297		MG/KG	
As	METALS	17.8			0.068		MG/KG	
Cd	METALS	0.768			0.0175		MG/KG	
Co	METALS	16.4			0.0527		MG/KG	
V	METALS	134			0.345		MG/KG	
Al	METALS	70300			2.39		MG/KG	
Fe	METALS	42100			0.564		MG/KG	
Mn	METALS	458			0.074		MG/KG	
Ni	METALS	131			0.0386		MG/KG	
Ba	METALS	485			0.018		MG/KG	
Cr	METALS	205			0.51		MG/KG	
Cu	METALS	2150			0.24		MG/KG	
Zn	METALS	260			0.107		MG/KG	
Ag	METALS	0.607			0.066		MG/KG	
Se	METALS	0.469	J		0.126		MG/KG	
Hg	METALS	0.846			0.00208		MG/KG	
Pb	METALS	56.6			0.198		MG/KG	
Mo	METALS	1.06			0.0391		MG/KG	
Sb	METALS	2.74			0.0297		MG/KG	
As	METALS	15			0.068		MG/KG	
Cd	METALS	0.604			0.0175		MG/KG	
Co	METALS	18.6			0.0527		MG/KG	
V	METALS	150			0.345		MG/KG	
Al	METALS	74100			2.39		MG/KG	
Fe	METALS	44500			0.564		MG/KG	
Mn	METALS	530			0.074		MG/KG	
Ni	METALS	118			0.0386		MG/KG	
Ba	METALS	445			0.018		MG/KG	
Cr	METALS	173			0.51		MG/KG	

Cu	METALS	199		0.24	MG/KG
Zn	METALS	154		0.107	MG/KG
Ag	METALS	0.473		0.066	MG/KG
Se	METALS	0.48	J	0.126	MG/KG
Hg	METALS	1.31		0.00208	MG/KG
Pb	METALS	128		0.198	MG/KG
Mo	METALS	2.52		0.0391	MG/KG
Sb	METALS	2.71		0.0297	MG/KG
As	METALS	15.2		0.068	MG/KG
Cd	METALS	2.21		0.0175	MG/KG
Co	METALS	18.6		0.0527	MG/KG
V	METALS	165		0.345	MG/KG
Al	METALS	74700		2.39	MG/KG
Fe	METALS	47000		0.564	MG/KG
Mn	METALS	439		0.074	MG/KG
Ni	METALS	140		0.0386	MG/KG
Ba	METALS	603		0.018	MG/KG
Cr	METALS	792		0.51	MG/KG
Cu	METALS	196		0.24	MG/KG
Zn	METALS	430		0.107	MG/KG
Ag	METALS	0.733		0.066	MG/KG
Se	METALS	0.978	J	0.126	MG/KG
Hg	METALS	0.925		0.00208	MG/KG
Pb	METALS	11.4		0.198	MG/KG
Mo	METALS	0.805		0.0391	MG/KG
Sb	METALS	0.46		0.0297	MG/KG
As	METALS	11.3		0.068	MG/KG
Cd	METALS	0.223	J	0.0175	MG/KG
Co	METALS	18.5		0.0527	MG/KG
V	METALS	153		0.345	MG/KG
Al	METALS	79400		2.39	MG/KG
Fe	METALS	49100		0.564	MG/KG
Mn	METALS	434		0.074	MG/KG
Ni	METALS	123		0.0386	MG/KG
Ba	METALS	483		0.018	MG/KG
Cr	METALS	364		0.51	MG/KG
Cu	METALS	104		0.24	MG/KG
Zn	METALS	288		0.107	MG/KG
Ag	METALS	0.113	J	0.066	MG/KG
Se	METALS	0.539	J	0.126	MG/KG
Hg	METALS	0.09		0.00208	MG/KG
Pb	METALS	272		0.198	MG/KG
Mo	METALS	3.25		0.0391	MG/KG
Sb	METALS	5.95		0.0297	MG/KG
As	METALS	13.9		0.068	MG/KG
Cd	METALS	3.76		0.0175	MG/KG
Co	METALS	18.4		0.0527	MG/KG
V	METALS	148		0.345	MG/KG
Al	METALS	69600		2.39	MG/KG
Fe	METALS	48100		0.564	MG/KG
Mn	METALS	481		0.074	MG/KG

Ni	METALS	88.8		0.0386	MG/KG
Ba	METALS	427		0.018	MG/KG
Cr	METALS	154		0.51	MG/KG
Cu	METALS	28.8		0.24	MG/KG
Zn	METALS	77.3		0.107	MG/KG
Ag	METALS	0.989		0.066	MG/KG
Se	METALS	0.508	J	0.126	MG/KG
Pb	METALS	153		0.198	MG/KG
Mo	METALS	2.62		0.0391	MG/KG
Sb	METALS	3.17		0.0297	MG/KG
As	METALS	14		0.068	MG/KG
Cd	METALS	2.05		0.0175	MG/KG
Co	METALS	18.3		0.0527	MG/KG
V	METALS	159		0.345	MG/KG
Al	METALS	73300		2.39	MG/KG
Fe	METALS	47700		0.564	MG/KG
Mn	METALS	415		0.074	MG/KG
Ni	METALS	115		0.0386	MG/KG
Ba	METALS	448		0.018	MG/KG
Cr	METALS	466		0.51	MG/KG
Cu	METALS	122		0.24	MG/KG
Zn	METALS	293		0.107	MG/KG
Ag	METALS	0.892		0.066	MG/KG
Se	METALS	0.739	J	0.126	MG/KG
Hg	METALS	0.856		0.00208	MG/KG
Hg	METALS	0.436		0.00208	MG/KG
Pb	METALS	47.8		0.198	MG/KG
Mo	METALS	2.65		0.0391	MG/KG
Sb	METALS	1.57		0.0297	MG/KG
As	METALS	14.2		0.068	MG/KG
Cd	METALS	1.1		0.0175	MG/KG
Co	METALS	18.1		0.0527	MG/KG
V	METALS	160		0.345	MG/KG
Al	METALS	72400		2.39	MG/KG
Fe	METALS	48500		0.564	MG/KG
Mn	METALS	425		0.074	MG/KG
Ni	METALS	99.1		0.0386	MG/KG
Ba	METALS	408		0.018	MG/KG
Cr	METALS	211		0.51	MG/KG
Cu	METALS	56.7		0.24	MG/KG
Zn	METALS	160		0.107	MG/KG
Ag	METALS	0.457		0.066	MG/KG
Se	METALS	0.504	J	0.126	MG/KG
Pb	METALS	10.5		0.198	MG/KG
Mo	METALS	2.98		0.0391	MG/KG
Sb	METALS	0.435		0.0297	MG/KG
As	METALS	14.9		0.068	MG/KG
Cd	METALS	0.397	J	0.0175	MG/KG
Co	METALS	16.8		0.0527	MG/KG
V	METALS	132		0.345	MG/KG
Al	METALS	73000		2.39	MG/KG

Fe	METALS	50100		0.564	MG/KG
Mn	METALS	495		0.074	MG/KG
Ni	METALS	93.5		0.0386	MG/KG
Ba	METALS	445		0.018	MG/KG
Cr	METALS	161		0.51	MG/KG
Cu	METALS	30.7		0.24	MG/KG
Zn	METALS	81.8		0.107	MG/KG
Ag	METALS	0.127	J	0.066	MG/KG
Se	METALS	0.42	J	0.126	MG/KG
Hg	METALS	0.0749		0.00208	MG/KG
Hg	METALS	0.391		0.00208	MG/KG
Pb	METALS	70.2		0.198	MG/KG
Mo	METALS	1.56		0.0391	MG/KG
Sb	METALS	1.67		0.0297	MG/KG
As	METALS	12.7		0.068	MG/KG
Cd	METALS	0.429	J	0.0175	MG/KG
Co	METALS	18.5		0.0527	MG/KG
V	METALS	146		0.345	MG/KG
Al	METALS	72200		2.39	MG/KG
Fe	METALS	42600		0.564	MG/KG
Mn	METALS	389		0.074	MG/KG
Ni	METALS	118		0.0386	MG/KG
Ba	METALS	462		0.018	MG/KG
Cr	METALS	191		0.51	MG/KG
Cu	METALS	66.2		0.24	MG/KG
Zn	METALS	135		0.107	MG/KG
Ag	METALS	0.633		0.066	MG/KG
Se	METALS	0.377	J	0.126	MG/KG
Hg	METALS	0.719		0.00208	MG/KG
Pb	METALS	83.2		0.198	MG/KG
Mo	METALS	1.76		0.0391	MG/KG
Sb	METALS	1.96		0.0297	MG/KG
As	METALS	16.5		0.068	MG/KG
Cd	METALS	0.764		0.0175	MG/KG
Co	METALS	19.7		0.0527	MG/KG
V	METALS	165		0.345	MG/KG
Al	METALS	78000		2.39	MG/KG
Fe	METALS	45000		0.564	MG/KG
Mn	METALS	478		0.074	MG/KG
Ni	METALS	112		0.0386	MG/KG
Ba	METALS	458		0.018	MG/KG
Cr	METALS	182		0.51	MG/KG
Cu	METALS	68.5		0.24	MG/KG
Zn	METALS	138		0.107	MG/KG
Ag	METALS	0.637		0.066	MG/KG
Se	METALS	0.394	J	0.126	MG/KG
Hg	METALS	0.324		0.00208	MG/KG
Pb	METALS	34.4		0.198	MG/KG
Mo	METALS	1.37		0.0391	MG/KG
Sb	METALS	0.947		0.0297	MG/KG
As	METALS	14.2		0.068	MG/KG

Cd	METALS	0.241	J	0.0175	MG/KG
Co	METALS	18.4		0.0527	MG/KG
V	METALS	166		0.345	MG/KG
Al	METALS	78600		2.39	MG/KG
Fe	METALS	42500		0.564	MG/KG
Mn	METALS	576		0.074	MG/KG
Ni	METALS	90.5		0.0386	MG/KG
Ba	METALS	428		0.018	MG/KG
Cr	METALS	151		0.51	MG/KG
Cu	METALS	46		0.24	MG/KG
Zn	METALS	88.4		0.107	MG/KG
Ag	METALS	0.165		0.066	MG/KG
Se	METALS	0.529	J	0.126	MG/KG
Hg	METALS	0.845		0.00208	MG/KG
Pb	METALS	200		0.198	MG/KG
Mo	METALS	2.38		0.0391	MG/KG
Sb	METALS	2.91		0.0297	MG/KG
As	METALS	16.8		0.068	MG/KG
Cd	METALS	2.15		0.0175	MG/KG
Co	METALS	20.1		0.0527	MG/KG
V	METALS	170		0.345	MG/KG
Al	METALS	73800		2.39	MG/KG
Fe	METALS	48800		0.564	MG/KG
Mn	METALS	415		0.074	MG/KG
Ni	METALS	110		0.0386	MG/KG
Ba	METALS	504		0.018	MG/KG
Cr	METALS	302		0.51	MG/KG
Cu	METALS	114		0.24	MG/KG
Zn	METALS	302		0.107	MG/KG
Ag	METALS	0.891		0.066	MG/KG
Se	METALS	0.675	J	0.126	MG/KG
Hg	METALS	0.328		0.00208	MG/KG
Pb	METALS	34.5		0.198	MG/KG
Mo	METALS	2.57		0.0391	MG/KG
Sb	METALS	1.13		0.0297	MG/KG
As	METALS	15.7		0.068	MG/KG
Cd	METALS	0.827		0.0175	MG/KG
Co	METALS	17.8		0.0527	MG/KG
V	METALS	156		0.345	MG/KG
Al	METALS	74300		2.39	MG/KG
Fe	METALS	49900		0.564	MG/KG
Mn	METALS	425		0.074	MG/KG
Ni	METALS	98.9		0.0386	MG/KG
Ba	METALS	426		0.018	MG/KG
Cr	METALS	194		0.51	MG/KG
Cu	METALS	46.6		0.24	MG/KG
Zn	METALS	133		0.107	MG/KG
Ag	METALS	0.29		0.066	MG/KG
Se	METALS	0.509	J	0.126	MG/KG
Hg	METALS	0.0734		0.00208	MG/KG
Pb	METALS	10.7		0.198	MG/KG

Mo	METALS	3.08		0.0391	MG/KG
Sb	METALS	0.409		0.0297	MG/KG
As	METALS	15.6		0.068	MG/KG
Cd	METALS	0.502	J	0.0175	MG/KG
Co	METALS	16.8		0.0527	MG/KG
V	METALS	138		0.345	MG/KG
Al	METALS	70200		2.39	MG/KG
Fe	METALS	52100		0.564	MG/KG
Mn	METALS	493		0.074	MG/KG
Ni	METALS	85.4		0.0386	MG/KG
Ba	METALS	406		0.018	MG/KG
Cr	METALS	170		0.51	MG/KG
Cu	METALS	30		0.24	MG/KG
Zn	METALS	84.5		0.107	MG/KG
Ag	METALS	0.141		0.066	MG/KG
Se	METALS	0.528	J	0.126	MG/KG
Hg	METALS	0.525		0.00208	MG/KG
Pb	METALS	43.8		0.198	MG/KG
Mo	METALS	1.28		0.0391	MG/KG
Sb	METALS	1.33		0.0297	MG/KG
As	METALS	12.6		0.068	MG/KG
Cd	METALS	0.4	J	0.0175	MG/KG
Co	METALS	20.8		0.0527	MG/KG
V	METALS	163		0.345	MG/KG
Al	METALS	72900		2.39	MG/KG
Fe	METALS	46800		0.564	MG/KG
Mn	METALS	453		0.074	MG/KG
Ni	METALS	116		0.0386	MG/KG
Ba	METALS	454		0.018	MG/KG
Cr	METALS	210		0.51	MG/KG
Cu	METALS	60.6		0.24	MG/KG
Zn	METALS	138		0.107	MG/KG
Ag	METALS	0.445		0.066	MG/KG
Se	METALS	0.429	J	0.126	MG/KG
Ag	METALS	0.31		0.066	MG/KG
Se	METALS	0.435	J	0.126	MG/KG
Al	METALS	78100		2.39	MG/KG
Fe	METALS	46400		0.564	MG/KG
Mn	METALS	425		0.074	MG/KG
Ni	METALS	98.5		0.0386	MG/KG
Ba	METALS	472		0.018	MG/KG
Cr	METALS	177		0.51	MG/KG
Cu	METALS	49		0.24	MG/KG
Zn	METALS	119		0.107	MG/KG
Hg	METALS	0.589		0.00208	MG/KG
Pb	METALS	29.8		0.198	MG/KG
Mo	METALS	1.32		0.0391	MG/KG
Sb	METALS	1.1		0.0297	MG/KG
As	METALS	15.3		0.068	MG/KG
Cd	METALS	0.341	J	0.0175	MG/KG
Co	METALS	19.8		0.0527	MG/KG

V	METALS	164		0.345	MG/KG
Hg	METALS	0.0884		0.00208	MG/KG
Pb	METALS	10.9		0.198	MG/KG
Mo	METALS	2.66		0.0391	MG/KG
Sb	METALS	0.459		0.0297	MG/KG
As	METALS	12.8		0.068	MG/KG
Cd	METALS	0.381	J	0.0175	MG/KG
Co	METALS	18.1		0.0527	MG/KG
V	METALS	144		0.345	MG/KG
Al	METALS	69500		2.39	MG/KG
Fe	METALS	46400		0.564	MG/KG
Mn	METALS	477		0.074	MG/KG
Ni	METALS	86.5		0.0386	MG/KG
Ba	METALS	412		0.018	MG/KG
Cr	METALS	157		0.51	MG/KG
Cu	METALS	31.1		0.24	MG/KG
Zn	METALS	87		0.107	MG/KG
Ag	METALS	0.158		0.066	MG/KG
Se	METALS	0.581	J	0.126	MG/KG
Hg	METALS	43.1		0.00208	MG/KG
Pb	METALS	101		0.198	MG/KG
Mo	METALS	1.98		0.0391	MG/KG
Sb	METALS	5.2		0.0297	MG/KG
As	METALS	32		0.068	MG/KG
Cd	METALS	0.734		0.0175	MG/KG
Co	METALS	19.7		0.0527	MG/KG
V	METALS	141		0.345	MG/KG
Al	METALS	64000		2.39	MG/KG
Fe	METALS	42800		0.564	MG/KG
Mn	METALS	539		0.074	MG/KG
Ni	METALS	154		0.0386	MG/KG
Ba	METALS	420		0.018	MG/KG
Cr	METALS	330		0.51	MG/KG
Cu	METALS	780		0.24	MG/KG
Zn	METALS	367		0.107	MG/KG
Ag	METALS	0.265		0.066	MG/KG
Se	METALS	0.371	J	0.126	MG/KG
Hg	METALS	0.124		0.00208	MG/KG
Pb	METALS	11.2		0.198	MG/KG
Mo	METALS	0.801		0.0391	MG/KG
Sb	METALS	0.444		0.0297	MG/KG
As	METALS	12.4		0.068	MG/KG
Cd	METALS	0.261	J	0.0175	MG/KG
Co	METALS	19		0.0527	MG/KG
V	METALS	150		0.345	MG/KG
Al	METALS	72400		2.39	MG/KG
Fe	METALS	45500		0.564	MG/KG
Mn	METALS	755		0.074	MG/KG
Ni	METALS	96.3		0.0386	MG/KG
Ba	METALS	431		0.018	MG/KG
Cr	METALS	152		0.51	MG/KG

Cu	METALS	31.2		0.24	MG/KG
Zn	METALS	83.5		0.107	MG/KG
Ag	METALS	0.125	J	0.066	MG/KG
Se	METALS	0.468	J	0.126	MG/KG
Hg	METALS	0.082		0.00208	MG/KG
Pb	METALS	11.1		0.198	MG/KG
Mo	METALS	0.398		0.0391	MG/KG
Sb	METALS	0.54		0.0297	MG/KG
As	METALS	6.05		0.068	MG/KG
Cd	METALS	0.193	J	0.0175	MG/KG
Co	METALS	13.3		0.0527	MG/KG
V	METALS	76		0.345	MG/KG
Al	METALS	69200		2.39	MG/KG
Fe	METALS	43600		0.564	MG/KG
Mn	METALS	632		0.074	MG/KG
Ni	METALS	136		0.0386	MG/KG
Ba	METALS	410		0.018	MG/KG
Cr	METALS	175		0.51	MG/KG
Cu	METALS	29.6		0.24	MG/KG
Zn	METALS	79.7		0.107	MG/KG
Ag	METALS	0.0708	J	0.066	MG/KG
Se	METALS	0.438	J	0.126	MG/KG
Pb	METALS	161		0.198	MG/KG
Mo	METALS	1.79		0.0391	MG/KG
Sb	METALS	9.94		0.0297	MG/KG
As	METALS	6.43		0.068	MG/KG
Cd	METALS	0.421	J	0.0175	MG/KG
Co	METALS	8.51		0.0527	MG/KG
V	METALS	45.8		0.345	MG/KG
Al	METALS	77300		2.39	MG/KG
Fe	METALS	47100		0.564	MG/KG
Mn	METALS	818		0.074	MG/KG
Ni	METALS	105		0.0386	MG/KG
Ba	METALS	457		0.018	MG/KG
Cr	METALS	167		0.51	MG/KG
Cu	METALS	125		0.24	MG/KG
Zn	METALS	93.8		0.107	MG/KG
Ag	METALS	0.14		0.066	MG/KG
Se	METALS	0.413	J	0.126	MG/KG
Hg	METALS	2.1		0.00208	MG/KG
Hg	METALS	0.0866		0.00208	MG/KG
Pb	METALS	17.7		0.198	MG/KG
Mo	METALS	0.981		0.0391	MG/KG
Sb	METALS	0.636		0.0297	MG/KG
As	METALS	10.8		0.068	MG/KG
Cd	METALS	0.304	J	0.0175	MG/KG
Co	METALS	21.9		0.0527	MG/KG
V	METALS	169		0.345	MG/KG
Al	METALS	80600		2.39	MG/KG
Fe	METALS	49500		0.564	MG/KG
Mn	METALS	934		0.074	MG/KG

Ni	METALS	110		0.0386	MG/KG
Ba	METALS	471		0.018	MG/KG
Cr	METALS	159		0.51	MG/KG
Cu	METALS	43.1		0.24	MG/KG
Zn	METALS	93.2		0.107	MG/KG
Ag	METALS	0.183		0.066	MG/KG
Se	METALS	0.461	J	0.126	MG/KG
Hg	METALS	0.0739		0.00208	MG/KG
Pb	METALS	247		0.198	MG/KG
Mo	METALS	1.48		0.0391	MG/KG
Sb	METALS	18.8		0.0297	MG/KG
As	METALS	10.3		0.068	MG/KG
Cd	METALS	0.575	J	0.0175	MG/KG
Co	METALS	16.3		0.0527	MG/KG
V	METALS	87		0.345	MG/KG
Al	METALS	82400		2.39	MG/KG
Fe	METALS	50700		0.564	MG/KG
Mn	METALS	1090		0.074	MG/KG
Ni	METALS	113		0.0386	MG/KG
Ba	METALS	481		0.018	MG/KG
Cr	METALS	159		0.51	MG/KG
Cu	METALS	43.9		0.24	MG/KG
Zn	METALS	96.5		0.107	MG/KG
Ag	METALS	0.514		0.066	MG/KG
Se	METALS	0.391	J	0.126	MG/KG
Hg	METALS	0.263		0.00208	MG/KG
Pb	METALS	39.8		0.198	MG/KG
Mo	METALS	1.27		0.0391	MG/KG
Sb	METALS	1.05		0.0297	MG/KG
As	METALS	10.5		0.068	MG/KG
Cd	METALS	0.436	J	0.0175	MG/KG
Co	METALS	16.5		0.0527	MG/KG
V	METALS	151		0.345	MG/KG
Al	METALS	65300		2.39	MG/KG
Fe	METALS	36300		0.564	MG/KG
Mn	METALS	442		0.074	MG/KG
Ni	METALS	102		0.0386	MG/KG
Ba	METALS	455		0.018	MG/KG
Cr	METALS	150		0.51	MG/KG
Cu	METALS	34.7		0.24	MG/KG
Zn	METALS	95.1		0.107	MG/KG
Ag	METALS	0.367		0.066	MG/KG
Se	METALS	0.262	J	0.126	MG/KG
Hg	METALS	0.421		0.00208	MG/KG
Pb	METALS	12.4		0.198	MG/KG
Mo	METALS	4.14		0.0391	MG/KG
Sb	METALS	0.571		0.0297	MG/KG
As	METALS	19		0.068	MG/KG
Cd	METALS	0.566	J	0.0175	MG/KG
Co	METALS	20.2		0.0527	MG/KG
V	METALS	157		0.345	MG/KG

Al	METALS	65900		2.39	MG/KG
Fe	METALS	36600		0.564	MG/KG
Mn	METALS	454		0.074	MG/KG
Ni	METALS	98.1		0.0386	MG/KG
Ba	METALS	454		0.018	MG/KG
Cr	METALS	159		0.51	MG/KG
Cu	METALS	38.7		0.24	MG/KG
Zn	METALS	95.8		0.107	MG/KG
Ag	METALS	0.136		0.066	MG/KG
Se	METALS	0.221	J	0.126	MG/KG
Hg	METALS	0.598		0.00208	MG/KG
Pb	METALS	21.4		0.198	MG/KG
Mo	METALS	0.705		0.0391	MG/KG
Sb	METALS	0.611		0.0297	MG/KG
As	METALS	9.76		0.068	MG/KG
Cd	METALS	0.212	J	0.0175	MG/KG
Co	METALS	17		0.0527	MG/KG
V	METALS	120		0.345	MG/KG
Al	METALS	69100		2.39	MG/KG
Fe	METALS	40900		0.564	MG/KG
Mn	METALS	532		0.074	MG/KG
Ni	METALS	101		0.0386	MG/KG
Ba	METALS	462		0.018	MG/KG
Cr	METALS	149		0.51	MG/KG
Cu	METALS	58.2		0.24	MG/KG
Zn	METALS	104		0.107	MG/KG
Ag	METALS	0.264		0.066	MG/KG
Se	METALS	0.368	J	0.126	MG/KG
Hg	METALS	0.198		0.00208	MG/KG
Pb	METALS	93		0.198	MG/KG
Mo	METALS	3.32		0.0391	MG/KG
Sb	METALS	2.84		0.0297	MG/KG
As	METALS	9.74		0.068	MG/KG
Cd	METALS	0.541	J	0.0175	MG/KG
Co	METALS	15.7		0.0527	MG/KG
V	METALS	126		0.345	MG/KG
Al	METALS	73200		2.39	MG/KG
Fe	METALS	43100		0.564	MG/KG
Mn	METALS	492		0.074	MG/KG
Ni	METALS	106		0.0386	MG/KG
Ba	METALS	461		0.018	MG/KG
Cr	METALS	172		0.51	MG/KG
Cu	METALS	50.8		0.24	MG/KG
Zn	METALS	102		0.107	MG/KG
Ag	METALS	0.327		0.066	MG/KG
Se	METALS	0.509	J	0.126	MG/KG
Ag	METALS	0.295		0.066	MG/KG
Se	METALS	0.341	J	0.126	MG/KG
Hg	METALS	0.0715		0.00208	MG/KG
Pb	METALS	21.4		0.198	MG/KG
Mo	METALS	0.827		0.0391	MG/KG

Sb	METALS	0.758		0.0297	MG/KG
As	METALS	11.5		0.068	MG/KG
Cd	METALS	0.358	J	0.0175	MG/KG
Co	METALS	17.3		0.0527	MG/KG
V	METALS	139		0.345	MG/KG
Al	METALS	73200		2.39	MG/KG
Fe	METALS	46100		0.564	MG/KG
Mn	METALS	676		0.074	MG/KG
Ni	METALS	100		0.0386	MG/KG
Ba	METALS	427		0.018	MG/KG
Cr	METALS	151		0.51	MG/KG
Cu	METALS	29.5		0.24	MG/KG
Zn	METALS	84.1		0.107	MG/KG
Hg	METALS	0.0709		0.00208	MG/KG
Pb	METALS	11.2		0.198	MG/KG
Mo	METALS	0.664		0.0391	MG/KG
Sb	METALS	0.475		0.0297	MG/KG
As	METALS	12.3		0.068	MG/KG
Cd	METALS	0.176	J	0.0175	MG/KG
Co	METALS	17.6		0.0527	MG/KG
V	METALS	146		0.345	MG/KG
Al	METALS	75600		2.39	MG/KG
Fe	METALS	45100		0.564	MG/KG
Mn	METALS	560		0.074	MG/KG
Ni	METALS	98.6		0.0386	MG/KG
Ba	METALS	452		0.018	MG/KG
Cr	METALS	153		0.51	MG/KG
Cu	METALS	29		0.24	MG/KG
Zn	METALS	83.1		0.107	MG/KG
Ag	METALS	0.107	J	0.066	MG/KG
Se	METALS	0.442	J	0.126	MG/KG
Hg	METALS	1.12		0.00208	MG/KG
Pb	METALS	284		0.198	MG/KG
Mo	METALS	2.38		0.0391	MG/KG
Sb	METALS	6.59		0.0297	MG/KG
As	METALS	16.7		0.068	MG/KG
Cd	METALS	3.21		0.0175	MG/KG
Co	METALS	19.6		0.0527	MG/KG
V	METALS	180		0.345	MG/KG
Al	METALS	73400		2.39	MG/KG
Fe	METALS	50100		0.564	MG/KG
Mn	METALS	423		0.074	MG/KG
Ni	METALS	121		0.0386	MG/KG
Ba	METALS	502		0.018	MG/KG
Cr	METALS	448		0.51	MG/KG
Cu	METALS	156		0.24	MG/KG
Zn	METALS	451		0.107	MG/KG
Ag	METALS	1.08		0.066	MG/KG
Se	METALS	0.829	J	0.126	MG/KG
Hg	METALS	0.668		0.00208	MG/KG
Pb	METALS	100		0.198	MG/KG

Mo	METALS	2.43		0.0391	MG/KG
Sb	METALS	2.21		0.0297	MG/KG
As	METALS	17		0.068	MG/KG
Cd	METALS	1.85		0.0175	MG/KG
Co	METALS	18.7		0.0527	MG/KG
V	METALS	166		0.345	MG/KG
Al	METALS	77400		2.39	MG/KG
Fe	METALS	51100		0.564	MG/KG
Mn	METALS	408		0.074	MG/KG
Ni	METALS	108		0.0386	MG/KG
Ba	METALS	453		0.018	MG/KG
Cr	METALS	285		0.51	MG/KG
Cu	METALS	76.7		0.24	MG/KG
Zn	METALS	243		0.107	MG/KG
Ag	METALS	0.626		0.066	MG/KG
Se	METALS	0.647	J	0.126	MG/KG
Hg	METALS	0.0827		0.00208	MG/KG
Pb	METALS	11.1		0.198	MG/KG
Mo	METALS	3.11		0.0391	MG/KG
Sb	METALS	0.47		0.0297	MG/KG
As	METALS	15.7		0.068	MG/KG
Cd	METALS	0.429	J	0.0175	MG/KG
Co	METALS	16.9		0.0527	MG/KG
V	METALS	136		0.345	MG/KG
Al	METALS	70700		2.39	MG/KG
Fe	METALS	52200		0.564	MG/KG
Mn	METALS	484		0.074	MG/KG
Ni	METALS	86.1		0.0386	MG/KG
Ba	METALS	412		0.018	MG/KG
Cr	METALS	160		0.51	MG/KG
Cu	METALS	30.7		0.24	MG/KG
Zn	METALS	84.5		0.107	MG/KG
Ag	METALS	0.198		0.066	MG/KG
Se	METALS	0.554	J	0.126	MG/KG
Hg	METALS	0.159		0.00208	MG/KG
Pb	METALS	15.1		0.198	MG/KG
Mo	METALS	0.464		0.0391	MG/KG
Sb	METALS	0.386		0.0297	MG/KG
As	METALS	6.56		0.068	MG/KG
Cd	METALS	0.145	J	0.0175	MG/KG
Co	METALS	12.7		0.0527	MG/KG
V	METALS	69.3		0.345	MG/KG
Al	METALS	43100		2.39	MG/KG
Fe	METALS	23700		0.564	MG/KG
Mn	METALS	519		0.074	MG/KG
Ni	METALS	68.7		0.0386	MG/KG
Ba	METALS	319		0.018	MG/KG
Cr	METALS	175		0.51	MG/KG
Cu	METALS	20		0.24	MG/KG
Zn	METALS	53.1		0.107	MG/KG
Ag	METALS	0.0826	J	0.066	MG/KG

Se	METALS	0.134	J	0.126	MG/KG
Hg	METALS	0.112		0.00208	MG/KG
Pb	METALS	7.1		0.198	MG/KG
Mo	METALS	0.578		0.0391	MG/KG
Sb	METALS	0.401		0.0297	MG/KG
As	METALS	7.61		0.068	MG/KG
Cd	METALS	0.104	J	0.0175	MG/KG
Co	METALS	14.6		0.0527	MG/KG
V	METALS	80.5		0.345	MG/KG
Al	METALS	50200		2.39	MG/KG
Fe	METALS	25800		0.564	MG/KG
Mn	METALS	570		0.074	MG/KG
Ni	METALS	81.3		0.0386	MG/KG
Ba	METALS	391		0.018	MG/KG
Cr	METALS	160		0.51	MG/KG
Cu	METALS	14.1		0.24	MG/KG
Zn	METALS	45.3		0.107	MG/KG
Ag	METALS	0.066	U	0.066	MG/KG
Se	METALS	0.153	J	0.126	MG/KG
Hg	METALS	0.292		0.00208	MG/KG
Pb	METALS	5.73		0.198	MG/KG
Mo	METALS	0.666		0.0391	MG/KG
Sb	METALS	0.3		0.0297	MG/KG
As	METALS	8.58		0.068	MG/KG
Cd	METALS	0.115	J	0.0175	MG/KG
Co	METALS	14.9		0.0527	MG/KG
V	METALS	76.7		0.345	MG/KG
Al	METALS	45900		2.39	MG/KG
Fe	METALS	23100		0.564	MG/KG
Mn	METALS	581		0.074	MG/KG
Ni	METALS	78.6		0.0386	MG/KG
Ba	METALS	355		0.018	MG/KG
Cr	METALS	145		0.51	MG/KG
Cu	METALS	10.6		0.24	MG/KG
Zn	METALS	38.5		0.107	MG/KG
Ag	METALS	0.066	U	0.066	MG/KG
Se	METALS	0.126	U	0.126	MG/KG
Hg	METALS	0.144		0.00208	MG/KG
Pb	METALS	12		0.198	MG/KG
Mo	METALS	3.07		0.0391	MG/KG
Sb	METALS	0.519		0.0297	MG/KG
As	METALS	13.6		0.068	MG/KG
Cd	METALS	0.372	J	0.0175	MG/KG
Co	METALS	17		0.0527	MG/KG
V	METALS	135		0.345	MG/KG
Al	METALS	71400		2.39	MG/KG
Fe	METALS	46400		0.564	MG/KG
Mn	METALS	484		0.074	MG/KG
Ni	METALS	93.1		0.0386	MG/KG
Ba	METALS	409		0.018	MG/KG
Cr	METALS	161		0.51	MG/KG

Cu	METALS	31.7		0.24	MG/KG
Zn	METALS	82		0.107	MG/KG
Ag	METALS	0.13		0.066	MG/KG
Se	METALS	0.509	J	0.126	MG/KG
Hg	METALS	0.0555		0.00208	MG/KG
Pb	METALS	9.66		0.198	MG/KG
Mo	METALS	2.58		0.0391	MG/KG
Sb	METALS	0.427		0.0297	MG/KG
As	METALS	11.2		0.068	MG/KG
Cd	METALS	0.341	J	0.0175	MG/KG
Co	METALS	16.1		0.0527	MG/KG
V	METALS	132		0.345	MG/KG
Al	METALS	68900		2.39	MG/KG
Fe	METALS	46900		0.564	MG/KG
Mn	METALS	469		0.074	MG/KG
Ni	METALS	84.8		0.0386	MG/KG
Ba	METALS	385		0.018	MG/KG
Cr	METALS	151		0.51	MG/KG
Cu	METALS	30.5		0.24	MG/KG
Zn	METALS	81.7		0.107	MG/KG
Ag	METALS	0.17		0.066	MG/KG
Se	METALS	0.495	J	0.126	MG/KG
Hg	METALS	0.218		0.00208	MG/KG
Pb	METALS	19.6		0.198	MG/KG
Mo	METALS	1.84		0.0391	MG/KG
Sb	METALS	0.711		0.0297	MG/KG
As	METALS	13.7		0.068	MG/KG
Cd	METALS	0.363	J	0.0175	MG/KG
Co	METALS	19.3		0.0527	MG/KG
V	METALS	160		0.345	MG/KG
Al	METALS	76200		2.39	MG/KG
Fe	METALS	47800		0.564	MG/KG
Mn	METALS	449		0.074	MG/KG
Ni	METALS	98.4		0.0386	MG/KG
Ba	METALS	426		0.018	MG/KG
Cr	METALS	179		0.51	MG/KG
Cu	METALS	42.2		0.24	MG/KG
Zn	METALS	99.4		0.107	MG/KG
Ag	METALS	0.238		0.066	MG/KG
Se	METALS	0.467	J	0.126	MG/KG
Hg	METALS	0.369		0.00208	MG/KG
Pb	METALS	120		0.198	MG/KG
Mo	METALS	6.94		0.0391	MG/KG
Sb	METALS	3.62		0.0297	MG/KG
As	METALS	16.8		0.068	MG/KG
Cd	METALS	0.226	J	0.0175	MG/KG
Co	METALS	14.7		0.0527	MG/KG
V	METALS	79.6		0.345	MG/KG
Al	METALS	52400		2.39	MG/KG
Fe	METALS	48400		0.564	MG/KG
Mn	METALS	462		0.074	MG/KG

Ni	METALS	90.6		0.0386	MG/KG
Ba	METALS	941		0.018	MG/KG
Cr	METALS	368		0.51	MG/KG
Cu	METALS	490		0.24	MG/KG
Zn	METALS	425		0.107	MG/KG
Ag	METALS	0.341		0.066	MG/KG
Se	METALS	0.201	J	0.126	MG/KG
Hg	METALS	0.433		0.00208	MG/KG
Pb	METALS	583		0.198	MG/KG
Mo	METALS	3.54		0.0391	MG/KG
Sb	METALS	1.64		0.0297	MG/KG
As	METALS	12.6		0.068	MG/KG
Cd	METALS	0.412	J	0.0175	MG/KG
Co	METALS	23		0.0527	MG/KG
V	METALS	76.8		0.345	MG/KG
Al	METALS	45500		2.39	MG/KG
Fe	METALS	41800		0.564	MG/KG
Mn	METALS	568		0.074	MG/KG
Ni	METALS	223		0.0386	MG/KG
Ba	METALS	631		0.018	MG/KG
Cr	METALS	913		0.51	MG/KG
Cu	METALS	326		0.24	MG/KG
Zn	METALS	214		0.107	MG/KG
Ag	METALS	0.369		0.066	MG/KG
Se	METALS	0.155	J	0.126	MG/KG
Al	METALS	77300		2.39	MG/KG
Fe	METALS	45800		0.564	MG/KG
Mn	METALS	417		0.074	MG/KG
Ni	METALS	105		0.0386	MG/KG
Ba	METALS	445		0.018	MG/KG
Cr	METALS	164		0.51	MG/KG
Cu	METALS	53.9		0.24	MG/KG
Zn	METALS	126		0.107	MG/KG
Ag	METALS	0.471		0.066	MG/KG
Se	METALS	0.402	J	0.126	MG/KG
Pb	METALS	34.4		0.198	MG/KG
Mo	METALS	1.31		0.0391	MG/KG
Sb	METALS	0.842		0.0297	MG/KG
As	METALS	12.7		0.068	MG/KG
Cd	METALS	0.165	J	0.0175	MG/KG
Co	METALS	19		0.0527	MG/KG
V	METALS	163		0.345	MG/KG
Hg	METALS	0.346		0.00208	MG/KG
Hg	METALS	0.352		0.00208	MG/KG
Pb	METALS	37.4		0.198	MG/KG
Mo	METALS	1.4		0.0391	MG/KG
Sb	METALS	1.13		0.0297	MG/KG
As	METALS	13		0.068	MG/KG
Cd	METALS	0.289	J	0.0175	MG/KG
Co	METALS	20.8		0.0527	MG/KG
V	METALS	176		0.345	MG/KG

Al	METALS	79200		2.39	MG/KG
Fe	METALS	48200		0.564	MG/KG
Mn	METALS	442		0.074	MG/KG
Ni	METALS	116		0.0386	MG/KG
Ba	METALS	445		0.018	MG/KG
Cr	METALS	167		0.51	MG/KG
Cu	METALS	62.7		0.24	MG/KG
Zn	METALS	133		0.107	MG/KG
Ag	METALS	0.493		0.066	MG/KG
Se	METALS	0.438	J	0.126	MG/KG
Hg	METALS	0.55		0.00208	MG/KG
Pb	METALS	106		0.198	MG/KG
Mo	METALS	1.48		0.0391	MG/KG
Sb	METALS	1.48		0.0297	MG/KG
As	METALS	13		0.068	MG/KG
Cd	METALS	0.509	J	0.0175	MG/KG
Co	METALS	19.2		0.0527	MG/KG
V	METALS	157		0.345	MG/KG
Al	METALS	75500		2.39	MG/KG
Fe	METALS	45300		0.564	MG/KG
Mn	METALS	421		0.074	MG/KG
Ni	METALS	125		0.0386	MG/KG
Ba	METALS	458		0.018	MG/KG
Cr	METALS	190		0.51	MG/KG
Cu	METALS	77.5		0.24	MG/KG
Zn	METALS	149		0.107	MG/KG
Ag	METALS	0.804		0.066	MG/KG
Se	METALS	0.628	J	0.126	MG/KG
Se	METALS	0.935	J	0.126	MG/KG
Hg	METALS	1.64		0.00208	MG/KG
Pb	METALS	316		0.198	MG/KG
Mo	METALS	3.17		0.0391	MG/KG
Sb	METALS	9.16		0.0297	MG/KG
As	METALS	14.9		0.068	MG/KG
Cd	METALS	3.74		0.0175	MG/KG
Co	METALS	20.2		0.0527	MG/KG
V	METALS	158		0.345	MG/KG
Al	METALS	68000		2.39	MG/KG
Fe	METALS	45100		0.564	MG/KG
Mn	METALS	404		0.074	MG/KG
Ni	METALS	138		0.0386	MG/KG
Ba	METALS	513		0.018	MG/KG
Cr	METALS	593		0.51	MG/KG
Cu	METALS	242		0.24	MG/KG
Zn	METALS	467		0.107	MG/KG
Ag	METALS	1.19		0.066	MG/KG
Hg	METALS	1.59		0.00208	MG/KG
Pb	METALS	172		0.198	MG/KG
Mo	METALS	3.11		0.0391	MG/KG
Sb	METALS	3.41		0.0297	MG/KG
As	METALS	15.2		0.068	MG/KG

Cd	METALS	3.03		0.0175	MG/KG
Co	METALS	18.7		0.0527	MG/KG
V	METALS	170		0.345	MG/KG
Al	METALS	77700		2.39	MG/KG
Fe	METALS	51200		0.564	MG/KG
Mn	METALS	423		0.074	MG/KG
Ni	METALS	124		0.0386	MG/KG
Ba	METALS	475		0.018	MG/KG
Cr	METALS	576		0.51	MG/KG
Cu	METALS	154		0.24	MG/KG
Zn	METALS	441		0.107	MG/KG
Ag	METALS	1.35		0.066	MG/KG
Se	METALS	0.678	J	0.126	MG/KG
Hg	METALS	0.127		0.00208	MG/KG
Pb	METALS	14.8		0.198	MG/KG
Mo	METALS	3.4		0.0391	MG/KG
Sb	METALS	0.531		0.0297	MG/KG
As	METALS	17.3		0.068	MG/KG
Cd	METALS	0.484	J	0.0175	MG/KG
Co	METALS	17.6		0.0527	MG/KG
V	METALS	141		0.345	MG/KG
Al	METALS	69200		2.39	MG/KG
Fe	METALS	49700		0.564	MG/KG
Mn	METALS	444		0.074	MG/KG
Ni	METALS	83.7		0.0386	MG/KG
Ba	METALS	407		0.018	MG/KG
Cr	METALS	168		0.51	MG/KG
Cu	METALS	31		0.24	MG/KG
Zn	METALS	85.7		0.107	MG/KG
Ag	METALS	0.15		0.066	MG/KG
Se	METALS	0.516	J	0.126	MG/KG
Hg	METALS	1.1		0.00208	MG/KG
Pb	METALS	133		0.198	MG/KG
Mo	METALS	2.55		0.0391	MG/KG
Sb	METALS	4.19		0.0297	MG/KG
As	METALS	15.9		0.068	MG/KG
Cd	METALS	1.8		0.0175	MG/KG
Co	METALS	20		0.0527	MG/KG
V	METALS	164		0.345	MG/KG
Al	METALS	74400		2.39	MG/KG
Fe	METALS	50900		0.564	MG/KG
Mn	METALS	453		0.074	MG/KG
Ni	METALS	131		0.0386	MG/KG
Ba	METALS	463		0.018	MG/KG
Cr	METALS	348		0.51	MG/KG
Cu	METALS	160		0.24	MG/KG
Zn	METALS	275		0.107	MG/KG
Ag	METALS	0.689		0.066	MG/KG
Se	METALS	0.556	J	0.126	MG/KG
Hg	METALS	0.635		0.00208	MG/KG
Pb	METALS	93.5		0.198	MG/KG

Mo	METALS	1.98		0.0391	MG/KG
Sb	METALS	2.05		0.0297	MG/KG
As	METALS	15.1		0.068	MG/KG
Cd	METALS	2.05		0.0175	MG/KG
Co	METALS	19.7		0.0527	MG/KG
V	METALS	172		0.345	MG/KG
Al	METALS	78200		2.39	MG/KG
Fe	METALS	53300		0.564	MG/KG
Mn	METALS	446		0.074	MG/KG
Ni	METALS	123		0.0386	MG/KG
Ba	METALS	440		0.018	MG/KG
Cr	METALS	338		0.51	MG/KG
Cu	METALS	77.1		0.24	MG/KG
Zn	METALS	210		0.107	MG/KG
Ag	METALS	0.493		0.066	MG/KG
Se	METALS	0.47	J	0.126	MG/KG
Hg	METALS	0.226		0.00208	MG/KG
Pb	METALS	20.8		0.198	MG/KG
Mo	METALS	2.79		0.0391	MG/KG
Sb	METALS	0.68		0.0297	MG/KG
As	METALS	16.3		0.068	MG/KG
Cd	METALS	0.465	J	0.0175	MG/KG
Co	METALS	17.6		0.0527	MG/KG
V	METALS	146		0.345	MG/KG
Al	METALS	73700		2.39	MG/KG
Fe	METALS	50600		0.564	MG/KG
Mn	METALS	457		0.074	MG/KG
Ni	METALS	91.9		0.0386	MG/KG
Ba	METALS	423		0.018	MG/KG
Cr	METALS	174		0.51	MG/KG
Cu	METALS	37.4		0.24	MG/KG
Zn	METALS	103		0.107	MG/KG
Ag	METALS	0.176		0.066	MG/KG
Se	METALS	0.548	J	0.126	MG/KG
Hg	METALS	0.314		0.00208	MG/KG
Pb	METALS	46.2		0.198	MG/KG
Mo	METALS	2.65		0.0391	MG/KG
Sb	METALS	2.43		0.0297	MG/KG
As	METALS	11.5		0.068	MG/KG
Cd	METALS	0.509	J	0.0175	MG/KG
Co	METALS	15.9		0.0527	MG/KG
V	METALS	125		0.345	MG/KG
Al	METALS	67400		2.39	MG/KG
Fe	METALS	47400		0.564	MG/KG
Mn	METALS	556		0.074	MG/KG
Ni	METALS	106		0.0386	MG/KG
Ba	METALS	418		0.018	MG/KG
Cr	METALS	218		0.51	MG/KG
Cu	METALS	92		0.24	MG/KG
Zn	METALS	137		0.107	MG/KG
Ag	METALS	0.22		0.066	MG/KG

Se	METALS	0.45	J	0.126	MG/KG
Al	METALS	68300		2.39	MG/KG
Fe	METALS	47100		0.564	MG/KG
Mn	METALS	481		0.074	MG/KG
Ni	METALS	90.1		0.0386	MG/KG
Ba	METALS	383		0.018	MG/KG
Cr	METALS	208		0.51	MG/KG
Cu	METALS	34.5		0.24	MG/KG
Zn	METALS	89.7		0.107	MG/KG
Ag	METALS	0.14		0.066	MG/KG
Se	METALS	0.426	J	0.126	MG/KG
Pb	METALS	15.7		0.198	MG/KG
Mo	METALS	2.71		0.0391	MG/KG
Sb	METALS	0.491		0.0297	MG/KG
As	METALS	13		0.068	MG/KG
Cd	METALS	0.501	J	0.0175	MG/KG
Co	METALS	17		0.0527	MG/KG
V	METALS	141		0.345	MG/KG
Hg	METALS	0.111		0.00208	MG/KG
Hg	METALS	0.2		0.00208	MG/KG
Pb	METALS	25.6		0.198	MG/KG
Mo	METALS	3.01		0.0391	MG/KG
Sb	METALS	0.738		0.0297	MG/KG
As	METALS	14.4		0.068	MG/KG
Cd	METALS	0.613		0.0175	MG/KG
Co	METALS	17.8		0.0527	MG/KG
V	METALS	150		0.345	MG/KG
Al	METALS	74100		2.39	MG/KG
Fe	METALS	51300		0.564	MG/KG
Mn	METALS	462		0.074	MG/KG
Ni	METALS	101		0.0386	MG/KG
Ba	METALS	417		0.018	MG/KG
Cr	METALS	198		0.51	MG/KG
Cu	METALS	41.3		0.24	MG/KG
Zn	METALS	109		0.107	MG/KG
Ag	METALS	0.203		0.066	MG/KG
Se	METALS	0.524	J	0.126	MG/KG
Hg	METALS	1.11		0.00208	MG/KG
Pb	METALS	408		0.198	MG/KG
Mo	METALS	2.4		0.0391	MG/KG
Sb	METALS	4.28		0.0297	MG/KG
As	METALS	13		0.068	MG/KG
Cd	METALS	4.69		0.0175	MG/KG
Co	METALS	18.1		0.0527	MG/KG
V	METALS	144		0.345	MG/KG
Al	METALS	63100		2.39	MG/KG
Fe	METALS	38900		0.564	MG/KG
Mn	METALS	420		0.074	MG/KG
Ni	METALS	96.2		0.0386	MG/KG
Ba	METALS	675		0.018	MG/KG
Cr	METALS	336		0.51	MG/KG

Cu	METALS	129		0.24	MG/KG
Zn	METALS	481		0.107	MG/KG
Ag	METALS	0.892		0.066	MG/KG
Se	METALS	1.15	J	0.126	MG/KG
Hg	METALS	0.709		0.00208	MG/KG
Pb	METALS	149		0.198	MG/KG
Mo	METALS	2.7		0.0391	MG/KG
Sb	METALS	2.47		0.0297	MG/KG
As	METALS	17.5		0.068	MG/KG
Cd	METALS	2.28		0.0175	MG/KG
Co	METALS	18.7		0.0527	MG/KG
V	METALS	164		0.345	MG/KG
Al	METALS	75800		2.39	MG/KG
Fe	METALS	50500		0.564	MG/KG
Mn	METALS	407		0.074	MG/KG
Ni	METALS	106		0.0386	MG/KG
Ba	METALS	483		0.018	MG/KG
Cr	METALS	278		0.51	MG/KG
Cu	METALS	84.3		0.24	MG/KG
Zn	METALS	268		0.107	MG/KG
Ag	METALS	0.623		0.066	MG/KG
Se	METALS	0.628	J	0.126	MG/KG
Hg	METALS	0.0929		0.00208	MG/KG
Pb	METALS	11		0.198	MG/KG
Mo	METALS	3.34		0.0391	MG/KG
Sb	METALS	0.445		0.0297	MG/KG
As	METALS	15.6		0.068	MG/KG
Cd	METALS	0.563	J	0.0175	MG/KG
Co	METALS	17.9		0.0527	MG/KG
V	METALS	147		0.345	MG/KG
Al	METALS	68300		2.39	MG/KG
Fe	METALS	50600		0.564	MG/KG
Mn	METALS	549		0.074	MG/KG
Ni	METALS	79.7		0.0386	MG/KG
Ba	METALS	437		0.018	MG/KG
Cr	METALS	181		0.51	MG/KG
Cu	METALS	29.3		0.24	MG/KG
Zn	METALS	84.5		0.107	MG/KG
Ag	METALS	0.168		0.066	MG/KG
Se	METALS	0.541	J	0.126	MG/KG
Hg	METALS	0.13		0.00208	MG/KG
Pb	METALS	20.2		0.198	MG/KG
Mo	METALS	0.423		0.0391	MG/KG
Sb	METALS	9.26		0.0297	MG/KG
As	METALS	5.8		0.068	MG/KG
Cd	METALS	0.117	J	0.0175	MG/KG
Co	METALS	12.4		0.0527	MG/KG
V	METALS	73		0.345	MG/KG
Al	METALS	44800		2.39	MG/KG
Fe	METALS	27000		0.564	MG/KG
Mn	METALS	630		0.074	MG/KG

Ni	METALS	82		0.0386	MG/KG
Ba	METALS	396		0.018	MG/KG
Cr	METALS	236		0.51	MG/KG
Cu	METALS	31		0.24	MG/KG
Zn	METALS	84.7		0.107	MG/KG
Ag	METALS	0.066	U	0.066	MG/KG
Se	METALS	0.126	U	0.126	MG/KG
Se	METALS	0.126	U	0.126	MG/KG
Ag	METALS	0.066	U	0.066	MG/KG
Hg	METALS	0.143		0.00208	MG/KG
Pb	METALS	6.24		0.198	MG/KG
Mo	METALS	0.621		0.0391	MG/KG
Sb	METALS	0.321		0.0297	MG/KG
As	METALS	10.1		0.068	MG/KG
Cd	METALS	0.204	J	0.0175	MG/KG
Co	METALS	17.3		0.0527	MG/KG
V	METALS	82		0.345	MG/KG
Al	METALS	42300		2.39	MG/KG
Fe	METALS	23300		0.564	MG/KG
Mn	METALS	550		0.074	MG/KG
Ni	METALS	68.8		0.0386	MG/KG
Ba	METALS	342		0.018	MG/KG
Cr	METALS	199		0.51	MG/KG
Cu	METALS	10		0.24	MG/KG
Zn	METALS	40.8		0.107	MG/KG
Hg	METALS	0.0547		0.00208	MG/KG
Pb	METALS	11.2		0.198	MG/KG
Mo	METALS	0.46		0.0391	MG/KG
Sb	METALS	0.382		0.0297	MG/KG
As	METALS	6.53		0.068	MG/KG
Cd	METALS	0.161	J	0.0175	MG/KG
Co	METALS	15.3		0.0527	MG/KG
V	METALS	87.1		0.345	MG/KG
Al	METALS	49700		2.39	MG/KG
Fe	METALS	25200		0.564	MG/KG
Mn	METALS	510		0.074	MG/KG
Ni	METALS	70.9		0.0386	MG/KG
Ba	METALS	407		0.018	MG/KG
Cr	METALS	221		0.51	MG/KG
Cu	METALS	9.82		0.24	MG/KG
Zn	METALS	45.1		0.107	MG/KG
Ag	METALS	0.567		0.066	MG/KG
Se	METALS	0.126	U	0.126	MG/KG
TOC	TOC	3660		100	MG/KG
TOC	TOC	3680		100	MG/KG
TOC	TOC	2310		100	MG/KG
TOC	TOC	5740		100	MG/KG
TOC	TOC	9360		100	MG/KG
TOC	TOC	3970	J	100	MG/KG
TOC	TOC	9530	J	100	MG/KG
TOC	TOC	9620	J	100	MG/KG

TOC	TOC	8270	J	100	MG/KG
TOC	TOC	10900		100	MG/KG
TOC	TOC	11100		100	MG/KG
TOC	TOC	11700		100	MG/KG
TOC	TOC	9880		100	MG/KG
TOC	TOC	9340		100	MG/KG
TOC	TOC	10400		100	MG/KG
TOC	TOC	10900		100	MG/KG
TOC	TOC	9960		100	MG/KG
TOC	TOC	10800		100	MG/KG
TOC	TOC	8640		100	MG/KG
TOC	TOC	9610		100	MG/KG
TOC	TOC	14400		100	MG/KG
TOC	TOC	12800		100	MG/KG
TOC	TOC	11500		100	MG/KG
TOC	TOC	10800		100	MG/KG
TOC	TOC	10200		100	MG/KG
TOC	TOC	11000		100	MG/KG
TOC	TOC	11800		100	MG/KG
TOC	TOC	15400		100	MG/KG
TOC	TOC	12500		100	MG/KG
TOC	TOC	11200		100	MG/KG
TOC	TOC	13300		100	MG/KG
TOC	TOC	13500		100	MG/KG
TOC	TOC	7730		100	MG/KG
TOC	TOC	6940		100	MG/KG
TOC	TOC	8990		100	MG/KG
TOC	TOC	16600	J	100	MG/KG
TOC	TOC	13500	J	100	MG/KG
TOC	TOC	9560	J	100	MG/KG
TOC	TOC	14800	J	100	MG/KG
TOC	TOC	10500	J	100	MG/KG
TOC	TOC	10800	J	100	MG/KG
TOC	TOC	16800		100	MG/KG
TOC	TOC	10600		100	MG/KG
TOC	TOC	10200		100	MG/KG
TOC	TOC	19300		100	MG/KG
TOC	TOC	15000		100	MG/KG
TOC	TOC	10600		100	MG/KG
TOC	TOC	21400		100	MG/KG
TOC	TOC	16600		100	MG/KG
TOC	TOC	10400		100	MG/KG
TOC	TOC	9180	J	100	MG/KG
TOC	TOC	9160	J	100	MG/KG
TOC	TOC	10300	J	100	MG/KG
TOC	TOC	21300		100	MG/KG
TOC	TOC	24200		100	MG/KG
TOC	TOC	10300		100	MG/KG
TOC	TOC	13500		100	MG/KG
TOC	TOC	13300	J	100	MG/KG
TOC	TOC	9400	J	100	MG/KG

SAMP_ID	CLIENT_SA	STYPE	FIELDQC	STATION	AREA	MEDIUM	TOP	BOT
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB196E	AAB-196	core	SA	PA-41	Point Avisadero Area	SEDIMENT	0	2
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB197E	AAB-197	core	SA	PA-41	Point Avisadero Area	SEDIMENT	2	4
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6

AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB198E	AAB-198	core	SA	PA-41	Point Avisadero Area	SEDIMENT	4	6
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB199E	AAB-199	core	SA	SB-12	South Basin Area X	SEDIMENT	0	2
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB200E	AAB-200	core	SA	SB-12	South Basin Area X	SEDIMENT	2	4
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6

AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB201E	AAB-201	core	SA	SB-12	South Basin Area X	SEDIMENT	4	6
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB202E	AAB-202	core	SA	SB-06	South Basin Area X	SEDIMENT	0	2
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB203E	AAB-203	core	SA	SB-06	South Basin Area X	SEDIMENT	2	4
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6

AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB204E	AAB-204	core	SA	SB-06	South Basin Area X	SEDIMENT	4	6
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB205E	AAB-205	core	SA	IB-56	India Basin Area I	SEDIMENT	0	2
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB206E	AAB-206	core	SA	IB-56	India Basin Area I	SEDIMENT	2	4
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6

AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB207E	AAB-207	core	SA	IB-56	India Basin Area I	SEDIMENT	4	6
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB208E	AAB-208	core	SA	SB-03	South Basin Area X	SEDIMENT	0	2
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB209E	AAB-209	core	SA	SB-03	South Basin Area X	SEDIMENT	2	4
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6

AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB210E	AAB-210	core	SA	SB-03	South Basin Area X	SEDIMENT	4	6
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB220E	AAB-220	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	0	2
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4

AAB221E	AAB-221	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	2	4
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB222E	AAB-222	core	SA	OR-28	Oil Reclamation Area	SEDIMENT	4	6
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB223E	AAB-223	core	SA	PA-47	Point Avisadero Area	SEDIMENT	0	2
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4

AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB224E	AAB-224	core	SA	PA-47	Point Avisadero Area	SEDIMENT	2	4
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB225E	AAB-225	core	SA	PA-47	Point Avisadero Area	SEDIMENT	4	6
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB226E	AAB-226	core	SA	PA-44	Point Avisadero Area	SEDIMENT	0	2
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4

AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB227E	AAB-227	core	SA	PA-44	Point Avisadero Area	SEDIMENT	2	4
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB228E	AAB-228	core	SA	PA-44	Point Avisadero Area	SEDIMENT	4	6
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB229E	AAB-229	core	SA	PA-52	Point Avisadero Area	SEDIMENT	0	2
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4

AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB230E	AAB-230	core	SA	PA-52	Point Avisadero Area	SEDIMENT	2	4
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB231E	AAB-231	core	SA	PA-52	Point Avisadero Area	SEDIMENT	4	6
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB232E	AAB-232	core	SA	PA-49	Point Avisadero Area	SEDIMENT	0	2
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4

AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB233E	AAB-233	core	SA	PA-49	Point Avisadero Area	SEDIMENT	2	4
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB234E	AAB-234	core	SA	PA-49	Point Avisadero Area	SEDIMENT	4	6
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB235E	AAB-235	core	SA	SB-07	South Basin Area X	SEDIMENT	0	2
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4

AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB236E	AAB-236	core	SA	SB-07	South Basin Area X	SEDIMENT	2	4
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB237E	AAB-237	core	SA	SB-07	South Basin Area X	SEDIMENT	4	6
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2

AAB238E	AAB-238	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	0	2
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB239E	AAB-239	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	2	4
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB240E	AAB-240	core	SA	EW-31	Eastern Wetland Area	SEDIMENT	4	6
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2

AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB241E	AAB-241	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	0	2
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB242E	AAB-242	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	2	4
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB243E	AAB-243	core	SA	OR-24	Oil Reclamation Area	SEDIMENT	4	6
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2

AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB244E	AAB-244	core	SA	PA-40	Point Avisadero Area	SEDIMENT	0	2
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB245E	AAB-245	core	SA	PA-40	Point Avisadero Area	SEDIMENT	2	4
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB247E	AAB-247	core	SA	IB-59	India Basin Area I	SEDIMENT	0	2
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4

AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB248E	AAB-248	core	SA	IB-59	India Basin Area I	SEDIMENT	2	4
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB249E	AAB-249	core	SA	IB-59	India Basin Area I	SEDIMENT	4	6
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB250E	AAB-250	core	SA	SB-20	South Basin Area X	SEDIMENT	0	2
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4

AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB251E	AAB-251	core	SA	SB-20	South Basin Area X	SEDIMENT	2	4
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB252E	AAB-252	core	SA	SB-20	South Basin Area X	SEDIMENT	4	6
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB253E	AAB-253	core	SA	SB-22	South Basin Area X	SEDIMENT	0	2
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4

AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB254E	AAB-254	core	SA	SB-22	South Basin Area X	SEDIMENT	2	4
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB255E	AAB-255	core	SA	SB-22	South Basin Area X	SEDIMENT	4	6
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2

AAB256E	AAB-256	core	SA	SB-16	South Basin Area X	SEDIMENT	0	2
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB257E	AAB-257	core	SA	SB-16	South Basin Area X	SEDIMENT	2	4
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB258E	AAB-258	core	SA	SB-16	South Basin Area X	SEDIMENT	4	6
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2

AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB259E	AAB-259	core	SA	SB-01	South Basin Area X	SEDIMENT	0	2
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB260E	AAB-260	core	SA	SB-01	South Basin Area X	SEDIMENT	2	4
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB261E	AAB-261	core	SA	SB-01	South Basin Area X	SEDIMENT	4	6
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2

AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB262E	AAB-262	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	0	2
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB263E	AAB-263	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	2	4
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6
AAB264E	AAB-264	core	SA	EW-36	Eastern Wetland Area	SEDIMENT	4	6

UNIT	TYPE	PC	CLASS	RESULT	QUAL	MDL	UNIT
FT	SA	Hg	METALS	2.09		0.00208	MG/KG
FT	SA	Pb	METALS	153		0.198	MG/KG
FT	SA	Mo	METALS	1.97		0.0391	MG/KG
FT	SA	Sb	METALS	3.97		0.0297	MG/KG
FT	SA	As	METALS	14.4		0.068	MG/KG
FT	SA	Cd	METALS	0.667		0.0175	MG/KG
FT	SA	Co	METALS	22.9		0.0527	MG/KG
FT	SA	V	METALS	137		0.345	MG/KG
FT	SA	Al	METALS	70800		2.39	MG/KG
FT	SA	Fe	METALS	46200		0.564	MG/KG
FT	SA	Mn	METALS	541		0.074	MG/KG
FT	SA	Ni	METALS	153		0.0386	MG/KG
FT	SA	Ba	METALS	823		0.018	MG/KG
FT	SA	Cr	METALS	430		0.51	MG/KG
FT	SA	Cu	METALS	1980		0.24	MG/KG
FT	SA	Zn	METALS	557		0.107	MG/KG
FT	SA	Ag	METALS	0.58		0.066	MG/KG
FT	SA	Se	METALS	0.47	J	0.126	MG/KG
FT	SA	Hg	METALS	1.84		0.00208	MG/KG
FT	SA	Pb	METALS	103		0.198	MG/KG
FT	SA	Mo	METALS	1.17		0.0391	MG/KG
FT	SA	Sb	METALS	6.27		0.0297	MG/KG
FT	SA	As	METALS	17.8		0.068	MG/KG
FT	SA	Cd	METALS	0.768		0.0175	MG/KG
FT	SA	Co	METALS	16.4		0.0527	MG/KG
FT	SA	V	METALS	134		0.345	MG/KG
FT	SA	Al	METALS	70300		2.39	MG/KG
FT	SA	Fe	METALS	42100		0.564	MG/KG
FT	SA	Mn	METALS	458		0.074	MG/KG
FT	SA	Ni	METALS	131		0.0386	MG/KG
FT	SA	Ba	METALS	485		0.018	MG/KG
FT	SA	Cr	METALS	205		0.51	MG/KG
FT	SA	Cu	METALS	2150		0.24	MG/KG
FT	SA	Zn	METALS	260		0.107	MG/KG
FT	SA	Ag	METALS	0.607		0.066	MG/KG
FT	SA	Se	METALS	0.469	J	0.126	MG/KG
FT	SA	Hg	METALS	0.846		0.00208	MG/KG
FT	SA	Pb	METALS	56.6		0.198	MG/KG
FT	SA	Mo	METALS	1.06		0.0391	MG/KG
FT	SA	Sb	METALS	2.74		0.0297	MG/KG
FT	SA	As	METALS	15		0.068	MG/KG
FT	SA	Cd	METALS	0.604		0.0175	MG/KG
FT	SA	Co	METALS	18.6		0.0527	MG/KG
FT	SA	V	METALS	150		0.345	MG/KG
FT	SA	Al	METALS	74100		2.39	MG/KG
FT	SA	Fe	METALS	44500		0.564	MG/KG
FT	SA	Mn	METALS	530		0.074	MG/KG
FT	SA	Ni	METALS	118		0.0386	MG/KG
FT	SA	Ba	METALS	445		0.018	MG/KG
FT	SA	Cr	METALS	173		0.51	MG/KG

FT	SA	Cu	METALS	199		0.24	MG/KG
FT	SA	Zn	METALS	154		0.107	MG/KG
FT	SA	Ag	METALS	0.473		0.066	MG/KG
FT	SA	Se	METALS	0.48	J	0.126	MG/KG
FT	SA	Hg	METALS	1.31		0.00208	MG/KG
FT	SA	Pb	METALS	128		0.198	MG/KG
FT	SA	Mo	METALS	2.52		0.0391	MG/KG
FT	SA	Sb	METALS	2.71		0.0297	MG/KG
FT	SA	As	METALS	15.2		0.068	MG/KG
FT	SA	Cd	METALS	2.21		0.0175	MG/KG
FT	SA	Co	METALS	18.6		0.0527	MG/KG
FT	SA	V	METALS	165		0.345	MG/KG
FT	SA	Al	METALS	74700		2.39	MG/KG
FT	SA	Fe	METALS	47000		0.564	MG/KG
FT	SA	Mn	METALS	439		0.074	MG/KG
FT	SA	Ni	METALS	140		0.0386	MG/KG
FT	SA	Ba	METALS	603		0.018	MG/KG
FT	SA	Cr	METALS	792		0.51	MG/KG
FT	SA	Cu	METALS	196		0.24	MG/KG
FT	SA	Zn	METALS	430		0.107	MG/KG
FT	SA	Ag	METALS	0.733		0.066	MG/KG
FT	SA	Se	METALS	0.978	J	0.126	MG/KG
FT	SA	Hg	METALS	0.925		0.00208	MG/KG
FT	SA	Pb	METALS	11.4		0.198	MG/KG
FT	SA	Mo	METALS	0.805		0.0391	MG/KG
FT	SA	Sb	METALS	0.46		0.0297	MG/KG
FT	SA	As	METALS	11.3		0.068	MG/KG
FT	SA	Cd	METALS	0.223	J	0.0175	MG/KG
FT	SA	Co	METALS	18.5		0.0527	MG/KG
FT	SA	V	METALS	153		0.345	MG/KG
FT	SA	Al	METALS	79400		2.39	MG/KG
FT	SA	Fe	METALS	49100		0.564	MG/KG
FT	SA	Mn	METALS	434		0.074	MG/KG
FT	SA	Ni	METALS	123		0.0386	MG/KG
FT	SA	Ba	METALS	483		0.018	MG/KG
FT	SA	Cr	METALS	364		0.51	MG/KG
FT	SA	Cu	METALS	104		0.24	MG/KG
FT	SA	Zn	METALS	288		0.107	MG/KG
FT	SA	Ag	METALS	0.113	J	0.066	MG/KG
FT	SA	Se	METALS	0.539	J	0.126	MG/KG
FT	SA	Hg	METALS	0.09		0.00208	MG/KG
FT	SA	Pb	METALS	272		0.198	MG/KG
FT	SA	Mo	METALS	3.25		0.0391	MG/KG
FT	SA	Sb	METALS	5.95		0.0297	MG/KG
FT	SA	As	METALS	13.9		0.068	MG/KG
FT	SA	Cd	METALS	3.76		0.0175	MG/KG
FT	SA	Co	METALS	18.4		0.0527	MG/KG
FT	SA	V	METALS	148		0.345	MG/KG
FT	SA	Al	METALS	69600		2.39	MG/KG
FT	SA	Fe	METALS	48100		0.564	MG/KG
FT	SA	Mn	METALS	481		0.074	MG/KG

FT	SA	Ni	METALS	88.8		0.0386	MG/KG
FT	SA	Ba	METALS	427		0.018	MG/KG
FT	SA	Cr	METALS	154		0.51	MG/KG
FT	SA	Cu	METALS	28.8		0.24	MG/KG
FT	SA	Zn	METALS	77.3		0.107	MG/KG
FT	SA	Ag	METALS	0.989		0.066	MG/KG
FT	SA	Se	METALS	0.508	J	0.126	MG/KG
FT	SA	Pb	METALS	153		0.198	MG/KG
FT	SA	Mo	METALS	2.62		0.0391	MG/KG
FT	SA	Sb	METALS	3.17		0.0297	MG/KG
FT	SA	As	METALS	14		0.068	MG/KG
FT	SA	Cd	METALS	2.05		0.0175	MG/KG
FT	SA	Co	METALS	18.3		0.0527	MG/KG
FT	SA	V	METALS	159		0.345	MG/KG
FT	SA	Al	METALS	73300		2.39	MG/KG
FT	SA	Fe	METALS	47700		0.564	MG/KG
FT	SA	Mn	METALS	415		0.074	MG/KG
FT	SA	Ni	METALS	115		0.0386	MG/KG
FT	SA	Ba	METALS	448		0.018	MG/KG
FT	SA	Cr	METALS	466		0.51	MG/KG
FT	SA	Cu	METALS	122		0.24	MG/KG
FT	SA	Zn	METALS	293		0.107	MG/KG
FT	SA	Ag	METALS	0.892		0.066	MG/KG
FT	SA	Se	METALS	0.739	J	0.126	MG/KG
FT	SA	Hg	METALS	0.856		0.00208	MG/KG
FT	SA	Hg	METALS	0.436		0.00208	MG/KG
FT	SA	Pb	METALS	47.8		0.198	MG/KG
FT	SA	Mo	METALS	2.65		0.0391	MG/KG
FT	SA	Sb	METALS	1.57		0.0297	MG/KG
FT	SA	As	METALS	14.2		0.068	MG/KG
FT	SA	Cd	METALS	1.1		0.0175	MG/KG
FT	SA	Co	METALS	18.1		0.0527	MG/KG
FT	SA	V	METALS	160		0.345	MG/KG
FT	SA	Al	METALS	72400		2.39	MG/KG
FT	SA	Fe	METALS	48500		0.564	MG/KG
FT	SA	Mn	METALS	425		0.074	MG/KG
FT	SA	Ni	METALS	99.1		0.0386	MG/KG
FT	SA	Ba	METALS	408		0.018	MG/KG
FT	SA	Cr	METALS	211		0.51	MG/KG
FT	SA	Cu	METALS	56.7		0.24	MG/KG
FT	SA	Zn	METALS	160		0.107	MG/KG
FT	SA	Ag	METALS	0.457		0.066	MG/KG
FT	SA	Se	METALS	0.504	J	0.126	MG/KG
FT	SA	Pb	METALS	10.5		0.198	MG/KG
FT	SA	Mo	METALS	2.98		0.0391	MG/KG
FT	SA	Sb	METALS	0.435		0.0297	MG/KG
FT	SA	As	METALS	14.9		0.068	MG/KG
FT	SA	Cd	METALS	0.397	J	0.0175	MG/KG
FT	SA	Co	METALS	16.8		0.0527	MG/KG
FT	SA	V	METALS	132		0.345	MG/KG
FT	SA	Al	METALS	73000		2.39	MG/KG

FT	SA	Fe	METALS	50100		0.564	MG/KG
FT	SA	Mn	METALS	495		0.074	MG/KG
FT	SA	Ni	METALS	93.5		0.0386	MG/KG
FT	SA	Ba	METALS	445		0.018	MG/KG
FT	SA	Cr	METALS	161		0.51	MG/KG
FT	SA	Cu	METALS	30.7		0.24	MG/KG
FT	SA	Zn	METALS	81.8		0.107	MG/KG
FT	SA	Ag	METALS	0.127	J	0.066	MG/KG
FT	SA	Se	METALS	0.42	J	0.126	MG/KG
FT	SA	Hg	METALS	0.0749		0.00208	MG/KG
FT	SA	Hg	METALS	0.391		0.00208	MG/KG
FT	SA	Pb	METALS	70.2		0.198	MG/KG
FT	SA	Mo	METALS	1.56		0.0391	MG/KG
FT	SA	Sb	METALS	1.67		0.0297	MG/KG
FT	SA	As	METALS	12.7		0.068	MG/KG
FT	SA	Cd	METALS	0.429	J	0.0175	MG/KG
FT	SA	Co	METALS	18.5		0.0527	MG/KG
FT	SA	V	METALS	146		0.345	MG/KG
FT	SA	Al	METALS	72200		2.39	MG/KG
FT	SA	Fe	METALS	42600		0.564	MG/KG
FT	SA	Mn	METALS	389		0.074	MG/KG
FT	SA	Ni	METALS	118		0.0386	MG/KG
FT	SA	Ba	METALS	462		0.018	MG/KG
FT	SA	Cr	METALS	191		0.51	MG/KG
FT	SA	Cu	METALS	66.2		0.24	MG/KG
FT	SA	Zn	METALS	135		0.107	MG/KG
FT	SA	Ag	METALS	0.633		0.066	MG/KG
FT	SA	Se	METALS	0.377	J	0.126	MG/KG
FT	SA	Hg	METALS	0.719		0.00208	MG/KG
FT	SA	Pb	METALS	83.2		0.198	MG/KG
FT	SA	Mo	METALS	1.76		0.0391	MG/KG
FT	SA	Sb	METALS	1.96		0.0297	MG/KG
FT	SA	As	METALS	16.5		0.068	MG/KG
FT	SA	Cd	METALS	0.764		0.0175	MG/KG
FT	SA	Co	METALS	19.7		0.0527	MG/KG
FT	SA	V	METALS	165		0.345	MG/KG
FT	SA	Al	METALS	78000		2.39	MG/KG
FT	SA	Fe	METALS	45000		0.564	MG/KG
FT	SA	Mn	METALS	478		0.074	MG/KG
FT	SA	Ni	METALS	112		0.0386	MG/KG
FT	SA	Ba	METALS	458		0.018	MG/KG
FT	SA	Cr	METALS	182		0.51	MG/KG
FT	SA	Cu	METALS	68.5		0.24	MG/KG
FT	SA	Zn	METALS	138		0.107	MG/KG
FT	SA	Ag	METALS	0.637		0.066	MG/KG
FT	SA	Se	METALS	0.394	J	0.126	MG/KG
FT	SA	Hg	METALS	0.324		0.00208	MG/KG
FT	SA	Pb	METALS	34.4		0.198	MG/KG
FT	SA	Mo	METALS	1.37		0.0391	MG/KG
FT	SA	Sb	METALS	0.947		0.0297	MG/KG
FT	SA	As	METALS	14.2		0.068	MG/KG

FT	SA	Cd	METALS	0.241	J	0.0175	MG/KG
FT	SA	Co	METALS	18.4		0.0527	MG/KG
FT	SA	V	METALS	166		0.345	MG/KG
FT	SA	Al	METALS	78600		2.39	MG/KG
FT	SA	Fe	METALS	42500		0.564	MG/KG
FT	SA	Mn	METALS	576		0.074	MG/KG
FT	SA	Ni	METALS	90.5		0.0386	MG/KG
FT	SA	Ba	METALS	428		0.018	MG/KG
FT	SA	Cr	METALS	151		0.51	MG/KG
FT	SA	Cu	METALS	46		0.24	MG/KG
FT	SA	Zn	METALS	88.4		0.107	MG/KG
FT	SA	Ag	METALS	0.165		0.066	MG/KG
FT	SA	Se	METALS	0.529	J	0.126	MG/KG
FT	SA	Hg	METALS	0.845		0.00208	MG/KG
FT	SA	Pb	METALS	200		0.198	MG/KG
FT	SA	Mo	METALS	2.38		0.0391	MG/KG
FT	SA	Sb	METALS	2.91		0.0297	MG/KG
FT	SA	As	METALS	16.8		0.068	MG/KG
FT	SA	Cd	METALS	2.15		0.0175	MG/KG
FT	SA	Co	METALS	20.1		0.0527	MG/KG
FT	SA	V	METALS	170		0.345	MG/KG
FT	SA	Al	METALS	73800		2.39	MG/KG
FT	SA	Fe	METALS	48800		0.564	MG/KG
FT	SA	Mn	METALS	415		0.074	MG/KG
FT	SA	Ni	METALS	110		0.0386	MG/KG
FT	SA	Ba	METALS	504		0.018	MG/KG
FT	SA	Cr	METALS	302		0.51	MG/KG
FT	SA	Cu	METALS	114		0.24	MG/KG
FT	SA	Zn	METALS	302		0.107	MG/KG
FT	SA	Ag	METALS	0.891		0.066	MG/KG
FT	SA	Se	METALS	0.675	J	0.126	MG/KG
FT	SA	Hg	METALS	0.328		0.00208	MG/KG
FT	SA	Pb	METALS	34.5		0.198	MG/KG
FT	SA	Mo	METALS	2.57		0.0391	MG/KG
FT	SA	Sb	METALS	1.13		0.0297	MG/KG
FT	SA	As	METALS	15.7		0.068	MG/KG
FT	SA	Cd	METALS	0.827		0.0175	MG/KG
FT	SA	Co	METALS	17.8		0.0527	MG/KG
FT	SA	V	METALS	156		0.345	MG/KG
FT	SA	Al	METALS	74300		2.39	MG/KG
FT	SA	Fe	METALS	49900		0.564	MG/KG
FT	SA	Mn	METALS	425		0.074	MG/KG
FT	SA	Ni	METALS	98.9		0.0386	MG/KG
FT	SA	Ba	METALS	426		0.018	MG/KG
FT	SA	Cr	METALS	194		0.51	MG/KG
FT	SA	Cu	METALS	46.6		0.24	MG/KG
FT	SA	Zn	METALS	133		0.107	MG/KG
FT	SA	Ag	METALS	0.29		0.066	MG/KG
FT	SA	Se	METALS	0.509	J	0.126	MG/KG
FT	SA	Hg	METALS	0.0734		0.00208	MG/KG
FT	SA	Pb	METALS	10.7		0.198	MG/KG

FT	SA	Mo	METALS	3.08		0.0391	MG/KG
FT	SA	Sb	METALS	0.409		0.0297	MG/KG
FT	SA	As	METALS	15.6		0.068	MG/KG
FT	SA	Cd	METALS	0.502	J	0.0175	MG/KG
FT	SA	Co	METALS	16.8		0.0527	MG/KG
FT	SA	V	METALS	138		0.345	MG/KG
FT	SA	Al	METALS	70200		2.39	MG/KG
FT	SA	Fe	METALS	52100		0.564	MG/KG
FT	SA	Mn	METALS	493		0.074	MG/KG
FT	SA	Ni	METALS	85.4		0.0386	MG/KG
FT	SA	Ba	METALS	406		0.018	MG/KG
FT	SA	Cr	METALS	170		0.51	MG/KG
FT	SA	Cu	METALS	30		0.24	MG/KG
FT	SA	Zn	METALS	84.5		0.107	MG/KG
FT	SA	Ag	METALS	0.141		0.066	MG/KG
FT	SA	Se	METALS	0.528	J	0.126	MG/KG
FT	SA	Hg	METALS	0.525		0.00208	MG/KG
FT	SA	Pb	METALS	43.8		0.198	MG/KG
FT	SA	Mo	METALS	1.28		0.0391	MG/KG
FT	SA	Sb	METALS	1.33		0.0297	MG/KG
FT	SA	As	METALS	12.6		0.068	MG/KG
FT	SA	Cd	METALS	0.4	J	0.0175	MG/KG
FT	SA	Co	METALS	20.8		0.0527	MG/KG
FT	SA	V	METALS	163		0.345	MG/KG
FT	SA	Al	METALS	72900		2.39	MG/KG
FT	SA	Fe	METALS	46800		0.564	MG/KG
FT	SA	Mn	METALS	453		0.074	MG/KG
FT	SA	Ni	METALS	116		0.0386	MG/KG
FT	SA	Ba	METALS	454		0.018	MG/KG
FT	SA	Cr	METALS	210		0.51	MG/KG
FT	SA	Cu	METALS	60.6		0.24	MG/KG
FT	SA	Zn	METALS	138		0.107	MG/KG
FT	SA	Ag	METALS	0.445		0.066	MG/KG
FT	SA	Se	METALS	0.429	J	0.126	MG/KG
FT	SA	Ag	METALS	0.31		0.066	MG/KG
FT	SA	Se	METALS	0.435	J	0.126	MG/KG
FT	SA	Al	METALS	78100		2.39	MG/KG
FT	SA	Fe	METALS	46400		0.564	MG/KG
FT	SA	Mn	METALS	425		0.074	MG/KG
FT	SA	Ni	METALS	98.5		0.0386	MG/KG
FT	SA	Ba	METALS	472		0.018	MG/KG
FT	SA	Cr	METALS	177		0.51	MG/KG
FT	SA	Cu	METALS	49		0.24	MG/KG
FT	SA	Zn	METALS	119		0.107	MG/KG
FT	SA	Hg	METALS	0.589		0.00208	MG/KG
FT	SA	Pb	METALS	29.8		0.198	MG/KG
FT	SA	Mo	METALS	1.32		0.0391	MG/KG
FT	SA	Sb	METALS	1.1		0.0297	MG/KG
FT	SA	As	METALS	15.3		0.068	MG/KG
FT	SA	Cd	METALS	0.341	J	0.0175	MG/KG
FT	SA	Co	METALS	19.8		0.0527	MG/KG

FT	SA	V	METALS	164		0.345	MG/KG
FT	SA	Hg	METALS	0.0884		0.00208	MG/KG
FT	SA	Pb	METALS	10.9		0.198	MG/KG
FT	SA	Mo	METALS	2.66		0.0391	MG/KG
FT	SA	Sb	METALS	0.459		0.0297	MG/KG
FT	SA	As	METALS	12.8		0.068	MG/KG
FT	SA	Cd	METALS	0.381	J	0.0175	MG/KG
FT	SA	Co	METALS	18.1		0.0527	MG/KG
FT	SA	V	METALS	144		0.345	MG/KG
FT	SA	Al	METALS	69500		2.39	MG/KG
FT	SA	Fe	METALS	46400		0.564	MG/KG
FT	SA	Mn	METALS	477		0.074	MG/KG
FT	SA	Ni	METALS	86.5		0.0386	MG/KG
FT	SA	Ba	METALS	412		0.018	MG/KG
FT	SA	Cr	METALS	157		0.51	MG/KG
FT	SA	Cu	METALS	31.1		0.24	MG/KG
FT	SA	Zn	METALS	87		0.107	MG/KG
FT	SA	Ag	METALS	0.158		0.066	MG/KG
FT	SA	Se	METALS	0.581	J	0.126	MG/KG
FT	SA	Hg	METALS	43.1		0.00208	MG/KG
FT	SA	Pb	METALS	101		0.198	MG/KG
FT	SA	Mo	METALS	1.98		0.0391	MG/KG
FT	SA	Sb	METALS	5.2		0.0297	MG/KG
FT	SA	As	METALS	32		0.068	MG/KG
FT	SA	Cd	METALS	0.734		0.0175	MG/KG
FT	SA	Co	METALS	19.7		0.0527	MG/KG
FT	SA	V	METALS	141		0.345	MG/KG
FT	SA	Al	METALS	64000		2.39	MG/KG
FT	SA	Fe	METALS	42800		0.564	MG/KG
FT	SA	Mn	METALS	539		0.074	MG/KG
FT	SA	Ni	METALS	154		0.0386	MG/KG
FT	SA	Ba	METALS	420		0.018	MG/KG
FT	SA	Cr	METALS	330		0.51	MG/KG
FT	SA	Cu	METALS	780		0.24	MG/KG
FT	SA	Zn	METALS	367		0.107	MG/KG
FT	SA	Ag	METALS	0.265		0.066	MG/KG
FT	SA	Se	METALS	0.371	J	0.126	MG/KG
FT	SA	Hg	METALS	0.124		0.00208	MG/KG
FT	SA	Pb	METALS	11.2		0.198	MG/KG
FT	SA	Mo	METALS	0.801		0.0391	MG/KG
FT	SA	Sb	METALS	0.444		0.0297	MG/KG
FT	SA	As	METALS	12.4		0.068	MG/KG
FT	SA	Cd	METALS	0.261	J	0.0175	MG/KG
FT	SA	Co	METALS	19		0.0527	MG/KG
FT	SA	V	METALS	150		0.345	MG/KG
FT	SA	Al	METALS	72400		2.39	MG/KG
FT	SA	Fe	METALS	45500		0.564	MG/KG
FT	SA	Mn	METALS	755		0.074	MG/KG
FT	SA	Ni	METALS	96.3		0.0386	MG/KG
FT	SA	Ba	METALS	431		0.018	MG/KG
FT	SA	Cr	METALS	152		0.51	MG/KG

FT	SA	Cu	METALS	31.2		0.24	MG/KG
FT	SA	Zn	METALS	83.5		0.107	MG/KG
FT	SA	Ag	METALS	0.125	J	0.066	MG/KG
FT	SA	Se	METALS	0.468	J	0.126	MG/KG
FT	SA	Hg	METALS	0.082		0.00208	MG/KG
FT	SA	Pb	METALS	11.1		0.198	MG/KG
FT	SA	Mo	METALS	0.398		0.0391	MG/KG
FT	SA	Sb	METALS	0.54		0.0297	MG/KG
FT	SA	As	METALS	6.05		0.068	MG/KG
FT	SA	Cd	METALS	0.193	J	0.0175	MG/KG
FT	SA	Co	METALS	13.3		0.0527	MG/KG
FT	SA	V	METALS	76		0.345	MG/KG
FT	SA	Al	METALS	69200		2.39	MG/KG
FT	SA	Fe	METALS	43600		0.564	MG/KG
FT	SA	Mn	METALS	632		0.074	MG/KG
FT	SA	Ni	METALS	136		0.0386	MG/KG
FT	SA	Ba	METALS	410		0.018	MG/KG
FT	SA	Cr	METALS	175		0.51	MG/KG
FT	SA	Cu	METALS	29.6		0.24	MG/KG
FT	SA	Zn	METALS	79.7		0.107	MG/KG
FT	SA	Ag	METALS	0.0708	J	0.066	MG/KG
FT	SA	Se	METALS	0.438	J	0.126	MG/KG
FT	SA	Pb	METALS	161		0.198	MG/KG
FT	SA	Mo	METALS	1.79		0.0391	MG/KG
FT	SA	Sb	METALS	9.94		0.0297	MG/KG
FT	SA	As	METALS	6.43		0.068	MG/KG
FT	SA	Cd	METALS	0.421	J	0.0175	MG/KG
FT	SA	Co	METALS	8.51		0.0527	MG/KG
FT	SA	V	METALS	45.8		0.345	MG/KG
FT	SA	Al	METALS	77300		2.39	MG/KG
FT	SA	Fe	METALS	47100		0.564	MG/KG
FT	SA	Mn	METALS	818		0.074	MG/KG
FT	SA	Ni	METALS	105		0.0386	MG/KG
FT	SA	Ba	METALS	457		0.018	MG/KG
FT	SA	Cr	METALS	167		0.51	MG/KG
FT	SA	Cu	METALS	125		0.24	MG/KG
FT	SA	Zn	METALS	93.8		0.107	MG/KG
FT	SA	Ag	METALS	0.14		0.066	MG/KG
FT	SA	Se	METALS	0.413	J	0.126	MG/KG
FT	SA	Hg	METALS	2.1		0.00208	MG/KG
FT	SA	Hg	METALS	0.0866		0.00208	MG/KG
FT	SA	Pb	METALS	17.7		0.198	MG/KG
FT	SA	Mo	METALS	0.981		0.0391	MG/KG
FT	SA	Sb	METALS	0.636		0.0297	MG/KG
FT	SA	As	METALS	10.8		0.068	MG/KG
FT	SA	Cd	METALS	0.304	J	0.0175	MG/KG
FT	SA	Co	METALS	21.9		0.0527	MG/KG
FT	SA	V	METALS	169		0.345	MG/KG
FT	SA	Al	METALS	80600		2.39	MG/KG
FT	SA	Fe	METALS	49500		0.564	MG/KG
FT	SA	Mn	METALS	934		0.074	MG/KG

FT	SA	Ni	METALS	110		0.0386	MG/KG
FT	SA	Ba	METALS	471		0.018	MG/KG
FT	SA	Cr	METALS	159		0.51	MG/KG
FT	SA	Cu	METALS	43.1		0.24	MG/KG
FT	SA	Zn	METALS	93.2		0.107	MG/KG
FT	SA	Ag	METALS	0.183		0.066	MG/KG
FT	SA	Se	METALS	0.461	J	0.126	MG/KG
FT	SA	Hg	METALS	0.0739		0.00208	MG/KG
FT	SA	Pb	METALS	247		0.198	MG/KG
FT	SA	Mo	METALS	1.48		0.0391	MG/KG
FT	SA	Sb	METALS	18.8		0.0297	MG/KG
FT	SA	As	METALS	10.3		0.068	MG/KG
FT	SA	Cd	METALS	0.575	J	0.0175	MG/KG
FT	SA	Co	METALS	16.3		0.0527	MG/KG
FT	SA	V	METALS	87		0.345	MG/KG
FT	SA	Al	METALS	82400		2.39	MG/KG
FT	SA	Fe	METALS	50700		0.564	MG/KG
FT	SA	Mn	METALS	1090		0.074	MG/KG
FT	SA	Ni	METALS	113		0.0386	MG/KG
FT	SA	Ba	METALS	481		0.018	MG/KG
FT	SA	Cr	METALS	159		0.51	MG/KG
FT	SA	Cu	METALS	43.9		0.24	MG/KG
FT	SA	Zn	METALS	96.5		0.107	MG/KG
FT	SA	Ag	METALS	0.514		0.066	MG/KG
FT	SA	Se	METALS	0.391	J	0.126	MG/KG
FT	SA	Hg	METALS	0.263		0.00208	MG/KG
FT	SA	Pb	METALS	39.8		0.198	MG/KG
FT	SA	Mo	METALS	1.27		0.0391	MG/KG
FT	SA	Sb	METALS	1.05		0.0297	MG/KG
FT	SA	As	METALS	10.5		0.068	MG/KG
FT	SA	Cd	METALS	0.436	J	0.0175	MG/KG
FT	SA	Co	METALS	16.5		0.0527	MG/KG
FT	SA	V	METALS	151		0.345	MG/KG
FT	SA	Al	METALS	65300		2.39	MG/KG
FT	SA	Fe	METALS	36300		0.564	MG/KG
FT	SA	Mn	METALS	442		0.074	MG/KG
FT	SA	Ni	METALS	102		0.0386	MG/KG
FT	SA	Ba	METALS	455		0.018	MG/KG
FT	SA	Cr	METALS	150		0.51	MG/KG
FT	SA	Cu	METALS	34.7		0.24	MG/KG
FT	SA	Zn	METALS	95.1		0.107	MG/KG
FT	SA	Ag	METALS	0.367		0.066	MG/KG
FT	SA	Se	METALS	0.262	J	0.126	MG/KG
FT	SA	Hg	METALS	0.421		0.00208	MG/KG
FT	SA	Pb	METALS	12.4		0.198	MG/KG
FT	SA	Mo	METALS	4.14		0.0391	MG/KG
FT	SA	Sb	METALS	0.571		0.0297	MG/KG
FT	SA	As	METALS	19		0.068	MG/KG
FT	SA	Cd	METALS	0.566	J	0.0175	MG/KG
FT	SA	Co	METALS	20.2		0.0527	MG/KG
FT	SA	V	METALS	157		0.345	MG/KG

FT	SA	Al	METALS	65900		2.39	MG/KG
FT	SA	Fe	METALS	36600		0.564	MG/KG
FT	SA	Mn	METALS	454		0.074	MG/KG
FT	SA	Ni	METALS	98.1		0.0386	MG/KG
FT	SA	Ba	METALS	454		0.018	MG/KG
FT	SA	Cr	METALS	159		0.51	MG/KG
FT	SA	Cu	METALS	38.7		0.24	MG/KG
FT	SA	Zn	METALS	95.8		0.107	MG/KG
FT	SA	Ag	METALS	0.136		0.066	MG/KG
FT	SA	Se	METALS	0.221	J	0.126	MG/KG
FT	SA	Hg	METALS	0.598		0.00208	MG/KG
FT	SA	Pb	METALS	21.4		0.198	MG/KG
FT	SA	Mo	METALS	0.705		0.0391	MG/KG
FT	SA	Sb	METALS	0.611		0.0297	MG/KG
FT	SA	As	METALS	9.76		0.068	MG/KG
FT	SA	Cd	METALS	0.212	J	0.0175	MG/KG
FT	SA	Co	METALS	17		0.0527	MG/KG
FT	SA	V	METALS	120		0.345	MG/KG
FT	SA	Al	METALS	69100		2.39	MG/KG
FT	SA	Fe	METALS	40900		0.564	MG/KG
FT	SA	Mn	METALS	532		0.074	MG/KG
FT	SA	Ni	METALS	101		0.0386	MG/KG
FT	SA	Ba	METALS	462		0.018	MG/KG
FT	SA	Cr	METALS	149		0.51	MG/KG
FT	SA	Cu	METALS	58.2		0.24	MG/KG
FT	SA	Zn	METALS	104		0.107	MG/KG
FT	SA	Ag	METALS	0.264		0.066	MG/KG
FT	SA	Se	METALS	0.368	J	0.126	MG/KG
FT	SA	Hg	METALS	0.198		0.00208	MG/KG
FT	SA	Pb	METALS	93		0.198	MG/KG
FT	SA	Mo	METALS	3.32		0.0391	MG/KG
FT	SA	Sb	METALS	2.84		0.0297	MG/KG
FT	SA	As	METALS	9.74		0.068	MG/KG
FT	SA	Cd	METALS	0.541	J	0.0175	MG/KG
FT	SA	Co	METALS	15.7		0.0527	MG/KG
FT	SA	V	METALS	126		0.345	MG/KG
FT	SA	Al	METALS	73200		2.39	MG/KG
FT	SA	Fe	METALS	43100		0.564	MG/KG
FT	SA	Mn	METALS	492		0.074	MG/KG
FT	SA	Ni	METALS	106		0.0386	MG/KG
FT	SA	Ba	METALS	461		0.018	MG/KG
FT	SA	Cr	METALS	172		0.51	MG/KG
FT	SA	Cu	METALS	50.8		0.24	MG/KG
FT	SA	Zn	METALS	102		0.107	MG/KG
FT	SA	Ag	METALS	0.327		0.066	MG/KG
FT	SA	Se	METALS	0.509	J	0.126	MG/KG
FT	SA	Ag	METALS	0.295		0.066	MG/KG
FT	SA	Se	METALS	0.341	J	0.126	MG/KG
FT	SA	Hg	METALS	0.0715		0.00208	MG/KG
FT	SA	Pb	METALS	21.4		0.198	MG/KG
FT	SA	Mo	METALS	0.827		0.0391	MG/KG

FT	SA	Sb	METALS	0.758		0.0297	MG/KG
FT	SA	As	METALS	11.5		0.068	MG/KG
FT	SA	Cd	METALS	0.358	J	0.0175	MG/KG
FT	SA	Co	METALS	17.3		0.0527	MG/KG
FT	SA	V	METALS	139		0.345	MG/KG
FT	SA	Al	METALS	73200		2.39	MG/KG
FT	SA	Fe	METALS	46100		0.564	MG/KG
FT	SA	Mn	METALS	676		0.074	MG/KG
FT	SA	Ni	METALS	100		0.0386	MG/KG
FT	SA	Ba	METALS	427		0.018	MG/KG
FT	SA	Cr	METALS	151		0.51	MG/KG
FT	SA	Cu	METALS	29.5		0.24	MG/KG
FT	SA	Zn	METALS	84.1		0.107	MG/KG
FT	SA	Hg	METALS	0.0709		0.00208	MG/KG
FT	SA	Pb	METALS	11.2		0.198	MG/KG
FT	SA	Mo	METALS	0.664		0.0391	MG/KG
FT	SA	Sb	METALS	0.475		0.0297	MG/KG
FT	SA	As	METALS	12.3		0.068	MG/KG
FT	SA	Cd	METALS	0.176	J	0.0175	MG/KG
FT	SA	Co	METALS	17.6		0.0527	MG/KG
FT	SA	V	METALS	146		0.345	MG/KG
FT	SA	Al	METALS	75600		2.39	MG/KG
FT	SA	Fe	METALS	45100		0.564	MG/KG
FT	SA	Mn	METALS	560		0.074	MG/KG
FT	SA	Ni	METALS	98.6		0.0386	MG/KG
FT	SA	Ba	METALS	452		0.018	MG/KG
FT	SA	Cr	METALS	153		0.51	MG/KG
FT	SA	Cu	METALS	29		0.24	MG/KG
FT	SA	Zn	METALS	83.1		0.107	MG/KG
FT	SA	Ag	METALS	0.107	J	0.066	MG/KG
FT	SA	Se	METALS	0.442	J	0.126	MG/KG
FT	SA	Hg	METALS	1.12		0.00208	MG/KG
FT	SA	Pb	METALS	284		0.198	MG/KG
FT	SA	Mo	METALS	2.38		0.0391	MG/KG
FT	SA	Sb	METALS	6.59		0.0297	MG/KG
FT	SA	As	METALS	16.7		0.068	MG/KG
FT	SA	Cd	METALS	3.21		0.0175	MG/KG
FT	SA	Co	METALS	19.6		0.0527	MG/KG
FT	SA	V	METALS	180		0.345	MG/KG
FT	SA	Al	METALS	73400		2.39	MG/KG
FT	SA	Fe	METALS	50100		0.564	MG/KG
FT	SA	Mn	METALS	423		0.074	MG/KG
FT	SA	Ni	METALS	121		0.0386	MG/KG
FT	SA	Ba	METALS	502		0.018	MG/KG
FT	SA	Cr	METALS	448		0.51	MG/KG
FT	SA	Cu	METALS	156		0.24	MG/KG
FT	SA	Zn	METALS	451		0.107	MG/KG
FT	SA	Ag	METALS	1.08		0.066	MG/KG
FT	SA	Se	METALS	0.829	J	0.126	MG/KG
FT	SA	Hg	METALS	0.668		0.00208	MG/KG
FT	SA	Pb	METALS	100		0.198	MG/KG

FT	SA	Mo	METALS	2.43		0.0391	MG/KG
FT	SA	Sb	METALS	2.21		0.0297	MG/KG
FT	SA	As	METALS	17		0.068	MG/KG
FT	SA	Cd	METALS	1.85		0.0175	MG/KG
FT	SA	Co	METALS	18.7		0.0527	MG/KG
FT	SA	V	METALS	166		0.345	MG/KG
FT	SA	Al	METALS	77400		2.39	MG/KG
FT	SA	Fe	METALS	51100		0.564	MG/KG
FT	SA	Mn	METALS	408		0.074	MG/KG
FT	SA	Ni	METALS	108		0.0386	MG/KG
FT	SA	Ba	METALS	453		0.018	MG/KG
FT	SA	Cr	METALS	285		0.51	MG/KG
FT	SA	Cu	METALS	76.7		0.24	MG/KG
FT	SA	Zn	METALS	243		0.107	MG/KG
FT	SA	Ag	METALS	0.626		0.066	MG/KG
FT	SA	Se	METALS	0.647	J	0.126	MG/KG
FT	SA	Hg	METALS	0.0827		0.00208	MG/KG
FT	SA	Pb	METALS	11.1		0.198	MG/KG
FT	SA	Mo	METALS	3.11		0.0391	MG/KG
FT	SA	Sb	METALS	0.47		0.0297	MG/KG
FT	SA	As	METALS	15.7		0.068	MG/KG
FT	SA	Cd	METALS	0.429	J	0.0175	MG/KG
FT	SA	Co	METALS	16.9		0.0527	MG/KG
FT	SA	V	METALS	136		0.345	MG/KG
FT	SA	Al	METALS	70700		2.39	MG/KG
FT	SA	Fe	METALS	52200		0.564	MG/KG
FT	SA	Mn	METALS	484		0.074	MG/KG
FT	SA	Ni	METALS	86.1		0.0386	MG/KG
FT	SA	Ba	METALS	412		0.018	MG/KG
FT	SA	Cr	METALS	160		0.51	MG/KG
FT	SA	Cu	METALS	30.7		0.24	MG/KG
FT	SA	Zn	METALS	84.5		0.107	MG/KG
FT	SA	Ag	METALS	0.198		0.066	MG/KG
FT	SA	Se	METALS	0.554	J	0.126	MG/KG
FT	SA	Hg	METALS	0.159		0.00208	MG/KG
FT	SA	Pb	METALS	15.1		0.198	MG/KG
FT	SA	Mo	METALS	0.464		0.0391	MG/KG
FT	SA	Sb	METALS	0.386		0.0297	MG/KG
FT	SA	As	METALS	6.56		0.068	MG/KG
FT	SA	Cd	METALS	0.145	J	0.0175	MG/KG
FT	SA	Co	METALS	12.7		0.0527	MG/KG
FT	SA	V	METALS	69.3		0.345	MG/KG
FT	SA	Al	METALS	43100		2.39	MG/KG
FT	SA	Fe	METALS	23700		0.564	MG/KG
FT	SA	Mn	METALS	519		0.074	MG/KG
FT	SA	Ni	METALS	68.7		0.0386	MG/KG
FT	SA	Ba	METALS	319		0.018	MG/KG
FT	SA	Cr	METALS	175		0.51	MG/KG
FT	SA	Cu	METALS	20		0.24	MG/KG
FT	SA	Zn	METALS	53.1		0.107	MG/KG
FT	SA	Ag	METALS	0.0826	J	0.066	MG/KG

FT	SA	Se	METALS	0.134	J	0.126	MG/KG
FT	SA	Hg	METALS	0.112		0.00208	MG/KG
FT	SA	Pb	METALS	7.1		0.198	MG/KG
FT	SA	Mo	METALS	0.578		0.0391	MG/KG
FT	SA	Sb	METALS	0.401		0.0297	MG/KG
FT	SA	As	METALS	7.61		0.068	MG/KG
FT	SA	Cd	METALS	0.104	J	0.0175	MG/KG
FT	SA	Co	METALS	14.6		0.0527	MG/KG
FT	SA	V	METALS	80.5		0.345	MG/KG
FT	SA	Al	METALS	50200		2.39	MG/KG
FT	SA	Fe	METALS	25800		0.564	MG/KG
FT	SA	Mn	METALS	570		0.074	MG/KG
FT	SA	Ni	METALS	81.3		0.0386	MG/KG
FT	SA	Ba	METALS	391		0.018	MG/KG
FT	SA	Cr	METALS	160		0.51	MG/KG
FT	SA	Cu	METALS	14.1		0.24	MG/KG
FT	SA	Zn	METALS	45.3		0.107	MG/KG
FT	SA	Ag	METALS	0.066	U	0.066	MG/KG
FT	SA	Se	METALS	0.153	J	0.126	MG/KG
FT	SA	Hg	METALS	0.292		0.00208	MG/KG
FT	SA	Pb	METALS	5.73		0.198	MG/KG
FT	SA	Mo	METALS	0.666		0.0391	MG/KG
FT	SA	Sb	METALS	0.3		0.0297	MG/KG
FT	SA	As	METALS	8.58		0.068	MG/KG
FT	SA	Cd	METALS	0.115	J	0.0175	MG/KG
FT	SA	Co	METALS	14.9		0.0527	MG/KG
FT	SA	V	METALS	76.7		0.345	MG/KG
FT	SA	Al	METALS	45900		2.39	MG/KG
FT	SA	Fe	METALS	23100		0.564	MG/KG
FT	SA	Mn	METALS	581		0.074	MG/KG
FT	SA	Ni	METALS	78.6		0.0386	MG/KG
FT	SA	Ba	METALS	355		0.018	MG/KG
FT	SA	Cr	METALS	145		0.51	MG/KG
FT	SA	Cu	METALS	10.6		0.24	MG/KG
FT	SA	Zn	METALS	38.5		0.107	MG/KG
FT	SA	Ag	METALS	0.066	U	0.066	MG/KG
FT	SA	Se	METALS	0.126	U	0.126	MG/KG
FT	SA	Hg	METALS	0.144		0.00208	MG/KG
FT	SA	Pb	METALS	12		0.198	MG/KG
FT	SA	Mo	METALS	3.07		0.0391	MG/KG
FT	SA	Sb	METALS	0.519		0.0297	MG/KG
FT	SA	As	METALS	13.6		0.068	MG/KG
FT	SA	Cd	METALS	0.372	J	0.0175	MG/KG
FT	SA	Co	METALS	17		0.0527	MG/KG
FT	SA	V	METALS	135		0.345	MG/KG
FT	SA	Al	METALS	71400		2.39	MG/KG
FT	SA	Fe	METALS	46400		0.564	MG/KG
FT	SA	Mn	METALS	484		0.074	MG/KG
FT	SA	Ni	METALS	93.1		0.0386	MG/KG
FT	SA	Ba	METALS	409		0.018	MG/KG
FT	SA	Cr	METALS	161		0.51	MG/KG

FT	SA	Cu	METALS	31.7		0.24	MG/KG
FT	SA	Zn	METALS	82		0.107	MG/KG
FT	SA	Ag	METALS	0.13		0.066	MG/KG
FT	SA	Se	METALS	0.509	J	0.126	MG/KG
FT	SA	Hg	METALS	0.0555		0.00208	MG/KG
FT	SA	Pb	METALS	9.66		0.198	MG/KG
FT	SA	Mo	METALS	2.58		0.0391	MG/KG
FT	SA	Sb	METALS	0.427		0.0297	MG/KG
FT	SA	As	METALS	11.2		0.068	MG/KG
FT	SA	Cd	METALS	0.341	J	0.0175	MG/KG
FT	SA	Co	METALS	16.1		0.0527	MG/KG
FT	SA	V	METALS	132		0.345	MG/KG
FT	SA	Al	METALS	68900		2.39	MG/KG
FT	SA	Fe	METALS	46900		0.564	MG/KG
FT	SA	Mn	METALS	469		0.074	MG/KG
FT	SA	Ni	METALS	84.8		0.0386	MG/KG
FT	SA	Ba	METALS	385		0.018	MG/KG
FT	SA	Cr	METALS	151		0.51	MG/KG
FT	SA	Cu	METALS	30.5		0.24	MG/KG
FT	SA	Zn	METALS	81.7		0.107	MG/KG
FT	SA	Ag	METALS	0.17		0.066	MG/KG
FT	SA	Se	METALS	0.495	J	0.126	MG/KG
FT	SA	Hg	METALS	0.218		0.00208	MG/KG
FT	SA	Pb	METALS	19.6		0.198	MG/KG
FT	SA	Mo	METALS	1.84		0.0391	MG/KG
FT	SA	Sb	METALS	0.711		0.0297	MG/KG
FT	SA	As	METALS	13.7		0.068	MG/KG
FT	SA	Cd	METALS	0.363	J	0.0175	MG/KG
FT	SA	Co	METALS	19.3		0.0527	MG/KG
FT	SA	V	METALS	160		0.345	MG/KG
FT	SA	Al	METALS	76200		2.39	MG/KG
FT	SA	Fe	METALS	47800		0.564	MG/KG
FT	SA	Mn	METALS	449		0.074	MG/KG
FT	SA	Ni	METALS	98.4		0.0386	MG/KG
FT	SA	Ba	METALS	426		0.018	MG/KG
FT	SA	Cr	METALS	179		0.51	MG/KG
FT	SA	Cu	METALS	42.2		0.24	MG/KG
FT	SA	Zn	METALS	99.4		0.107	MG/KG
FT	SA	Ag	METALS	0.238		0.066	MG/KG
FT	SA	Se	METALS	0.467	J	0.126	MG/KG
FT	SA	Hg	METALS	0.369		0.00208	MG/KG
FT	SA	Pb	METALS	120		0.198	MG/KG
FT	SA	Mo	METALS	6.94		0.0391	MG/KG
FT	SA	Sb	METALS	3.62		0.0297	MG/KG
FT	SA	As	METALS	16.8		0.068	MG/KG
FT	SA	Cd	METALS	0.226	J	0.0175	MG/KG
FT	SA	Co	METALS	14.7		0.0527	MG/KG
FT	SA	V	METALS	79.6		0.345	MG/KG
FT	SA	Al	METALS	52400		2.39	MG/KG
FT	SA	Fe	METALS	48400		0.564	MG/KG
FT	SA	Mn	METALS	462		0.074	MG/KG

FT	SA	Ni	METALS	90.6		0.0386	MG/KG
FT	SA	Ba	METALS	941		0.018	MG/KG
FT	SA	Cr	METALS	368		0.51	MG/KG
FT	SA	Cu	METALS	490		0.24	MG/KG
FT	SA	Zn	METALS	425		0.107	MG/KG
FT	SA	Ag	METALS	0.341		0.066	MG/KG
FT	SA	Se	METALS	0.201	J	0.126	MG/KG
FT	SA	Hg	METALS	0.433		0.00208	MG/KG
FT	SA	Pb	METALS	583		0.198	MG/KG
FT	SA	Mo	METALS	3.54		0.0391	MG/KG
FT	SA	Sb	METALS	1.64		0.0297	MG/KG
FT	SA	As	METALS	12.6		0.068	MG/KG
FT	SA	Cd	METALS	0.412	J	0.0175	MG/KG
FT	SA	Co	METALS	23		0.0527	MG/KG
FT	SA	V	METALS	76.8		0.345	MG/KG
FT	SA	Al	METALS	45500		2.39	MG/KG
FT	SA	Fe	METALS	41800		0.564	MG/KG
FT	SA	Mn	METALS	568		0.074	MG/KG
FT	SA	Ni	METALS	223		0.0386	MG/KG
FT	SA	Ba	METALS	631		0.018	MG/KG
FT	SA	Cr	METALS	913		0.51	MG/KG
FT	SA	Cu	METALS	326		0.24	MG/KG
FT	SA	Zn	METALS	214		0.107	MG/KG
FT	SA	Ag	METALS	0.369		0.066	MG/KG
FT	SA	Se	METALS	0.155	J	0.126	MG/KG
FT	SA	Al	METALS	77300		2.39	MG/KG
FT	SA	Fe	METALS	45800		0.564	MG/KG
FT	SA	Mn	METALS	417		0.074	MG/KG
FT	SA	Ni	METALS	105		0.0386	MG/KG
FT	SA	Ba	METALS	445		0.018	MG/KG
FT	SA	Cr	METALS	164		0.51	MG/KG
FT	SA	Cu	METALS	53.9		0.24	MG/KG
FT	SA	Zn	METALS	126		0.107	MG/KG
FT	SA	Ag	METALS	0.471		0.066	MG/KG
FT	SA	Se	METALS	0.402	J	0.126	MG/KG
FT	SA	Pb	METALS	34.4		0.198	MG/KG
FT	SA	Mo	METALS	1.31		0.0391	MG/KG
FT	SA	Sb	METALS	0.842		0.0297	MG/KG
FT	SA	As	METALS	12.7		0.068	MG/KG
FT	SA	Cd	METALS	0.165	J	0.0175	MG/KG
FT	SA	Co	METALS	19		0.0527	MG/KG
FT	SA	V	METALS	163		0.345	MG/KG
FT	SA	Hg	METALS	0.346		0.00208	MG/KG
FT	SA	Hg	METALS	0.352		0.00208	MG/KG
FT	SA	Pb	METALS	37.4		0.198	MG/KG
FT	SA	Mo	METALS	1.4		0.0391	MG/KG
FT	SA	Sb	METALS	1.13		0.0297	MG/KG
FT	SA	As	METALS	13		0.068	MG/KG
FT	SA	Cd	METALS	0.289	J	0.0175	MG/KG
FT	SA	Co	METALS	20.8		0.0527	MG/KG
FT	SA	V	METALS	176		0.345	MG/KG

FT	SA	Al	METALS	79200		2.39	MG/KG
FT	SA	Fe	METALS	48200		0.564	MG/KG
FT	SA	Mn	METALS	442		0.074	MG/KG
FT	SA	Ni	METALS	116		0.0386	MG/KG
FT	SA	Ba	METALS	445		0.018	MG/KG
FT	SA	Cr	METALS	167		0.51	MG/KG
FT	SA	Cu	METALS	62.7		0.24	MG/KG
FT	SA	Zn	METALS	133		0.107	MG/KG
FT	SA	Ag	METALS	0.493		0.066	MG/KG
FT	SA	Se	METALS	0.438	J	0.126	MG/KG
FT	SA	Hg	METALS	0.55		0.00208	MG/KG
FT	SA	Pb	METALS	106		0.198	MG/KG
FT	SA	Mo	METALS	1.48		0.0391	MG/KG
FT	SA	Sb	METALS	1.48		0.0297	MG/KG
FT	SA	As	METALS	13		0.068	MG/KG
FT	SA	Cd	METALS	0.509	J	0.0175	MG/KG
FT	SA	Co	METALS	19.2		0.0527	MG/KG
FT	SA	V	METALS	157		0.345	MG/KG
FT	SA	Al	METALS	75500		2.39	MG/KG
FT	SA	Fe	METALS	45300		0.564	MG/KG
FT	SA	Mn	METALS	421		0.074	MG/KG
FT	SA	Ni	METALS	125		0.0386	MG/KG
FT	SA	Ba	METALS	458		0.018	MG/KG
FT	SA	Cr	METALS	190		0.51	MG/KG
FT	SA	Cu	METALS	77.5		0.24	MG/KG
FT	SA	Zn	METALS	149		0.107	MG/KG
FT	SA	Ag	METALS	0.804		0.066	MG/KG
FT	SA	Se	METALS	0.628	J	0.126	MG/KG
FT	SA	Se	METALS	0.935	J	0.126	MG/KG
FT	SA	Hg	METALS	1.64		0.00208	MG/KG
FT	SA	Pb	METALS	316		0.198	MG/KG
FT	SA	Mo	METALS	3.17		0.0391	MG/KG
FT	SA	Sb	METALS	9.16		0.0297	MG/KG
FT	SA	As	METALS	14.9		0.068	MG/KG
FT	SA	Cd	METALS	3.74		0.0175	MG/KG
FT	SA	Co	METALS	20.2		0.0527	MG/KG
FT	SA	V	METALS	158		0.345	MG/KG
FT	SA	Al	METALS	68000		2.39	MG/KG
FT	SA	Fe	METALS	45100		0.564	MG/KG
FT	SA	Mn	METALS	404		0.074	MG/KG
FT	SA	Ni	METALS	138		0.0386	MG/KG
FT	SA	Ba	METALS	513		0.018	MG/KG
FT	SA	Cr	METALS	593		0.51	MG/KG
FT	SA	Cu	METALS	242		0.24	MG/KG
FT	SA	Zn	METALS	467		0.107	MG/KG
FT	SA	Ag	METALS	1.19		0.066	MG/KG
FT	SA	Hg	METALS	1.59		0.00208	MG/KG
FT	SA	Pb	METALS	172		0.198	MG/KG
FT	SA	Mo	METALS	3.11		0.0391	MG/KG
FT	SA	Sb	METALS	3.41		0.0297	MG/KG
FT	SA	As	METALS	15.2		0.068	MG/KG

FT	SA	Cd	METALS	3.03		0.0175	MG/KG
FT	SA	Co	METALS	18.7		0.0527	MG/KG
FT	SA	V	METALS	170		0.345	MG/KG
FT	SA	Al	METALS	77700		2.39	MG/KG
FT	SA	Fe	METALS	51200		0.564	MG/KG
FT	SA	Mn	METALS	423		0.074	MG/KG
FT	SA	Ni	METALS	124		0.0386	MG/KG
FT	SA	Ba	METALS	475		0.018	MG/KG
FT	SA	Cr	METALS	576		0.51	MG/KG
FT	SA	Cu	METALS	154		0.24	MG/KG
FT	SA	Zn	METALS	441		0.107	MG/KG
FT	SA	Ag	METALS	1.35		0.066	MG/KG
FT	SA	Se	METALS	0.678	J	0.126	MG/KG
FT	SA	Hg	METALS	0.127		0.00208	MG/KG
FT	SA	Pb	METALS	14.8		0.198	MG/KG
FT	SA	Mo	METALS	3.4		0.0391	MG/KG
FT	SA	Sb	METALS	0.531		0.0297	MG/KG
FT	SA	As	METALS	17.3		0.068	MG/KG
FT	SA	Cd	METALS	0.484	J	0.0175	MG/KG
FT	SA	Co	METALS	17.6		0.0527	MG/KG
FT	SA	V	METALS	141		0.345	MG/KG
FT	SA	Al	METALS	69200		2.39	MG/KG
FT	SA	Fe	METALS	49700		0.564	MG/KG
FT	SA	Mn	METALS	444		0.074	MG/KG
FT	SA	Ni	METALS	83.7		0.0386	MG/KG
FT	SA	Ba	METALS	407		0.018	MG/KG
FT	SA	Cr	METALS	168		0.51	MG/KG
FT	SA	Cu	METALS	31		0.24	MG/KG
FT	SA	Zn	METALS	85.7		0.107	MG/KG
FT	SA	Ag	METALS	0.15		0.066	MG/KG
FT	SA	Se	METALS	0.516	J	0.126	MG/KG
FT	SA	Hg	METALS	1.1		0.00208	MG/KG
FT	SA	Pb	METALS	133		0.198	MG/KG
FT	SA	Mo	METALS	2.55		0.0391	MG/KG
FT	SA	Sb	METALS	4.19		0.0297	MG/KG
FT	SA	As	METALS	15.9		0.068	MG/KG
FT	SA	Cd	METALS	1.8		0.0175	MG/KG
FT	SA	Co	METALS	20		0.0527	MG/KG
FT	SA	V	METALS	164		0.345	MG/KG
FT	SA	Al	METALS	74400		2.39	MG/KG
FT	SA	Fe	METALS	50900		0.564	MG/KG
FT	SA	Mn	METALS	453		0.074	MG/KG
FT	SA	Ni	METALS	131		0.0386	MG/KG
FT	SA	Ba	METALS	463		0.018	MG/KG
FT	SA	Cr	METALS	348		0.51	MG/KG
FT	SA	Cu	METALS	160		0.24	MG/KG
FT	SA	Zn	METALS	275		0.107	MG/KG
FT	SA	Ag	METALS	0.689		0.066	MG/KG
FT	SA	Se	METALS	0.556	J	0.126	MG/KG
FT	SA	Hg	METALS	0.635		0.00208	MG/KG
FT	SA	Pb	METALS	93.5		0.198	MG/KG

FT	SA	Mo	METALS	1.98		0.0391	MG/KG
FT	SA	Sb	METALS	2.05		0.0297	MG/KG
FT	SA	As	METALS	15.1		0.068	MG/KG
FT	SA	Cd	METALS	2.05		0.0175	MG/KG
FT	SA	Co	METALS	19.7		0.0527	MG/KG
FT	SA	V	METALS	172		0.345	MG/KG
FT	SA	Al	METALS	78200		2.39	MG/KG
FT	SA	Fe	METALS	53300		0.564	MG/KG
FT	SA	Mn	METALS	446		0.074	MG/KG
FT	SA	Ni	METALS	123		0.0386	MG/KG
FT	SA	Ba	METALS	440		0.018	MG/KG
FT	SA	Cr	METALS	338		0.51	MG/KG
FT	SA	Cu	METALS	77.1		0.24	MG/KG
FT	SA	Zn	METALS	210		0.107	MG/KG
FT	SA	Ag	METALS	0.493		0.066	MG/KG
FT	SA	Se	METALS	0.47	J	0.126	MG/KG
FT	SA	Hg	METALS	0.226		0.00208	MG/KG
FT	SA	Pb	METALS	20.8		0.198	MG/KG
FT	SA	Mo	METALS	2.79		0.0391	MG/KG
FT	SA	Sb	METALS	0.68		0.0297	MG/KG
FT	SA	As	METALS	16.3		0.068	MG/KG
FT	SA	Cd	METALS	0.465	J	0.0175	MG/KG
FT	SA	Co	METALS	17.6		0.0527	MG/KG
FT	SA	V	METALS	146		0.345	MG/KG
FT	SA	Al	METALS	73700		2.39	MG/KG
FT	SA	Fe	METALS	50600		0.564	MG/KG
FT	SA	Mn	METALS	457		0.074	MG/KG
FT	SA	Ni	METALS	91.9		0.0386	MG/KG
FT	SA	Ba	METALS	423		0.018	MG/KG
FT	SA	Cr	METALS	174		0.51	MG/KG
FT	SA	Cu	METALS	37.4		0.24	MG/KG
FT	SA	Zn	METALS	103		0.107	MG/KG
FT	SA	Ag	METALS	0.176		0.066	MG/KG
FT	SA	Se	METALS	0.548	J	0.126	MG/KG
FT	SA	Hg	METALS	0.314		0.00208	MG/KG
FT	SA	Pb	METALS	46.2		0.198	MG/KG
FT	SA	Mo	METALS	2.65		0.0391	MG/KG
FT	SA	Sb	METALS	2.43		0.0297	MG/KG
FT	SA	As	METALS	11.5		0.068	MG/KG
FT	SA	Cd	METALS	0.509	J	0.0175	MG/KG
FT	SA	Co	METALS	15.9		0.0527	MG/KG
FT	SA	V	METALS	125		0.345	MG/KG
FT	SA	Al	METALS	67400		2.39	MG/KG
FT	SA	Fe	METALS	47400		0.564	MG/KG
FT	SA	Mn	METALS	556		0.074	MG/KG
FT	SA	Ni	METALS	106		0.0386	MG/KG
FT	SA	Ba	METALS	418		0.018	MG/KG
FT	SA	Cr	METALS	218		0.51	MG/KG
FT	SA	Cu	METALS	92		0.24	MG/KG
FT	SA	Zn	METALS	137		0.107	MG/KG
FT	SA	Ag	METALS	0.22		0.066	MG/KG

FT	SA	Se	METALS	0.45	J	0.126	MG/KG
FT	SA	Al	METALS	68300		2.39	MG/KG
FT	SA	Fe	METALS	47100		0.564	MG/KG
FT	SA	Mn	METALS	481		0.074	MG/KG
FT	SA	Ni	METALS	90.1		0.0386	MG/KG
FT	SA	Ba	METALS	383		0.018	MG/KG
FT	SA	Cr	METALS	208		0.51	MG/KG
FT	SA	Cu	METALS	34.5		0.24	MG/KG
FT	SA	Zn	METALS	89.7		0.107	MG/KG
FT	SA	Ag	METALS	0.14		0.066	MG/KG
FT	SA	Se	METALS	0.426	J	0.126	MG/KG
FT	SA	Pb	METALS	15.7		0.198	MG/KG
FT	SA	Mo	METALS	2.71		0.0391	MG/KG
FT	SA	Sb	METALS	0.491		0.0297	MG/KG
FT	SA	As	METALS	13		0.068	MG/KG
FT	SA	Cd	METALS	0.501	J	0.0175	MG/KG
FT	SA	Co	METALS	17		0.0527	MG/KG
FT	SA	V	METALS	141		0.345	MG/KG
FT	SA	Hg	METALS	0.111		0.00208	MG/KG
FT	SA	Hg	METALS	0.2		0.00208	MG/KG
FT	SA	Pb	METALS	25.6		0.198	MG/KG
FT	SA	Mo	METALS	3.01		0.0391	MG/KG
FT	SA	Sb	METALS	0.738		0.0297	MG/KG
FT	SA	As	METALS	14.4		0.068	MG/KG
FT	SA	Cd	METALS	0.613		0.0175	MG/KG
FT	SA	Co	METALS	17.8		0.0527	MG/KG
FT	SA	V	METALS	150		0.345	MG/KG
FT	SA	Al	METALS	74100		2.39	MG/KG
FT	SA	Fe	METALS	51300		0.564	MG/KG
FT	SA	Mn	METALS	462		0.074	MG/KG
FT	SA	Ni	METALS	101		0.0386	MG/KG
FT	SA	Ba	METALS	417		0.018	MG/KG
FT	SA	Cr	METALS	198		0.51	MG/KG
FT	SA	Cu	METALS	41.3		0.24	MG/KG
FT	SA	Zn	METALS	109		0.107	MG/KG
FT	SA	Ag	METALS	0.203		0.066	MG/KG
FT	SA	Se	METALS	0.524	J	0.126	MG/KG
FT	SA	Hg	METALS	1.11		0.00208	MG/KG
FT	SA	Pb	METALS	408		0.198	MG/KG
FT	SA	Mo	METALS	2.4		0.0391	MG/KG
FT	SA	Sb	METALS	4.28		0.0297	MG/KG
FT	SA	As	METALS	13		0.068	MG/KG
FT	SA	Cd	METALS	4.69		0.0175	MG/KG
FT	SA	Co	METALS	18.1		0.0527	MG/KG
FT	SA	V	METALS	144		0.345	MG/KG
FT	SA	Al	METALS	63100		2.39	MG/KG
FT	SA	Fe	METALS	38900		0.564	MG/KG
FT	SA	Mn	METALS	420		0.074	MG/KG
FT	SA	Ni	METALS	96.2		0.0386	MG/KG
FT	SA	Ba	METALS	675		0.018	MG/KG
FT	SA	Cr	METALS	336		0.51	MG/KG

FT	SA	Cu	METALS	129		0.24	MG/KG
FT	SA	Zn	METALS	481		0.107	MG/KG
FT	SA	Ag	METALS	0.892		0.066	MG/KG
FT	SA	Se	METALS	1.15	J	0.126	MG/KG
FT	SA	Hg	METALS	0.709		0.00208	MG/KG
FT	SA	Pb	METALS	149		0.198	MG/KG
FT	SA	Mo	METALS	2.7		0.0391	MG/KG
FT	SA	Sb	METALS	2.47		0.0297	MG/KG
FT	SA	As	METALS	17.5		0.068	MG/KG
FT	SA	Cd	METALS	2.28		0.0175	MG/KG
FT	SA	Co	METALS	18.7		0.0527	MG/KG
FT	SA	V	METALS	164		0.345	MG/KG
FT	SA	Al	METALS	75800		2.39	MG/KG
FT	SA	Fe	METALS	50500		0.564	MG/KG
FT	SA	Mn	METALS	407		0.074	MG/KG
FT	SA	Ni	METALS	106		0.0386	MG/KG
FT	SA	Ba	METALS	483		0.018	MG/KG
FT	SA	Cr	METALS	278		0.51	MG/KG
FT	SA	Cu	METALS	84.3		0.24	MG/KG
FT	SA	Zn	METALS	268		0.107	MG/KG
FT	SA	Ag	METALS	0.623		0.066	MG/KG
FT	SA	Se	METALS	0.628	J	0.126	MG/KG
FT	SA	Hg	METALS	0.0929		0.00208	MG/KG
FT	SA	Pb	METALS	11		0.198	MG/KG
FT	SA	Mo	METALS	3.34		0.0391	MG/KG
FT	SA	Sb	METALS	0.445		0.0297	MG/KG
FT	SA	As	METALS	15.6		0.068	MG/KG
FT	SA	Cd	METALS	0.563	J	0.0175	MG/KG
FT	SA	Co	METALS	17.9		0.0527	MG/KG
FT	SA	V	METALS	147		0.345	MG/KG
FT	SA	Al	METALS	68300		2.39	MG/KG
FT	SA	Fe	METALS	50600		0.564	MG/KG
FT	SA	Mn	METALS	549		0.074	MG/KG
FT	SA	Ni	METALS	79.7		0.0386	MG/KG
FT	SA	Ba	METALS	437		0.018	MG/KG
FT	SA	Cr	METALS	181		0.51	MG/KG
FT	SA	Cu	METALS	29.3		0.24	MG/KG
FT	SA	Zn	METALS	84.5		0.107	MG/KG
FT	SA	Ag	METALS	0.168		0.066	MG/KG
FT	SA	Se	METALS	0.541	J	0.126	MG/KG
FT	SA	Hg	METALS	0.13		0.00208	MG/KG
FT	SA	Pb	METALS	20.2		0.198	MG/KG
FT	SA	Mo	METALS	0.423		0.0391	MG/KG
FT	SA	Sb	METALS	9.26		0.0297	MG/KG
FT	SA	As	METALS	5.8		0.068	MG/KG
FT	SA	Cd	METALS	0.117	J	0.0175	MG/KG
FT	SA	Co	METALS	12.4		0.0527	MG/KG
FT	SA	V	METALS	73		0.345	MG/KG
FT	SA	Al	METALS	44800		2.39	MG/KG
FT	SA	Fe	METALS	27000		0.564	MG/KG
FT	SA	Mn	METALS	630		0.074	MG/KG

FT	SA	Ni	METALS	82		0.0386	MG/KG
FT	SA	Ba	METALS	396		0.018	MG/KG
FT	SA	Cr	METALS	236		0.51	MG/KG
FT	SA	Cu	METALS	31		0.24	MG/KG
FT	SA	Zn	METALS	84.7		0.107	MG/KG
FT	SA	Ag	METALS	0.066	U	0.066	MG/KG
FT	SA	Se	METALS	0.126	U	0.126	MG/KG
FT	SA	Se	METALS	0.126	U	0.126	MG/KG
FT	SA	Ag	METALS	0.066	U	0.066	MG/KG
FT	SA	Hg	METALS	0.143		0.00208	MG/KG
FT	SA	Pb	METALS	6.24		0.198	MG/KG
FT	SA	Mo	METALS	0.621		0.0391	MG/KG
FT	SA	Sb	METALS	0.321		0.0297	MG/KG
FT	SA	As	METALS	10.1		0.068	MG/KG
FT	SA	Cd	METALS	0.204	J	0.0175	MG/KG
FT	SA	Co	METALS	17.3		0.0527	MG/KG
FT	SA	V	METALS	82		0.345	MG/KG
FT	SA	Al	METALS	42300		2.39	MG/KG
FT	SA	Fe	METALS	23300		0.564	MG/KG
FT	SA	Mn	METALS	550		0.074	MG/KG
FT	SA	Ni	METALS	68.8		0.0386	MG/KG
FT	SA	Ba	METALS	342		0.018	MG/KG
FT	SA	Cr	METALS	199		0.51	MG/KG
FT	SA	Cu	METALS	10		0.24	MG/KG
FT	SA	Zn	METALS	40.8		0.107	MG/KG
FT	SA	Hg	METALS	0.0547		0.00208	MG/KG
FT	SA	Pb	METALS	11.2		0.198	MG/KG
FT	SA	Mo	METALS	0.46		0.0391	MG/KG
FT	SA	Sb	METALS	0.382		0.0297	MG/KG
FT	SA	As	METALS	6.53		0.068	MG/KG
FT	SA	Cd	METALS	0.161	J	0.0175	MG/KG
FT	SA	Co	METALS	15.3		0.0527	MG/KG
FT	SA	V	METALS	87.1		0.345	MG/KG
FT	SA	Al	METALS	49700		2.39	MG/KG
FT	SA	Fe	METALS	25200		0.564	MG/KG
FT	SA	Mn	METALS	510		0.074	MG/KG
FT	SA	Ni	METALS	70.9		0.0386	MG/KG
FT	SA	Ba	METALS	407		0.018	MG/KG
FT	SA	Cr	METALS	221		0.51	MG/KG
FT	SA	Cu	METALS	9.82		0.24	MG/KG
FT	SA	Zn	METALS	45.1		0.107	MG/KG
FT	SA	Ag	METALS	0.567		0.066	MG/KG
FT	SA	Se	METALS	0.126	U	0.126	MG/KG

STUDY_ID	SAMP_ID	CLIENT_SAM	FIELD_SAM	FIELD_QC	STATION_ID	AREA_NAME
HPS_VAL_HH	AAB-238-G		core	SA	EW-31	Eastern Wetland Area
HPS_VAL_HH	AAB-239-G		core	SA	EW-31	Eastern Wetland Area
HPS_VAL_HH	AAB-240-G		core	SA	EW-31	Eastern Wetland Area
HPS_VAL_HH	AAB-262-G		core	SA	EW-36	Eastern Wetland Area
HPS_VAL_HH	AAB-263-G		core	SA	EW-36	Eastern Wetland Area
HPS_VAL_HH	AAB-264-G		core	SA	EW-36	Eastern Wetland Area
HPS_VAL_HH	AAB-205-G		core	SA	IB-56	India Basin Area I
HPS_VAL_HH	AAB-206-G		core	SA	IB-56	India Basin Area I
HPS_VAL_HH	AAB-207-G		core	SA	IB-56	India Basin Area I
HPS_VAL_HH	AAB-247-G		core	SA	IB-59	India Basin Area I
HPS_VAL_HH	AAB-248-G		core	SA	IB-59	India Basin Area I
HPS_VAL_HH	AAB-249-G		core	SA	IB-59	India Basin Area I
HPS_VAL_HH	AAB-241-G		core	SA	OR-24	Oil Reclamation Area
HPS_VAL_HH	AAB-242-G		core	SA	OR-24	Oil Reclamation Area
HPS_VAL_HH	AAB-243-G		core	SA	OR-24	Oil Reclamation Area
HPS_VAL_HH	AAB-220-G		core	SA	OR-28	Oil Reclamation Area
HPS_VAL_HH	AAB-221-G		core	SA	OR-28	Oil Reclamation Area
HPS_VAL_HH	AAB-222-G		core	SA	OR-28	Oil Reclamation Area
HPS_VAL_HH	AAB-244-G		core	SA	PA-40	Point Avisadero Area
HPS_VAL_HH	AAB-245-G		core	SA	PA-40	Point Avisadero Area
HPS_VAL_HH	AAB-196-G		core	SA	PA-41	Point Avisadero Area
HPS_VAL_HH	AAB-197-G		core	SA	PA-41	Point Avisadero Area
HPS_VAL_HH	AAB-198-G		core	SA	PA-41	Point Avisadero Area
HPS_VAL_HH	AAB-226-G		core	SA	PA-44	Point Avisadero Area
HPS_VAL_HH	AAB-227-G		core	SA	PA-44	Point Avisadero Area
HPS_VAL_HH	AAB-228-G		core	SA	PA-44	Point Avisadero Area
HPS_VAL_HH	AAB-223-G		core	SA	PA-47	Point Avisadero Area
HPS_VAL_HH	AAB-224-G		core	SA	PA-47	Point Avisadero Area
HPS_VAL_HH	AAB-225-G		core	SA	PA-47	Point Avisadero Area
HPS_VAL_HH	AAB-232-G		core	SA	PA-49	Point Avisadero Area
HPS_VAL_HH	AAB-233-G		core	SA	PA-49	Point Avisadero Area
HPS_VAL_HH	AAB-234-G		core	SA	PA-49	Point Avisadero Area
HPS_VAL_HH	AAB-229-G		core	SA	PA-52	Point Avisadero Area
HPS_VAL_HH	AAB-230-G		core	SA	PA-52	Point Avisadero Area
HPS_VAL_HH	AAB-231-G		core	SA	PA-52	Point Avisadero Area
HPS_VAL_HH	AAB-259-G		core	SA	SB-01	South Basin Area X
HPS_VAL_HH	AAB-260-G		core	SA	SB-01	South Basin Area X
HPS_VAL_HH	AAB-261-G		core	SA	SB-01	South Basin Area X
HPS_VAL_HH	AAB-208-G		core	SA	SB-03	South Basin Area X
HPS_VAL_HH	AAB-209-G		core	SA	SB-03	South Basin Area X
HPS_VAL_HH	AAB-210-G		core	SA	SB-03	South Basin Area X
HPS_VAL_HH	AAB-202-G		core	SA	SB-06	South Basin Area X
HPS_VAL_HH	AAB-203-G		core	SA	SB-06	South Basin Area X
HPS_VAL_HH	AAB-204-G		core	SA	SB-06	South Basin Area X
HPS_VAL_HH	AAB-235-G		core	SA	SB-07	South Basin Area X
HPS_VAL_HH	AAB-236-G		core	SA	SB-07	South Basin Area X
HPS_VAL_HH	AAB-237-G		core	SA	SB-07	South Basin Area X
HPS_VAL_HH	AAB-199-G		core	SA	SB-12	South Basin Area X
HPS_VAL_HH	AAB-200-G		core	SA	SB-12	South Basin Area X
HPS_VAL_HH	AAB-201-G		core	SA	SB-12	South Basin Area X

HPS_VAL_HH	AAB-256-G	core	SA	SB-16	South Basin Area X
HPS_VAL_HH	AAB-257-G	core	SA	SB-16	South Basin Area X
HPS_VAL_HH	AAB-258-G	core	SA	SB-16	South Basin Area X
HPS_VAL_HH	AAB-250-G	core	SA	SB-20	South Basin Area X
HPS_VAL_HH	AAB-251-G	core	SA	SB-20	South Basin Area X
HPS_VAL_HH	AAB-252-G	core	SA	SB-20	South Basin Area X
HPS_VAL_HH	AAB-253-G	core	SA	SB-22	South Basin Area X
HPS_VAL_HH	AAB-254-G	core	SA	SB-22	South Basin Area X
HPS_VAL_HH	AAB-255-G	core	SA	SB-22	South Basin Area X

MEDIA	DATE_START	DEPTH_TOP	DEPTH_BOT	DEPTH_UI	LAB	LAB_BATC
SEDIMENT	5/23/2001	0	2	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	2	4	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	4	6	FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	0	2	FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	2	4	FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	4	6	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	0	2	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	2	4	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	4	6	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	0	2	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	2	4	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	4	6	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	0	2	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	2	4	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	4	6	FT	STL-SA	G1E25022
SEDIMENT	5/22/2001	0	2	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	2	4	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	4	6	FT	STL-SA	G1E24018
SEDIMENT	5/23/2001	0	2	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	2	4	FT	STL-SA	G1E25022
SEDIMENT	5/22/2001	0	2	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	2	4	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	4	6	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	0	2	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	2	4	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	4	6	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	0	2	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	2	4	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	4	6	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	0	2	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	2	4	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	4	6	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	0	2	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	2	4	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	4	6	FT	STL-SA	G1E24018
SEDIMENT	5/24/2001	0	2	FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	2	4	FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	4	6	FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	0	2	FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	2	4	FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	4	6	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	0	2	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	2	4	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	4	6	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	0	2	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	2	4	FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	4	6	FT	STL-SA	G1E25022
SEDIMENT	5/22/2001	0	2	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	2	4	FT	STL-SA	G1E24018
SEDIMENT	5/22/2001	4	6	FT	STL-SA	G1E24018

SEDIMENT	5/24/2001	0	2 FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	2	4 FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	4	6 FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	0	2 FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	2	4 FT	STL-SA	G1E25022
SEDIMENT	5/23/2001	4	6 FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	0	2 FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	2	4 FT	STL-SA	G1E25022
SEDIMENT	5/24/2001	4	6 FT	STL-SA	G1E25022

ANALYSIS_METH	METHOD_CITATION	SAMP_TYPE	ANALYSIS_DATE	PERCENT_MO
NONE	EPA 9060 EPA 9060	SA	5/29/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/30/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/30/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	6/4/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/31/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/31/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/31/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/30/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/30/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/31/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/31/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/31/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/31/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/26/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/26/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/26/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/30/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/30/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/26/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/26/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/26/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/28/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/28/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/28/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/26/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/26/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/26/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/29/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/29/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/29/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/28/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/28/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/28/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/29/2001 0:00	
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NONE	EPA 9060 EPA 9060	SA	5/29/2001 0:00	
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NONE	EPA 9060 EPA 9060	SA	5/29/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/29/2001 0:00	
NONE	EPA 9060 EPA 9060	SA	5/29/2001 0:00	

NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00
NONE	EPA 9060 EPA 9060	SA	5/31/2001 0:00
NONE	EPA 9060 EPA 9060	SA	5/31/2001 0:00
NONE	EPA 9060 EPA 9060	SA	5/31/2001 0:00
NONE	EPA 9060 EPA 9060	SA	5/31/2001 0:00
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00
NONE	EPA 9060 EPA 9060	SA	6/1/2001 0:00

PARAM_CODE	DESCR	CLASS	RESULT	LAB_QUAL	FINAL_QUAL	MDL
NAV0014	TOC	CONVENTIONA	3660			76.8
NAV0014	TOC	CONVENTIONA	3680			76.8
NAV0014	TOC	CONVENTIONA	2310			76.8
NAV0014	TOC	CONVENTIONA	5740			76.8
NAV0014	TOC	CONVENTIONA	9360			76.8
NAV0014	TOC	CONVENTIONA	3970		J	76.8
NAV0014	TOC	CONVENTIONA	9530		J	76.8
NAV0014	TOC	CONVENTIONA	9620		J	76.8
NAV0014	TOC	CONVENTIONA	8270		J	76.8
NAV0014	TOC	CONVENTIONA	10900			76.8
NAV0014	TOC	CONVENTIONA	11100			76.8
NAV0014	TOC	CONVENTIONA	11700			76.8
NAV0014	TOC	CONVENTIONA	9880			76.8
NAV0014	TOC	CONVENTIONA	9340			76.8
NAV0014	TOC	CONVENTIONA	10400			76.8
NAV0014	TOC	CONVENTIONA	10900			76.8
NAV0014	TOC	CONVENTIONA	9960			76.8
NAV0014	TOC	CONVENTIONA	10800			76.8
NAV0014	TOC	CONVENTIONA	8640			76.8
NAV0014	TOC	CONVENTIONA	9610			76.8
NAV0014	TOC	CONVENTIONA	14400			76.8
NAV0014	TOC	CONVENTIONA	12800			76.8
NAV0014	TOC	CONVENTIONA	11500			76.8
NAV0014	TOC	CONVENTIONA	10800			76.8
NAV0014	TOC	CONVENTIONA	10200			76.8
NAV0014	TOC	CONVENTIONA	11000			76.8
NAV0014	TOC	CONVENTIONA	11800			76.8
NAV0014	TOC	CONVENTIONA	15400			76.8
NAV0014	TOC	CONVENTIONA	12500			76.8
NAV0014	TOC	CONVENTIONA	11200			76.8
NAV0014	TOC	CONVENTIONA	13300			76.8
NAV0014	TOC	CONVENTIONA	13500			76.8
NAV0014	TOC	CONVENTIONA	7730			76.8
NAV0014	TOC	CONVENTIONA	6940			76.8
NAV0014	TOC	CONVENTIONA	8990			76.8
NAV0014	TOC	CONVENTIONA	16600		J	76.8
NAV0014	TOC	CONVENTIONA	13500		J	76.8
NAV0014	TOC	CONVENTIONA	9560		J	76.8
NAV0014	TOC	CONVENTIONA	14800		J	76.8
NAV0014	TOC	CONVENTIONA	10500		J	76.8
NAV0014	TOC	CONVENTIONA	10800		J	76.8
NAV0014	TOC	CONVENTIONA	16800			76.8
NAV0014	TOC	CONVENTIONA	10600			76.8
NAV0014	TOC	CONVENTIONA	10200			76.8
NAV0014	TOC	CONVENTIONA	19300			76.8
NAV0014	TOC	CONVENTIONA	15000			76.8
NAV0014	TOC	CONVENTIONA	10600			76.8
NAV0014	TOC	CONVENTIONA	21400			76.8
NAV0014	TOC	CONVENTIONA	16600			76.8
NAV0014	TOC	CONVENTIONA	10400			76.8

NAV0014	TOC	CONVENTIONA	9180	J	76.8
NAV0014	TOC	CONVENTIONA	9160	J	76.8
NAV0014	TOC	CONVENTIONA	10300	J	76.8
NAV0014	TOC	CONVENTIONA	21300		76.8
NAV0014	TOC	CONVENTIONA	24200		76.8
NAV0014	TOC	CONVENTIONA	10300		76.8
NAV0014	TOC	CONVENTIONA	13500		76.8
NAV0014	TOC	CONVENTIONA	13300	J	76.8
NAV0014	TOC	CONVENTIONA	9400	J	76.8

RDL	UNIT
100	MG/KG_DRYWT
100	MG/KG_DRYWT
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100	MG/KG_DRYWT
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