Comprehensive Long-Term Environmental Action Navy (CLEAN II)

Contract # N62474-94-D-7609 · Contract Task Order 0011

Parcel E Information Package
Phase II Groundwater Data Gaps Investigation

Hunters Point Shipyard
San Francisco, California

DS.0011.16328

August 10, 2001

Department of the Navy • Southwest Division

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN II)
Northern and Central California, Nevada, and Utah
Contract No. N62474-94-D-7609
Contract Task Order No. 011

Prepared for

DEPARTMENT OF THE NAVY
Southwest Division
Naval Facilities Engineering Command
San Diego, California

PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

DS.0011.16328

August 10, 2001

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ABBREVIATIONS AND ACRONYMS

BCT	Base Realignment and Closure Act Cleanup Team
COPC	Chemical of potential concern
CTO	Contract task order
DQO	Data quality objective
FSP/QAPP	Field sampling plan and quality assurance project plan
GDGI	Groundwater data gaps investigation
HPS	Hunters Point Shipyard
IR	Installation restoration
LNAPL	Light nonaqueous phase liquid
mg/L	Milligram per liter
SWDIV	Naval Facilities Engineering Command, Southwest Division
TDS	Total dissolved solids
TtEMI	Tetra Tech EM Inc.

1.0 INTRODUCTION

Tetra Tech EM Inc. (TtEMI), received contract task order 011 (CTO 011) under Comprehensive Long-term Environmental Action Navy Contract No. N62474-94-D-7609 from the Department of the Navy, Naval Facilities Engineering Command, Southwest Division (SWDIV), to conduct remedial investigations through record-of-decision activities at Parcels B and C at Hunters Point Shipyard (HPS) in San Francisco, California. TtEMI received subsequent modifications to CTO 011 to evaluate data gaps for groundwater. A phased approach was used to implement the groundwater data gaps investigation (GDGI) at HPS.

This information package documents the results of the Phase II GDGI conducted at HPS Parcel E. The data presented in this package represent the most recent for groundwater at Parcel E; further data collection is planned for Phase III of the GDGI. The intent of the information packages is to provide a basis for groundwater data evaluation for use in the Parcel E feasibility study. The Phase II report will help the Base Realignment and Closure Act Cleanup Team (BCT) evaluate the Phase II sampling results and recommend changes to the Phase III sampling to address specific conditions at Parcel E, if necessary.

Objectives of the Phase II GDGI at Parcel E were to:

- Evaluate the condition of existing monitoring wells at the site.
- Complete a basewide measurement of groundwater levels so that a potentiometric map could be developed.
- Conduct two sampling events at Parcel E to confirm the extent of remedial units for groundwater (Appendix A contains field data sheets; Appendix B contains chain-of-custody forms).

Field activities to address these data gaps and comparisons to data quality objectives (DQO) are presented in the following sections. Phase I activities for Parcel E included well condition surveys and water level measurements. Phase II was expanded to include groundwater sampling based on input from the BCT during a meeting in November 2000.

2.0 WELL CONDITION SURVEY AND WELL REPAIR

As part of Phase I of the GDGI (TtEMI 2001a), the Navy conducted a survey of the condition of monitoring wells basewide in April 2000. The locations of the monitoring wells are shown on Figure 2-1. During the inspection, the Navy surveyed new horizontal and vertical well coordinates, and completed light maintenance of monitoring wells, including replacement of broken well caps and locks and missing lid bolts and renewal of the water level measurement mark or notch and external well identification information. The results of the well inspection survey can be found in Table 4-1 of the Phase II Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) Addenda (TtEMI 2001b).

Since the initial well survey was completed several years ago, top-of-casing elevations at 24 selected wells were measured during Phase I to confirm previous survey measurements. In addition, top-of-casing and/or ground surface elevations were measured at approximately 65 wells for which survey data were incomplete, as detailed in Table 4-1 of the Phase I FSP/QAPP (TtEMI 2000). The data collected during the confirmation survey varied by more than 0.05 foot at more than 30 percent of the wells from the initial survey data. For this reason, the Navy resurveyed the top-of-casing elevations at all wells included in the water level measurement event for the Phase I GDGI, new wells installed during the Phase II GDGI, and existing wells proposed for addition to the Phase II GDGI.

During Phase I of the GDGI, the Navy also conducted basic repairs to the wells in accordance with recommendations from the April 2000 survey, including repair and replacement of traffic-rated lids, well vaults, and concrete pads. Table 2-1 identifies well repairs, provides notes on general well conditions, and identifies specific problems for individual wells.

The Navy conducted a basewide inspection survey of monitoring wells in April 2000. This inspection was done in accordance with the DQOs in the Phase I FSP/QAPP (TtEMI 2000), The DQOs for the well condition survey and repair are provided in Table 2-2. The DQO process includes development of decision rules; related field activities; and resulting responses, comments, and conclusions. The locations of the wells inspected are shown on Figure 2-1, and current conditions of wells are provided in Table 2-1. Overall, the Phase I and II GDGI satisfied the DQOs for well inspection, as explained in the paragraphs below.

Most of the monitoring wells at HPS had not been sampled in several years and their conditions were unknown. Therefore, it was necessary to assess their current condition. The survey included measuring the total depth of the well to assess buildup of silt, measuring the depth to water to compare the current

water level with historical levels, detecting the presence of product (if any), and visually inspecting the general integrity of the well.

Some basic repairs (for example, well vault replacement) were made before and during the Phase II GDGI. Wells included in the Parcel E sampling program were redeveloped if sediment covered more than 10 percent of the well screen interval. Ten wells (IR01MW42A, IR01MWI-8, IR01MWI-9, IR02MW300A, IR02MW373A, IR04MW31A, IR12MW19A, PA36MW03A, PA36MW04A, and IR39MW23A) were redeveloped before sampling began for the Phase II GDGI. Redevelopment records for these wells are provided in Attachment 1. Redevelopment at an additional well (IR02MW97A) with accumulated sediment covered slightly over 10 percent of the screen interval will be conducted prior to the Phase III sampling. Vaults were repaired for five wells in January and February 2001 (IR13MWB5A-W, IR36MW14A, IR36MW122A, IR36MW125A, IR36MW128A). Vaults were replaced for four wells in September and November 2000 (IR36MW09A, IR36MW126A, IR36MW137A, and IR75MW05B). Additional follow-on repairs are being made.

3.0 GROUNDWATER LEVEL MEASUREMENT STUDY

Basewide water levels were measured in 313 wells completed in the A-aquifer, 40 wells completed in the B-aquifer, and 20 bedrock water-bearing zone wells on February 14, 2001, to assess horizontal hydraulic and vertical hydraulic gradients.

Water levels were measured within a 3-hour period to minimize variation caused by the tide. The measurement period began at 10:30 a.m., before the lower low tide, and ended at 1:25 p.m., after the lower low tide. Water levels were measured during a period of relatively small change in tidal levels in San Francisco Bay. During the 3-hour measurement period, the tidal fluctuation in the bay was less than 0.8 foot. Later that day and on the next day, additional water level measurements were collected at selected wells to evaluate tidal influence. Before the measurement period began, all well covers were unlocked and unfastened to allow equilibration and to expedite access to the wells.

Groundwater levels were measured first in wells nearest the shore (that is, the locations expected to display the highest tidal efficiency). Water level measurements were then collected from wells farther away from the shore (that is, the locations expected to display relatively lower tidal efficiencies), with the wells farthest from the shore measured last. A tidal study being completed by the Navy's remedial action contractor will be evaluated before Phase III monitoring, so that all high efficiency wells are monitored over a short time. Figure 3-1 presents the groundwater elevation contours for the A-aquifer based on water level data collected on February 14, 2001. Table 3-1 summarizes the February 2001 groundwater elevations. Groundwater elevation contour maps for the A-aquifer based on water level measurements from 1994 through 2000 are included in Appendix C as Figures C-1 through C-5. These figures were included as Figures 2 through 6 in the revised information package for the Phase I GDGI (TtEMI 2001a).

The DQOs for the water level measurement study are provided in Table 3-2. The DQO process includes development of decision rules; related field activities; and resulting responses, comments, and conclusions. Overall, the Phase I and II GDGI satisfied DQOs for the water level study, as explained in the paragraphs below.

Using the new survey data, groundwater surface elevations were calculated for each well. A contour map of the potentiometric surface was prepared using the data collected on February 14, 2001 (Figure 3-1). The A-aquifer groundwater elevation contour map shows that the potentiometric surface of the A-aquifer at Parcel E is a complex configuration of sinks and mounds. An important feature of the potentiometric surface is the groundwater depression in the eastern portion of Parcel E (adjacent to the

boundary of Parcel D). This groundwater depression is probably related to groundwater leakage into the sewer lines. The pump station located in Parcel A discharges the sewage to the publicly operated treatment works (see Figure 3-1). This groundwater depression is significantly smaller when compared with the potentiometric surface map for July 2000 (Appendix C, Figure C-5). This trend may be attributed to seasonal variations resulting in higher surface infiltration rates during February 2001 when compared to July 2000.

An elongated groundwater mound exists along the central shoreline of Parcel E, as shown on Figure 3-1. The axis of the mound is approximately parallel to the shoreline and is centered at a network of water supply lines near wells IR02MW114A1 and IR04MW298A, where groundwater elevations are highest. Leakage from the water supply lines is likely contributing to the mounding. Although the historical maximum concentrations of total dissolved solids (TDS) at wells IR02MW114A1 and IR04MW298A (2,920 and 5,830 milligrams per liter [mg/L]) do not entirely support this hypothesis, recent results for TDS from wells IR02MW114A1 and IR04MW298A (1,280 and 1,510 mg/L) confirm this hypothesis. Investigation and repairs are planned to address potential leaks in the water line in the area. Progress of the repair work will be reported in the Phase III GDGI report. Mounding in Parcel E may be related to groundwater backing up behind the sheetpile wall installed along the shoreline at installation restoration site 01/21 (IR-01/21) and IR-03 or from increased infiltration of surface water (see Figure 3-1). The Navy and the BCT are addressing this landfill issue separately. An additional groundwater mound is located around well IR11MW25A and may be related to a leak in a water line in the area. The leak will be investigated and repair activities will be conducted in this area, if necessary.

A contour map of the A-aquifer's potentiometric surface was prepared using the July 2000 data and is included as Figure C-5 in Appendix C. The potentiometric surface and resulting directions of groundwater flow in the A-aquifer were found to be generally consistent with previous groundwater contour maps, with the exception of the decreased size of the groundwater depression (as discussed above) and the lack of a groundwater sink previously identified at well IR02MW146A. Updated survey data for this well obtained recently indicated that the groundwater sink noted previously was probably not present and instead had been interpreted based on outdated well survey data.

4.0 GROUNDWATER SAMPLING

The Phase II groundwater sampling data for Parcel E are presented for information purposes only. Groundwater sampling DQOs for the A-aquifer, the B-aquifer, and the bedrock water-bearing zone will be addressed after combining and evaluating Phase II and Phase III data. Review of the Phase II data will allow the BCT to consider changes to the Phase III monitoring program to address specific conditions at Parcel E.

For the Phase II GDGI at Parcel E, groundwater samples were collected at 101 monitoring wells in the A-aquifer, 11 monitoring wells in the B-aquifer, and two bedrock water-bearing zone wells. The samples were collected between March 6 and April 24, 2001. The rationale for each sample collected is provided in Table 4-1, which was initially presented in the Phase II FSP/QAPP Addenda (TtEMI 2001b). Groundwater sampling locations in Parcel E are shown on Figure 4-1.

Table 4-2 summarizes the samples collected and the analyses. Table 4-3 presents the results of Phase II sampling. Copies of the groundwater sampling field data sheets are provided in Appendix A. Copies of the chain-of-custody forms are provided in Appendix B.

Chemical analytical data (Table 4-3) were compared with California and federal maximum contaminant levels, aquatic criteria, and HPS groundwater ambient levels. Screening criteria for groundwater are summarized in Table 4-4. Maximum concentration maps (Figures 4-2 through 4-36) were prepared for 35 chemicals of potential concern (COPC) that were identified based on a comparison with the applicable screening criteria. The maximum contaminant concentrations were contoured for several COPCs that represented spatially significant distributions compared with applicable criteria. Contour maps were constructed for the following six analytes: benzene (Figure 4-2), trichloroethene (Figure 4-3), lead (Figure 4-4), nickel (Figure 4-5), chromium (Figure 4-6), and Aroclor-1260 (Figure 4-7).

Phase II GDGI groundwater sampling at Parcel E generally followed the Phase II FSP/QAPP Addenda (TtEMI 2001b); field deviations were as follows:

- Monitoring wells IR01MW42A, IR01MWI-8, IR01MWI-9, IR02MW300A, IR02MW373A, IR04MW31A, IR12MW19A, PA36MW03A, PA36MW04A, and IR39MW23A were redeveloped in January 2001 before sampling began.
- Monitoring well IR01MW16A was not sampled because of health and safety considerations related to oxygen-deficient conditions at the wellhead.

- Groundwater samples were not collected from the following wells because of the presence of floating product above the groundwater: IR01MW16A, IR02MW146A, IR02MW173A, IR03MW218A1, IR03MW225A, IR03MW226A, IR03MW369A, IR03MW370A, IR03MW371A, IR03MWO-1, IR03MWO-2, IR03MWO-3, IR03MW228B, IR05MW74A, IR05MW82A, IR12MW16A, IR12MW21A, IR14MW13A, and PA36MW03A (see Figure 4-1).

The Phase II GDGI included an investigation of the nature and extent of contamination in the B-aquifer, the hydrogeologic conditions of the B-aquifer, and TDS concentrations. The investigation included collecting water level measurements and groundwater samples from all 11 existing B-aquifer wells during Phase II.

Table 4-5 provides decision rules; corresponding field activities; and resulting responses, comments, and conclusions for the study of the B-aquifer zone.

The Phase II GDGI included an investigation of the A-aquifer and the bedrock water-bearing zone. The A-aquifer and bedrock water-bearing zone remedial units were developed on the basis of chemical data collected several years ago and may not reflect current conditions. Phase II Groundwater samples were collected from 101 monitoring wells in the A-aquifer and two monitoring wells in the bedrock water-bearing zone at Parcel E and analyzed for COPCs. The rationale for sampling A-aquifer and bedrock water bearing zone wells at Parcel E during the Phase II GDGI was provided in Table 4-7 of the Phase II FSP/QAPP Addenda (TtEMI 2001b) and is repeated here as Table 4-1. A summary of the locations sampled and analyses performed during Phase II sampling at Parcel E is provided in Table 4-2. Analytical results from Phase II sampling are presented in Table 4-3. Table 4-6 provides a comparison of the decision rules; corresponding field activities; and resulting responses, comments, and conclusions. The A-aquifer and bedrock water-bearing zone DQOs will be addressed after combining and evaluating the Phase II and Phase III data. Results will be presented in the Phase III GDGI report.

5.0 PHASE III GROUNDWATER DATA GAPS INVESTIGATION

The Phase III GDGI at Parcel E will include additional groundwater sampling, groundwater level measurements, and continuing assessments of the condition of the monitoring wells.

Repairs to and assessments of the conditions of the wells will be documented in the Phase III report, expected to be completed in the spring of 2002. Basewide groundwater elevations will be measured again. Groundwater from the A-aquifer, B-aquifer, and bedrock water-bearing zone wells will be sampled and analyzed as for the Phase II GDGI, with any of the BCT's modifications incorporated. Also, additional samples will be collected and analyzed for the speciation of specific radionuclides.

The Phase III GDGI groundwater data, along with the Phase II data, will be used by the Navy and the BCT to complete the Parcel E feasibility study.

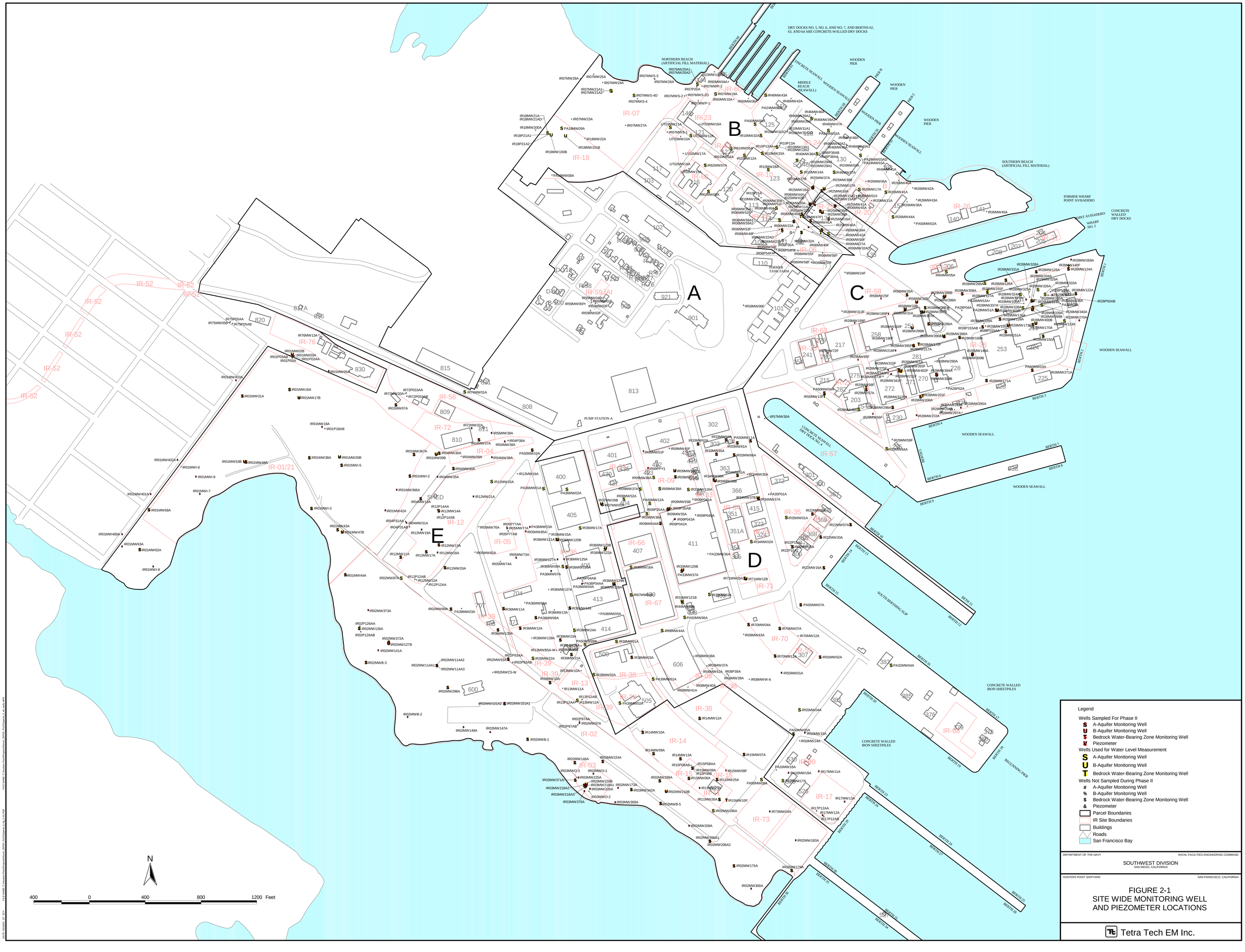
REFERENCES

Tetra Tech EM Inc. (TtEMI). 2000. "Final Field Sampling Plan for Phase I Groundwater Data Gaps Investigation, Hunters Point Shipyard, San Francisco, California." July 31.

TtEMI. 2001a. "Revised Information Package for the Phase I Groundwater Data Gaps Investigation, Hunters Point Shipyard, San Francisco, California." January 8.

TtEMI. 2001b. "Field Sampling Plan and Quality Assurance Project Plan Addenda for Phase II Groundwater Data Gaps Investigation, Hunters Point Shipyard, San Francisco, California." January 8.

FIGURES



Legend

Wells Sampled For Phase II
- S A-Aquifer Monitoring Well
- U B-Aquifer Monitoring Well
- ‡ Bedrock Water-Bearing Zone Monitoring Well
- V Piezometer

Wells Used for Water Level Measurement
- S A-Aquifer Monitoring Well
- U B-Aquifer Monitoring Well
- T Bedrock Water-Bearing Zone Monitoring Well

Wells Not Sampled During Phase II
- # A-Aquifer Monitoring Well
- % B-Aquifer Monitoring Well
- $ Bedrock Water-Bearing Zone Monitoring Well
- & Piezometer

- Parcel Boundaries
- IR Site Boundaries
- Buildings
- Roads
- San Francisco Bay

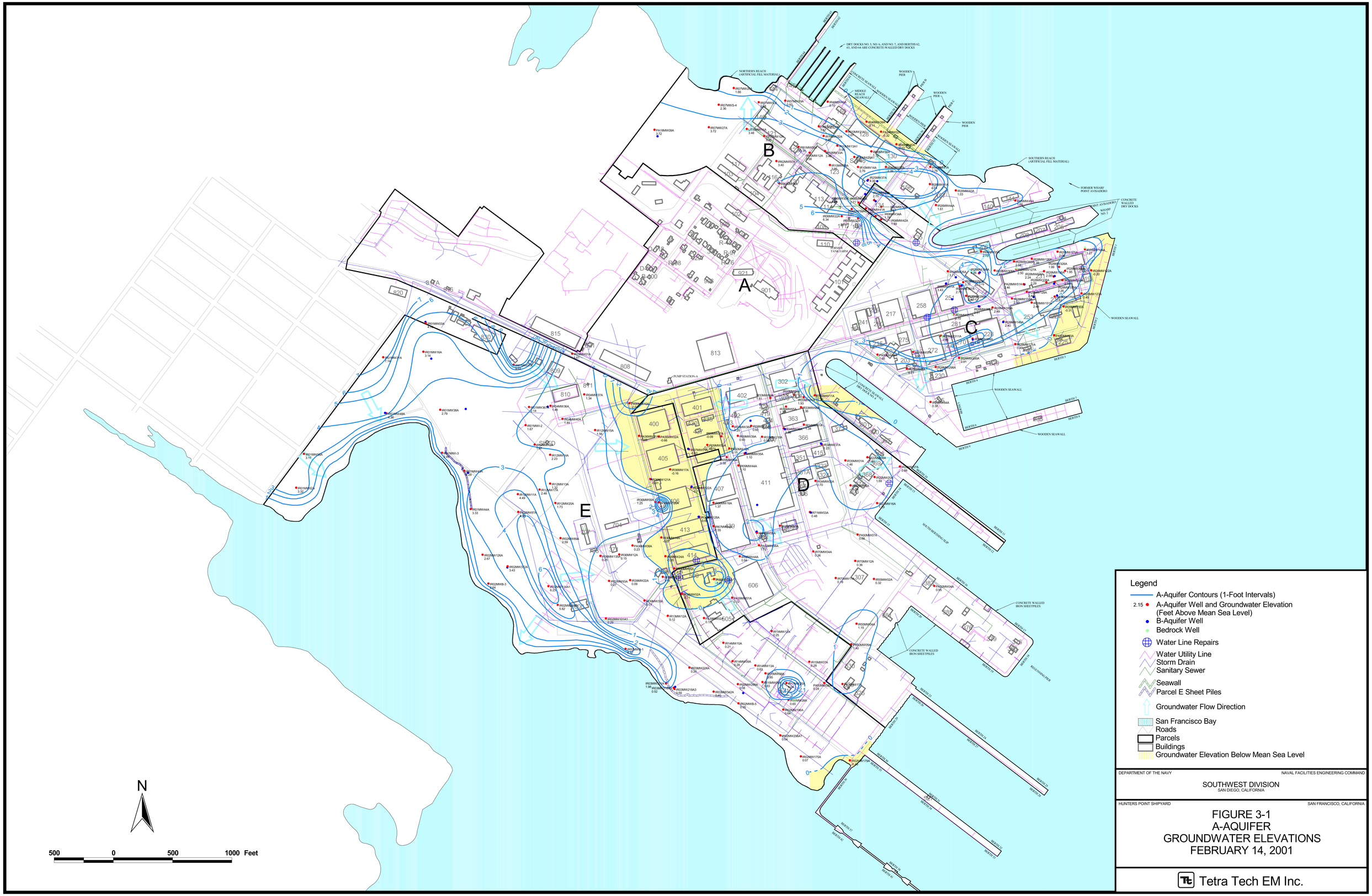
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 2-1
SITE WIDE MONITORING WELL AND PIEZOMETER LOCATIONS

Tetra Tech EM Inc.


A
B
C
D
E
N
500 0 500 1000 Feet
Legend
A-Aquifer Contours (1-Foot Intervals)
2.15 A-Aquifer Well and Groundwater Elevation (Feet Above Mean Sea Level)
B-Aquifer Well
Bedrock Well
Water Line Repairs
Water Utility Line
Storm Drain
Sanitary Sewer
Seawall
Parcel E Sheet Piles
Groundwater Flow Direction
San Francisco Bay
Roads
Parcels
Buildings
Groundwater Elevation Below Mean Sea Level
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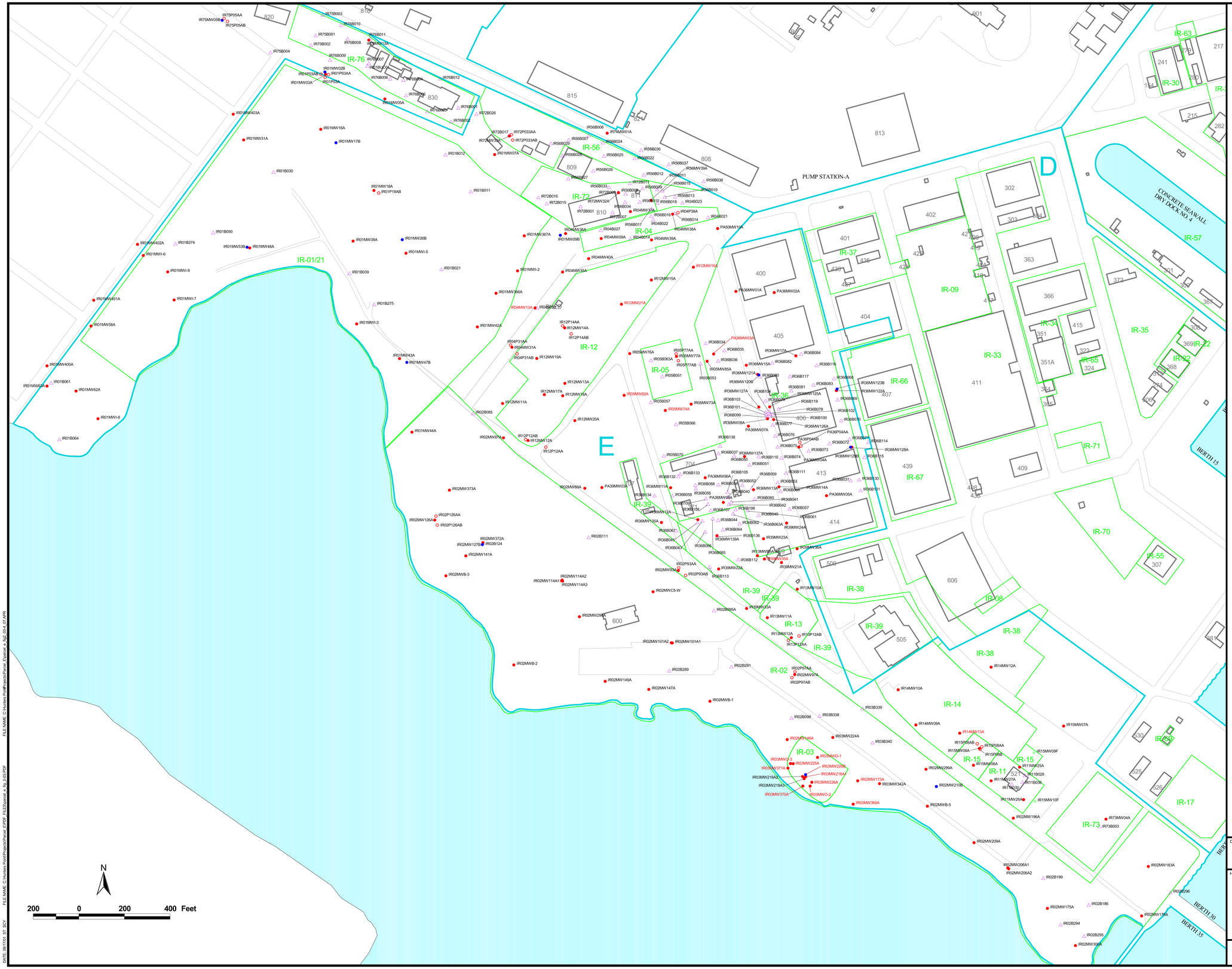
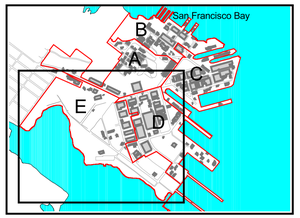
SAN FRANCISCO, CALIFORNIA
FIGURE 3-1
A-AQUIFER
GROUNDWATER ELEVATIONS
FEBRUARY 14, 2001
Tetra Tech EM Inc.





Location Map

Legend

- Boring-Grab Groundwater Sample
- A-Aquifer Monitoring Well
- B-Aquifer Monitoring Well
- Bedrock Monitoring Well
- Piezometer
- Parcel Boundary
- IR Site Boundary
- San Francisco Bay
- Road
- 134 Building/Building Number
- IR03MW218A2 Groundwater Sample Location Label
- IR03MW225A Label For Well Which Contains Product

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-1
PARCEL E GROUNDWATER SAMPLING LOCATIONS

Tetra Tech EM Inc.

FILE NAME: C:\Hunters Point\Projects\Parcel_E\parcel_e_fig2_014_07.APR

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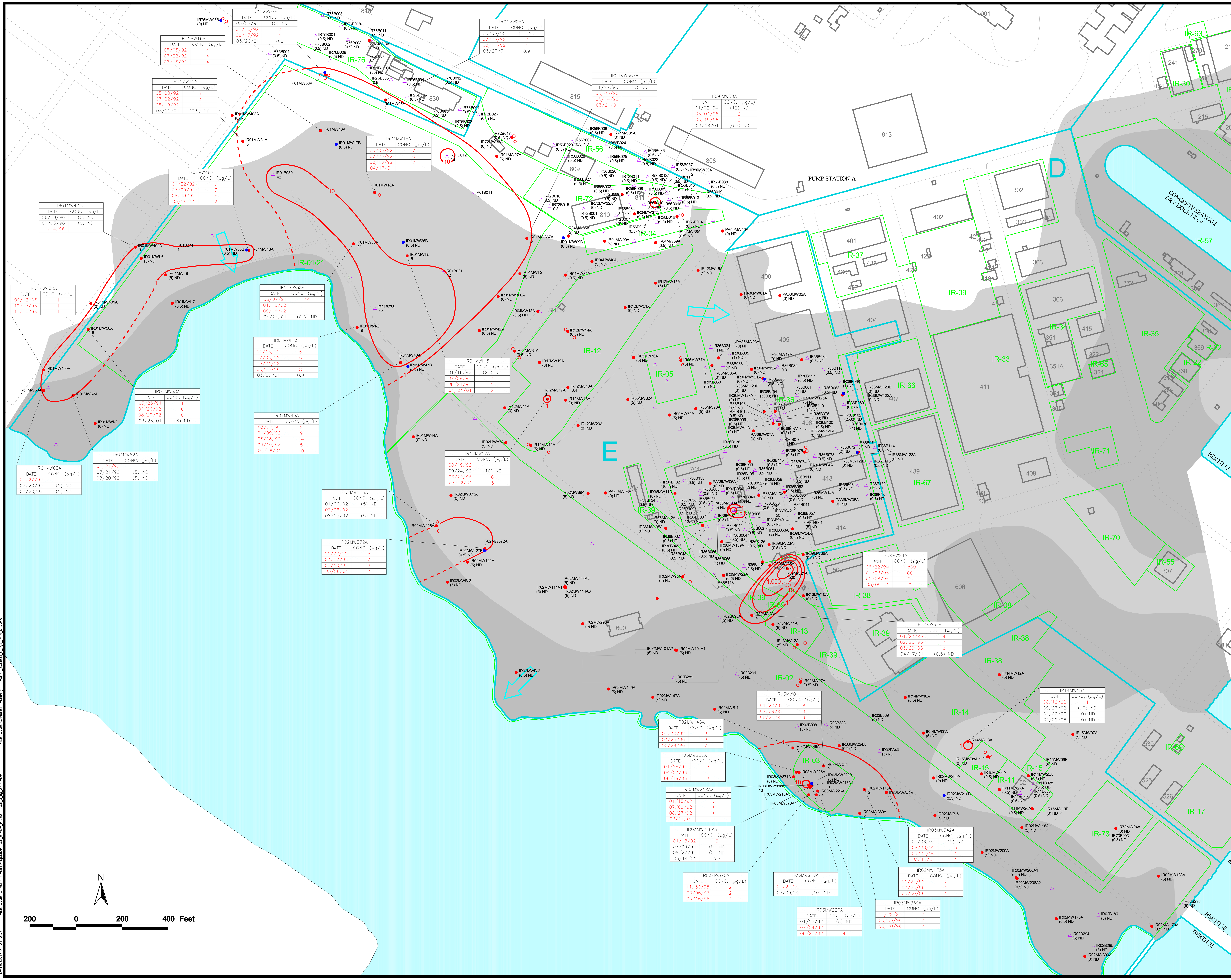
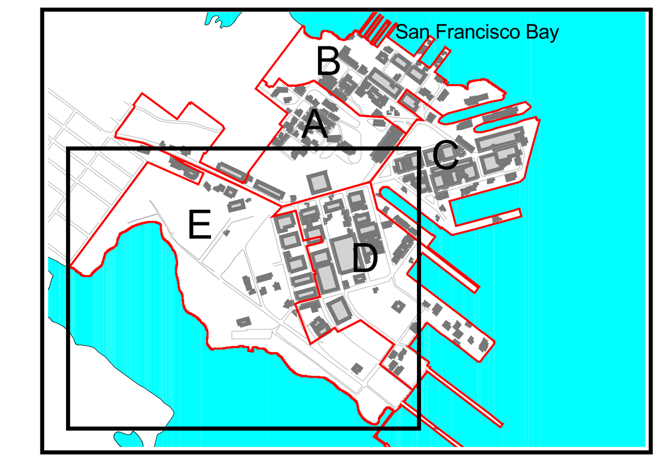
DATE: 08/17/01 ST SCY





Location Map

Legend

ND — Not detected at the associated detection limit

IR09MW01A 451 — Sampling Location Identification with Benzene Concentration in micrograms per Liter (µg/L)

Boring-Grab Groundwater Sample

A-Aquifer Monitoring Well

IR70MW12A	
DATE	CONC. (µg/L)
10/20/95	1.8
01/12/96	(0.2) ND
02/14/96	9.2

Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.

B-Aquifer Monitoring Well

Bedrock Monitoring Well

Piezometer

Note: Locations without associated data are those where no data for benzene exist.

Benzene Isoconcentration Contour Line (µg/L)

Inferred Benzene Isoconcentration Contour Line (µg/L)

Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)

Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L

General Groundwater Flow Direction

Parcel Boundary

IR Site Boundary

San Francisco Bay

Road

134 Building/Building Number

Federal MCL	5	µg/L
California MCL	1	µg/L
Aquatic Criterion	510	µg/L

MCL — Maximum Contaminant Level

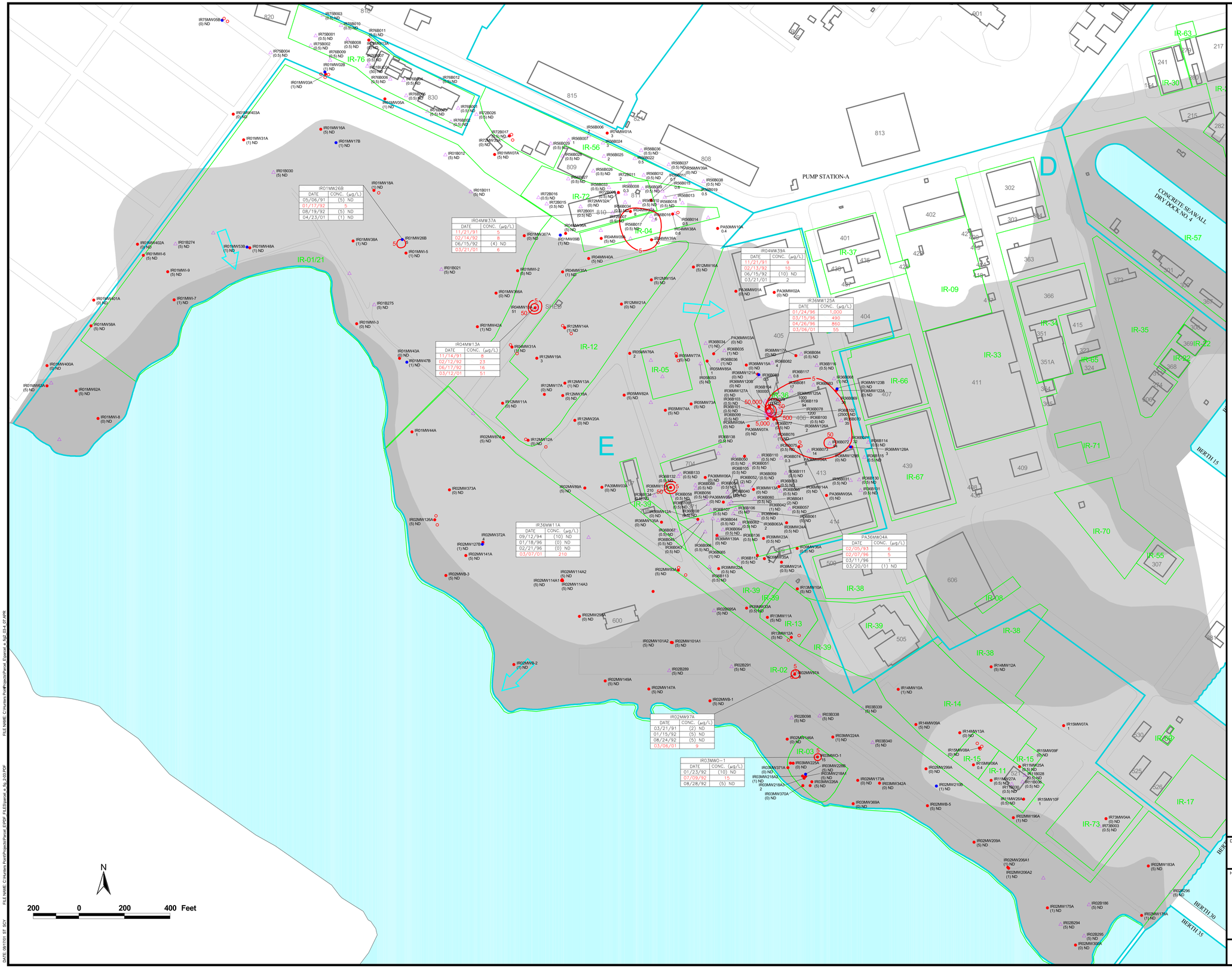
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-2
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF BENZENE IN GROUNDWATER

Tetra Tech EM Inc.



IR01MW26B	
DATE	CONC. (µg/L)
05/06/91	(5) ND
01/17/92	5
08/19/92	(5) ND
04/23/01	(1) ND

IR04MW37A	
DATE	CONC. (µg/L)
11/21/91	5
02/14/92	8
06/15/92	(4) ND
03/21/01	6

IR04MW39A	
DATE	CONC. (µg/L)
11/21/91	9
02/13/92	10
06/15/92	(10) ND
03/21/01	2

IR36MW125A	
DATE	CONC. (µg/L)
01/24/96	1,000
03/15/96	490
04/26/96	860
03/06/01	55

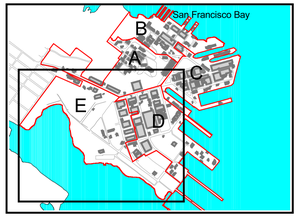
IR04MW13A	
DATE	CONC. (µg/L)
11/14/91	8
02/12/92	23
06/17/92	16
03/12/01	51

IR36MW11A	
DATE	CONC. (µg/L)
09/12/94	(10) ND
01/18/96	(0) ND
02/21/96	(0) ND
03/07/01	210

PA36MW04A	
DATE	CONC. (µg/L)
02/05/93	6
02/07/96	5
03/11/96	1
03/20/01	(1) ND

IR02MW97A	
DATE	CONC. (µg/L)
03/21/91	(2) ND
01/15/92	(5) ND
08/24/92	(5) ND
03/06/01	9

IR03MW0-1	
DATE	CONC. (µg/L)
01/23/92	(10) ND
07/09/92	15
08/28/92	(5) ND



Location Map

Legend

ND — Not detected at the associated detection limit

IR09MW01A 451 — Sampling Location Identification with Trichloroethene Concentration in micrograms per Liter (µg/L)

Boring-Grab Groundwater Sample

A-Aquifer Monitoring Well

IR70MW12A	
DATE	CONC. (µg/L)
10/20/95	1.8
01/12/96	(0.2) ND
02/14/96	9.2

Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.

B-Aquifer Monitoring Well

Bedrock Monitoring Well

Piezometer

Note: Locations without associated data are those where no data for trichloroethene exist.

Trichloroethene Isoconcentration Contour Line (µg/L)

Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)

Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L

General Groundwater Flow Direction

Parcel Boundary

IR Site Boundary

San Francisco Bay

Road

134 — Building/Building Number

Federal MCL	5	µg/L
California MCL	5	µg/L
Aquatic Criterion	200	µg/L

MCL — Maximum Contaminant Level

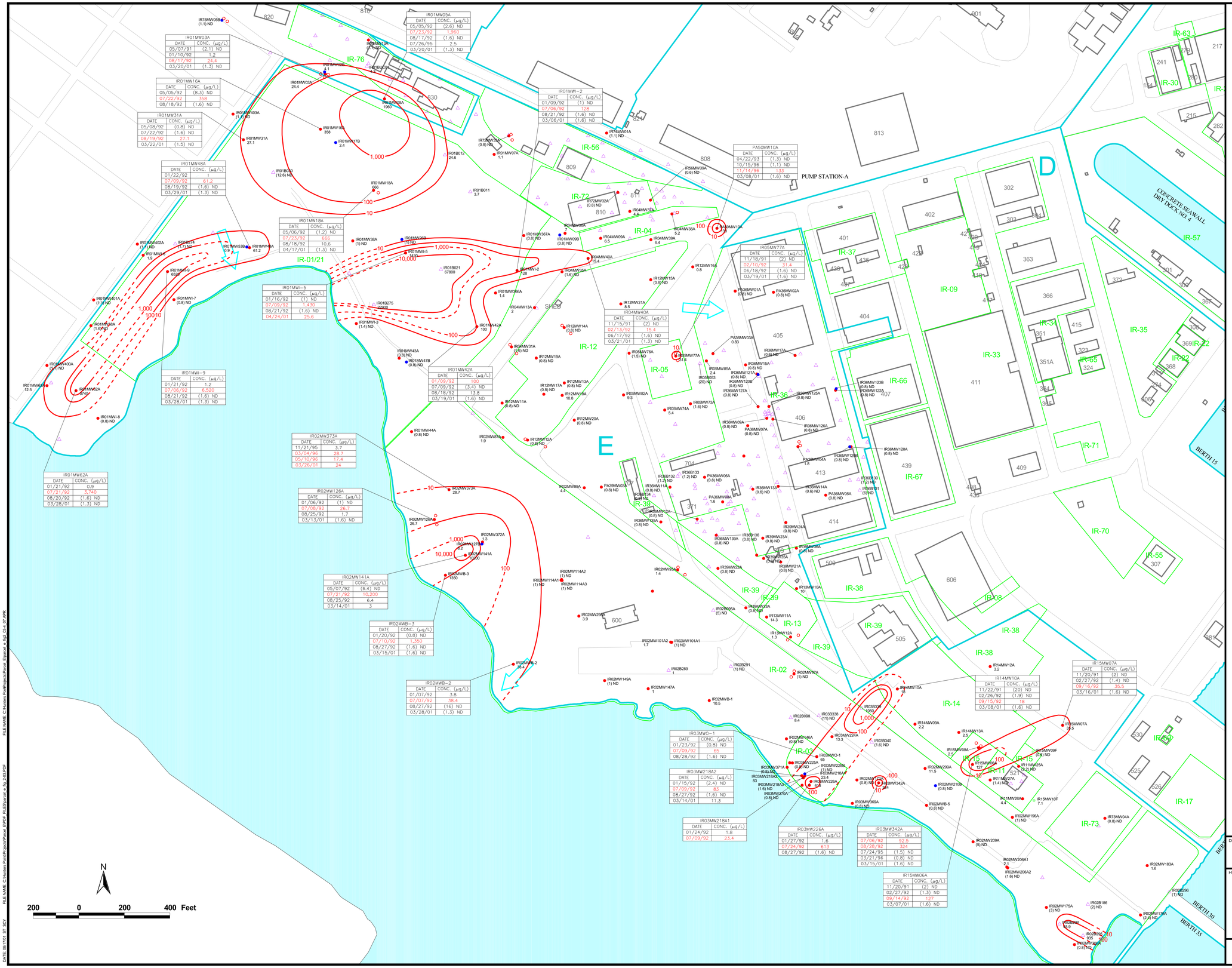
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

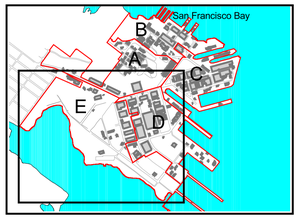
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-3
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
TRICHLOROETHENE IN GROUNDWATER

Tetra Tech EM Inc.





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Lead Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for lead exist.

∿	Lead Isoconcentration Contour Line (µg/L)
∿	Inferred Lead Isoconcentration Contour Line (µg/L)
⇧	General Groundwater Flow Direction
▭	Parcel Boundary
▭	IR Site Boundary
▭	San Francisco Bay
▭	Road
134	Building/Building Number

Federal MCL	15	µg/L
California MCL	15	µg/L
Aquatic Criterion	8.1	µg/L
HGAL	14.44	µg/L

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

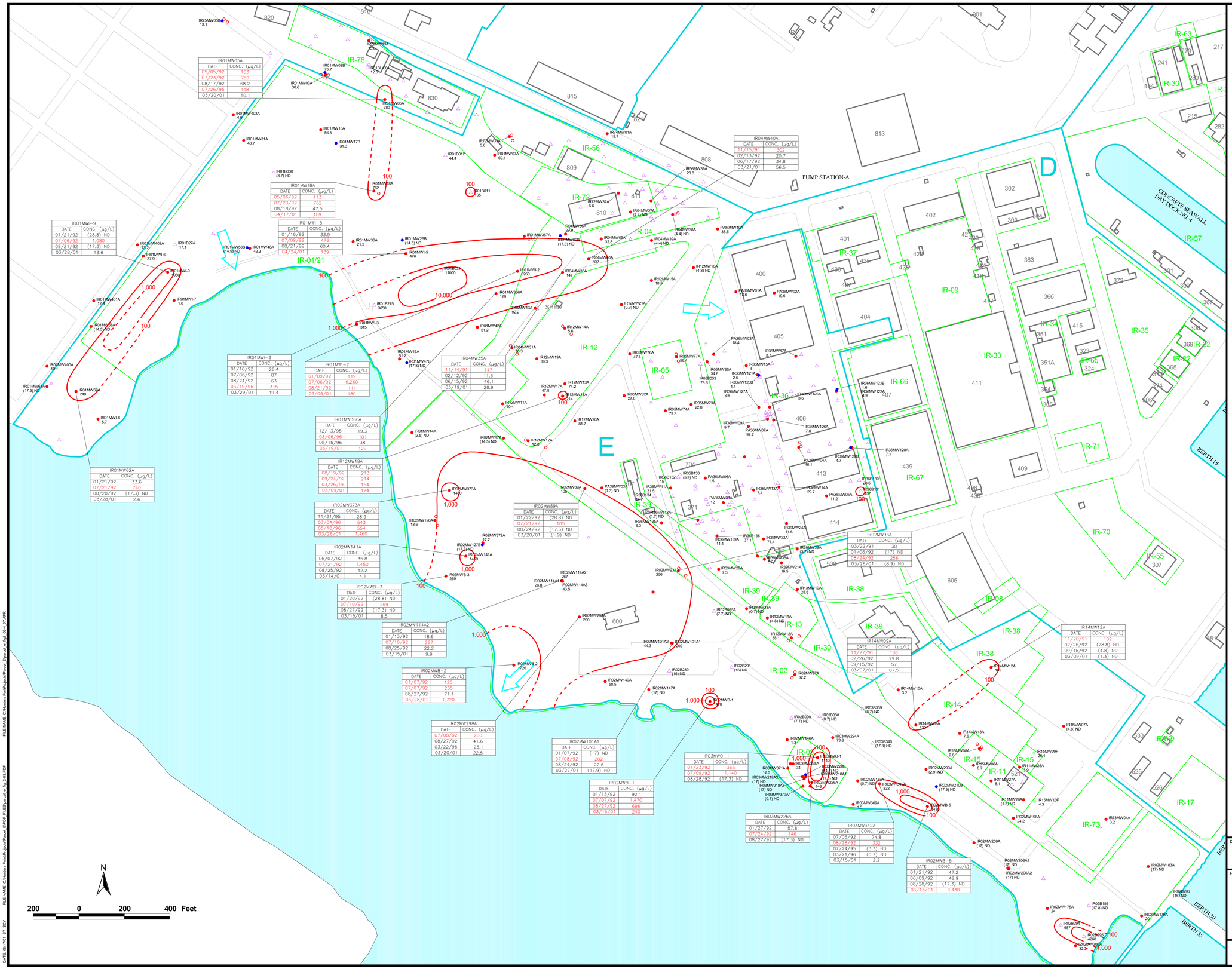
FIGURE 4-4
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF LEAD IN GROUNDWATER

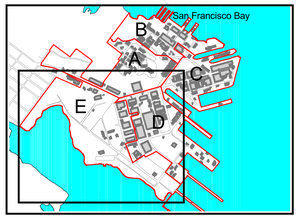
Tetra Tech EM Inc.

FILE NAME: C:\Hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_3-03.PDF

FILE NAME: C:\Hunters Point\Projects\Parcel_E\parcel_e_fig2_03-4_07.APR

DATE: 08/17/01 ST SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Nickel Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for nickel exist.

∿	Nickel Isoconcentration Contour Line (µg/L)
∿	Inferred Nickel Isoconcentration Contour Line (µg/L)
⇧	General Groundwater Flow Direction
▭	Parcel Boundary
▭	IR Site Boundary
▭	San Francisco Bay
▭	Road
134	Building/Building Number

Federal MCL	-----	
California MCL	100	µg/L
Aquatic Criterion	8.2	µg/L
HGAL	96.48	µg/L

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

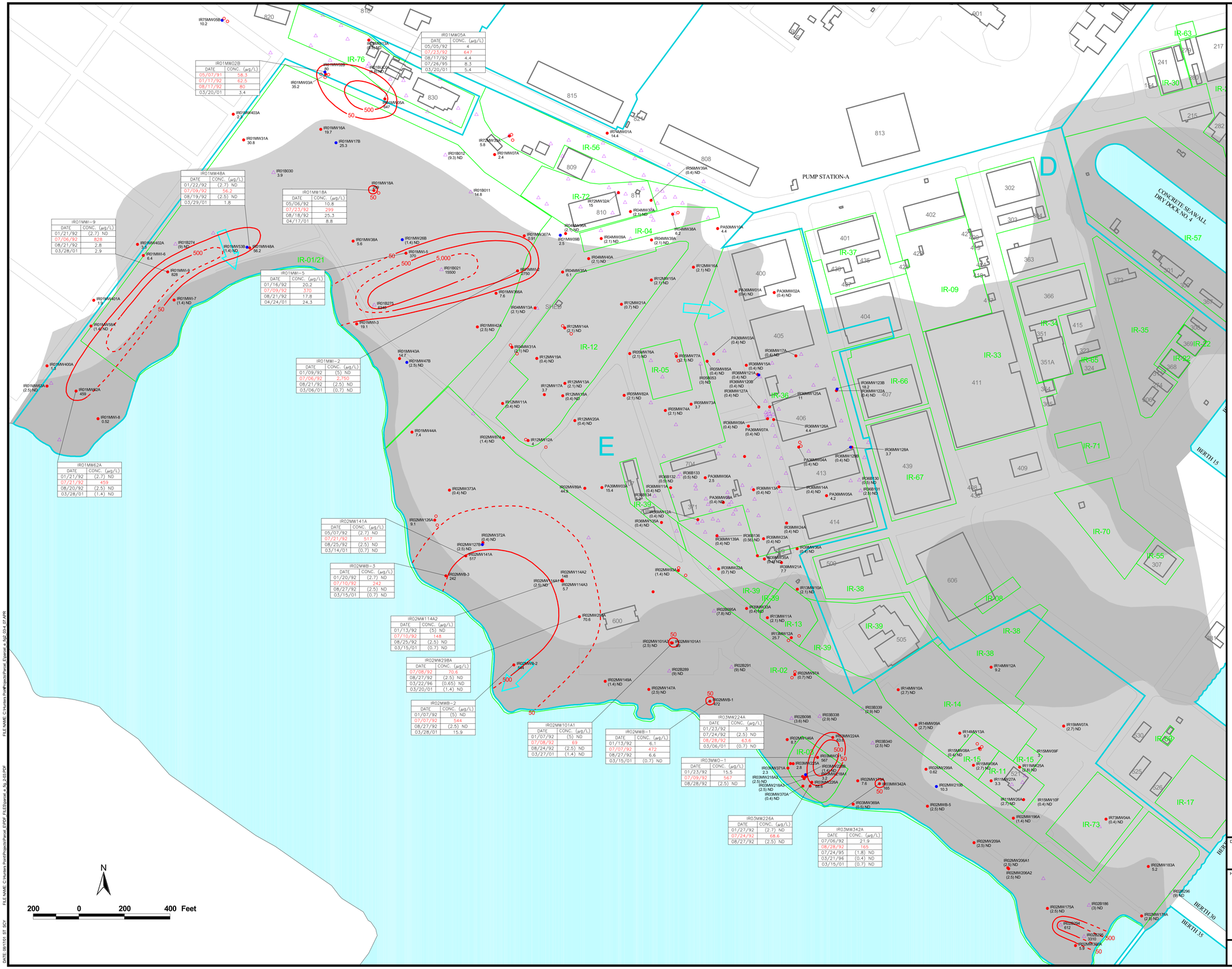
FIGURE 4-5
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF NICKEL IN GROUNDWATER

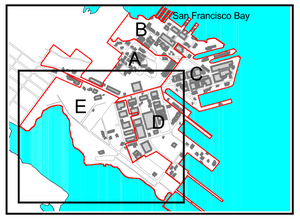
Tetra Tech EM Inc.

FILE NAME: C:\Hunters Point\Projects\Parcel_E\FIGS\parcel_e_fig_2-03.DWG

FILE NAME: C:\Hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2-03.PDF

DATE: 09/17/01 BY: SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Chromium Concentration in micrograms per Liter (μg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
IR70MW12A: DATE / CONC. (µg/L); 10/20/95 / 1.8; 07/12/96 / (0.2) ND; 02/14/96 / 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

Note: Locations without associated data are those where no data for chromium exist.

	Chromium Isoconcentration Contour Line (μg/L)
	Inferred Chromium Isoconcentration Contour Line (μg/L)
	Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)
	Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L
	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	100	μg/L
California MCL	50	μg/L
Aquatic Criterion	1,030	μg/L
HGAL	15.66	μg/L

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

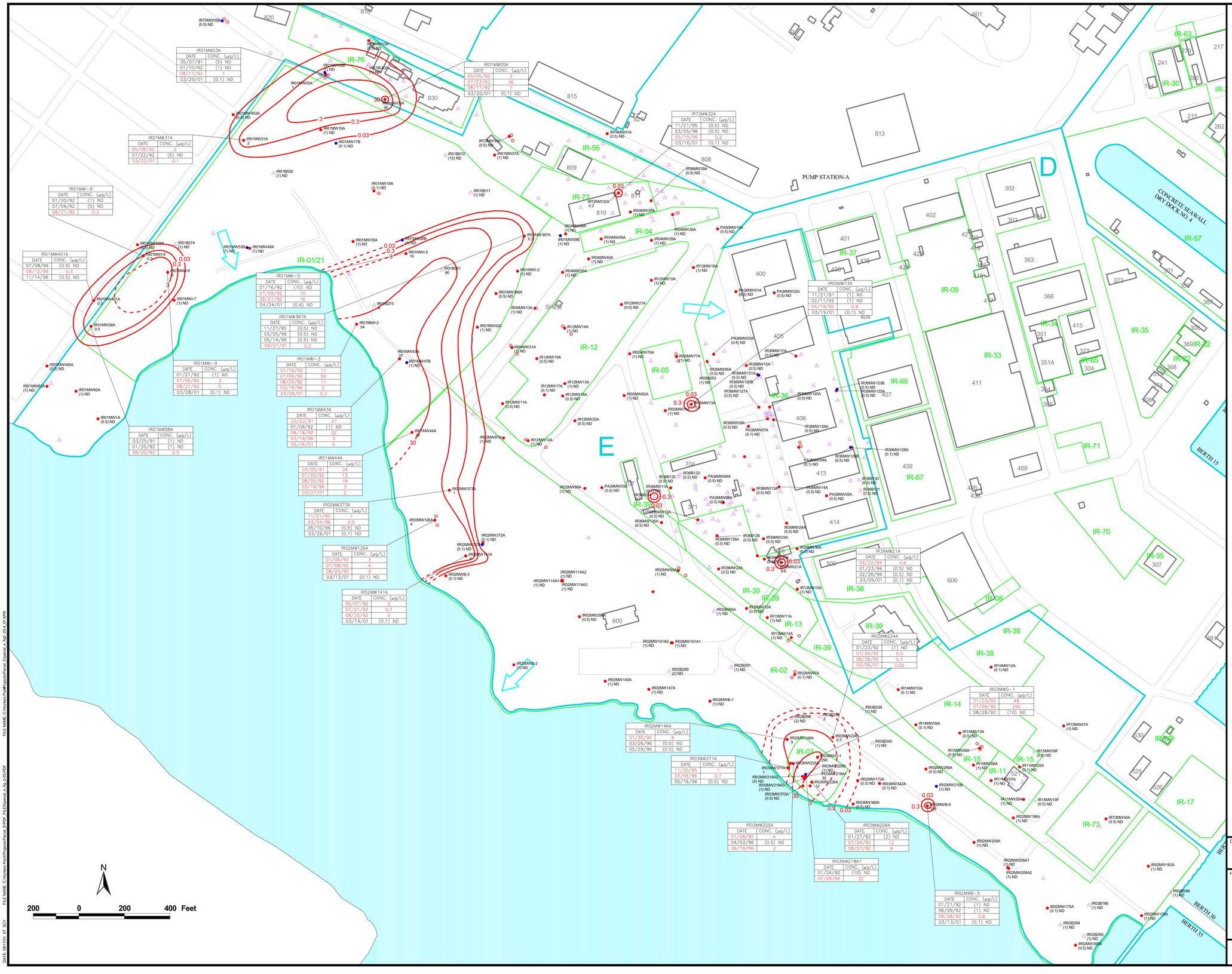
FIGURE 4-6
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF CHROMIUM IN GROUNDWATER

Tetra Tech EM Inc.

FILE NAME: C:\Hunters Pt\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2-03.PDF

FILE NAME: C:\Hunters Pt\Projects\Parcel_E\parcel_e_fig_4-06.pdf

DATE: 09/17/01 BY: SCY



IR01MW03A	
DATE	CONC. (µg/L)
05/07/91	(5) ND
01/10/92	(1) ND
08/17/92	1
03/20/01	(0.1) ND

IR01MW05A	
DATE	CONC. (µg/L)
05/05/92	3
07/23/92	36
08/17/92	7
03/20/01	(0.1) ND

IR72MW32A	
DATE	CONC. (µg/L)
11/21/95	(0.5) ND
03/05/96	(0.5) ND
05/15/96	0.2
03/16/01	(0.1) ND

IR01MW31A	
DATE	CONC. (µg/L)
05/08/92	2
07/22/92	(5) ND
03/22/01	0.1

IR01MWI-6	
DATE	CONC. (µg/L)
01/20/92	(1) ND
07/09/92	(5) ND
08/21/92	0.3

IR01MW401A	
DATE	CONC. (µg/L)
07/08/96	(0.5) ND
09/12/96	0.1
11/14/96	(0.5) ND

IR01MWI-5	
DATE	CONC. (µg/L)
01/16/92	(10) ND
07/09/92	10
08/21/92	16
04/24/01	(0.6) ND

IR01MW367A	
DATE	CONC. (µg/L)
11/27/95	(0.5) ND
03/05/96	(0.5) ND
05/14/96	(0.5) ND
03/21/01	0.3

IR01MWI-9	
DATE	CONC. (µg/L)
01/21/92	(1) ND
07/06/92	3
08/21/92	5
03/28/01	(0.1) ND

IR01MWI-3	
DATE	CONC. (µg/L)
01/16/92	11
07/06/92	54
08/24/92	11
03/19/96	2
03/29/01	0.3

IR01MW43A	
DATE	CONC. (µg/L)
03/22/91	37
01/09/92	(1) ND
08/18/92	32
03/19/96	3
03/16/01	5

IR01MW58A	
DATE	CONC. (µg/L)
03/25/91	(1) ND
01/20/92	(1) ND
08/20/92	0.5

IR01MW44A	
DATE	CONC. (µg/L)
03/25/91	34
01/20/92	13
08/20/92	19
03/19/96	3
03/27/01	2

IR02MW373A	
DATE	CONC. (µg/L)
11/21/95	1
03/04/96	0.5
05/10/96	(0.5) ND
03/26/01	(0.1) ND

IR02MW126A	
DATE	CONC. (µg/L)
01/06/92	3
07/08/92	4
08/25/92	3
03/13/01	(0.1) ND

IR02MW141A	
DATE	CONC. (µg/L)
05/07/92	2
07/21/92	0.7
08/25/92	5
03/14/01	(0.1) ND

IR39MW21A	
DATE	CONC. (µg/L)
06/22/94	0.6
01/23/96	(0.5) ND
02/26/96	(0.5) ND
03/09/01	(0.1) ND

IR03MW224A	
DATE	CONC. (µg/L)
01/23/92	(1) ND
07/24/92	0.5
08/28/92	0.7
03/06/01	0.06

IR05MW73A	
DATE	CONC. (µg/L)
11/21/91	(1) ND
02/11/92	(1) ND
06/19/92	0.8
03/19/01	(0.1) ND

IR03MWO-1	
DATE	CONC. (µg/L)
01/23/92	48
07/09/92	290
08/28/92	(10) ND

IR02MW146A	
DATE	CONC. (µg/L)
01/30/92	9
03/26/96	(0.5) ND
05/29/96	(0.5) ND

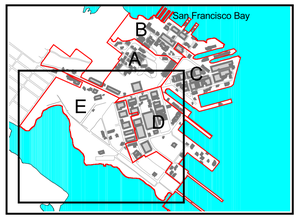
IR03MW371A	
DATE	CONC. (µg/L)
11/30/95	1
03/06/96	0.7
05/16/96	(0.5) ND

IR03MW225A	
DATE	CONC. (µg/L)
01/28/92	4
04/03/96	(0.5) ND
06/19/96	2

IR03MW226A	
DATE	CONC. (µg/L)
01/27/92	(2) ND
07/24/92	12
08/27/92	9

IR03MW218A1	
DATE	CONC. (µg/L)
01/24/92	(10) ND
07/09/92	32

IR02MWB-5	
DATE	CONC. (µg/L)
01/21/92	(1) ND
06/09/92	(1) ND
08/28/92	0.8
03/13/01	(0.1) ND



Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Aroclor-1260 Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer
Note:	Locations without associated data are those where no data for aroclor-1260 exist.
∿	Aroclor-1260 Isoconcentration Contour Line (µg/L)
∿	Inferred Aroclor-1260 Isoconcentration Contour Line (µg/L)
⇧	General Groundwater Flow Direction
▭	Parcel Boundary
▭	IR Site Boundary
▭	San Francisco Bay
▭	Road
134	Building/Building Number

Federal MCL	0.5	µg/L
California MCL	0.5	µg/L
Aquatic Criterion	0.03	µg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

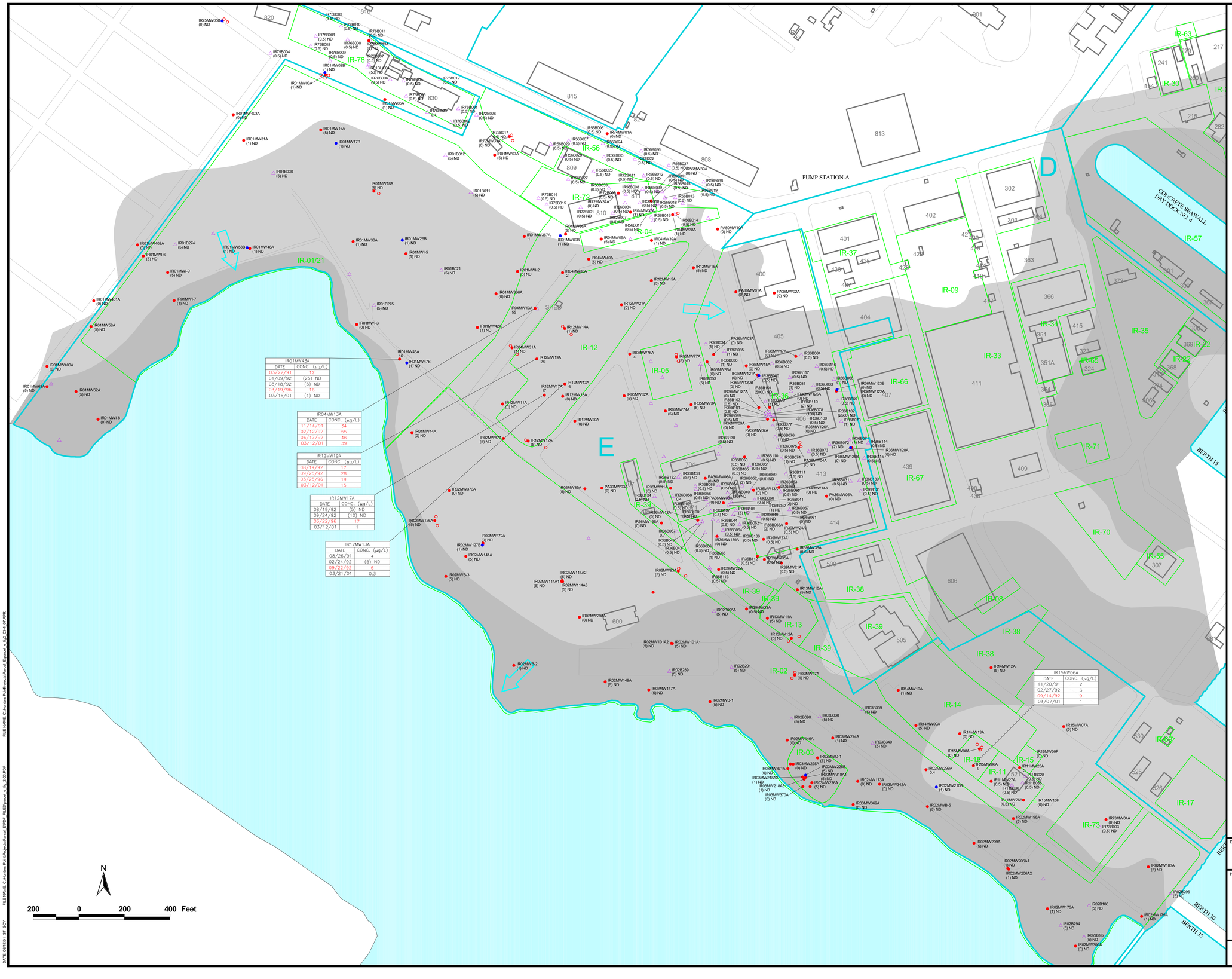
FIGURE 4-7
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF AROCLOR-1260 IN GROUNDWATER

Tetra Tech EM Inc.

FILE NAME: C:\Hunters Point\Projects\Parcel_E\parcel_e_fig2_03.4_07.APR

FILE NAME: C:\Hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2.03.PDF

DATE: 08/17/01 ST SCY



IR01MW43A	
DATE	CONC. (µg/L)
03/22/91	12
01/09/92	(25) ND
08/18/92	(5) ND
03/19/96	16
03/16/01	(1) ND

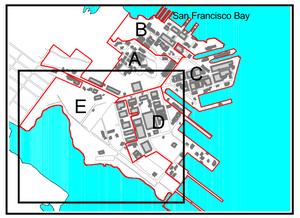
IR04MW13A	
DATE	CONC. (µg/L)
11/14/91	34
02/12/92	55
06/17/92	46
03/12/01	39

IR12MW19A	
DATE	CONC. (µg/L)
08/19/92	17
09/25/92	28
03/25/96	19
03/12/01	15

IR12MW17A	
DATE	CONC. (µg/L)
08/19/92	(5) ND
09/24/92	(10) ND
03/22/96	17
03/12/01	1

IR12MW13A	
DATE	CONC. (µg/L)
08/26/91	4
02/24/92	(5) ND
09/22/92	6
03/21/01	0.3

IR15MW06A	
DATE	CONC. (µg/L)
11/20/91	2
02/27/92	3
09/14/92	9
03/07/01	1



Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with 1,1-Dichloroethane Concentration in micrograms per Liter (µg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

Note: Locations without associated data are those where no data for 1,1-dichloroethane exist.

IR70MW12A	
DATE	CONC. (µg/L)
10/20/95	1.8
01/12/96	(0.2) ND
02/14/96	9.2

	Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)
	Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L
	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	-----	
California MCL	5	µg/L
Aquatic Criterion	-----	

MCL Maximum Contaminant Level

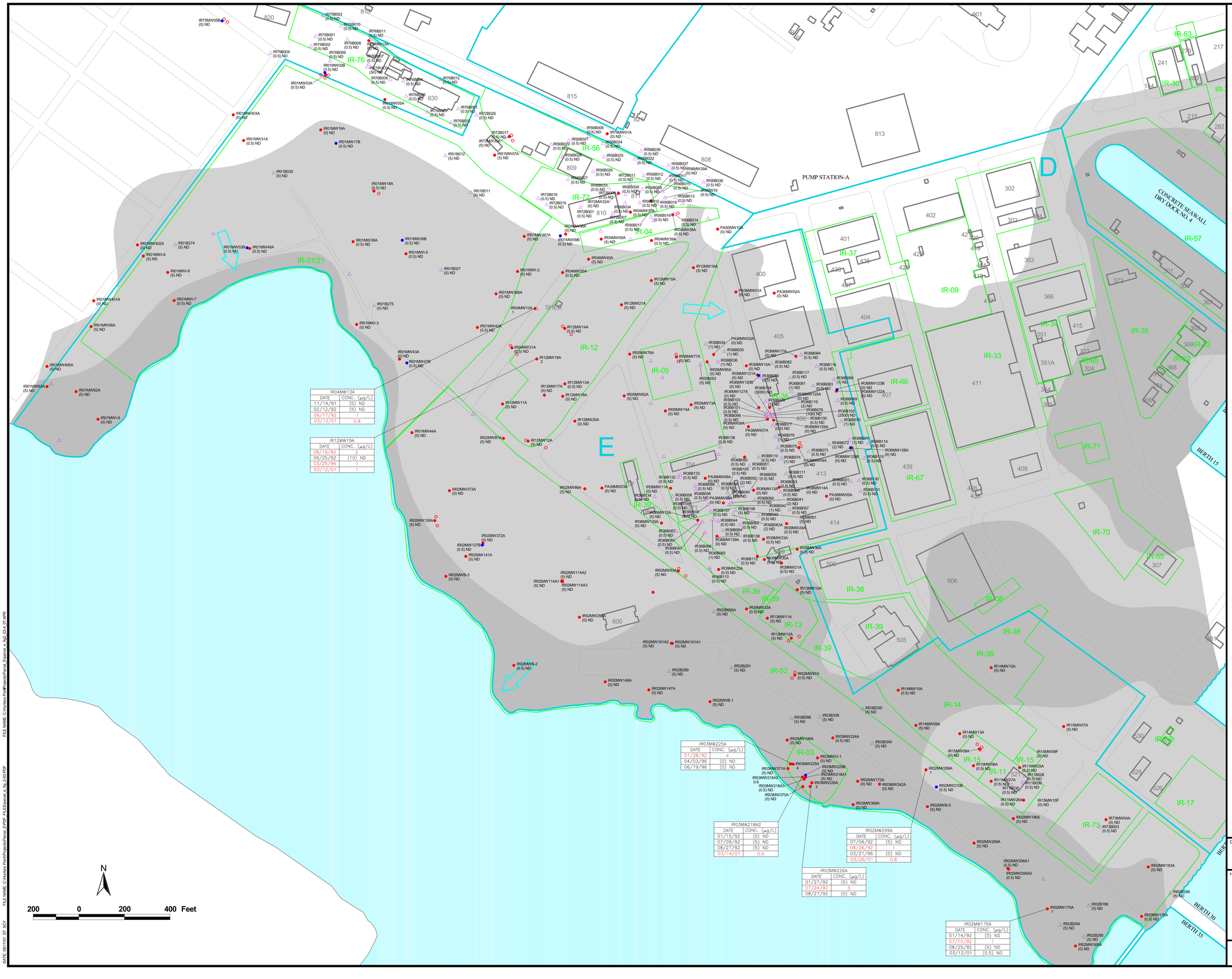
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-8
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
1,1-DICHLOROETHANE IN GROUNDWATER

Tetra Tech EM Inc.



IR04MW13A	
DATE	CONC. (µg/L)
11/14/91	(5) ND
02/12/92	(5) ND
06/17/92	1
03/12/01	0.8

IR12MW19A	
DATE	CONC. (µg/L)
08/19/92	2
09/25/92	(10) ND
03/25/96	1
03/12/01	1

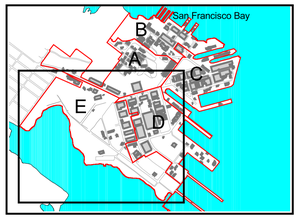
IR03MW225A	
DATE	CONC. (µg/L)
01/28/92	4
04/03/96	(0) ND
06/19/96	(0) ND

IR03MW218A2	
DATE	CONC. (µg/L)
01/15/92	(5) ND
07/09/92	(5) ND
08/27/92	(5) ND
03/14/01	0.6

IR03MW226A	
DATE	CONC. (µg/L)
01/27/92	(5) ND
07/24/92	3
08/27/92	(5) ND

IR02MW299A	
DATE	CONC. (µg/L)
07/06/92	(5) ND
08/26/92	1
03/21/96	(0) ND
03/26/01	0.8

IR02MW175A	
DATE	CONC. (µg/L)
01/14/92	(5) ND
07/10/92	1
08/25/92	(5) ND
03/12/01	(0.5) ND



Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with 1,2-Dichloroethane Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A DATE CONC. (µg/L) 10/20/95 1.8 01/12/96 (0.2) ND 02/14/96 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for 1,2-dichloroethane exist.

	Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)
	Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L
⇧	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	5	µg/L
California MCL	0.5	µg/L
Aquatic Criterion	11,300	µg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

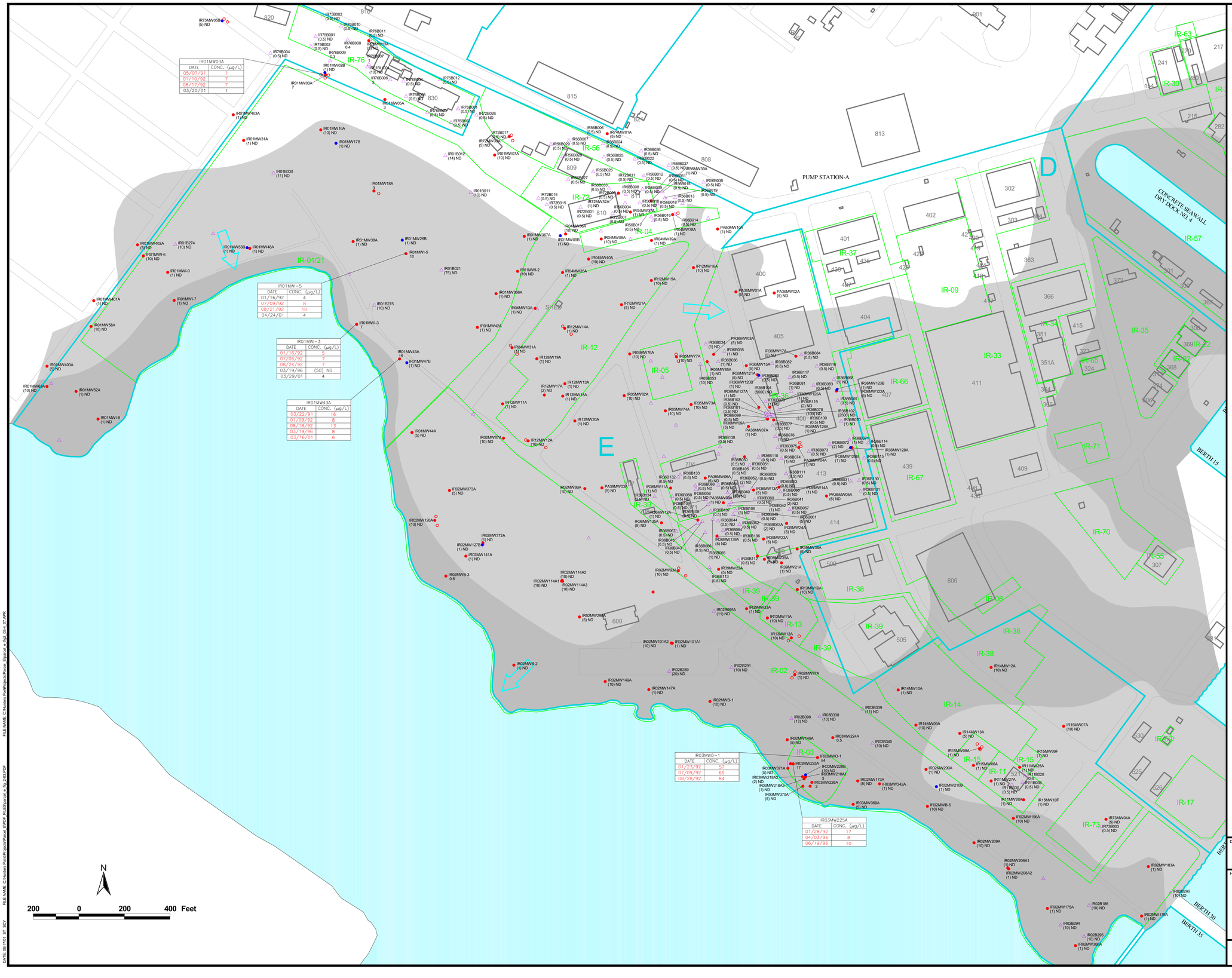
FIGURE 4-9
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF 1,2-DICHLOROETHANE IN GROUNDWATER

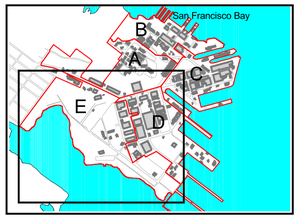
Tetra Tech EM Inc.

FILE NAME: C:\hunters Point\Projects\Parcel_E\parcel_e_fig_0-01_07.APR

FILE NAME: C:\hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2-03.PDF

DATE: 09/17/01 ST SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with 1,4-Dichlorobenzene Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A: 10/20/95 1.8; 01/12/96 (0.2) ND; 02/14/96 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for 1,4-dichlorobenzene exist.

	Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)
	Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L
⇧	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	75	µg/L
California MCL	5	µg/L
Aquatic Criterion	129	µg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-10
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF 1,4-DICHLOROBENZENE IN GROUNDWATER

Tetra Tech EM Inc.

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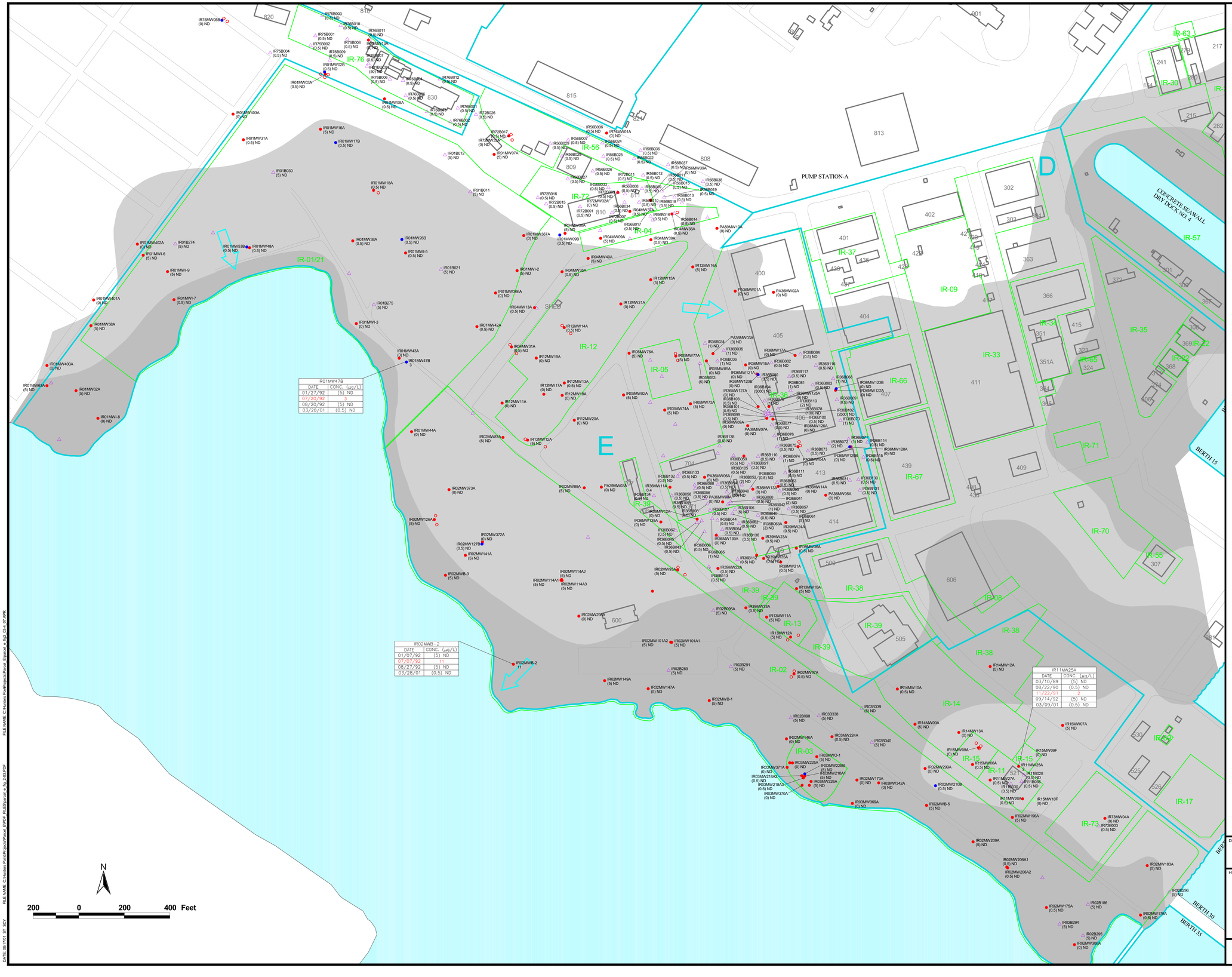
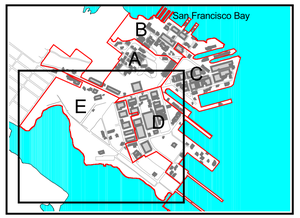
DATE: 09/17/01 ST SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Carbon Tetrachloride Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A DATE CONC. (µg/L) 10/20/95 1.8 01/12/96 (0.2) ND 02/14/96 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for carbon tetrachloride exist.

	Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)
	Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L
⇧	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	5	µg/L
California MCL	0.5	µg/L
Aquatic Criterion	6,400	µg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

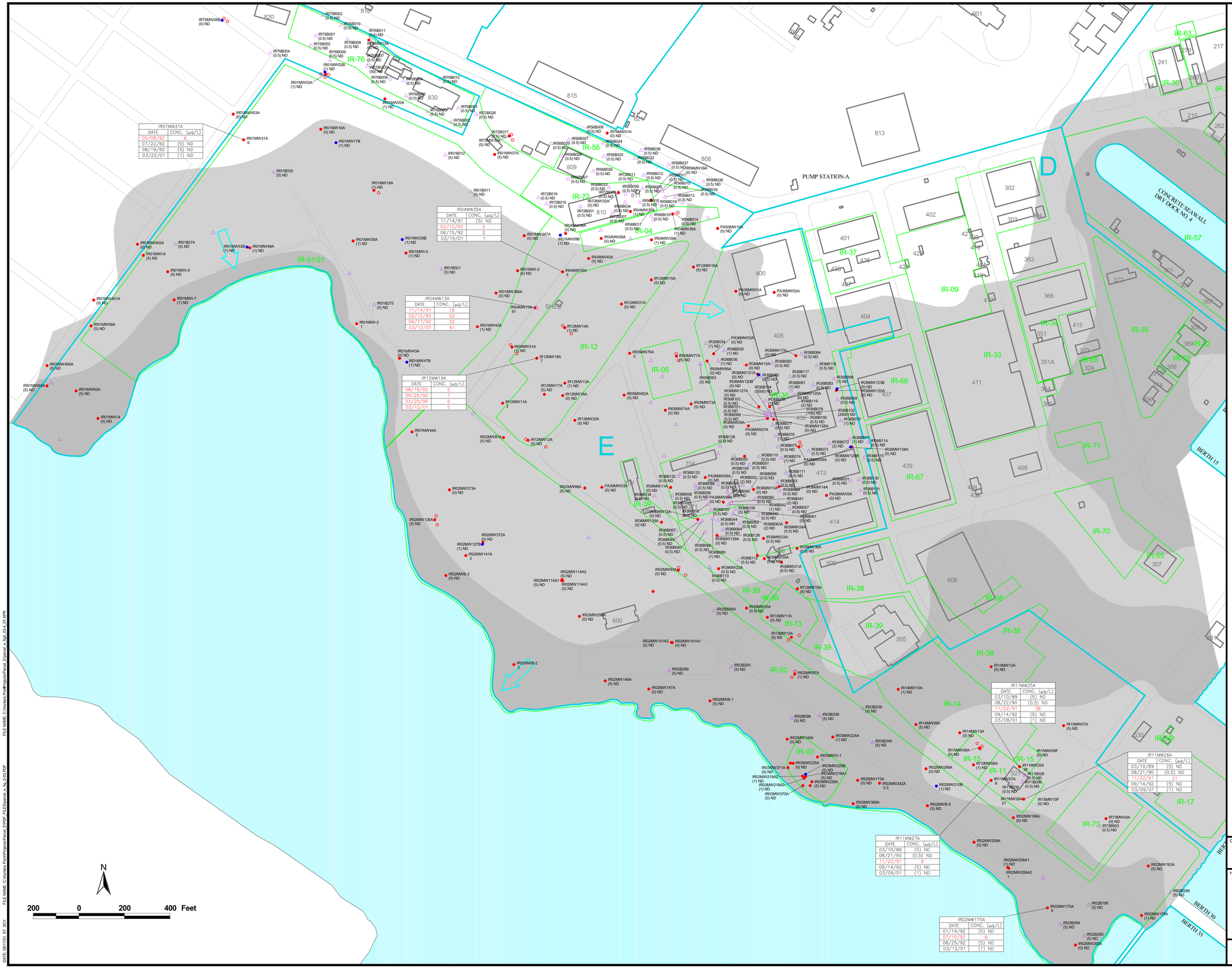
FIGURE 4-11
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
CARBON TETRACHLORIDE IN GROUNDWATER

Tetra Tech EM Inc.

FILE NAME: C:\hunters Point\Projects\Parcel_E\pdf_files\parcel_e_fig_2-03.PDF

FILE NAME: C:\hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_4-01_07APR

DATE: 09/17/01 ST SCY



IR01MW31A	
DATE	CONC. (µg/L)
05/08/92	6
07/22/92	(5) ND
08/19/92	(5) ND
03/22/01	(1) ND

IR04MW35A	
DATE	CONC. (µg/L)
11/14/91	(5) ND
02/12/92	5
06/15/92	2
03/19/01	1

IR04MW13A	
DATE	CONC. (µg/L)
11/14/91	19
02/12/92	52
06/17/92	32
03/12/01	61

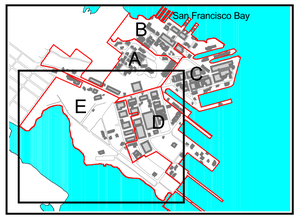
IR12MW19A	
DATE	CONC. (µg/L)
08/19/92	5
09/25/92	7
03/25/96	6
03/12/01	5

IR11MW25A	
DATE	CONC. (µg/L)
03/10/89	(5) ND
08/22/90	(0.5) ND
11/22/91	38
09/14/92	(5) ND
03/09/01	(1) ND

IR11MW26A	
DATE	CONC. (µg/L)
03/10/89	(5) ND
08/21/90	(0.5) ND
11/22/91	21
09/14/92	(5) ND
03/09/01	(1) ND

IR11MW27A	
DATE	CONC. (µg/L)
03/10/89	(5) ND
08/21/90	(0.5) ND
11/22/91	9
09/14/92	(5) ND
03/09/01	(1) ND

IR02MW175A	
DATE	CONC. (µg/L)
01/14/92	(5) ND
07/10/92	6
08/25/92	(5) ND
03/12/01	(1) ND



Location Map

Legend

ND Not detected at the associated detection limit

IR09MW01A 451 Sampling Location Identification with Tetrachloroethene Concentration in micrograms per Liter (µg/L)

Boring-Grab Groundwater Sample

A-Aquifer Monitoring Well

IR70M812A	
DATE	CONC. (µg/L)
10/20/95	1.8
01/12/96	(0.2) ND
02/14/96	9.2

Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.

B-Aquifer Monitoring Well

Bedrock Monitoring Well

Piezometer

Note: Locations without associated data are those where no data for tetrachloroethene exist.

Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)

Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L

General Groundwater Flow Direction

Parcel Boundary

IR Site Boundary

San Francisco Bay

Road

134 Building/Building Number

Federal MCL	5	µg/L
California MCL	5	µg/L
Aquatic Criterion	450	µg/L

MCL Maximum Contaminant Level

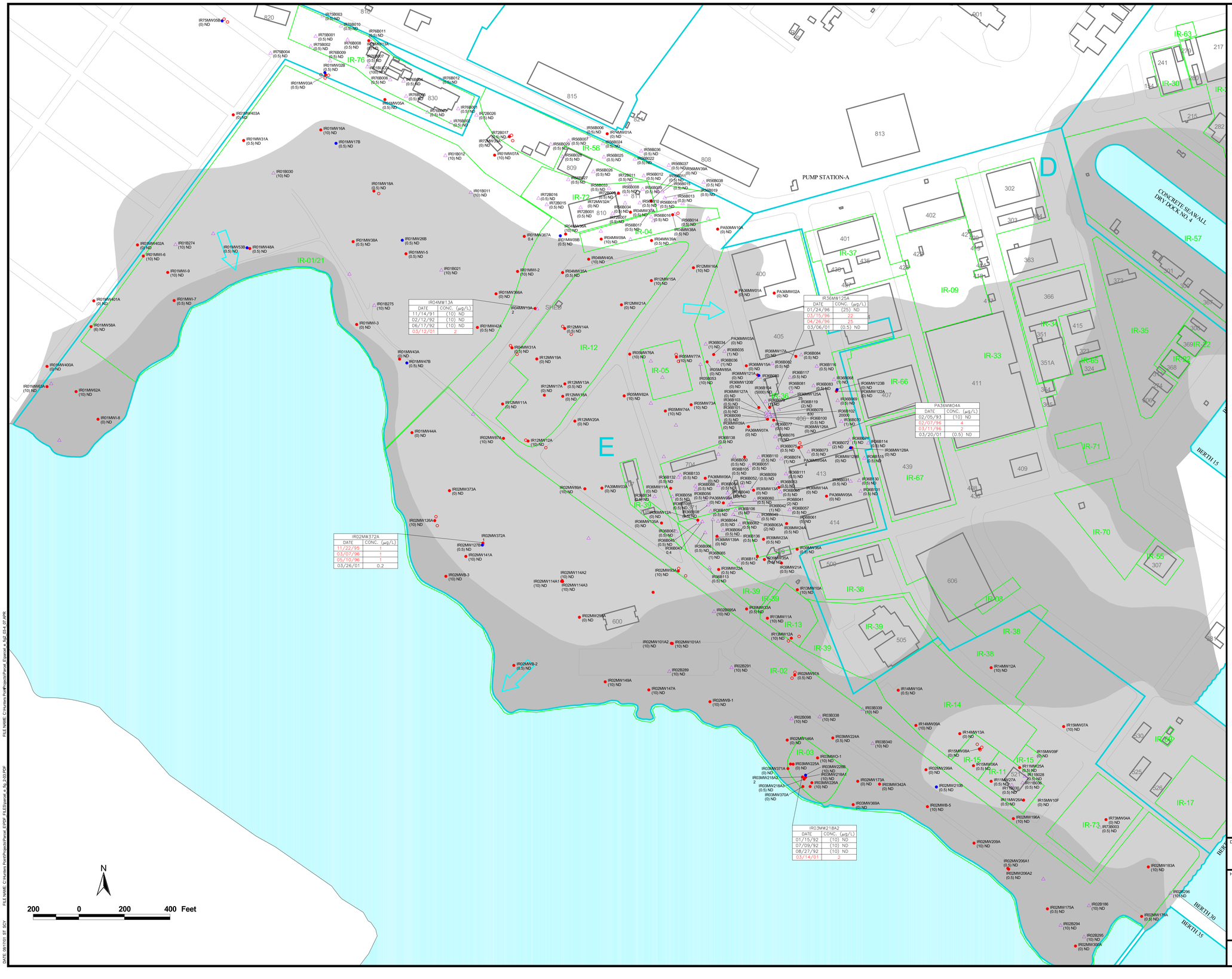
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-12
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
TETRACHLOROETHENE IN GROUNDWATER

Tetra Tech EM Inc.



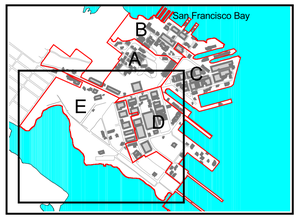
IR04MW13A	
DATE	CONC. (µg/L)
11/14/91	(10) ND
02/12/92	(10) ND
06/17/92	(10) ND
03/12/01	2

IR36MW125A	
DATE	CONC. (µg/L)
01/24/96	(25) ND
03/15/96	22
04/26/96	25
03/06/01	(0.5) ND

PA36MW04A	
DATE	CONC. (µg/L)
02/05/93	(10) ND
02/07/96	4
03/11/96	2
03/20/01	(0.5) ND

IR02MW372A	
DATE	CONC. (µg/L)
11/22/95	1
03/07/96	1
05/10/96	1
03/26/01	0.2

IR03MW218A2	
DATE	CONC. (µg/L)
01/15/92	(10) ND
07/09/92	(10) ND
08/27/92	(10) ND
03/14/01	2



Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Vinyl Chloride Concentration in micrograms per Liter (µg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
IR70MW12A	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

Note: Locations without associated data are those where no data for vinyl chloride exist.

	Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)
	Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L
	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	2	µg/L
California MCL	0.5	µg/L
Aquatic Criterion	-----	

MCL Maximum Contaminant Level

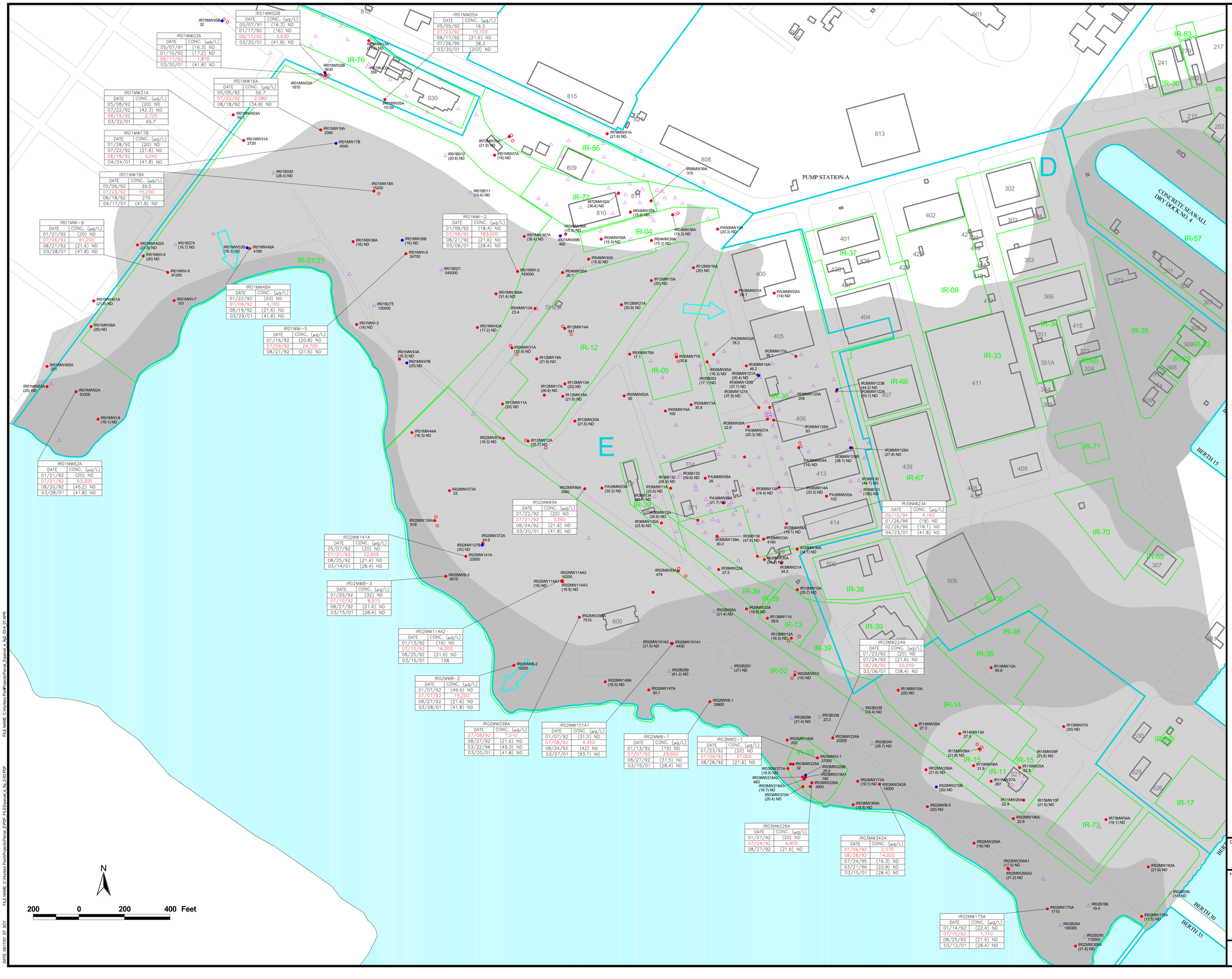
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

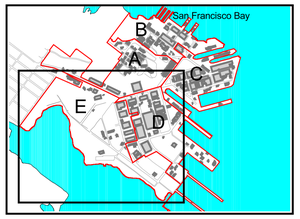
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-13
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
VINYL CHLORIDE IN GROUNDWATER

Tetra Tech EM Inc.





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Aluminum Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A: DATE / CONC. (µg/L); 10/20/95 / 1.8; 07/12/96 / (0.2) ND; 02/14/96 / 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for aluminum exist.

	Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)
	Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L
⇧	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	-----
California MCL	1,000 µg/L
Aquatic Criterion	-----
HGAL	-----

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-14
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
ALUMINUM IN GROUNDWATER

Tetra Tech EM Inc.

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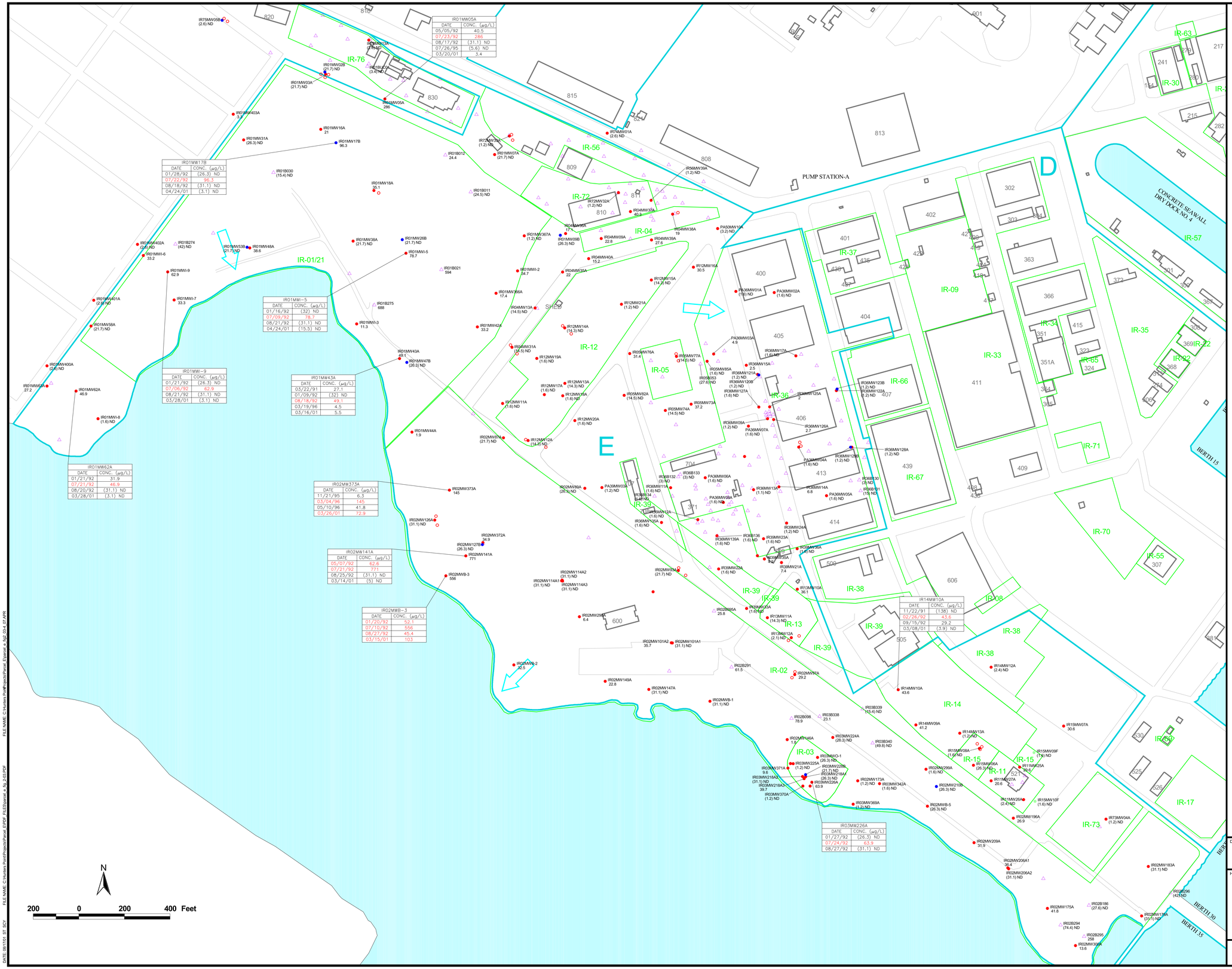
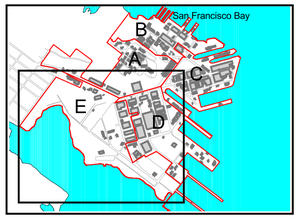
FILE NAME: C:\hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2-03.PDF

DATE: 09/17/01 ST SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Antimony Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR20MW12A	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for antimony exist.

⇧	General Groundwater Flow Direction
▭	Parcel Boundary
▭	IR Site Boundary
▭	San Francisco Bay
▭	Road
134	Building/Building Number

Federal MCL	6	µg/L
California MCL	6	µg/L
Aquatic Criterion	-----	
HGAL	43.26	µg/L

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-15
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF ANTIMONY IN GROUNDWATER

Tetra Tech EM Inc.

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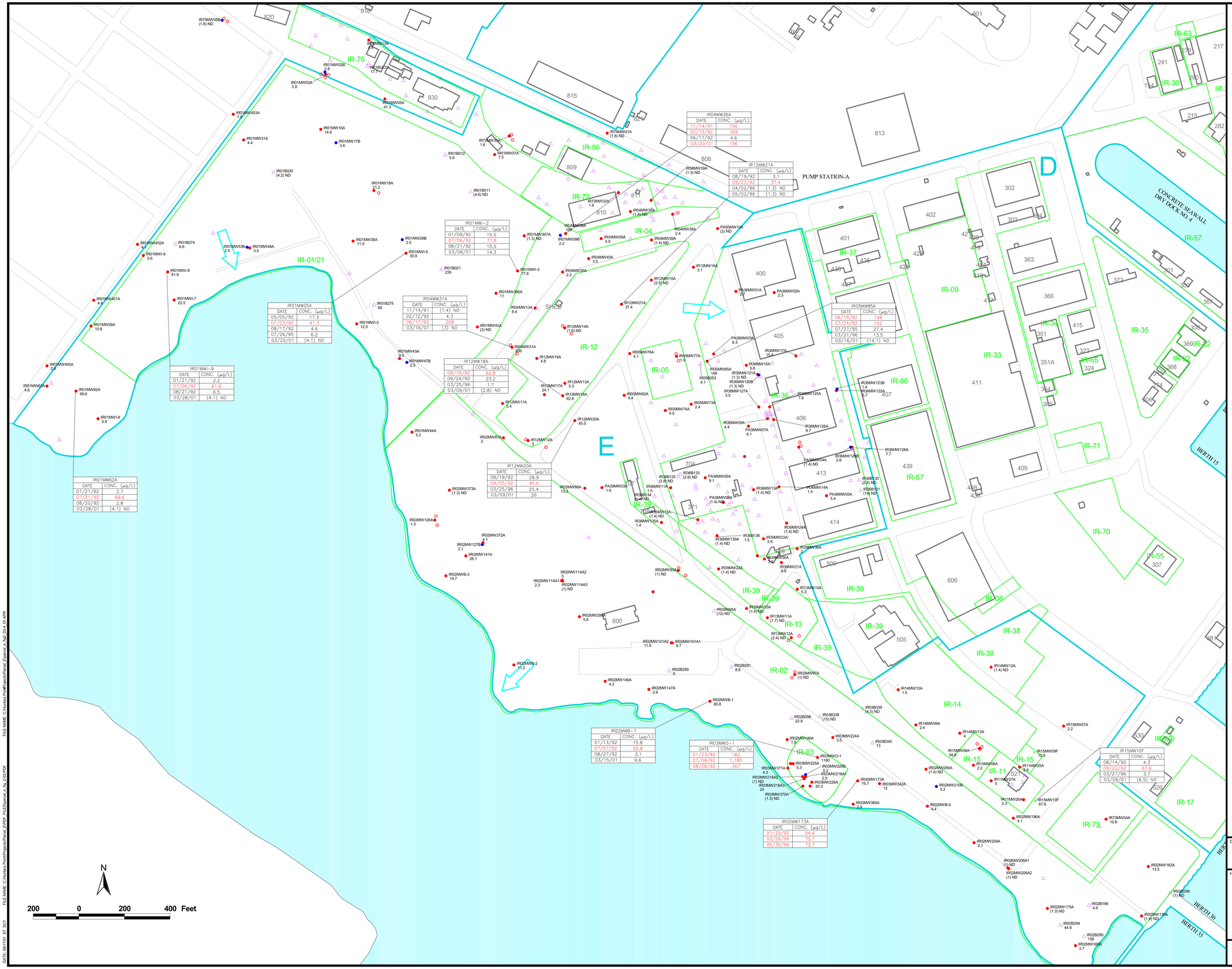
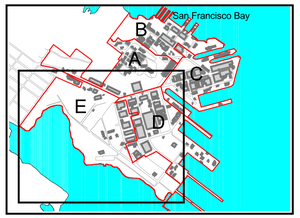
DATE: 09/17/01 BY: SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Arsenic Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR20MW12A (DATE / CONC. (µg/L): 10/20/95 / 1.8; 07/12/96 / (0.2) ND; 02/14/96 / 9.2)	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for arsenic exist.

⇧	General Groundwater Flow Direction
▭	Parcel Boundary
▭	IR Site Boundary
▭	San Francisco Bay
▭	Road
134	Building/Building Number

Federal MCL	50	µg/L
California MCL	50	µg/L
Aquatic Criterion	36	µg/L
HGAL	27.34	µg/L

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-16
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF ARSENIC IN GROUNDWATER

Tetra Tech EM Inc.

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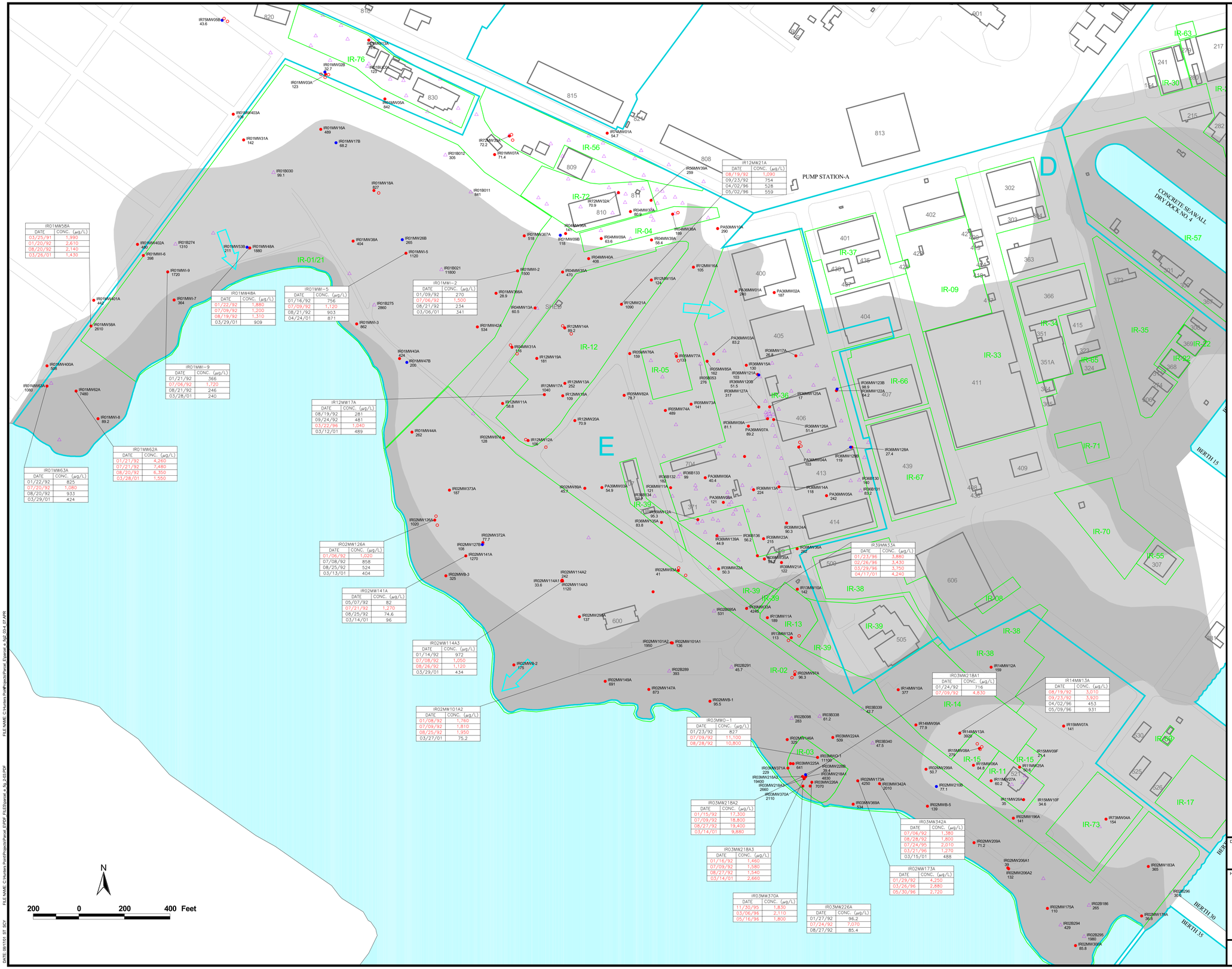
FILE NAME: C:\Hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2-03.PDF

DATE: 09/17/01 BY: SCY



IR01MW58A	
DATE	CONC. (µg/L)
03/25/91	1,990
01/20/92	2,610
08/20/92	2,140
03/26/01	1,430

IR01MW48A	
DATE	CONC. (µg/L)
01/22/92	1,880
07/09/92	1,200
08/19/92	1,310
03/29/01	909

IR01MWI-5	
DATE	CONC. (µg/L)
01/16/92	756
07/09/92	1,120
08/21/92	903
04/24/01	871

IR01MWI-2	
DATE	CONC. (µg/L)
01/09/92	270
07/06/92	1,500
08/21/92	234
03/06/01	341

IR01MWI-9	
DATE	CONC. (µg/L)
01/21/92	366
07/06/92	1,720
08/21/92	246
03/28/01	240

IR12MW17A	
DATE	CONC. (µg/L)
08/19/92	281
09/24/92	481
03/22/96	1,040
03/12/01	489

IR01MW62A	
DATE	CONC. (µg/L)
01/21/92	4,260
07/21/92	7,480
08/20/92	6,350
03/28/01	1,550

IR01MW63A	
DATE	CONC. (µg/L)
01/22/92	825
07/20/92	1,080
08/20/92	933
03/29/01	424

IR02MW126A	
DATE	CONC. (µg/L)
01/06/92	1,020
07/08/92	858
08/25/92	524
03/13/01	404

IR02MW141A	
DATE	CONC. (µg/L)
05/07/92	82
07/21/92	1,270
08/25/92	74.6
03/14/01	96

IR02MW114A3	
DATE	CONC. (µg/L)
01/14/92	972
07/08/92	1,050
08/26/92	1,120
03/29/01	434

IR02MW101A2	
DATE	CONC. (µg/L)
01/08/92	1,760
07/09/92	1,810
08/25/92	1,950
03/27/01	75.2

IR12MW21A	
DATE	CONC. (µg/L)
08/19/92	1,090
09/23/92	754
04/02/96	528
05/02/96	559

IR39MW33A	
DATE	CONC. (µg/L)
01/23/96	3,880
02/26/96	3,430
03/29/96	3,750
04/17/01	4,240

IR03MW218A1	
DATE	CONC. (µg/L)
01/24/92	716
07/09/92	4,830

IR14MW13A	
DATE	CONC. (µg/L)
08/19/92	3,010
09/23/92	3,920
04/02/96	453
05/09/96	931

IR03MWO-1	
DATE	CONC. (µg/L)
01/23/92	827
07/09/92	11,100
08/28/92	10,800

IR03MW218A2	
DATE	CONC. (µg/L)
01/15/92	17,300
07/09/92	18,800
08/27/92	19,400
03/14/01	9,880

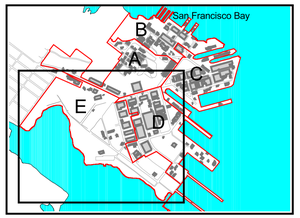
IR03MW218A3	
DATE	CONC. (µg/L)
01/16/92	1,460
07/09/92	1,580
08/27/92	1,540
03/14/01	2,660

IR03MW370A	
DATE	CONC. (µg/L)
11/30/95	1,830
03/06/96	2,110
05/16/96	1,800

IR03MW226A	
DATE	CONC. (µg/L)
01/27/92	96.2
07/24/92	7,070
08/27/92	85.4

IR03MW342A	
DATE	CONC. (µg/L)
07/06/92	1,380
08/28/92	1,800
07/24/95	2,010
03/21/96	1,270
03/15/01	488

IR02MW173A	
DATE	CONC. (µg/L)
01/23/92	4,250
03/26/96	2,880
05/30/96	2,720



Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Barium Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A: 10/20/95 1.8; 07/12/96 (0.2) ND; 02/14/96 5.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for barium exist.

	Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)
	Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L
	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	2,000	µg/L
California MCL	1,000	µg/L
Aquatic Criterion	-----	
HGAL	504.2	µg/L

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

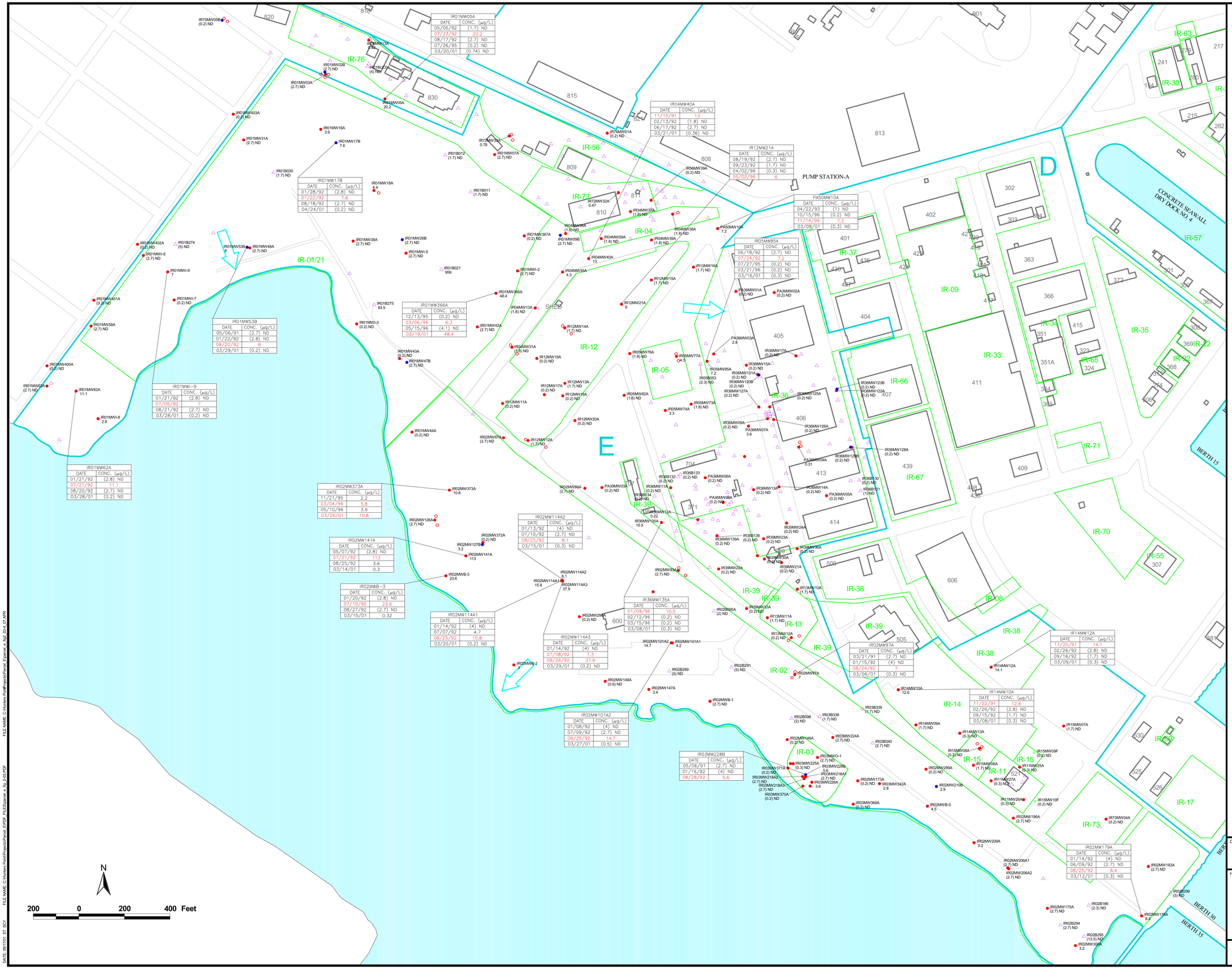
FIGURE 4-17
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
BARIUM IN GROUNDWATER

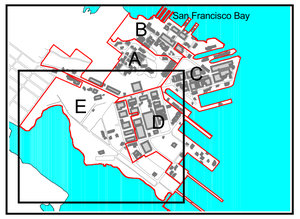
Tetra Tech EM Inc.

FILE NAME: C:\Hunters Point\Projects\Parcel_E\PDF FILES\parcel_e_fig_4-03.PDF

FILE NAME: C:\Hunters Point\Projects\Parcel_E\Parcel_e_fig2_03-4_07-APR

DATE: 06/17/01 ST SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Cadmium Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR20MW12A	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer
Note:	Locations without associated data are those where no data for cadmium exist.
⇧	General Groundwater Flow Direction
▭	Parcel Boundary
▭	IR Site Boundary
▭	San Francisco Bay
⌒	Road
134	Building/Building Number

Federal MCL	5	µg/L
California MCL	5	µg/L
Aquatic Criterion	9.3	µg/L
HGAL	5.08	µg/L

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

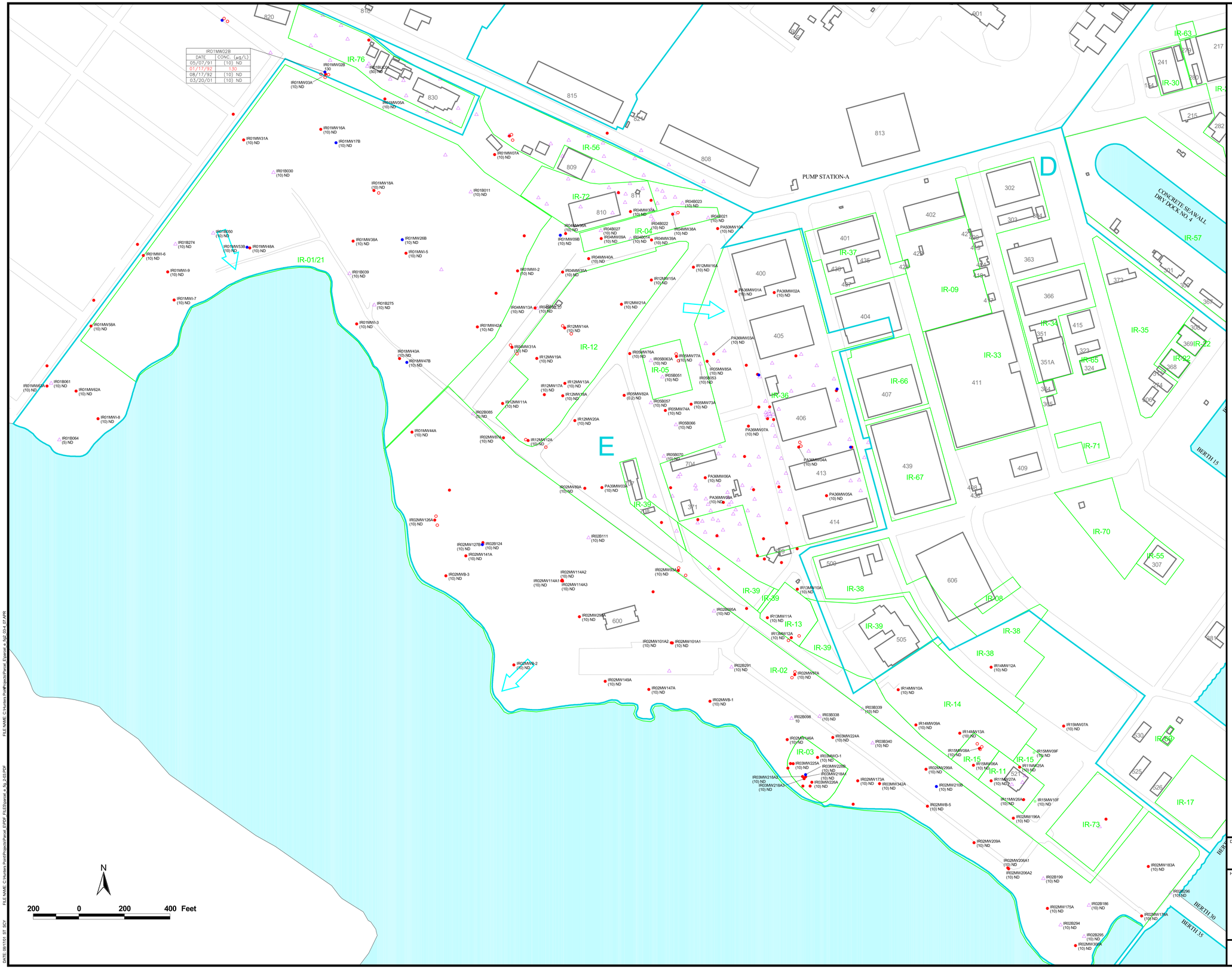
FIGURE 4-18
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF CADMIUM IN GROUNDWATER

Tetra Tech EM Inc.

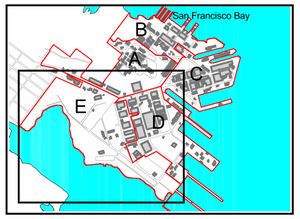
FILE NAME: C:\Hunters Pt\Projects\Parcel_E\parcel_e_fig_0-04_07-APR

FILE NAME: C:\Hunters Pt\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2-03.PDF

DATE: 09/17/01 BY: SCY



IR01MW02B	
DATE	CONC. (µg/L)
05/07/91	(10) ND
01/17/92	130
08/17/92	(10) ND
03/20/01	(10) ND



Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Chromium VI Concentration in micrograms per Liter (µg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
IR70MW12A	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

Note: Locations without associated data are those where no data for chromium VI exist.

- General Groundwater Flow Direction
- Parcel Boundary
- IR Site Boundary
- San Francisco Bay
- Road
- 134 Building/Building Number

Federal MCL	-----
California MCL	-----
Aquatic Criterion	50 µg/L
HGAL	-----

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level

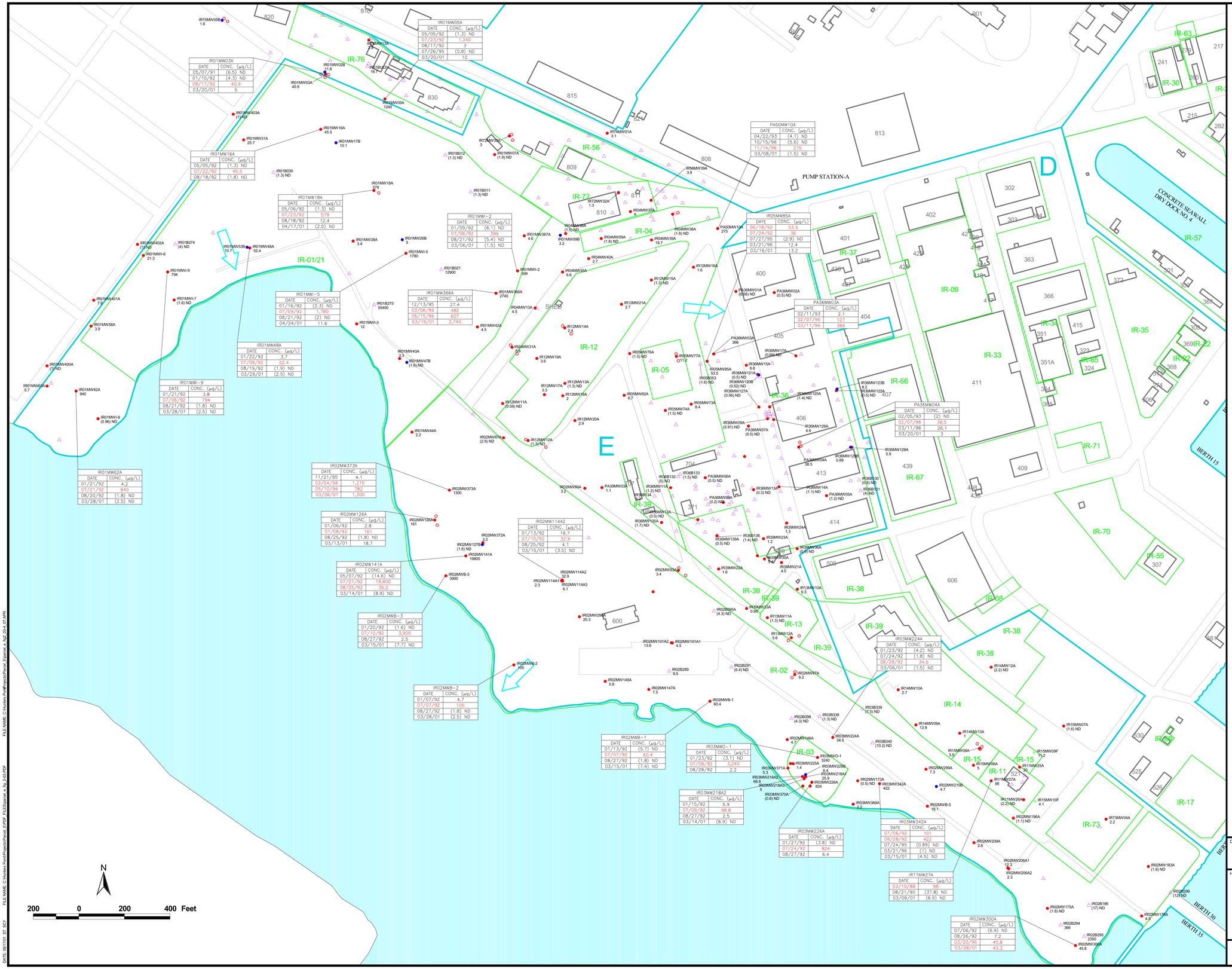
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-19
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
CHROMIUM VI IN GROUNDWATER

Tetra Tech EM Inc.



IR01MW05A	
DATE	CONC. (µg/L)
05/05/92	(1.3) ND
07/23/92	1,240
08/17/92	5
07/26/95	(0.8) ND
03/20/01	10

IR01MW03A	
DATE	CONC. (µg/L)
05/07/91	(6.5) ND
01/10/92	(4.3) ND
08/17/92	40.9
03/20/01	5

IR01MW16A	
DATE	CONC. (µg/L)
05/05/92	(1.3) ND
07/22/92	45.5
08/18/92	(1.8) ND

IR01MW18A	
DATE	CONC. (µg/L)
05/06/92	(1.3) ND
07/23/92	579
08/18/92	12.4
04/17/01	(2.5) ND

IR01MWI-2	
DATE	CONC. (µg/L)
01/09/92	(6.1) ND
07/06/92	399
08/21/92	(5.4) ND
03/06/01	(1.5) ND

IR01MWI-5	
DATE	CONC. (µg/L)
01/16/92	(2.3) ND
07/09/92	1,760
08/21/92	(2) ND
04/24/01	11.6

IR01MW366A	
DATE	CONC. (µg/L)
12/13/95	27.4
03/06/96	482
05/15/96	607
03/19/01	2,740

IR01MW48A	
DATE	CONC. (µg/L)
01/22/92	3.7
07/09/92	52.4
08/19/92	(1.9) ND
03/29/01	(2.5) ND

IR01MWI-9	
DATE	CONC. (µg/L)
01/21/92	3.8
07/06/92	794
08/21/92	(1.8) ND
03/28/01	(2.5) ND

IR01MW62A	
DATE	CONC. (µg/L)
01/21/92	4.2
07/21/92	940
08/20/92	(1.8) ND
03/28/01	(2.5) ND

IR02MW373A	
DATE	CONC. (µg/L)
11/21/95	4.1
03/04/96	1,210
05/10/96	782
03/26/01	1,300

IR02MW126A	
DATE	CONC. (µg/L)
01/06/92	2.8
07/08/92	161
08/25/92	(1.8) ND
03/13/01	18.7

IR02MW114A2	
DATE	CONC. (µg/L)
01/13/92	16.7
07/10/92	32.9
08/25/92	4.1
03/15/01	(3.5) ND

IR02MW141A	
DATE	CONC. (µg/L)
05/07/92	(14.6) ND
07/21/92	19,800
08/25/92	36.2
03/14/01	(8.9) ND

IR02MWB-3	
DATE	CONC. (µg/L)
01/20/92	(1.6) ND
07/10/92	3,900
08/27/92	2.5
03/15/01	(7.7) ND

IR02MWB-2	
DATE	CONC. (µg/L)
01/07/92	4.7
07/07/92	105
08/27/92	(1.8) ND
03/28/01	(2.5) ND

IR02MWB-1	
DATE	CONC. (µg/L)
01/13/92	(5.7) ND
07/07/92	60.4
08/27/92	(1.8) ND
03/15/01	(7.4) ND

IR03MWO-1	
DATE	CONC. (µg/L)
01/23/92	(3.1) ND
07/09/92	3,240
08/28/92	2.2

IR03MW218A2	
DATE	CONC. (µg/L)
01/15/92	5.9
07/09/92	68.8
08/27/92	2.5
03/14/01	(8.9) ND

IR03MW226A	
DATE	CONC. (µg/L)
01/27/92	(3.8) ND
07/24/92	824
08/27/92	6.4

IR03MW342A	
DATE	CONC. (µg/L)
07/06/92	101
08/28/92	422
07/24/95	(0.89) ND
03/21/96	(1) ND
03/15/01	(4.5) ND

IR11MW27A	
DATE	CONC. (µg/L)
03/10/89	98
08/21/90	(37.8) ND
03/09/01	(6.9) ND

IR02MW300A	
DATE	CONC. (µg/L)
07/06/92	(6.9) ND
08/26/92	7.2
03/20/96	45.8
03/28/01	45.5

IR03MW224A	
DATE	CONC. (µg/L)
01/23/92	(4.2) ND
07/24/92	(1.8) ND
08/28/92	34.5
03/06/01	(1.5) ND

PA50MW10A	
DATE	CONC. (µg/L)
04/22/93	(4.1) ND
10/15/96	(5.6) ND
11/14/96	275
03/08/01	(1.5) ND

IR05MW85A	
DATE	CONC. (µg/L)
06/18/92	53.5
07/24/92	36
07/27/95	(2.9) ND
03/21/96	12.4
03/16/01	13.2

PA36MW03A	
DATE	CONC. (µg/L)
02/11/93	2.1
02/07/96	127
03/11/96	366

PA36MW04A	
DATE	CONC. (µg/L)
02/05/93	(2) ND
02/07/96	36.5
03/11/96	26.1
03/20/01	3

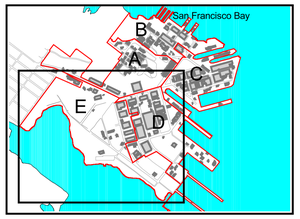
Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Copper Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer
Note:	Locations without associated data are those where no data for copper exist.
⇧	General Groundwater Flow Direction
▭	Parcel Boundary
▭	IR Site Boundary
▭	San Francisco Bay
▭	Road
134	Building/Building Number

Federal MCL	1,300	µg/L
California MCL	1,300	µg/L
Aquatic Criterion	3.1	µg/L
HGAL	28.04	µg/L

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level



Location Map

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-20
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF COPPER IN GROUNDWATER

Tetra Tech EM Inc.

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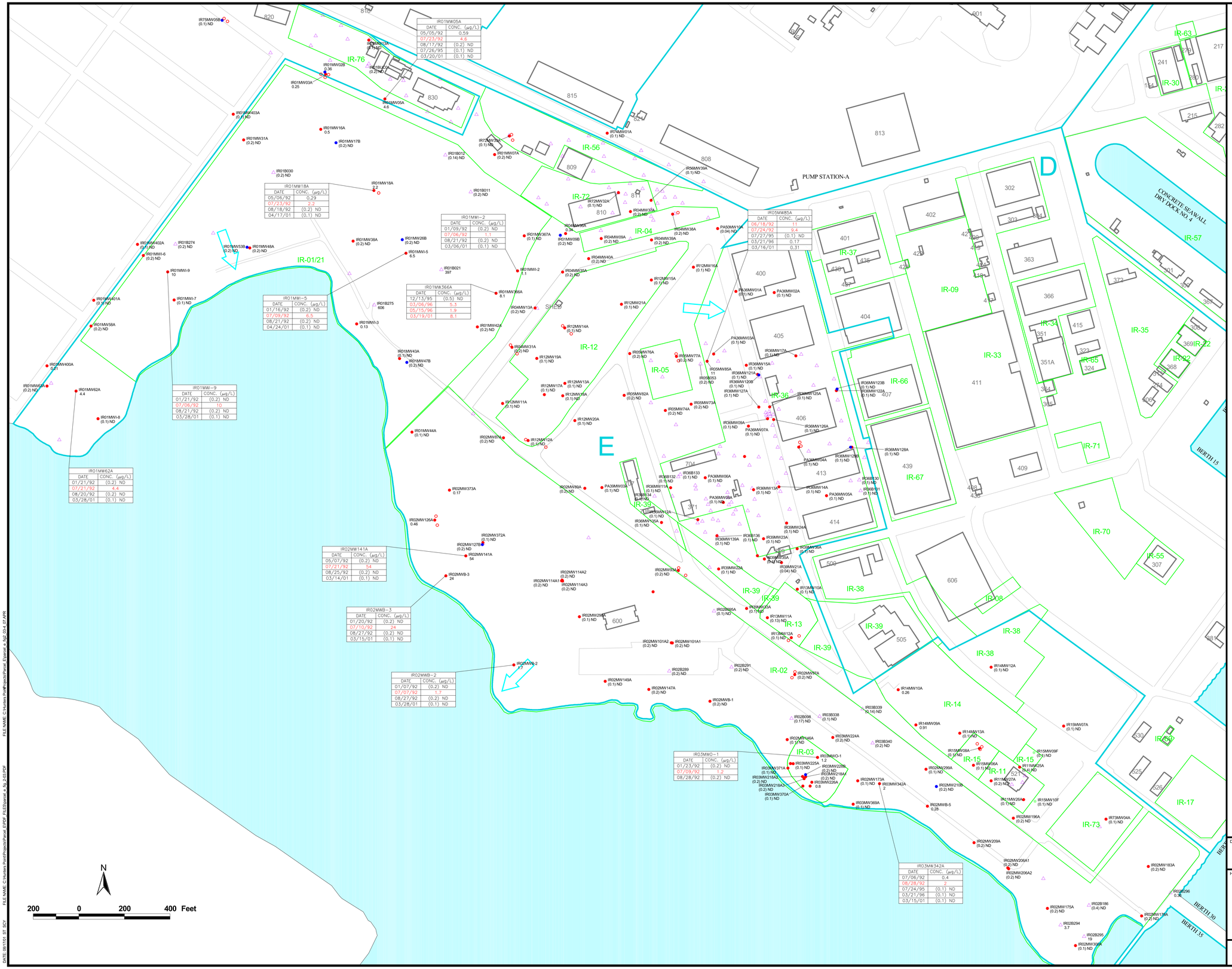
DATE: 09/17/01 BY: SCY



IR01MW05A	
DATE	CONC. (µg/L)
05/05/92	0.59
07/23/92	4.6
08/17/92	(0.2) ND
07/26/95	(0.1) ND
03/20/01	(0.1) ND

IR01MW18A	
DATE	CONC. (µg/L)
05/06/92	0.29
07/23/92	2.2
08/18/92	(0.2) ND
04/17/01	(0.1) ND

IR01MWI-2	
DATE	CONC. (µg/L)
01/09/92	(0.2) ND
07/06/92	1.1
08/21/92	(0.2) ND
03/06/01	(0.1) ND

IR05MW85A	
DATE	CONC. (µg/L)
06/18/92	11
07/24/92	9.4
07/27/95	(0.1) ND
03/21/96	0.17
03/16/01	0.31

IR01MW366A	
DATE	CONC. (µg/L)
12/13/95	(0.5) ND
03/06/96	5.3
05/15/96	1.9
03/19/01	8.1

IR01MWI-5	
DATE	CONC. (µg/L)
01/16/92	(0.2) ND
07/09/92	6.5
08/21/92	(0.2) ND
04/24/01	(0.1) ND

IR01MWI-9	
DATE	CONC. (µg/L)
01/21/92	(0.2) ND
07/06/92	10
08/21/92	(0.2) ND
03/28/01	(0.1) ND

IR01MW62A	
DATE	CONC. (µg/L)
01/21/92	(0.2) ND
07/21/92	4.4
08/20/92	(0.2) ND
03/28/01	(0.1) ND

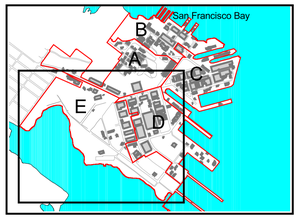
IR02MW141A	
DATE	CONC. (µg/L)
05/07/92	(0.2) ND
07/21/92	54
08/25/92	(0.2) ND
03/14/01	(0.1) ND

IR02MWB-3	
DATE	CONC. (µg/L)
01/20/92	(0.2) ND
07/10/92	24
08/27/92	(0.2) ND
03/15/01	(0.1) ND

IR02MWB-2	
DATE	CONC. (µg/L)
01/07/92	(0.2) ND
07/07/92	1.7
08/27/92	(0.2) ND
03/28/01	(0.1) ND

IR03MWO-1	
DATE	CONC. (µg/L)
01/23/92	(0.2) ND
07/09/92	1.2
08/28/92	(0.2) ND

IR03MW342A	
DATE	CONC. (µg/L)
07/06/92	0.4
08/28/92	2
07/24/95	(0.1) ND
03/21/96	(0.1) ND
03/15/01	(0.1) ND



Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Mercury Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A DATE CONC. (µg/L) 10/20/95 1.8 01/12/96 (0.2) ND 02/14/96 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for mercury exist.

- General Groundwater Flow Direction
- Parcel Boundary
- IR Site Boundary
- San Francisco Bay
- Road
- 134 Building/Building Number

Federal MCL	2	µg/L
California MCL	2	µg/L
Aquatic Criterion	0.94	µg/L
HGAL	0.6	µg/L

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level

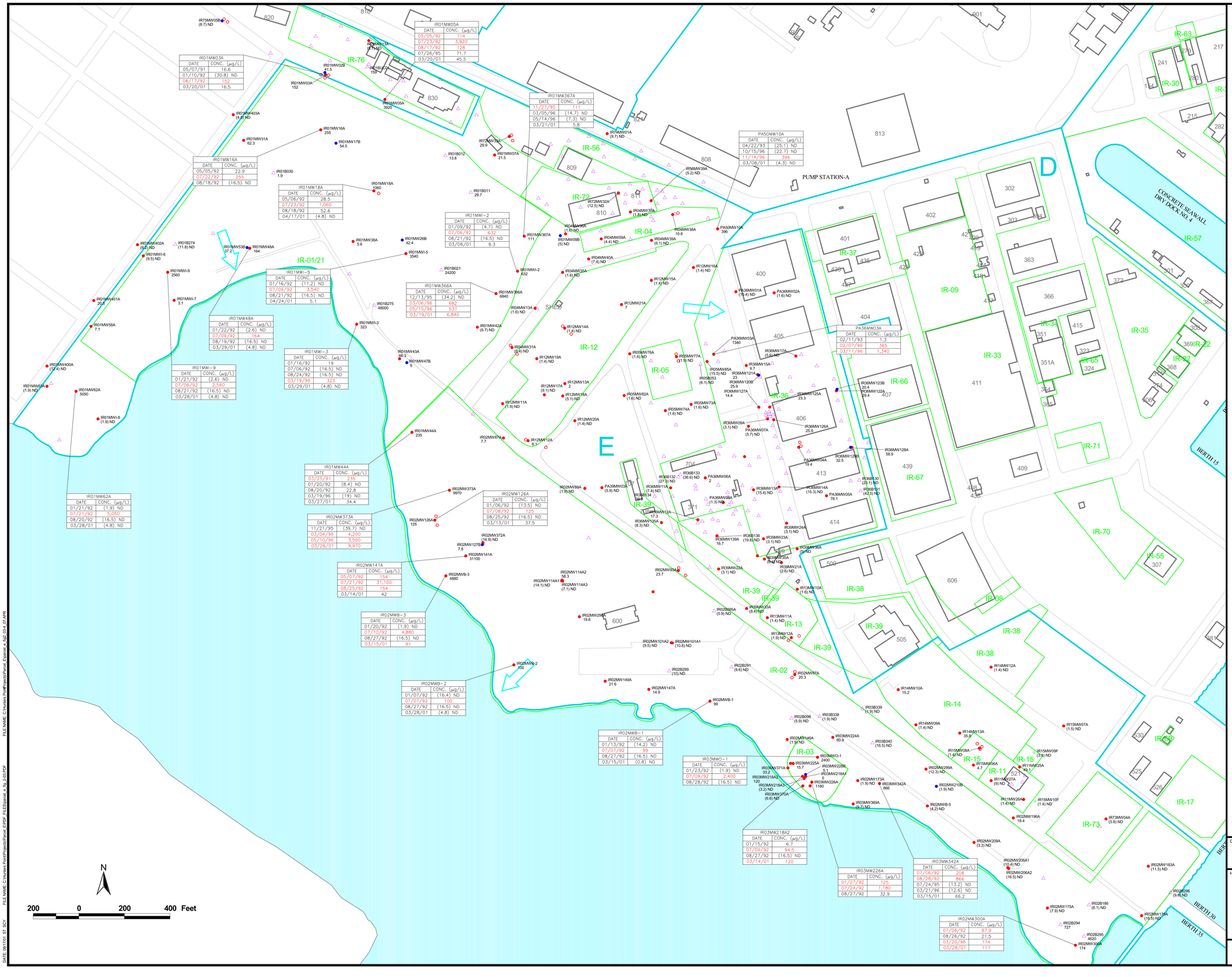
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

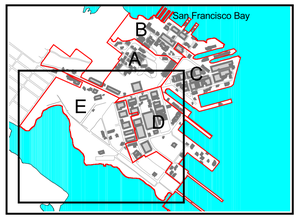
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-21
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
MERCURY IN GROUNDWATER

Tetra Tech EM Inc.





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Zinc Concentration in micrograms per Liter (μg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR72MW12A: DATE / CONC. (µg/L); 10/20/95 / 1.8; 01/12/96 / (0.2) ND; 02/14/96 / 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for zinc exist.

⇧	General Groundwater Flow Direction
▭	Parcel Boundary
▭	IR Site Boundary
▭	San Francisco Bay
▽	Road
134	Building/Building Number

Federal MCL	-----	
California MCL	-----	
Aquatic Criterion	81	μg/L
HGAL	75.68	μg/L

MCL Maximum Contaminant Level

HGAL Hunters Point Groundwater Ambient Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-22
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF ZINC IN GROUNDWATER

Tetra Tech EM Inc.

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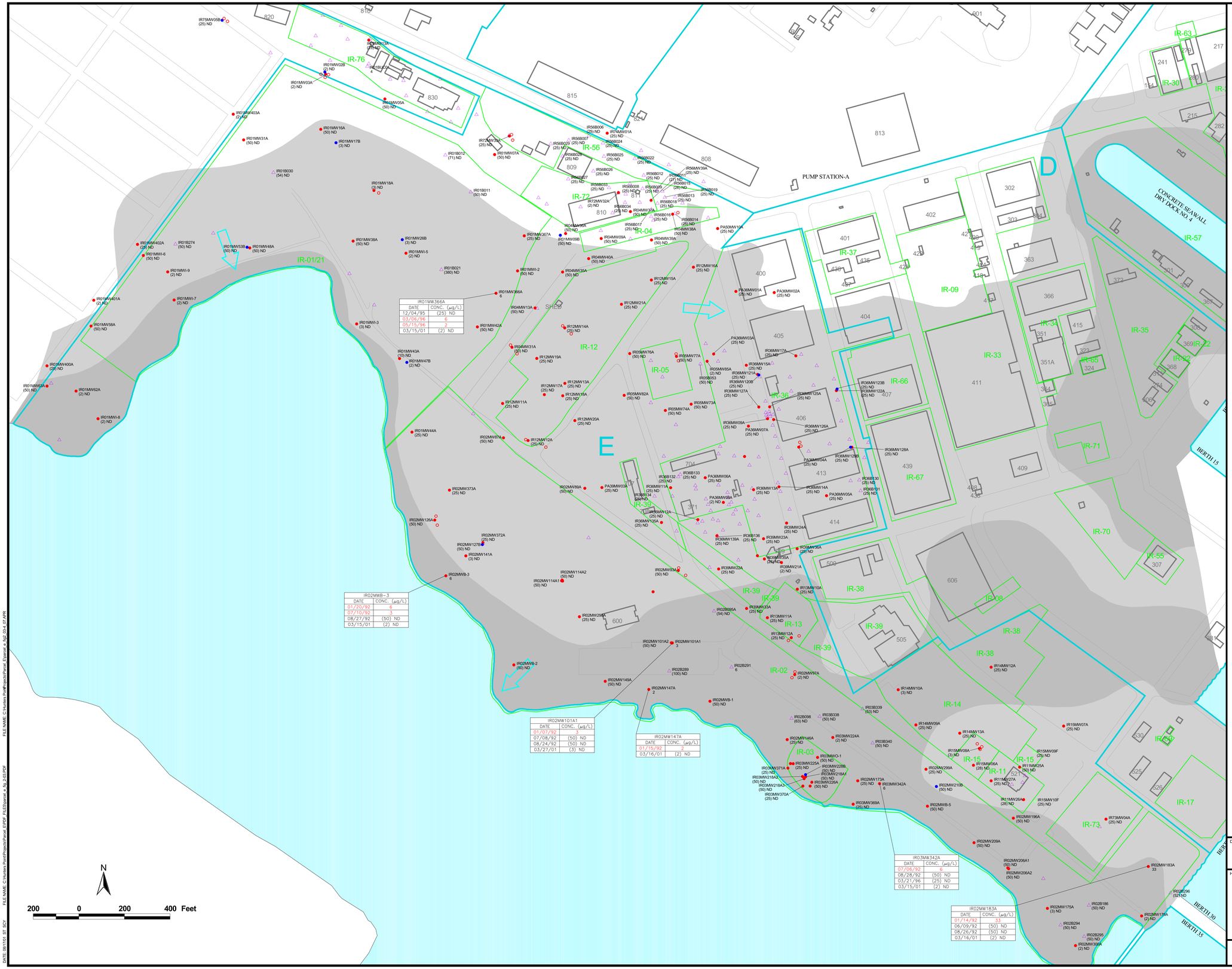
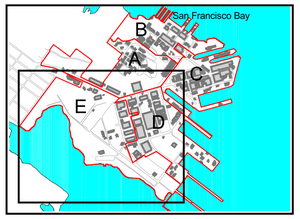
FILE NAME: C:\Hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_4-03.PDF
DATE: 09/17/01 ST SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Pentachlorophenol Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

IR70MW12A	
DATE	CONC. (µg/L)
10/25/95	1.8
01/12/96	(0.2) ND
02/14/96	9.2

Note: Locations without associated data are those where no data for pentachlorophenol exist.

Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)

Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L

General Groundwater Flow Direction

Parcel Boundary

IR Site Boundary

San Francisco Bay

Road

134 Building/Building Number

Federal MCL	1	µg/L
California MCL	1	µg/L
Aquatic Criterion	7.9	µg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-23
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF PENTACHLOROPHENOL IN GROUNDWATER

Tetra Tech EM Inc.

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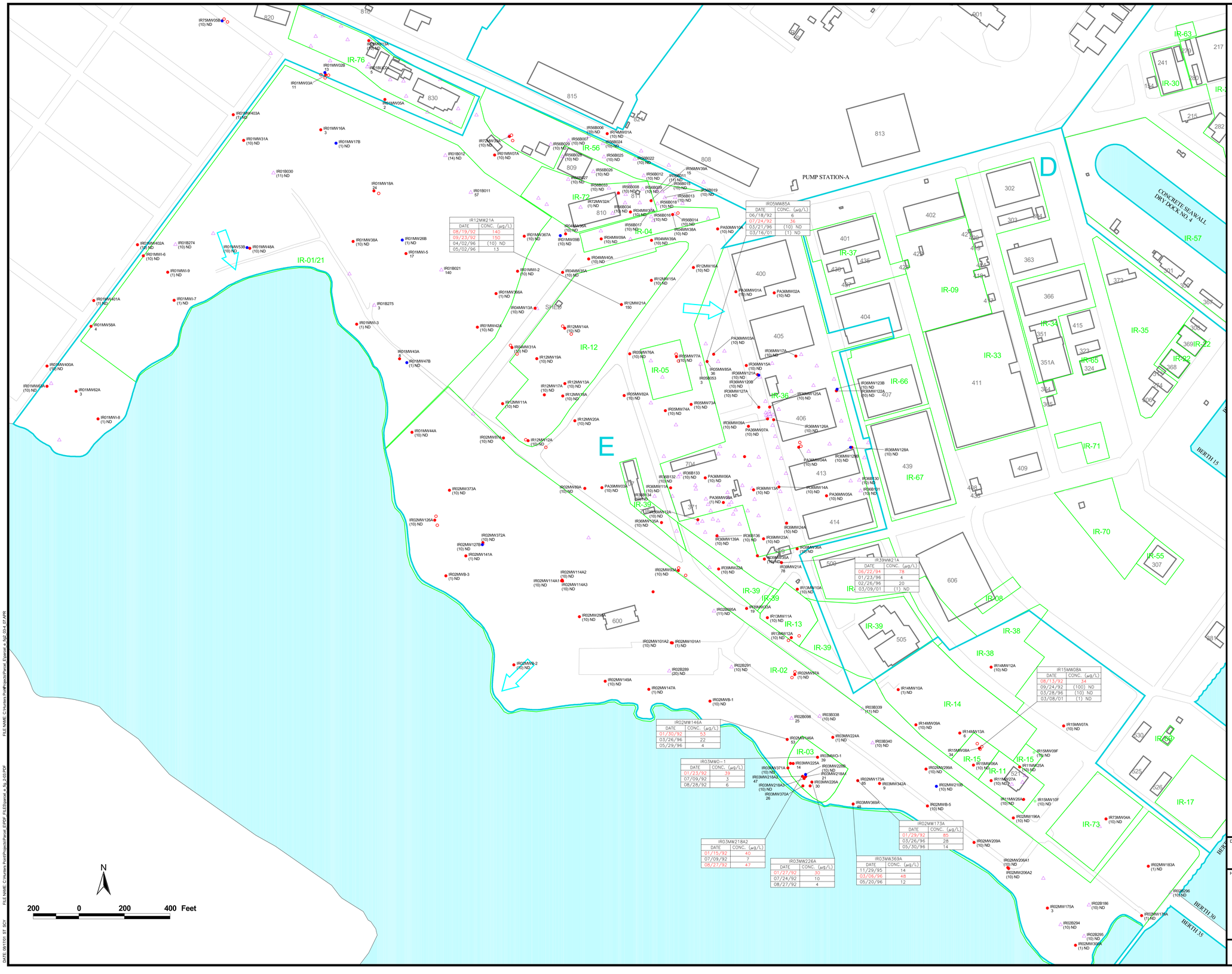
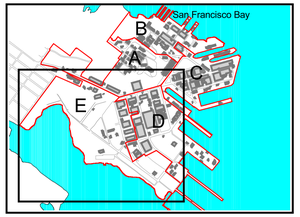
FILE NAME: C:\hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2-03.PDF

DATE: 09/17/01 BY: SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with 2-Methylnaphthalene Concentration in micrograms per Liter (μg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A: 10/20/95 1.8; 01/12/96 (0.2) ND; 02/14/96 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for 2-methylnaphthalene exist.

⇧	General Groundwater Flow Direction
▭	Parcel Boundary
▭	IR Site Boundary
▭	San Francisco Bay
▭	Road
134	Building/Building Number

Federal MCL	-----	
California MCL	-----	
Aquatic Criterion	30	μg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

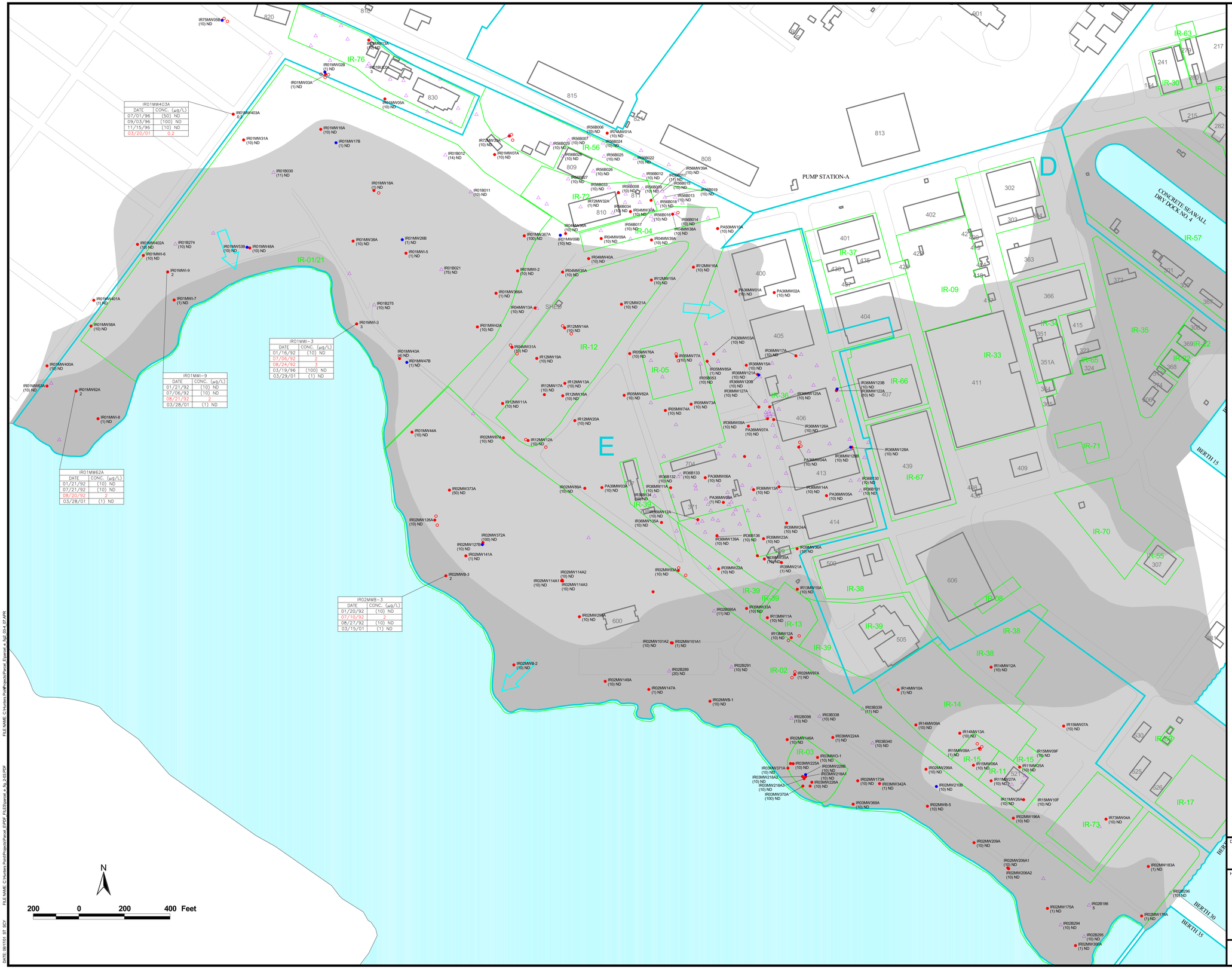
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

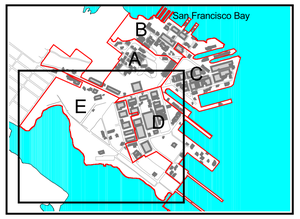
HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-24
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF 2-METHYLNAPHTHALENE IN GROUNDWATER

Tetra Tech EM Inc.

FILE NAME: C:\Hunters Point\Projects\Parcel_E\parcel_e_fig2_03-4_07-APR
FILE NAME: C:\Hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_3-03.PDF
DATE: 08/17/01 ST SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Benzo(a)pyrene Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A: DATE / CONC. (µg/L); 10/25/95 / 1.8; 01/12/96 / (0.2) ND; 02/14/96 / 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for benzo(a)pyrene exist.

	Total Dissolved Solids Concentration ≥ 10,000 milligrams per Liter (mg/L)
	Total Dissolved Solids Concentration < 10,000 mg/L, but > 3,000 mg/L
⇧	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	0.2	µg/L
California MCL	0.2	µg/L
Aquatic Criterion	30	µg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

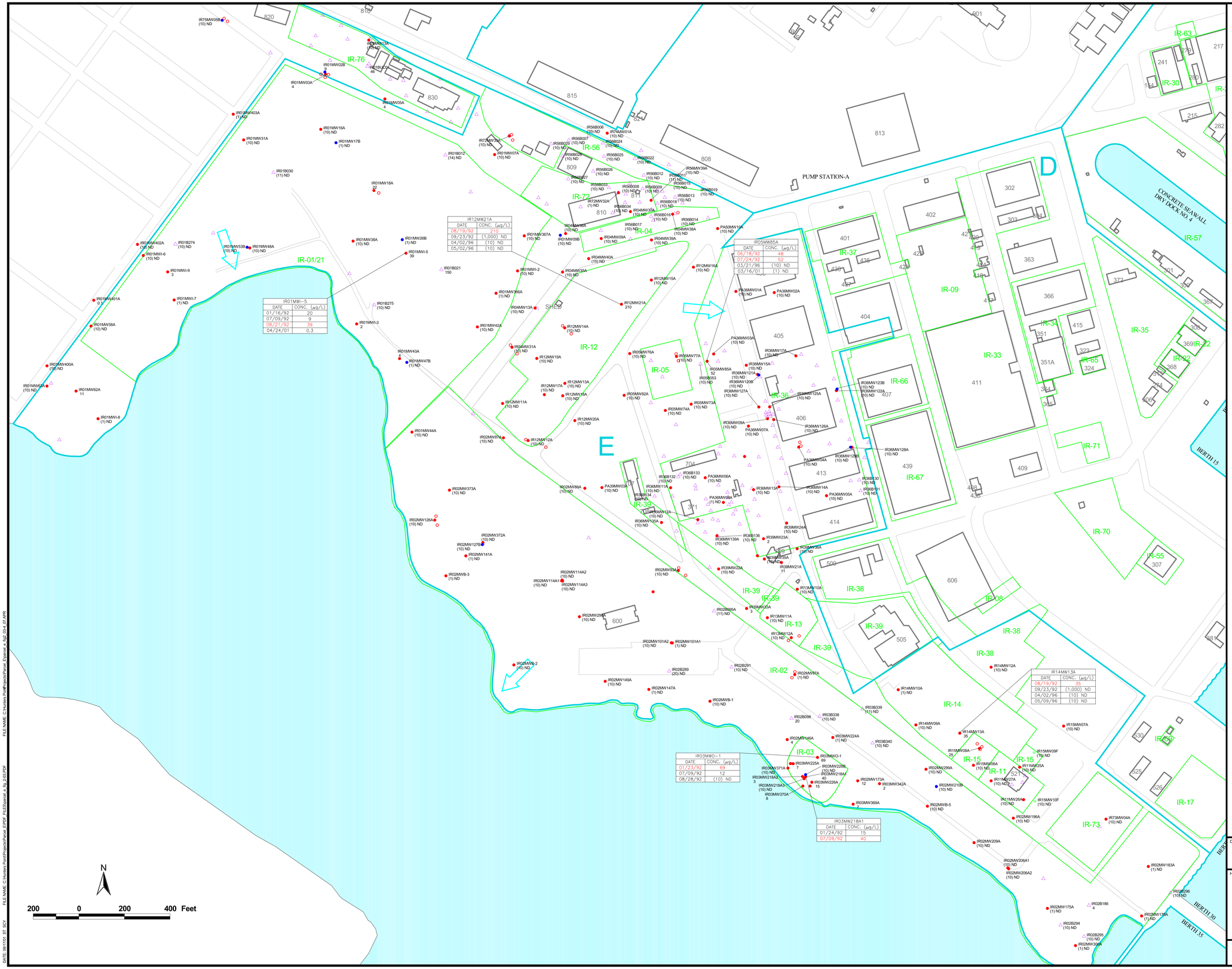
FIGURE 4-25
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF BENZO(A)PYRENE IN GROUNDWATER

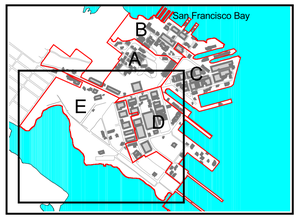
Tetra Tech EM Inc.

FILE NAME: C:\hunters Point\Projects\Parcel_E\pdf_FILES\parcel_e_fig_2-03.PDF

FILE NAME: C:\hunters Point\Projects\Parcel_E\parcel_e_fig_4-25.dwg

DATE: 09/17/01 BY: SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Phenanthrene Concentration in micrograms per Liter (µg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

IR70MW12A

DATE	CONC. (µg/L)
10/20/95	1.8
01/12/96	(0.2) ND
02/14/96	9.2

Note: Locations without associated data are those where no data for phenanthrene exist.

	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	-----
California MCL	-----
Aquatic Criterion	30 µg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

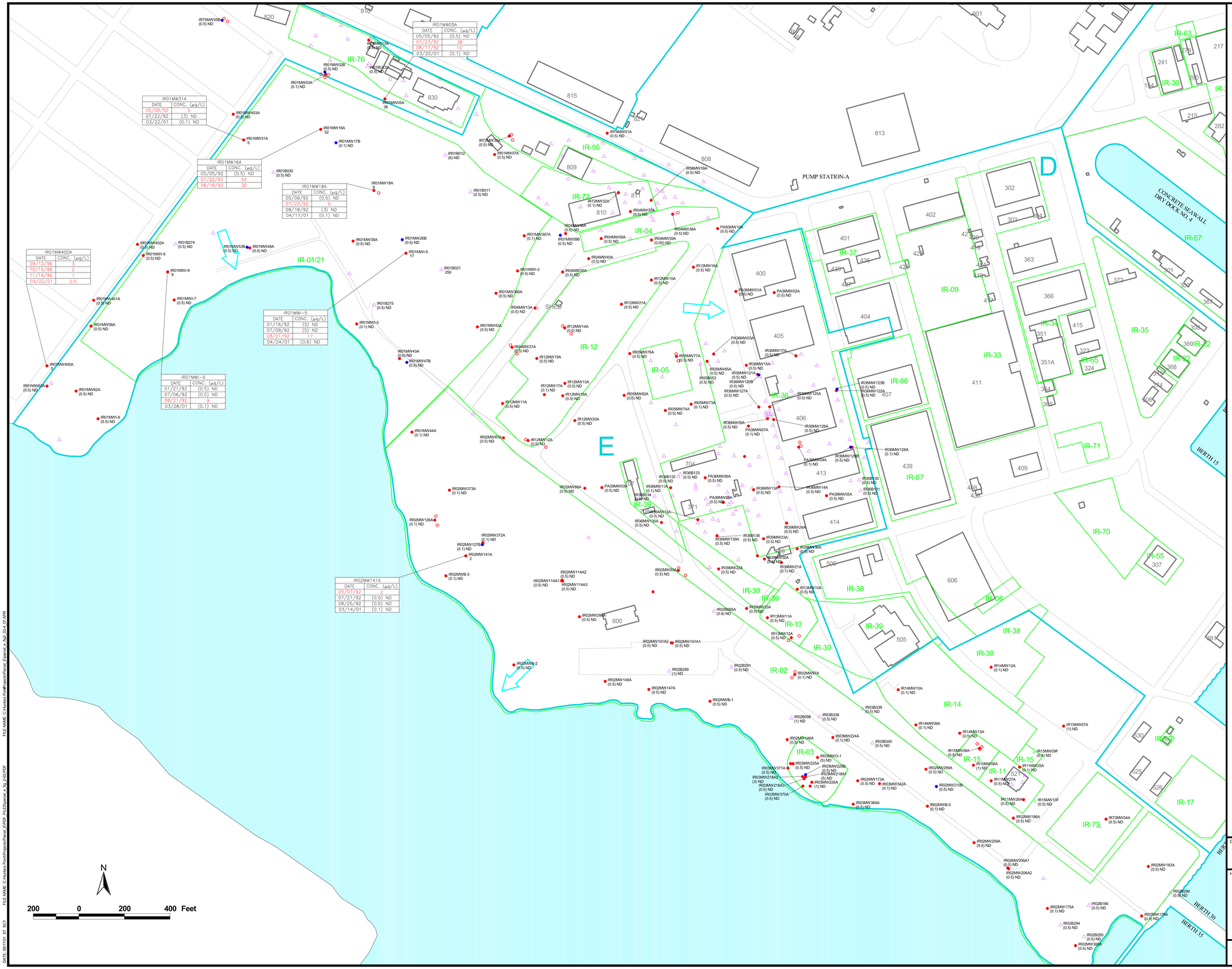
FIGURE 4-26
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF PHENANTHRENE IN GROUNDWATER

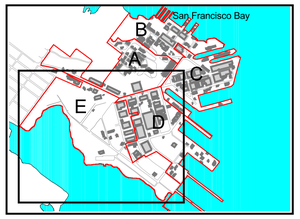
Tetra Tech EM Inc.

FILE NAME: C:\hunters Point\Projects\Parcel_E\parcel_e_fig_0-04_07-APR

FILE NAME: C:\hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2-03.PDF

DATE: 09/17/01 BY: SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Aroclor-1242 Concentration in micrograms per Liter (μg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
IR70MW12A: DATE / CONC. (µg/L) 10/20/95 1.8; 01/12/96 (0.2) ND; 02/14/96 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

Note: Locations without associated data are those where no data for aroclor-1242 exist.

	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	0.5	μg/L
California MCL	0.5	μg/L
Aquatic Criterion	0.03	μg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

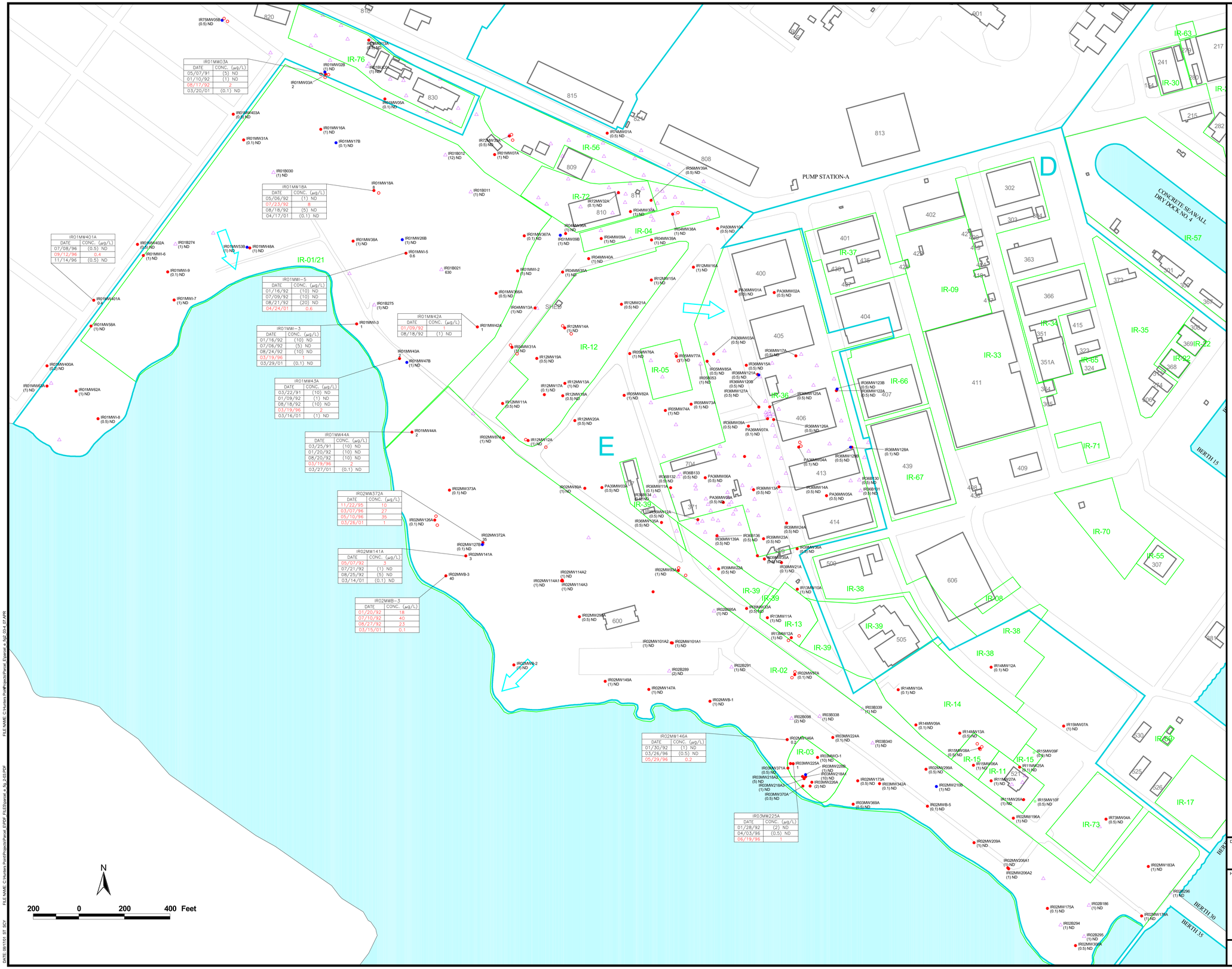
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-27
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF AROCLOR-1242 IN GROUNDWATER

Tetra Tech EM Inc.

FILE NAME: C:\hunters Pt\Projects\Parcel_E\parcel_e_fig_0-04_07.APR
FILE NAME: C:\hunters Pt\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2-03.PDF
DATE: 09/17/01 BY: SCY



IR01MW03A	
DATE	CONC. (µg/L)
05/07/91	(5) ND
01/10/92	(1) ND
08/17/92	2
03/20/01	(0.1) ND

IR01MW18A	
DATE	CONC. (µg/L)
05/06/92	(1) ND
07/23/92	8
08/18/92	(5) ND
04/17/01	(0.1) ND

IR01MW401A	
DATE	CONC. (µg/L)
07/08/96	(0.5) ND
09/12/96	0.4
11/14/96	(0.5) ND

IR01MWI-5	
DATE	CONC. (µg/L)
01/16/92	(10) ND
07/09/92	(10) ND
08/21/92	(20) ND
04/24/01	0.6

IR01MW42A	
DATE	CONC. (µg/L)
01/09/92	1
08/18/92	(1) ND

IR01MWI-3	
DATE	CONC. (µg/L)
01/16/92	(10) ND
07/06/92	(5) ND
08/24/92	(10) ND
03/19/96	1
03/29/01	(0.1) ND

IR01MW43A	
DATE	CONC. (µg/L)
03/22/91	(10) ND
01/09/92	(1) ND
08/18/92	(10) ND
03/19/96	2
03/16/01	(1) ND

IR01MW44A	
DATE	CONC. (µg/L)
03/25/91	(10) ND
01/20/92	(10) ND
08/20/92	(10) ND
03/19/96	2
03/27/01	(0.1) ND

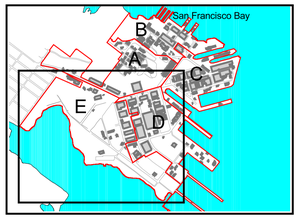
IR02MW372A	
DATE	CONC. (µg/L)
11/22/95	10
03/07/96	27
05/10/96	35
03/26/01	1

IR02MW141A	
DATE	CONC. (µg/L)
05/07/92	3
07/21/92	(1) ND
08/25/92	(5) ND
03/14/01	(0.1) ND

IR02MWB-3	
DATE	CONC. (µg/L)
01/20/92	18
07/10/92	40
08/27/92	23
03/15/01	0.1

IR02MW146A	
DATE	CONC. (µg/L)
01/30/92	(1) ND
03/26/96	(0.5) ND
05/29/96	0.2

IR03MW225A	
DATE	CONC. (µg/L)
01/28/92	(2) ND
04/03/96	(0.5) ND
06/19/96	1



Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Aroclor-1254 Concentration in micrograms per Liter (µg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
IR70MW12A DATE CONC. (µg/L) 10/20/95 1.8 01/12/96 (0.2) ND 02/14/96 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

Note: Locations without associated data are those where no data for aroclor-1254 exist.

- General Groundwater Flow Direction
- Parcel Boundary
- IR Site Boundary
- San Francisco Bay
- Road
- 134 Building/Building Number

Federal MCL	0.5	µg/L
California MCL	0.5	µg/L
Aquatic Criterion	0.03	µg/L

MCL Maximum Contaminant Level

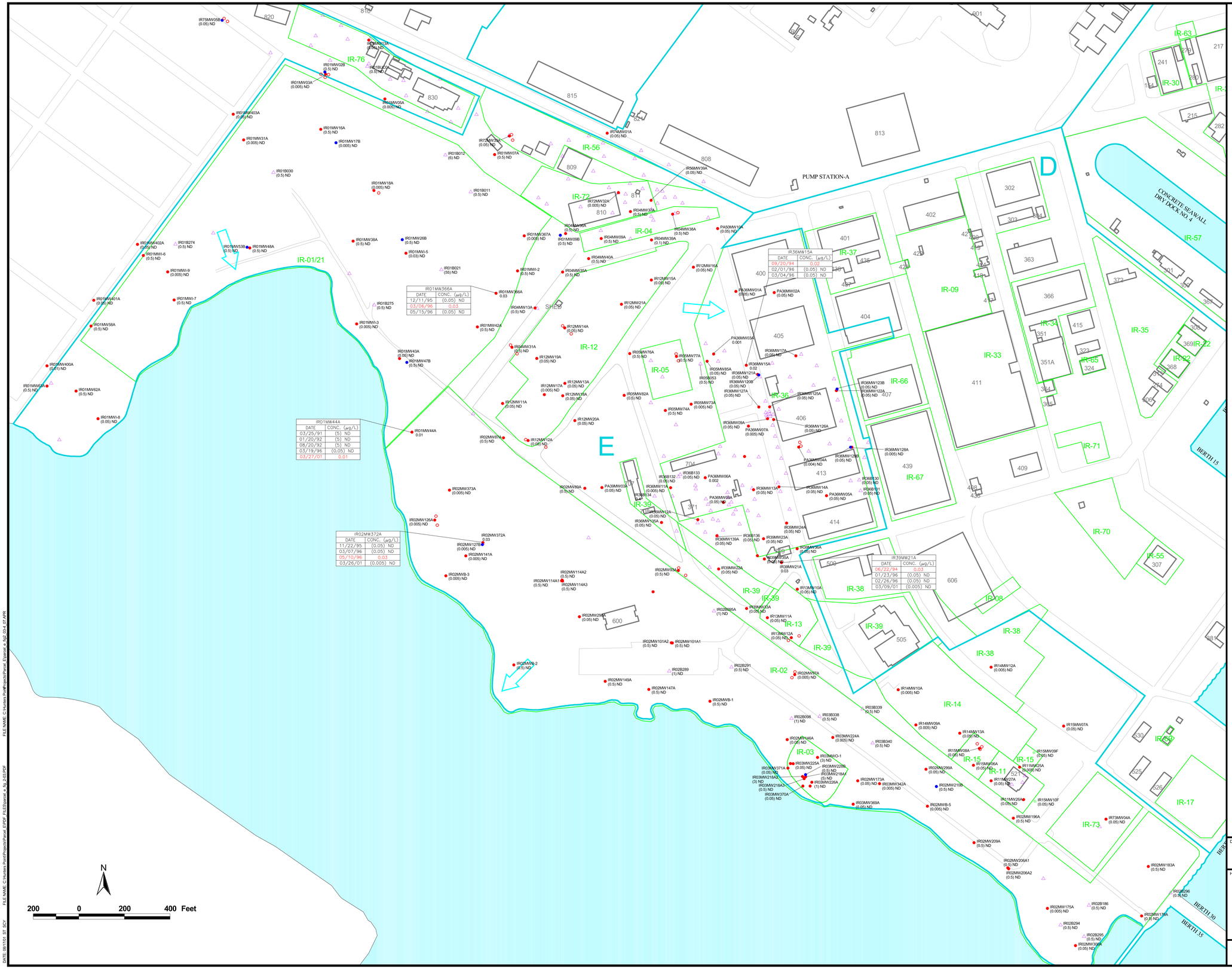
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

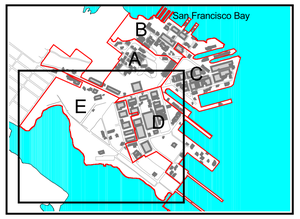
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-28
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
AROCLOR-1254 IN GROUNDWATER

Tetra Tech EM Inc.





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Chlordane (Alpha) Concentration in micrograms per Liter (μg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A (DATE / CONC. (µg/L): 10/20/95 1.8; 01/12/96 (0.2) ND; 02/14/96 9.2)	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for chlordane (alpha) exist.

⇧	General Groundwater Flow Direction
▭	Parcel Boundary
▭	IR Site Boundary
▭	San Francisco Bay
▭	Road
134	Building/Building Number

Federal MCL	2	μg/L
California MCL	0.1	μg/L
Aquatic Criterion	0.004	μg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-29
PARCEL E A-AQUIFER MAXIMUM CONCENTRATIONS OF CHLORDANE (ALPHA) IN GROUNDWATER

Tetra Tech EM Inc.

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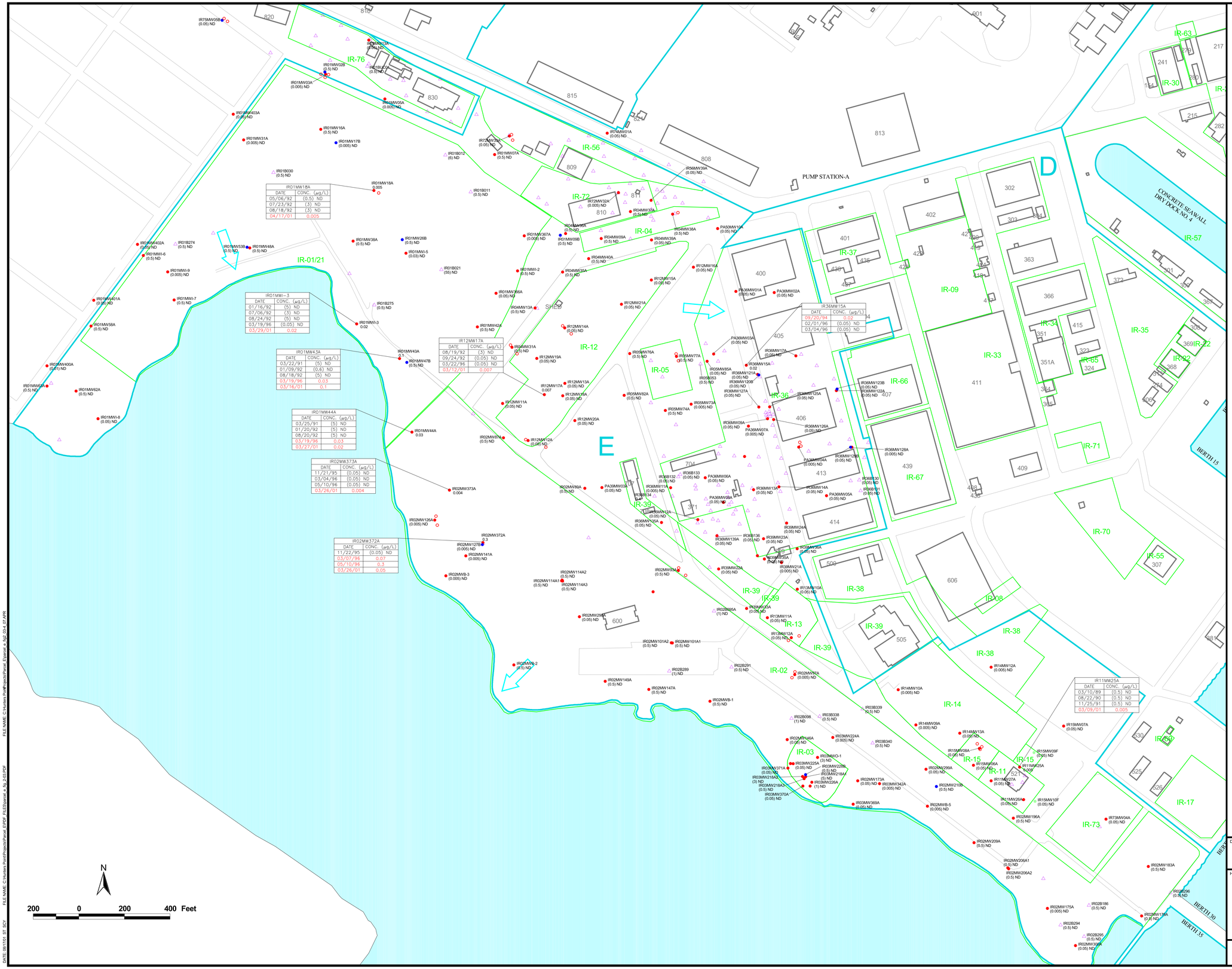
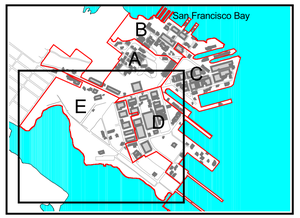
FILE NAME: C:\hunters Point\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2-03.PDF
DATE: 09/17/01 BY: SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Chlordane (Gamma) Concentration in micrograms per Liter (μg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
IR70MW12A DATE / CONC. (µg/L) 10/20/95 / 1.8 01/12/96 / (0.2) ND 02/14/96 / 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

Note: Locations without associated data are those where no data for chlordane (gamma) exist.

	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	2	μg/L
California MCL	0.1	μg/L
Aquatic Criterion	0.004	μg/L

MCL Maximum Contaminant Level

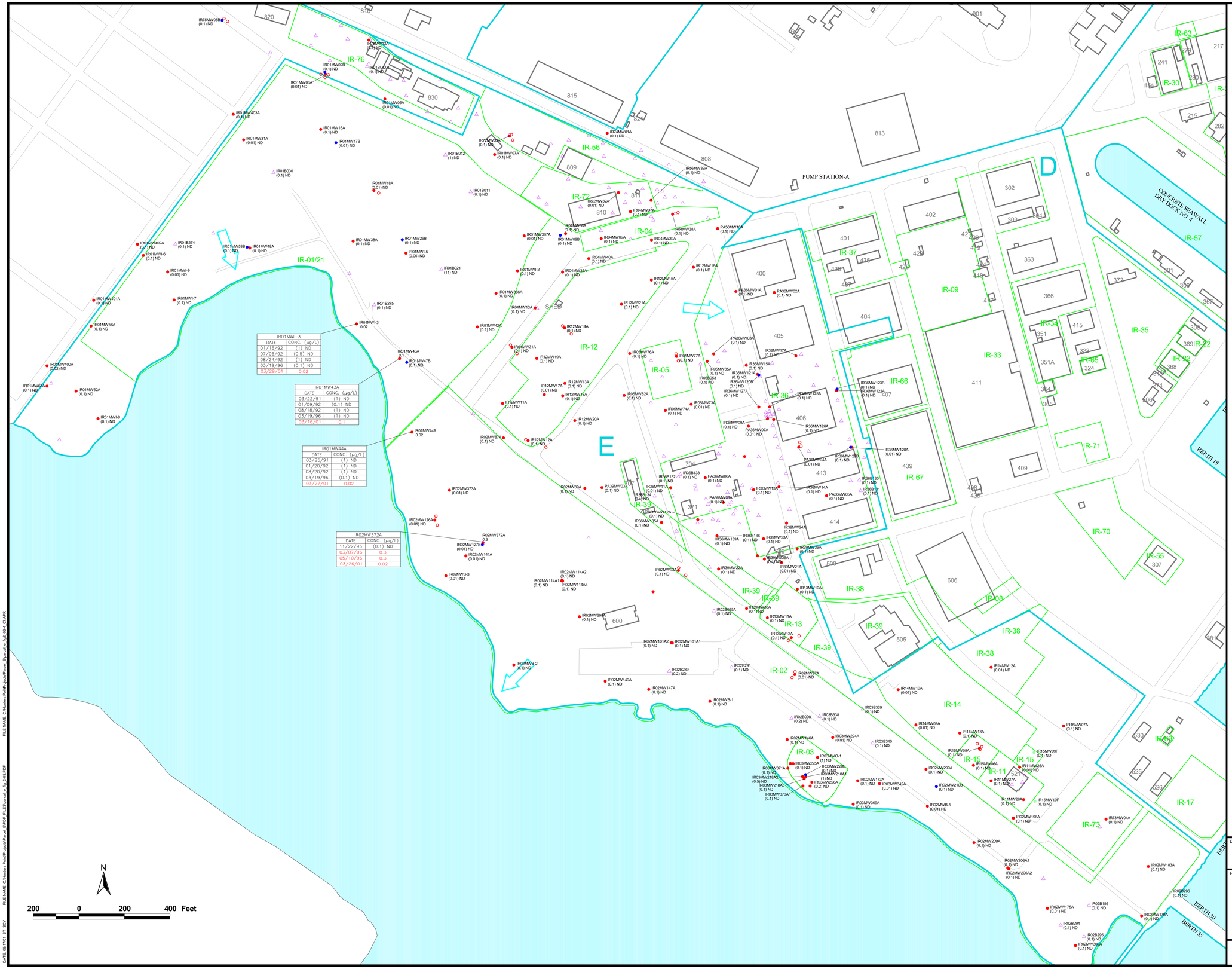
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-30
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
CHLORDANE (GAMMA) IN GROUNDWATER

Tetra Tech EM Inc.

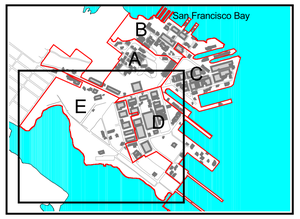


IR01MWI-3	
DATE	CONC. (µg/L)
01/16/92	(1) ND
07/06/92	(0.5) ND
08/24/92	(1) ND
03/19/96	(0.1) ND
03/29/01	0.02

IR01MW43A	
DATE	CONC. (µg/L)
03/22/91	(1) ND
01/09/92	(0.1) ND
08/18/92	(1) ND
03/19/96	(1) ND
03/16/01	0.1

IR01MW44A	
DATE	CONC. (µg/L)
03/25/91	(1) ND
01/20/92	(1) ND
08/20/92	(1) ND
03/19/96	(0.1) ND
03/27/01	0.02

IR02MW372A	
DATE	CONC. (µg/L)
11/22/95	(0.1) ND
03/07/96	0.3
05/10/96	0.3
03/26/01	0.02



Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Dieldrin Concentration in micrograms per Liter (µg/L)
△	Boring-Grab Groundwater Sample
●	A-Aquifer Monitoring Well
IR70MW12A	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
●	B-Aquifer Monitoring Well
●	Bedrock Monitoring Well
○	Piezometer

Note: Locations without associated data are those where no data for dieldrin exist.

	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	-----
California MCL	-----
Aquatic Criterion	0.0019 µg/L

MCL Maximum Contaminant Level

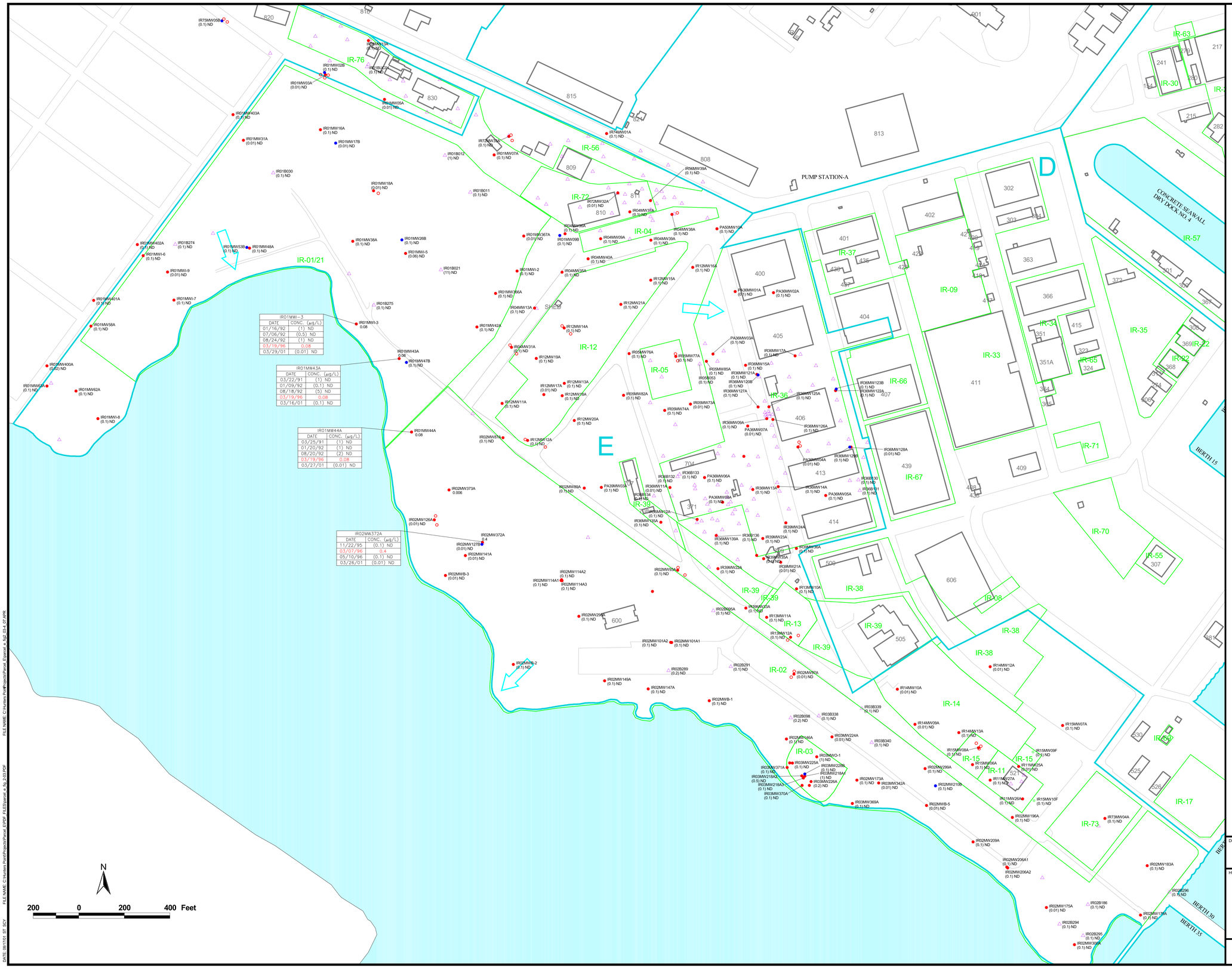
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

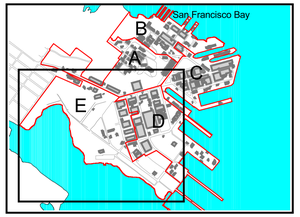
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-31
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
DIELDRIN IN GROUNDWATER

Tetra Tech EM Inc.





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Endosulfan II Concentration in micrograms per Liter (μg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

IR70MW12A

DATE	CONC. (µg/L)
10/20/95	1.8
01/12/96	(0.2) ND
02/14/96	9.2

Note: Locations without associated data are those where no data for endosulfan II exist.

	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	-----
California MCL	-----
Aquatic Criterion	0.0087 μg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

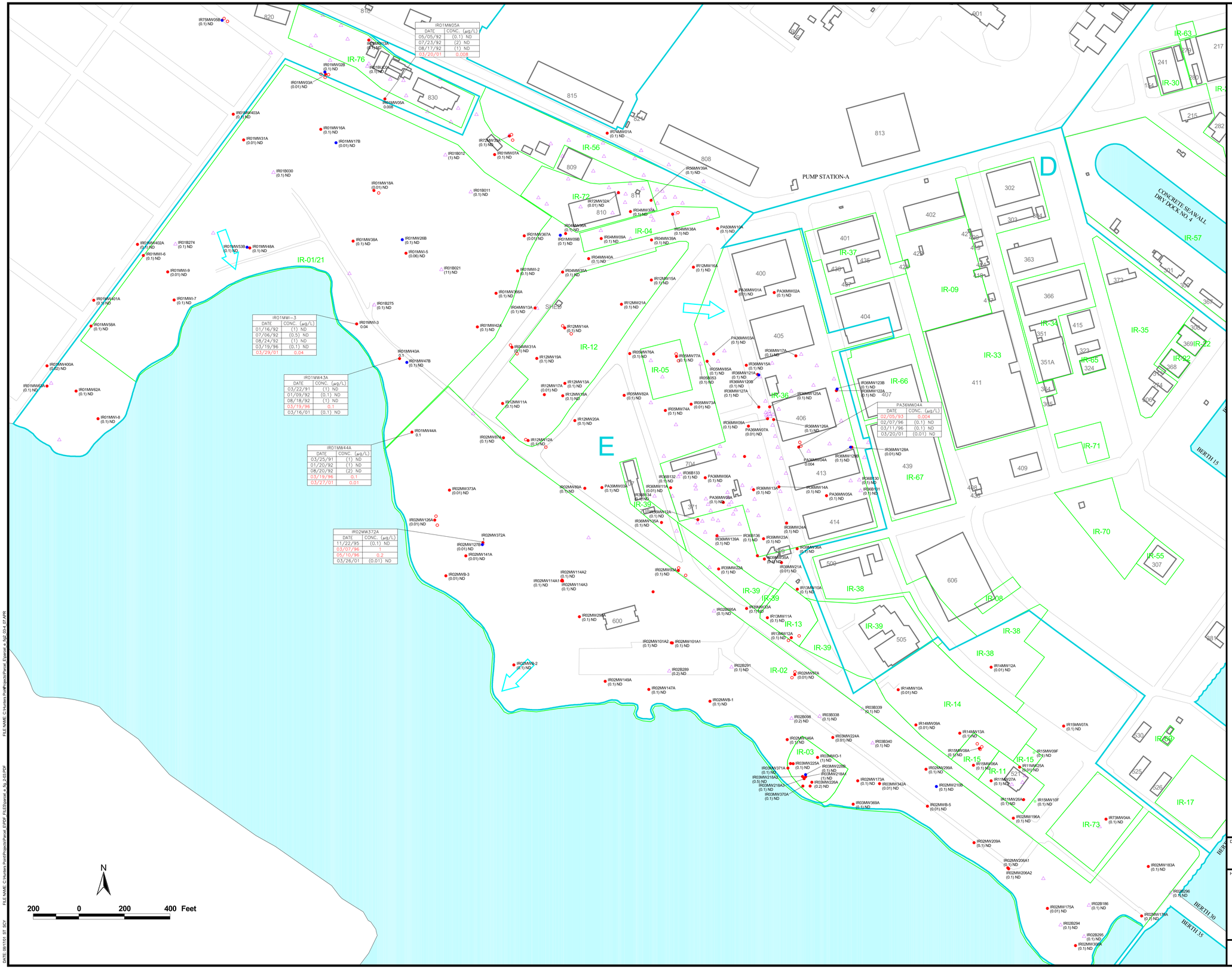
FIGURE 4-32
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
ENDOSULFAN II IN GROUNDWATER

Tetra Tech EM Inc.

FILE NAME: C:\Hunters Pt\Projects\Parcel_E\PDF_FILES\parcel_e_fig_2-03.PDF

FILE NAME: C:\Hunters Pt\Projects\Parcel_E\PDF_FILES\parcel_e_fig_4-03_07-APR

DATE: 09/17/01 ST SCY



IR01MW05A	
DATE	CONC. (µg/L)
05/05/92	(0.1) ND
07/23/92	(2) ND
08/17/92	(1) ND
03/20/01	0.008

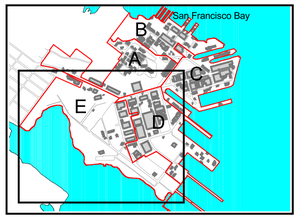
IR01MWI-3	
DATE	CONC. (µg/L)
01/16/92	(1) ND
07/06/92	(0.5) ND
08/24/92	(1) ND
03/19/96	(0.1) ND
03/29/01	0.04

IR01MW43A	
DATE	CONC. (µg/L)
03/22/91	(1) ND
01/09/92	(0.1) ND
08/18/92	(1) ND
03/19/96	0.1
03/16/01	(0.1) ND

IR01MW44A	
DATE	CONC. (µg/L)
03/25/91	(1) ND
01/20/92	(1) ND
08/20/92	(2) ND
03/19/96	0.1
03/27/01	0.01

IR02MW372A	
DATE	CONC. (µg/L)
11/22/95	(0.1) ND
03/07/96	1
05/10/96	0.2
03/26/01	(0.01) ND

PA36MW04A	
DATE	CONC. (µg/L)
02/05/93	0.004
02/07/96	(0.1) ND
03/11/96	(0.1) ND
03/20/01	(0.01) ND



Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Endrin Concentration in micrograms per Liter (µg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
IR70MW12A DATE / CONC. (µg/L) 10/20/95 / 1.8; 01/12/96 / (0.2) ND; 02/14/96 / 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

Note: Locations without associated data are those where no data for endrin exist.

- General Groundwater Flow Direction
- Parcel Boundary
- IR Site Boundary
- San Francisco Bay
- Road
- 134 Building/Building Number

Federal MCL	2	µg/L
California MCL	2	µg/L
Aquatic Criterion	0.0023	µg/L

MCL Maximum Contaminant Level

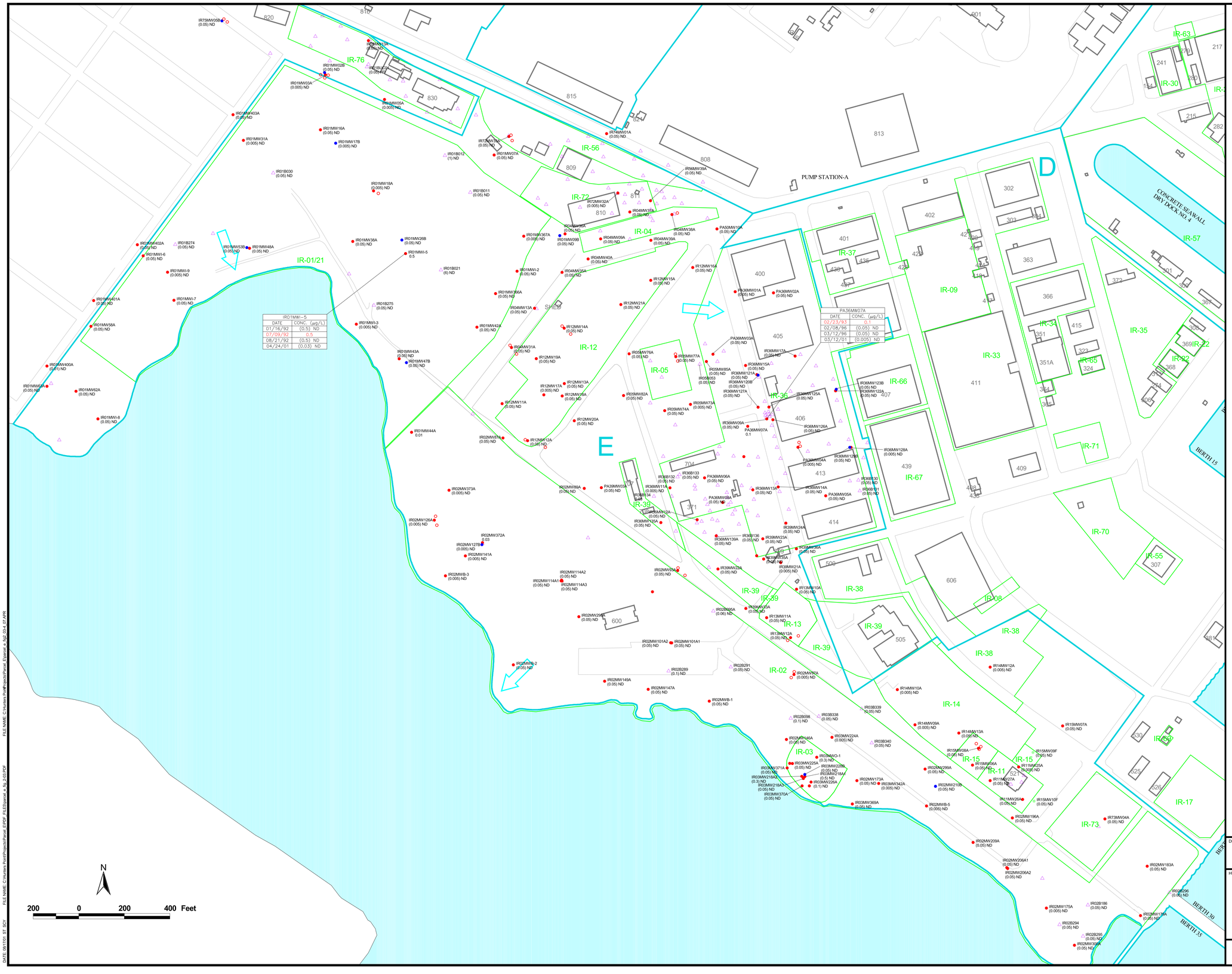
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

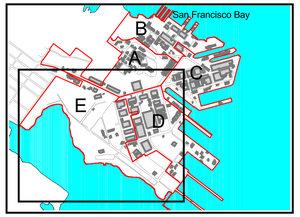
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-33
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
ENDRIN IN GROUNDWATER

Tetra Tech EM Inc.





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Heptachlor Concentration in micrograms per Liter (μg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

Note: Locations without associated data are those where no data for heptachlor exist.

	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	0.4	μg/L
California MCL	0.01	μg/L
Aquatic Criterion	0.0036	μg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-34
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
HEPTACHLOR IN GROUNDWATER

Tetra Tech EM Inc.

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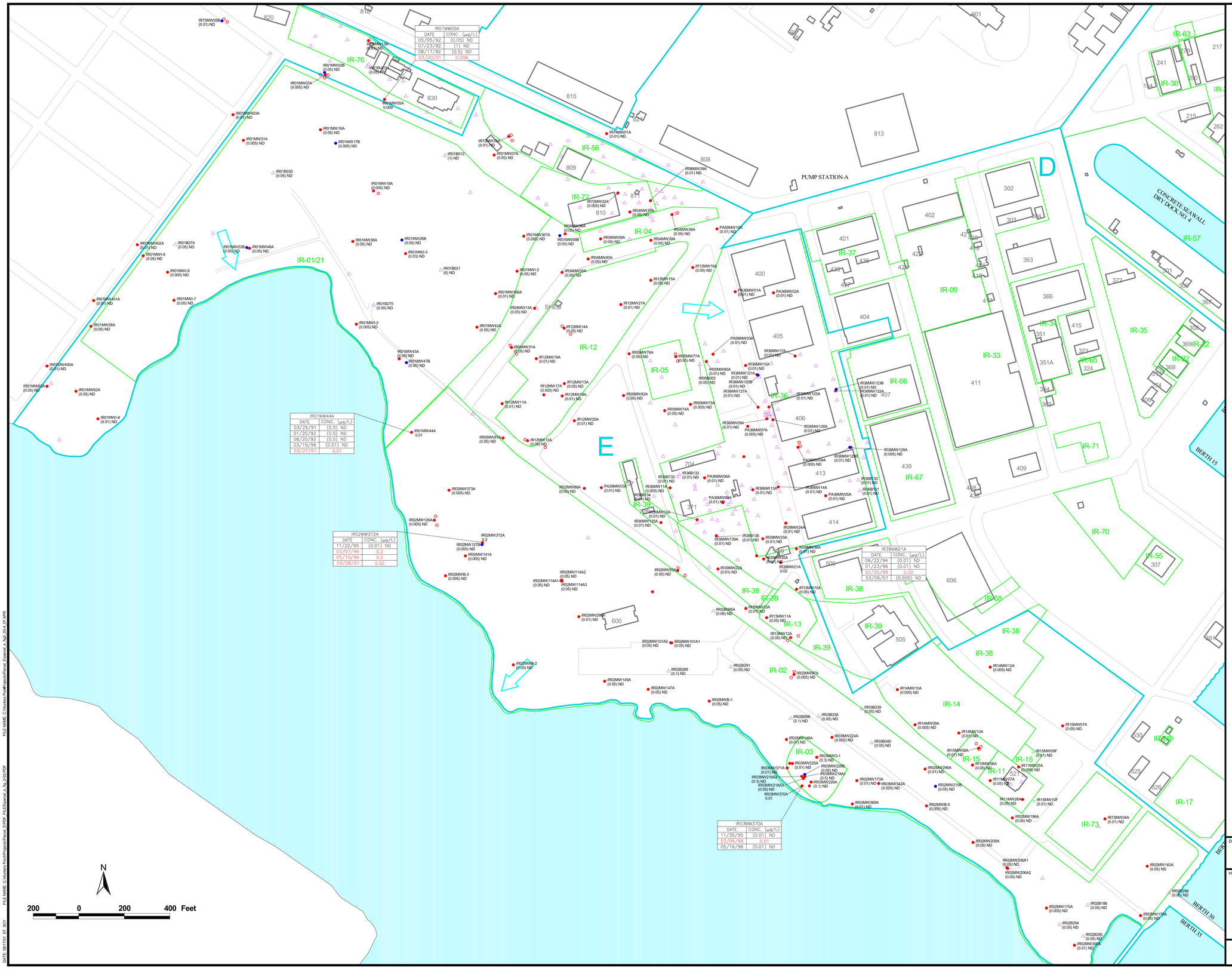
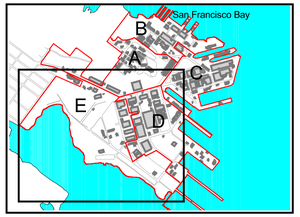
DATE: 09/17/01 ST SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Heptachlor Epoxide Concentration in micrograms per Liter (µg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
IR70MW12A DATE CONC. (µg/L) 10/20/95 1.8 01/12/96 (0.2) ND 02/14/96 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

Note: Locations without associated data are those where no data for heptachlor epoxide exist.

	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	0.2	µg/L
California MCL	0.01	µg/L
Aquatic Criterion	0.0036	µg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-35
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
HEPTACHLOR EPOXIDE IN GROUNDWATER

Tetra Tech EM Inc.

FILE NAME: C:\Hunters Pt\Projects\Parcel_E\PDF_FILES\parcel e fig. 2-03.PDF
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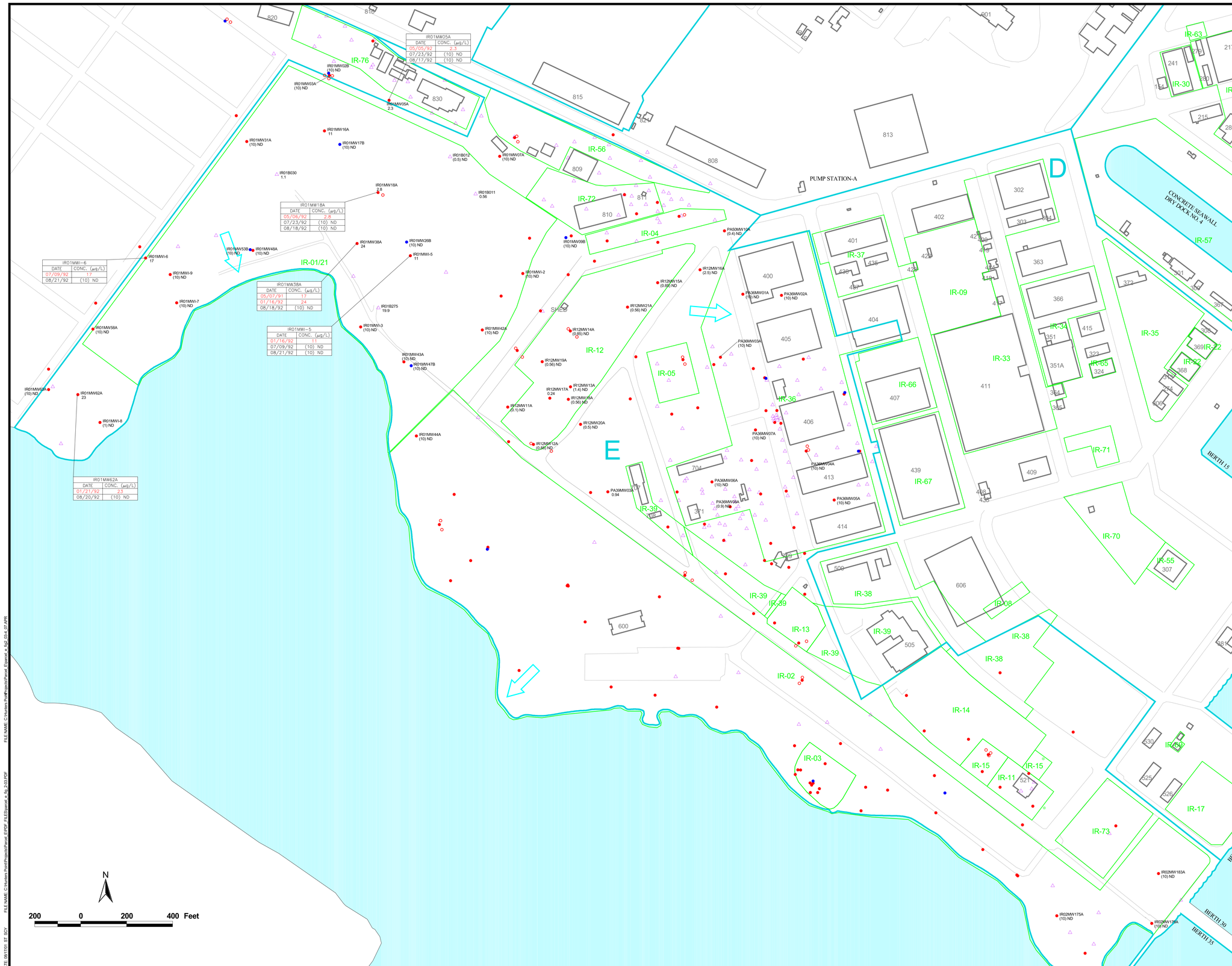
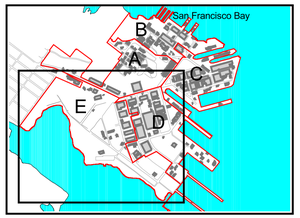
DATE: 08/17/01 ST SCY





Location Map

Legend

ND	Not detected at the associated detection limit
IR09MW01A 451	Sampling Location Identification with Cyanide Concentration in micrograms per Liter (µg/L)
	Boring-Grab Groundwater Sample
	A-Aquifer Monitoring Well
IR70MW12A DATE CONC. (µg/L) 10/20/95 1.8 01/12/96 (0.2) ND 02/14/96 9.2	Historical Analytical Results For Sampling Locations Where The Maximum Concentration Exceeds Applicable Screening Criteria.
	B-Aquifer Monitoring Well
	Bedrock Monitoring Well
	Piezometer

Note: Locations without associated data are those where no data for cyanide exist.

	General Groundwater Flow Direction
	Parcel Boundary
	IR Site Boundary
	San Francisco Bay
	Road
134	Building/Building Number

Federal MCL	200	µg/L
California MCL	200	µg/L
Aquatic Criterion	1	µg/L

MCL Maximum Contaminant Level

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE 4-36
PARCEL E A-AQUIFER
MAXIMUM CONCENTRATIONS OF
CYANIDE IN GROUNDWATER

Tetra Tech EM Inc.

TABLES

TABLE 2-1

PARCEL E
WELL CONSTRUCTION INFORMATION AND CURRENT CONDITIONS
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Well	Northing	Easting	Constructed Well Depth (feet bgs)	Ground Surface Elevation (feet msl)	Top of Casing Elevation (feet msl)	Top of Screen Elevation (feet msl)	Top of Screen Elevation (feet bgs)	Bottom of Screen Elevation (feet msl)	Current Condition
IR01									
IR01MW02B	452,006.87	1,457,472.91	37.0	19.16	20.61	-7.84	27	-17.84	Inspected Apr 2000; NPI
IR01MW03A	451,997.51	1,457,475.96	31.5	18.86	19.97	6.86	12	-8.14	Inspected Apr 2000; NPI
IR01MW05A	451,888.61	1,457,735.94	30.0	19.66	21.41	10.16	9.5	-6.84	Inspected Apr 2000; NPI
IR01MW07A	451,645.08	1,458,217.06	26.5	16.90	19.02	11.90	5	-5.10	Inspected Apr 2000; NPI
IR01MW09B	451,291.11	1,458,505.08	42.5	10.63	10.05	-21.37	32	-31.37	Inspected Apr 2000; NPI
IR01MW16A	451,755.55	1,457,454.71	27.0	20.52	23.85	9.02	11.5	-5.98	Inspected Apr 2000; Oxygen-deficient condition present Apr 2001.
IR01MW17B	451,696.82	1,457,521.49	48.5	21.84	29.95	-15.16	37	-25.16	Inspected Apr 2000; NPI
IR01MW18A	451,487.33	1,457,687.42	31.5	18.00	22.94	8.00	10	-10.00	Inspected Apr 2000; NPI
IR01MW26B	451,271.85	1,457,812.14	52.0	16.68	23.38	-24.32	41	-34.32	CNL during inspection nor repair; located Apr 2001.
IR01MW31A	451,709.10	1,457,116.33	26.5	11.58	13.81	5.58	6	-12.42	Inspected Apr 2000; NPI
IR01MW38A	451,265.90	1,457,596.70	25.0	11.19	17.30	4.19	7	-8.81	Inspected Apr 2000; NPI
IR01MW42A	450,889.61	1,458,141.19	31.5	11.27	14.03	-5.23	16.5	-13.73	Inspected Apr 2000; NPI
IR01MW43A	450,750.54	1,457,799.87	26.5	10.12	12.16	5.12	5	-12.38	Inspected Apr 2000; NPI
IR01MW44A	450,427.81	1,457,854.56	16.5	6.55	9.22	2.55	4	-1.45	Inspected Apr 2000; NPI
IR01MW47B	450,733.52	1,457,831.85	47.5	10.24	12.31	-24.76	35	-34.76	Inspected Apr 2000; NPI
IR01MW48A	451,235.62	1,457,143.24	25.5	9.12	10.96	4.12	5	-8.88	Inspected Apr 2000; NPI
IR01MW53B	451,238.55	1,457,131.37	44.0	8.78	10.01	-25.22	34	-35.22	Inspected Apr 2000; NPI
IR01MW58A	450,892.94	1,456,447.14	23.0	7.10	9.19	3.10	4	-9.41	Inspected Apr 2000; NPI
IR01MW62A	450,607.92	1,456,381.18	16.5	6.43	7.91	3.43	3	-6.57	Inspected Apr 2000; NPI
IR01MW63A	450,630.23	1,456,253.77	21.5	6.38	7.88	2.38	4	-11.62	Inspected Apr 2000; NPI
IR01MW366A	451,037.00	1,458,223.00	16.5	15.14	16.74	10.14	5	0.14	Inspected Apr 2000; NPI
IR01MW367A	451,289.00	1,458,347.00	16.5	10.21	12.12	5.21	5	-4.79	Inspected Apr 2000; NPI
IR01MW400A	450,719.00	1,456,254.00	21.5	9.20	11.58	4.20	5	-10.80	Inspected Apr 2000; NPI
IR01MW401A	451,006.00	1,456,459.00	21.5	14.30	13.87	9.30	5	-5.70	Inspected Apr 2000; NPI
IR01MW402A	451,251.00	1,456,651.00	21.0	13.34	12.51	7.84	5.5	-7.16	CNL during inspection nor repair; located Apr 2001.
IR01MW403A	451,822.00	1,457,071.00	21.5	13.37	13.00	7.87	5.5	-7.13	Inspected Apr 2000; NPI
IR01MWI-2	451,135.09	1,458,317.62	20.5	12.35	13.22	0.35	12	-4.65	Inspected Apr 2000; NPI
IR01MWI-3	450,902.28	1,457,612.06	17.0	12.56	13.80	0.56	12	-4.44	Inspected Apr 2000; NPI
IR01MWI-5	451,212.67	1,457,828.17	20.0	15.91	15.44	10.91	5	-4.09	Inspected Apr 2000; NPI
IR01MWI-6	451,202.46	1,456,676.72	11.5	8.89	9.55	4.89	4	-2.61	Well recently located, well condition assessment pending
IR01MWI-7	451,007.37	1,456,811.65	13.0	5.79	5.81	2.79	3	-7.21	Inspected Apr 2000; unable to open well; opened Apr 2001.
IR01MWI-8	450,486.93	1,456,477.47	12.5	4.12	6.64	2.12	2	-7.88	Inspected Apr 2000; NPI
IR01MWI-9	451,130.81	1,456,783.26	12.5	7.34	8.00	5.34	2	-4.66	Inspected Apr 2000; NPI
IR01P03A	451,982.82	1,457,473.29	27.0	19.43	20.13	12.43	7	-7.57	Inspected Apr 2000; NPI
IR01P03AA	451,995.00	1,457,488.00	27.5	21.49	20.98	9.49	12	-5.51	Inspected Apr 2000; NPI
IR01P03AB	451,997.00	1,457,455.00	27.5	20.47	19.87	8.47	12	-6.53	Inspected Apr 2000; NPI
IR01P18AB	451,476.00	1,457,708.00	15.0	19.31	18.91	9.81	9.5	4.81	Inspected Apr 2000; NPI

TABLE 2-1

PARCEL E
WELL CONSTRUCTION INFORMATION AND CURRENT CONDITIONS
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Well	Northing	Easting	Constructed Well Depth (feet bgs)	Ground Surface Elevation (feet msl)	Top of Casing Elevation (feet msl)	Top of Screen Elevation (feet msl)	Top of Screen Elevation (feet bgs)	Bottom of Screen Elevation (feet msl)	Current Condition
IR02									
IR02MW87A	450,403.14	1,458,255.65	15.0	8.86	8.48	4.36	4.5	-5.64	Inspected Apr 2000; NPI
IR02MW89A	450,181.69	1,458,612.51	31.5	8.58	10.08	2.58	6	-12.42	Inspected Apr 2000; NPI
IR02MW93A	449,821.52	1,459,022.89	19.0	7.64	7.25	3.64	4	-11.36	Inspected Apr 2000; NPI
IR02MW97A	449,365.27	1,459,533.52	28.0	6.64	8.95	1.64	5	-15.36	Inspected Apr 2000; redevelopment pending.
IR02MW101A1	449,503.94	1,458,996.46	17.0	9.23	11.23	2.23	7	-7.77	Inspected Apr 2000; NPI
IR02MW101A2	449,504.48	1,458,992.08	37.5	9.24	11.22	-17.76	27	-24.76	Inspected Apr 2000; NPI
IR02MW114A1	449,776.09	1,458,510.72	10.0	11.60	13.63	6.60	5	1.60	Inspected Apr 2000; NPI
IR02MW114A2	449,779.28	1,458,513.07	41.5	11.55	12.43	-1.45	13	-13.45	Inspected Apr 2000; NPI
IR02MW114A3	449,774.97	1,458,515.29	51.0	11.49	13.29	-30.51	42	-37.51	Inspected Apr 2000; NPI
IR02MW126A	450,042.18	1,457,954.82	18.0	10.15	11.36	5.15	5	-3.85	Inspected Apr 2000; NPI
IR02MW127B	449,934.87	1,458,163.41	65.5	12.58	14.59	-41.42	54	-51.42	Inspected Apr 2000; NPI
IR02MW141A	449,885.53	1,458,090.88	17.0	13.54	15.49	7.54	6	-2.46	Inspected Apr 2000; NPI
IR02MW146A	449,080.17	1,459,500.16	26.5	9.43	11.34	3.43	6	-8.57	Well contains product; not sampled in April 2001.
IR02MW147A	449,299.98	1,458,893.50	12.5	7.21	8.36	3.21	4	-1.79	Inspected Apr 2000; NPI
IR02MW149A	449,335.31	1,458,701.83	24.0	6.17	8.72	1.67	4.5	-13.33	Inspected Apr 2000; NPI
IR02MW173A	448,899.53	1,459,809.80	21.5	7.82	9.51	1.82	6	-11.18	Well contains thick product; not sampled in April 2001.
IR02MW175A	448,340.24	1,460,641.30	35.0	7.80	7.74	-1.20	9	-23.20	Inspected Apr 2000; NPI
IR02MW179A	448,306.99	1,461,054.61	22.5	8.37	9.82	3.87	4.5	-9.63	Inspected Apr 2000; NPI
IR02MW183A	448,523.61	1,461,083.62	41.0	8.73	10.40	4.73	4	-25.27	Inspected Apr 2000; NPI
IR02MW196A	448,735.65	1,460,492.35	16.5	8.54	8.05	4.24	4.3	-2.76	Inspected Apr 2000; NPI
IR02MW206A1	448,517.20	1,460,467.97	10.0	5.93	7.43	3.43	2.5	-1.58	Inspected Apr 2000; NPI
IR02MW206A2	448,513.75	1,460,471.23	22.5	5.82	7.41	-4.18	10	-14.18	Inspected Apr 2000; NPI
IR02MW209A	448,628.02	1,460,319.72	22.5	5.28	6.34	-3.72	9	-13.72	Inspected Apr 2000; NPI
IR02MW210B	448,874.22	1,460,154.48	41.5	7.19	9.17	-14.81	22	-22.81	Inspected Apr 2000; NPI
IR02MW298A	449,618.76	1,458,588.99	26.5	9.79	11.80	3.79	6	-11.21	Inspected Apr 2000; NPI
IR02MW299A	448,950.23	1,460,109.04	21.5	8.72	10.56	2.72	6	-12.28	Inspected Apr 2000; NPI
IR02MW300A	448,176.80	1,460,764.39	31.5	7.15	9.00	-0.65	7.8	-15.65	Inspected Apr 2000; NPI
IR02MW372A	449,944.00	1,458,166.00	15.0	12.22	14.21	7.22	5	-2.78	Inspected Apr 2000; NPI
IR02MW373A	450,174.00	1,458,019.00	15.0	11.84	11.34	6.84	5	1.84	Inspected Apr 2000; NPI
IR02MWB-1	449,248.10	1,459,161.49	19.5	7.34	8.47	-4.66	12	-9.66	Inspected Apr 2000; NPI
IR02MWB-2	449,407.48	1,458,301.67	20.5	11.19	11.88	7.19	4	-7.81	Inspected Apr 2000; NPI
IR02MWB-3	449,798.42	1,458,003.26	19.0	12.13	12.95	8.13	4	-6.87	Inspected Apr 2000; NPI
IR02MWB-5	448,787.96	1,460,115.24	17.0	4.78	4.74	1.78	3	-12.22	Inspected Apr 2000; NPI
IR02MWC5-W	449,728.34	1,458,911.99		8.05	7.49				Inspected Apr 2000; NPI; Complete construction information not available*
IR02P93AA	449,832.59	1,459,023.68	20.0	7.81	6.93	2.81	5	-12.19	Inspected Apr 2000; NPI
IR02P93AB	449,800.21	1,459,054.68	20.0	7.63	7.11	3.63	4	-11.37	Inspected Apr 2000; NPI
IR02P97AA	449,377.03	1,459,534.06	25.0	5.98	7.09	0.98	5	-17.02	Inspected Apr 2000; NPI
IR02P97AB	449,351.40	1,459,521.08	25.0	6.94	7.54	1.94	5	-18.06	Inspected Apr 2000; NPI
IR02P126AA	450,059.21	1,457,959.52	16.5	9.81	10.58	4.81	5	-5.19	Inspected Apr 2000; NPI
IR02P126AB	450,019.95	1,457,965.47	16.5	10.05	11.00	5.05	5	-4.95	Inspected Apr 2000; NPI

TABLE 2-1

PARCEL E
WELL CONSTRUCTION INFORMATION AND CURRENT CONDITIONS
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Well	Northing	Easting	Constructed Well Depth (feet bgs)	Ground Surface Elevation (feet msl)	Top of Casing Elevation (feet msl)	Top of Screen Elevation (feet msl)	Top of Screen Elevation (feet bgs)	Bottom of Screen Elevation (feet msl)	Current Condition
IR03									
IR03MW218A1	448,916.93	1,459,580.85	14.0	12.60	11.92	8.60	4	2.60	Well contains product; not sampled in April 2001.
IR03MW218A2	448,918.29	1,459,567.49	18.5	10.35	12.26	-2.15	12.5	-7.15	Inspected Apr 2000; NPI
IR03MW218A3	448,908.77	1,459,574.37	38.0	10.07	12.00	-9.93	20	-19.93	Inspected Apr 2000; NPI
IR03MW224A	449,089.45	1,459,700.21	21.5	9.14	10.92	4.64	4.5	-3.36	Inspected Apr 2000; NPI
IR03MW225A	448,974.12	1,459,526.71	21.5	13.00	12.27	9.00	4	-6.00	Well contains product; not sampled in April 2001.
IR03MW226A	448,893.20	1,459,608.51	20.5	12.66	11.81	8.66	4	-6.34	Well contains product; not sampled in April 2001.
IR03MW228B	448,926.20	1,459,580.66	68.0	10.27	12.12	-47.73	58	-57.73	Well contains product; not sampled in April 2001.
IR03MW342A	448,886.81	1,459,905.31	21.5	7.03	8.48	2.03	5	-7.47	Inspected Apr 2000; NPI
IR03MW369A	448,796.70	1,459,789.60	22.5	10.40	10.01	5.90	4.5	-9.10	Well contains product; not sampled in April 2001.
IR03MW370A	448,876.00	1,459,569.00	23.5	11.59	11.19	5.59	6	-9.41	Well contains product; not sampled in April 2001.
IR03MW371A	448,955.00	1,459,503.00	23.5	9.87	12.48	3.87	6	-11.13	Well contains product; not sampled in April 2001.
IR03MWO-1	449,001.74	1,459,633.43	18.5	12.73	11.92	0.73	12	-4.27	Well contains product; not sampled in April 2001.
IR03MWO-2	448,876.38	1,459,600.68	21.0	12.37	11.55	0.37	12	-4.63	Well contains product; not sampled in April 2001.
IR03MWO-3	448,975.07	1,459,514.31	20.0	12.88	9.22	0.88	12	-4.12	Well contains product; not sampled in April 2001.
IR04									
IR04MW09A	451,276.61	1,458,684.86	26.5	9.88	9.34	4.88	5	-10.12	Inspected Apr 2000; NPI
IR04MW13A	450,972.31	1,458,394.71	36.5	10.45	12.55	5.45	5	-9.55	Inspected Apr 2000; NPI
IR04MW31A	450,800.16	1,458,293.32	37.5	10.02	12.53	-0.98	11	-15.98	Inspected Apr 2000; NPI
IR04MW35A	451,129.72	1,458,515.33	31.0	9.38	11.11	2.38	7	-17.62	Inspected Apr 2000; NPI
IR04MW36A	451,298.96	1,458,528.10	36.0	10.28	9.84	4.28	6	-15.72	Inspected Apr 2000; NPI
IR04MW37A	451,395.22	1,458,812.73	32.0	10.25	9.54	2.75	7.5	-12.25	Inspected Apr 2000; NPI
IR04MW38A	451,383.46	1,458,997.82	26.0	10.41	9.76	4.41	6	-10.59	Inspected Apr 2000; NPI
IR04MW39A	451,270.47	1,458,905.37	31.0	8.82	7.86	3.82	5	-16.18	Inspected Apr 2000; NPI
IR04MW40A	451,189.01	1,458,629.78	34.0	7.98	7.16	2.98	5	-19.02	Inspected Apr 2000; NPI
IR04P31AA	450,809.55	1,458,286.47	19.0	10.99	11.89	1.99	9	-8.01	Inspected Apr 2000; NPI
IR04P31AB	450,771.13	1,458,315.48	30.0	10.96	12.14	0.96	10	-19.04	Inspected Apr 2000; NPI
IR04P38A	451,390.01	1,459,020.79	23.0	10.40	9.81	2.40	8	-12.60	Inspected Apr 2000; NPI
IR05									
IR05MW73A	450,550.36	1,459,079.14	21.0	6.97	6.59	1.47	5.5	-3.53	Inspected Apr 2000; NPI
IR05MW74A	450,522.95	1,458,965.76	31.0	7.62	7.40	1.62	6	-15.38	Well contains product; not sampled in April 2001.
IR05MW76A	450,772.44	1,458,809.50	17.5	5.89	4.97	0.89	5	-8.11	Well recently located, well condition assessment pending
IR05MW77A	450,760.23	1,459,014.65	37.5	9.02	10.43	2.02	7	-23.78	Inspected Apr 2000; NPI
IR05MW82A	450,589.49	1,458,785.02	44.5	10.63	12.00	3.63	7	-11.37	Well contains product; not sampled in April 2001.
IR05MW85A	450,738.99	1,459,148.72	26.5	7.95	9.80	1.95	6	-13.05	Inspected Apr 2000; NPI
IR05P77AA	450,770.83	1,459,012.66	39.0	9.03	10.04	1.03	8	-25.97	Inspected Apr 2000; NPI
IR05P77AB	450,740.50	1,459,022.42	35.0	8.94	9.62	3.94	5	-26.06	Inspected Apr 2000; NPI
IR11									
IR11MW25A	448,959.29	1,460,519.68	10.0	10.51	11.40	6.51	4	0.51	Inspected Apr 2000; NPI
IR11MW26A	448,816.70	1,460,536.86	9.0	8.59	9.33	3.59	5	-0.41	Inspected Apr 2000; NPI
IR11MW27A	448,899.06	1,460,394.84	10.0	8.86	9.84	3.86	5	-1.14	Inspected Apr 2000; NPI

TABLE 2-1

PARCEL E
WELL CONSTRUCTION INFORMATION AND CURRENT CONDITIONS
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Well	Northing	Easting	Constructed Well Depth (feet bgs)	Ground Surface Elevation (feet msl)	Top of Casing Elevation (feet msl)	Top of Screen Elevation (feet msl)	Top of Screen Elevation (feet bgs)	Bottom of Screen Elevation (feet msl)	Current Condition
IR12									
IR12MW11A	450,553.71	1,458,252.05	22.0	9.44	11.68	5.44	4	-7.56	Inspected Apr 2000; NPI
IR12MW12A	450,391.33	1,458,364.05	22.0	9.08	8.40	5.08	4	-7.92	Require redevelopment before resampling.
IR12MW13A	450,641.99	1,458,525.20	20.5	10.20	12.52	5.70	4.5	-9.30	Inspected Apr 2000; NPI
IR12MW14A	450,885.25	1,458,524.47	38.0	9.18	10.46	4.18	5	-10.82	Inspected Apr 2000; NPI
IR12MW15A	451,094.82	1,458,904.36	25.5	8.11	7.28	3.11	5	-11.89	Inspected Apr 2000; NPI
IR12MW16A	451,151.21	1,459,088.89	36.5	9.27	8.57	3.27	6	-6.73	Well contains product; not sampled in April 2001.
IR12MW17A	450,592.37	1,458,435.38	21.5	10.85	12.46	5.85	5	-4.15	Inspected Apr 2000; NPI
IR12MW18A	450,587.34	1,458,515.98	21.0	10.49	12.37	0.49	10	-9.51	Inspected Apr 2000; NPI
IR12MW19A	450,751.51	1,458,402.17	22.0	10.92	13.02	4.92	6	-10.08	Inspected Apr 2000. Above ground stovepipe unanchored - removable by hand; well head broken off.
IR12MW20A	450,478.54	1,458,568.79	22.0	10.24	12.27	4.24	6	-10.76	Inspected Apr 2000; NPI
IR12MW21A	450,988.49	1,458,773.04	21.5	8.20	10.42	3.20	5	-11.80	Well contains product; not sampled in April 2001.
IR12P12AA	450,361.58	1,458,441.15	20.0	8.86	9.81	4.86	4	-10.14	Inspected Apr 2000; NPI
IR12P12AB	450,395.14	1,458,353.14	20.0	9.09	10.09	5.09	4	-9.91	Inspected Apr 2000; NPI
IR12P14AA	450,893.73	1,458,515.01	26.5	9.72	10.68	5.72	4	-14.28	Inspected Apr 2000; NPI
IR12P14AB	450,858.82	1,458,552.96	25.0	9.14	10.43	4.14	5	-15.86	Inspected Apr 2000; NPI
IR13									
IR13MW10A	449,739.48	1,459,544.26	26.5	4.44	3.56	0.44	4	-13.56	Well recently located, well condition assessment pending
IR13MW11A	449,614.30	1,459,413.09	17.0	5.46	4.84	1.46	4	-4.04	Inspected Apr 2000; NPI
IR13MW12A	449,527.03	1,459,518.04	33.0	4.59	4.12	-0.42	5	-13.42	Inspected Apr 2000; NPI
IR13MWB5A-W	449,886.42	1,459,369.84		6.28	5.93				Inspected Apr 2000; vault repaired Feb 2001; Complete construction information not available*
IR13P12AA	449,514.66	1,459,505.16	18.0	4.73	4.49	-3.27	8	-13.27	Inspected Apr 2000; NPI
IR13P12AB	449,534.13	1,459,552.28	20.0	4.69	4.53	-0.31	5	-15.31	Inspected Apr 2000; NPI
IR14									
IR14MW09A	449,144.60	1,460,064.43	17.0	8.21	9.93	3.21	5	-4.79	Inspected Apr 2000; NPI
IR14MW10A	449,298.60	1,459,987.15	15.0	7.14	8.89	2.34	4.8	-7.66	Inspected Apr 2000; NPI
IR14MW12A	449,397.63	1,460,394.77	16.5	6.62	8.52	1.62	5	-9.88	Inspected Apr 2000; NPI
IR14MW13A	449,107.96	1,460,257.30	21.5	7.69	9.75	2.69	5	-12.31	Well contains product; not sampled in April 2001.
IR15									
IR15MW06A	448,967.51	1,460,317.17	19.0	9.12	11.11	3.12	6	-9.88	Inspected Apr 2000; NPI
IR15MW07A	449,139.09	1,460,712.87	20.0	9.59	11.18	4.59	5	-8.42	Inspected Apr 2000; NPI
IR15MW08A	449,041.19	1,460,343.13	65.5	9.71	11.70	4.71	5	-10.29	Inspected Apr 2000; NPI
IR15MW09F	449,022.87	1,460,582.98	46.0	9.64	11.48	-8.36	18	-18.36	Inspected Apr 2000; NPI
IR15MW10F	448,809.05	1,460,586.88	45.0	9.09	10.98	-8.91	18	-18.91	Inspected Apr 2000; NPI
IR15P08AA	449,048.00	1,460,353.00	21.0	12.18	11.65	7.18	5	-7.82	Inspected Apr 2000; NPI
IR15P08AB	449,061.00	1,460,333.00	21.0	12.01	11.41	7.01	5	-7.99	Inspected Apr 2000; NPI
IR15P08B	449,037.00	1,460,346.00	52.0	11.70	11.11	-30.30	42	-40.30	Inspected Apr 2000; NPI

TABLE 2-1

PARCEL E
WELL CONSTRUCTION INFORMATION AND CURRENT CONDITIONS
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Well	Northing	Easting	Constructed Well Depth (feet bgs)	Ground Surface Elevation (feet msl)	Top of Casing Elevation (feet msl)	Top of Screen Elevation (feet msl)	Top of Screen Elevation (feet bgs)	Bottom of Screen Elevation (feet msl)	Current Condition
IR36									
IR36MW09A	450,486.94	1,459,414.00	22.0	5.57	5.00	0.07	5.5	-14.93	Inspected Apr 2000; vault replaced Nov 2000.
IR36MW11A	450,184.64	1,458,989.17	22.5	9.00	8.55	3.00	6	-12.00	Inspected Apr 2000; NPI
IR36MW12A	450,044.49	1,459,108.25	22.5	7.95	7.18	1.95	6	-13.05	Inspected Apr 2000; NPI
IR36MW13A	450,175.58	1,459,352.74	11.0	6.76	8.96	0.76	6	-4.24	Inspected Apr 2000; NPI
IR36MW14A	450,187.95	1,459,464.23	16.5	5.97	5.42	-0.03	6	-10.03	Inspected Apr 2000; vault repaired Jan 2001.
IR36MW15A	450,721.17	1,459,321.00	22.0	7.58	7.04	1.58	6	-13.42	Inspected Apr 2000; NPI
IR36MW17A	450,762.29	1,459,538.12	22.0	8.85	8.36	2.85	6	-12.15	Inspected Apr 2000; NPI
IR36MW120B	450,679.00	1,459,376.00	73.0	7.81	7.05	-50.19	58	-65.19	Inspected Apr 2000; NPI
IR36MW121A	450,681.00	1,459,370.00	30.0	7.56	6.96	-7.44	15	-22.44	Inspected Apr 2000; NPI
IR36MW122A	450,610.00	1,459,716.00	33.0	8.22	7.64	-9.28	17.5	-24.28	Inspected Apr 2000; vault repaired Feb 2001.
IR36MW123B	450,617.00	1,459,719.00	65.0	8.22	7.55	-41.78	50	-56.78	Inspected Apr 2000; NPI
IR36MW125A	450,539.00	1,459,423.00	10.0	7.24	6.59	2.74	4.5	-2.26	Inspected Apr 2000; vault repaired Feb 2001.
IR36MW126A	450,483.00	1,459,441.00	10.0	5.82	5.16	1.82	4	-3.18	Inspected Apr 2000; vault replaced Nov 2000.
IR36MW127A	450,538.00	1,459,376.00	26.0	7.04	6.45	1.04	6	-18.96	Inspected Apr 2000; NPI
IR36MW128A	450,362.00	1,459,784.00	21.0	8.42	8.01	2.42	6	-12.58	Inspected Apr 2000; vault repaired Jan 2001.
IR36MW129B	450,362.00	1,459,778.00	70.0	8.39	7.80	-46.11	54.5	-61.11	Inspected Apr 2000; NPI
IR36MW135A	450,032.00	1,458,949.00	26.5	8.37	7.85	2.37	6	-17.63	Inspected Apr 2000; NPI
IR36MW137A	450,321.00	1,459,313.00	6.0	8.70	7.76	4.70	4	3.20	Inspected Apr 2000; vault replaced Nov 2000.
IR36MW139A	449,974.00	1,459,192.00	20.0	7.78	7.10	3.28	4.5	-11.72	Inspected Apr 2000; CNA - underneath large dumpster.
PA36MW01A	451,045.21	1,459,275.38	22.0	8.17	7.64	2.17	6	-13.33	Inspected Apr 2000; NPI
PA36MW02A	451,040.15	1,459,443.45	26.0	8.50	8.02	2.50	6	-13.00	Inspected Apr 2000; NPI
PA36MW03A	450,770.64	1,459,177.56	22.0	7.76	9.26	1.76	6	-8.24	Well contains product; not sampled in April 2001.
PA36MW04A	450,362.74	1,459,550.85	21.5	7.86	7.33	2.36	5.5	-13.14	Inspected Apr 2000; NPI
PA36MW05A	450,149.11	1,459,672.93	27.0	7.92	7.40	2.92	5	-17.08	Inspected Apr 2000; decommissioned.
PA36MW06A	450,227.84	1,459,140.98	27.0	9.55	8.94	3.55	6	-16.45	Inspected Apr 2000; decommissioned.
PA36MW07A	450,454.59	1,459,330.48	22.0	7.37	6.80	2.37	5	-12.63	Inspected Apr 2000; NPI
PA36MW08A	450,119.87	1,459,220.35	27.0	8.13	7.65	2.13	6	-12.87	Inspected Apr 2000; NPI
PA36P04AA	450,367.00	1,459,560.00	21.0	8.17	8.03	2.67	5.5	-12.33	Inspected Apr 2000; NPI
PA36P04AB	450,383.00	1,459,555.00	21.0	8.59	8.47	4.59	4	-10.41	Inspected Apr 2000; NPI
IR39									
IR39MW21A	449,855.96	1,459,475.49	13.0	5.87	7.92	-0.13	6	-7.13	Inspected Apr 2000; NPI
IR39MW22A	449,828.04	1,459,199.84	21.5	6.6	6.34	1.20	5.4	-13.80	Inspected Apr 2000; NPI
IR39MW23A	449,960.44	1,459,396.17	31.5	6.45	5.54	0.45	6	-14.55	Inspected Apr 2000; NPI
IR39MW24A	450,029.54	1,459,497.72	21.5	5.91	4.8	-0.09	6	-10.09	Inspected Apr 2000; NPI
IR39MW33A	449,655.00	1,459,322.00	24.5	4.88	4.31	-1.12	6	-19.12	Inspected Apr 2000; NPI
IR39MW35A	449,872.00	1,459,400.00	26.5	6.09	5.59	0.09	6	-19.91	Well contains product.
IR39MW36A	449,917.00	1,459,544.00	26.5	5.28	4.73	-0.72	6	-20.72	Inspected Apr 2000; NPI
PA39MW03A	450,184.78	1,458,687.99	26.0	8.89	10.46	3.89	5	-16.61	Inspected Apr 2000; NPI
IR50									
PA50MW10A	451,320.90	1,459,194.90	19.0	8.94	8.45	3.94	5	-9.06	Inspected Apr 2000; NPI

TABLE 2-1

PARCEL E
WELL CONSTRUCTION INFORMATION AND CURRENT CONDITIONS
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Well	Northing	Easting	Constructed Well Depth (feet bgs)	Ground Surface Elevation (feet msl)	Top of Casing Elevation (feet msl)	Top of Screen Elevation (feet msl)	Top of Screen Elevation (feet bgs)	Bottom of Screen Elevation (feet msl)	Current Condition
IR56									
IR56MW39A	451,444.10	1,458,903.58	22.0	10.36	9.84	4.36	6	-10.64	Inspected Apr 2000; NPI
IR72									
IR72MW32A	451,478.00	1,458,760.00	21.5	10.74	10.08	4.74	6	-10.26	Inspected Apr 2000; NPI
IR72MW33A	451,726.00	1,458,282.00	21.5	12.53	12.05	6.53	6	-8.47	Inspected Apr 2000; NPI
IR72P033AA	451,732.00	1,458,291.00	21.5	12.58	12.07	6.58	6	-8.42	Inspected Apr 2000; NPI
IR72P033AB	451,708.00	1,458,296.00	21.5	12.65	12.35	6.65	6	-8.35	Inspected Apr 2000; NPI
IR73									
IR73MW04A	448,731.00	1,460,898.00	21.5	14.06	13.48	8.06	6	-6.94	Inspected Apr 2000; NPI
IR74									
IR74MW01A	451,739.00	1,458,711.00	16.0	13.88	13.16	3.38	10.5	-1.62	Inspected Apr 2000; NPI
IR75									
IR75MW05B	452,234.00	1,457,022.00	21.5	15.96	15.57	4.96	11	-5.04	Inspected Apr 2000; vault replaced Sep 2000.
IR75P05AA	452,241.00	1,457,030.00	21.5	16.07	15.34	5.07	11	-4.93	Inspected Apr 2000; NPI
IR75P05AB	452,229.00	1,457,045.00	21.5	15.95	15.52	4.95	11	-5.05	Inspected Apr 2000; NPI
IR76									
IR76MW13A	452,147.00	1,457,665.00	24.5	20.04	19.69	11.04	9	-3.96	Inspected Apr 2000; NPI

Notes:

*	Wells with incomplete well construction information will be considered for decommissioning after consultation with the BCT
BCT	Base Realignment and Closure Act Cleanup Team
bgs	Below ground surface
CNA	Currently not accessible
CNL	Currently not located
IR	Installation restoration
IT	IT Corporation
msl	Mean sea level
NPI	No problems identified

TABLE 2-2

EVALUATION OF DATA QUALITY OBJECTIVES FOR WELL CONDITION SURVEY AND REPAIR
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA
(Page 1 of 1)

State the Problem	Identify the Decision(s)	Identify Inputs to the Decision(s)	Develop Decision Rules	Related Field Activities	Responses, Comments, and Conclusions
Most of the monitoring wells at Hunters Point Shipyard have not been sampled in more than 4 years, and their conditions are unknown.	Which monitoring wells are in a condition that requires repair or redevelopment prior to sample collection or water level measurement? Which monitoring wells are in a condition that requires decommissioning and replacement prior to sample collection or water level measurement?	Comprehensive survey of condition of all existing monitoring wells. Survey includes measuring the total depth of the well to assess silt buildup, measuring the depth to water to compare to historical levels, measuring product thickness to compare to historical levels, and a visual inspection of the general integrity of the well.	If a monitoring well has minor damage (for example, damaged surface casing), then repairs will be made. If a monitoring well has significant damage (for example, damaged well casing) that is beyond repair, then the well will be decommissioned. If the well location is deemed necessary for future monitoring, then the well will be replaced. If there is visual evidence of surface contamination entering the well casing, the well will be redeveloped, decommissioned, replaced, or reassessed, as appropriate. If a monitoring well is not damaged and does not show signs of surface contamination entering the well casing, then no action will be taken prior to sample collection. If well sediment covers less than 10 percent of the well screen interval, then no well redevelopment is necessary. If well sediment covers 10 to 50 percent of the well screen interval, then the well will be redeveloped. If well sediment covers more than 50 percent (or 3 feet, whichever is greater) of the well screen interval, then the well will be decommissioned. The well will be replaced if the location is deemed necessary for future monitoring.	During Phase I, existing wells were inspected for damage, and the following additional work was conducted, as needed: (1) minor repairs, (2) basic repairs (i.e., well vault repair or replacement), and (3) well redevelopment. IR01MW42A, IR01MWI-8, IR01MWI-9, IR02MW300A, IR02MW373A, IR04MW31A, IR12MW19A, PA36MW03A, PA36MW04A and IR39MW23A were re-developed in January 2001.	The well condition survey is complete but well maintenance will continue; the database will be continually updated as changes occur. Basic repairs are currently being made to additional monitoring wells, as needed (Table 2-1). Recently located wells and piezometers will be inspected, and follow-on actions will be identified, as needed. No wells were noted as having significant damage; therefore, none were decommissioned.

TABLE 3-1

PARCEL E GROUNDWATER ELEVATIONS, FEBRUARY 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Well	Aquifer Zone	Time of Measurement	TOC Elevation (feet msl)	Depth to Water (feet below TOC)[a]	Groundwater Elevation (feet msl)
IR01MW02B	MWB	2/14/01 11:45	20.61	15.09	5.52
IR01MW03A	MWA	2/14/01 11:37	19.97	15.21	4.76
IR01MW07A	MWA	2/14/01 12:05	19.02	9.49	9.53
IR01MW09B	MWB	2/14/01 12:25	10.05	9.28	0.77
IR01MW16A	MWA	2/14/01 11:15	23.85	20.71	3.14
IR01MW17B	MWB	2/14/01 11:08	29.95	24.18	5.77
IR01MW26B	MWB	2/14/01 10:38	23.38	19.55	3.83
IR01MW31A	MWA	2/14/01 11:22	13.81	6.67	7.14
IR01MW367A	MWA	2/14/01 12:25	12.12	9.98	2.14
IR01MW38A	MWA	2/14/01 10:44	17.30	14.51	2.79
IR01MW43A	MWA	2/14/01 13:00	12.16	9.87	2.29
IR01MW44A	MWA	2/14/01 13:07	9.22	5.89	3.33
IR01MW47B	MWB	2/14/01 13:04	12.31	8.29	4.02
IR01MW48A	MWA	2/14/01 10:45	10.96	6.60	4.36
IR01MW53B	MWB	2/14/01 10:50	10.01	5.12	4.89
IR01MW58A	MWA	2/14/01 11:10	9.19	6.02	3.17
IR01MW62A	MWA	2/14/01 11:05	7.91	4.59	3.32
IR01MWI-2	MWA	2/14/01 10:55	13.22	11.55	1.67
IR01MWI-3	MWA	2/14/01 10:34	13.80	11.31	2.49
IR02MW101A1	MWA	2/14/01 12:16	11.23	10.94	0.29
IR02MW114A1	MWA	2/14/01 11:09	13.63	7.40	6.23
IR02MW126A	MWA	2/14/01 10:58	11.36	8.69	2.67
IR02MW127B	MWB	2/14/01 10:59	14.59	11.14	3.45
IR02MW175A	MWA	2/14/01 11:46	7.74	7.67	0.07
IR02MW179A	MWA	2/14/01 11:28	9.82	10.28	-0.46
IR02MW196A	MWA	2/14/01 12:30	8.05	7.41	0.64
IR02MW206A1	MWA	2/14/01 11:36	7.43	7.39	0.04
IR02MW210B	MWB	2/14/01 10:39	9.17	8.79	0.38
IR02MW298A	MWA	2/14/01 11:05	11.80	5.98	5.82
IR02MW299A	MWA	2/14/01 10:42	10.56	10.18	0.38
IR02MW372A	MWA	2/14/01 11:01	14.21	10.78	3.43
IR02MW87A	MWA	2/14/01 11:30	8.48	3.50	4.98
IR02MW89A	MWA	2/14/01 11:17	10.08	7.49	2.59
IR02MW93A	MWA	2/14/01 10:44	7.25	6.98	0.27
IR02MWB-1	MWA	2/14/01 10:37	8.47	4.15	4.32
IR02MWB-3	MWA	2/14/01 10:50	12.95	10.31	2.64
IR02MWB-5	MWA	2/14/01 10:31	4.74	4.69	0.05
IR03MW218A1	MWA	2/14/01 10:50	11.92	9.23	2.69
IR03MW218A2	MWA	2/14/01 10:53	12.26	11.74	0.52
IR03MW218A3	MWA	2/14/01 10:44	12.00	11.41	0.59
IR03MW224A	MWA	2/14/01 11:15	10.92	10.72	0.20
IR03MW228B	MWB	2/14/01 10:56	12.12	9.59	2.53
IR03MW342A	MWA	2/14/01 10:35	8.48	8.08	0.40
IR03MW371A	MWA	2/14/01 10:59	12.48	10.50	1.98
IR04MW13A	MWA	2/14/01 11:52	12.55	10.58	1.97
IR04MW36A	MWA	2/14/01 12:23	9.84	8.36	1.48
IR04MW37A	MWA	2/14/01 12:30	9.54	8.20	1.34
IR04MW40A	MWA	2/14/01 12:20	7.16	5.72	1.44
IR11MW25A	MWA	2/14/01 12:08	11.40	7.36	4.04

TABLE 3-1

PARCEL E GROUNDWATER ELEVATIONS, FEBRUARY 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Well	Aquifer Zone	Time of Measurement	TOC Elevation (feet msl)	Depth to Water (feet below TOC)[a]	Groundwater Elevation (feet msl)
IR11MW26A	MWA	2/14/01 12:12	9.33	8.68	0.65
IR12MW11A	MWA	2/14/01 11:37	11.68	7.19	4.49
IR12MW13A	MWA	2/14/01 11:45	12.52	11.20	1.32
IR12MW14A	MWA	2/14/01 11:49	10.46	8.23	2.23
IR12MW15A	MWA	2/14/01 12:35	7.28	5.72	1.56
IR12MW17A	MWA	2/14/01 11:42	12.46	9.98	2.48
IR12MW20A	MWA	2/14/01 11:15	12.27	10.54	1.73
IR13MW12A	MWA	2/14/01 11:28	4.12	4.00	0.12
IR14MW09A	MWA	2/14/01 11:10	9.93	9.65	0.28
IR14MW10A	MWA	2/14/01 11:14	8.89	8.68	0.21
IR14MW12A	MWA	2/14/01 11:17	8.52	8.27	0.25
IR14MW13A	MWA	2/14/01 11:05	9.75	9.12	0.63
IR15MW06A	MWA	2/14/01 10:45	11.11	10.28	0.83
IR15MW07A	MWA	2/14/01 12:00	11.18	10.90	0.28
IR15MW08A	MWA	2/14/01 10:47	11.70	10.85	0.85
IR15MW10F	MWF	2/14/01 12:20	10.98	9.80	1.18
IR36MW09A	MWA	2/14/01 11:42	5.00	3.75	1.25
IR36MW120B	MWB	2/14/01 11:55	7.05	4.10	2.95
IR36MW121A	MWA	2/14/01 11:52	6.96	7.57	-0.61
IR36MW122A	MWA	2/14/01 11:25	7.64	8.35	-0.71
IR36MW123B	MWB	2/14/01 11:27	7.55	4.60	2.95
IR36MW126A	MWA	2/14/01 11:46	5.16	1.09	4.07
IR36MW128A	MWA	2/14/01 11:17	8.01	8.70	-0.69
IR36MW129B	MWB	2/14/01 11:20	7.80	5.12	2.68
IR36MW12A	MWA	2/14/01 11:25	7.18	7.03	0.15
IR36MW135A	MWA	2/14/01 11:19	7.85	7.60	0.25
IR36MW14A	MWA	2/14/01 11:13	5.52	5.59	-0.07
IR36MW17A	MWA	2/14/01 11:34	8.36	8.52	-0.16
IR39MW21A	MWA	2/14/01 10:55	7.92	6.81	1.11
IR39MW22A	MWA	2/14/01 12:03	6.34	6.25	0.09
IR39MW24A	MWA	2/14/01 11:04	4.80	4.85	-0.05
IR39MW33A	MWA	2/14/01 11:52	4.31	4.30	0.01
IR74MW01A	MWA	2/14/01 12:25	13.16	11.55	1.61
PA36MW01A	MWA	2/14/01 12:02	7.64	8.29	-0.65
PA36MW02A	MWA	2/14/01 12:07	8.02	8.68	-0.66
PA36MW08A	MWA	2/14/01 11:36	7.65	7.42	0.23
PA50MW10A	MWA	2/14/01 12:40	8.45	11.11	-2.66

Notes:

a	Depth to water was based on the median value of three field measurements at the well.
A	A aquifer
B	B aquifer
F	Bedrock aquifer
IR	Installation restoration
msl	Mean sea level
MW	Monitoring well
PA	Preliminary assessment
TOC	Top of casing

TABLE 3-2

EVALUATION OF DATA QUALITY OBJECTIVES FOR POTENTIOMETRIC SURFACE OF THE A-AQUIFER
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA
(Page 1 of 1)

State the Problem	Identify the Decision(s)	Identify Inputs to the Decision(s)	Develop Decision Rules	Related Field Activities	Responses, Comments, and Conclusions
The most current A-aquifer and potentiometric surface map was generated more than 4 years ago and may not reflect current groundwater flow conditions. Recharge and discharge from utility lines may be affecting groundwater flow. Potential ground settling may affect current groundwater elevation measurements.	What is the current potentiometric surface of the A-aquifer (particularly in the vicinity of existing groundwater RUs)?	Water level measurements from approximately 202 existing A-aquifer locations, to be collected using a sounder. Evaluate water level measurement data and interpret the potentiometric surface using (1) an appropriate numeric interpolation technique and (2) modification by a California Registered geologist. New survey measurement of tops of well casings for all locations included in the water level measurement event.	If the interpreted potentiometric surface at a given parcel predicts different flow directions when compared with historical data collected during the same season and at the same location, then the data may be further evaluated, depending on whether groundwater contamination is present, to identify the cause of the inconsistency. If the interpreted potentiometric surface at a given parcel predicts different flow directions when compared with historical data collected in the same season and at the same location and groundwater flow potentially affects RUs, then an evaluation of potential flow impacts from utility lines will be conducted and utility lines will be repaired, if necessary, and new water level measurements will be collected. If the interpreted potentiometric surface at a given parcel predicts different flow directions when compared with historical data collected in the same season and at the same location and groundwater flow in the area potentially affects RUs, and the data were not collected near utility lines, then (1) pressure transducers may be installed to confirm the data or (2) the data will be used to create an updated potentiometric surface map. If the interpreted potentiometric surface at a given parcel does not predict different flow directions (compared to historical data collected in the same season and at the same location), then no action will be taken. If the survey data at more than 30 percent of the resurveyed wells vary by more than 0.05 foot when compared with historical data, then 20 additional wells will be resurveyed before groundwater levels are measured. If the survey data at more than 30 percent of the resurveyed wells do not vary by more than 0.05 foot when compared with historical elevation data, then no action will be taken.	Water level measurements were collected from 187 A-aquifer monitoring wells on July 12, 2000, and a potentiometric surface contour map was prepared using the data (Figure D-5 of Appendix D). Water level measurements were collected from 313 A-aquifer wells on February 14, 2001, and a potentiometric surface contour map was prepared using the data (Figure 3-1). Top-of-casing elevations were measured for 24 wells. Top-of-casing or ground surface elevations, or both, were measured for 65 wells that lacked complete survey data. The resulting data varied from historical data by more than 0.05 foot at more than 30 percent of the wells, so all wells included in the Phase I water level measurement event, new wells installed during Phase II, and existing wells added to the Phase II groundwater data gap investigation were resurveyed; 187 A-aquifer wells were surveyed.	Current potentiometric surface maps were prepared from the Phase I and II water elevation data. These maps were compared with the existing water level elevation maps. The potentiometric surface and resulting directions of groundwater flow in the A-aquifer were found to be generally consistent with previous groundwater contour maps. No additional action is necessary. A new survey for top-of-casing elevations was conducted for every well where a groundwater elevation was collected for the potentiometric surface maps. No additional action is necessary.

Notes:
RU Remedial unit

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-01 (A-aquifer)	IR01MW03A	Aluminum	MCL	Confirm extent of listed metals
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Zinc	MCL	
		PCBs	MCL	Confirm extent of PCBs
		SVOCs	MCL	Confirm extent of 1,4-dichlorobenzene; Obtain SVOC data to eliminate data gaps
		VOCs	MCL	Confirm attenuation and extent of benzene
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
	IR01MW05A	Aluminum	MCL	Confirm extent of listed metals
		Antimony	HGAL/MCL	
		Arsenic	NAWQC	
		Cadmium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Silver	MCL	
		Zinc	MCL	
		PCBs	MCL	Confirm extent of PCBs
		VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
	IR01MW07A	Nickel	HGAL/NAWQC	Confirm extent of listed metals
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
	IR01MW16A	Aluminum	MCL	Confirm extent of listed metals
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		PCBs	MCL	Confirm extent of PCBs
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
	IR01MW18A	Aluminum	MCL	Confirm extent of listed metals
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Zinc	MCL	
		PCBs	MCL	Confirm extent of PCBs
		SVOCs	NAWQC	Confirm extent of phenanthrene
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-01	IR01MW31A	Lead	HGAL/NAWQC	Confirm extent of lead
(A-aquifer)		Aluminum	MCL	Confirm extent of aluminum
(cont.)		PCBs	MCL	Confirm extent of PCBs
		VOCs	MCL	Confirm attenuation and extent of benzene; confirm attenuation and migration of HVOCs
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW38A	VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
	IR01MW42A	Lead	HGAL/NAWQC	confirm extent of listed metals
		VOCs	MCL	Evaluate extent of VOC migration
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
	IR01MW43A	Antimony	HGAL/MCL	Confirm extent of antimony
		PCBs	MCL	Confirm extent of PCBs
		Pesticides	NAWQC	Confirm extent of pesticides; Obtain pesticide data to eliminate data gaps
		SVOCs	MCL	Confirm extent of 1,4-dichlorobenzene; Obtain SVOC data to eliminate data gaps
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of HVOCs, VOCs and benzene
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
	IR01MW44A	Zinc	MCL	Confirm extent of listed metals
		PCBs	MCL	Confirm extent of PCBs
		Pesticides	NAWQC	Confirm extent of pesticides
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW48A	Aluminum	MCL	Confirm extent of listed metals
		Barium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Zinc	MCL	
		VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
	IR01MW58A	Barium	MCL	Confirm extent of listed metals
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW62A	Aluminum	MCL	Confirm extent of listed metals
		Antimony	HGAL/MCL	
		Arsenic	NAWQC	
		Barium	MCL	
		Cadmium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Zinc	MCL	

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-01	IR01MW62A	SVOCs	NAWQC	Confirm extent of PAHs and SVOCs
(A-aquifer)	(cont.)	MNA	--	Assess process of natural attenuation
(cont.)		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW63A	Barium	MCL	Confirm extent of barium
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW366A	Cadmium	MCL	Confirm extent of listed metals
		Copper	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Zinc	MCL	
		SVOCs	NAWQC	Confirm extent of SVOCs
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW367A	Zinc	MCL	Confirm extent of listed metals
		Pesticides	NAWQC	Confirm extent of pesticides
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of benzene; evaluate VOC migration
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW400A[c]	PCBs	MCL	Confirm extent of PCBs
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW401A	VOCs, SVOCs, metals	--	Evaluate wells at site periphery
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW402A[b]	TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW403A	VOCs, SVOCs, metals	--	Evaluate wells at site periphery
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MWI-2	Aluminum	MCL	Confirm extent of listed metals
		Arsenic	NAWQC	
		Barium	MCL	
		Beryllium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Zinc	MCL	
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
	IR01MWI-3	Nickel	HGAL/NAWQC	Confirm extent of listed metals
		Zinc	MCL	
		PCBs	MCL	Confirm extent of PCBs
		SVOCs	NAWQC	Confirm extent of PAHs
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MWI-5	Antimony	HGAL/MCL	Confirm extent of listed metals
		Barium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-01	IR01MWI-5	Nickel	HGAL/NAWQC	
(A-aquifer)	(cont.)	Zinc	MCL	
(cont.)		PCBs	MCL	Confirm extent of PCBs and pesticides
		Pesticides	NAWQC	
		SVOCs	NAWQC	Confirm extent of SVOCs
		VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MWI-7[c]	VOCs, SVOCs, metals	--	Evaluate wells near shore
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MWI-8[d]	VOCs, SVOCs, metals	--	Evaluate wells near shore
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MWI-9	Aluminum	MCL	Confirm extent of listed metals
		Antimony	HGAL/MCL	
		Arsenic	NAWQC	
		Barium	MCL	
		Cadmium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Silver	MCL	
		Zinc	MCL	
		PCBs	MCL	Confirm extent of PCBs
		SVOCs	NAWQC	Confirm extent of PAHs; Obtain SVOC data to eliminate data gaps
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
IR-01	IR01MW02B	Aluminum	MCL	Confirm extent of aluminum
(B-aquifer)		Chromium, Chromium VI	MCL	Confirm the extent of chromium VI and chromium
		SVOCs	NAWQC	Confirm extent of phenanthrene
		VOCs	MCL	Evaluate possible migration from A aquifer
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
	IR01MW09B	TPH-ext, TPH-purg	--	Evaluate possible TPH, benzene migration and
		VOCs	MCL	VOCs from A aquifer
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW17B	Aluminum	MCL	Confirm extent of listed metals
		Antimony	HGAL/MCL	
		Cadmium	MCL	
		PCBs	MCL	Evaluate possible PCB and benzene migration
		VOCs	MCL	VOCs from A aquifer
		MNA	--	Assess process of natural attenuation
		SVOCs	NAWQC	Confirm presence or extent of bis(2-ethylhexyl) phthalate
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW26B[b]	TPH-ext, TPH-purg	--	Evaluate possible TPH, benzene migration and
		VOCs	MCL	VOCs from A aquifer
		SVOCs	NAWQC	Obtain SVOC data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		TDS	--	Obtain TDS data for beneficial use analysis

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-01	IR01MW47B	VOCs	MCL	Confirm extent and attenuation of HVOCs
(B-aquifer)		SVOCs	NAWQC	Obtain SVOC data to eliminate data gaps
(cont.)		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		TDS	--	Obtain TDS data for beneficial use analysis
	IR01MW53B	Cadmium	MCL	Confirm extent of cadmium
		TPH-ext, TPH-purg	--	Evaluate possible TPH, benzene migration and
		VOCs	MCL	VOCs from A aquifer
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
IR-02	IR02MW89A	Aluminum	MCL	Confirm extent of aluminum and nickel
(A-aquifer)		Nickel	HGAL/NAWQC	
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near former NRDL sites
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW93A	Nickel	HGAL/NAWQC	Confirm extent of nickel
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW97A	Cadmium	MCL	Confirm extent of cadmium
		Chromium, Chromium VI	MCL	Confirm extent of chromium and chromium VI
		Pesticides	NAWQC	Confirm extent of pesticides
		PCBs, VOCs, SVOCs	--	Confirm extent of IR03 plumes:
		Barium, Arsenic, Nickel	--	PCBs, Ba, As, Ni, VOCs, pentachlorophenol
		TPH-ext, TPH-purg	--	and TPH
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW101A1	Aluminum	MCL	Confirm the extent of listed metals and
		Chromium, Chromium VI	MCL	chromium VI
		Nickel	HGAL/NAWQC	
		SVOCs	NAWQC	Confirm extent of pentachlorophenol
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW101A2	Barium	MCL	Confirm extent of listed metals
		Cadmium	MCL	
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW114A1	Cadmium	MCL	Confirm extent of cadmium
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW114A2	Aluminum	MCL	Confirm extent of listed metals
		Cadmium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
	IR02MW114A3	Barium	MCL	Confirm extent of listed metals
		Cadmium	MCL	
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW126A	Barium	MCL	Confirm extent of listed metals
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Zinc	MCL	
		PCBs	MCL	Confirm extent of PCBs
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW141A	Aluminum	MCL	Confirm extent of listed metals
		Antimony	HGAL/MCL	
		Barium	MCL	
		Cadmium	MCL	
		Chromium, Chromium VI	MCL	

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-02	IR02MW141A	Copper	HGAL/NAWQC	
(A-aquifer)	(cont.)	Lead	HGAL/NAWQC	
(cont.)		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Silver	MCL	
		Zinc	MCL	
		PCBs	MCL	Confirm extent of PCBs
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
		SVOCs	NAWQC	Obtain SVOC data to eliminate data gaps
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW146A	PCBs	MCL	Confirm extent of PCBs
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of benzene
		SVOCs	NAWQC	Confirm extent of IR03 plumes: pentachlorophenol,
		Barium, Arsenic, Nickel	--	listed metals, VOCs, and PCBs
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW147A	SVOCs	NAWQC	Confirm extent of pentachlorophenol
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW149A	Copper	HGAL/NAWQC	Confirm extent of listed metals
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW173A[e]	Arsenic	NAWQC	Confirm extent of listed metals
		Barium	MCL	
		SVOCs	NAWQC	Confirm extent of phenanthrene
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW175A	Aluminum	MCL	Confirm extent of aluminum
		VOCs	MCL	Confirm attenuation and extent of HVOCs
		SVOCs	NAWQC	Obtain SVOC data to eliminate data gaps
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW179A	Cadmium	MCL	Confirm extent of cadmium and nickel
		Nickel	HGAL/NAWQC	
		VOCs	MCL	Confirm extent of VOCs at IR02MW175A
		SVOCs	NAWQC	Confirm extent of pentachlorophenol at IR02MW183A
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
	IR02MW183A	SVOCs	NAWQC	Confirm extent of pentachlorophenol
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW206A1	VOCs	MCL	Confirm extent of VOCs near IR02MW175A
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
	IR02MW206A2	VOCs	MCL	Confirm extent of VOCs near IR02MW175A
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-02 (A-aquifer) (cont.)	IR02MW209A	Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium -226 and -228	MCL	Confirm extent of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW298A	Aluminum	MCL	Confirm extent of metals at IR02MW114A2
		Cadmium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW299A	Copper	HGAL/NAWQC	Confirm extent of listed metals
		VOCs	MCL	Confirm attenuation and extent of HVOCs
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW300A	Copper	HGAL/NAWQC	Confirm extent of listed metals
		Nickel	HGAL/NAWQC	
		Zinc	MCL	
		VOCs	MCL	Confirm extent of VOCs near IR02MW175A
		SVOCs	NAWQC	Obtain SVOC data to eliminate data gaps
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW372A	Pesticides	NAWQC	Confirm extent of pesticides
		VOCs	MCL	Confirm attenuation and extent of benzene and HVOCs
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW373A	Antimony	HGAL/MCL	Confirm extent of listed metals
		Cadmium	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Zinc	MCL	
		PCBs	MCL	Confirm extent of PCBs
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MWB-1	Aluminum	MCL	Confirm extent of listed metals
		Arsenic	NAWQC	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Zinc	MCL	
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MWB-2	Aluminum	MCL	Confirm extent of listed metals and chromium VI
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Thallium	HGAL/NAWQC	
		Zinc	MCL	
		VOCs	MCL	Confirm attenuation and extent of HVOCs
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-02	IR02MWB-3	Aluminum	MCL	Confirm extent of listed metals
(A-aquifer)		Antimony	HGAL/MCL	
(cont.)		Cadmium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Zinc	MCL	
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
		SVOCs	NAWQC	Confirm extent of PAHs and Pentachlorophenol
				Obtain SVOC data to eliminate data gaps
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MWB-5	Nickel	HGAL/NAWQC	Confirm extent of listed metals
		PCBs	MCL	Confirm extent of PCBs
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
IR-02	IR02MW127B	VOCs, pesticides		Assess migration from A aquifer
(B-aquifer)		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near debris disposal areas
		TDS	--	Obtain TDS data for beneficial use analysis
	IR02MW210B	VOCs	MCL	Evaluate possible HVOC migration from A aquifer
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
IR-03	IR03MW218A1[e]	Barium	MCL	Confirm extent of listed metals
(A-aquifer)		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		PCBs	MCL	Confirm extent of PCBs
		SVOCs	NAWQC	Confirm extent of phenanthrene
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR03MW218A2	Barium	MCL	Confirm extent of listed metals
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Zinc	MCL	
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR03MW218A3	Barium	MCL	Confirm extent of barium
		VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR03MW224A	Aluminum	MCL	Confirm extent of listed metals
		Chromium, Chromium VI	MCL	Confirm extent of chromium and chromium VI
		Copper	HGAL/NAWQC	
		TPH-ext, TPH-purg	--	Confirm extent of IR03 contamination: SVOCs,
		SVOCs	NAWQC	VOCs, TPH, arsenic, barium, nickel; obtain
		VOCs	MCL	SVOC data to eliminate data gaps
		Arsenic, barium, nickel	--	

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-03 (A-aquifer) (cont.)	IR03MW224A (cont.)	MNA	--	Assess process of natural attenuation
		PCBs	MCL	Confirm extent of PCBs
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
	IR03MW225A[e]	Nickel	HGAL/NAWQC	Confirm extent of listed metals
		PCBs	MCL	Confirm extent of PCBs
		SVOCs	--	Confirm extent of SVOCs
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm extent of HVOCs
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
	IR03MW226A[e]	Aluminum	MCL	Confirm extent of listed metals
		Antimony	HGAL/MCL	
		Barium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Zinc	MCL	
		PCBs	MCL	Confirm extent of PCBs
		SVOCs	NAWQC	Confirm extent of phenanthrene
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of HVOCs and benzene
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
	IR03MW342A	Aluminum	MCL	Confirm extent of listed metals
		Arsenic	NAWQC	
		Barium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Zinc	MCL	
		TPH-ext, TPH-purg	--	Confirm extent of IR03 plumes: pentachlorophenol,
		SVOCs	NAWQC	PCB and TPH
		VOCs	MCL	Confirm attenuation and extent of benzene
		PCBs	MCL	and IR03 plumes
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR03MW369A[e]	SVOCs	NAWQC	Confirm extent of phenanthrene
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of benzene
		PCBs	MCL	Confirm extent of IR03 plumes: pentachlorophenol,
		Barium, Arsenic, Nickel	--	listed metals, VOCs, PCBs and TPH
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
	IR03MW370A[e]	Barium, Arsenic, Nickel	--	Confirm extent of barium and metals at IR03 plume
		PCBs	MCL	Confirm extent of PCBs from IR03 plume
		SVOCs	NAWQC	Confirm extent of phenanthrene
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of benzene
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-03	IR03MW371A	PCBs	MCL	Confirm extent of PCBs
(A-aquifer)		VOCs	MCL	Confirm extent of IR03 plumes: pentachlorophenol,
(cont.)		SVOCs	NAWQC	listed metals, VOCs, PCBs and TPH
		Barium, Arsenic, Nickel	--	
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
	IR03MWO-1[e]	Aluminum	MCL	Confirm extent of listed metals and of IR03 plume
		Arsenic	NAWQC	
		Barium	MCL	
		Chromium, Chromium VI	MCL	
		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		Nickel	HGAL/NAWQC	
		Zinc	MCL	
		PCBs	MCL	Confirm extent of PCBs
		SVOCs	NAWQC	Confirm extent of SVOCs
		VOCs	MCL	Confirm attenuation and extent of benzene
			--	Confirm attenuation and extent of HVOCs
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Confirm extent of radioactivity
		Radium-226 and -228	MCL	Confirm extent of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
IR-03	IR03MW228B	Cadmium	MCL	Confirm extent of cadmium
(B-aquifer)		Barium	MCL	Evaluate migration from A aquifer
		VOCs	MCL	Evaluate migration from A aquifer
		SVOCs	NAWQC	Obtain SVOC data to eliminate data gaps
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate migration of radioactivity
		TDS	--	Obtain TDS data for beneficial use analysis
IR-04	IR04MW13A	VOCs	MCL	Confirm attenuation and extent of HVOCs
(A-aquifer)		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR04MW31A	Arsenic	NAWQC	Confirm extent of arsenic
		VOCs	MCL	Evaluate migration from A aquifer
		TDS	--	Obtain TDS data for beneficial use analysis
	IR04MW35A	Nickel	HGAL/NAWQC	Confirm extent of nickel
		VOCs	MCL	Confirm attenuation and extent of HVOCs
	IR04MW35A	MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR04MW36A	Arsenic	NAWQC	Confirm extent of arsenic
		TDS	--	Obtain TDS data for beneficial use analysis
	IR04MW37A	VOCs	MCL	Confirm attenuation and extent of HVOCs
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR04MW38A	VOCs	MCL	Evaluate potential for VOC migration
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR04MW39A	VOCs	MCL	Confirm attenuation and extent of HVOCs
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR04MW40A	Lead	HGAL/NAWQC	Confirm extent of listed metals
		Nickel	HGAL/NAWQC	
		Cadmium	MCL	
		TDS	--	Obtain TDS data for beneficial use analysis
IR-05	IR05MW73A	PCBs	MCL	Confirm extent of PCBs
(A-aquifer)		TDS	--	Obtain TDS data for beneficial use analysis

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-05	IR05MW77A	Lead	HGAL/NAWQC	Confirm extent of lead
(A-aquifer)		TDS	--	Obtain TDS data for beneficial use analysis
(cont.)	IR05MW85A	Arsenic	NAWQC	Confirm extent of listed metals
		Cadmium	MCL	
		Copper	HGAL/NAWQC	
		Mercury	HGAL/NAWQC	
		SVOCs	NAWQC	Confirm extent of phenanthrene
		TDS	--	Obtain TDS data for beneficial use analysis
IR-11	IR11MW25A	VOCs	MCL	Confirm attenuation and extent of HVOCs
(A-aquifer)		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR11MW26A	VOCs	MCL	Confirm attenuation and extent of HVOCs
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR11MW27A	Copper	HGAL/NAWQC	Confirm extent of copper
		VOCs	MCL	Confirm attenuation and extent of HVOCs
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
IR-12	IR12MW11A	VOCs	MCL	Evaluate potential for VOC migration
(A-aquifer)		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR12MW13A	VOCs	MCL	Confirm attenuation and extent of HVOCs
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR12MW14A	VOCs	MCL	Evaluate potential for VOC migration
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR12MW17A	Barium	MCL	Confirm extent of barium
		TPH-ext, TPH-purg	--	Confirm attenuation and extent of TPH
		VOCs	MCL	Confirm attenuation and extent of HVOCs
				Confirm extent and attenuation of benzene
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR12MW18A	Arsenic	NAWQC	Confirm extent of listed metals
		Nickel	HGAL/NAWQC	
		VOCs	MCL	Evaluate potential for VOC migration
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR12MW19A	VOCs	MCL	Confirm attenuation and extent of HVOCs
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR12MW20A	Arsenic	NAWQC	Confirm extent of arsenic
		VOCs	MCL	Evaluate potential for VOC migration
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near former NRDL sites
	IR12MW21A[e]	Arsenic	NAWQC	Confirm extent of listed metals
		Barium	MCL	
		Cadmium	MCL	
		VOCs	MCL	Evaluate possible HVOC migration
		TPH-ext, TPH-purg	--	Confirm extent and attenuation of TPH
		SVOCs	NAWQC	Obtain SVOC data to eliminate data gaps;
				Confirm extent of phenanthrene
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-14	IR14MW09A	Mercury	HGAL/NAWQC	Confirm extent of listed metals
(A-aquifer)		Nickel	HGAL/NAWQC	
		TPH-ext, TPH-purg	--	Confirm extent of TPH contamination from IR14MW13A and IR15MW08A plume
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near former NRDL sites
		TDS	--	Obtain TDS data for beneficial use analysis
	IR14MW10A	Antimony	HGAL/MCL	Confirm extent of listed metals
		Cadmium	MCL	
		Lead	HGAL/NAWQC	
		PCBs	MCL	Confirm extent of IR03 plumes including
		VOCs	MCL	PCBs, barium, arsenic, nickel, VOCs
		SVOCs	NAWQC	and pentachlorophenol
		Barium, Arsenic, Nickel	--	
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near former NRDL sites
		TDS	--	Obtain TDS data for beneficial use analysis
	IR14MW12A	Cadmium	MCL	Confirm extent of cadmium and nickel
		Nickel	HGAL/NAWQC	
		TPH-ext, TPH-purg	--	Confirm extent of TPH contamination from IR14MW13A and IR15MW08A plume
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near former NRDL sites
		TDS	--	Obtain TDS data for beneficial use analysis
	IR14MW13A	Barium	MCL	Confirm extent of barium
		SVOCs	NAWQC	Confirm extent of phenanthrene
		TPH-ext, TPH-purg	--	Confirm extent and attenuation of TPH
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near former NRDL sites
IR-15	IR15MW06A	Lead	HGAL/NAWQC	Confirm extent of listed metals
(A-aquifer)		Thallium	HGAL/MCL	
		VOCs	MCL	Confirm attenuation and extent of HVOCs
		MNA	--	Assess process of natural attenuation
		TPH-ext, TPH-purg	--	Confirm extent of TPH contamination at IR14MW13A and IR15MW08A plume
		TDS	--	Obtain TDS data for beneficial use analysis
	IR15MW07A	Lead	HGAL/NAWQC	Confirm extent of lead and silver
		Silver	MCL	
		TPH-ext, TPH-purg	--	Confirm extent of TPH contamination at IR14MW13A and IR15MW08A plume
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near former NRDL sites
		TDS	--	Obtain TDS data for beneficial use analysis
	IR15MW08A	TPH-ext, TPH-purg	--	Confirm extent and attenuation of TPH
		MNA	--	Assess process of natural attenuation
		SVOCs	NAWQC	Confirm extent of phenanthrene; Obtain SVOC data to eliminate data gaps
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near former NRDL sites
		TDS	--	Obtain TDS data for beneficial use analysis
IR-15	IR15MW09F	VOCs	MCL	Evaluate potential for VOC migration
(Bedrock)		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near former NRDL sites
		TDS	--	Obtain TDS data for beneficial use analysis
	IR15MW10F	Arsenic	NAWQC	Confirm extent of arsenic
		VOCs	MCL	Evaluate potential for VOC migration
		TDS	--	Obtain TDS data for beneficial use analysis
IR-36	IR36MW11A	TPH-ext, TPH-purg	--	Confirm extent and attenuation of TPH
(A-aquifer)		VOCs	MCL	Evaluate potential for VOC migration
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near former NRDL sites
		TDS	--	Obtain TDS data for beneficial use analysis

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-36	IR36MW12A	TPH-ext, TPH-purg	--	Confirm extent and attenuation of TPH
(A-aquifer)		MNA	--	Assess process of natural attenuation
(cont.)		Gross Alpha, Gross Beta	MCL	Evaluate radioactivity near former NRDL sites
		TDS	--	Obtain TDS data for beneficial use analysis
	IR36MW14A	VOCs	MCL	Confirm extent of VOCs to the north
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR36MW125A	VOCs	MCL	Confirm attenuation and extent of HVOCs
		TDS	--	Obtain TDS data for beneficial use analysis
	IR36MW126A	VOCs	MCL	Evaluate possible HVOC migration other wells
		TDS	--	Obtain TDS data for beneficial use analysis
	IR36MW127A	VOCs	MCL	Evaluate possible HVOC migration other wells
		TDS	--	Obtain TDS data for beneficial use analysis
	IR36MW128A	VOCs	MCL	Confirm extent of VOCs to the north
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		TDS	--	Obtain TDS data for beneficial use analysis
	IR36MW135A	Cadmium	MCL	Confirm extent of cadmium
		TDS	--	Obtain TDS data for beneficial use analysis
	PA36MW03A[d]	Copper	HGAL/NAWQC	Confirm extent of listed metals
		Zinc	MCL	
		Pesticides	NAWQC	Confirm extent of 4,4 DDT
		TDS	--	Obtain TDS data for beneficial use analysis
	PA36MW04A	Copper	HGAL/NAWQC	Confirm extent of copper
		Pesticides	NAWQC	Confirm extent of pesticides
		VOCs	MCL	Confirm extent or attenuation of HVOCs
		TDS	--	Obtain TDS data for beneficial use analysis
	PA36MW07A	Pesticides	NAWQC	Confirm reduction of heptachlor
		VOCs	MCL	Confirm extent or attenuation of HVOCs
		TDS	--	Obtain TDS data for beneficial use analysis
	PA36MW08A	TPH-ext, TPH-purg	--	Confirm extent and attenuation of TPH
		SVOCs	NAWQC	Obtain SVOC data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
IR-36	IR36MW120B	VOCs	MCL	Evaluate possible HVOC migration from A aquifer
(B-aquifer)		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR36MW123B	VOCs	MCL	Evaluate possible HVOC migration from A aquifer
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
	IR36MW129B	VOCs	MCL	Evaluate possible HVOC migration from A aquifer
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
IR-39	IR39MW21A	Antimony	HGAL/MCL	Confirm extent of antimony
(A-aquifer)		Pesticides	NAWQC	Confirm extent of heptachlor; Obtain pesticides data to eliminate data gaps
		VOCs	MCL	Confirm extent or attenuation of benzene
		MNA	--	Assess process of natural attenuation
		SVOCs	NAWQC	Obtain SVOC data to eliminate data gaps
		PCBs	MCL	Confirm extent of PCBs
		TDS	--	Obtain TDS data for beneficial use analysis
	IR39MW23A	Aluminum	MCL	Confirm extent of aluminum
		TDS	--	Obtain TDS data for beneficial use analysis
	IR39MW33A	Barium	MCL	Confirm extent of barium
		VOCs	MCL	Confirm extent and attenuation of benzene
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
IR-50	PA50MW10A	Cadmium	MCL	Confirm extent of listed metals
(A-aquifer)		Copper	HGAL/NAWQC	
		Lead	HGAL/NAWQC	
		Zinc	MCL	

TABLE 4-1

PARCEL E WELLS - RATIONALE FOR SAMPLING AND ANALYSIS
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

IR Site	Monitoring Well	Target Analytes	Criteria of Concern[a]	Rationale for Resampling[f]
IR-50	PA50MW10A	VOCs	MCL	Evaluate possible migration of VOCs
(A-aquifer)	(cont.)	MNA	--	Assess process of natural attenuation
(cont.)		TDS	--	Obtain TDS data for beneficial use analysis
IR-56	IR56MW39A	TPH-ext, TPH-purg	--	Confirm extent and attenuation of TPH
(A-aquifer)		VOCs	MCL	Confirm extent and attenuation of benzene
		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis
IR-72	IR72MW32A	TPH-ext, TPH-purg	--	Confirm extent and attenuation of TPH
(A-aquifer)		VOCs	MCL	Evaluate possible migration of VOCs
		SVOCs	NAWQC	Obtain SVOC data to eliminate data gaps
		MNA	--	Assess process of natural attenuation
		Pesticides	NAWQC	Obtain pesticide data to eliminate data gaps
		TDS	--	Obtain TDS data for beneficial use analysis
IR-73	IR73MW04A	TPH-ext, TPH-purg	--	Confirm extent and attenuation of TPH
(A-aquifer)		MNA	--	Assess process of natural attenuation
		TDS	--	Obtain TDS data for beneficial use analysis

Notes:

a Criteria of concern are NAWQC or the lower of the state or federal MCLs, where above HGALs. Criteria listed are lower criteria for the contaminants of concern.

b These wells have not been located, and may not be available for sampling. Additional wells will be sampled if appropriate and/or new wells will be installed as necessary.

c The lids of these wells could not be opened during the well condition survey, and may not be available for sampling. Additional wells will be sampled if appropriate and/or new wells will be installed as necessary.

d This well was silted more than 50 percent, and may not be possible to sample. Redevelopment will be attempted. If not successful, a new well will be installed.

e These wells have viscous free product, and may not be possible to sample.

f A detailed rationale for identifying data gaps at Parcel E is included in Appendix B of the FSP addendum; meeting minutes from the November 7, 2000 Parcel E groundwater evaluation meeting are also included in Appendix B.

1 MNA parameters include reduced metals iron (II) and iron (III), calcium, magnesium, sodium, potassium, manganese (II), methane, ethane, ethene, nitrate, nitrite, sulfate, dissolved oxygen, oxygen reduction potential, chloride, total alkalinity, carbonate, bicarbonate, hydroxide alkalinity, and TDS. The wells indicated for MNA analysis will be sampled as feasible, but the total number of wells to be sampled may be reduced based on field conditions.

FSP Field sampling plan
HGAL Hunters Point groundwater ambient level
HVOC Halogenated volatile organic compound
IR Installation restoration
MCL Maximum contaminant limit
MNA Monitored natural attenuation (see note 1)
NAWQC National Ambient Water Quality Criteria
NRDL Naval Radiological Defense Laboratory
PA Preliminary assessment
PAH Polycyclic aromatic hydrocarbon
PCB Polychlorinated biphenyl
SVOC Semivolatile organic compound
TDS Total dissolved solids
TPH-ext Total petroleum hydrocarbons, extractables
TPH-purg Total petroleum hydrocarbons, purgeables
VOC Volatile organic compound

TABLE 4-2

PARCEL E
GROUNDWATER SAMPLES COLLECTED AND ANALYSES PERFORMED, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

	Analytes of Concern Data																									Fate and Transport Data													
	Laboratory Analyses																									Monitored Natural Attenuation										Laboratory	Laboratory	Field Measurement	
																										Laboratory Analysis						Field Measurement							
Well No.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Chromium VI	Copper	Lead	Manganese	Mercury	Nickel	Silver	Thallium	Zinc	CLP Metals	CLP PCBs	Pesticides	SVOCs	TPH-ext	TPH-purg	VOCs	Gross Alpha, Gross Beta	Radium-226 and -228	General Minerals (Calcium, Magnesium, Ferric Iron, Sodium & Potassium)	Methane, Ethane, Ethene	Nitrate-N, Nitrite-N	Major Anions (Sulfate, Chloride)	Total Alkalinity	Carbonate, Bicarbonate, Hydroxide alkalinity	Oxygen, dissolved	Oxygen Reduction Potential	Ferrous Iron (Fe2+)	Manganese (II) (Mn2+)	Total Dissolved Solids	Salinity	Water-Level	Near shore-well--sample at low tide
IR01																																							
IR01MW03A	1								1	1			1			1		1	1	1			1	1	1	1	1	1	1	1	1						1		
IR01MW05A	1	1	1			1	1	1	1	1		1	1	1		1		1					1	1		1	1	1	1	1	1			1					
IR01MW07A													1								1	1		1		1	1	1	1	1	1					1			
IR01MW18A	1						1	1	1	1		1	1			1		1		1	1	1	1	1	1	1	1	1	1	1	1					1			
IR01MW31A	1									1								1					1			1	1	1	1	1	1					1			
IR01MW38A																							1	1		1	1	1	1	1	1					1			
IR01MW42A										1													1	1		1	1	1	1	1						1			
IR01MW43A		1																1	1	1	1	1	1	1		1	1	1	1	1						1	1		
IR01MW44A																1		1	1		1	1		1		1	1	1	1	1	1					1			
IR01MW48A	1			1			1	1	1	1						1							1	1		1	1	1	1	1	1					1	1		
IR01MW58A				1																	1	1	1			1	1	1	1	1	1					1			
IR01MW62A	1	1	1	1		1	1	1	1	1		1	1			1				1						1	1	1	1	1	1					1			
IR01MW63A				1																																1			
IR01MW366A						1			1			1	1			1				1	1	1		1		1	1	1	1	1	1					1			
IR01MW367A																1			1		1	1	1	1		1	1	1	1	1	1					1			
IR01MW400A																		1								1	1	1	1	1	1					1			
IR01MW401A																	1			1			1			1	1	1	1	1	1					1			

TABLE 4-2

PARCEL E
GROUNDWATER SAMPLES COLLECTED AND ANALYSES PERFORMED, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

	Analytes of Concern Data																								Fate and Transport Data													
	Laboratory Analyses																								Monitored Natural Attenuation										Laboratory	Laboratory	Field Measurement	
																									Laboratory Analysis						Field Measurement							
Well No.	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Chromium VI**	**Copper**	**Lead**	**Manganese**	**Mercury**	**Nickel**	**Silver**	**Thallium**	**Zinc**	**CLP Metals**	**CLP PCBs**	**Pesticides**	**SVOCs**	**TPH-ext**	**TPH-purg**	**VOCs**	**Gross Alpha, Gross Beta**	**Radium-226 and -228**	**General Minerals (Calcium, Magnesium, Ferric Iron, Sodium & Potassium)**	**Methane, Ethane, Ethene**	**Nitrate-N, Nitrite-N**	**Major Anions (Sulfate, Chloride)**	**Total Alkalinity**	**Carbonate, Bicarbonate, Hydroxide alkalinity**	**Oxygen, dissolved**	**Oxygen Reduction Potential**	**Ferrous Iron (Fe2+)**	**Manganese (II) (Mn2+)**	**Total Dissolved Solids**	**Salinity**	**Water-Level**	**Near shore-well--sample at low tide**
IR01MW402A																					1	1				1	1	1	1	1	1					1			
IR01MW403A																	1			1			1			1	1	1	1	1	1					1			
IR01MWI-2	1		1	1	1		1	1	1	1		1	1			1								1												1			
IR01MWI-3													1			1		1		1	1	1	1	1		1	1	1	1	1	1					1			
IR01MWI-5		1		1			1	1	1	1		1	1			1		1	1	1			1	1		1	1	1	1	1	1					1	1		
IR01MWI-7																	1			1			1			1	1	1	1	1	1					1			
IR01MWI-8																	1			1			1			1	1	1	1	1	1					1			
IR01MWI-9	1	1	1	1		1	1	1	1	1		1	1	1		1		1	1	1						1	1	1	1	1	1					1			
IR01MW02B	1						1	1												1			1	1		1	1	1	1	1	1					1	1		
IR01MW09B																					1	1	1			1	1	1	1	1	1					1			
IR01MW17B	1	1				1												1		1			1	1		1	1	1	1	1	1					1	1		
IR01MW26B																				1	1	1	1	1		1	1	1	1	1	1					1	1		
IR01MW47B																				1			1	1		1	1	1	1	1	1					1	1		
IR01MW53B						1															1	1	1													1	1		
Total:	**10**	**6**	**4**	**7**	**1**	**6**	**8**	**8**	**9**	**10**		**7**	**10**	**2**		**12**	**4**	**11**	**6**	**16**	**12**	**12**	**22**	**18**	**2**	**28**	**28**	**28**	**28**	**28**	**26**			**1**		**29**	**9**		
IR02																																							
IR02MW89A	1												1											1															
IR02MW93A													1											1											1				

TABLE 4-2

PARCEL E
GROUNDWATER SAMPLES COLLECTED AND ANALYSES PERFORMED, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

	Analytes of Concern Data																								Fate and Transport Data													
	Laboratory Analyses																								Monitored Natural Attenuation										Laboratory	Laboratory	Field Measurement	
																									Laboratory Analysis						Field Measurement							
Well No.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Chromium VI	Copper	Lead	Manganese	Mercury	Nickel	Silver	Thallium	Zinc	CLP Metals	CLP PCBs	Pesticides	SVOCs	TPH-ext	TPH-purg	VOCs	Gross Alpha, Gross Beta	Radium-226 and -228	General Minerals (Calcium, Magnesium, Ferric Iron, Sodium & Potassium)	Methane, Ethane, Ethene	Nitrate-N, Nitrite-N	Major Anions (Sulfate, Chloride)	Total Alkalinity	Carbonate, Bicarbonate, Hydroxide alkalinity	Oxygen, dissolved	Oxygen Reduction Potential	Ferrous Iron (Fe2+)	Manganese (II) (Mn2+)	Total Dissolved Solids	Salinity	Water-Level	Near shore-well--sample at low tide
IR02MW97A			1	1		1	1	1					1					1	1	1	1	1	1	1		1	1	1	1	1	1					1			
IR02MW101A1	1						1	1					1							1																1			
IR02MW101A2				1		1																		1												1			
IR02MW114A1						1																														1			
IR02MW114A2	1					1	1	1	1				1											1												1			
IR02MW114A3				1		1																														1			
IR02MW126A				1					1	1						1		1						1	1	1	1	1	1	1	1					1			
IR02MW141A	1	1		1		1	1	1	1	1		1	1	1		1		1	1	1				1	1	1	1	1	1	1	1								
IR02MW147A																				1				1												1			
IR02MW149A									1															1												1			
IR02MW175A	1																		1	1			1	1	1											1			
IR02MW179A						1							1							1			1	1	1											1			
IR02MW206A1																							1	1	1											1			
IR02MW206A2																							1	1	1											1			
IR02MW209A																								1	1											1			
IR02MW298A	1					1	1	1	1				1											1												1			
IR02MW299A									1														1	1												1			
IR02MW300A									1				1			1				1			1	1												1			
IR02MW372A																			1				1	1		1	1	1	1	1	1	1	1	1	1	1	1		

TABLE 4-2

PARCEL E
GROUNDWATER SAMPLES COLLECTED AND ANALYSES PERFORMED, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

	Analytes of Concern Data																									Fate and Transport Data													
	Laboratory Analyses																									Monitored Natural Attenuation										Laboratory	Laboratory	Field Measurement	
																										Laboratory Analysis						Field Measurement							
Well No.	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Chromium VI**	**Copper**	**Lead**	**Manganese**	**Mercury**	**Nickel**	**Silver**	**Thallium**	**Zinc**	**CLP Metals**	**CLP PCBs**	**Pesticides**	**SVOCs**	**TPH-ext**	**TPH-purg**	**VOCs**	**Gross Alpha, Gross Beta**	**Radium-226 and -228**	**General Minerals (Calcium, Magnesium, Ferric Iron, Sodium & Potassium)**	**Methane, Ethane, Ethene**	**Nitrate-N, Nitrite-N**	**Major Anions (Sulfate, Chloride)**	**Total Alkalinity**	**Carbonate, Bicarbonate, Hydroxide alkalinity**	**Oxygen, dissolved**	**Oxygen Reduction Potential**	**Ferrous Iron (Fe2+)**	**Manganese (II) (Mn2+)**	**Total Dissolved Solids**	**Salinity**	**Water-Level**	**Near shore-well--sample at low tide**
IR02MW373A		1				1			1	1			1			1		1						1		1	1	1	1	1	1	1	1	1	1	1			
IR02MW127B																			1				1	1		1	1	1	1	1	1	1	1	1	1	1	1		
IR02MW210B																							1	1												1			
IR02MWB-1	1		1				1	1	1				1			1								1	1											1			
IR02MWB-2	1						1	1	1	1		1	1		1	1							1	1	1	1	1	1	1	1	1	1	1	1	1			
IR02MWB-3	1	1				1	1	1	1	1		1	1			1			1	1				1	1	1	1	1	1	1	1	1	1	1	1	1			
IR02MWB-5													1					1						1	1	1	1	1	1	1	1	1	1	1	1	1			
Total:	**9**	**3**	**2**	**5**		**10**	**8**	**8**	**11**	**5**		**3**	**14**	**1**	**1**	**7**		**5**	**6**	**8**	**1**	**1**	**11**	**25**	**11**	**9**	**9**	**9**	**9**	**9**	**9**	**6**	**6**	**6**	**6**	**26**	**2**		
IR03																																							
IR03MW218A2				1					1	1						1					1	1	1	1	1	1	1	1	1	1	1					1	1		
IR03MW218A3				1																			1	1	1	1	1	1	1	1	1					1	1		
IR03MW224A	1		1	1			1	1	1				1					1		1	1	1	1	1		1	1	1	1	1	1								
IR03MW342A	1		1	1			1	1	1	1		1	1			1		1		1	1	1	1	1		1	1	1	1	1	1					1			
Total:	**2**		**2**	**4**			**2**	**2**	**3**	**2**		**1**	**2**			**2**		**2**		**2**	**3**	**3**	**4**	**4**	**2**	**4**	**4**	**4**	**4**	**4**	**4**					**3**	**2**		
IR04																																							
IR04MW13A																							1			1	1	1	1	1	1					1			
IR04MW31A			1																				1													1			

TABLE 4-2

PARCEL E
GROUNDWATER SAMPLES COLLECTED AND ANALYSES PERFORMED, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

	Analytes of Concern Data																								Fate and Transport Data												
	Laboratory Analyses																								Monitored Natural Attenuation										Laboratory	Laboratory	Field Measurement	
																									Laboratory Analysis						Field Measurement							
Well No.	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Chromium VI**	**Copper**	**Lead**	**Manganese**	**Mercury**	**Nickel**	**Silver**	**Thallium**	**Zinc**	**CLP Metals**	**CLP PCBs**	**Pesticides**	**SVOCs**	**TPH-ext**	**TPH-purg**	**VOCs**	**Gross Alpha, Gross Beta**	**Radium-226 and -228**	**General Minerals (Calcium, Magnesium, Ferric Iron, Sodium & Potassium)**	**Methane, Ethane, Ethene**	**Nitrate-N, Nitrite-N**	**Major Anions (Sulfate, Chloride)**	**Total Alkalinity**	**Carbonate, Bicarbonate, Hydroxide alkalinity**	**Oxygen, dissolved**	**Oxygen Reduction Potential**	**Ferrous Iron (Fe2+)**	**Manganese (II) (Mn2+)**	**Total Dissolved Solids**	**Salinity**	**Water-Level**	**Near shore-well--sample at low tide**
IR04MW35A													1										1			1	1	1	1	1	1					1			
IR04MW36A			1																																1	1		
IR04MW37A																							1			1	1	1	1	1	1					1			
IR04MW38A																							1			1	1	1	1	1	1					1			
IR04MW39A																										1	1	1	1	1	1					1			
IR04MW40A						1				1			1																						1			
Total:			**2**			**1**				**1**			**2**										**5**			**5**	**5**	**5**	**5**	**5**	**5**					**8**	**1**		
IR05																																						
IR05MW73A																		1																	1			
IR05MW85A			1			1			1			1								1															1			
Total:			**1**			**1**			**1**			**1**						**1**		**1**															**2**			
IR11																																						
IR11MW25A																			1				1			1	1	1	1	1	1					1			
IR11MW26A																							1			1	1	1	1	1	1					1			
IR11MW27A									1														1			1	1	1	1	1	1					1			
Total:									**1**										**1**				**3**			**3**	**3**	**3**	**3**	**3**	**3**					**3**			

TABLE 4-2

PARCEL E
GROUNDWATER SAMPLES COLLECTED AND ANALYSES PERFORMED, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

	Analytes of Concern Data																								Fate and Transport Data													
	Laboratory Analyses																								Monitored Natural Attenuation										Laboratory	Laboratory	Field Measurement	
																									Laboratory Analysis						Field Measurement							
Well No.	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Chromium VI**	**Copper**	**Lead**	**Manganese**	**Mercury**	**Nickel**	**Silver**	**Thallium**	**Zinc**	**CLP Metals**	**CLP PCBs**	**Pesticides**	**SVOCs**	**TPH-ext**	**TPH-purg**	**VOCs**	**Gross Alpha, Gross Beta**	**Radium-226 and -228**	**General Minerals (Calcium, Magnesium, Ferric Iron, Sodium & Potassium)**	**Methane, Ethane, Ethene**	**Nitrate-N, Nitrite-N**	**Major Anions (Sulfate, Chloride)**	**Total Alkalinity**	**Carbonate, Bicarbonate, Hydroxide alkalinity**	**Oxygen, dissolved**	**Oxygen Reduction Potential**	**Ferrous Iron (Fe2+)**	**Manganese (II) (Mn2+)**	**Total Dissolved Solids**	**Salinity**	**Water-Level**	**Near shore-well--sample at low tide**
IR12																																						
IR12MW11A																							1			1	1	1	1	1	1					1			
IR12MW13A																							1			1	1	1	1	1	1					1			
IR12MW14A																							1			1	1	1	1	1	1					1			
IR12MW17A				1															1		1	1	1			1	1	1	1	1	1					1			
IR12MW18A			1										1										1			1	1	1	1	1	1					1			
IR12MW19A																							1			1	1	1	1	1	1					1			
IR12MW20A			1																				1	1		1	1	1	1	1	1					1			
Total:			**2**	**1**									**1**						**1**		**1**	**1**	**7**	**1**		**7**	**7**	**7**	**7**	**7**	**7**					**7**			
IR14																																						
IR14MW09A												1	1						1		1	1		1		1	1	1	1	1	1					1			
IR14MW10A		1	1	1		1				1			1					1		1			1	1												1			
IR14MW12A						1							1						1		1	1		1												1			
Total:		**1**	**1**	**1**		**2**				**1**		**1**	**3**					**1**	**2**	**1**	**2**	**2**	**1**	**3**		**1**	**1**	**1**	**1**	**1**	**1**					**3**			
IR15																																						
IR15MW06A										1					1						1	1	1			1	1	1	1	1	1					1			

TABLE 4-2

PARCEL E
GROUNDWATER SAMPLES COLLECTED AND ANALYSES PERFORMED, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

	Analytes of Concern Data																								Fate and Transport Data												
	Laboratory Analyses																								Monitored Natural Attenuation										Laboratory	Laboratory	Field Measurement	
																									Laboratory Analysis						Field Measurement							
Well No.	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Chromium VI**	**Copper**	**Lead**	**Manganese**	**Mercury**	**Nickel**	**Silver**	**Thallium**	**Zinc**	**CLP Metals**	**CLP PCBs**	**Pesticides**	**SVOCs**	**TPH-ext**	**TPH-purg**	**VOCs**	**Gross Alpha, Gross Beta**	**Radium-226 and -228**	**General Minerals (Calcium, Magnesium, Ferric Iron, Sodium & Potassium)**	**Methane, Ethane, Ethene**	**Nitrate-N, Nitrite-N**	**Major Anions (Sulfate, Chloride)**	**Total Alkalinity**	**Carbonate, Bicarbonate, Hydroxide alkalinity**	**Oxygen, dissolved**	**Oxygen Reduction Potential**	**Ferrous Iron (Fe2+)**	**Manganese (II) (Mn2+)**	**Total Dissolved Solids**	**Salinity**	**Water-Level**	**Near shore-well--sample at low tide**
IR15MW07A										1				1							1	1		1												1			
IR15MW08A																				1	1	1		1		1	1	1	1	1	1					1			
IR15MW09F																							1	1												1			
IR15MW10F			1																				1													1			
Total:			**1**							**2**				**1**	**1**					**1**	**3**	**3**	**3**	**3**		**2**	**2**	**2**	**2**	**2**	**2**					**5**			
IR36																																							
IR36MW11A																			1		1	1	1	1												1			
IR36MW12A																					1	1		1		1	1	1	1	1	1					1			
IR36MW14A																							1			1	1	1	1	1	1					1			
IR36MW125A																							1													1			
IR36MW126A																							1													1			
IR36MW127A																							1													1			
IR36MW128A																			1				1													1	1		
IR36MW135A						1																														1			
PA36MW03A																																				1			
PA36MW04A									1										1				1													1			
PA36MW07A																			1				1													1			

TABLE 4-2

PARCEL E
GROUNDWATER SAMPLES COLLECTED AND ANALYSES PERFORMED, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

	Analytes of Concern Data																									Fate and Transport Data													
	Laboratory Analyses																									Monitored Natural Attenuation										Laboratory	Laboratory	Field Measurement	
																										Laboratory Analysis						Field Measurement							
Well No.	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Chromium VI**	**Copper**	**Lead**	**Manganese**	**Mercury**	**Nickel**	**Silver**	**Thallium**	**Zinc**	**CLP Metals**	**CLP PCBs**	**Pesticides**	**SVOCs**	**TPH-ext**	**TPH-purg**	**VOCs**	**Gross Alpha, Gross Beta**	**Radium-226 and -228**	**General Minerals (Calcium, Magnesium, Ferric Iron, Sodium & Potassium)**	**Methane, Ethane, Ethene**	**Nitrate-N, Nitrite-N**	**Major Anions (Sulfate, Chloride)**	**Total Alkalinity**	**Carbonate, Bicarbonate, Hydroxide alkalinity**	**Oxygen, dissolved**	**Oxygen Reduction Potential**	**Ferrous Iron (Fe2+)**	**Manganese (II) (Mn2+)**	**Total Dissolved Solids**	**Salinity**	**Water-Level**	**Near shore-well--sample at low tide**
PA36MW08A																				1	1	1				1	1	1	1	1	1					1			
IR36MW120B																							1													1			
IR36MW123B																							1													1			
IR36MW129B																							1													1	1		
Total:						**1**			**1**										**4**	**1**	**3**	**3**	**11**	**2**		**3**	**3**	**3**	**3**	**3**	**3**					**15**	**2**		
IR39																																							
IR39MW21A		1																1	1	1			1			1	1	1	1	1	1					1			
IR39MW23A	1																																			1			
IR39MW33A				1																			1			1	1	1	1	1	1					1			
Total:	**1**	**1**		**1**														**1**	**1**	**1**			**2**			**2**	**2**	**2**	**2**	**2**	**2**					**3**			
IR50																																							
PA50MW10A						1			1	1						1							1			1	1	1	1	1	1					1			
Total:						**1**			**1**	**1**						**1**							**1**			**1**	**1**	**1**	**1**	**1**	**1**					**1**			
IR56																																							
IR56MW39A																					1	1	1			1	1	1	1	1	1					1			
Total:																					**1**	**1**	**1**			**1**	**1**	**1**	**1**	**1**	**1**					**1**			

TABLE 4-2

PARCEL E
GROUNDWATER SAMPLES COLLECTED AND ANALYSES PERFORMED, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

	Analytes of Concern Data																									Fate and Transport Data													
	Laboratory Analyses																									Monitored Natural Attenuation										Laboratory	Laboratory	Field Measurement	Near shore-well--sample at low tide
																										Laboratory Analysis						Field Measurement							
Well No.	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Chromium VI**	**Copper**	**Lead**	**Manganese**	**Mercury**	**Nickel**	**Silver**	**Thallium**	**Zinc**	**CLP Metals**	**CLP PCBs**	**Pesticides**	**SVOCs**	**TPH-ext**	**TPH-purg**	**VOCs**	**Gross Alpha, Gross Beta**	**Radium-226 and -228**	**General Minerals (Calcium, Magnesium, Ferric Iron, Sodium & Potassium)**	**Methane, Ethane, Ethene**	**Nitrate-N, Nitrite-N**	**Major Anions (Sulfate, Chloride)**	**Total Alkalinity**	**Carbonate, Bicarbonate, Hydroxide alkalinity**	**Oxygen, dissolved**	**Oxygen Reduction Potential**	**Ferrous Iron (Fe2+)**	**Manganese (II) (Mn2+)**	**Total Dissolved Solids**	**Salinity**	**Water-Level**	
IR72																																							
IR72MW32A																			1	1	1	1	1			1	1	1	1	1	1					1			
Total:																			**1**	**1**	**1**	**1**	**1**			**1**	**1**	**1**	**1**	**1**	**1**					**1**			
IR73																																							
IR73MW04A																					1	1				1	1	1	1	1	1					1			
Total:																					**1**	**1**				**1**	**1**	**1**	**1**	**1**	**1**					**1**			

Notes:

CLP	Contract laboratory program
IR	Installation restoration
PCB	Polychlorinated biphenyls
SVOC	Semivolatile organic compounds
TPH-ext	Total petroleum hydrocarbons-extractable range
TPH-purg	Total petroleum hydrocarbons-purgeable range
VOC	Volatile organic compound

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW03A	3/20/2001	ALKALINITY, TOTAL (AS CACO3)	530000		µg/L
		3/20/2001	CHLORIDE	953000		µg/L
		3/20/2001	SULFATE	167000		µg/L
		3/20/2001	NITRATE/NITRITE NITROGEN	1600		µg/L
		3/20/2001	NITRITE NITROGEN	17		µg/L
		3/20/2001	NITRATE AS N	1600		µg/L
		3/20/2001	ALUMINUM	41.8	U	µg/L
		3/20/2001	CALCIUM	25300		µg/L
		3/20/2001	COPPER	5	J	µg/L
		3/20/2001	IRON	719		µg/L
		3/20/2001	LEAD	1.3	UJ3	µg/L
		3/20/2001	MAGNESIUM	64200		µg/L
		3/20/2001	NICKEL	3.9	U2	µg/L
		3/20/2001	POTASSIUM	52400	J4	µg/L
		3/20/2001	SODIUM	815000		µg/L
		3/20/2001	ZINC	16.5	J	µg/L
		3/20/2001	ALPHA-BHC	0.005	U	µg/L
		3/20/2001	BETA-BHC	0.005	U	µg/L
		3/20/2001	DELTA-BHC	0.005	U	µg/L
		3/20/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/20/2001	HEPTACHLOR	0.005	U	µg/L
		3/20/2001	ALDRIN	0.005	U	µg/L
		3/20/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/20/2001	ENDOSULFAN I	0.005	U	µg/L
		3/20/2001	DIELDRIN	0.01	U	µg/L
		3/20/2001	4,4'-DDE	0.01	U	µg/L
		3/20/2001	ENDRIN	0.01	U	µg/L
		3/20/2001	ENDOSULFAN II	0.01	U	µg/L
		3/20/2001	4,4'-DDD	0.01	U	µg/L
		3/20/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/20/2001	4,4'-DDT	0.01	U	µg/L
		3/20/2001	METHOXYCHLOR	0.05	U	µg/L
		3/20/2001	ENDRIN KETONE	0.01	U	µg/L
		3/20/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/20/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/20/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/20/2001	TOXAPHENE	0.5	U	µg/L
		3/20/2001	AROCLOR-1016	0.1	U	µg/L
		3/20/2001	AROCLOR-1221	0.2	U	µg/L
		3/20/2001	AROCLOR-1232	0.1	U	µg/L
		3/20/2001	AROCLOR-1242	0.1	U	µg/L
		3/20/2001	AROCLOR-1248	0.1	UJ9	µg/L
		3/20/2001	AROCLOR-1254	0.1	UJ9	µg/L
		3/20/2001	AROCLOR-1260	0.1	U	µg/L
		3/20/2001	PHENOL	1	U	µg/L
		3/20/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/20/2001	2-CHLOROPHENOL	1	U	µg/L
		3/20/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,4-DICHLOROBENZENE	1	J	µg/L
		3/20/2001	1,2-DICHLOROBENZENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW03A	3/20/2001	2-METHYLPHENOL	1	U	µg/L
		3/20/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/20/2001	4-METHYLPHENOL	0.6	J	µg/L
		3/20/2001	HEXACHLOROETHANE	1	U	µg/L
		3/20/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/20/2001	NITROBENZENE	1	U	µg/L
		3/20/2001	ISOPHORONE	1	U	µg/L
		3/20/2001	2-NITROPHENOL	1	U	µg/L
		3/20/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/20/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/20/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/20/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/20/2001	NAPHTHALENE	1	U	µg/L
		3/20/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/20/2001	HEXACHLOROBUTADIENE	1	U	µg/L
		3/20/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/20/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/20/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/20/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/20/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/20/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/20/2001	2-NITROANILINE	2	U	µg/L
		3/20/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/20/2001	ACENAPHTHYLENE	1	U	µg/L
		3/20/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/20/2001	3-NITROANILINE	2	UJ37	µg/L
		3/20/2001	ACENAPHTHENE	0.5	J	µg/L
		3/20/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/20/2001	DIBENZOFURAN	1	U	µg/L
		3/20/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/20/2001	2,4-DINITROTOLUENE	1	UJ7	µg/L
		3/20/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/20/2001	FLUORENE	0.1	J	µg/L
		3/20/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/20/2001	4-NITROANILINE	2	UJ7	µg/L
		3/20/2001	N-NITROSODIPHENYLAMINE	0.4	J	µg/L
		3/20/2001	4,6-DINITRO-2-METHYLPHENOL	2	UJ7	µg/L
		3/20/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/20/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/20/2001	PENTACHLOROPHENOL	2	UJ7	µg/L
		3/20/2001	PHENANTHRENE	1	U	µg/L
		3/20/2001	ANTHRACENE	1	U	µg/L
		3/20/2001	CARBAZOLE	1	U	µg/L
		3/20/2001	DI-N-BUTYLPHTHALATE	1	U4	µg/L
		3/20/2001	FLUORANTHENE	1	U	µg/L
		3/20/2001	PYRENE	1	U	µg/L
		3/20/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/20/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/20/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/20/2001	CHRYSENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW03A	3/20/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/20/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/20/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/20/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/20/2001	BENZO(A)PYRENE	1	U	µg/L
		3/20/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/20/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/20/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/20/2001	CHLOROMETHANE	1	U	µg/L
		3/20/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/20/2001	CHLOROETHANE	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/20/2001	ACETONE	5	R7	µg/L
		3/20/2001	CARBON DISULFIDE	1	U	µg/L
		3/20/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/20/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/20/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	2-BUTANONE	5	U	µg/L
		3/20/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	CHLOROFORM	1	U	µg/L
		3/20/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/20/2001	BENZENE	0.6		µg/L
		3/20/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/20/2001	TRICHLOROETHENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/20/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/20/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/20/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/20/2001	TOLUENE	1	U	µg/L
		3/20/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/20/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	TETRACHLOROETHENE	1	U	µg/L
		3/20/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/20/2001	CHLOROBENZENE	4		µg/L
		3/20/2001	ETHYLBENZENE	1	U	µg/L
		3/20/2001	STYRENE	1	U	µg/L
		3/20/2001	XYLENE (TOTAL)	0.7	J	µg/L
		3/20/2001	BROMOFORM	1	UJ7	µg/L
		3/20/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/20/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,4-DICHLOROBENZENE	1		µg/L
		3/20/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/20/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/20/2001	BROMOMETHANE	1	U	µg/L
		3/20/2001	2-HEXANONE	5	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW03A	3/20/2001	ETHANE	4	UJ7	µg/L
		3/20/2001	ETHENE	3	UJ7	µg/L
		3/20/2001	SALINITY	2.6		µg/L
		3/20/2001	TOTAL DISSOLVED SOLIDS	2590000		µg/L
		3/20/2001	METHANE	1000	J7	µg/L
		3/20/2001	RADIUM-226	0.16	U	µg/L
		3/20/2001	RADIUM-228	0.66	U	µg/L
		3/20/2001	GROSS BETA - RADIOACTIVITY	39.5		µg/L
		3/20/2001	GROSS ALPHA - RADIOACTIVITY	3.9	U	µg/L
	IR01MW05A	3/20/2001	CHROMIUM VI	10	U	µg/L
		3/20/2001	GROSS ALPHA - RADIOACTIVITY	0.6	U	µg/L
		3/20/2001	GROSS BETA - RADIOACTIVITY	12.1		µg/L
		3/20/2001	ALKALINITY	1000	U	µg/L
		3/20/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/20/2001	ALKALINITY (AS CACO3)	688000		µg/L
		3/20/2001	ALKALINITY, TOTAL (AS CACO3)	688000		µg/L
		3/20/2001	CHLORIDE	269000		µg/L
		3/20/2001	SULFATE	600		µg/L
		3/20/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/20/2001	NITRATE AS N	10	U	µg/L
		3/20/2001	NITRITE NITROGEN	5	U	µg/L
		3/20/2001	MERCURY	0.1	U	µg/L
		3/20/2001	ALUMINUM	203	U1	µg/L
		3/20/2001	ANTIMONY	3.4	J	µg/L
		3/20/2001	ARSENIC	4.1	U	µg/L
		3/20/2001	CADMIUM	0.74	U1	µg/L
		3/20/2001	CALCIUM	69100		µg/L
		3/20/2001	CHROMIUM	5.4	J	µg/L
		3/20/2001	COPPER	10	J	µg/L
		3/20/2001	IRON	19600		µg/L
		3/20/2001	LEAD	1.3	UJ3	µg/L
		3/20/2001	MAGNESIUM	104000		µg/L
		3/20/2001	NICKEL	50.1		µg/L
		3/20/2001	POTASSIUM	15600	J4	µg/L
		3/20/2001	SILVER	2.4	U	µg/L
		3/20/2001	SODIUM	226000		µg/L
		3/20/2001	ZINC	45.5		µg/L
		3/20/2001	ALPHA-BHC	0.005	U	µg/L
		3/20/2001	BETA-BHC	0.008	U219	µg/L
		3/20/2001	DELTA-BHC	0.01	J19	µg/L
		3/20/2001	GAMMA-BHC (LINDANE)	0.008	J1	µg/L
		3/20/2001	HEPTACHLOR	0.005	UJ1	µg/L
		3/20/2001	ALDRIN	0.005	UJ1	µg/L
		3/20/2001	HEPTACHLOR EPOXIDE	0.009	J19	µg/L
		3/20/2001	ENDOSULFAN I	0.005	U	µg/L
		3/20/2001	DIELDRIN	0.01	UJ9	µg/L
		3/20/2001	4,4'-DDE	0.01	U	µg/L
		3/20/2001	ENDRIN	0.008	J	µg/L
		3/20/2001	ENDOSULFAN II	0.01	U	µg/L
		3/20/2001	4,4'-DDD	0.01	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW05A	3/20/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/20/2001	4,4'-DDT	0.01	U	µg/L
		3/20/2001	METHOXYCHLOR	0.05	U	µg/L
		3/20/2001	ENDRIN KETONE	0.01	U	µg/L
		3/20/2001	ENDRIN ALDEHYDE	0.02	J9	µg/L
		3/20/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/20/2001	GAMMA-CHLORDANE	0.005	UJ1	µg/L
		3/20/2001	TOXAPHENE	0.5	U	µg/L
		3/20/2001	AROCLOR-1016	0.1	U	µg/L
		3/20/2001	AROCLOR-1221	0.2	U	µg/L
		3/20/2001	AROCLOR-1232	0.1	U	µg/L
		3/20/2001	AROCLOR-1242	0.1	U	µg/L
		3/20/2001	AROCLOR-1248	0.1	U	µg/L
		3/20/2001	AROCLOR-1254	0.1	U	µg/L
		3/20/2001	AROCLOR-1260	0.1	U	µg/L
		3/20/2001	CHLOROMETHANE	0.4	J	µg/L
		3/20/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/20/2001	BROMOMETHANE	1	U	µg/L
		3/20/2001	CHLOROETHANE	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/20/2001	ACETONE	11	U47	µg/L
		3/20/2001	CARBON DISULFIDE	1	U	µg/L
		3/20/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/20/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/20/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	2-BUTANONE	5	U	µg/L
		3/20/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	CHLOROFORM	1	U	µg/L
		3/20/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/20/2001	BENZENE	0.9		µg/L
		3/20/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/20/2001	TRICHLOROETHENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/20/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/20/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/20/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/20/2001	TOLUENE	1	U	µg/L
		3/20/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/20/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	2-HEXANONE	5	U	µg/L
		3/20/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/20/2001	CHLOROBENZENE	8		µg/L
		3/20/2001	ETHYLBENZENE	1	U	µg/L
		3/20/2001	STYRENE	1	U	µg/L
		3/20/2001	XYLENE (TOTAL)	0.4	J	µg/L
		3/20/2001	BROMOFORM	1	UJ7	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW05A	3/20/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/20/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,4-DICHLOROBENZENE	3		µg/L
		3/20/2001	1,2-DICHLOROBENZENE	0.4	J	µg/L
		3/20/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/20/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/20/2001	TETRACHLOROETHENE	1	U	µg/L
		3/20/2001	ETHANE	4	UJ7	µg/L
		3/20/2001	ETHENE	3	UJ7	µg/L
		3/20/2001	TOTAL DISSOLVED SOLIDS	2080000		µg/L
		3/20/2001	METHANE	6100	J7	µg/L
	IR01MW07A	3/14/2001	ALKALINITY	1000	U	µg/L
		3/14/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/14/2001	ALKALINITY (AS CACO3)	376000		µg/L
		3/14/2001	ALKALINITY, TOTAL (AS CACO3)	376000		µg/L
		3/14/2001	CHLORIDE	78700		µg/L
		3/14/2001	SULFATE	325000		µg/L
		3/14/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/14/2001	NITRITE NITROGEN	5	U	µg/L
		3/14/2001	NITRATE AS N	10	U	µg/L
		3/14/2001	CALCIUM	95700		µg/L
		3/14/2001	IRON	28	J	µg/L
		3/14/2001	MAGNESIUM	117000		µg/L
		3/14/2001	NICKEL	69.1		µg/L
		3/14/2001	POTASSIUM	926	U1	µg/L
		3/14/2001	SODIUM	71700		µg/L
		3/14/2001	ETHANE	4	UJ7	µg/L
		3/14/2001	ETHENE	3	UJ7	µg/L
		3/14/2001	TOTAL DISSOLVED SOLIDS	980000		µg/L
		3/14/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/14/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/14/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/14/2001	METHANE	2200	J7	µg/L
		3/14/2001	GROSS ALPHA - RADIOACTIVITY	60.3		µg/L
		3/14/2001	GROSS BETA - RADIOACTIVITY	17.7		µg/L
	IR01MW18A	4/17/2001	CHROMIUM VI	10	U	µg/L
		4/17/2001	RADIUM-226	0.93	J	µg/L
		4/17/2001	RADIUM-228	1.7		µg/L
		4/17/2001	GROSS ALPHA - RADIOACTIVITY	4	U	µg/L
		4/17/2001	GROSS BETA - RADIOACTIVITY	105		µg/L
		4/17/2001	ALKALINITY	1000	U	µg/L
		4/17/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		4/17/2001	ALKALINITY (AS CACO3)	1660000		µg/L
		4/17/2001	ALKALINITY, TOTAL (AS CACO3)	1660000		µg/L
		4/17/2001	CHLORIDE	4160000		µg/L
		4/17/2001	SULFATE	13200		µg/L
		4/17/2001	NITRATE/NITRITE NITROGEN	20		µg/L
		4/17/2001	NITRITE NITROGEN	5	U	µg/L
		4/17/2001	NITRATE AS N	20		µg/L
		4/17/2001	MERCURY	0.1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW18A	4/17/2001	ALUMINUM	41.8	U	µg/L
		4/17/2001	CHROMIUM	8.8	J	µg/L
		4/17/2001	COPPER	2.5	U	µg/L
		4/17/2001	IRON	24000		µg/L
		4/17/2001	LEAD	1.3	U	µg/L
		4/17/2001	MAGNESIUM	342000		µg/L
		4/17/2001	NICKEL	103		µg/L
		4/17/2001	POTASSIUM	94900	J4	µg/L
		4/17/2001	SODIUM	2160000	J4	µg/L
		4/17/2001	ZINC	4.8	U	µg/L
		4/17/2001	CALCIUM	173000		µg/L
		4/17/2001	ALPHA-BHC	0.005	U	µg/L
		4/17/2001	BETA-BHC	0.005	UJ9	µg/L
		4/17/2001	DELTA-BHC	0.005	U	µg/L
		4/17/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		4/17/2001	HEPTACHLOR	0.005	U	µg/L
		4/17/2001	ALDRIN	0.005	U	µg/L
		4/17/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		4/17/2001	ENDOSULFAN I	0.005	U	µg/L
		4/17/2001	DIELDRIN	0.01	U	µg/L
		4/17/2001	4,4'-DDE	0.01	U	µg/L
		4/17/2001	ENDRIN	0.01	U	µg/L
		4/17/2001	ENDOSULFAN II	0.01	U	µg/L
		4/17/2001	4,4'-DDD	0.01	U	µg/L
		4/17/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		4/17/2001	4,4'-DDT	0.01	U	µg/L
		4/17/2001	METHOXYCHLOR	0.05	U	µg/L
		4/17/2001	ENDRIN KETONE	0.01	U	µg/L
		4/17/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		4/17/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		4/17/2001	GAMMA-CHLORDANE	0.005	J	µg/L
		4/17/2001	TOXAPHENE	0.5	U	µg/L
		4/17/2001	AROCLOR-1016	0.1	U	µg/L
		4/17/2001	AROCLOR-1221	0.2	U	µg/L
		4/17/2001	AROCLOR-1232	0.1	U	µg/L
		4/17/2001	AROCLOR-1242	0.1	U	µg/L
		4/17/2001	AROCLOR-1248	0.1	U	µg/L
		4/17/2001	AROCLOR-1254	0.1	U	µg/L
		4/17/2001	AROCLOR-1260	0.1	U	µg/L
		4/17/2001	PHENOL	1	U	µg/L
		4/17/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		4/17/2001	2-CHLOROPHENOL	1	U	µg/L
		4/17/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		4/17/2001	1,4-DICHLOROBENZENE	0.2	J	µg/L
		4/17/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		4/17/2001	2-METHYLPHENOL	1	U	µg/L
		4/17/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		4/17/2001	4-METHYLPHENOL	1	U	µg/L
		4/17/2001	HEXACHLOROETHANE	1	U	µg/L
		4/17/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW18A	4/17/2001	NITROBENZENE	1	U	µg/L
		4/17/2001	ISOPHORONE	1	U	µg/L
		4/17/2001	2-NITROPHENOL	1	U	µg/L
		4/17/2001	2,4-DIMETHYLPHENOL	1	UJ7	µg/L
		4/17/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		4/17/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		4/17/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		4/17/2001	NAPHTHALENE	0.3	J	µg/L
		4/17/2001	4-CHLOROANILINE	1	UJ3	µg/L
		4/17/2001	HEXACHLOROBUTADIENE	1	U	µg/L
		4/17/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		4/17/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		4/17/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		4/17/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		4/17/2001	2,4,5-TRICHLOROPHENOL	3	U	µg/L
		4/17/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		4/17/2001	2-NITROANILINE	3	U	µg/L
		4/17/2001	DIMETHYLPHTHALATE	1	U	µg/L
		4/17/2001	ACENAPHTHYLENE	1	U	µg/L
		4/17/2001	2,6-DINITROTOLUENE	1	U	µg/L
		4/17/2001	3-NITROANILINE	3	UJ3	µg/L
		4/17/2001	ACENAPHTHENE	0.5	J	µg/L
		4/17/2001	2,4-DINITROPHENOL	3	U	µg/L
		4/17/2001	DIBENZOFURAN	1	U	µg/L
		4/17/2001	4-NITROPHENOL	3	U	µg/L
		4/17/2001	2,4-DINITROTOLUENE	1	U	µg/L
		4/17/2001	DIETHYLPHTHALATE	1	U4	µg/L
		4/17/2001	FLUORENE	0.2	J	µg/L
		4/17/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		4/17/2001	4-NITROANILINE	3	U	µg/L
		4/17/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		4/17/2001	4,6-DINITRO-2-METHYLPHENOL	3	U	µg/L
		4/17/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		4/17/2001	HEXACHLOROBENZENE	1	U	µg/L
		4/17/2001	PENTACHLOROPHENOL	3	U	µg/L
		4/17/2001	PHENANTHRENE	0.1	J	µg/L
		4/17/2001	ANTHRACENE	1	U	µg/L
		4/17/2001	CARBAZOLE	1	U	µg/L
		4/17/2001	DI-N-BUTYLPHTHALATE	1	U4	µg/L
		4/17/2001	FLUORANTHENE	1	U	µg/L
		4/17/2001	PYRENE	1	U	µg/L
		4/17/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		4/17/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		4/17/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		4/17/2001	CHRYSENE	1	U	µg/L
		4/17/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		4/17/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		4/17/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		4/17/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		4/17/2001	BENZO(A)PYRENE	1	U	µg/L

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PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW18A	4/17/2001	INDENO(1,2,3-CD)PYRENE	1	UJ7	µg/L
		4/17/2001	DIBENZ(A,H)ANTHRACENE	1	UJ7	µg/L
		4/17/2001	BENZO(G,H,I)PERYLENE	1	UJ7	µg/L
		4/17/2001	CHLOROMETHANE	1	U	µg/L
		4/17/2001	VINYL CHLORIDE	0.5	U	µg/L
		4/17/2001	BROMOMETHANE	1	U	µg/L
		4/17/2001	CHLOROETHANE	1	U	µg/L
		4/17/2001	1,1-DICHLOROETHENE	1	U	µg/L
		4/17/2001	CARBON DISULFIDE	1	U	µg/L
		4/17/2001	METHYLENE CHLORIDE	2	U	µg/L
		4/17/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		4/17/2001	TERT-BUTYL METHYL ETHER	0.3	J	µg/L
		4/17/2001	1,1-DICHLOROETHANE	1	U	µg/L
		4/17/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		4/17/2001	2-BUTANONE	5	U4	µg/L
		4/17/2001	BROMOCHLOROMETHANE	1	U	µg/L
		4/17/2001	CHLOROFORM	1	U	µg/L
		4/17/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		4/17/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		4/17/2001	BENZENE	1		µg/L
		4/17/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		4/17/2001	TRICHLOROETHENE	1	U	µg/L
		4/17/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		4/17/2001	BROMODICHLOROMETHANE	1	U	µg/L
		4/17/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		4/17/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		4/17/2001	TOLUENE	1	U	µg/L
		4/17/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		4/17/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		4/17/2001	TETRACHLOROETHENE	1	U	µg/L
		4/17/2001	2-HEXANONE	5	U	µg/L
		4/17/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		4/17/2001	1,2-DIBROMOETHANE	1	U	µg/L
		4/17/2001	CHLOROBENZENE	3		µg/L
		4/17/2001	ETHYLBENZENE	1	U	µg/L
		4/17/2001	STYRENE	1	U	µg/L
		4/17/2001	XYLENE (TOTAL)	1	U	µg/L
		4/17/2001	BROMOFORM	1	U	µg/L
		4/17/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		4/17/2001	1,3-DICHLOROBENZENE	0.3	J	µg/L
		4/17/2001	1,4-DICHLOROBENZENE	2		µg/L
		4/17/2001	1,2-DICHLOROBENZENE	0.3	J	µg/L
		4/17/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		4/17/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		4/17/2001	ACETONE	35	U27	µg/L
		4/17/2001	ETHANE	4	UJ7	µg/L
		4/17/2001	ETHENE	3	UJ7	µg/L
		4/17/2001	TOTAL DISSOLVED SOLIDS	8370000		µg/L
		4/17/2001	DIESEL RANGE ORGANICS	100	J7	µg/L
		4/17/2001	MOTOR OIL RANGE ORGANICS	100	UJ7	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW18A	4/17/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		4/17/2001	METHANE	4800	J7	µg/L
		4/17/2001	NICKEL	109		µg/L
		4/17/2001	CHLOROMETHANE	1	U	µg/L
		4/17/2001	VINYL CHLORIDE	0.5	U	µg/L
		4/17/2001	BROMOMETHANE	1	U	µg/L
		4/17/2001	CHLOROETHANE	1	U	µg/L
		4/17/2001	1,1-DICHLOROETHENE	1	U	µg/L
		4/17/2001	ACETONE	31	U27	µg/L
		4/17/2001	CARBON DISULFIDE	1	U	µg/L
		4/17/2001	METHYLENE CHLORIDE	2	U	µg/L
		4/17/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		4/17/2001	TERT-BUTYL METHYL ETHER	0.4	J	µg/L
		4/17/2001	1,1-DICHLOROETHANE	1	U	µg/L
		4/17/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		4/17/2001	2-BUTANONE	5	U4	µg/L
		4/17/2001	BROMOCHLOROMETHANE	1	U	µg/L
		4/17/2001	CHLOROFORM	1	U	µg/L
		4/17/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		4/17/2001	BENZENE	1		µg/L
		4/17/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		4/17/2001	TRICHLOROETHENE	1	U	µg/L
		4/17/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		4/17/2001	BROMODICHLOROMETHANE	1	U	µg/L
		4/17/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		4/17/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		4/17/2001	TOLUENE	1	U	µg/L
		4/17/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		4/17/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		4/17/2001	TETRACHLOROETHENE	1	U	µg/L
		4/17/2001	2-HEXANONE	5	U	µg/L
		4/17/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		4/17/2001	1,2-DIBROMOETHANE	1	U	µg/L
		4/17/2001	CHLOROBENZENE	4		µg/L
		4/17/2001	ETHYLBENZENE	1	U	µg/L
		4/17/2001	STYRENE	1	U	µg/L
		4/17/2001	XYLENE (TOTAL)	1	U	µg/L
		4/17/2001	BROMOFORM	1	U	µg/L
		4/17/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		4/17/2001	1,3-DICHLOROBENZENE	0.4	J	µg/L
		4/17/2001	1,4-DICHLOROBENZENE	3		µg/L
		4/17/2001	1,2-DICHLOROBENZENE	0.3	J	µg/L
		4/17/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		4/17/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		4/17/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
	IR01MW31A	3/22/2001	ALKALINITY	1000	U	µg/L
		3/22/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/22/2001	ALKALINITY (AS CACO3)	510000		µg/L
		3/22/2001	ALKALINITY, TOTAL (AS CACO3)	510000		µg/L
		3/22/2001	NITRATE AS N	10	U	µg/L
		3/22/2001	SULFATE	208000		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW31A	3/22/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/22/2001	NITRITE NITROGEN	5	U	µg/L
		3/22/2001	CHLORIDE	422000		µg/L
		3/22/2001	ALUMINUM	65.7	J	µg/L
		3/22/2001	CALCIUM	68800		µg/L
		3/22/2001	IRON	151		µg/L
		3/22/2001	LEAD	1.5	U1	µg/L
		3/22/2001	MAGNESIUM	69600		µg/L
		3/22/2001	POTASSIUM	15700		µg/L
		3/22/2001	SODIUM	520000		µg/L
		3/22/2001	ALPHA-BHC	0.005	U	µg/L
		3/22/2001	BETA-BHC	0.005	U	µg/L
		3/22/2001	DELTA-BHC	0.005	U	µg/L
		3/22/2001	ENDRIN ALDEHYDE	0.01	UJ1	µg/L
		3/22/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/22/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/22/2001	TOXAPHENE	0.5	U	µg/L
		3/22/2001	AROCLOR-1016	0.1	U	µg/L
		3/22/2001	AROCLOR-1221	0.2	U	µg/L
		3/22/2001	AROCLOR-1232	0.1	U	µg/L
		3/22/2001	AROCLOR-1242	0.1	U	µg/L
		3/22/2001	AROCLOR-1248	0.1	U	µg/L
		3/22/2001	AROCLOR-1254	0.1	U	µg/L
		3/22/2001	AROCLOR-1260	0.1		µg/L
		3/22/2001	ENDRIN KETONE	0.01	UJ1	µg/L
		3/22/2001	DIELDRIN	0.01	U	µg/L
		3/22/2001	4,4'-DDE	0.01	U	µg/L
		3/22/2001	ENDRIN	0.01	U	µg/L
		3/22/2001	ENDOSULFAN II	0.01	U	µg/L
		3/22/2001	4,4'-DDD	0.01	U	µg/L
		3/22/2001	ENDOSULFAN SULFATE	0.01	UJ1	µg/L
		3/22/2001	4,4'-DDT	0.01	J	µg/L
		3/22/2001	METHOXYCHLOR	0.05	UJ1	µg/L
		3/22/2001	ENDOSULFAN I	0.005	U	µg/L
		3/22/2001	HEPTACHLOR	0.005	U	µg/L
		3/22/2001	ALDRIN	0.005	U	µg/L
		3/22/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/22/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/22/2001	STYRENE	1	U	µg/L
		3/22/2001	XYLENE (TOTAL)	1	U	µg/L
		3/22/2001	BROMOFORM	1	U	µg/L
		3/22/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/22/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/22/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/22/2001	ETHYLBENZENE	1	U	µg/L
		3/22/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/22/2001	CHLOROFORM	1	U	µg/L
		3/22/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW31A	3/22/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/22/2001	BENZENE	0.5	U	µg/L
		3/22/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/22/2001	TRICHLOROETHENE	1	U	µg/L
		3/22/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/22/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/22/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/22/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/22/2001	TOLUENE	1	U	µg/L
		3/22/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/22/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/22/2001	TETRACHLOROETHENE	1	U	µg/L
		3/22/2001	2-HEXANONE	5	U	µg/L
		3/22/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/22/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/22/2001	CHLOROBENZENE	1	U	µg/L
		3/22/2001	2-BUTANONE	5	U	µg/L
		3/22/2001	CHLOROMETHANE	1	U	µg/L
		3/22/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/22/2001	BROMOMETHANE	1	U	µg/L
		3/22/2001	CHLOROETHANE	1	U	µg/L
		3/22/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/22/2001	ACETONE	5	U47	µg/L
		3/22/2001	CARBON DISULFIDE	1	U	µg/L
		3/22/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/22/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/22/2001	TERT-BUTYL METHYL ETHER	0.3	J	µg/L
		3/22/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/22/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/22/2001	ETHANE	4	UJ7	µg/L
		3/22/2001	ETHENE	3	UJ7	µg/L
		3/22/2001	TOTAL DISSOLVED SOLIDS	1810000		µg/L
		3/22/2001	METHANE	1100	J7	µg/L
		3/22/2001	CALCIUM	67800		µg/L
		3/22/2001	IRON	177		µg/L
		3/22/2001	MAGNESIUM	72500		µg/L
		3/22/2001	SODIUM	530000		µg/L
		3/22/2001	POTASSIUM	15400		µg/L
		3/22/2001	ETHANE	4	UJ7	µg/L
		3/22/2001	ETHENE	3	UJ7	µg/L
		3/22/2001	METHANE	1000	J7	µg/L
	IR01MW42A	3/19/2001	ALKALINITY	1000	U	µg/L
		3/19/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/19/2001	ALKALINITY (AS CACO3)	1270000		µg/L
		3/19/2001	ALKALINITY, TOTAL (AS CACO3)	1270000		µg/L
		3/19/2001	SULFATE	137000		µg/L
		3/19/2001	CHLORIDE	5860000		µg/L
		3/19/2001	NITRATE/NITRITE NITROGEN	10		µg/L
		3/19/2001	NITRITE NITROGEN	5	U	µg/L
		3/19/2001	NITRATE AS N	10		µg/L
		3/19/2001	CALCIUM	148000		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW42A	3/19/2001	IRON	730		µg/L
		3/19/2001	LEAD	1.6	U	µg/L
		3/19/2001	MAGNESIUM	772000		µg/L
		3/19/2001	POTASSIUM	71800	J4	µg/L
		3/19/2001	SODIUM	2940000		µg/L
		3/19/2001	CHLOROMETHANE	1	U	µg/L
		3/19/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/19/2001	BROMOMETHANE	1	U	µg/L
		3/19/2001	CHLOROETHANE	1	U	µg/L
		3/19/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/19/2001	ACETONE	5	R7	µg/L
		3/19/2001	CARBON DISULFIDE	1	U	µg/L
		3/19/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/19/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/19/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/19/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/19/2001	2-BUTANONE	5	U	µg/L
		3/19/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/19/2001	CHLOROFORM	1	U	µg/L
		3/19/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/19/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/19/2001	BENZENE	0.5	U	µg/L
		3/19/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/19/2001	TRICHLOROETHENE	1	U	µg/L
		3/19/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/19/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/19/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/19/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/19/2001	TOLUENE	1	U	µg/L
		3/19/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/19/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/19/2001	TETRACHLOROETHENE	1	U	µg/L
		3/19/2001	2-HEXANONE	5	U	µg/L
		3/19/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/19/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/19/2001	CHLOROBENZENE	1	U	µg/L
		3/19/2001	ETHYLBENZENE	1	U	µg/L
		3/19/2001	STYRENE	1	U	µg/L
		3/19/2001	XYLENE (TOTAL)	1	U	µg/L
		3/19/2001	BROMOFORM	1	U	µg/L
		3/19/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/19/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/19/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/19/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/19/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/19/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/19/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/19/2001	METHANE	99	J7	µg/L
		3/19/2001	ETHANE	4	UJ7	µg/L
		3/19/2001	ETHENE	3	UJ7	µg/L
		3/19/2001	TOTAL DISSOLVED SOLIDS	11500000		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW42A	3/19/2001	GROSS ALPHA - RADIOACTIVITY	-6	U	µg/L
		3/19/2001	GROSS BETA - RADIOACTIVITY	62		µg/L
	IR01MW43A	3/16/2001	ALKALINITY	1000	U	µg/L
		3/16/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/16/2001	ALKALINITY (AS CACO3)	1180000		µg/L
		3/16/2001	ALKALINITY, TOTAL (AS CACO3)	1180000		µg/L
		3/16/2001	CHLORIDE	1060000		µg/L
		3/16/2001	SULFATE	7000		µg/L
		3/16/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/16/2001	NITRITE NITROGEN	6		µg/L
		3/16/2001	NITRATE AS N	10	U	µg/L
		3/16/2001	ANTIMONY	5.5	J	µg/L
		3/16/2001	CALCIUM	93900		µg/L
		3/16/2001	IRON	3340		µg/L
		3/16/2001	MAGNESIUM	95400		µg/L
		3/16/2001	POTASSIUM	61500	J4	µg/L
		3/16/2001	SODIUM	965000		µg/L
		3/16/2001	CHLOROMETHANE	0.3	J	µg/L
		3/16/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/16/2001	BROMOMETHANE	1	U	µg/L
		3/16/2001	CHLOROETHANE	10		µg/L
		3/16/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/16/2001	ACETONE	33	U27	µg/L
		3/16/2001	CARBON DISULFIDE	1	U	µg/L
		3/16/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/16/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/16/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/16/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/16/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/16/2001	2-BUTANONE	5	U	µg/L
		3/16/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/16/2001	CHLOROFORM	1	U	µg/L
		3/16/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/16/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/16/2001	BENZENE	10		µg/L
		3/16/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/16/2001	TRICHLOROETHENE	1	U	µg/L
		3/16/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/16/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/16/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/16/2001	TOLUENE	1	U2	µg/L
		3/16/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/16/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/16/2001	TETRACHLOROETHENE	1	U	µg/L
		3/16/2001	2-HEXANONE	5	U	µg/L
		3/16/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/16/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/16/2001	CHLOROBENZENE	14		µg/L
		3/16/2001	ETHYLBENZENE	0.3	J	µg/L
		3/16/2001	STYRENE	1	U	µg/L
		3/16/2001	XYLENE (TOTAL)	2		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW43A	3/16/2001	BROMOFORM	1	U	µg/L
		3/16/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/16/2001	1,3-DICHLOROBENZENE	5		µg/L
		3/16/2001	1,4-DICHLOROBENZENE	6		µg/L
		3/16/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/16/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/16/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/16/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/16/2001	ETHANE	4	UJ7	µg/L
		3/16/2001	ETHENE	6	J7	µg/L
		3/16/2001	SALINITY	3.3		µg/L
		3/16/2001	TOTAL DISSOLVED SOLIDS	3220000		µg/L
		3/16/2001	MOTOR OIL RANGE ORGANICS	200	M	µg/L
		3/16/2001	DIESEL RANGE ORGANICS	500	LHZ	µg/L
		3/16/2001	GASOLINE RANGE ORGANICS	200		µg/L
		3/16/2001	ALPHA-BHC	0.05	U	µg/L
		3/16/2001	BETA-BHC	0.05	U	µg/L
		3/16/2001	DELTA-BHC	0.05	U	µg/L
		3/16/2001	GAMMA-BHC (LINDANE)	0.05	U	µg/L
		3/16/2001	HEPTACHLOR	0.05	U	µg/L
		3/16/2001	ALDRIN	0.05	U	µg/L
		3/16/2001	HEPTACHLOR EPOXIDE	0.05	U	µg/L
		3/16/2001	ENDOSULFAN I	0.05	U	µg/L
		3/16/2001	DIELDRIN	0.1		µg/L
		3/16/2001	4,4'-DDE	0.1	U	µg/L
		3/16/2001	ENDRIN	0.1	U	µg/L
		3/16/2001	ENDOSULFAN II	0.1	UJ1	µg/L
		3/16/2001	4,4'-DDD	0.1	U	µg/L
		3/16/2001	ENDOSULFAN SULFATE	0.1	UJ1	µg/L
		3/16/2001	4,4'-DDT	0.1	J1	µg/L
		3/16/2001	METHOXYCHLOR	0.5	UJ1	µg/L
		3/16/2001	ENDRIN KETONE	0.1	UJ1	µg/L
		3/16/2001	ENDRIN ALDEHYDE	0.1	UJ91	µg/L
		3/16/2001	ALPHA-CHLORDANE	0.05	U	µg/L
		3/16/2001	GAMMA-CHLORDANE	0.06		µg/L
		3/16/2001	TOXAPHENE	5	U	µg/L
		3/16/2001	AROCLOR-1016	1	U	µg/L
		3/16/2001	AROCLOR-1221	2	U	µg/L
		3/16/2001	AROCLOR-1232	1	U	µg/L
		3/16/2001	AROCLOR-1242	1	U	µg/L
		3/16/2001	AROCLOR-1248	1	U	µg/L
		3/16/2001	AROCLOR-1254	1	U	µg/L
		3/16/2001	AROCLOR-1260	2		µg/L
		3/16/2001	PHENOL	31		µg/L
		3/16/2001	BIS(2-CHLOROETHYL)ETHER	4	U	µg/L
		3/16/2001	2-CHLOROPHENOL	4	U	µg/L
		3/16/2001	1,3-DICHLOROBENZENE	3	J3	µg/L
		3/16/2001	1,4-DICHLOROBENZENE	4	J3	µg/L
		3/16/2001	1,2-DICHLOROBENZENE	4	UJ3	µg/L
		3/16/2001	2-METHYLPHENOL	4	U	µg/L
		3/16/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	4	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW43A	3/16/2001	4-METHYLPHENOL	2	J	µg/L
		3/16/2001	HEXACHLOROETHANE	4	UJ3	µg/L
		3/16/2001	N-NITROSO-DI-N-PROPYLAMINE	4	U	µg/L
		3/16/2001	NITROBENZENE	4	U	µg/L
		3/16/2001	ISOPHORONE	4	U	µg/L
		3/16/2001	2-NITROPHENOL	4	U	µg/L
		3/16/2001	2,4-DIMETHYLPHENOL	4	U	µg/L
		3/16/2001	BIS(2-CHLOROETHOXY)METHANE	4	U	µg/L
		3/16/2001	2,4-DICHLOROPHENOL	4	U	µg/L
		3/16/2001	1,2,4-TRICHLOROBENZENE	4	UJ3	µg/L
		3/16/2001	NAPHTHALENE	0.5	J	µg/L
		3/16/2001	4-CHLOROANILINE	4	U	µg/L
		3/16/2001	HEXACHLOROBUTADIENE	4	UJ3	µg/L
		3/16/2001	4-CHLORO-3-METHYLPHENOL	4	U	µg/L
		3/16/2001	2-METHYLNAPHTHALENE	0.5	J	µg/L
		3/16/2001	HEXACHLOROCYCLOPENTADIENE	4	UJ137	µg/L
		3/16/2001	2,4,6-TRICHLOROPHENOL	4	UJ1	µg/L
		3/16/2001	2,4,5-TRICHLOROPHENOL	10	UJ1	µg/L
		3/16/2001	2-CHLORONAPHTHALENE	4	UJ1	µg/L
		3/16/2001	2-NITROANILINE	10	UJ17	µg/L
		3/16/2001	DIMETHYLPHTHALATE	4	UJ1	µg/L
		3/16/2001	ACENAPHTHYLENE	4	UJ1	µg/L
		3/16/2001	2,6-DINITROTOLUENE	4	UJ1	µg/L
		3/16/2001	3-NITROANILINE	10	UJ1	µg/L
		3/16/2001	ACENAPHTHENE	0.5	J1	µg/L
		3/16/2001	2,4-DINITROPHENOL	10	UJ17	µg/L
		3/16/2001	DIBENZOFURAN	4	UJ1	µg/L
		3/16/2001	4-NITROPHENOL	10	UJ17	µg/L
		3/16/2001	2,4-DINITROTOLUENE	4	UJ1	µg/L
		3/16/2001	DIETHYLPHTHALATE	4	UJ1	µg/L
		3/16/2001	FLUORENE	0.4	J1	µg/L
		3/16/2001	4-CHLOROPHENYL-PHENYLETHER	4	UJ1	µg/L
		3/16/2001	4-NITROANILINE	10	UJ17	µg/L
		3/16/2001	N-NITROSODIPHENYLAMINE	4	UJ01	µg/L
		3/16/2001	4,6-DINITRO-2-METHYLPHENOL	10	UJ017	µg/L
		3/16/2001	4-BROMOPHENYL-PHENYLETHER	4	UJ01	µg/L
		3/16/2001	HEXACHLOROBENZENE	4	UJ01	µg/L
		3/16/2001	PENTACHLOROPHENOL	10	UJ017	µg/L
		3/16/2001	PHENANTHRENE	0.6	J01	µg/L
		3/16/2001	ANTHRACENE	4	UJ01	µg/L
		3/16/2001	CARBAZOLE	4	UJ01	µg/L
		3/16/2001	DI-N-BUTYLPHTHALATE	4	UJ01	µg/L
		3/16/2001	FLUORANTHENE	0.6	J01	µg/L
		3/16/2001	PYRENE	0.8	J01	µg/L
		3/16/2001	BUTYLBENZYLPHTHALATE	4	UJ01	µg/L
		3/16/2001	BENZO(A)ANTHRACENE	4	UJ01	µg/L
		3/16/2001	3,3'-DICHLOROBENZIDINE	4	UJ017	µg/L
		3/16/2001	CHRYSENE	2	J01	µg/L
		3/16/2001	BIS(2-ETHYLHEXYL)PHTHALATE	4	U401	µg/L
		3/16/2001	DI-N-OCTYLPHTHALATE	4	UJ01	µg/L

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PARCEL E INFORMATION PACKAGE
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HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW43A	3/16/2001	BENZO(B)FLUORANTHENE	4	UJ01	µg/L
		3/16/2001	BENZO(K)FLUORANTHENE	4	UJ01	µg/L
		3/16/2001	BENZO(A)PYRENE	4	UJ01	µg/L
		3/16/2001	INDENO(1,2,3-CD)PYRENE	4	UJ01	µg/L
		3/16/2001	DIBENZ(A,H)ANTHRACENE	4	UJ01	µg/L
		3/16/2001	BENZO(G,H,I)PERYLENE	4	UJ01	µg/L
		3/16/2001	METHANE	9400	J7	µg/L
		3/16/2001	GROSS ALPHA - RADIOACTIVITY	1	U	µg/L
		3/16/2001	GROSS BETA - RADIOACTIVITY	53		µg/L
		3/16/2001	SALINITY	3.2		µg/L
		3/16/2001	ALPHA-BHC	0.2	UJ7	µg/L
		3/16/2001	BETA-BHC	0.2	U	µg/L
		3/16/2001	DELTA-BHC	0.2	UJ7	µg/L
		3/16/2001	GAMMA-BHC (LINDANE)	0.2	U	µg/L
		3/16/2001	HEPTACHLOR	0.2	U	µg/L
		3/16/2001	ALDRIN	0.2	U	µg/L
		3/16/2001	HEPTACHLOR EPOXIDE	0.2	U	µg/L
		3/16/2001	ENDOSULFAN I	0.2	U	µg/L
		3/16/2001	DIELDRIN	0.3	UJ9	µg/L
		3/16/2001	4,4'-DDE	0.3	UJ7	µg/L
		3/16/2001	ENDRIN	0.3	U	µg/L
		3/16/2001	ENDOSULFAN II	0.3	U	µg/L
		3/16/2001	4,4'-DDD	0.3	UJ7	µg/L
		3/16/2001	ENDOSULFAN SULFATE	0.3	U	µg/L
		3/16/2001	4,4'-DDT	0.3	U	µg/L
		3/16/2001	METHOXYCHLOR	2	U	µg/L
		3/16/2001	ENDRIN KETONE	0.3	U	µg/L
		3/16/2001	ENDRIN ALDEHYDE	0.3	U	µg/L
		3/16/2001	ALPHA-CHLORDANE	0.2	U	µg/L
		3/16/2001	GAMMA-CHLORDANE	0.1	J	µg/L
		3/16/2001	TOXAPHENE	15	U	µg/L
		3/16/2001	AROCLOR-1016	3	U	µg/L
		3/16/2001	AROCLOR-1221	6	U	µg/L
		3/16/2001	AROCLOR-1232	3	U	µg/L
		3/16/2001	AROCLOR-1242	3	U	µg/L
		3/16/2001	AROCLOR-1248	3	U	µg/L
		3/16/2001	AROCLOR-1254	3	U	µg/L
		3/16/2001	AROCLOR-1260	5		µg/L
	IR01MW44A	3/27/2001	GROSS ALPHA - RADIOACTIVITY	1.3	U	µg/L
		3/27/2001	GROSS BETA - RADIOACTIVITY	16.8		µg/L
		3/27/2001	ALKALINITY	1000	U	µg/L
		3/27/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/27/2001	ALKALINITY (AS CACO3)	760000		µg/L
		3/27/2001	ALKALINITY, TOTAL (AS CACO3)	760000		µg/L
		3/27/2001	CHLORIDE	855000		µg/L
		3/27/2001	SULFATE	3200		µg/L
		3/27/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/27/2001	NITRITE NITROGEN	5	U	µg/L
		3/27/2001	NITRATE AS N	10	U	µg/L
		3/27/2001	CALCIUM	153000		µg/L

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HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW44A	3/27/2001	IRON	4430		µg/L
		3/27/2001	MAGNESIUM	119000		µg/L
		3/27/2001	POTASSIUM	46500		µg/L
		3/27/2001	SODIUM	846000		µg/L
		3/27/2001	ZINC	34.4		µg/L
		3/27/2001	ALPHA-BHC	0.005	U	µg/L
		3/27/2001	BETA-BHC	0.009	J9	µg/L
		3/27/2001	DELTA-BHC	0.004	J	µg/L
		3/27/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/27/2001	HEPTACHLOR	0.008	J9	µg/L
		3/27/2001	ALDRIN	0.005	U	µg/L
		3/27/2001	HEPTACHLOR EPOXIDE	0.01		µg/L
		3/27/2001	ENDOSULFAN I	0.005	UJ9	µg/L
		3/27/2001	DIELDRIN	0.02	J9	µg/L
		3/27/2001	4,4'-DDE	0.01	UJ9	µg/L
		3/27/2001	ENDRIN	0.01	J9	µg/L
		3/27/2001	ENDOSULFAN II	0.01	U	µg/L
		3/27/2001	4,4'-DDD	0.01	U	µg/L
		3/27/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/27/2001	4,4'-DDT	0.03	J9	µg/L
		3/27/2001	METHOXYCHLOR	0.05	U	µg/L
		3/27/2001	ENDRIN KETONE	0.01	UJ1	µg/L
		3/27/2001	ENDRIN ALDEHYDE	0.02	J9	µg/L
		3/27/2001	ALPHA-CHLORDANE	0.01		µg/L
		3/27/2001	GAMMA-CHLORDANE	0.02	J9	µg/L
		3/27/2001	TOXAPHENE	0.5	U	µg/L
		3/27/2001	AROCLOR-1016	0.1	U	µg/L
		3/27/2001	AROCLOR-1221	0.2	U	µg/L
		3/27/2001	AROCLOR-1232	0.1	U	µg/L
		3/27/2001	AROCLOR-1242	0.1	U	µg/L
		3/27/2001	AROCLOR-1248	0.1	U	µg/L
		3/27/2001	AROCLOR-1254	0.1	U	µg/L
		3/27/2001	AROCLOR-1260	2		µg/L
		3/27/2001	ETHANE	4	UJ7	µg/L
		3/27/2001	ETHENE	3	UJ7	µg/L
		3/27/2001	TOTAL DISSOLVED SOLIDS	2920000		µg/L
		3/27/2001	DIESEL RANGE ORGANICS	100	UJ3	µg/L
		3/27/2001	MOTOR OIL RANGE ORGANICS	100	UJ3	µg/L
		3/27/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/27/2001	METHANE	4500	J7	µg/L
		3/27/2001	GROSS ALPHA - RADIOACTIVITY	0.4	U	µg/L
		3/27/2001	GROSS BETA - RADIOACTIVITY	16		µg/L
	IR01MW48A	3/29/2001	CHROMIUM VI	10	U	µg/L
		3/29/2001	ALKALINITY	1000	U	µg/L
		3/29/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/29/2001	ALKALINITY (AS CACO3)	380000		µg/L
		3/29/2001	ALKALINITY, TOTAL (AS CACO3)	380000		µg/L
		3/29/2001	CHLORIDE	2730000		µg/L
		3/29/2001	SULFATE	11000		µg/L
		3/29/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L

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PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW48A	3/29/2001	NITRITE NITROGEN	5	U	µg/L
		3/29/2001	NITRATE AS N	10	U	µg/L
		3/29/2001	ALUMINUM	41.8	U	µg/L
		3/29/2001	BARIUM	909		µg/L
		3/29/2001	CALCIUM	72800		µg/L
		3/29/2001	CHROMIUM	1.8	J	µg/L
		3/29/2001	COPPER	2.5	U	µg/L
		3/29/2001	IRON	2330		µg/L
		3/29/2001	LEAD	1.3	U	µg/L
		3/29/2001	MAGNESIUM	51700		µg/L
		3/29/2001	POTASSIUM	59700	J4	µg/L
		3/29/2001	SODIUM	1510000		µg/L
		3/29/2001	ZINC	4.8	U	µg/L
		3/29/2001	CHLOROMETHANE	1	U	µg/L
		3/29/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/29/2001	BROMOMETHANE	1	U	µg/L
		3/29/2001	CHLOROETHANE	1	U	µg/L
		3/29/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/29/2001	ACETONE	9	U47	µg/L
		3/29/2001	CARBON DISULFIDE	1	U	µg/L
		3/29/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/29/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/29/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/29/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/29/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/29/2001	2-BUTANONE	5	U	µg/L
		3/29/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/29/2001	CHLOROFORM	1	U	µg/L
		3/29/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/29/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/29/2001	BENZENE	2		µg/L
		3/29/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/29/2001	TRICHLOROETHENE	1	U	µg/L
		3/29/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/29/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/29/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/29/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/29/2001	TOLUENE	1	U	µg/L
		3/29/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/29/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/29/2001	TETRACHLOROETHENE	1	U	µg/L
		3/29/2001	2-HEXANONE	5	U	µg/L
		3/29/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/29/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/29/2001	CHLOROBENZENE	1	U	µg/L
		3/29/2001	ETHYLBENZENE	1	U	µg/L
		3/29/2001	STYRENE	1	U	µg/L
		3/29/2001	XYLENE (TOTAL)	1	U	µg/L
		3/29/2001	BROMOFORM	1	U	µg/L
		3/29/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L

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PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW48A	3/29/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/29/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/29/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/29/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/29/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/29/2001	ETHANE	4	UJ7	µg/L
		3/29/2001	ETHENE	6	J7	µg/L
		3/29/2001	SALINITY	5.1		µg/L
		3/29/2001	TOTAL DISSOLVED SOLIDS	3940000		µg/L
		3/29/2001	METHANE	14000	J7	µg/L
		3/29/2001	GROSS ALPHA - RADIOACTIVITY	2.2	U	µg/L
		3/29/2001	GROSS BETA - RADIOACTIVITY	41		µg/L
		3/29/2001	ALKALINITY	1000	U	µg/L
		3/29/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/29/2001	ALKALINITY (AS CACO3)	410000		µg/L
		3/29/2001	ALKALINITY, TOTAL (AS CACO3)	410000		µg/L
		3/29/2001	CHLORIDE	2440000		µg/L
		3/29/2001	SULFATE	10500		µg/L
		3/29/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/29/2001	NITRITE NITROGEN	5	U	µg/L
		3/29/2001	NITRATE AS N	10	U	µg/L
		3/29/2001	CALCIUM	75000		µg/L
		3/29/2001	IRON	2160		µg/L
		3/29/2001	MAGNESIUM	53300		µg/L
		3/29/2001	POTASSIUM	61700	J4	µg/L
		3/29/2001	SODIUM	1500000		µg/L
		3/29/2001	ETHANE	4	UJ7	µg/L
		3/29/2001	ETHENE	4	J7	µg/L
		3/29/2001	TOTAL DISSOLVED SOLIDS	4480000		µg/L
		3/29/2001	METHANE	11000	J7	µg/L
	IR01MW58A	3/26/2001	ALKALINITY	1000	U	µg/L
		3/26/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/26/2001	ALKALINITY (AS CACO3)	690000		µg/L
		3/26/2001	ALKALINITY, TOTAL (AS CACO3)	690000		µg/L
		3/26/2001	CHLORIDE	593000		µg/L
		3/26/2001	SULFATE	500		µg/L
		3/26/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/26/2001	NITRITE NITROGEN	5	U	µg/L
		3/26/2001	NITRATE AS N	10	U	µg/L
		3/26/2001	BARIUM	1430		µg/L
		3/26/2001	CALCIUM	48600		µg/L
		3/26/2001	IRON	1210		µg/L
		3/26/2001	MAGNESIUM	61700		µg/L
		3/26/2001	POTASSIUM	35900		µg/L
		3/26/2001	SODIUM	588000		µg/L
		3/26/2001	CHLOROMETHANE	11	U	µg/L
		3/26/2001	VINYL CHLORIDE	6	U	µg/L
		3/26/2001	BROMOMETHANE	11	U	µg/L
		3/26/2001	CHLOROETHANE	11	U	µg/L
		3/26/2001	1,1-DICHLOROETHENE	11	U	µg/L
		3/26/2001	ACETONE	55	R7	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW58A	3/26/2001	CARBON DISULFIDE	11	U	µg/L
		3/26/2001	METHYLENE CHLORIDE	22	U	µg/L
		3/26/2001	TERT-BUTYL METHYL ETHER	11	U	µg/L
		3/26/2001	1,1-DICHLOROETHANE	11	U	µg/L
		3/26/2001	2-BUTANONE	55	U	µg/L
		3/26/2001	BROMOCHLOROMETHANE	11	U	µg/L
		3/26/2001	CHLOROFORM	11	U	µg/L
		3/26/2001	1,1,1-TRICHLOROETHANE	11	U	µg/L
		3/26/2001	CARBON TETRACHLORIDE	6	U	µg/L
		3/26/2001	BENZENE	6	U	µg/L
		3/26/2001	1,2-DICHLOROETHANE	6	U	µg/L
		3/26/2001	TRICHLOROETHENE	11	U	µg/L
		3/26/2001	1,2-DICHLOROPROPANE	11	U	µg/L
		3/26/2001	BROMODICHLOROMETHANE	11	U	µg/L
		3/26/2001	CIS-1,3-DICHLOROPROPENE	11	U	µg/L
		3/26/2001	4-METHYL-2-PENTANONE	55	U	µg/L
		3/26/2001	TOLUENE	11	U	µg/L
		3/26/2001	TRANS-1,3-DICHLOROPROPENE	6	U	µg/L
		3/26/2001	1,1,2-TRICHLOROETHANE	11	U	µg/L
		3/26/2001	TETRACHLOROETHENE	11	U	µg/L
		3/26/2001	2-HEXANONE	55	U	µg/L
		3/26/2001	DIBROMOCHLOROMETHANE	11	U	µg/L
		3/26/2001	1,2-DIBROMOETHANE	11	U	µg/L
		3/26/2001	CHLOROBENZENE	11	U	µg/L
		3/26/2001	ETHYLBENZENE	11	U	µg/L
		3/26/2001	STYRENE	11	U	µg/L
		3/26/2001	XYLENE (TOTAL)	11	U	µg/L
		3/26/2001	BROMOFORM	11	U	µg/L
		3/26/2001	1,1,2,2-TETRACHLOROETHANE	11	U	µg/L
		3/26/2001	1,3-DICHLOROBENZENE	11	U	µg/L
		3/26/2001	1,4-DICHLOROBENZENE	11	U	µg/L
		3/26/2001	1,2-DICHLOROBENZENE	11	U	µg/L
		3/26/2001	1,2-DIBROMO-3-CHLOROPROPANE	11	U	µg/L
		3/26/2001	1,2,4-TRICHLOROBENZENE	11	U	µg/L
		3/26/2001	TRANS-1,2-DICHLOROETHENE	11	U	µg/L
		3/26/2001	CIS-1,2-DICHLOROETHENE	11	U	µg/L
		3/26/2001	ETHANE	4	UJ7	µg/L
		3/26/2001	ETHENE	3	UJ7	µg/L
		3/26/2001	TOTAL DISSOLVED SOLIDS	1520000		µg/L
		3/26/2001	DIESEL RANGE ORGANICS	2000	L	µg/L
		3/26/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/26/2001	GASOLINE RANGE ORGANICS	1000	HZ	µg/L
		3/26/2001	METHANE	4900	J7	µg/L
		3/26/2001	DIESEL RANGE ORGANICS	2000	L	µg/L
		3/26/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
	IR01MW62A	3/28/2001	CHROMIUM VI	10	U	µg/L
		3/28/2001	ALKALINITY	1000	U	µg/L
		3/28/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/28/2001	ALKALINITY (AS CACO3)	240000		µg/L
		3/28/2001	ALKALINITY, TOTAL (AS CACO3)	240000		µg/L
		3/28/2001	CHLORIDE	2700000		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW62A	3/28/2001	SULFATE	2400		µg/L
		3/28/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/28/2001	NITRITE NITROGEN	5	U	µg/L
		3/28/2001	NITRATE AS N	10	U	µg/L
		3/28/2001	MERCURY	0.1	U	µg/L
		3/28/2001	ALUMINUM	41.8	U	µg/L
		3/28/2001	ANTIMONY	3.1	U	µg/L
		3/28/2001	ARSENIC	4.1	U	µg/L
		3/28/2001	BARIUM	1550		µg/L
		3/28/2001	BERYLLIUM	0.1	U	µg/L
		3/28/2001	CADMIUM	0.2	U	µg/L
		3/28/2001	CALCIUM	117000		µg/L
		3/28/2001	CHROMIUM	1.4	U	µg/L
		3/28/2001	COBALT	1.2	U	µg/L
		3/28/2001	COPPER	2.5	U	µg/L
		3/28/2001	IRON	1290		µg/L
		3/28/2001	LEAD	1.3	U	µg/L
		3/28/2001	MAGNESIUM	65300		µg/L
		3/28/2001	MANGANESE	103		µg/L
		3/28/2001	NICKEL	2.2	J	µg/L
		3/28/2001	POTASSIUM	66300	J4	µg/L
		3/28/2001	SELENIUM	4.2	U	µg/L
		3/28/2001	SILVER	2.4	U	µg/L
		3/28/2001	SODIUM	1700000		µg/L
		3/28/2001	THALLIUM	4.1	UJ3	µg/L
		3/28/2001	VANADIUM	2.9	J	µg/L
		3/28/2001	ZINC	4.8	U	µg/L
		3/28/2001	MOLYBDENUM	1.2	U	µg/L
		3/28/2001	PHENOL	1	U	µg/L
		3/28/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/28/2001	2-CHLOROPHENOL	1	U	µg/L
		3/28/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	2-METHYLPHENOL	0.2	J	µg/L
		3/28/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/28/2001	4-METHYLPHENOL	1	U	µg/L
		3/28/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/28/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/28/2001	NITROBENZENE	1	U	µg/L
		3/28/2001	ISOPHORONE	1	U	µg/L
		3/28/2001	2-NITROPHENOL	1	U	µg/L
		3/28/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/28/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/28/2001	2,4-DICHLOROPHENOL	0.1	J	µg/L
		3/28/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	NAPHTHALENE	6		µg/L
		3/28/2001	4-CHLOROANILINE	1	U	µg/L
		3/28/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/28/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/28/2001	2-METHYLNAPHTHALENE	0.6	J	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW62A	3/28/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ37	µg/L
		3/28/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/28/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/28/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/28/2001	2-NITROANILINE	2	U	µg/L
		3/28/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/28/2001	ACENAPHTHYLENE	1	U	µg/L
		3/28/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/28/2001	3-NITROANILINE	2	U	µg/L
		3/28/2001	ACENAPHTHENE	0.5	J	µg/L
		3/28/2001	2,4-DINITROPHENOL	2	R7	µg/L
		3/28/2001	DIBENZOFURAN	1	U	µg/L
		3/28/2001	4-NITROPHENOL	2	U	µg/L
		3/28/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/28/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/28/2001	FLUORENE	0.5	J	µg/L
		3/28/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/28/2001	4-NITROANILINE	2	U	µg/L
		3/28/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/28/2001	4,6-DINITRO-2-METHYLPHENOL	2	UJ7	µg/L
		3/28/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/28/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/28/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/28/2001	PHENANTHRENE	0.9	J	µg/L
		3/28/2001	ANTHRACENE	0.2	J	µg/L
		3/28/2001	CARBAZOLE	0.3	J	µg/L
		3/28/2001	FLUORANTHENE	0.3	J	µg/L
		3/28/2001	PYRENE	0.2	J	µg/L
		3/28/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/28/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/28/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/28/2001	CHRYSENE	1	U	µg/L
		3/28/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U	µg/L
		3/28/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/28/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/28/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/28/2001	BENZO(A)PYRENE	1	U	µg/L
		3/28/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/28/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/28/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/28/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/28/2001	ETHANE	4	UJ7	µg/L
		3/28/2001	ETHENE	3	UJ7	µg/L
		3/28/2001	TOTAL DISSOLVED SOLIDS	5250000		µg/L
		3/28/2001	METHANE	9700	J7	µg/L
		3/28/2001	MERCURY	0.1	U	µg/L
		3/28/2001	ALUMINUM	41.8	U	µg/L
		3/28/2001	ANTIMONY	3.1	U	µg/L
		3/28/2001	ARSENIC	4.1	U	µg/L
		3/28/2001	BARIUM	1440		µg/L
		3/28/2001	BERYLLIUM	0.1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW62A	3/28/2001	CADMIUM	0.2	U	µg/L
		3/28/2001	CALCIUM	114000		µg/L
		3/28/2001	CHROMIUM	1.4	U	µg/L
		3/28/2001	COBALT	1.2	U	µg/L
		3/28/2001	COPPER	2.5	U	µg/L
		3/28/2001	IRON	1300		µg/L
		3/28/2001	LEAD	1.3	U	µg/L
		3/28/2001	MAGNESIUM	63400		µg/L
		3/28/2001	MANGANESE	98.7		µg/L
		3/28/2001	NICKEL	2.6	J	µg/L
		3/28/2001	POTASSIUM	64900	J4	µg/L
		3/28/2001	SELENIUM	4.2	U	µg/L
		3/28/2001	SILVER	2.4	U	µg/L
		3/28/2001	SODIUM	1630000		µg/L
		3/28/2001	THALLIUM	4.1	UJ3	µg/L
		3/28/2001	VANADIUM	2.7	J	µg/L
		3/28/2001	ZINC	4.8	U	µg/L
		3/28/2001	MOLYBDENUM	1.2	U	µg/L
		3/28/2001	TOTAL DISSOLVED SOLIDS	5560000		µg/L
	IR01MW63A	3/29/2001	BARIUM	424		µg/L
		3/29/2001	TOTAL DISSOLVED SOLIDS	6180000		µg/L
	IR01MW366A	3/15/2001	ALKALINITY	1000	U	µg/L
		3/15/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/15/2001	ALKALINITY (AS CACO3)	810000		µg/L
		3/15/2001	ALKALINITY, TOTAL (AS CACO3)	810000		µg/L
		3/15/2001	NITRATE/NITRITE NITROGEN	10		µg/L
		3/15/2001	NITRITE NITROGEN	6		µg/L
		3/15/2001	NITRATE AS N	10	U	µg/L
		3/15/2001	CHLORIDE	1020000		µg/L
		3/15/2001	SULFATE	561000		µg/L
		3/15/2001	PHENOL	5	J3	µg/L
		3/15/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/15/2001	2-CHLOROPHENOL	1	UJ3	µg/L
		3/15/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	2-METHYLPHENOL	1	UJ3	µg/L
		3/15/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/15/2001	4-METHYLPHENOL	1	U	µg/L
		3/15/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/15/2001	N-NITROSO-DI-N-PROPYLAMINE	1	UJ3	µg/L
		3/15/2001	NITROBENZENE	1	U	µg/L
		3/15/2001	ISOPHORONE	1	U	µg/L
		3/15/2001	2-NITROPHENOL	1	U	µg/L
		3/15/2001	2,4-DIMETHYLPHENOL	0.1	J	µg/L
		3/15/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/15/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/15/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	NAPHTHALENE	1	UJ3	µg/L
		3/15/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/15/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW366A	3/15/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/15/2001	2-METHYLNAPHTHALENE	1	UJ37	µg/L
		3/15/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/15/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/15/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/15/2001	2-CHLORONAPHTHALENE	1	UJ3	µg/L
		3/15/2001	2-NITROANILINE	2	U	µg/L
		3/15/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/15/2001	ACENAPHTHYLENE	1	UJ3	µg/L
		3/15/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/15/2001	3-NITROANILINE	2	UJ3	µg/L
		3/15/2001	ACENAPHTHENE	1	U	µg/L
		3/15/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/15/2001	DIBENZOFURAN	1	U	µg/L
		3/15/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/15/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/15/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/15/2001	FLUORENE	1	U	µg/L
		3/15/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/15/2001	4-NITROANILINE	2	U	µg/L
		3/15/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/15/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/15/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/15/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/15/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/15/2001	PHENANTHRENE	1	U	µg/L
		3/15/2001	ANTHRACENE	1	U	µg/L
		3/15/2001	CARBAZOLE	1	U	µg/L
		3/15/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/15/2001	FLUORANTHENE	1	U	µg/L
		3/15/2001	PYRENE	1	U	µg/L
		3/15/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/15/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/15/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/15/2001	CHRYSENE	0.1	J	µg/L
		3/15/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/15/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/15/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/15/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/15/2001	BENZO(A)PYRENE	1	U	µg/L
		3/15/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/15/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/15/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/15/2001	METHANE	670	J7	µg/L
		3/15/2001	ETHANE	4	UJ7	µg/L
		3/15/2001	ETHENE	3	UJ7	µg/L
		3/15/2001	TOTAL DISSOLVED SOLIDS	3040000		µg/L
		3/15/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/15/2001	GROSS ALPHA - RADIOACTIVITY	7	U	µg/L
		3/15/2001	GROSS BETA - RADIOACTIVITY	42		µg/L
	IR01MW367A	3/21/2001	ALKALINITY	1000	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW367A	3/21/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/21/2001	ALKALINITY, TOTAL (AS CACO3)	1860000		µg/L
		3/21/2001	ALKALINITY (AS CACO3)	1860000		µg/L
		3/21/2001	CHLORIDE	1360000		µg/L
		3/21/2001	SULFATE	246000		µg/L
		3/21/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/21/2001	NITRITE NITROGEN	5	U	µg/L
		3/21/2001	NITRATE AS N	10	U	µg/L
		3/21/2001	CALCIUM	19300		µg/L
		3/21/2001	ZINC	5.8	J	µg/L
		3/21/2001	ALPHA-BHC	0.005	U	µg/L
		3/21/2001	BETA-BHC	0.005	U	µg/L
		3/21/2001	DELTA-BHC	0.005	U	µg/L
		3/21/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/21/2001	HEPTACHLOR	0.005	U	µg/L
		3/21/2001	ALDRIN	0.005	U	µg/L
		3/21/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/21/2001	ENDOSULFAN I	0.005	U	µg/L
		3/21/2001	DIELDRIN	0.01	U	µg/L
		3/21/2001	4,4'-DDE	0.01	U	µg/L
		3/21/2001	ENDRIN	0.01	U	µg/L
		3/21/2001	ENDOSULFAN II	0.01	U	µg/L
		3/21/2001	4,4'-DDD	0.01	U	µg/L
		3/21/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/21/2001	4,4'-DDT	0.01	UJ9	µg/L
		3/21/2001	METHOXYCHLOR	0.05	U	µg/L
		3/21/2001	ENDRIN KETONE	0.01	U	µg/L
		3/21/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/21/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/21/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/21/2001	TOXAPHENE	0.5	U	µg/L
		3/21/2001	AROCLOR-1016	0.1	U	µg/L
		3/21/2001	AROCLOR-1221	0.2	U	µg/L
		3/21/2001	AROCLOR-1232	0.1	U	µg/L
		3/21/2001	AROCLOR-1242	0.1	U	µg/L
		3/21/2001	AROCLOR-1248	0.1	U	µg/L
		3/21/2001	AROCLOR-1254	0.1	U	µg/L
		3/21/2001	AROCLOR-1260	0.3		µg/L
		3/21/2001	CHLOROMETHANE	1	U	µg/L
		3/21/2001	VINYL CHLORIDE	0.4	J	µg/L
		3/21/2001	BROMOMETHANE	1	U	µg/L
		3/21/2001	CHLOROETHANE	2		µg/L
		3/21/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/21/2001	ACETONE	20	U47	µg/L
		3/21/2001	CARBON DISULFIDE	1	U	µg/L
		3/21/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/21/2001	TRANS-1,2-DICHLOROETHENE	0.3	J	µg/L
		3/21/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/21/2001	1,1-DICHLOROETHANE	0.3	J	µg/L
		3/21/2001	CIS-1,2-DICHLOROETHENE	0.8	J	µg/L
		3/21/2001	2-BUTANONE	5	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW367A	3/21/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	CHLOROFORM	1	U	µg/L
		3/21/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/21/2001	BENZENE	3		µg/L
		3/21/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/21/2001	TRICHLOROETHENE	1	U	µg/L
		3/21/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/21/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/21/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/21/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/21/2001	TOLUENE	0.3	J	µg/L
		3/21/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/21/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/21/2001	TETRACHLOROETHENE	1	U	µg/L
		3/21/2001	2-HEXANONE	5	U	µg/L
		3/21/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/21/2001	CHLOROBENZENE	1	U	µg/L
		3/21/2001	ETHYLBENZENE	1	U	µg/L
		3/21/2001	STYRENE	1	U	µg/L
		3/21/2001	XYLENE (TOTAL)	0.3	J	µg/L
		3/21/2001	BROMOFORM	1	UJ7	µg/L
		3/21/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/21/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/21/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/21/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/21/2001	ETHANE	4	UJ7	µg/L
		3/21/2001	ETHENE	7	J7	µg/L
		3/21/2001	TOTAL DISSOLVED SOLIDS	3350000		µg/L
		3/21/2001	DIESEL RANGE ORGANICS	200	D	µg/L
		3/21/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/21/2001	GASOLINE RANGE ORGANICS	70	H	µg/L
		3/21/2001	METHANE	5300	J7	µg/L
		3/21/2001	GROSS ALPHA - RADIOACTIVITY	-15	U	µg/L
		3/21/2001	GROSS BETA - RADIOACTIVITY	54		µg/L
	IR01MW400A	3/22/2001	SULFATE	241000		µg/L
		3/22/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/22/2001	CHLORIDE	1300000		µg/L
		3/22/2001	CALCIUM	220000		µg/L
		3/22/2001	MAGNESIUM	47800		µg/L
		3/22/2001	POTASSIUM	54300		µg/L
		3/22/2001	SODIUM	1090000		µg/L
		3/22/2001	IRON	351		µg/L
		3/22/2001	DIELDRIN	0.02	U	µg/L
		3/22/2001	4,4'-DDE	0.02	U	µg/L
		3/22/2001	ENDRIN	0.02	U	µg/L
		3/22/2001	ENDOSULFAN II	0.02	U	µg/L
		3/22/2001	4,4'-DDD	0.02	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW400A	3/22/2001	ENDOSULFAN SULFATE	0.02	U	µg/L
		3/22/2001	4,4'-DDT	0.02	U	µg/L
		3/22/2001	METHOXYCHLOR	0.1	U	µg/L
		3/22/2001	ENDRIN KETONE	0.02	U	µg/L
		3/22/2001	ENDRIN ALDEHYDE	0.02	U	µg/L
		3/22/2001	ENDOSULFAN I	0.01	U	µg/L
		3/22/2001	ALPHA-BHC	0.01	U	µg/L
		3/22/2001	BETA-BHC	0.01	U	µg/L
		3/22/2001	DELTA-BHC	0.005	J	µg/L
		3/22/2001	GAMMA-BHC (LINDANE)	0.01	U	µg/L
		3/22/2001	HEPTACHLOR	0.01	U	µg/L
		3/22/2001	ALDRIN	0.01	U	µg/L
		3/22/2001	HEPTACHLOR EPOXIDE	0.01	U	µg/L
		3/22/2001	GAMMA-CHLORDANE	0.01	U	µg/L
		3/22/2001	TOXAPHENE	1	U	µg/L
		3/22/2001	AROCLOR-1016	0.2	U	µg/L
		3/22/2001	AROCLOR-1221	0.4	U	µg/L
		3/22/2001	AROCLOR-1232	0.2	U	µg/L
		3/22/2001	AROCLOR-1242	0.5		µg/L
		3/22/2001	AROCLOR-1248	0.2	U	µg/L
		3/22/2001	AROCLOR-1254	0.2	U	µg/L
		3/22/2001	AROCLOR-1260	0.2	U	µg/L
		3/22/2001	ALPHA-CHLORDANE	0.01	U	µg/L
		3/22/2001	ETHANE	4	UJ7	µg/L
		3/22/2001	ETHENE	3	UJ7	µg/L
		3/22/2001	TOTAL DISSOLVED SOLIDS	4350000		µg/L
		3/22/2001	METHANE	6400	J7	µg/L
	IR01MW401A	3/22/2001	ALKALINITY	1000	U	µg/L
		3/22/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/22/2001	ALKALINITY (AS CACO3)	720000		µg/L
		3/22/2001	ALKALINITY, TOTAL (AS CACO3)	720000		µg/L
		3/22/2001	NITRATE AS N	30		µg/L
		3/22/2001	NITRITE NITROGEN	5	U	µg/L
		3/22/2001	SULFATE	207000		µg/L
		3/22/2001	NITRATE/NITRITE NITROGEN	30		µg/L
		3/22/2001	CHLORIDE	125000		µg/L
		3/22/2001	MERCURY	0.1	U	µg/L
		3/22/2001	SODIUM	210000		µg/L
		3/22/2001	THALLIUM	4.1	U	µg/L
		3/22/2001	VANADIUM	5.4	J	µg/L
		3/22/2001	ZINC	20.5		µg/L
		3/22/2001	MOLYBDENUM	1.2	U	µg/L
		3/22/2001	SILVER	2.4	U	µg/L
		3/22/2001	ALUMINUM	41.8	U	µg/L
		3/22/2001	ANTIMONY	3.1	U	µg/L
		3/22/2001	ARSENIC	4.4	J	µg/L
		3/22/2001	BARIUM	120	J	µg/L
		3/22/2001	BERYLLIUM	0.1	U	µg/L
		3/22/2001	CADMIUM	0.39	U1	µg/L
		3/22/2001	CALCIUM	174000		µg/L
		3/22/2001	CHROMIUM	1.4	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW401A	3/22/2001	COBALT	1.3	J	µg/L
		3/22/2001	COPPER	7.6	J	µg/L
		3/22/2001	IRON	220		µg/L
		3/22/2001	LEAD	4.5	U1	µg/L
		3/22/2001	MAGNESIUM	64200		µg/L
		3/22/2001	MANGANESE	682		µg/L
		3/22/2001	NICKEL	9.8	J	µg/L
		3/22/2001	POTASSIUM	7810		µg/L
		3/22/2001	SELENIUM	4.2	U	µg/L
		3/22/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/22/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/22/2001	2-NITROANILINE	2	U	µg/L
		3/22/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/22/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/22/2001	4-METHYLPHENOL	1	U	µg/L
		3/22/2001	HEXACHLOROETHANE	1	U	µg/L
		3/22/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/22/2001	NITROBENZENE	1	U	µg/L
		3/22/2001	ISOPHORONE	1	U	µg/L
		3/22/2001	2-NITROPHENOL	1	U	µg/L
		3/22/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/22/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/22/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/22/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/22/2001	NAPHTHALENE	1	U	µg/L
		3/22/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/22/2001	HEXACHLOROBUTADIENE	1	U	µg/L
		3/22/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/22/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/22/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/22/2001	2-METHYLPHENOL	1	U	µg/L
		3/22/2001	PHENOL	1	U	µg/L
		3/22/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/22/2001	2-CHLOROPHENOL	1	U	µg/L
		3/22/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	PHENANTHRENE	0.1	J	µg/L
		3/22/2001	ANTHRACENE	1	U	µg/L
		3/22/2001	CARBAZOLE	1	U	µg/L
		3/22/2001	DI-N-BUTYLPHTHALATE	1	U4	µg/L
		3/22/2001	FLUORANTHENE	0.08	J	µg/L
		3/22/2001	PYRENE	0.07	J	µg/L
		3/22/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/22/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/22/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/22/2001	CHRYSENE	1	U	µg/L
		3/22/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/22/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/22/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/22/2001	BENZO(K)FLUORANTHENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW401A	3/22/2001	BENZO(A)PYRENE	1	U	µg/L
		3/22/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/22/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/22/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/22/2001	PENTACHLOROPHENOL	2	UJ7	µg/L
		3/22/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/22/2001	ACENAPHTHYLENE	1	U	µg/L
		3/22/2001	2,6-DINITROTOLUENE	1	UJ7	µg/L
		3/22/2001	3-NITROANILINE	2	UJ7	µg/L
		3/22/2001	ACENAPHTHENE	1	U	µg/L
		3/22/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/22/2001	DIBENZOFURAN	1	U	µg/L
		3/22/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/22/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/22/2001	DIETHYLPHTHALATE	1	U4	µg/L
		3/22/2001	FLUORENE	1	U	µg/L
		3/22/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/22/2001	4-NITROANILINE	2	UJ7	µg/L
		3/22/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/22/2001	4,6-DINITRO-2-METHYLPHENOL	2	UJ7	µg/L
		3/22/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/22/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/22/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/22/2001	2-BUTANONE	5	U	µg/L
		3/22/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/22/2001	CHLOROFORM	1	U	µg/L
		3/22/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/22/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/22/2001	BENZENE	0.5	U	µg/L
		3/22/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/22/2001	TRICHLOROETHENE	1	U	µg/L
		3/22/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/22/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/22/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/22/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/22/2001	TOLUENE	1	U	µg/L
		3/22/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/22/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/22/2001	TETRACHLOROETHENE	1	U	µg/L
		3/22/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/22/2001	CHLOROMETHANE	1	U	µg/L
		3/22/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/22/2001	BROMOMETHANE	1	U	µg/L
		3/22/2001	CHLOROETHANE	1	U	µg/L
		3/22/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/22/2001	ACETONE	5	U47	µg/L
		3/22/2001	CARBON DISULFIDE	1	U	µg/L
		3/22/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/22/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/22/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/22/2001	STYRENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW401A	3/22/2001	XYLENE (TOTAL)	1	U	µg/L
		3/22/2001	BROMOFORM	1	U	µg/L
		3/22/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/22/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/22/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/22/2001	ETHYLBENZENE	1	U	µg/L
		3/22/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/22/2001	CHLOROBENZENE	1	U	µg/L
		3/22/2001	2-HEXANONE	5	U	µg/L
		3/22/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/22/2001	ETHANE	4	UJ7	µg/L
		3/22/2001	ETHENE	3	UJ7	µg/L
		3/22/2001	METHANE	550	J7	µg/L
		3/22/2001	TOTAL DISSOLVED SOLIDS	1420000		µg/L
	IR01MW402A	4/23/2001	ALKALINITY	1000	U	µg/L
		4/23/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		4/23/2001	ALKALINITY (AS CACO3)	770000		µg/L
		4/23/2001	ALKALINITY, TOTAL (AS CACO3)	770000		µg/L
		4/23/2001	CHLORIDE	1350000		µg/L
		4/23/2001	SULFATE	27100		µg/L
		4/23/2001	NITRATE/NITRITE NITROGEN	10		µg/L
		4/23/2001	NITRITE NITROGEN	5	U	µg/L
		4/23/2001	NITRATE AS N	10		µg/L
		4/23/2001	CALCIUM	163000		µg/L
		4/23/2001	IRON	606		µg/L
		4/23/2001	MAGNESIUM	60000		µg/L
		4/23/2001	POTASSIUM	25100		µg/L
		4/23/2001	SODIUM	807000		µg/L
		4/23/2001	ETHANE	4	U	µg/L
		4/23/2001	ETHENE	3	U	µg/L
		4/23/2001	TOTAL DISSOLVED SOLIDS	3150000		µg/L
		4/23/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		4/23/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		4/23/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		4/23/2001	METHANE	1100	J7	µg/L
		4/23/2001	ALKALINITY	1000	U	µg/L
		4/23/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		4/23/2001	ALKALINITY (AS CACO3)	790000		µg/L
		4/23/2001	ALKALINITY, TOTAL (AS CACO3)	790000		µg/L
		4/23/2001	CHLORIDE	1320000		µg/L
		4/23/2001	SULFATE	27100		µg/L
		4/23/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		4/23/2001	NITRITE NITROGEN	5	U	µg/L
		4/23/2001	NITRATE AS N	10	U	µg/L
		4/23/2001	CALCIUM	166000		µg/L
		4/23/2001	IRON	1010		µg/L
		4/23/2001	MAGNESIUM	61200		µg/L
		4/23/2001	POTASSIUM	25800		µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW402A	4/23/2001	SODIUM	881000		µg/L
		4/23/2001	ETHANE	4	U	µg/L
		4/23/2001	ETHENE	3	U	µg/L
		4/23/2001	TOTAL DISSOLVED SOLIDS	3120000		µg/L
		4/23/2001	METHANE	2000	J7	µg/L
	IR01MW403A	3/20/2001	ALKALINITY	1000	U	µg/L
		3/20/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/20/2001	ALKALINITY (AS CACO3)	780000		µg/L
		3/20/2001	ALKALINITY, TOTAL (AS CACO3)	780000		µg/L
		3/20/2001	CHLORIDE	419000		µg/L
		3/20/2001	SULFATE	146000		µg/L
		3/20/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/20/2001	NITRITE NITROGEN	5	U	µg/L
		3/20/2001	NITRATE AS N	10	U	µg/L
		3/20/2001	MERCURY	0.1	U	µg/L
		3/20/2001	ALUMINUM	41.8	U	µg/L
		3/20/2001	ANTIMONY	3.3	J	µg/L
		3/20/2001	ARSENIC	4.1	U	µg/L
		3/20/2001	BARIUM	68.6	J	µg/L
		3/20/2001	BERYLLIUM	0.1	U	µg/L
		3/20/2001	CADMIUM	0.2	U	µg/L
		3/20/2001	CALCIUM	108000		µg/L
		3/20/2001	CHROMIUM	1.8	J	µg/L
		3/20/2001	COBALT	1.2	U	µg/L
		3/20/2001	COPPER	2.5	U	µg/L
		3/20/2001	IRON	1360		µg/L
		3/20/2001	LEAD	1.3	UJ3	µg/L
		3/20/2001	MAGNESIUM	85000		µg/L
		3/20/2001	MANGANESE	1200		µg/L
		3/20/2001	NICKEL	3	U2	µg/L
		3/20/2001	POTASSIUM	14900	J4	µg/L
		3/20/2001	SELENIUM	3.9	U	µg/L
		3/20/2001	SILVER	2.4	U	µg/L
		3/20/2001	SODIUM	541000		µg/L
		3/20/2001	THALLIUM	4.1	U	µg/L
		3/20/2001	VANADIUM	1.9	J	µg/L
		3/20/2001	ZINC	4.8	U	µg/L
		3/20/2001	PHENOL	1	U	µg/L
		3/20/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/20/2001	2-CHLOROPHENOL	1	U	µg/L
		3/20/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	2-METHYLPHENOL	1	U	µg/L
		3/20/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/20/2001	4-METHYLPHENOL	1	U	µg/L
		3/20/2001	HEXACHLOROETHANE	1	U	µg/L
		3/20/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/20/2001	NITROBENZENE	1	U	µg/L
		3/20/2001	ISOPHORONE	1	U	µg/L
		3/20/2001	2-NITROPHENOL	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW403A	3/20/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/20/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/20/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/20/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/20/2001	NAPHTHALENE	1	U	µg/L
		3/20/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/20/2001	HEXACHLOROBUTADIENE	1	U	µg/L
		3/20/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/20/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/20/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/20/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/20/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/20/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/20/2001	2-NITROANILINE	2	U	µg/L
		3/20/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/20/2001	ACENAPHTHYLENE	1	U	µg/L
		3/20/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/20/2001	3-NITROANILINE	2	UJ37	µg/L
		3/20/2001	ACENAPHTHENE	1	U	µg/L
		3/20/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/20/2001	DIBENZOFURAN	1	U	µg/L
		3/20/2001	2,4-DINITROTOLUENE	1	UJ7	µg/L
		3/20/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/20/2001	FLUORENE	1	U	µg/L
		3/20/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/20/2001	4-NITROANILINE	2	UJ7	µg/L
		3/20/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/20/2001	4,6-DINITRO-2-METHYLPHENOL	2	UJ7	µg/L
		3/20/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/20/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/20/2001	PENTACHLOROPHENOL	2	UJ7	µg/L
		3/20/2001	PHENANTHRENE	1	U	µg/L
		3/20/2001	ANTHRACENE	1	U	µg/L
		3/20/2001	CARBAZOLE	1	U	µg/L
		3/20/2001	DI-N-BUTYLPHTHALATE	1	U4	µg/L
		3/20/2001	FLUORANTHENE	1	U	µg/L
		3/20/2001	PYRENE	1	U	µg/L
		3/20/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/20/2001	BENZO(A)ANTHRACENE	0.08	J	µg/L
		3/20/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/20/2001	CHRYSENE	0.06	J	µg/L
		3/20/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/20/2001	DI-N-OCTYLPHTHALATE	1	U4	µg/L
		3/20/2001	BENZO(B)FLUORANTHENE	0.2	J	µg/L
		3/20/2001	BENZO(K)FLUORANTHENE	0.2	J	µg/L
		3/20/2001	BENZO(A)PYRENE	0.2	J	µg/L
		3/20/2001	INDENO(1,2,3-CD)PYRENE	0.3	J	µg/L
		3/20/2001	DIBENZ(A,H)ANTHRACENE	0.3	J	µg/L
		3/20/2001	BENZO(G,H,I)PERYLENE	0.4	J	µg/L
		3/20/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/20/2001	CHLOROMETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW403A	3/20/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/20/2001	BROMOMETHANE	1	U	µg/L
		3/20/2001	CHLOROETHANE	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/20/2001	ACETONE	5	R7	µg/L
		3/20/2001	CARBON DISULFIDE	0.9	J	µg/L
		3/20/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/20/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/20/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	2-BUTANONE	5	U	µg/L
		3/20/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	CHLOROFORM	1	U	µg/L
		3/20/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/20/2001	BENZENE	0.5	U	µg/L
		3/20/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/20/2001	TRICHLOROETHENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/20/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/20/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/20/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/20/2001	TOLUENE	1	U	µg/L
		3/20/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/20/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	TETRACHLOROETHENE	1	U	µg/L
		3/20/2001	2-HEXANONE	5	U	µg/L
		3/20/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/20/2001	CHLOROBENZENE	1	U	µg/L
		3/20/2001	ETHYLBENZENE	1	U	µg/L
		3/20/2001	STYRENE	1	U	µg/L
		3/20/2001	XYLENE (TOTAL)	1	U	µg/L
		3/20/2001	BROMOFORM	1	UJ7	µg/L
		3/20/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/20/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/20/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/20/2001	METHANE	430	J7	µg/L
		3/20/2001	ETHANE	4	UJ7	µg/L
		3/20/2001	ETHENE	3	UJ7	µg/L
		3/20/2001	TOTAL DISSOLVED SOLIDS	1990000		µg/L
		3/20/2001	ALKALINITY	1000	U	µg/L
		3/20/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/20/2001	ALKALINITY (AS CACO3)	780000		µg/L
		3/20/2001	ALKALINITY, TOTAL (AS CACO3)	780000		µg/L
		3/20/2001	CHLORIDE	453000		µg/L
		3/20/2001	SULFATE	150000		µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-2	3/6/2001	CHROMIUM VI	10	U	µg/L
		3/6/2001	MERCURY	0.1	U	µg/L
		3/6/2001	ALUMINUM	28.4	U	µg/L
		3/6/2001	ARSENIC	14.3		µg/L
		3/6/2001	BARIUM	341		µg/L
		3/6/2001	CHROMIUM	0.7	U	µg/L
		3/6/2001	COPPER	1.5	U	µg/L
		3/6/2001	LEAD	1.6	U	µg/L
		3/6/2001	NICKEL	180		µg/L
		3/6/2001	ZINC	9.3	J	µg/L
		3/6/2001	BERYLLIUM	0.2	U	µg/L
		3/6/2001	TOTAL DISSOLVED SOLIDS	2600000		µg/L
		3/6/2001	GROSS ALPHA - RADIOACTIVITY	9	U	µg/L
		3/6/2001	GROSS BETA - RADIOACTIVITY	35		µg/L
	IR01MWI-3	3/29/2001	ALKALINITY	1000	U	µg/L
		3/29/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/29/2001	ALKALINITY (AS CACO3)	856000		µg/L
		3/29/2001	ALKALINITY, TOTAL (AS CACO3)	856000		µg/L
		3/29/2001	CHLORIDE	2660000		µg/L
		3/29/2001	SULFATE	76900		µg/L
		3/29/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/29/2001	NITRITE NITROGEN	5	U	µg/L
		3/29/2001	NITRATE AS N	10	U	µg/L
		3/29/2001	CALCIUM	175000		µg/L
		3/29/2001	IRON	18000		µg/L
		3/29/2001	MAGNESIUM	294000		µg/L
		3/29/2001	NICKEL	19.4	J	µg/L
		3/29/2001	POTASSIUM	58100	J4	µg/L
		3/29/2001	SODIUM	1030000		µg/L
		3/29/2001	ZINC	4.8	U	µg/L
		3/29/2001	ALPHA-BHC	0.005	U	µg/L
		3/29/2001	BETA-BHC	0.04		µg/L
		3/29/2001	DELTA-BHC	0.005	J	µg/L
		3/29/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/29/2001	HEPTACHLOR	0.005	U	µg/L
		3/29/2001	ALDRIN	0.005	U	µg/L
		3/29/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/29/2001	ENDOSULFAN I	0.005	U	µg/L
		3/29/2001	DIELDRIN	0.02		µg/L
		3/29/2001	4,4'-DDE	0.01	U	µg/L
		3/29/2001	ENDRIN	0.04	J9	µg/L
		3/29/2001	ENDOSULFAN II	0.01	U	µg/L
		3/29/2001	4,4'-DDD	0.01	UJ9	µg/L
		3/29/2001	ENDOSULFAN SULFATE	0.01	UJ9	µg/L
		3/29/2001	4,4'-DDT	0.02		µg/L
		3/29/2001	METHOXYCHLOR	0.05	U	µg/L
		3/29/2001	ENDRIN KETONE	0.01	U	µg/L
		3/29/2001	ENDRIN ALDEHYDE	0.01	J9	µg/L
		3/29/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/29/2001	GAMMA-CHLORDANE	0.02		µg/L
		3/29/2001	TOXAPHENE	0.5	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-3	3/29/2001	AROCLOR-1016	0.1	U	µg/L
		3/29/2001	AROCLOR-1221	0.2	U	µg/L
		3/29/2001	AROCLOR-1232	0.1	U	µg/L
		3/29/2001	AROCLOR-1242	0.1	U	µg/L
		3/29/2001	AROCLOR-1248	0.1	U	µg/L
		3/29/2001	AROCLOR-1254	0.1	U	µg/L
		3/29/2001	AROCLOR-1260	0.3		µg/L
		3/29/2001	PHENOL	3		µg/L
		3/29/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/29/2001	2-CHLOROPHENOL	1	U	µg/L
		3/29/2001	1,3-DICHLOROBENZENE	0.5	J3	µg/L
		3/29/2001	1,4-DICHLOROBENZENE	2	J3	µg/L
		3/29/2001	1,2-DICHLOROBENZENE	0.2	J3	µg/L
		3/29/2001	2-METHYLPHENOL	1	U	µg/L
		3/29/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/29/2001	4-METHYLPHENOL	1	U	µg/L
		3/29/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/29/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/29/2001	NITROBENZENE	1	U	µg/L
		3/29/2001	ISOPHORONE	1	U	µg/L
		3/29/2001	2-NITROPHENOL	1	U	µg/L
		3/29/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/29/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/29/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/29/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/29/2001	NAPHTHALENE	0.08	J	µg/L
		3/29/2001	4-CHLOROANILINE	1	U	µg/L
		3/29/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/29/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/29/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/29/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/29/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/29/2001	2,4,5-TRICHLOROPHENOL	3	U	µg/L
		3/29/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/29/2001	2-NITROANILINE	3	U	µg/L
		3/29/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/29/2001	ACENAPHTHYLENE	1	U	µg/L
		3/29/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/29/2001	3-NITROANILINE	3	U	µg/L
		3/29/2001	ACENAPHTHENE	0.2	J	µg/L
		3/29/2001	2,4-DINITROPHENOL	3	R7	µg/L
		3/29/2001	DIBENZOFURAN	1	U	µg/L
		3/29/2001	4-NITROPHENOL	3	U	µg/L
		3/29/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/29/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/29/2001	FLUORENE	0.2	J	µg/L
		3/29/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/29/2001	4-NITROANILINE	3	UJ7	µg/L
		3/29/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/29/2001	4,6-DINITRO-2-METHYLPHENOL	3	U	µg/L
		3/29/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-3	3/29/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/29/2001	PENTACHLOROPHENOL	3	U	µg/L
		3/29/2001	PHENANTHRENE	1	U	µg/L
		3/29/2001	ANTHRACENE	0.2	J	µg/L
		3/29/2001	CARBAZOLE	1	U	µg/L
		3/29/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/29/2001	FLUORANTHENE	1	U	µg/L
		3/29/2001	PYRENE	1	U	µg/L
		3/29/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/29/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/29/2001	CHRYSENE	1	U	µg/L
		3/29/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/29/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/29/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/29/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/29/2001	BENZO(A)PYRENE	1	U	µg/L
		3/29/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/29/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/29/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/29/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/29/2001	CHLOROMETHANE	0.3	J	µg/L
		3/29/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/29/2001	BROMOMETHANE	1	U	µg/L
		3/29/2001	CHLOROETHANE	1	U	µg/L
		3/29/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/29/2001	ACETONE	29	U27	µg/L
		3/29/2001	CARBON DISULFIDE	1	U	µg/L
		3/29/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/29/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/29/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/29/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/29/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/29/2001	2-BUTANONE	5	U	µg/L
		3/29/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/29/2001	CHLOROFORM	1	U	µg/L
		3/29/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/29/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/29/2001	BENZENE	0.9		µg/L
		3/29/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/29/2001	TRICHLOROETHENE	1	U	µg/L
		3/29/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/29/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/29/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/29/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/29/2001	TOLUENE	1	U2	µg/L
		3/29/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/29/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/29/2001	TETRACHLOROETHENE	1	U	µg/L
		3/29/2001	2-HEXANONE	5	U	µg/L
		3/29/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/29/2001	1,2-DIBROMOETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-3	3/29/2001	CHLOROBENZENE	21		µg/L
		3/29/2001	ETHYLBENZENE	1	U	µg/L
		3/29/2001	STYRENE	1	U	µg/L
		3/29/2001	XYLENE (TOTAL)	1	U	µg/L
		3/29/2001	BROMOFORM	1	U	µg/L
		3/29/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/29/2001	1,3-DICHLOROBENZENE	1		µg/L
		3/29/2001	1,4-DICHLOROBENZENE	4		µg/L
		3/29/2001	1,2-DICHLOROBENZENE	0.4	J	µg/L
		3/29/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/29/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/29/2001	ETHANE	4	UJ7	µg/L
		3/29/2001	ETHENE	3	UJ7	µg/L
		3/29/2001	TOTAL DISSOLVED SOLIDS	4460000		µg/L
		3/29/2001	DIESEL RANGE ORGANICS	200	D	µg/L
		3/29/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/29/2001	GASOLINE RANGE ORGANICS	60	HZ	µg/L
		3/29/2001	METHANE	7400	J7	µg/L
		3/29/2001	GROSS ALPHA - RADIOACTIVITY	-9	U	µg/L
		3/29/2001	GROSS BETA - RADIOACTIVITY	57		µg/L
		3/29/2001	GASOLINE RANGE ORGANICS	90	HZ	µg/L
		3/29/2001	GROSS BETA - RADIOACTIVITY	77		µg/L
		3/29/2001	GROSS ALPHA - RADIOACTIVITY	6	U	µg/L
	IR01MWI-5	4/24/2001	CHROMIUM VI	10	U	µg/L
		4/24/2001	ALKALINITY	1000	U	µg/L
		4/24/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		4/24/2001	ALKALINITY (AS CACO3)	2180000		µg/L
		4/24/2001	ALKALINITY, TOTAL (AS CACO3)	2180000		µg/L
		4/24/2001	CHLORIDE	497000		µg/L
		4/24/2001	NITRATE/NITRITE NITROGEN	30		µg/L
		4/24/2001	NITRITE NITROGEN	5		µg/L
		4/24/2001	NITRATE AS N	20		µg/L
		4/24/2001	SULFATE	300		µg/L
		4/24/2001	MERCURY	0.1	U	µg/L
		4/24/2001	ANTIMONY	15.5	U1	µg/L
		4/24/2001	BARIUM	871		µg/L
		4/24/2001	CALCIUM	43600		µg/L
		4/24/2001	CHROMIUM	24.3		µg/L
		4/24/2001	COPPER	11.6	J	µg/L
		4/24/2001	IRON	15500		µg/L
		4/24/2001	LEAD	25.6		µg/L
		4/24/2001	MAGNESIUM	421000		µg/L
		4/24/2001	NICKEL	139		µg/L
		4/24/2001	POTASSIUM	43200		µg/L
		4/24/2001	SODIUM	406000		µg/L
		4/24/2001	ZINC	5.1	J	µg/L
		4/24/2001	ALPHA-BHC	0.03	U	µg/L
		4/24/2001	BETA-BHC	0.05	U2	µg/L
		4/24/2001	DELTA-BHC	0.03	U	µg/L
		4/24/2001	GAMMA-BHC (LINDANE)	0.03	U	µg/L
		4/24/2001	HEPTACHLOR	0.03	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-5	4/24/2001	ALDRIN	0.03	U	µg/L
		4/24/2001	HEPTACHLOR EPOXIDE	0.03	U	µg/L
		4/24/2001	ENDOSULFAN I	0.03	U	µg/L
		4/24/2001	DIELDRIN	0.06	U	µg/L
		4/24/2001	4,4'-DDE	0.06	U	µg/L
		4/24/2001	ENDRIN	0.06	U	µg/L
		4/24/2001	ENDOSULFAN II	0.06	U	µg/L
		4/24/2001	4,4'-DDD	0.06	U	µg/L
		4/24/2001	ENDOSULFAN SULFATE	0.06	U	µg/L
		4/24/2001	4,4'-DDT	0.06	UJ7	µg/L
		4/24/2001	METHOXYCHLOR	0.3	UJ7	µg/L
		4/24/2001	ENDRIN KETONE	0.06	U	µg/L
		4/24/2001	ENDRIN ALDEHYDE	0.05	J	µg/L
		4/24/2001	ALPHA-CHLORDANE	0.03	UJ9	µg/L
		4/24/2001	GAMMA-CHLORDANE	0.03	U	µg/L
		4/24/2001	TOXAPHENE	3	U	µg/L
		4/24/2001	AROCLOR-1016	0.6	U	µg/L
		4/24/2001	AROCLOR-1221	1	U	µg/L
		4/24/2001	AROCLOR-1232	0.6	U	µg/L
		4/24/2001	AROCLOR-1242	0.6	U	µg/L
		4/24/2001	AROCLOR-1248	0.6	U	µg/L
		4/24/2001	AROCLOR-1254	0.6	J9	µg/L
		4/24/2001	AROCLOR-1260	0.6	U	µg/L
		4/24/2001	PHENOL	0.8	J	µg/L
		4/24/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		4/24/2001	2-CHLOROPHENOL	0.07	J	µg/L
		4/24/2001	1,3-DICHLOROBENZENE	0.5	J3	µg/L
		4/24/2001	1,4-DICHLOROBENZENE	3	J3	µg/L
		4/24/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		4/24/2001	2-METHYLPHENOL	0.4	J	µg/L
		4/24/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		4/24/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		4/24/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		4/24/2001	NITROBENZENE	1	U	µg/L
		4/24/2001	ISOPHORONE	1	U	µg/L
		4/24/2001	2-NITROPHENOL	1	U	µg/L
		4/24/2001	2,4-DIMETHYLPHENOL	8	J7	µg/L
		4/24/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		4/24/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		4/24/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		4/24/2001	NAPHTHALENE	0.5	J	µg/L
		4/24/2001	4-CHLOROANILINE	1	U	µg/L
		4/24/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		4/24/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		4/24/2001	2-METHYLNAPHTHALENE	0.2	J	µg/L
		4/24/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		4/24/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		4/24/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		4/24/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		4/24/2001	2-NITROANILINE	2	U	µg/L
		4/24/2001	DIMETHYLPHTHALATE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-5	4/24/2001	ACENAPHTHYLENE	1	U	µg/L
		4/24/2001	2,6-DINITROTOLUENE	1	U	µg/L
		4/24/2001	3-NITROANILINE	2	U	µg/L
		4/24/2001	ACENAPHTHENE	0.8	J	µg/L
		4/24/2001	2,4-DINITROPHENOL	2	U	µg/L
		4/24/2001	DIBENZOFURAN	1	U	µg/L
		4/24/2001	4-NITROPHENOL	2	U	µg/L
		4/24/2001	2,4-DINITROTOLUENE	1	U	µg/L
		4/24/2001	DIETHYLPHTHALATE	1	U	µg/L
		4/24/2001	FLUORENE	0.4	J	µg/L
		4/24/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		4/24/2001	4-NITROANILINE	2	U	µg/L
		4/24/2001	N-NITROSODIPHENYLAMINE	1	UJ0	µg/L
		4/24/2001	4,6-DINITRO-2-METHYLPHENOL	2	UJ0	µg/L
		4/24/2001	4-BROMOPHENYL-PHENYLETHER	1	UJ0	µg/L
		4/24/2001	HEXACHLOROBENZENE	1	UJ0	µg/L
		4/24/2001	PENTACHLOROPHENOL	2	UJ0	µg/L
		4/24/2001	PHENANTHRENE	0.3	J0	µg/L
		4/24/2001	ANTHRACENE	0.2	J0	µg/L
		4/24/2001	CARBAZOLE	1	UJ0	µg/L
		4/24/2001	DI-N-BUTYLPHTHALATE	1	UJ0	µg/L
		4/24/2001	FLUORANTHENE	0.5	J0	µg/L
		4/24/2001	PYRENE	0.9	J0	µg/L
		4/24/2001	BUTYLBENZYLPHTHALATE	1	UJ0	µg/L
		4/24/2001	BENZO(A)ANTHRACENE	0.2	J0	µg/L
		4/24/2001	3,3'-DICHLOROBENZIDINE	1	UJ0	µg/L
		4/24/2001	CHRYSENE	0.2	J0	µg/L
		4/24/2001	BIS(2-ETHYLHEXYL)PHTHALATE	2	U40	µg/L
		4/24/2001	DI-N-OCTYLPHTHALATE	1	UJ0	µg/L
		4/24/2001	BENZO(B)FLUORANTHENE	1	UJ0	µg/L
		4/24/2001	BENZO(K)FLUORANTHENE	1	UJ0	µg/L
		4/24/2001	BENZO(A)PYRENE	1	UJ0	µg/L
		4/24/2001	INDENO(1,2,3-CD)PYRENE	1	UJ07	µg/L
		4/24/2001	DIBENZ(A,H)ANTHRACENE	1	UJ07	µg/L
		4/24/2001	BENZO(G,H,I)PERYLENE	1	UJ07	µg/L
		4/24/2001	CHLOROMETHANE	1	U	µg/L
		4/24/2001	VINYL CHLORIDE	0.5	U	µg/L
		4/24/2001	BROMOMETHANE	1	U	µg/L
		4/24/2001	CHLOROETHANE	1	U	µg/L
		4/24/2001	1,1-DICHLOROETHENE	1	U	µg/L
		4/24/2001	ACETONE	36	U27	µg/L
		4/24/2001	CARBON DISULFIDE	1	U	µg/L
		4/24/2001	METHYLENE CHLORIDE	2	U	µg/L
		4/24/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		4/24/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		4/24/2001	1,1-DICHLOROETHANE	1	U	µg/L
		4/24/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		4/24/2001	2-BUTANONE	5	U4	µg/L
		4/24/2001	BROMOCHLOROMETHANE	1	U	µg/L
		4/24/2001	CHLOROFORM	1	U	µg/L
		4/24/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-5	4/24/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		4/24/2001	BENZENE	2		µg/L
		4/24/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		4/24/2001	TRICHLOROETHENE	1	U	µg/L
		4/24/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		4/24/2001	BROMODICHLOROMETHANE	1	U	µg/L
		4/24/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		4/24/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		4/24/2001	TOLUENE	0.7	J	µg/L
		4/24/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		4/24/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		4/24/2001	TETRACHLOROETHENE	1	U	µg/L
		4/24/2001	2-HEXANONE	5	U	µg/L
		4/24/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		4/24/2001	1,2-DIBROMOETHANE	1	U	µg/L
		4/24/2001	CHLOROBENZENE	5		µg/L
		4/24/2001	ETHYLBENZENE	1	U	µg/L
		4/24/2001	STYRENE	1	U	µg/L
		4/24/2001	XYLENE (TOTAL)	0.4	J	µg/L
		4/24/2001	BROMOFORM	1	U	µg/L
		4/24/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		4/24/2001	1,3-DICHLOROBENZENE	0.7	J	µg/L
		4/24/2001	1,4-DICHLOROBENZENE	4		µg/L
		4/24/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		4/24/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		4/24/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		4/24/2001	METHANE	940	J7	µg/L
		4/24/2001	ETHANE	4	U	µg/L
		4/24/2001	ETHENE	3	U	µg/L
		4/24/2001	SALINITY	2.9		µg/L
		4/24/2001	TOTAL DISSOLVED SOLIDS	3170000		µg/L
		4/24/2001	4-METHYLPHENOL	8		µg/L
		4/24/2001	GROSS ALPHA - RADIOACTIVITY	-3.9	U	µg/L
		4/24/2001	GROSS BETA - RADIOACTIVITY	20.3		µg/L
	IR01MWI-7	3/30/2001	ALKALINITY	1000	U	µg/L
		3/30/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/30/2001	ALKALINITY (AS CACO3)	1210000		µg/L
		3/30/2001	ALKALINITY, TOTAL (AS CACO3)	1210000		µg/L
		3/30/2001	CHLORIDE	12600000		µg/L
		3/30/2001	SULFATE	598000		µg/L
		3/30/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/30/2001	NITRITE NITROGEN	5	U	µg/L
		3/30/2001	NITRATE AS N	10	U	µg/L
		3/30/2001	MERCURY	0.1	U	µg/L
		3/30/2001	ALUMINUM	101	J	µg/L
		3/30/2001	ANTIMONY	3.1	U	µg/L
		3/30/2001	ARSENIC	10.4	U1	µg/L
		3/30/2001	BARIUM	364		µg/L
		3/30/2001	BERYLLIUM	0.11	J	µg/L
		3/30/2001	CADMIUM	0.2	U	µg/L
		3/30/2001	CALCIUM	417000		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-7	3/30/2001	CHROMIUM	1.4	U	µg/L
		3/30/2001	COBALT	1.7	J	µg/L
		3/30/2001	COPPER	2.6	U1	µg/L
		3/30/2001	IRON	285	U1	µg/L
		3/30/2001	LEAD	1.3	U	µg/L
		3/30/2001	MAGNESIUM	905000		µg/L
		3/30/2001	MANGANESE	294		µg/L
		3/30/2001	NICKEL	1.8	J	µg/L
		3/30/2001	POTASSIUM	288000		µg/L
		3/30/2001	SELENIUM	8.7	U1	µg/L
		3/30/2001	SILVER	2.4	U	µg/L
		3/30/2001	SODIUM	6840000	J4	µg/L
		3/30/2001	THALLIUM	4.1	U	µg/L
		3/30/2001	VANADIUM	12.2	J	µg/L
		3/30/2001	ZINC	3.1	J	µg/L
		3/30/2001	MOLYBDENUM	5.3	U1	µg/L
		3/30/2001	PHENOL	0.9	J	µg/L
		3/30/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/30/2001	2-CHLOROPHENOL	1	U	µg/L
		3/30/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/30/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/30/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/30/2001	2-METHYLPHENOL	1	U	µg/L
		3/30/2001	4-METHYLPHENOL	1	U	µg/L
		3/30/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/30/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/30/2001	NITROBENZENE	1	U	µg/L
		3/30/2001	ISOPHORONE	1	U	µg/L
		3/30/2001	2-NITROPHENOL	1	U	µg/L
		3/30/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/30/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/30/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/30/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/30/2001	NAPHTHALENE	1	U	µg/L
		3/30/2001	4-CHLOROANILINE	1	U	µg/L
		3/30/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/30/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/30/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/30/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/30/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/30/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/30/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/30/2001	2-NITROANILINE	2	U	µg/L
		3/30/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/30/2001	ACENAPHTHYLENE	1	U	µg/L
		3/30/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/30/2001	3-NITROANILINE	2	U	µg/L
		3/30/2001	ACENAPHTHENE	1	U	µg/L
		3/30/2001	2,4-DINITROPHENOL	2	R7	µg/L
		3/30/2001	DIBENZOFURAN	1	U	µg/L
		3/30/2001	4-NITROPHENOL	2	U	µg/L

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PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-7	3/30/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/30/2001	DIETHYLPHTHALATE	1	U4	µg/L
		3/30/2001	FLUORENE	1	U	µg/L
		3/30/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/30/2001	4-NITROANILINE	2	UJ7	µg/L
		3/30/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/30/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/30/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/30/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/30/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/30/2001	PHENANTHRENE	1	U	µg/L
		3/30/2001	ANTHRACENE	1	U	µg/L
		3/30/2001	CARBAZOLE	1	U	µg/L
		3/30/2001	DI-N-BUTYLPHTHALATE	1	U4	µg/L
		3/30/2001	FLUORANTHENE	1	U	µg/L
		3/30/2001	PYRENE	1	U	µg/L
		3/30/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/30/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/30/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/30/2001	CHRYSENE	1	U	µg/L
		3/30/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/30/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/30/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/30/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/30/2001	BENZO(A)PYRENE	1	U	µg/L
		3/30/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/30/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/30/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/30/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/30/2001	CHLOROMETHANE	1	U	µg/L
		3/30/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/30/2001	BROMOMETHANE	1	U	µg/L
		3/30/2001	CHLOROETHANE	1	U	µg/L
		3/30/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/30/2001	ACETONE	5	U47	µg/L
		3/30/2001	CARBON DISULFIDE	1	U2	µg/L
		3/30/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/30/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/30/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/30/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/30/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/30/2001	2-BUTANONE	5	U	µg/L
		3/30/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/30/2001	CHLOROFORM	1	U	µg/L
		3/30/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/30/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/30/2001	BENZENE	0.5	U	µg/L
		3/30/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/30/2001	TRICHLOROETHENE	1	U	µg/L
		3/30/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/30/2001	BROMODICHLOROMETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-7	3/30/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/30/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/30/2001	TOLUENE	1	U	µg/L
		3/30/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/30/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/30/2001	TETRACHLOROETHENE	1	U	µg/L
		3/30/2001	2-HEXANONE	5	U	µg/L
		3/30/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/30/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/30/2001	CHLOROBENZENE	1	U	µg/L
		3/30/2001	ETHYLBENZENE	1	U	µg/L
		3/30/2001	STYRENE	1	U	µg/L
		3/30/2001	XYLENE (TOTAL)	1	U	µg/L
		3/30/2001	BROMOFORM	1	U	µg/L
		3/30/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/30/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/30/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/30/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/30/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/30/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/30/2001	METHANE	1400	J7	µg/L
		3/30/2001	ETHANE	4	UJ7	µg/L
		3/30/2001	ETHENE	3	UJ7	µg/L
		3/30/2001	TOTAL DISSOLVED SOLIDS	28400000		µg/L
		3/30/2001	CHLOROMETHANE	1	U	µg/L
		3/30/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/30/2001	CHLOROETHANE	1	U	µg/L
		3/30/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/30/2001	ACETONE	5	U47	µg/L
		3/30/2001	CARBON DISULFIDE	1	U2	µg/L
		3/30/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/30/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/30/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/30/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/30/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/30/2001	2-BUTANONE	5	U	µg/L
		3/30/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/30/2001	CHLOROFORM	1	U	µg/L
		3/30/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/30/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/30/2001	BENZENE	0.5	U	µg/L
		3/30/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/30/2001	TRICHLOROETHENE	1	U	µg/L
		3/30/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/30/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/30/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/30/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/30/2001	TOLUENE	1	U	µg/L
		3/30/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/30/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/30/2001	TETRACHLOROETHENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-7	3/30/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/30/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/30/2001	CHLOROBENZENE	1	U	µg/L
		3/30/2001	ETHYLBENZENE	1	U	µg/L
		3/30/2001	STYRENE	1	U	µg/L
		3/30/2001	XYLENE (TOTAL)	1	U	µg/L
		3/30/2001	BROMOFORM	1	U	µg/L
		3/30/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/30/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/30/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/30/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/30/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/30/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/30/2001	BROMOMETHANE	1	U	µg/L
		3/30/2001	2-HEXANONE	5	U	µg/L
	IR01MWI-8	3/29/2001	ALKALINITY	1000	U	µg/L
		3/29/2001	ALKALINITY (AS CACO3)	300000		µg/L
		3/29/2001	ALKALINITY, TOTAL (AS CACO3)	300000		µg/L
		3/29/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/29/2001	SULFATE	1510000		µg/L
		3/29/2001	CHLORIDE	11900000		µg/L
		3/29/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/29/2001	NITRITE NITROGEN	5	U	µg/L
		3/29/2001	NITRATE AS N	10	U	µg/L
		3/29/2001	MERCURY	0.1	U	µg/L
		3/29/2001	ALUMINUM	41.8	U	µg/L
		3/29/2001	ANTIMONY	3.1	U	µg/L
		3/29/2001	ARSENIC	5.8	J	µg/L
		3/29/2001	BARIUM	71.7	J	µg/L
		3/29/2001	BERYLLIUM	0.34	U1	µg/L
		3/29/2001	CADMIUM	0.2	U	µg/L
		3/29/2001	CALCIUM	296000		µg/L
		3/29/2001	CHROMIUM	1.4	U	µg/L
		3/29/2001	COBALT	1.2	U	µg/L
		3/29/2001	COPPER	2.5	U	µg/L
		3/29/2001	IRON	967		µg/L
		3/29/2001	LEAD	1.3	U	µg/L
		3/29/2001	MAGNESIUM	724000		µg/L
		3/29/2001	MANGANESE	284		µg/L
		3/29/2001	NICKEL	2.3	J	µg/L
		3/29/2001	POTASSIUM	277000	J4	µg/L
		3/29/2001	SELENIUM	4.2	U	µg/L
		3/29/2001	SILVER	2.4	U	µg/L
		3/29/2001	SODIUM	6880000		µg/L
		3/29/2001	THALLIUM	4.1	UJ3	µg/L
		3/29/2001	VANADIUM	1.5	J	µg/L
		3/29/2001	ZINC	4.8	U	µg/L
		3/29/2001	MOLYBDENUM	9.7	J	µg/L
		3/29/2001	PHENOL	1	U	µg/L
		3/29/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/29/2001	2-CHLOROPHENOL	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-8	3/29/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/29/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/29/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/29/2001	2-METHYLPHENOL	1	U	µg/L
		3/29/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/29/2001	4-METHYLPHENOL	1	U	µg/L
		3/29/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/29/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/29/2001	NITROBENZENE	1	U	µg/L
		3/29/2001	ISOPHORONE	1	U	µg/L
		3/29/2001	2-NITROPHENOL	1	U	µg/L
		3/29/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/29/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/29/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/29/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/29/2001	NAPHTHALENE	1	U	µg/L
		3/29/2001	4-CHLOROANILINE	1	U	µg/L
		3/29/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/29/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/29/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/29/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/29/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/29/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/29/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/29/2001	2-NITROANILINE	2	U	µg/L
		3/29/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/29/2001	ACENAPHTHYLENE	1	U	µg/L
		3/29/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/29/2001	3-NITROANILINE	2	U	µg/L
		3/29/2001	ACENAPHTHENE	1	U	µg/L
		3/29/2001	2,4-DINITROPHENOL	2	R7	µg/L
		3/29/2001	DIBENZOFURAN	1	U	µg/L
		3/29/2001	4-NITROPHENOL	2	U	µg/L
		3/29/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/29/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/29/2001	FLUORENE	1	U	µg/L
		3/29/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/29/2001	4-NITROANILINE	2	UJ7	µg/L
		3/29/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/29/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/29/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/29/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/29/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/29/2001	PHENANTHRENE	1	U	µg/L
		3/29/2001	ANTHRACENE	1	U	µg/L
		3/29/2001	CARBAZOLE	1	U	µg/L
		3/29/2001	DI-N-BUTYLPHTHALATE	1	U4	µg/L
		3/29/2001	FLUORANTHENE	1	U	µg/L
		3/29/2001	PYRENE	1	U	µg/L
		3/29/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/29/2001	BENZO(A)ANTHRACENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-8	3/29/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/29/2001	CHRYSENE	1	U	µg/L
		3/29/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/29/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/29/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/29/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/29/2001	BENZO(A)PYRENE	1	U	µg/L
		3/29/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/29/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/29/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/29/2001	CHLOROMETHANE	1	U	µg/L
		3/29/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/29/2001	BROMOMETHANE	1	U	µg/L
		3/29/2001	CHLOROETHANE	1	U	µg/L
		3/29/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/29/2001	ACETONE	5	R7	µg/L
		3/29/2001	CARBON DISULFIDE	1	U	µg/L
		3/29/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/29/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/29/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/29/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/29/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/29/2001	2-BUTANONE	5	U	µg/L
		3/29/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/29/2001	CHLOROFORM	1	U	µg/L
		3/29/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/29/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/29/2001	BENZENE	0.5	U	µg/L
		3/29/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/29/2001	TRICHLOROETHENE	1	U	µg/L
		3/29/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/29/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/29/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/29/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/29/2001	TOLUENE	1	U	µg/L
		3/29/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/29/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/29/2001	TETRACHLOROETHENE	1	U	µg/L
		3/29/2001	2-HEXANONE	5	U	µg/L
		3/29/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/29/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/29/2001	CHLOROBENZENE	1	U	µg/L
		3/29/2001	ETHYLBENZENE	1	U	µg/L
		3/29/2001	STYRENE	1	U	µg/L
		3/29/2001	XYLENE (TOTAL)	1	U	µg/L
		3/29/2001	BROMOFORM	1	U	µg/L
		3/29/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/29/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/29/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/29/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/29/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-8	3/29/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/29/2001	METHANE	22	J7	µg/L
		3/29/2001	ETHANE	4	UJ7	µg/L
		3/29/2001	ETHENE	3	UJ7	µg/L
		3/29/2001	TOTAL DISSOLVED SOLIDS	26900000		µg/L
	IR01MWI-9	3/28/2001	CHROMIUM VI	10	U	µg/L
		3/28/2001	ALKALINITY	1000	U	µg/L
		3/28/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/28/2001	ALKALINITY (AS CACO3)	790000		µg/L
		3/28/2001	ALKALINITY, TOTAL (AS CACO3)	790000		µg/L
		3/28/2001	CHLORIDE	987000		µg/L
		3/28/2001	SULFATE	78200		µg/L
		3/28/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/28/2001	NITRITE NITROGEN	5	U	µg/L
		3/28/2001	NITRATE AS N	10	U	µg/L
		3/28/2001	MERCURY	0.1	U	µg/L
		3/28/2001	ALUMINUM	41.8	U	µg/L
		3/28/2001	ANTIMONY	3.1	U	µg/L
		3/28/2001	ARSENIC	4.1	U	µg/L
		3/28/2001	BARIUM	240		µg/L
		3/28/2001	BERYLLIUM	0.1	U	µg/L
		3/28/2001	CADMIUM	0.2	U	µg/L
		3/28/2001	CALCIUM	116000		µg/L
		3/28/2001	CHROMIUM	2.9	J	µg/L
		3/28/2001	COBALT	1.2	U	µg/L
		3/28/2001	COPPER	2.5	U	µg/L
		3/28/2001	IRON	1470		µg/L
		3/28/2001	LEAD	1.3	U	µg/L
		3/28/2001	MAGNESIUM	49000		µg/L
		3/28/2001	MANGANESE	730		µg/L
		3/28/2001	NICKEL	13.6	J	µg/L
		3/28/2001	POTASSIUM	23400	J4	µg/L
		3/28/2001	SELENIUM	4.2	U	µg/L
		3/28/2001	SILVER	2.4	U	µg/L
		3/28/2001	SODIUM	816000		µg/L
		3/28/2001	THALLIUM	4.1	UJ3	µg/L
		3/28/2001	VANADIUM	1.4	U	µg/L
		3/28/2001	ZINC	4.8	U	µg/L
		3/28/2001	MOLYBDENUM	1.2	U	µg/L
		3/28/2001	ALPHA-BHC	0.005	U	µg/L
		3/28/2001	BETA-BHC	0.005	U	µg/L
		3/28/2001	DELTA-BHC	0.005	U	µg/L
		3/28/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/28/2001	HEPTACHLOR	0.005	U	µg/L
		3/28/2001	ALDRIN	0.005	U	µg/L
		3/28/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/28/2001	ENDOSULFAN I	0.005	U	µg/L
		3/28/2001	DIELDRIN	0.01	U	µg/L
		3/28/2001	4,4'-DDE	0.01	U	µg/L
		3/28/2001	ENDRIN	0.01	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-9	3/28/2001	ENDOSULFAN II	0.01	U	µg/L
		3/28/2001	4,4'-DDD	0.01	U	µg/L
		3/28/2001	ENDOSULFAN SULFATE	0.01	UJ3	µg/L
		3/28/2001	4,4'-DDT	0.01	U	µg/L
		3/28/2001	METHOXYCHLOR	0.05	U	µg/L
		3/28/2001	ENDRIN KETONE	0.01	U	µg/L
		3/28/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/28/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/28/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/28/2001	TOXAPHENE	0.5	U	µg/L
		3/28/2001	AROCLOR-1016	0.1	U	µg/L
		3/28/2001	AROCLOR-1221	0.2	U	µg/L
		3/28/2001	AROCLOR-1232	0.1	U	µg/L
		3/28/2001	AROCLOR-1242	0.1	U	µg/L
		3/28/2001	AROCLOR-1248	0.1	U	µg/L
		3/28/2001	AROCLOR-1254	0.1	U	µg/L
		3/28/2001	AROCLOR-1260	0.1	U	µg/L
		3/28/2001	PHENOL	1	U	µg/L
		3/28/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/28/2001	2-CHLOROPHENOL	1	U	µg/L
		3/28/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	2-METHYLPHENOL	1	U	µg/L
		3/28/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/28/2001	4-METHYLPHENOL	1	U	µg/L
		3/28/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/28/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/28/2001	NITROBENZENE	1	U	µg/L
		3/28/2001	ISOPHORONE	1	U	µg/L
		3/28/2001	2-NITROPHENOL	1	U	µg/L
		3/28/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/28/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/28/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/28/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	NAPHTHALENE	1	U	µg/L
		3/28/2001	4-CHLOROANILINE	1	U	µg/L
		3/28/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/28/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/28/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/28/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ37	µg/L
		3/28/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/28/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/28/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/28/2001	2-NITROANILINE	2	U	µg/L
		3/28/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/28/2001	ACENAPHTHYLENE	1	U	µg/L
		3/28/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/28/2001	3-NITROANILINE	2	U	µg/L
		3/28/2001	ACENAPHTHENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MWI-9	3/28/2001	2,4-DINITROPHENOL	2	R7	µg/L
		3/28/2001	DIBENZOFURAN	1	U	µg/L
		3/28/2001	4-NITROPHENOL	2	U	µg/L
		3/28/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/28/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/28/2001	FLUORENE	1	U	µg/L
		3/28/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/28/2001	4-NITROANILINE	2	U	µg/L
		3/28/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/28/2001	4,6-DINITRO-2-METHYLPHENOL	2	UJ7	µg/L
		3/28/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/28/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/28/2001	PHENANTHRENE	1	U	µg/L
		3/28/2001	ANTHRACENE	1	U	µg/L
		3/28/2001	CARBAZOLE	1	U	µg/L
		3/28/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/28/2001	FLUORANTHENE	1	U	µg/L
		3/28/2001	PYRENE	1	U	µg/L
		3/28/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/28/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/28/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/28/2001	CHRYSENE	1	U	µg/L
		3/28/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U	µg/L
		3/28/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/28/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/28/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/28/2001	BENZO(A)PYRENE	1	U	µg/L
		3/28/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/28/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/28/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/28/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/28/2001	ETHANE	4	UJ7	µg/L
		3/28/2001	ETHENE	3	UJ7	µg/L
		3/28/2001	TOTAL DISSOLVED SOLIDS	2930000		µg/L
		3/28/2001	METHANE	1200	J7	µg/L
	IR01MW02B	3/20/2001	CHROMIUM VI	10	U	µg/L
		3/20/2001	GROSS ALPHA - RADIOACTIVITY	1.8	U	µg/L
		3/20/2001	GROSS BETA - RADIOACTIVITY	19.4		µg/L
		3/20/2001	ALKALINITY	1000	U	µg/L
		3/20/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/20/2001	ALKALINITY (AS CACO3)	390000		µg/L
		3/20/2001	ALKALINITY, TOTAL (AS CACO3)	390000		µg/L
		3/20/2001	CHLORIDE	225000		µg/L
		3/20/2001	SULFATE	113000		µg/L
		3/20/2001	NITRATE/NITRITE NITROGEN	5500		µg/L
		3/20/2001	NITRATE AS N	5500		µg/L
		3/20/2001	NITRITE NITROGEN	20		µg/L
		3/20/2001	ALUMINUM	41.8	U	µg/L
		3/20/2001	CALCIUM	6850		µg/L
		3/20/2001	CHROMIUM	3.4	J	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW02B	3/20/2001	IRON	200	U1	µg/L
		3/20/2001	MAGNESIUM	17000		µg/L
		3/20/2001	POTASSIUM	23500	J4	µg/L
		3/20/2001	SODIUM	379000		µg/L
		3/20/2001	PHENOL	1	U	µg/L
		3/20/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/20/2001	2-CHLOROPHENOL	1	U	µg/L
		3/20/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	2-METHYLPHENOL	1	U	µg/L
		3/20/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/20/2001	4-METHYLPHENOL	1	U	µg/L
		3/20/2001	HEXACHLOROETHANE	1	U	µg/L
		3/20/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/20/2001	NITROBENZENE	1	U	µg/L
		3/20/2001	ISOPHORONE	1	U	µg/L
		3/20/2001	2-NITROPHENOL	1	U	µg/L
		3/20/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/20/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/20/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/20/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/20/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/20/2001	HEXACHLOROBUTADIENE	1	U	µg/L
		3/20/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/20/2001	2-METHYLNAPHTHALENE	1		µg/L
		3/20/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/20/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/20/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/20/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/20/2001	2-NITROANILINE	2	U	µg/L
		3/20/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/20/2001	ACENAPHTHYLENE	1	U	µg/L
		3/20/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/20/2001	3-NITROANILINE	2	UJ37	µg/L
		3/20/2001	ACENAPHTHENE	2		µg/L
		3/20/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/20/2001	DIBENZOFURAN	1	U	µg/L
		3/20/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/20/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/20/2001	FLUORENE	0.8	J	µg/L
		3/20/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/20/2001	4-NITROANILINE	2	UJ7	µg/L
		3/20/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/20/2001	4,6-DINITRO-2-METHYLPHENOL	2	UJ7	µg/L
		3/20/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/20/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/20/2001	PENTACHLOROPHENOL	2	UJ7	µg/L
		3/20/2001	PHENANTHRENE	0.6	J	µg/L
		3/20/2001	ANTHRACENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW02B	3/20/2001	CARBAZOLE	0.4	J	µg/L
		3/20/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/20/2001	FLUORANTHENE	0.3	J	µg/L
		3/20/2001	PYRENE	0.7	J	µg/L
		3/20/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/20/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/20/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/20/2001	CHRYSENE	1	U	µg/L
		3/20/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/20/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/20/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/20/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/20/2001	BENZO(A)PYRENE	1	U	µg/L
		3/20/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/20/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/20/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/20/2001	2,4-DINITROTOLUENE	1	UJ7	µg/L
		3/20/2001	CHLOROMETHANE	1	U	µg/L
		3/20/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/20/2001	BROMOMETHANE	1	U	µg/L
		3/20/2001	CHLOROETHANE	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/20/2001	ACETONE	5	R7	µg/L
		3/20/2001	CARBON DISULFIDE	1	U	µg/L
		3/20/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/20/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/20/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	2-BUTANONE	5	U	µg/L
		3/20/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	CHLOROFORM	1	U	µg/L
		3/20/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	BENZENE	0.5	U	µg/L
		3/20/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/20/2001	TRICHLOROETHENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/20/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/20/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/20/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/20/2001	TOLUENE	1	U	µg/L
		3/20/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/20/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	TETRACHLOROETHENE	1	U	µg/L
		3/20/2001	2-HEXANONE	5	U	µg/L
		3/20/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/20/2001	CHLOROBENZENE	1	U	µg/L
		3/20/2001	ETHYLBENZENE	1	U	µg/L
		3/20/2001	STYRENE	1	U	µg/L
		3/20/2001	XYLENE (TOTAL)	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW02B	3/20/2001	BROMOFORM	1	UJ7	µg/L
		3/20/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/20/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/20/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/20/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/20/2001	METHANE	180	J7	µg/L
		3/20/2001	ETHANE	4	UJ7	µg/L
		3/20/2001	ETHENE	3	UJ7	µg/L
		3/20/2001	SALINITY	1		µg/L
		3/20/2001	TOTAL DISSOLVED SOLIDS	1240000		µg/L
		3/20/2001	NAPHTHALENE	9		µg/L
	IR01MW09B	3/19/2001	ALKALINITY	1000	U	µg/L
		3/19/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/19/2001	ALKALINITY (AS CACO3)	250000		µg/L
		3/19/2001	ALKALINITY, TOTAL (AS CACO3)	250000		µg/L
		3/19/2001	CHLORIDE	809000		µg/L
		3/19/2001	SULFATE	1400		µg/L
		3/19/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/19/2001	NITRITE NITROGEN	5	U	µg/L
		3/19/2001	NITRATE AS N	10	U	µg/L
		3/19/2001	CALCIUM	47500		µg/L
		3/19/2001	IRON	929		µg/L
		3/19/2001	MAGNESIUM	117000		µg/L
		3/19/2001	POTASSIUM	40700	J4	µg/L
		3/19/2001	SODIUM	496000		µg/L
		3/19/2001	CHLOROMETHANE	1	U	µg/L
		3/19/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/19/2001	BROMOMETHANE	1	U	µg/L
		3/19/2001	CHLOROETHANE	1	U	µg/L
		3/19/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/19/2001	ACETONE	5	R7	µg/L
		3/19/2001	CARBON DISULFIDE	1	U	µg/L
		3/19/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/19/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/19/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/19/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/19/2001	2-BUTANONE	5	U	µg/L
		3/19/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/19/2001	CHLOROFORM	1	U	µg/L
		3/19/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/19/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/19/2001	BENZENE	0.5	U	µg/L
		3/19/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/19/2001	TRICHLOROETHENE	1	U	µg/L
		3/19/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/19/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/19/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/19/2001	4-METHYL-2-PENTANONE	5	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW09B	3/19/2001	TOLUENE	1	U	µg/L
		3/19/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/19/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/19/2001	TETRACHLOROETHENE	1	U	µg/L
		3/19/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/19/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/19/2001	CHLOROBENZENE	1	U	µg/L
		3/19/2001	ETHYLBENZENE	1	U	µg/L
		3/19/2001	STYRENE	1	U	µg/L
		3/19/2001	XYLENE (TOTAL)	1	U	µg/L
		3/19/2001	BROMOFORM	1	U	µg/L
		3/19/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/19/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/19/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/19/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/19/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/19/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/19/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/19/2001	2-HEXANONE	5	U	µg/L
		3/19/2001	METHANE	190	J7	µg/L
		3/19/2001	ETHANE	4	UJ7	µg/L
		3/19/2001	ETHENE	3	UJ7	µg/L
		3/19/2001	SALINITY	2.1		µg/L
		3/19/2001	TOTAL DISSOLVED SOLIDS	2280000		µg/L
		3/19/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/19/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/19/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
	IR01MW17B	4/24/2001	ALKALINITY	1000	U	µg/L
		4/24/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		4/24/2001	ALKALINITY (AS CACO3)	220000		µg/L
		4/24/2001	ALKALINITY, TOTAL (AS CACO3)	220000		µg/L
		4/24/2001	CHLORIDE	1200000		µg/L
		4/24/2001	SULFATE	79100		µg/L
		4/24/2001	NITRATE/NITRITE NITROGEN	5200		µg/L
		4/24/2001	NITRITE NITROGEN	6		µg/L
		4/24/2001	NITRATE AS N	5200		µg/L
		4/24/2001	ALUMINUM	41.8	U	µg/L
		4/24/2001	ANTIMONY	3.1	U	µg/L
		4/24/2001	CADMIUM	0.2	U	µg/L
		4/24/2001	CALCIUM	63800		µg/L
		4/24/2001	IRON	106		µg/L
		4/24/2001	MAGNESIUM	272000		µg/L
		4/24/2001	POTASSIUM	6610		µg/L
		4/24/2001	SODIUM	343000		µg/L
		4/24/2001	ALPHA-BHC	0.005	U	µg/L
		4/24/2001	BETA-BHC	0.005	U	µg/L
		4/24/2001	DELTA-BHC	0.005	U	µg/L
		4/24/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		4/24/2001	HEPTACHLOR	0.005	U	µg/L
		4/24/2001	ALDRIN	0.005	U	µg/L
		4/24/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW17B	4/24/2001	ENDOSULFAN I	0.005	U	µg/L
		4/24/2001	DIELDRIN	0.01	U	µg/L
		4/24/2001	4,4'-DDE	0.01	U	µg/L
		4/24/2001	ENDRIN	0.01	U	µg/L
		4/24/2001	ENDOSULFAN II	0.01	U	µg/L
		4/24/2001	4,4'-DDD	0.01	U	µg/L
		4/24/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		4/24/2001	4,4'-DDT	0.01	UJ7	µg/L
		4/24/2001	METHOXYCHLOR	0.05	UJ7	µg/L
		4/24/2001	ENDRIN KETONE	0.01	U	µg/L
		4/24/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		4/24/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		4/24/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		4/24/2001	TOXAPHENE	0.5	U	µg/L
		4/24/2001	AROCLOR-1016	0.1	U	µg/L
		4/24/2001	AROCLOR-1221	0.2	U	µg/L
		4/24/2001	AROCLOR-1232	0.1	U	µg/L
		4/24/2001	AROCLOR-1242	0.1	U	µg/L
		4/24/2001	AROCLOR-1248	0.1	U	µg/L
		4/24/2001	AROCLOR-1254	0.1	U	µg/L
		4/24/2001	AROCLOR-1260	0.1	U	µg/L
		4/24/2001	PHENOL	1	U	µg/L
		4/24/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		4/24/2001	2-CHLOROPHENOL	1	U	µg/L
		4/24/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		4/24/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		4/24/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		4/24/2001	2-METHYLPHENOL	1	U	µg/L
		4/24/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		4/24/2001	4-METHYLPHENOL	1	U	µg/L
		4/24/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		4/24/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		4/24/2001	NITROBENZENE	1	U	µg/L
		4/24/2001	ISOPHORONE	1	U	µg/L
		4/24/2001	2-NITROPHENOL	1	U	µg/L
		4/24/2001	2,4-DIMETHYLPHENOL	1	UJ7	µg/L
		4/24/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		4/24/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		4/24/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		4/24/2001	NAPHTHALENE	1	U	µg/L
		4/24/2001	4-CHLOROANILINE	1	U	µg/L
		4/24/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		4/24/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		4/24/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		4/24/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		4/24/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		4/24/2001	2,4,5-TRICHLOROPHENOL	3	U	µg/L
		4/24/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		4/24/2001	2-NITROANILINE	3	U	µg/L
		4/24/2001	DIMETHYLPHTHALATE	1	U	µg/L
		4/24/2001	ACENAPHTHYLENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW17B	4/24/2001	2,6-DINITROTOLUENE	1	U	µg/L
		4/24/2001	3-NITROANILINE	3	U	µg/L
		4/24/2001	ACENAPHTHENE	1	U	µg/L
		4/24/2001	2,4-DINITROPHENOL	3	U	µg/L
		4/24/2001	DIBENZOFURAN	1	U	µg/L
		4/24/2001	4-NITROPHENOL	3	U	µg/L
		4/24/2001	2,4-DINITROTOLUENE	1	U	µg/L
		4/24/2001	DIETHYLPHTHALATE	1	U	µg/L
		4/24/2001	FLUORENE	1	U	µg/L
		4/24/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		4/24/2001	4-NITROANILINE	3	U	µg/L
		4/24/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		4/24/2001	4,6-DINITRO-2-METHYLPHENOL	3	U	µg/L
		4/24/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		4/24/2001	HEXACHLOROBENZENE	1	U	µg/L
		4/24/2001	PENTACHLOROPHENOL	3	U	µg/L
		4/24/2001	PHENANTHRENE	1	U	µg/L
		4/24/2001	ANTHRACENE	1	U	µg/L
		4/24/2001	CARBAZOLE	1	U	µg/L
		4/24/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		4/24/2001	FLUORANTHENE	1	U	µg/L
		4/24/2001	PYRENE	1	U	µg/L
		4/24/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		4/24/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		4/24/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		4/24/2001	CHRYSENE	1	U	µg/L
		4/24/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		4/24/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		4/24/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		4/24/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		4/24/2001	BENZO(A)PYRENE	1	U	µg/L
		4/24/2001	INDENO(1,2,3-CD)PYRENE	1	UJ7	µg/L
		4/24/2001	DIBENZ(A,H)ANTHRACENE	1	UJ7	µg/L
		4/24/2001	BENZO(G,H,I)PERYLENE	1	UJ7	µg/L
		4/24/2001	CHLOROMETHANE	1	U	µg/L
		4/24/2001	VINYL CHLORIDE	0.5	U	µg/L
		4/24/2001	BROMOMETHANE	1	U	µg/L
		4/24/2001	CHLOROETHANE	1	U	µg/L
		4/24/2001	1,1-DICHLOROETHENE	1	U	µg/L
		4/24/2001	ACETONE	5	R7	µg/L
		4/24/2001	CARBON DISULFIDE	1	U	µg/L
		4/24/2001	METHYLENE CHLORIDE	2	U	µg/L
		4/24/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		4/24/2001	1,1-DICHLOROETHANE	1	U	µg/L
		4/24/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		4/24/2001	2-BUTANONE	5	U	µg/L
		4/24/2001	BROMOCHLOROMETHANE	1	U	µg/L
		4/24/2001	CHLOROFORM	1	U	µg/L
		4/24/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		4/24/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		4/24/2001	BENZENE	0.5	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW17B	4/24/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		4/24/2001	TRICHLOROETHENE	1	U	µg/L
		4/24/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		4/24/2001	BROMODICHLOROMETHANE	1	U	µg/L
		4/24/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		4/24/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		4/24/2001	TOLUENE	1	U	µg/L
		4/24/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		4/24/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		4/24/2001	TETRACHLOROETHENE	1	U	µg/L
		4/24/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		4/24/2001	1,2-DIBROMOETHANE	1	U	µg/L
		4/24/2001	CHLOROBENZENE	1	U	µg/L
		4/24/2001	ETHYLBENZENE	1	U	µg/L
		4/24/2001	STYRENE	1	U	µg/L
		4/24/2001	XYLENE (TOTAL)	1	U	µg/L
		4/24/2001	BROMOFORM	1	U	µg/L
		4/24/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		4/24/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		4/24/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		4/24/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		4/24/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		4/24/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		4/24/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		4/24/2001	2-HEXANONE	5	U	µg/L
		4/24/2001	METHANE	31	J7	µg/L
		4/24/2001	ETHANE	4	U	µg/L
		4/24/2001	ETHENE	3	U	µg/L
		4/24/2001	SALINITY	2.5		µg/L
		4/24/2001	TOTAL DISSOLVED SOLIDS	2870000		µg/L
		4/24/2001	GROSS ALPHA - RADIOACTIVITY	1.2	U	µg/L
		4/24/2001	GROSS BETA - RADIOACTIVITY	-1.8	U	µg/L
	IR01MW26B	4/23/2001	ALKALINITY	1000	U	µg/L
		4/23/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		4/23/2001	ALKALINITY, TOTAL (AS CACO3)	330000		µg/L
		4/23/2001	ALKALINITY (AS CACO3)	330000		µg/L
		4/23/2001	CHLORIDE	2230000		µg/L
		4/23/2001	SULFATE	3200		µg/L
		4/23/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		4/23/2001	NITRITE NITROGEN	5	U	µg/L
		4/23/2001	NITRATE AS N	10	U	µg/L
		4/23/2001	CALCIUM	79500		µg/L
		4/23/2001	IRON	3260		µg/L
		4/23/2001	MAGNESIUM	235000		µg/L
		4/23/2001	POTASSIUM	55600		µg/L
		4/23/2001	SODIUM	1060000		µg/L
		4/23/2001	PHENOL	1	U	µg/L
		4/23/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		4/23/2001	2-CHLOROPHENOL	1	U	µg/L
		4/23/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		4/23/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW26B	4/23/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		4/23/2001	2-METHYLPHENOL	1	U	µg/L
		4/23/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		4/23/2001	4-METHYLPHENOL	1	U	µg/L
		4/23/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		4/23/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		4/23/2001	NITROBENZENE	1	U	µg/L
		4/23/2001	ISOPHORONE	1	U	µg/L
		4/23/2001	2-NITROPHENOL	1	U	µg/L
		4/23/2001	2,4-DIMETHYLPHENOL	1	UJ7	µg/L
		4/23/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		4/23/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		4/23/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		4/23/2001	NAPHTHALENE	1	U	µg/L
		4/23/2001	4-CHLOROANILINE	1	U	µg/L
		4/23/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		4/23/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		4/23/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		4/23/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		4/23/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		4/23/2001	2,4,5-TRICHLOROPHENOL	3	U	µg/L
		4/23/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		4/23/2001	2-NITROANILINE	3	U	µg/L
		4/23/2001	DIMETHYLPHTHALATE	1	U	µg/L
		4/23/2001	ACENAPHTHYLENE	1	U	µg/L
		4/23/2001	2,6-DINITROTOLUENE	1	U	µg/L
		4/23/2001	3-NITROANILINE	3	U	µg/L
		4/23/2001	ACENAPHTHENE	1	U	µg/L
		4/23/2001	2,4-DINITROPHENOL	3	U	µg/L
		4/23/2001	DIBENZOFURAN	1	U	µg/L
		4/23/2001	4-NITROPHENOL	3	U	µg/L
		4/23/2001	2,4-DINITROTOLUENE	1	U	µg/L
		4/23/2001	DIETHYLPHTHALATE	1	U4	µg/L
		4/23/2001	FLUORENE	1	U	µg/L
		4/23/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		4/23/2001	4-NITROANILINE	3	U	µg/L
		4/23/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		4/23/2001	4,6-DINITRO-2-METHYLPHENOL	3	U	µg/L
		4/23/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		4/23/2001	HEXACHLOROBENZENE	1	U	µg/L
		4/23/2001	PENTACHLOROPHENOL	3	U	µg/L
		4/23/2001	PHENANTHRENE	1	U	µg/L
		4/23/2001	ANTHRACENE	1	U	µg/L
		4/23/2001	DI-N-BUTYLPHTHALATE	1	U4	µg/L
		4/23/2001	FLUORANTHENE	1	U	µg/L
		4/23/2001	PYRENE	1	U	µg/L
		4/23/2001	BUTYLBENZYLPHTHALATE	1	U4	µg/L
		4/23/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		4/23/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		4/23/2001	CHRYSENE	1	U	µg/L
		4/23/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW26B	4/23/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		4/23/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		4/23/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		4/23/2001	BENZO(A)PYRENE	1	U	µg/L
		4/23/2001	INDENO(1,2,3-CD)PYRENE	1	UJ7	µg/L
		4/23/2001	DIBENZ(A,H)ANTHRACENE	1	UJ7	µg/L
		4/23/2001	BENZO(G,H,I)PERYLENE	1	UJ7	µg/L
		4/23/2001	CARBAZOLE	1	U	µg/L
		4/23/2001	VINYL CHLORIDE	0.5	U	µg/L
		4/23/2001	BROMOMETHANE	1	U	µg/L
		4/23/2001	CHLOROETHANE	1	U	µg/L
		4/23/2001	1,1-DICHLOROETHENE	1	U	µg/L
		4/23/2001	ACETONE	5	R7	µg/L
		4/23/2001	CARBON DISULFIDE	1	U	µg/L
		4/23/2001	METHYLENE CHLORIDE	2	U	µg/L
		4/23/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		4/23/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		4/23/2001	1,1-DICHLOROETHANE	1	U	µg/L
		4/23/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		4/23/2001	2-BUTANONE	5	U	µg/L
		4/23/2001	BROMOCHLOROMETHANE	1	U	µg/L
		4/23/2001	CHLOROFORM	1	U	µg/L
		4/23/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		4/23/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		4/23/2001	BENZENE	0.5	U	µg/L
		4/23/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		4/23/2001	TRICHLOROETHENE	1	U	µg/L
		4/23/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		4/23/2001	BROMODICHLOROMETHANE	1	U	µg/L
		4/23/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		4/23/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		4/23/2001	TOLUENE	1	U	µg/L
		4/23/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		4/23/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		4/23/2001	TETRACHLOROETHENE	1	U	µg/L
		4/23/2001	2-HEXANONE	5	U	µg/L
		4/23/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		4/23/2001	1,2-DIBROMOETHANE	1	U	µg/L
		4/23/2001	CHLOROBENZENE	1	U	µg/L
		4/23/2001	ETHYLBENZENE	1	U	µg/L
		4/23/2001	STYRENE	1	U	µg/L
		4/23/2001	XYLENE (TOTAL)	1	U	µg/L
		4/23/2001	BROMOFORM	1	U	µg/L
		4/23/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		4/23/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		4/23/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		4/23/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		4/23/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		4/23/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		4/23/2001	CHLOROMETHANE	1	U	µg/L
		4/23/2001	METHANE	890	J7	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW26B	4/23/2001	ETHENE	3	U	µg/L
		4/23/2001	ETHANE	4	U	µg/L
		4/23/2001	SALINITY	4.6		µg/L
		4/23/2001	TOTAL DISSOLVED SOLIDS	5120000		µg/L
		4/23/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		4/23/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		4/23/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		4/23/2001	GROSS ALPHA - RADIOACTIVITY	2	U	µg/L
		4/23/2001	GROSS BETA - RADIOACTIVITY	33		µg/L
	IR01MW47B	3/28/2001	GROSS ALPHA - RADIOACTIVITY	6.3	U	µg/L
		3/28/2001	GROSS BETA - RADIOACTIVITY	48		µg/L
		3/28/2001	ALKALINITY	1000	U	µg/L
		3/28/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/28/2001	ALKALINITY (AS CACO3)	330000		µg/L
		3/28/2001	ALKALINITY, TOTAL (AS CACO3)	330000		µg/L
		3/28/2001	CHLORIDE	1680000		µg/L
		3/28/2001	SULFATE	500		µg/L
		3/28/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/28/2001	NITRITE NITROGEN	5	U	µg/L
		3/28/2001	NITRATE AS N	10	U	µg/L
		3/28/2001	CALCIUM	71600		µg/L
		3/28/2001	IRON	5160		µg/L
		3/28/2001	MAGNESIUM	178000		µg/L
		3/28/2001	POTASSIUM	58800	J4	µg/L
		3/28/2001	SODIUM	992000		µg/L
		3/28/2001	PHENOL	1	U	µg/L
		3/28/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/28/2001	2-CHLOROPHENOL	1	U	µg/L
		3/28/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	2-METHYLPHENOL	1	U	µg/L
		3/28/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/28/2001	4-METHYLPHENOL	1	U	µg/L
		3/28/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/28/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/28/2001	NITROBENZENE	1	U	µg/L
		3/28/2001	ISOPHORONE	1	U	µg/L
		3/28/2001	2-NITROPHENOL	1	U	µg/L
		3/28/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/28/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/28/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/28/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	NAPHTHALENE	1	U	µg/L
		3/28/2001	4-CHLOROANILINE	1	U	µg/L
		3/28/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/28/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/28/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/28/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/28/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/28/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW47B	3/28/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/28/2001	2-NITROANILINE	2	U	µg/L
		3/28/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/28/2001	ACENAPHTHYLENE	1	U	µg/L
		3/28/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/28/2001	3-NITROANILINE	2	U	µg/L
		3/28/2001	ACENAPHTHENE	1	U	µg/L
		3/28/2001	2,4-DINITROPHENOL	2	R7	µg/L
		3/28/2001	DIBENZOFURAN	1	U	µg/L
		3/28/2001	4-NITROPHENOL	2	U	µg/L
		3/28/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/28/2001	DIETHYLPHTHALATE	1	U4	µg/L
		3/28/2001	FLUORENE	1	U	µg/L
		3/28/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/28/2001	4-NITROANILINE	2	UJ7	µg/L
		3/28/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/28/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/28/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/28/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/28/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/28/2001	PHENANTHRENE	1	U	µg/L
		3/28/2001	ANTHRACENE	1	U	µg/L
		3/28/2001	CARBAZOLE	1	U	µg/L
		3/28/2001	DI-N-BUTYLPHTHALATE	1	U4	µg/L
		3/28/2001	FLUORANTHENE	1	U	µg/L
		3/28/2001	PYRENE	1	U	µg/L
		3/28/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/28/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/28/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/28/2001	CHRYSENE	1	U	µg/L
		3/28/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/28/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/28/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/28/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/28/2001	BENZO(A)PYRENE	1	U	µg/L
		3/28/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/28/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/28/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/28/2001	CHLOROMETHANE	1	U	µg/L
		3/28/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/28/2001	BROMOMETHANE	1	U	µg/L
		3/28/2001	CHLOROETHANE	1	U	µg/L
		3/28/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/28/2001	ACETONE	5	R7	µg/L
		3/28/2001	CARBON DISULFIDE	1	U	µg/L
		3/28/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/28/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/28/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/28/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/28/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L

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PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW47B	3/28/2001	2-BUTANONE	5	U	µg/L
		3/28/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/28/2001	CHLOROFORM	1	U	µg/L
		3/28/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/28/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/28/2001	BENZENE	0.5	U	µg/L
		3/28/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/28/2001	TRICHLOROETHENE	1	U	µg/L
		3/28/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/28/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/28/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/28/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/28/2001	TOLUENE	1	U	µg/L
		3/28/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/28/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/28/2001	TETRACHLOROETHENE	1	U	µg/L
		3/28/2001	2-HEXANONE	5	U	µg/L
		3/28/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/28/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/28/2001	CHLOROBENZENE	1	U	µg/L
		3/28/2001	ETHYLBENZENE	1	U	µg/L
		3/28/2001	STYRENE	1	U	µg/L
		3/28/2001	XYLENE (TOTAL)	1	U	µg/L
		3/28/2001	BROMOFORM	1	U	µg/L
		3/28/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/28/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/28/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/28/2001	ETHANE	4	UJ7	µg/L
		3/28/2001	ETHENE	3	UJ7	µg/L
		3/28/2001	SALINITY	3.7		µg/L
		3/28/2001	TOTAL DISSOLVED SOLIDS	3060000		µg/L
		3/28/2001	METHANE	13000	J7	µg/L
	IR01MW53B	3/29/2001	CADMIUM	0.2	U	µg/L
		3/29/2001	CHLOROMETHANE	1	U	µg/L
		3/29/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/29/2001	BROMOMETHANE	1	U	µg/L
		3/29/2001	CHLOROETHANE	1	U	µg/L
		3/29/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/29/2001	ACETONE	5	R7	µg/L
		3/29/2001	CARBON DISULFIDE	1	U	µg/L
		3/29/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/29/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/29/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/29/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/29/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/29/2001	2-BUTANONE	5	U	µg/L
		3/29/2001	BROMOCHLOROMETHANE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-01	IR01MW53B	3/29/2001	CHLOROFORM	1	U	µg/L
		3/29/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/29/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/29/2001	BENZENE	0.5	U	µg/L
		3/29/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/29/2001	TRICHLOROETHENE	1	U	µg/L
		3/29/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/29/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/29/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/29/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/29/2001	TOLUENE	1	U	µg/L
		3/29/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/29/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/29/2001	TETRACHLOROETHENE	1	U	µg/L
		3/29/2001	2-HEXANONE	5	U	µg/L
		3/29/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/29/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/29/2001	CHLOROBENZENE	1	U	µg/L
		3/29/2001	ETHYLBENZENE	1	U	µg/L
		3/29/2001	STYRENE	1	U	µg/L
		3/29/2001	XYLENE (TOTAL)	1	U	µg/L
		3/29/2001	BROMOFORM	1	U	µg/L
		3/29/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/29/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/29/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/29/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/29/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/29/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/29/2001	SALINITY	2.7		µg/L
		3/29/2001	TOTAL DISSOLVED SOLIDS	2510000		µg/L
		3/29/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/29/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/29/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
IR-02	IR02MW89A	3/20/2001	GROSS BETA - RADIOACTIVITY	6.2		µg/L
		3/20/2001	GROSS ALPHA - RADIOACTIVITY	0	U	µg/L
		3/20/2001	ALUMINUM	41.8	U	µg/L
		3/20/2001	NICKEL	1.9	U2	µg/L
		3/20/2001	TOTAL DISSOLVED SOLIDS	1160000		µg/L
	IR02MW93A	3/26/2001	GROSS ALPHA - RADIOACTIVITY	11	U	µg/L
		3/26/2001	GROSS BETA - RADIOACTIVITY	29		µg/L
		3/26/2001	NICKEL	8.9	U1	µg/L
		3/26/2001	TOTAL DISSOLVED SOLIDS	7880000		µg/L
	IR02MW97A	3/6/2001	CHROMIUM VI	10	U	µg/L
		3/6/2001	ALKALINITY	1000	U	µg/L
		3/6/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/6/2001	ALKALINITY (AS CACO3)	304000		µg/L
		3/6/2001	ALKALINITY, TOTAL (AS CACO3)	304000		µg/L
		3/6/2001	CHLORIDE	5320000		µg/L
		3/6/2001	SULFATE	818000		µg/L
		3/6/2001	NITRATE/NITRITE NITROGEN	30		µg/L

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PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW97A	3/6/2001	NITRITE NITROGEN	5	U	µg/L
		3/6/2001	NITRATE AS N	30		µg/L
		3/6/2001	ARSENIC	2.5	U	µg/L
		3/6/2001	BARIUM	95.7	J	µg/L
		3/6/2001	CADMIUM	0.3	U	µg/L
		3/6/2001	CALCIUM	262000		µg/L
		3/6/2001	CHROMIUM	0.7	U	µg/L
		3/6/2001	IRON	280		µg/L
		3/6/2001	MAGNESIUM	479000		µg/L
		3/6/2001	NICKEL	4.1	J	µg/L
		3/6/2001	POTASSIUM	136000	J4	µg/L
		3/6/2001	SODIUM	3580000	J4	µg/L
		3/6/2001	ALPHA-BHC	0.005	U	µg/L
		3/6/2001	BETA-BHC	0.005	U	µg/L
		3/6/2001	DELTA-BHC	0.005	U	µg/L
		3/6/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/6/2001	HEPTACHLOR	0.005	U	µg/L
		3/6/2001	ALDRIN	0.005	U	µg/L
		3/6/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/6/2001	ENDOSULFAN I	0.005	U	µg/L
		3/6/2001	DIELDRIN	0.01	U	µg/L
		3/6/2001	4,4'-DDE	0.01	U	µg/L
		3/6/2001	ENDRIN	0.01	U	µg/L
		3/6/2001	ENDOSULFAN II	0.01	U	µg/L
		3/6/2001	4,4'-DDD	0.01	U	µg/L
		3/6/2001	ENDOSULFAN SULFATE	0.01	UJ3	µg/L
		3/6/2001	4,4'-DDT	0.01	U	µg/L
		3/6/2001	METHOXYCHLOR	0.05	U	µg/L
		3/6/2001	ENDRIN KETONE	0.01	U	µg/L
		3/6/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/6/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/6/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/6/2001	TOXAPHENE	0.5	U	µg/L
		3/6/2001	AROCLOR-1016	0.1	U	µg/L
		3/6/2001	AROCLOR-1221	0.2	U	µg/L
		3/6/2001	AROCLOR-1232	0.1	U	µg/L
		3/6/2001	AROCLOR-1242	0.1	U	µg/L
		3/6/2001	AROCLOR-1248	0.1	U	µg/L
		3/6/2001	AROCLOR-1254	0.1	U	µg/L
		3/6/2001	AROCLOR-1260	0.1	U	µg/L
		3/6/2001	PHENOL	1	U	µg/L
		3/6/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/6/2001	2-CHLOROPHENOL	1	U	µg/L
		3/6/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/6/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/6/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/6/2001	2-METHYLPHENOL	1	U	µg/L
		3/6/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	UJ7	µg/L
		3/6/2001	4-METHYLPHENOL	1	U	µg/L
		3/6/2001	HEXACHLOROETHANE	1	UJ3	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW97A	3/6/2001	N-NITROSO-DI-N-PROPYLAMINE	1	UJ7	µg/L
		3/6/2001	NITROBENZENE	1	U	µg/L
		3/6/2001	ISOPHORONE	1	U	µg/L
		3/6/2001	2-NITROPHENOL	1	U	µg/L
		3/6/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/6/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/6/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/6/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/6/2001	NAPHTHALENE	1	UJ3	µg/L
		3/6/2001	4-CHLOROANILINE	1	UJ7	µg/L
		3/6/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/6/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/6/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/6/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ37	µg/L
		3/6/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/6/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/6/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/6/2001	2-NITROANILINE	2	U	µg/L
		3/6/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/6/2001	ACENAPHTHYLENE	1	U	µg/L
		3/6/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/6/2001	3-NITROANILINE	2	U	µg/L
		3/6/2001	ACENAPHTHENE	1	U	µg/L
		3/6/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/6/2001	DIBENZOFURAN	1	U	µg/L
		3/6/2001	4-NITROPHENOL	2	U	µg/L
		3/6/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/6/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/6/2001	FLUORENE	1	U	µg/L
		3/6/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/6/2001	4-NITROANILINE	2	U	µg/L
		3/6/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/6/2001	4,6-DINITRO-2-METHYLPHENOL	2	UJ7	µg/L
		3/6/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/6/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/6/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/6/2001	PHENANTHRENE	1	U	µg/L
		3/6/2001	ANTHRACENE	1	U	µg/L
		3/6/2001	CARBAZOLE	1	U	µg/L
		3/6/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/6/2001	FLUORANTHENE	1	U	µg/L
		3/6/2001	PYRENE	1	U	µg/L
		3/6/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/6/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/6/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/6/2001	CHRYSENE	1	U	µg/L
		3/6/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/6/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/6/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/6/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/6/2001	BENZO(A)PYRENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW97A	3/6/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/6/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/6/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/6/2001	CHLOROMETHANE	1	U	µg/L
		3/6/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/6/2001	BROMOMETHANE	1	U	µg/L
		3/6/2001	CHLOROETHANE	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/6/2001	ACETONE	5	U	µg/L
		3/6/2001	CARBON DISULFIDE	1	U	µg/L
		3/6/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/6/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/6/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/6/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/6/2001	2-BUTANONE	5	U	µg/L
		3/6/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	CHLOROFORM	1	U2	µg/L
		3/6/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/6/2001	BENZENE	0.5	U	µg/L
		3/6/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/6/2001	TRICHLOROETHENE	9		µg/L
		3/6/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/6/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/6/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/6/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/6/2001	TOLUENE	1	U	µg/L
		3/6/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/6/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	TETRACHLOROETHENE	1	U	µg/L
		3/6/2001	2-HEXANONE	5	U	µg/L
		3/6/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/6/2001	CHLOROBENZENE	1	U	µg/L
		3/6/2001	ETHYLBENZENE	1	U	µg/L
		3/6/2001	STYRENE	1	U	µg/L
		3/6/2001	XYLENE (TOTAL)	1	U	µg/L
		3/6/2001	BROMOFORM	1	U	µg/L
		3/6/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/6/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/6/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/6/2001	METHANE	13	J7	µg/L
		3/6/2001	ETHANE	4	U	µg/L
		3/6/2001	ETHENE	3	U	µg/L
		3/6/2001	TOTAL DISSOLVED SOLIDS	10800000		µg/L
		3/6/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/6/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW97A	3/6/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/6/2001	GROSS BETA - RADIOACTIVITY	69		µg/L
		3/6/2001	GROSS ALPHA - RADIOACTIVITY	9	U	µg/L
	IR02MW101A1	3/27/2001	CHROMIUM VI	10	U	µg/L
		3/27/2001	ALUMINUM	83.1	U1	µg/L
		3/27/2001	CHROMIUM	1.4	U	µg/L
		3/27/2001	NICKEL	17.9	U19	µg/L
		3/27/2001	PHENOL	1	U	µg/L
		3/27/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/27/2001	2-CHLOROPHENOL	1	U	µg/L
		3/27/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/27/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/27/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/27/2001	2-METHYLPHENOL	1	U	µg/L
		3/27/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/27/2001	4-METHYLPHENOL	1	U	µg/L
		3/27/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/27/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/27/2001	NITROBENZENE	1	U	µg/L
		3/27/2001	ISOPHORONE	1	U	µg/L
		3/27/2001	2-NITROPHENOL	1	U	µg/L
		3/27/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/27/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/27/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/27/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/27/2001	NAPHTHALENE	1	U	µg/L
		3/27/2001	4-CHLOROANILINE	1	U	µg/L
		3/27/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/27/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/27/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/27/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ37	µg/L
		3/27/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/27/2001	2,4,5-TRICHLOROPHENOL	3	U	µg/L
		3/27/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/27/2001	2-NITROANILINE	3	U	µg/L
		3/27/2001	ACENAPHTHYLENE	1	U	µg/L
		3/27/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/27/2001	3-NITROANILINE	3	U	µg/L
		3/27/2001	ACENAPHTHENE	1	U	µg/L
		3/27/2001	2,4-DINITROPHENOL	3	R7	µg/L
		3/27/2001	DIBENZOFURAN	1	U	µg/L
		3/27/2001	4-NITROPHENOL	3	U	µg/L
		3/27/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/27/2001	DIETHYLPHTHALATE	1	U4	µg/L
		3/27/2001	FLUORENE	1	U	µg/L
		3/27/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/27/2001	4-NITROANILINE	3	U	µg/L
		3/27/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/27/2001	4,6-DINITRO-2-METHYLPHENOL	3	UJ7	µg/L
		3/27/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/27/2001	HEXACHLOROBENZENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW101A1	3/27/2001	PENTACHLOROPHENOL	3	U	µg/L
		3/27/2001	PHENANTHRENE	1	U	µg/L
		3/27/2001	ANTHRACENE	1	U	µg/L
		3/27/2001	CARBAZOLE	1	U	µg/L
		3/27/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/27/2001	FLUORANTHENE	1	U	µg/L
		3/27/2001	PYRENE	1	U	µg/L
		3/27/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/27/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/27/2001	CHRYSENE	1	U	µg/L
		3/27/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/27/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/27/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/27/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/27/2001	BENZO(A)PYRENE	1	U	µg/L
		3/27/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/27/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/27/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/27/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/27/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/27/2001	TOTAL DISSOLVED SOLIDS	16300000		µg/L
	IR02MW101A2	3/27/2001	GROSS ALPHA - RADIOACTIVITY	94		µg/L
		3/27/2001	GROSS BETA - RADIOACTIVITY	54		µg/L
		3/27/2001	BARIUM	75.2	J	µg/L
		3/27/2001	CADMIUM	0.5	U	µg/L
		3/27/2001	TOTAL DISSOLVED SOLIDS	2290000		µg/L
	IR02MW114A1	3/20/2001	CADMIUM	0.2	U	µg/L
		3/20/2001	TOTAL DISSOLVED SOLIDS	1280000		µg/L
		3/20/2001	RADIUM-226	0.11	U	µg/L
		3/20/2001	RADIUM-228	0.5	U	µg/L
	IR02MW114A2	3/15/2001	CHROMIUM VI	10	U	µg/L
		3/15/2001	ALUMINUM	158	J	µg/L
		3/15/2001	CADMIUM	0.3	U	µg/L
		3/15/2001	CHROMIUM	0.7	U	µg/L
		3/15/2001	COPPER	3.5	U1	µg/L
		3/15/2001	NICKEL	9.9	J	µg/L
		3/15/2001	TOTAL DISSOLVED SOLIDS	1050000		µg/L
		3/15/2001	GROSS ALPHA - RADIOACTIVITY	2.3	U	µg/L
		3/15/2001	GROSS BETA - RADIOACTIVITY	7.2		µg/L
	IR02MW114A3	3/29/2001	BARIUM	434		µg/L
		3/29/2001	CADMIUM	0.2	U	µg/L
		3/29/2001	TOTAL DISSOLVED SOLIDS	14100000		µg/L
	IR02MW126A	3/13/2001	ALKALINITY	1000	U	µg/L
		3/13/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/13/2001	ALKALINITY (AS CACO3)	648000		µg/L
		3/13/2001	ALKALINITY, TOTAL (AS CACO3)	648000		µg/L
		3/13/2001	CHLORIDE	1820000		µg/L
		3/13/2001	SULFATE	143000		µg/L
		3/13/2001	NITRATE/NITRITE NITROGEN	340		µg/L
		3/13/2001	NITRITE NITROGEN	6		µg/L
		3/13/2001	NITRATE AS N	330		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW126A	3/13/2001	BARIUM	404		µg/L
		3/13/2001	CALCIUM	103000		µg/L
		3/13/2001	COPPER	18.7	J	µg/L
		3/13/2001	IRON	43.8	J	µg/L
		3/13/2001	LEAD	1.6	U	µg/L
		3/13/2001	MAGNESIUM	165000		µg/L
		3/13/2001	POTASSIUM	96200		µg/L
		3/13/2001	SODIUM	1180000	J4	µg/L
		3/13/2001	ZINC	37.5		µg/L
		3/13/2001	ALPHA-BHC	0.005	U	µg/L
		3/13/2001	BETA-BHC	0.005	U	µg/L
		3/13/2001	DELTA-BHC	0.005	U	µg/L
		3/13/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/13/2001	HEPTACHLOR	0.005	U	µg/L
		3/13/2001	ALDRIN	0.005	U	µg/L
		3/13/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/13/2001	ENDOSULFAN I	0.005	U	µg/L
		3/13/2001	DIELDRIN	0.01	U	µg/L
		3/13/2001	4,4'-DDE	0.01	U	µg/L
		3/13/2001	ENDRIN	0.01	U	µg/L
		3/13/2001	ENDOSULFAN II	0.01	U	µg/L
		3/13/2001	4,4'-DDD	0.01	U	µg/L
		3/13/2001	ENDOSULFAN SULFATE	0.01	UJ3	µg/L
		3/13/2001	4,4'-DDT	0.01	U	µg/L
		3/13/2001	METHOXYCHLOR	0.05	U	µg/L
		3/13/2001	ENDRIN KETONE	0.01	U	µg/L
		3/13/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/13/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/13/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/13/2001	TOXAPHENE	0.5	U	µg/L
		3/13/2001	AROCLOR-1016	0.1	U	µg/L
		3/13/2001	AROCLOR-1221	0.2	U	µg/L
		3/13/2001	AROCLOR-1232	0.1	U	µg/L
		3/13/2001	AROCLOR-1242	0.1	U	µg/L
		3/13/2001	AROCLOR-1248	0.1	U	µg/L
		3/13/2001	AROCLOR-1254	0.1	U	µg/L
		3/13/2001	AROCLOR-1260	0.1	U	µg/L
		3/13/2001	ETHANE	4	UJ7	µg/L
		3/13/2001	ETHENE	3	UJ7	µg/L
		3/13/2001	TOTAL DISSOLVED SOLIDS	3870000		µg/L
		3/13/2001	METHANE	3200	J7	µg/L
		3/13/2001	RADIUM-228	0.19	U	µg/L
		3/13/2001	RADIUM-226	0.25	U	µg/L
		3/13/2001	GROSS ALPHA - RADIOACTIVITY	-0.1	U	µg/L
		3/13/2001	GROSS BETA - RADIOACTIVITY	73		µg/L
	IR02MW141A	3/14/2001	CHROMIUM VI	10	U	µg/L
		3/14/2001	ALKALINITY	1000	U	µg/L
		3/14/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/14/2001	ALKALINITY (AS CACO3)	770000		µg/L
		3/14/2001	ALKALINITY, TOTAL (AS CACO3)	770000		µg/L
		3/14/2001	CHLORIDE	2700000		µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW141A	3/14/2001	SULFATE	463000		µg/L
		3/14/2001	NITRATE/NITRITE NITROGEN	20		µg/L
		3/14/2001	NITRITE NITROGEN	5	U	µg/L
		3/14/2001	NITRATE AS N	20		µg/L
		3/14/2001	MERCURY	0.1	U	µg/L
		3/14/2001	ALUMINUM	28.4	U	µg/L
		3/14/2001	ANTIMONY	5	U1	µg/L
		3/14/2001	BARIUM	96	J	µg/L
		3/14/2001	CADMIUM	0.3	J	µg/L
		3/14/2001	CALCIUM	48400		µg/L
		3/14/2001	CHROMIUM	0.7	U	µg/L
		3/14/2001	COPPER	8.9	U1	µg/L
		3/14/2001	IRON	1300		µg/L
		3/14/2001	MAGNESIUM	286000		µg/L
		3/14/2001	NICKEL	4.1	J	µg/L
		3/14/2001	POTASSIUM	124000		µg/L
		3/14/2001	SILVER	1.3	U1	µg/L
		3/14/2001	SODIUM	1370000		µg/L
		3/14/2001	ZINC	42	J4	µg/L
		3/14/2001	LEAD	3	J	µg/L
		3/14/2001	ALPHA-BHC	0.005	U	µg/L
		3/14/2001	BETA-BHC	0.005	U	µg/L
		3/14/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/14/2001	HEPTACHLOR	0.005	U	µg/L
		3/14/2001	ALDRIN	0.005	U	µg/L
		3/14/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/14/2001	ENDOSULFAN I	0.005	U	µg/L
		3/14/2001	DIELDRIN	0.01	U	µg/L
		3/14/2001	4,4'-DDE	0.01	U	µg/L
		3/14/2001	ENDRIN	0.01	U	µg/L
		3/14/2001	ENDOSULFAN II	0.01	U	µg/L
		3/14/2001	4,4'-DDD	0.01	U	µg/L
		3/14/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/14/2001	4,4'-DDT	0.01	U	µg/L
		3/14/2001	METHOXYCHLOR	0.05	U	µg/L
		3/14/2001	ENDRIN KETONE	0.01	U	µg/L
		3/14/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/14/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/14/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/14/2001	TOXAPHENE	0.5	U	µg/L
		3/14/2001	AROCLOR-1016	0.1	U	µg/L
		3/14/2001	AROCLOR-1221	0.2	U	µg/L
		3/14/2001	AROCLOR-1232	0.1	U	µg/L
		3/14/2001	AROCLOR-1242	0.1	U	µg/L
		3/14/2001	AROCLOR-1248	0.1	U	µg/L
		3/14/2001	AROCLOR-1254	0.1	U	µg/L
		3/14/2001	AROCLOR-1260	0.1	U	µg/L
		3/14/2001	DELTA-BHC	0.005	U	µg/L
		3/14/2001	PHENOL	1	UJ3	µg/L
		3/14/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/14/2001	2-CHLOROPHENOL	1	UJ3	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW141A	3/14/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/14/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/14/2001	1,2-DICHLOROBENZENE	0.2	J3	µg/L
		3/14/2001	2-METHYLPHENOL	1	UJ3	µg/L
		3/14/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/14/2001	4-METHYLPHENOL	1	U	µg/L
		3/14/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/14/2001	N-NITROSO-DI-N-PROPYLAMINE	1	UJ3	µg/L
		3/14/2001	NITROBENZENE	1	U	µg/L
		3/14/2001	ISOPHORONE	1	U	µg/L
		3/14/2001	2-NITROPHENOL	1	U	µg/L
		3/14/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/14/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/14/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/14/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/14/2001	NAPHTHALENE	1	UJ3	µg/L
		3/14/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/14/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/14/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/14/2001	2-METHYLNAPHTHALENE	1	UJ37	µg/L
		3/14/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/14/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/14/2001	2,4,5-TRICHLOROPHENOL	3	U	µg/L
		3/14/2001	2-CHLORONAPHTHALENE	1	UJ3	µg/L
		3/14/2001	2-NITROANILINE	3	U	µg/L
		3/14/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/14/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/14/2001	3-NITROANILINE	3	UJ37	µg/L
		3/14/2001	ACENAPHTHENE	1	U	µg/L
		3/14/2001	2,4-DINITROPHENOL	3	UJ7	µg/L
		3/14/2001	DIBENZOFURAN	1	U	µg/L
		3/14/2001	4-NITROPHENOL	3	UJ7	µg/L
		3/14/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/14/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/14/2001	FLUORENE	1	U	µg/L
		3/14/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/14/2001	4-NITROANILINE	3	U	µg/L
		3/14/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/14/2001	4,6-DINITRO-2-METHYLPHENOL	3	U	µg/L
		3/14/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/14/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/14/2001	PENTACHLOROPHENOL	3	UJ7	µg/L
		3/14/2001	PHENANTHRENE	1	U	µg/L
		3/14/2001	ANTHRACENE	1	U	µg/L
		3/14/2001	CARBAZOLE	1	U	µg/L
		3/14/2001	DI-N-BUTYLPHTHALATE	1	U4	µg/L
		3/14/2001	FLUORANTHENE	1	U	µg/L
		3/14/2001	PYRENE	1	U	µg/L
		3/14/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/14/2001	3,3'-DICHLOROBENZIDINE	1	UJ7	µg/L
		3/14/2001	CHRYSENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW141A	3/14/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/14/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/14/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/14/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/14/2001	BENZO(A)PYRENE	1	U	µg/L
		3/14/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/14/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/14/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/14/2001	ACENAPHTHYLENE	1	UJ3	µg/L
		3/14/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/14/2001	METHANE	100	J7	µg/L
		3/14/2001	ETHANE	4	UJ7	µg/L
		3/14/2001	ETHENE	3	UJ7	µg/L
		3/14/2001	TOTAL DISSOLVED SOLIDS	5100000		µg/L
		3/14/2001	RADIUM-226	0.15	U	µg/L
		3/14/2001	RADIUM-228	0.65	U	µg/L
		3/14/2001	GROSS BETA - RADIOACTIVITY	96		µg/L
		3/14/2001	GROSS ALPHA - RADIOACTIVITY	-2	U	µg/L
		3/14/2001	ALKALINITY	1000	U	µg/L
		3/14/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/14/2001	ALKALINITY (AS CACO3)	710000		µg/L
		3/14/2001	ALKALINITY, TOTAL (AS CACO3)	710000		µg/L
		3/14/2001	CHLORIDE	2340000		µg/L
		3/14/2001	SULFATE	461000		µg/L
		3/14/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/14/2001	NITRITE NITROGEN	5	U	µg/L
		3/14/2001	NITRATE AS N	10	U	µg/L
		3/14/2001	CALCIUM	48500		µg/L
		3/14/2001	IRON	1290		µg/L
		3/14/2001	MAGNESIUM	283000		µg/L
		3/14/2001	POTASSIUM	128000		µg/L
		3/14/2001	SODIUM	1380000		µg/L
		3/14/2001	ALPHA-BHC	0.005	U	µg/L
		3/14/2001	BETA-BHC	0.005	U	µg/L
		3/14/2001	DELTA-BHC	0.005	U	µg/L
		3/14/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/14/2001	HEPTACHLOR	0.005	U	µg/L
		3/14/2001	ALDRIN	0.005	U	µg/L
		3/14/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/14/2001	ENDOSULFAN I	0.005	U	µg/L
		3/14/2001	DIELDRIN	0.01	U	µg/L
		3/14/2001	4,4'-DDE	0.01	U	µg/L
		3/14/2001	ENDRIN	0.01	U	µg/L
		3/14/2001	ENDOSULFAN II	0.01	U	µg/L
		3/14/2001	4,4'-DDD	0.01	U	µg/L
		3/14/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/14/2001	4,4'-DDT	0.01	U	µg/L
		3/14/2001	METHOXYCHLOR	0.05	U	µg/L
		3/14/2001	ENDRIN KETONE	0.01	U	µg/L
		3/14/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/14/2001	ALPHA-CHLORDANE	0.005	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW141A	3/14/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/14/2001	TOXAPHENE	0.5	U	µg/L
		3/14/2001	AROCLOR-1016	0.1	U	µg/L
		3/14/2001	AROCLOR-1221	0.2	U	µg/L
		3/14/2001	AROCLOR-1232	0.1	U	µg/L
		3/14/2001	AROCLOR-1242	0.1	U	µg/L
		3/14/2001	AROCLOR-1248	0.1	U	µg/L
		3/14/2001	AROCLOR-1254	0.1	U	µg/L
		3/14/2001	AROCLOR-1260	0.1	U	µg/L
		3/14/2001	METHANE	97	J7	µg/L
		3/14/2001	ETHANE	4	UJ7	µg/L
		3/14/2001	ETHENE	3	UJ7	µg/L
	IR02MW147A	3/16/2001	PHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/16/2001	2-CHLOROPHENOL	1	U	µg/L
		3/16/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	2-METHYLPHENOL	1	U	µg/L
		3/16/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/16/2001	4-METHYLPHENOL	1	U	µg/L
		3/16/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/16/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/16/2001	NITROBENZENE	1	U	µg/L
		3/16/2001	ISOPHORONE	1	U	µg/L
		3/16/2001	2-NITROPHENOL	1	U	µg/L
		3/16/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/16/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/16/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	NAPHTHALENE	1	U	µg/L
		3/16/2001	4-CHLOROANILINE	1	U	µg/L
		3/16/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/16/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/16/2001	2-METHYLNAPHTHALENE	1	UJ7	µg/L
		3/16/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/16/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/16/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/16/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/16/2001	2-NITROANILINE	2	U	µg/L
		3/16/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/16/2001	ACENAPHTHYLENE	1	U	µg/L
		3/16/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/16/2001	3-NITROANILINE	2	U	µg/L
		3/16/2001	ACENAPHTHENE	1	U	µg/L
		3/16/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/16/2001	DIBENZOFURAN	1	U	µg/L
		3/16/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/16/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/16/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/16/2001	FLUORENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW147A	3/16/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	4-NITROANILINE	2	U	µg/L
		3/16/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/16/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/16/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/16/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/16/2001	PHENANTHRENE	1	U	µg/L
		3/16/2001	ANTHRACENE	1	U	µg/L
		3/16/2001	CARBAZOLE	1	U	µg/L
		3/16/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/16/2001	FLUORANTHENE	1	U	µg/L
		3/16/2001	PYRENE	1	U	µg/L
		3/16/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/16/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/16/2001	CHRYSENE	1	U	µg/L
		3/16/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/16/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(A)PYRENE	1	U	µg/L
		3/16/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/16/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/16/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/16/2001	TOTAL DISSOLVED SOLIDS	15400000		µg/L
		3/16/2001	GROSS BETA - RADIOACTIVITY	95		µg/L
		3/16/2001	GROSS ALPHA - RADIOACTIVITY	-5	U	µg/L
	IR02MW149A	3/27/2001	GROSS ALPHA - RADIOACTIVITY	22	U	µg/L
		3/27/2001	GROSS BETA - RADIOACTIVITY	57	U	µg/L
		3/27/2001	COPPER	44.9	U19	µg/L
		3/27/2001	TOTAL DISSOLVED SOLIDS	19100000		µg/L
	IR02MW175A	3/12/2001	ALUMINUM	28.4	U	µg/L
		3/12/2001	ALPHA-BHC	0.005	U	µg/L
		3/12/2001	BETA-BHC	0.005	U	µg/L
		3/12/2001	DELTA-BHC	0.005	U	µg/L
		3/12/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/12/2001	HEPTACHLOR	0.005	U	µg/L
		3/12/2001	ALDRIN	0.005	U	µg/L
		3/12/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/12/2001	ENDOSULFAN I	0.005	U	µg/L
		3/12/2001	DIELDRIN	0.01	U	µg/L
		3/12/2001	4,4'-DDE	0.01	U	µg/L
		3/12/2001	ENDRIN	0.01	U	µg/L
		3/12/2001	ENDOSULFAN II	0.01	U	µg/L
		3/12/2001	4,4'-DDD	0.01	U	µg/L
		3/12/2001	ENDOSULFAN SULFATE	0.01	UJ3	µg/L
		3/12/2001	4,4'-DDT	0.01	U	µg/L
		3/12/2001	METHOXYCHLOR	0.05	U	µg/L
		3/12/2001	ENDRIN KETONE	0.01	U	µg/L
		3/12/2001	ENDRIN ALDEHYDE	0.01	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW175A	3/12/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/12/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/12/2001	TOXAPHENE	0.5	U	µg/L
		3/12/2001	AROCLOR-1016	0.1	U	µg/L
		3/12/2001	AROCLOR-1221	0.2	U	µg/L
		3/12/2001	AROCLOR-1232	0.1	U	µg/L
		3/12/2001	AROCLOR-1242	0.1	U	µg/L
		3/12/2001	AROCLOR-1248	0.1	U	µg/L
		3/12/2001	AROCLOR-1254	0.1	U	µg/L
		3/12/2001	AROCLOR-1260	0.1	U	µg/L
		3/12/2001	PHENOL	1	U	µg/L
		3/12/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/12/2001	2-CHLOROPHENOL	1	U	µg/L
		3/12/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/12/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/12/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/12/2001	2-METHYLPHENOL	1	U	µg/L
		3/12/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/12/2001	4-METHYLPHENOL	1	U	µg/L
		3/12/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/12/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/12/2001	NITROBENZENE	1	U	µg/L
		3/12/2001	ISOPHORONE	1	U	µg/L
		3/12/2001	2-NITROPHENOL	1	U	µg/L
		3/12/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/12/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/12/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/12/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/12/2001	NAPHTHALENE	1	U	µg/L
		3/12/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/12/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/12/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/12/2001	2-METHYLNAPHTHALENE	1	UJ7	µg/L
		3/12/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/12/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/12/2001	2,4,5-TRICHLOROPHENOL	3	U	µg/L
		3/12/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/12/2001	2-NITROANILINE	3	U	µg/L
		3/12/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/12/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/12/2001	3-NITROANILINE	3	UJ37	µg/L
		3/12/2001	ACENAPHTHENE	1	U	µg/L
		3/12/2001	2,4-DINITROPHENOL	3	UJ7	µg/L
		3/12/2001	DIBENZOFURAN	1	U	µg/L
		3/12/2001	4-NITROPHENOL	3	UJ7	µg/L
		3/12/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/12/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/12/2001	FLUORENE	1	U	µg/L
		3/12/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/12/2001	4-NITROANILINE	3	U	µg/L
		3/12/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW175A	3/12/2001	4,6-DINITRO-2-METHYLPHENOL	3	U	µg/L
		3/12/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/12/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/12/2001	PENTACHLOROPHENOL	3	UJ7	µg/L
		3/12/2001	PHENANTHRENE	1	U	µg/L
		3/12/2001	ANTHRACENE	1	U	µg/L
		3/12/2001	CARBAZOLE	1	U	µg/L
		3/12/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/12/2001	FLUORANTHENE	1	U	µg/L
		3/12/2001	PYRENE	1	U	µg/L
		3/12/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/12/2001	3,3'-DICHLOROBENZIDINE	1	UJ7	µg/L
		3/12/2001	CHRYSENE	1	U	µg/L
		3/12/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/12/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/12/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/12/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/12/2001	BENZO(A)PYRENE	1	U	µg/L
		3/12/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/12/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/12/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/12/2001	ACENAPHTHYLENE	1	U	µg/L
		3/12/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/12/2001	CHLOROMETHANE	1	UJ7	µg/L
		3/12/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/12/2001	BROMOMETHANE	1	U	µg/L
		3/12/2001	CHLOROETHANE	1	U	µg/L
		3/12/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/12/2001	CARBON DISULFIDE	1	U	µg/L
		3/12/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/12/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/12/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/12/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/12/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/12/2001	2-BUTANONE	5	UJ7	µg/L
		3/12/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/12/2001	CHLOROFORM	1	U	µg/L
		3/12/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/12/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/12/2001	BENZENE	0.5	U	µg/L
		3/12/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/12/2001	TRICHLOROETHENE	1	U	µg/L
		3/12/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/12/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/12/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/12/2001	4-METHYL-2-PENTANONE	5	UJ7	µg/L
		3/12/2001	TOLUENE	1	U	µg/L
		3/12/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/12/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/12/2001	TETRACHLOROETHENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW175A	3/12/2001	2-HEXANONE	5	UJ7	µg/L
		3/12/2001	DIBROMOCHLOROMETHANE	1	UJ7	µg/L
		3/12/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/12/2001	CHLOROBENZENE	1	U	µg/L
		3/12/2001	ETHYLBENZENE	1	U	µg/L
		3/12/2001	STYRENE	1	U	µg/L
		3/12/2001	XYLENE (TOTAL)	1	U	µg/L
		3/12/2001	BROMOFORM	1	UJ7	µg/L
		3/12/2001	1,1,2,2-TETRACHLOROETHANE	1	UJ7	µg/L
		3/12/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	UJ7	µg/L
		3/12/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/12/2001	ACETONE	5	R7	µg/L
		3/12/2001	TOTAL DISSOLVED SOLIDS	26800000		µg/L
		3/12/2001	RADIUM-226	0.43	J	µg/L
		3/12/2001	RADIUM-228	1.2		µg/L
		3/12/2001	GROSS BETA - RADIOACTIVITY	168		µg/L
		3/12/2001	GROSS ALPHA - RADIOACTIVITY	-50	U	µg/L
		3/12/2001	RADIUM-226	0.59	J	µg/L
		3/12/2001	RADIUM-228	0.99	J	µg/L
	IR02MW179A	3/12/2001	CADMIUM	0.3	U	µg/L
		3/12/2001	NICKEL	1.4	J	µg/L
		3/12/2001	PHENOL	1	U	µg/L
		3/12/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/12/2001	2-CHLOROPHENOL	1	U	µg/L
		3/12/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/12/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/12/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/12/2001	2-METHYLPHENOL	1	U	µg/L
		3/12/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/12/2001	4-METHYLPHENOL	1	U	µg/L
		3/12/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/12/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/12/2001	NITROBENZENE	1	U	µg/L
		3/12/2001	ISOPHORONE	1	U	µg/L
		3/12/2001	2-NITROPHENOL	1	U	µg/L
		3/12/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/12/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/12/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/12/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/12/2001	NAPHTHALENE	1	U	µg/L
		3/12/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/12/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/12/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/12/2001	2-METHYLNAPHTHALENE	1	UJ7	µg/L
		3/12/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/12/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/12/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW179A	3/12/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/12/2001	2-NITROANILINE	2	U	µg/L
		3/12/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/12/2001	ACENAPHTHYLENE	1	U	µg/L
		3/12/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/12/2001	3-NITROANILINE	2	UJ37	µg/L
		3/12/2001	ACENAPHTHENE	1	U	µg/L
		3/12/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/12/2001	DIBENZOFURAN	1	U	µg/L
		3/12/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/12/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/12/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/12/2001	FLUORENE	1	U	µg/L
		3/12/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/12/2001	4-NITROANILINE	2	U	µg/L
		3/12/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/12/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/12/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/12/2001	PENTACHLOROPHENOL	2	UJ7	µg/L
		3/12/2001	PHENANTHRENE	1	U	µg/L
		3/12/2001	ANTHRACENE	1	U	µg/L
		3/12/2001	CARBAZOLE	1	U	µg/L
		3/12/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/12/2001	FLUORANTHENE	1	U	µg/L
		3/12/2001	PYRENE	1	U	µg/L
		3/12/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/12/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/12/2001	3,3'-DICHLOROBENZIDINE	1	UJ7	µg/L
		3/12/2001	CHRYSENE	1	U	µg/L
		3/12/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/12/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/12/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/12/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/12/2001	BENZO(A)PYRENE	1	U	µg/L
		3/12/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/12/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/12/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/12/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/12/2001	CHLOROMETHANE	1	UJ7	µg/L
		3/12/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/12/2001	BROMOMETHANE	1	U	µg/L
		3/12/2001	CHLOROETHANE	1	U	µg/L
		3/12/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/12/2001	ACETONE	5	R7	µg/L
		3/12/2001	CARBON DISULFIDE	1	U	µg/L
		3/12/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/12/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/12/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/12/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/12/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/12/2001	2-BUTANONE	5	UJ7	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW179A	3/12/2001	CHLOROFORM	1	U	µg/L
		3/12/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/12/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/12/2001	BENZENE	0.5	U	µg/L
		3/12/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/12/2001	TRICHLOROETHENE	1	U	µg/L
		3/12/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/12/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/12/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/12/2001	4-METHYL-2-PENTANONE	5	UJ7	µg/L
		3/12/2001	TOLUENE	1	U	µg/L
		3/12/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/12/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/12/2001	TETRACHLOROETHENE	1	U	µg/L
		3/12/2001	2-HEXANONE	5	UJ7	µg/L
		3/12/2001	DIBROMOCHLOROMETHANE	1	UJ7	µg/L
		3/12/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/12/2001	CHLOROBENZENE	1	U	µg/L
		3/12/2001	ETHYLBENZENE	1	U	µg/L
		3/12/2001	STYRENE	1	U	µg/L
		3/12/2001	XYLENE (TOTAL)	1	U	µg/L
		3/12/2001	BROMOFORM	1	UJ7	µg/L
		3/12/2001	1,1,2,2-TETRACHLOROETHANE	1	UJ7	µg/L
		3/12/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/12/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/12/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	UJ7	µg/L
		3/12/2001	TOTAL DISSOLVED SOLIDS	18600000		µg/L
		3/12/2001	RADIUM-226	0.16	U	µg/L
		3/12/2001	RADIUM-228	0.49	U	µg/L
		3/12/2001	GROSS ALPHA - RADIOACTIVITY	-12	U	µg/L
		3/12/2001	GROSS BETA - RADIOACTIVITY	162		µg/L
	IR02MW183A	3/16/2001	PHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/16/2001	2-CHLOROPHENOL	1	U	µg/L
		3/16/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	2-METHYLPHENOL	1	U	µg/L
		3/16/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/16/2001	4-METHYLPHENOL	1	U	µg/L
		3/16/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/16/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/16/2001	NITROBENZENE	1	U	µg/L
		3/16/2001	ISOPHORONE	1	U	µg/L
		3/16/2001	2-NITROPHENOL	1	U	µg/L
		3/16/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/16/2001	2,4-DICHLOROPHENOL	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW183A	3/16/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	NAPHTHALENE	1	U	µg/L
		3/16/2001	4-CHLOROANILINE	1	U	µg/L
		3/16/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/16/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/16/2001	2-METHYLNAPHTHALENE	1	UJ7	µg/L
		3/16/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/16/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/16/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/16/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/16/2001	2-NITROANILINE	2	U	µg/L
		3/16/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/16/2001	ACENAPHTHYLENE	1	U	µg/L
		3/16/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/16/2001	3-NITROANILINE	2	U	µg/L
		3/16/2001	ACENAPHTHENE	1	U	µg/L
		3/16/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/16/2001	DIBENZOFURAN	1	U	µg/L
		3/16/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/16/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/16/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/16/2001	FLUORENE	1	U	µg/L
		3/16/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	4-NITROANILINE	2	U	µg/L
		3/16/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/16/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/16/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/16/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/16/2001	PHENANTHRENE	1	U	µg/L
		3/16/2001	ANTHRACENE	1	U	µg/L
		3/16/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/16/2001	FLUORANTHENE	1	U	µg/L
		3/16/2001	PYRENE	1	U	µg/L
		3/16/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/16/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/16/2001	CHRYSENE	1	U	µg/L
		3/16/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/16/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(A)PYRENE	1	U	µg/L
		3/16/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/16/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/16/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/16/2001	CARBAZOLE	1	U	µg/L
		3/16/2001	TOTAL DISSOLVED SOLIDS	15000000		µg/L
		3/16/2001	PHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/16/2001	2-CHLOROPHENOL	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW183A	3/16/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	2-METHYLPHENOL	1	U	µg/L
		3/16/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/16/2001	4-METHYLPHENOL	1	U	µg/L
		3/16/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/16/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/16/2001	NITROBENZENE	1	U	µg/L
		3/16/2001	ISOPHORONE	1	U	µg/L
		3/16/2001	2-NITROPHENOL	1	U	µg/L
		3/16/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/16/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/16/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	NAPHTHALENE	1	U	µg/L
		3/16/2001	4-CHLOROANILINE	1	U	µg/L
		3/16/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/16/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/16/2001	2-METHYLNAPHTHALENE	1	UJ7	µg/L
		3/16/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/16/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/16/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/16/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/16/2001	2-NITROANILINE	2	U	µg/L
		3/16/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/16/2001	ACENAPHTHYLENE	1	U	µg/L
		3/16/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/16/2001	3-NITROANILINE	2	U	µg/L
		3/16/2001	ACENAPHTHENE	1	U	µg/L
		3/16/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/16/2001	DIBENZOFURAN	1	U	µg/L
		3/16/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/16/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/16/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/16/2001	FLUORENE	1	U	µg/L
		3/16/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	4-NITROANILINE	2	U	µg/L
		3/16/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/16/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/16/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/16/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/16/2001	PHENANTHRENE	1	U	µg/L
		3/16/2001	ANTHRACENE	1	U	µg/L
		3/16/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/16/2001	FLUORANTHENE	1	U	µg/L
		3/16/2001	PYRENE	1	U	µg/L
		3/16/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/16/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW183A	3/16/2001	CHRYSENE	1	U	µg/L
		3/16/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/16/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(A)PYRENE	1	U	µg/L
		3/16/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/16/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/16/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/16/2001	CARBAZOLE	1	U	µg/L
		3/16/2001	TOTAL DISSOLVED SOLIDS	15000000		µg/L
	IR02MW206A1	3/13/2001	CHLOROMETHANE	1	U	µg/L
		3/13/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/13/2001	BROMOMETHANE	1	U	µg/L
		3/13/2001	CHLOROETHANE	1	U	µg/L
		3/13/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/13/2001	ACETONE	5	R7	µg/L
		3/13/2001	CARBON DISULFIDE	1	U	µg/L
		3/13/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/13/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/13/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/13/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/13/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/13/2001	2-BUTANONE	5	U	µg/L
		3/13/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/13/2001	CHLOROFORM	1	U	µg/L
		3/13/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/13/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/13/2001	BENZENE	0.5	U	µg/L
		3/13/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/13/2001	TRICHLOROETHENE	1	U	µg/L
		3/13/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/13/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/13/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/13/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/13/2001	TOLUENE	1	U	µg/L
		3/13/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/13/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/13/2001	TETRACHLOROETHENE	1	U	µg/L
		3/13/2001	2-HEXANONE	5	U	µg/L
		3/13/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/13/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/13/2001	CHLOROBENZENE	1	U	µg/L
		3/13/2001	ETHYLBENZENE	1	U	µg/L
		3/13/2001	STYRENE	1	U	µg/L
		3/13/2001	XYLENE (TOTAL)	1	U	µg/L
		3/13/2001	BROMOFORM	1	U	µg/L
		3/13/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/13/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,2-DICHLOROBENZENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW206A1	3/13/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/13/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/13/2001	TOTAL DISSOLVED SOLIDS	25400000		µg/L
		3/13/2001	RADIUM-228	0.48	U	µg/L
		3/13/2001	RADIUM-226	0.14	U	µg/L
		3/13/2001	GROSS ALPHA - RADIOACTIVITY	-7	U	µg/L
		3/13/2001	GROSS BETA - RADIOACTIVITY	224		µg/L
	IR02MW206A2	3/13/2001	CHLOROMETHANE	1	U	µg/L
		3/13/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/13/2001	CHLOROETHANE	1	U	µg/L
		3/13/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/13/2001	ACETONE	5	R7	µg/L
		3/13/2001	CARBON DISULFIDE	1	U	µg/L
		3/13/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/13/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/13/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/13/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/13/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/13/2001	2-BUTANONE	5	U	µg/L
		3/13/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/13/2001	CHLOROFORM	1	U	µg/L
		3/13/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/13/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/13/2001	BENZENE	0.5	U	µg/L
		3/13/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/13/2001	TRICHLOROETHENE	1	U	µg/L
		3/13/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/13/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/13/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/13/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/13/2001	TOLUENE	1	U	µg/L
		3/13/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/13/2001	TETRACHLOROETHENE	1	U	µg/L
		3/13/2001	2-HEXANONE	5	U	µg/L
		3/13/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/13/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/13/2001	CHLOROBENZENE	1	U	µg/L
		3/13/2001	ETHYLBENZENE	1	U	µg/L
		3/13/2001	STYRENE	1	U	µg/L
		3/13/2001	XYLENE (TOTAL)	1	U	µg/L
		3/13/2001	BROMOFORM	1	U	µg/L
		3/13/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/13/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/13/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/13/2001	BROMOMETHANE	1	U	µg/L
		3/13/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/13/2001	GROSS ALPHA - RADIOACTIVITY	43	U	µg/L
		3/13/2001	GROSS BETA - RADIOACTIVITY	202		µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW206A2	3/13/2001	CHLOROMETHANE	1	U	µg/L
		3/13/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/13/2001	BROMOMETHANE	1	U	µg/L
		3/13/2001	CHLOROETHANE	1	U	µg/L
		3/13/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/13/2001	ACETONE	5	R7	µg/L
		3/13/2001	CARBON DISULFIDE	1	U	µg/L
		3/13/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/13/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/13/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/13/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/13/2001	2-BUTANONE	5	U	µg/L
		3/13/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/13/2001	CHLOROFORM	1	U	µg/L
		3/13/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/13/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/13/2001	BENZENE	0.5	U	µg/L
		3/13/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/13/2001	TRICHLOROETHENE	1	U	µg/L
		3/13/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/13/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/13/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/13/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/13/2001	TOLUENE	1	U	µg/L
		3/13/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/13/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/13/2001	TETRACHLOROETHENE	1	U	µg/L
		3/13/2001	2-HEXANONE	5	U	µg/L
		3/13/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/13/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/13/2001	CHLOROBENZENE	1	U	µg/L
		3/13/2001	ETHYLBENZENE	1	U	µg/L
		3/13/2001	STYRENE	1	U	µg/L
		3/13/2001	XYLENE (TOTAL)	1	U	µg/L
		3/13/2001	BROMOFORM	1	U	µg/L
		3/13/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/13/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/13/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/13/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/13/2001	TOTAL DISSOLVED SOLIDS	29900000		µg/L
		3/13/2001	RADIUM-226	0.78	J	µg/L
		3/13/2001	GROSS ALPHA - RADIOACTIVITY	41	U	µg/L
		3/13/2001	GROSS BETA - RADIOACTIVITY	241		µg/L
		3/13/2001	RADIUM-228	1		µg/L
	IR02MW209A	3/13/2001	TOTAL DISSOLVED SOLIDS	31300000		µg/L
		3/13/2001	RADIUM-226	0.65	J	µg/L
		3/13/2001	GROSS ALPHA - RADIOACTIVITY	26	U	µg/L
		3/13/2001	GROSS BETA - RADIOACTIVITY	226		µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW209A	3/13/2001	RADIUM-228	1.1		µg/L
		3/13/2001	TOTAL DISSOLVED SOLIDS	31200000		µg/L
		3/13/2001	GROSS ALPHA - RADIOACTIVITY	27	U	µg/L
		3/13/2001	GROSS BETA - RADIOACTIVITY	169		µg/L
	IR02MW298A	3/20/2001	GROSS ALPHA - RADIOACTIVITY	0.9	U	µg/L
		3/20/2001	GROSS BETA - RADIOACTIVITY	3.1	U	µg/L
		3/20/2001	TOTAL DISSOLVED SOLIDS	1510000		µg/L
		3/20/2001	CHROMIUM VI	10	U	µg/L
		3/20/2001	GROSS ALPHA - RADIOACTIVITY	5.2		µg/L
		3/20/2001	GROSS BETA - RADIOACTIVITY	4.2	U	µg/L
		3/20/2001	ALUMINUM	41.8	U	µg/L
		3/20/2001	CADMIUM	0.2	U	µg/L
		3/20/2001	CHROMIUM	1.4	U	µg/L
		3/20/2001	COPPER	12.7	J	µg/L
		3/20/2001	NICKEL	22.5	J	µg/L
		3/20/2001	TOTAL DISSOLVED SOLIDS	1670000		µg/L
	IR02MW299A	3/26/2001	GROSS BETA - RADIOACTIVITY	38		µg/L
		3/26/2001	GROSS ALPHA - RADIOACTIVITY	1	U	µg/L
		3/26/2001	COPPER	2.5	U	µg/L
		3/26/2001	CHLOROMETHANE	1	U	µg/L
		3/26/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/26/2001	BROMOMETHANE	1	U	µg/L
		3/26/2001	CHLOROETHANE	1	U	µg/L
		3/26/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/26/2001	ACETONE	5	R7	µg/L
		3/26/2001	CARBON DISULFIDE	1	U	µg/L
		3/26/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/26/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/26/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/26/2001	1,1-DICHLOROETHANE	0.4	J	µg/L
		3/26/2001	CIS-1,2-DICHLOROETHENE	0.3	J	µg/L
		3/26/2001	2-BUTANONE	5	U	µg/L
		3/26/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/26/2001	CHLOROFORM	1	U	µg/L
		3/26/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/26/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/26/2001	BENZENE	0.5	U	µg/L
		3/26/2001	1,2-DICHLOROETHANE	0.8		µg/L
		3/26/2001	TRICHLOROETHENE	1	U	µg/L
		3/26/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/26/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/26/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/26/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/26/2001	TOLUENE	1	U	µg/L
		3/26/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/26/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/26/2001	TETRACHLOROETHENE	1	U	µg/L
		3/26/2001	2-HEXANONE	5	U	µg/L
		3/26/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/26/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/26/2001	CHLOROBENZENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW299A	3/26/2001	ETHYLBENZENE	1	U	µg/L
		3/26/2001	STYRENE	1	U	µg/L
		3/26/2001	XYLENE (TOTAL)	1	U	µg/L
		3/26/2001	BROMOFORM	1	U	µg/L
		3/26/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/26/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/26/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/26/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/26/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/26/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/26/2001	TOTAL DISSOLVED SOLIDS	6660000		µg/L
	IR02MW300A	3/28/2001	GROSS ALPHA - RADIOACTIVITY	-7	U	µg/L
		3/28/2001	GROSS BETA - RADIOACTIVITY	103		µg/L
		3/28/2001	COPPER	43.3		µg/L
		3/28/2001	NICKEL	10.8	J	µg/L
		3/28/2001	ZINC	117		µg/L
		3/28/2001	PHENOL	1	U	µg/L
		3/28/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/28/2001	2-CHLOROPHENOL	1	U	µg/L
		3/28/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	2-METHYLPHENOL	1	U	µg/L
		3/28/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/28/2001	4-METHYLPHENOL	1	U	µg/L
		3/28/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/28/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/28/2001	NITROBENZENE	1	U	µg/L
		3/28/2001	ISOPHORONE	1	U	µg/L
		3/28/2001	2-NITROPHENOL	1	U	µg/L
		3/28/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/28/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/28/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/28/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	NAPHTHALENE	1	U	µg/L
		3/28/2001	4-CHLOROANILINE	1	U	µg/L
		3/28/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/28/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/28/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/28/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ37	µg/L
		3/28/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/28/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/28/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/28/2001	2-NITROANILINE	2	U	µg/L
		3/28/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/28/2001	ACENAPHTHYLENE	1	U	µg/L
		3/28/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/28/2001	3-NITROANILINE	2	U	µg/L
		3/28/2001	ACENAPHTHENE	1	U	µg/L
		3/28/2001	2,4-DINITROPHENOL	2	R7	µg/L
		3/28/2001	DIBENZOFURAN	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW300A	3/28/2001	4-NITROPHENOL	2	U	µg/L
		3/28/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/28/2001	DIETHYLPHTHALATE	1	U4	µg/L
		3/28/2001	FLUORENE	1	U	µg/L
		3/28/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/28/2001	4-NITROANILINE	2	U	µg/L
		3/28/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/28/2001	4,6-DINITRO-2-METHYLPHENOL	2	UJ7	µg/L
		3/28/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/28/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/28/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/28/2001	ANTHRACENE	1	U	µg/L
		3/28/2001	CARBAZOLE	1	U	µg/L
		3/28/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/28/2001	FLUORANTHENE	1	U	µg/L
		3/28/2001	PYRENE	1	U	µg/L
		3/28/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/28/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/28/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/28/2001	CHRYSENE	1	U	µg/L
		3/28/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/28/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/28/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/28/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/28/2001	BENZO(A)PYRENE	1	U	µg/L
		3/28/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/28/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/28/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/28/2001	PHENANTHRENE	1	U	µg/L
		3/28/2001	CHLOROMETHANE	1	U	µg/L
		3/28/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/28/2001	BROMOMETHANE	1	U	µg/L
		3/28/2001	CHLOROETHANE	1	U	µg/L
		3/28/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/28/2001	ACETONE	5	R7	µg/L
		3/28/2001	CARBON DISULFIDE	1	U	µg/L
		3/28/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/28/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/28/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/28/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/28/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/28/2001	2-BUTANONE	5	U	µg/L
		3/28/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/28/2001	CHLOROFORM	1	U	µg/L
		3/28/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/28/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/28/2001	BENZENE	0.5	U	µg/L
		3/28/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/28/2001	TRICHLOROETHENE	1	U	µg/L
		3/28/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/28/2001	BROMODICHLOROMETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW300A	3/28/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/28/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/28/2001	TOLUENE	1	U	µg/L
		3/28/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/28/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/28/2001	TETRACHLOROETHENE	1	U	µg/L
		3/28/2001	2-HEXANONE	5	U	µg/L
		3/28/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/28/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/28/2001	CHLOROBENZENE	1	U	µg/L
		3/28/2001	ETHYLBENZENE	1	U	µg/L
		3/28/2001	STYRENE	1	U	µg/L
		3/28/2001	XYLENE (TOTAL)	1	U	µg/L
		3/28/2001	BROMOFORM	1	U	µg/L
		3/28/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/28/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/28/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/28/2001	TOTAL DISSOLVED SOLIDS	18500000		µg/L
		3/28/2001	PHENOL	1	U	µg/L
		3/28/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/28/2001	2-CHLOROPHENOL	1	U	µg/L
		3/28/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	2-METHYLPHENOL	1	U	µg/L
		3/28/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/28/2001	4-METHYLPHENOL	1	U	µg/L
		3/28/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/28/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/28/2001	NITROBENZENE	1	U	µg/L
		3/28/2001	ISOPHORONE	1	U	µg/L
		3/28/2001	2-NITROPHENOL	1	U	µg/L
		3/28/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/28/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/28/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/28/2001	NAPHTHALENE	1	U	µg/L
		3/28/2001	4-CHLOROANILINE	1	U	µg/L
		3/28/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/28/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/28/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/28/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ37	µg/L
		3/28/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/28/2001	2,4,5-TRICHLOROPHENOL	3	U	µg/L
		3/28/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/28/2001	2-NITROANILINE	3	U	µg/L
		3/28/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/28/2001	ACENAPHTHYLENE	1	U	µg/L
		3/28/2001	2,6-DINITROTOLUENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW300A	3/28/2001	3-NITROANILINE	3	U	µg/L
		3/28/2001	ACENAPHTHENE	1	U	µg/L
		3/28/2001	2,4-DINITROPHENOL	3	R7	µg/L
		3/28/2001	DIBENZOFURAN	1	U	µg/L
		3/28/2001	4-NITROPHENOL	3	U	µg/L
		3/28/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/28/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/28/2001	FLUORENE	1	U	µg/L
		3/28/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/28/2001	4-NITROANILINE	3	U	µg/L
		3/28/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/28/2001	4,6-DINITRO-2-METHYLPHENOL	3	UJ7	µg/L
		3/28/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/28/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/28/2001	PENTACHLOROPHENOL	3	U	µg/L
		3/28/2001	PHENANTHRENE	1	U	µg/L
		3/28/2001	ANTHRACENE	1	U	µg/L
		3/28/2001	CARBAZOLE	1	U	µg/L
		3/28/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/28/2001	FLUORANTHENE	1	U	µg/L
		3/28/2001	PYRENE	1	U	µg/L
		3/28/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/28/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/28/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/28/2001	CHRYSENE	1	U	µg/L
		3/28/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/28/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/28/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/28/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/28/2001	BENZO(A)PYRENE	1	U	µg/L
		3/28/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/28/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/28/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/28/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/28/2001	CHLOROMETHANE	1	U	µg/L
		3/28/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/28/2001	BROMOMETHANE	1	U	µg/L
		3/28/2001	CHLOROETHANE	1	U	µg/L
		3/28/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/28/2001	ACETONE	5	R7	µg/L
		3/28/2001	CARBON DISULFIDE	1	U	µg/L
		3/28/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/28/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/28/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/28/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/28/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/28/2001	2-BUTANONE	5	U	µg/L
		3/28/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/28/2001	CHLOROFORM	1	U	µg/L
		3/28/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/28/2001	CARBON TETRACHLORIDE	0.5	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW300A	3/28/2001	BENZENE	0.5	U	µg/L
		3/28/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/28/2001	TRICHLOROETHENE	1	U	µg/L
		3/28/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/28/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/28/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/28/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/28/2001	TOLUENE	1	U	µg/L
		3/28/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/28/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/28/2001	TETRACHLOROETHENE	1	U	µg/L
		3/28/2001	2-HEXANONE	5	U	µg/L
		3/28/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/28/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/28/2001	CHLOROBENZENE	1	U	µg/L
		3/28/2001	ETHYLBENZENE	1	U	µg/L
		3/28/2001	STYRENE	1	U	µg/L
		3/28/2001	XYLENE (TOTAL)	1	U	µg/L
		3/28/2001	BROMOFORM	1	U	µg/L
		3/28/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/28/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/28/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/28/2001	TOTAL DISSOLVED SOLIDS	18900000		µg/L
	IR02MW372A	3/26/2001	GROSS ALPHA - RADIOACTIVITY	-2.8	U	µg/L
		3/26/2001	GROSS BETA - RADIOACTIVITY	105		µg/L
		3/26/2001	ALKALINITY	1000	U	µg/L
		3/26/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/26/2001	ALKALINITY (AS CACO3)	1050000		µg/L
		3/26/2001	ALKALINITY, TOTAL (AS CACO3)	1050000		µg/L
		3/26/2001	CHLORIDE	400000		µg/L
		3/26/2001	SULFATE	532000		µg/L
		3/26/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/26/2001	NITRITE NITROGEN	5	U	µg/L
		3/26/2001	NITRATE AS N	10	U	µg/L
		3/26/2001	CALCIUM	21200		µg/L
		3/26/2001	IRON	373		µg/L
		3/26/2001	MAGNESIUM	203000		µg/L
		3/26/2001	POTASSIUM	152000		µg/L
		3/26/2001	SODIUM	521000		µg/L
		3/26/2001	ALPHA-BHC	0.005	U	µg/L
		3/26/2001	BETA-BHC	0.008	J9	µg/L
		3/26/2001	DELTA-BHC	0.005	U	µg/L
		3/26/2001	GAMMA-BHC (LINDANE)	0.01	J9	µg/L
		3/26/2001	HEPTACHLOR	0.03	J9	µg/L
		3/26/2001	ALDRIN	0.005	U	µg/L
		3/26/2001	HEPTACHLOR EPOXIDE	0.02	J9	µg/L
		3/26/2001	ENDOSULFAN I	0.005	J9	µg/L
		3/26/2001	DIELDRIN	0.02	J9	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW372A	3/26/2001	4,4'-DDE	0.03		µg/L
		3/26/2001	ENDRIN	0.01	U	µg/L
		3/26/2001	ENDOSULFAN II	0.01	U	µg/L
		3/26/2001	4,4'-DDD	0.01	U	µg/L
		3/26/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/26/2001	4,4'-DDT	0.04		µg/L
		3/26/2001	METHOXYCHLOR	0.05	U	µg/L
		3/26/2001	ENDRIN KETONE	0.01	U	µg/L
		3/26/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/26/2001	ALPHA-CHLORDANE	0.005	UJ9	µg/L
		3/26/2001	GAMMA-CHLORDANE	0.05	J9	µg/L
		3/26/2001	TOXAPHENE	0.5	U	µg/L
		3/26/2001	AROCLOR-1016	0.1	U	µg/L
		3/26/2001	AROCLOR-1221	0.2	U	µg/L
		3/26/2001	AROCLOR-1232	0.1	U	µg/L
		3/26/2001	AROCLOR-1242	0.1	U	µg/L
		3/26/2001	AROCLOR-1248	0.1	U	µg/L
		3/26/2001	AROCLOR-1254	1		µg/L
		3/26/2001	AROCLOR-1260	0.1	U	µg/L
		3/26/2001	CHLOROMETHANE	1	U	µg/L
		3/26/2001	VINYL CHLORIDE	0.2	J	µg/L
		3/26/2001	BROMOMETHANE	1	U	µg/L
		3/26/2001	CHLOROETHANE	1	U	µg/L
		3/26/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/26/2001	ACETONE	5	U47	µg/L
		3/26/2001	CARBON DISULFIDE	1	U	µg/L
		3/26/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/26/2001	TRANS-1,2-DICHLOROETHENE	0.6	J	µg/L
		3/26/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/26/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/26/2001	CIS-1,2-DICHLOROETHENE	0.6	J	µg/L
		3/26/2001	2-BUTANONE	5	U	µg/L
		3/26/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/26/2001	CHLOROFORM	1	U	µg/L
		3/26/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/26/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/26/2001	BENZENE	2		µg/L
		3/26/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/26/2001	TRICHLOROETHENE	0.2	J	µg/L
		3/26/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/26/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/26/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/26/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/26/2001	TOLUENE	1	U	µg/L
		3/26/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/26/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/26/2001	TETRACHLOROETHENE	1	U	µg/L
		3/26/2001	2-HEXANONE	5	U	µg/L
		3/26/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/26/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/26/2001	CHLOROBENZENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW372A	3/26/2001	ETHYLBENZENE	0.4	J	µg/L
		3/26/2001	STYRENE	1	U	µg/L
		3/26/2001	XYLENE (TOTAL)	1	U	µg/L
		3/26/2001	BROMOFORM	1	U	µg/L
		3/26/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/26/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/26/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/26/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/26/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/26/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/26/2001	ETHANE	4	UJ7	µg/L
		3/26/2001	ETHENE	3	UJ7	µg/L
		3/26/2001	SALINITY	2.3		µg/L
		3/26/2001	TOTAL DISSOLVED SOLIDS	2370000		µg/L
		3/26/2001	METHANE	1000	J7	µg/L
	IR02MW373A	3/26/2001	GROSS ALPHA - RADIOACTIVITY	1.6	U	µg/L
		3/26/2001	GROSS BETA - RADIOACTIVITY	5.7		µg/L
		3/26/2001	ALKALINITY	1000	U	µg/L
		3/26/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/26/2001	ALKALINITY (AS CACO3)	560000		µg/L
		3/26/2001	ALKALINITY, TOTAL (AS CACO3)	560000		µg/L
		3/26/2001	CHLORIDE	62300		µg/L
		3/26/2001	SULFATE	414000		µg/L
		3/26/2001	NITRATE/NITRITE NITROGEN	140		µg/L
		3/26/2001	NITRITE NITROGEN	5	U	µg/L
		3/26/2001	NITRATE AS N	140		µg/L
		3/26/2001	ANTIMONY	72.9		µg/L
		3/26/2001	CADMIUM	10.8		µg/L
		3/26/2001	CALCIUM	198000		µg/L
		3/26/2001	COPPER	1300		µg/L
		3/26/2001	IRON	98.7	U1	µg/L
		3/26/2001	LEAD	24		µg/L
		3/26/2001	MAGNESIUM	87400		µg/L
		3/26/2001	NICKEL	1460		µg/L
		3/26/2001	POTASSIUM	8670		µg/L
		3/26/2001	SODIUM	83400		µg/L
		3/26/2001	ZINC	9970		µg/L
		3/26/2001	ALPHA-BHC	0.005	U	µg/L
		3/26/2001	BETA-BHC	0.005	U	µg/L
		3/26/2001	DELTA-BHC	0.005	U	µg/L
		3/26/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/26/2001	HEPTACHLOR	0.005	U	µg/L
		3/26/2001	ALDRIN	0.005	U	µg/L
		3/26/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/26/2001	ENDOSULFAN I	0.005	U	µg/L
		3/26/2001	DIELDRIN	0.01	U	µg/L
		3/26/2001	4,4'-DDE	0.01	U	µg/L
		3/26/2001	ENDRIN	0.01	U	µg/L
		3/26/2001	ENDOSULFAN II	0.006	J	µg/L
		3/26/2001	4,4'-DDD	0.01	U	µg/L
		3/26/2001	ENDOSULFAN SULFATE	0.01	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW373A	3/26/2001	4,4'-DDT	0.01	UJ9	µg/L
		3/26/2001	METHOXYCHLOR	0.05	U	µg/L
		3/26/2001	ENDRIN KETONE	0.01	U	µg/L
		3/26/2001	ENDRIN ALDEHYDE	0.01		µg/L
		3/26/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/26/2001	GAMMA-CHLORDANE	0.004	J	µg/L
		3/26/2001	TOXAPHENE	0.5	U	µg/L
		3/26/2001	AROCLOR-1016	0.1	U	µg/L
		3/26/2001	AROCLOR-1221	0.2	U	µg/L
		3/26/2001	AROCLOR-1232	0.1	U	µg/L
		3/26/2001	AROCLOR-1242	0.1	U	µg/L
		3/26/2001	AROCLOR-1248	0.1	U	µg/L
		3/26/2001	AROCLOR-1254	0.1	U	µg/L
		3/26/2001	AROCLOR-1260	0.1	U	µg/L
		3/26/2001	METHANE	6	J7	µg/L
		3/26/2001	ETHANE	4	UJ7	µg/L
		3/26/2001	ETHENE	3	UJ7	µg/L
		3/26/2001	TOTAL DISSOLVED SOLIDS	1020000		µg/L
	IR02MW127B	3/26/2001	GROSS BETA - RADIOACTIVITY	80		µg/L
		3/26/2001	GROSS ALPHA - RADIOACTIVITY	17	U	µg/L
		3/26/2001	ALKALINITY	1000	U	µg/L
		3/26/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/26/2001	ALKALINITY (AS CACO3)	720000		µg/L
		3/26/2001	ALKALINITY, TOTAL (AS CACO3)	720000		µg/L
		3/26/2001	CHLORIDE	3220000		µg/L
		3/26/2001	SULFATE	200		µg/L
		3/26/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/26/2001	NITRITE NITROGEN	5	U	µg/L
		3/26/2001	NITRATE AS N	10	U	µg/L
		3/26/2001	CALCIUM	111000		µg/L
		3/26/2001	IRON	4760		µg/L
		3/26/2001	POTASSIUM	99600		µg/L
		3/26/2001	SODIUM	1810000		µg/L
		3/26/2001	MAGNESIUM	235000		µg/L
		3/26/2001	ALPHA-BHC	0.005	U	µg/L
		3/26/2001	BETA-BHC	0.005	U	µg/L
		3/26/2001	DELTA-BHC	0.005	U	µg/L
		3/26/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/26/2001	HEPTACHLOR	0.005	U	µg/L
		3/26/2001	ALDRIN	0.005	U	µg/L
		3/26/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/26/2001	ENDOSULFAN I	0.005	U	µg/L
		3/26/2001	DIELDRIN	0.01	U	µg/L
		3/26/2001	4,4'-DDE	0.01	U	µg/L
		3/26/2001	ENDRIN	0.01	U	µg/L
		3/26/2001	ENDOSULFAN II	0.01	U	µg/L
		3/26/2001	4,4'-DDD	0.01	U	µg/L
		3/26/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/26/2001	4,4'-DDT	0.01	U	µg/L
		3/26/2001	METHOXYCHLOR	0.05	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW127B	3/26/2001	ENDRIN KETONE	0.01	U	µg/L
		3/26/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/26/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/26/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/26/2001	TOXAPHENE	0.5	U	µg/L
		3/26/2001	AROCLOR-1016	0.1	U	µg/L
		3/26/2001	AROCLOR-1221	0.2	U	µg/L
		3/26/2001	AROCLOR-1232	0.1	U	µg/L
		3/26/2001	AROCLOR-1242	0.1	U	µg/L
		3/26/2001	AROCLOR-1248	0.1	U	µg/L
		3/26/2001	AROCLOR-1254	0.1	U	µg/L
		3/26/2001	AROCLOR-1260	0.1	U	µg/L
		3/26/2001	CHLOROMETHANE	1	U	µg/L
		3/26/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/26/2001	BROMOMETHANE	1	U	µg/L
		3/26/2001	CHLOROETHANE	1	U	µg/L
		3/26/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/26/2001	ACETONE	5	R7	µg/L
		3/26/2001	CARBON DISULFIDE	1	U	µg/L
		3/26/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/26/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/26/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/26/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/26/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/26/2001	2-BUTANONE	5	U	µg/L
		3/26/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/26/2001	CHLOROFORM	1	U	µg/L
		3/26/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/26/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/26/2001	BENZENE	0.5	U	µg/L
		3/26/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/26/2001	TRICHLOROETHENE	1	U	µg/L
		3/26/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/26/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/26/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/26/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/26/2001	TOLUENE	1	U	µg/L
		3/26/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/26/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/26/2001	TETRACHLOROETHENE	1	U	µg/L
		3/26/2001	2-HEXANONE	5	U	µg/L
		3/26/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/26/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/26/2001	CHLOROBENZENE	1	U	µg/L
		3/26/2001	ETHYLBENZENE	1	U	µg/L
		3/26/2001	STYRENE	1	U	µg/L
		3/26/2001	XYLENE (TOTAL)	1	U	µg/L
		3/26/2001	BROMOFORM	1	U	µg/L
		3/26/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/26/2001	1,3-DICHLOROBENZENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW127B	3/26/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/26/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/26/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/26/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/26/2001	ETHANE	4	UJ7	µg/L
		3/26/2001	ETHENE	3	UJ7	µg/L
		3/26/2001	SALINITY	7.3		µg/L
		3/26/2001	TOTAL DISSOLVED SOLIDS	6810000		µg/L
		3/26/2001	METHANE	14000	J7	µg/L
	IR02MW210B	3/27/2001	GROSS ALPHA - RADIOACTIVITY	-23	U	µg/L
		3/27/2001	GROSS BETA - RADIOACTIVITY	113		µg/L
		3/27/2001	CHLOROMETHANE	1	U	µg/L
		3/27/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/27/2001	BROMOMETHANE	1	U	µg/L
		3/27/2001	CHLOROETHANE	1	U	µg/L
		3/27/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/27/2001	ACETONE	5	R7	µg/L
		3/27/2001	CARBON DISULFIDE	1	U	µg/L
		3/27/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/27/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/27/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/27/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/27/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/27/2001	2-BUTANONE	5	U	µg/L
		3/27/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/27/2001	CHLOROFORM	1	U	µg/L
		3/27/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/27/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/27/2001	BENZENE	0.5	U	µg/L
		3/27/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/27/2001	TRICHLOROETHENE	1	U	µg/L
		3/27/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/27/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/27/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/27/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/27/2001	TOLUENE	1	U	µg/L
		3/27/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/27/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/27/2001	TETRACHLOROETHENE	1	U	µg/L
		3/27/2001	2-HEXANONE	5	U	µg/L
		3/27/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/27/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/27/2001	CHLOROBENZENE	1	U	µg/L
		3/27/2001	ETHYLBENZENE	1	U	µg/L
		3/27/2001	STYRENE	1	U	µg/L
		3/27/2001	XYLENE (TOTAL)	1	U	µg/L
		3/27/2001	BROMOFORM	1	U	µg/L
		3/27/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/27/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/27/2001	1,4-DICHLOROBENZENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW210B	3/27/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/27/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/27/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/27/2001	TOTAL DISSOLVED SOLIDS	22600000		µg/L
	IR02MWB-1	3/15/2001	CHROMIUM VI	10	U	µg/L
		3/15/2001	ALUMINUM	28.4	U	µg/L
		3/15/2001	ARSENIC	9.6	J	µg/L
		3/15/2001	CHROMIUM	0.7	U	µg/L
		3/15/2001	COPPER	7.4	U1	µg/L
		3/15/2001	NICKEL	240		µg/L
		3/15/2001	ZINC	0.8	UJ4	µg/L
		3/15/2001	TOTAL DISSOLVED SOLIDS	17800000		µg/L
		3/15/2001	GROSS ALPHA - RADIOACTIVITY	26	U	µg/L
		3/15/2001	GROSS BETA - RADIOACTIVITY	119		µg/L
		3/15/2001	RADIUM-226	0.44	J	µg/L
		3/15/2001	RADIUM-228	1.3		µg/L
		3/15/2001	GROSS ALPHA - RADIOACTIVITY	3	U	µg/L
		3/15/2001	GROSS BETA - RADIOACTIVITY	166		µg/L
		3/15/2001	ALUMINUM	28.4	U	µg/L
		3/15/2001	ARSENIC	4.1	J	µg/L
		3/15/2001	CHROMIUM	0.7	U	µg/L
		3/15/2001	COPPER	8.9	U1	µg/L
		3/15/2001	NICKEL	198		µg/L
		3/15/2001	ZINC	0.8	UJ4	µg/L
	IR02MWB-2	3/28/2001	CHROMIUM VI	10	U	µg/L
		3/28/2001	ALKALINITY	1000	U	µg/L
		3/28/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/28/2001	ALKALINITY (AS CACO3)	550000		µg/L
		3/28/2001	ALKALINITY, TOTAL (AS CACO3)	550000		µg/L
		3/28/2001	CHLORIDE	7410000		µg/L
		3/28/2001	SULFATE	1070000		µg/L
		3/28/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/28/2001	NITRITE NITROGEN	5	U	µg/L
		3/28/2001	NITRATE AS N	10	U	µg/L
		3/28/2001	MERCURY	0.1	U	µg/L
		3/28/2001	ALUMINUM	41.8	U	µg/L
		3/28/2001	CALCIUM	290000		µg/L
		3/28/2001	CHROMIUM	15.9		µg/L
		3/28/2001	COPPER	2.5	U	µg/L
		3/28/2001	IRON	18400		µg/L
		3/28/2001	LEAD	1.3	U	µg/L
		3/28/2001	MAGNESIUM	618000		µg/L
		3/28/2001	NICKEL	1720		µg/L
		3/28/2001	POTASSIUM	194000	J4	µg/L
		3/28/2001	SODIUM	5240000		µg/L
		3/28/2001	THALLIUM	4.1	UJ3	µg/L
		3/28/2001	ZINC	4.8	U	µg/L
		3/28/2001	CHLOROMETHANE	1	U	µg/L
		3/28/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/28/2001	BROMOMETHANE	1	U	µg/L
		3/28/2001	CHLOROETHANE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MWB-2	3/28/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/28/2001	ACETONE	5	R7	µg/L
		3/28/2001	CARBON DISULFIDE	1	U	µg/L
		3/28/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/28/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/28/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/28/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/28/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/28/2001	2-BUTANONE	5	U	µg/L
		3/28/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/28/2001	CHLOROFORM	1	U	µg/L
		3/28/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/28/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/28/2001	BENZENE	0.5	U	µg/L
		3/28/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/28/2001	TRICHLOROETHENE	1	U	µg/L
		3/28/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/28/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/28/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/28/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/28/2001	TOLUENE	1	U	µg/L
		3/28/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/28/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/28/2001	TETRACHLOROETHENE	1	U	µg/L
		3/28/2001	2-HEXANONE	5	U	µg/L
		3/28/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/28/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/28/2001	CHLOROBENZENE	1	U	µg/L
		3/28/2001	ETHYLBENZENE	1	U	µg/L
		3/28/2001	STYRENE	1	U	µg/L
		3/28/2001	XYLENE (TOTAL)	1	U	µg/L
		3/28/2001	BROMOFORM	1	U	µg/L
		3/28/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/28/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/28/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/28/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/28/2001	METHANE	11	J7	µg/L
		3/28/2001	ETHANE	4	UJ7	µg/L
		3/28/2001	ETHENE	3	UJ7	µg/L
		3/28/2001	TOTAL DISSOLVED SOLIDS	13900000		µg/L
		3/28/2001	RADIUM-226	0.26	U	µg/L
		3/28/2001	RADIUM-228	-0.1	U	µg/L
		3/28/2001	GROSS ALPHA - RADIOACTIVITY	4	U	µg/L
		3/28/2001	GROSS BETA - RADIOACTIVITY	107		µg/L
	IR02MWB-3	3/15/2001	ALKALINITY	1000	U	µg/L
		3/15/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/15/2001	ALKALINITY, TOTAL (AS CACO3)	550000		µg/L
		3/15/2001	ALKALINITY (AS CACO3)	550000		µg/L
		3/15/2001	CHLORIDE	5340000		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MWB-3	3/15/2001	SULFATE	378000		µg/L
		3/15/2001	NITRATE/NITRITE NITROGEN	10		µg/L
		3/15/2001	NITRITE NITROGEN	8		µg/L
		3/15/2001	NITRATE AS N	10	U	µg/L
		3/15/2001	MERCURY	0.1	U	µg/L
		3/15/2001	ALUMINUM	28.4	U	µg/L
		3/15/2001	ANTIMONY	103		µg/L
		3/15/2001	CADMIUM	0.32	J	µg/L
		3/15/2001	CALCIUM	119000		µg/L
		3/15/2001	CHROMIUM	0.7	U	µg/L
		3/15/2001	COPPER	7.7	U1	µg/L
		3/15/2001	IRON	215		µg/L
		3/15/2001	LEAD	1.6	U	µg/L
		3/15/2001	MAGNESIUM	411000		µg/L
		3/15/2001	NICKEL	8.5	J	µg/L
		3/15/2001	POTASSIUM	144000		µg/L
		3/15/2001	SODIUM	2740000		µg/L
		3/15/2001	ZINC	91	J4	µg/L
		3/15/2001	ALPHA-BHC	0.005	U	µg/L
		3/15/2001	BETA-BHC	0.005	U	µg/L
		3/15/2001	DELTA-BHC	0.005	U	µg/L
		3/15/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/15/2001	HEPTACHLOR	0.005	U	µg/L
		3/15/2001	ALDRIN	0.005	U	µg/L
		3/15/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/15/2001	ENDOSULFAN I	0.005	U	µg/L
		3/15/2001	DIELDRIN	0.01	U	µg/L
		3/15/2001	4,4'-DDE	0.01	U	µg/L
		3/15/2001	ENDRIN	0.01	U	µg/L
		3/15/2001	ENDOSULFAN II	0.01	U	µg/L
		3/15/2001	4,4'-DDD	0.01	U	µg/L
		3/15/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/15/2001	4,4'-DDT	0.008	J	µg/L
		3/15/2001	METHOXYCHLOR	0.05	U	µg/L
		3/15/2001	ENDRIN KETONE	0.01	U	µg/L
		3/15/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/15/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/15/2001	GAMMA-CHLORDANE	0.005	UJ9	µg/L
		3/15/2001	TOXAPHENE	0.5	U	µg/L
		3/15/2001	AROCLOR-1016	0.1	U	µg/L
		3/15/2001	AROCLOR-1221	0.2	U	µg/L
		3/15/2001	AROCLOR-1232	0.1	U	µg/L
		3/15/2001	AROCLOR-1242	0.1	U	µg/L
		3/15/2001	AROCLOR-1248	0.1	U	µg/L
		3/15/2001	AROCLOR-1254	0.1		µg/L
		3/15/2001	AROCLOR-1260	0.1	U	µg/L
		3/15/2001	PHENOL	0.4	J3	µg/L
		3/15/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/15/2001	2-CHLOROPHENOL	1	UJ3	µg/L
		3/15/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	1,4-DICHLOROBENZENE	0.6	J3	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MWB-3	3/15/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	2-METHYLPHENOL	1	UJ3	µg/L
		3/15/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/15/2001	4-METHYLPHENOL	1	U	µg/L
		3/15/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/15/2001	N-NITROSO-DI-N-PROPYLAMINE	1	UJ3	µg/L
		3/15/2001	NITROBENZENE	1	U	µg/L
		3/15/2001	ISOPHORONE	1	U	µg/L
		3/15/2001	2-NITROPHENOL	1	U	µg/L
		3/15/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/15/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/15/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/15/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	NAPHTHALENE	0.1	J3	µg/L
		3/15/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/15/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/15/2001	2-METHYLNAPHTHALENE	1	UJ37	µg/L
		3/15/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/15/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/15/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/15/2001	2-CHLORONAPHTHALENE	1	UJ3	µg/L
		3/15/2001	2-NITROANILINE	2	U	µg/L
		3/15/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/15/2001	ACENAPHTHYLENE	1	UJ3	µg/L
		3/15/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/15/2001	3-NITROANILINE	2	UJ3	µg/L
		3/15/2001	ACENAPHTHENE	0.09	J	µg/L
		3/15/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/15/2001	DIBENZOFURAN	1	U	µg/L
		3/15/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/15/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/15/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/15/2001	FLUORENE	1	U	µg/L
		3/15/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/15/2001	4-NITROANILINE	2	U	µg/L
		3/15/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/15/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/15/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/15/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/15/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/15/2001	PHENANTHRENE	1	U	µg/L
		3/15/2001	ANTHRACENE	1	U	µg/L
		3/15/2001	CARBAZOLE	1	U	µg/L
		3/15/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/15/2001	FLUORANTHENE	1	U	µg/L
		3/15/2001	PYRENE	0.07	J	µg/L
		3/15/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/15/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/15/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/15/2001	CHRYSENE	1	U	µg/L
		3/15/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MWB-3	3/15/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/15/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/15/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/15/2001	BENZO(A)PYRENE	1	U	µg/L
		3/15/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/15/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/15/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/15/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/15/2001	CHROMIUM VI	10	U	µg/L
		3/15/2001	METHANE	1000	J7	µg/L
		3/15/2001	ETHANE	4	UJ7	µg/L
		3/15/2001	ETHENE	4	J7	µg/L
		3/15/2001	TOTAL DISSOLVED SOLIDS	10100000		µg/L
		3/15/2001	RADIUM-226	0.31	J	µg/L
		3/15/2001	RADIUM-228	0.83	J	µg/L
		3/15/2001	GROSS ALPHA - RADIOACTIVITY	0	U	µg/L
		3/15/2001	GROSS BETA - RADIOACTIVITY	106		µg/L
		3/15/2001	MERCURY	0.1	U	µg/L
		3/15/2001	ALUMINUM	28.4	U	µg/L
		3/15/2001	ANTIMONY	103		µg/L
		3/15/2001	CADMIUM	0.3	U	µg/L
		3/15/2001	CHROMIUM	0.7	U	µg/L
		3/15/2001	COPPER	8.9	U1	µg/L
		3/15/2001	LEAD	1.6	U	µg/L
		3/15/2001	NICKEL	8.1	J	µg/L
		3/15/2001	ZINC	88.5	J4	µg/L
		3/15/2001	PHENOL	0.3	J3	µg/L
		3/15/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/15/2001	2-CHLOROPHENOL	1	UJ3	µg/L
		3/15/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	1,4-DICHLOROBENZENE	0.6	J3	µg/L
		3/15/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	2-METHYLPHENOL	1	UJ3	µg/L
		3/15/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/15/2001	4-METHYLPHENOL	1	U	µg/L
		3/15/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/15/2001	N-NITROSO-DI-N-PROPYLAMINE	1	UJ3	µg/L
		3/15/2001	NITROBENZENE	1	U	µg/L
		3/15/2001	ISOPHORONE	1	U	µg/L
		3/15/2001	2-NITROPHENOL	1	U	µg/L
		3/15/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/15/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/15/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/15/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	NAPHTHALENE	0.1	J3	µg/L
		3/15/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/15/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/15/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/15/2001	2-METHYLNAPHTHALENE	1	UJ37	µg/L
		3/15/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/15/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MWB-3	3/15/2001	2,4,5-TRICHLOROPHENOL	3	U	µg/L
		3/15/2001	2-CHLORONAPHTHALENE	1	UJ3	µg/L
		3/15/2001	2-NITROANILINE	3	U	µg/L
		3/15/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/15/2001	ACENAPHTHYLENE	1	UJ3	µg/L
		3/15/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/15/2001	3-NITROANILINE	3	UJ3	µg/L
		3/15/2001	ACENAPHTHENE	0.1	J	µg/L
		3/15/2001	2,4-DINITROPHENOL	3	UJ7	µg/L
		3/15/2001	4-NITROPHENOL	3	UJ7	µg/L
		3/15/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/15/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/15/2001	FLUORENE	1	U	µg/L
		3/15/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/15/2001	4-NITROANILINE	3	U	µg/L
		3/15/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/15/2001	4,6-DINITRO-2-METHYLPHENOL	3	U	µg/L
		3/15/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/15/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/15/2001	PENTACHLOROPHENOL	3	U	µg/L
		3/15/2001	PHENANTHRENE	1	U	µg/L
		3/15/2001	ANTHRACENE	1	U	µg/L
		3/15/2001	CARBAZOLE	1	U	µg/L
		3/15/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/15/2001	FLUORANTHENE	1	U	µg/L
		3/15/2001	PYRENE	0.07	J	µg/L
		3/15/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/15/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/15/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/15/2001	CHRYSENE	1	U	µg/L
		3/15/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/15/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/15/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/15/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/15/2001	BENZO(A)PYRENE	1	U	µg/L
		3/15/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/15/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/15/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/15/2001	DIBENZOFURAN	1	U	µg/L
	IR02MWB-5	3/13/2001	ALKALINITY	1000	U	µg/L
		3/13/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/13/2001	ALKALINITY (AS CACO3)	272000		µg/L
		3/13/2001	ALKALINITY, TOTAL (AS CACO3)	272000		µg/L
		3/13/2001	CHLORIDE	8020000		µg/L
		3/13/2001	SULFATE	929000		µg/L
		3/13/2001	NITRATE/NITRITE NITROGEN	20		µg/L
		3/13/2001	NITRITE NITROGEN	5	U	µg/L
		3/13/2001	NITRATE AS N	20		µg/L
		3/13/2001	CALCIUM	217000		µg/L
		3/13/2001	IRON	30100		µg/L
		3/13/2001	MAGNESIUM	630000		µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MWB-5	3/13/2001	NICKEL	3430		µg/L
		3/13/2001	POTASSIUM	239000		µg/L
		3/13/2001	SODIUM	5360000	J4	µg/L
		3/13/2001	ALPHA-BHC	0.005	U	µg/L
		3/13/2001	BETA-BHC	0.005	U	µg/L
		3/13/2001	DELTA-BHC	0.005	U	µg/L
		3/13/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/13/2001	HEPTACHLOR	0.005	U	µg/L
		3/13/2001	ALDRIN	0.005	U	µg/L
		3/13/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/13/2001	ENDOSULFAN I	0.005	U	µg/L
		3/13/2001	DIELDRIN	0.01	U	µg/L
		3/13/2001	4,4'-DDE	0.01	U	µg/L
		3/13/2001	ENDRIN	0.01	U	µg/L
		3/13/2001	ENDOSULFAN II	0.01	U	µg/L
		3/13/2001	4,4'-DDD	0.01	U	µg/L
		3/13/2001	ENDOSULFAN SULFATE	0.01	UJ3	µg/L
		3/13/2001	4,4'-DDT	0.01	U	µg/L
		3/13/2001	METHOXYCHLOR	0.05	U	µg/L
		3/13/2001	ENDRIN KETONE	0.01	U	µg/L
		3/13/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/13/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/13/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/13/2001	TOXAPHENE	0.5	U	µg/L
		3/13/2001	AROCLOR-1016	0.1	U	µg/L
		3/13/2001	AROCLOR-1221	0.2	U	µg/L
		3/13/2001	AROCLOR-1232	0.1	U	µg/L
		3/13/2001	AROCLOR-1242	0.1	U	µg/L
		3/13/2001	AROCLOR-1248	0.1	U	µg/L
		3/13/2001	AROCLOR-1254	0.1	U	µg/L
		3/13/2001	AROCLOR-1260	0.1	U	µg/L
		3/13/2001	METHANE	140	J7	µg/L
		3/13/2001	ETHANE	4	UJ7	µg/L
		3/13/2001	ETHENE	3	UJ7	µg/L
		3/13/2001	TOTAL DISSOLVED SOLIDS	15300000		µg/L
		3/13/2001	RADIUM-226	0.34	J	µg/L
		3/13/2001	RADIUM-228	1.1		µg/L
		3/13/2001	GROSS BETA - RADIOACTIVITY	120		µg/L
		3/13/2001	GROSS ALPHA - RADIOACTIVITY	27	U	µg/L
	IR02MW183A	3/16/2001	PHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/16/2001	2-CHLOROPHENOL	1	U	µg/L
		3/16/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	2-METHYLPHENOL	1	U	µg/L
		3/16/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/16/2001	4-METHYLPHENOL	1	U	µg/L
		3/16/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/16/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/16/2001	NITROBENZENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW183A	3/16/2001	ISOPHORONE	1	U	µg/L
		3/16/2001	2-NITROPHENOL	1	U	µg/L
		3/16/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/16/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/16/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	NAPHTHALENE	1	U	µg/L
		3/16/2001	4-CHLOROANILINE	1	U	µg/L
		3/16/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/16/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/16/2001	2-METHYLNAPHTHALENE	1	UJ7	µg/L
		3/16/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/16/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/16/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/16/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/16/2001	2-NITROANILINE	2	U	µg/L
		3/16/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/16/2001	ACENAPHTHYLENE	1	U	µg/L
		3/16/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/16/2001	3-NITROANILINE	2	U	µg/L
		3/16/2001	ACENAPHTHENE	1	U	µg/L
		3/16/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/16/2001	DIBENZOFURAN	1	U	µg/L
		3/16/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/16/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/16/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/16/2001	FLUORENE	1	U	µg/L
		3/16/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	4-NITROANILINE	2	U	µg/L
		3/16/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/16/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/16/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/16/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/16/2001	PHENANTHRENE	1	U	µg/L
		3/16/2001	ANTHRACENE	1	U	µg/L
		3/16/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/16/2001	FLUORANTHENE	1	U	µg/L
		3/16/2001	PYRENE	1	U	µg/L
		3/16/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/16/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/16/2001	CHRYSENE	1	U	µg/L
		3/16/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/16/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(A)PYRENE	1	U	µg/L
		3/16/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/16/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/16/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW183A	3/16/2001	CARBAZOLE	1	U	µg/L
		3/16/2001	TOTAL DISSOLVED SOLIDS	15000000		µg/L
		3/16/2001	PHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/16/2001	2-CHLOROPHENOL	1	U	µg/L
		3/16/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	2-METHYLPHENOL	1	U	µg/L
		3/16/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/16/2001	4-METHYLPHENOL	1	U	µg/L
		3/16/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/16/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/16/2001	NITROBENZENE	1	U	µg/L
		3/16/2001	ISOPHORONE	1	U	µg/L
		3/16/2001	2-NITROPHENOL	1	U	µg/L
		3/16/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/16/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/16/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	NAPHTHALENE	1	U	µg/L
		3/16/2001	4-CHLOROANILINE	1	U	µg/L
		3/16/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/16/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/16/2001	2-METHYLNAPHTHALENE	1	UJ7	µg/L
		3/16/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/16/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/16/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/16/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/16/2001	2-NITROANILINE	2	U	µg/L
		3/16/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/16/2001	ACENAPHTHYLENE	1	U	µg/L
		3/16/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/16/2001	3-NITROANILINE	2	U	µg/L
		3/16/2001	ACENAPHTHENE	1	U	µg/L
		3/16/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/16/2001	DIBENZOFURAN	1	U	µg/L
		3/16/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/16/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/16/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/16/2001	FLUORENE	1	U	µg/L
		3/16/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	4-NITROANILINE	2	U	µg/L
		3/16/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/16/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/16/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/16/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/16/2001	PHENANTHRENE	1	U	µg/L
		3/16/2001	ANTHRACENE	1	U	µg/L
		3/16/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-02	IR02MW183A	3/16/2001	FLUORANTHENE	1	U	µg/L
		3/16/2001	PYRENE	1	U	µg/L
		3/16/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/16/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/16/2001	CHRYSENE	1	U	µg/L
		3/16/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/16/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(A)PYRENE	1	U	µg/L
		3/16/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/16/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/16/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/16/2001	CARBAZOLE	1	U	µg/L
		3/16/2001	TOTAL DISSOLVED SOLIDS	15000000		µg/L
IR-03	IR03MW218A2	3/14/2001	RADIUM-228	3.2		µg/L
		3/14/2001	GROSS BETA - RADIOACTIVITY	140		µg/L
		3/14/2001	GROSS ALPHA - RADIOACTIVITY	0	U	µg/L
		3/14/2001	RADIUM-226	3.2		µg/L
		3/14/2001	ALKALINITY	1000	U	µg/L
		3/14/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/14/2001	ALKALINITY (AS CACO3)	88000		µg/L
		3/14/2001	ALKALINITY, TOTAL (AS CACO3)	88000		µg/L
		3/14/2001	CHLORIDE	7120000		µg/L
		3/14/2001	SULFATE	200	U	µg/L
		3/14/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/14/2001	NITRITE NITROGEN	8		µg/L
		3/14/2001	NITRATE AS N	10	U	µg/L
		3/14/2001	BARIUM	9350		µg/L
		3/14/2001	CALCIUM	175000		µg/L
		3/14/2001	COPPER	8.9	U1	µg/L
		3/14/2001	IRON	951		µg/L
		3/14/2001	LEAD	10.9		µg/L
		3/14/2001	MAGNESIUM	125000		µg/L
		3/14/2001	POTASSIUM	185000		µg/L
		3/14/2001	SODIUM	4210000		µg/L
		3/14/2001	ZINC	29.4	J4	µg/L
		3/14/2001	CHLOROMETHANE	1	U1	µg/L
		3/14/2001	VINYL CHLORIDE	2		µg/L
		3/14/2001	BROMOMETHANE	1	U	µg/L
		3/14/2001	CHLOROETHANE	1	U	µg/L
		3/14/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/14/2001	ACETONE	18	U47	µg/L
		3/14/2001	CARBON DISULFIDE	1	U	µg/L
		3/14/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/14/2001	TRANS-1,2-DICHLOROETHENE	0.4	J	µg/L
		3/14/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/14/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/14/2001	CIS-1,2-DICHLOROETHENE	2		µg/L
		3/14/2001	2-BUTANONE	5	U4	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-03	IR03MW218A2	3/14/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/14/2001	CHLOROFORM	1	U	µg/L
		3/14/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/14/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/14/2001	BENZENE	11		µg/L
		3/14/2001	1,2-DICHLOROETHANE	0.6		µg/L
		3/14/2001	TRICHLOROETHENE	1	U	µg/L
		3/14/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/14/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/14/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/14/2001	4-METHYL-2-PENTANONE	5		µg/L
		3/14/2001	TOLUENE	5		µg/L
		3/14/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/14/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/14/2001	TETRACHLOROETHENE	1	U	µg/L
		3/14/2001	2-HEXANONE	5	U	µg/L
		3/14/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/14/2001	CHLOROBENZENE	25		µg/L
		3/14/2001	ETHYLBENZENE	12		µg/L
		3/14/2001	STYRENE	1	U	µg/L
		3/14/2001	XYLENE (TOTAL)	30		µg/L
		3/14/2001	BROMOFORM	1	U	µg/L
		3/14/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/14/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/14/2001	1,4-DICHLOROBENZENE	2	U2	µg/L
		3/14/2001	1,2-DICHLOROBENZENE	2		µg/L
		3/14/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/14/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/14/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/14/2001	ETHANE	4	UJ7	µg/L
		3/14/2001	ETHENE	51	J7	µg/L
		3/14/2001	SALINITY	14.8		µg/L
		3/14/2001	TOTAL DISSOLVED SOLIDS	11800000		µg/L
		3/14/2001	DIESEL RANGE ORGANICS	4000	D	µg/L
		3/14/2001	MOTOR OIL RANGE ORGANICS	1000		µg/L
		3/14/2001	GASOLINE RANGE ORGANICS	500	H	µg/L
		3/14/2001	METHANE	7400	J7	µg/L
		3/14/2001	BARIUM	9880		µg/L
		3/14/2001	COPPER	10.8	U1	µg/L
		3/14/2001	LEAD	11.3		µg/L
		3/14/2001	ZINC	120	J4	µg/L
	IR03MW218A3	3/14/2001	RADIUM-226	2.6		µg/L
		3/14/2001	RADIUM-228	3.1		µg/L
		3/14/2001	GROSS ALPHA - RADIOACTIVITY	53	U	µg/L
		3/14/2001	GROSS BETA - RADIOACTIVITY	157		µg/L
		3/14/2001	ALKALINITY	1000	U	µg/L
		3/14/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/14/2001	ALKALINITY (AS CACO3)	910000		µg/L
		3/14/2001	ALKALINITY, TOTAL (AS CACO3)	910000		µg/L
		3/14/2001	CHLORIDE	11500000		µg/L
		3/14/2001	SULFATE	10600		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-03	IR03MW218A3	3/14/2001	NITRATE/NITRITE NITROGEN	10		µg/L
		3/14/2001	NITRITE NITROGEN	5	U	µg/L
		3/14/2001	NITRATE AS N	10		µg/L
		3/14/2001	BARIUM	2660		µg/L
		3/14/2001	CALCIUM	115000		µg/L
		3/14/2001	IRON	173		µg/L
		3/14/2001	MAGNESIUM	615000		µg/L
		3/14/2001	POTASSIUM	299000		µg/L
		3/14/2001	SODIUM	6980000		µg/L
		3/14/2001	CHLOROMETHANE	1	U1	µg/L
		3/14/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/14/2001	BROMOMETHANE	1	U	µg/L
		3/14/2001	CHLOROETHANE	1	U	µg/L
		3/14/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/14/2001	ACETONE	11	U47	µg/L
		3/14/2001	CARBON DISULFIDE	0.3	J	µg/L
		3/14/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/14/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/14/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/14/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/14/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/14/2001	2-BUTANONE	5	U4	µg/L
		3/14/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/14/2001	CHLOROFORM	1	U	µg/L
		3/14/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/14/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/14/2001	BENZENE	0.5		µg/L
		3/14/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/14/2001	TRICHLOROETHENE	1	U	µg/L
		3/14/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/14/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/14/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/14/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/14/2001	TOLUENE	1	U2	µg/L
		3/14/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/14/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/14/2001	TETRACHLOROETHENE	1	U	µg/L
		3/14/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/14/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/14/2001	CHLOROBENZENE	3		µg/L
		3/14/2001	ETHYLBENZENE	1		µg/L
		3/14/2001	STYRENE	1	U	µg/L
		3/14/2001	XYLENE (TOTAL)	2		µg/L
		3/14/2001	BROMOFORM	1	U	µg/L
		3/14/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/14/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/14/2001	1,4-DICHLOROBENZENE	1	U2	µg/L
		3/14/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/14/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/14/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/14/2001	2-HEXANONE	5	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-03	IR03MW218A3	3/14/2001	ETHANE	4	UJ7	µg/L
		3/14/2001	ETHENE	3	UJ7	µg/L
		3/14/2001	SALINITY	42.5		µg/L
		3/14/2001	TOTAL DISSOLVED SOLIDS	22200000		µg/L
		3/14/2001	METHANE	1400	J7	µg/L
	IR03MW224A	3/6/2001	CHROMIUM VI	10	U	µg/L
		3/6/2001	ALKALINITY	1000	U	µg/L
		3/6/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/6/2001	ALKALINITY (AS CACO3)	284000		µg/L
		3/6/2001	ALKALINITY, TOTAL (AS CACO3)	284000		µg/L
		3/6/2001	CHLORIDE	9130000		µg/L
		3/6/2001	SULFATE	1100000		µg/L
		3/6/2001	NITRATE/NITRITE NITROGEN	30		µg/L
		3/6/2001	NITRITE NITROGEN	5	U	µg/L
		3/6/2001	NITRATE AS N	30		µg/L
		3/6/2001	ALUMINUM	28.4	U	µg/L
		3/6/2001	ARSENIC	3.5	J	µg/L
		3/6/2001	BARIUM	298		µg/L
		3/6/2001	CALCIUM	248000		µg/L
		3/6/2001	CHROMIUM	0.7	U	µg/L
		3/6/2001	COPPER	1.5	U	µg/L
		3/6/2001	IRON	206		µg/L
		3/6/2001	MAGNESIUM	615000		µg/L
		3/6/2001	NICKEL	17.8	J	µg/L
		3/6/2001	POTASSIUM	190000	J4	µg/L
		3/6/2001	SODIUM	4920000	J4	µg/L
		3/6/2001	ALPHA-BHC	0.005	UJ7	µg/L
		3/6/2001	BETA-BHC	0.005	U	µg/L
		3/6/2001	DELTA-BHC	0.005	UJ7	µg/L
		3/6/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/6/2001	HEPTACHLOR	0.005	U	µg/L
		3/6/2001	ALDRIN	0.005	U	µg/L
		3/6/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/6/2001	ENDOSULFAN I	0.005	U	µg/L
		3/6/2001	DIELDRIN	0.01	U	µg/L
		3/6/2001	4,4'-DDE	0.01	U	µg/L
		3/6/2001	ENDRIN	0.01	U	µg/L
		3/6/2001	ENDOSULFAN II	0.01	U	µg/L
		3/6/2001	4,4'-DDD	0.01	U	µg/L
		3/6/2001	ENDOSULFAN SULFATE	0.01	UJ3	µg/L
		3/6/2001	4,4'-DDT	0.01	UJ7	µg/L
		3/6/2001	METHOXYCHLOR	0.05	U	µg/L
		3/6/2001	ENDRIN KETONE	0.01	U	µg/L
		3/6/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/6/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/6/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/6/2001	TOXAPHENE	0.5	U	µg/L
		3/6/2001	AROCLOR-1016	0.1	U	µg/L
		3/6/2001	AROCLOR-1221	0.2	U	µg/L
		3/6/2001	AROCLOR-1232	0.1	U	µg/L
		3/6/2001	AROCLOR-1242	0.1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-03	IR03MW224A	3/6/2001	AROCLOR-1248	0.1	U	µg/L
		3/6/2001	AROCLOR-1254	0.1	U	µg/L
		3/6/2001	AROCLOR-1260	0.06	J	µg/L
		3/6/2001	PHENOL	1	U	µg/L
		3/6/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/6/2001	2-CHLOROPHENOL	1	U	µg/L
		3/6/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,4-DICHLOROBENZENE	0.5	J	µg/L
		3/6/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	2-METHYLPHENOL	1	U	µg/L
		3/6/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	UJ7	µg/L
		3/6/2001	4-METHYLPHENOL	1	U	µg/L
		3/6/2001	HEXACHLOROETHANE	1	U	µg/L
		3/6/2001	N-NITROSO-DI-N-PROPYLAMINE	1	UJ7	µg/L
		3/6/2001	NITROBENZENE	1	U	µg/L
		3/6/2001	ISOPHORONE	1	U	µg/L
		3/6/2001	2-NITROPHENOL	1	U	µg/L
		3/6/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/6/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/6/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/6/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/6/2001	NAPHTHALENE	1	U	µg/L
		3/6/2001	4-CHLOROANILINE	1	UJ37	µg/L
		3/6/2001	HEXACHLOROBUTADIENE	1	U	µg/L
		3/6/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/6/2001	2-METHYLNAPHTHALENE	1	U	µg/L
		3/6/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ37	µg/L
		3/6/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/6/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/6/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/6/2001	2-NITROANILINE	2	U	µg/L
		3/6/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/6/2001	ACENAPHTHYLENE	1	U	µg/L
		3/6/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/6/2001	3-NITROANILINE	2	UJ3	µg/L
		3/6/2001	ACENAPHTHENE	1	U	µg/L
		3/6/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/6/2001	DIBENZOFURAN	1	U	µg/L
		3/6/2001	4-NITROPHENOL	2	U	µg/L
		3/6/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/6/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/6/2001	FLUORENE	1	U	µg/L
		3/6/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/6/2001	4-NITROANILINE	2	U	µg/L
		3/6/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/6/2001	4,6-DINITRO-2-METHYLPHENOL	2	UJ7	µg/L
		3/6/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/6/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/6/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/6/2001	PHENANTHRENE	1	U	µg/L
		3/6/2001	ANTHRACENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-03	IR03MW224A	3/6/2001	CARBAZOLE	1	U	µg/L
		3/6/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/6/2001	FLUORANTHENE	1	U	µg/L
		3/6/2001	PYRENE	1	U	µg/L
		3/6/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/6/2001	3,3'-DICHLOROBENZIDINE	1	UJ3	µg/L
		3/6/2001	CHRYSENE	1	U	µg/L
		3/6/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U43	µg/L
		3/6/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/6/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/6/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/6/2001	BENZO(A)PYRENE	1	U	µg/L
		3/6/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/6/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/6/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/6/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/6/2001	CHLOROMETHANE	1	UJ7	µg/L
		3/6/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/6/2001	BROMOMETHANE	1	UJ7	µg/L
		3/6/2001	CHLOROETHANE	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/6/2001	ACETONE	5	U	µg/L
		3/6/2001	CARBON DISULFIDE	1	U	µg/L
		3/6/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/6/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/6/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/6/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/6/2001	2-BUTANONE	5	U	µg/L
		3/6/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	CHLOROFORM	1	U	µg/L
		3/6/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/6/2001	BENZENE	0.5	U	µg/L
		3/6/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/6/2001	TRICHLOROETHENE	1	U	µg/L
		3/6/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/6/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/6/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/6/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/6/2001	TOLUENE	1	U	µg/L
		3/6/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/6/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	TETRACHLOROETHENE	1	U	µg/L
		3/6/2001	2-HEXANONE	5	U	µg/L
		3/6/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/6/2001	CHLOROBENZENE	1	U	µg/L
		3/6/2001	ETHYLBENZENE	1	U	µg/L
		3/6/2001	STYRENE	1	U	µg/L
		3/6/2001	XYLENE (TOTAL)	1	U	µg/L

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PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-03	IR03MW224A	3/6/2001	BROMOFORM	1	U	µg/L
		3/6/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/6/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,4-DICHLOROBENZENE	1	U2	µg/L
		3/6/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/6/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/6/2001	METHANE	120	J7	µg/L
		3/6/2001	ETHANE	4	U	µg/L
		3/6/2001	ETHENE	3	U	µg/L
		3/6/2001	TOTAL DISSOLVED SOLIDS	17100000		µg/L
		3/6/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/6/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/6/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/6/2001	GROSS BETA - RADIOACTIVITY	198		µg/L
		3/6/2001	GROSS ALPHA - RADIOACTIVITY	30	U	µg/L
	IR03MW342A	3/15/2001	CHROMIUM VI	10	U	µg/L
		3/15/2001	ALKALINITY	1000	U	µg/L
		3/15/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/15/2001	ALKALINITY (AS CACO3)	450000		µg/L
		3/15/2001	ALKALINITY, TOTAL (AS CACO3)	450000		µg/L
		3/15/2001	CHLORIDE	1150000		µg/L
		3/15/2001	SULFATE	101000		µg/L
		3/15/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/15/2001	NITRITE NITROGEN	5	U	µg/L
		3/15/2001	NITRATE AS N	10	U	µg/L
		3/15/2001	MERCURY	0.1	U	µg/L
		3/15/2001	ALUMINUM	28.4	U	µg/L
		3/15/2001	ARSENIC	2.5	U	µg/L
		3/15/2001	BARIUM	488		µg/L
		3/15/2001	CALCIUM	85300		µg/L
		3/15/2001	CHROMIUM	0.7	U	µg/L
		3/15/2001	COPPER	4.5	U1	µg/L
		3/15/2001	IRON	311		µg/L
		3/15/2001	LEAD	1.6	U	µg/L
		3/15/2001	MAGNESIUM	128000		µg/L
		3/15/2001	NICKEL	2.2	J	µg/L
		3/15/2001	POTASSIUM	24000		µg/L
		3/15/2001	SODIUM	697000		µg/L
		3/15/2001	ZINC	66.2	J4	µg/L
		3/15/2001	ALPHA-BHC	0.003	J	µg/L
		3/15/2001	BETA-BHC	0.005	U	µg/L
		3/15/2001	DELTA-BHC	0.005	U	µg/L
		3/15/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/15/2001	HEPTACHLOR	0.005	U	µg/L
		3/15/2001	ALDRIN	0.005	U	µg/L
		3/15/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/15/2001	ENDOSULFAN I	0.005	U	µg/L
		3/15/2001	DIELDRIN	0.01	U	µg/L
		3/15/2001	4,4'-DDE	0.01	U	µg/L
		3/15/2001	ENDRIN	0.01	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-03	IR03MW342A	3/15/2001	ENDOSULFAN II	0.01	U	µg/L
		3/15/2001	4,4'-DDD	0.01	U	µg/L
		3/15/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/15/2001	4,4'-DDT	0.01	U	µg/L
		3/15/2001	METHOXYCHLOR	0.05	U	µg/L
		3/15/2001	ENDRIN KETONE	0.01	U	µg/L
		3/15/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/15/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/15/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/15/2001	TOXAPHENE	0.5	U	µg/L
		3/15/2001	AROCLOR-1016	0.1	U	µg/L
		3/15/2001	AROCLOR-1221	0.2	U	µg/L
		3/15/2001	AROCLOR-1232	0.1	U	µg/L
		3/15/2001	AROCLOR-1242	0.1	U	µg/L
		3/15/2001	AROCLOR-1248	0.1	U	µg/L
		3/15/2001	AROCLOR-1254	0.1	U	µg/L
		3/15/2001	AROCLOR-1260	0.1	U	µg/L
		3/15/2001	PHENOL	0.7	J3	µg/L
		3/15/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/15/2001	2-CHLOROPHENOL	1	UJ3	µg/L
		3/15/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	2-METHYLPHENOL	1	UJ3	µg/L
		3/15/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/15/2001	4-METHYLPHENOL	1	U	µg/L
		3/15/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/15/2001	N-NITROSO-DI-N-PROPYLAMINE	1	UJ3	µg/L
		3/15/2001	NITROBENZENE	1	U	µg/L
		3/15/2001	ISOPHORONE	1	U	µg/L
		3/15/2001	2-NITROPHENOL	1	U	µg/L
		3/15/2001	2,4-DIMETHYLPHENOL	0.5	J	µg/L
		3/15/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/15/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/15/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/15/2001	NAPHTHALENE	1	J3	µg/L
		3/15/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/15/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/15/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/15/2001	2-METHYLNAPHTHALENE	0.1	J37	µg/L
		3/15/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/15/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/15/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/15/2001	2-CHLORONAPHTHALENE	1	UJ3	µg/L
		3/15/2001	2-NITROANILINE	2	U	µg/L
		3/15/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/15/2001	ACENAPHTHYLENE	1	UJ3	µg/L
		3/15/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/15/2001	3-NITROANILINE	2	UJ37	µg/L
		3/15/2001	ACENAPHTHENE	0.2	J	µg/L
		3/15/2001	2,4-DINITROPHENOL	2	UJ7	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-03	IR03MW342A	3/15/2001	DIBENZOFURAN	1	U	µg/L
		3/15/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/15/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/15/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/15/2001	FLUORENE	1	U	µg/L
		3/15/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/15/2001	4-NITROANILINE	2	U	µg/L
		3/15/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/15/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/15/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/15/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/15/2001	PENTACHLOROPHENOL	2	UJ7	µg/L
		3/15/2001	PHENANTHRENE	1	U	µg/L
		3/15/2001	ANTHRACENE	1	U	µg/L
		3/15/2001	CARBAZOLE	1	U	µg/L
		3/15/2001	DI-N-BUTYLPHTHALATE	1	U4	µg/L
		3/15/2001	FLUORANTHENE	1	U	µg/L
		3/15/2001	PYRENE	1	U	µg/L
		3/15/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/15/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/15/2001	3,3'-DICHLOROBENZIDINE	1	UJ7	µg/L
		3/15/2001	CHRYSENE	1	U	µg/L
		3/15/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/15/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/15/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/15/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/15/2001	BENZO(A)PYRENE	1	U	µg/L
		3/15/2001	INDENO(1,2,3-CD)PYRENE	1	UJ1	µg/L
		3/15/2001	DIBENZ(A,H)ANTHRACENE	1	UJ1	µg/L
		3/15/2001	BENZO(G,H,I)PERYLENE	1	UJ1	µg/L
		3/15/2001	CHLOROMETHANE	1	U1	µg/L
		3/15/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/15/2001	BROMOMETHANE	1	UJ7	µg/L
		3/15/2001	CHLOROETHANE	1	U	µg/L
		3/15/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/15/2001	ACETONE	6	U47	µg/L
		3/15/2001	CARBON DISULFIDE	1	U	µg/L
		3/15/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/15/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/15/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/15/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/15/2001	2-BUTANONE	5	UJ7	µg/L
		3/15/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/15/2001	CHLOROFORM	1	U	µg/L
		3/15/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/15/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/15/2001	BENZENE	1		µg/L
		3/15/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/15/2001	TRICHLOROETHENE	1	U	µg/L
		3/15/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/15/2001	BROMODICHLOROMETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-03	IR03MW342A	3/15/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/15/2001	4-METHYL-2-PENTANONE	5	UJ7	µg/L
		3/15/2001	TOLUENE	1	U	µg/L
		3/15/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/15/2001	1,1,2-TRICHLOROETHANE	1	UJ7	µg/L
		3/15/2001	TETRACHLOROETHENE	0.3	J	µg/L
		3/15/2001	2-HEXANONE	5	UJ7	µg/L
		3/15/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/15/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/15/2001	CHLOROBENZENE	1	U	µg/L
		3/15/2001	ETHYLBENZENE	0.8	J	µg/L
		3/15/2001	STYRENE	1	U	µg/L
		3/15/2001	XYLENE (TOTAL)	0.4	J	µg/L
		3/15/2001	BROMOFORM	1	U	µg/L
		3/15/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/15/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/15/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/15/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/15/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	UJ7	µg/L
		3/15/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/15/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/15/2001	ETHANE	4	UJ7	µg/L
		3/15/2001	ETHENE	3	UJ7	µg/L
		3/15/2001	TOTAL DISSOLVED SOLIDS	2500000		µg/L
		3/15/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/15/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/15/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/15/2001	METHANE	2700	J7	µg/L
		3/15/2001	GROSS ALPHA - RADIOACTIVITY	7.3	U	µg/L
		3/15/2001	GROSS BETA - RADIOACTIVITY	20.3		µg/L
		3/15/2001	CHLOROMETHANE	1	U1	µg/L
		3/15/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/15/2001	BROMOMETHANE	1	UJ7	µg/L
		3/15/2001	CHLOROETHANE	1	U	µg/L
		3/15/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/15/2001	ACETONE	5	U47	µg/L
		3/15/2001	CARBON DISULFIDE	1	U	µg/L
		3/15/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/15/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/15/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/15/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/15/2001	2-BUTANONE	5	UJ7	µg/L
		3/15/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/15/2001	CHLOROFORM	1	U	µg/L
		3/15/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/15/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/15/2001	BENZENE	1		µg/L
		3/15/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/15/2001	TRICHLOROETHENE	1	U	µg/L
		3/15/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/15/2001	BROMODICHLOROMETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-03	IR03MW342A	3/15/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/15/2001	4-METHYL-2-PENTANONE	5	UJ7	µg/L
		3/15/2001	TOLUENE	1	U	µg/L
		3/15/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/15/2001	1,1,2-TRICHLOROETHANE	1	UJ7	µg/L
		3/15/2001	TETRACHLOROETHENE	0.2	J	µg/L
		3/15/2001	2-HEXANONE	5	UJ7	µg/L
		3/15/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/15/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/15/2001	CHLOROBENZENE	1	U	µg/L
		3/15/2001	ETHYLBENZENE	0.8	J	µg/L
		3/15/2001	STYRENE	1	U	µg/L
		3/15/2001	XYLENE (TOTAL)	0.4	J	µg/L
		3/15/2001	BROMOFORM	1	U	µg/L
		3/15/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/15/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/15/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/15/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/15/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	UJ7	µg/L
		3/15/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/15/2001	1,1-DICHLOROETHANE	1	U	µg/L
IR-04	IR04MW13A	3/12/2001	ALKALINITY	1000	U	µg/L
		3/12/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/12/2001	ALKALINITY (AS CACO3)	620000		µg/L
		3/12/2001	ALKALINITY, TOTAL (AS CACO3)	620000		µg/L
		3/12/2001	CHLORIDE	1130000		µg/L
		3/12/2001	SULFATE	273000		µg/L
		3/12/2001	NITRATE/NITRITE NITROGEN	10		µg/L
		3/12/2001	NITRITE NITROGEN	5	U	µg/L
		3/12/2001	NITRATE AS N	10		µg/L
		3/12/2001	CALCIUM	101000		µg/L
		3/12/2001	IRON	58	J	µg/L
		3/12/2001	MAGNESIUM	298000		µg/L
		3/12/2001	POTASSIUM	6770		µg/L
		3/12/2001	SODIUM	513000	J4	µg/L
		3/12/2001	CHLOROMETHANE	1	U	µg/L
		3/12/2001	VINYL CHLORIDE	2		µg/L
		3/12/2001	BROMOMETHANE	1	U	µg/L
		3/12/2001	CHLOROETHANE	1	U	µg/L
		3/12/2001	ACETONE	5	R7	µg/L
		3/12/2001	CARBON DISULFIDE	1	U	µg/L
		3/12/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/12/2001	TRANS-1,2-DICHLOROETHENE	3		µg/L
		3/12/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/12/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/12/2001	CHLOROFORM	1	U2	µg/L
		3/12/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/12/2001	BENZENE	0.5	U	µg/L
		3/12/2001	1,2-DICHLOROETHANE	0.8		µg/L
		3/12/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/12/2001	BROMODICHLOROMETHANE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-04	IR04MW13A	3/12/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/12/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/12/2001	TOLUENE	1	U	µg/L
		3/12/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/12/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/12/2001	2-HEXANONE	5	U	µg/L
		3/12/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/12/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/12/2001	CHLOROBENZENE	1	U	µg/L
		3/12/2001	ETHYLBENZENE	1	U	µg/L
		3/12/2001	STYRENE	1	U	µg/L
		3/12/2001	XYLENE (TOTAL)	1	U	µg/L
		3/12/2001	BROMOFORM	1	U	µg/L
		3/12/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/12/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/12/2001	2-BUTANONE	5	U	µg/L
		3/12/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/12/2001	ETHANE	4	UJ7	µg/L
		3/12/2001	METHANE	44	J7	µg/L
		3/12/2001	ETHENE	3	UJ7	µg/L
		3/12/2001	TOTAL DISSOLVED SOLIDS	2620000		µg/L
		3/12/2001	1,1-DICHLOROETHENE	36		µg/L
		3/12/2001	1,1-DICHLOROETHANE	39		µg/L
		3/12/2001	CIS-1,2-DICHLOROETHENE	34		µg/L
		3/12/2001	1,1,1-TRICHLOROETHANE	34		µg/L
		3/12/2001	TRICHLOROETHENE	51		µg/L
		3/12/2001	TETRACHLOROETHENE	61		µg/L
	IR04MW31A	3/16/2001	ARSENIC	3	U1	µg/L
		3/16/2001	CHLOROMETHANE	1	U	µg/L
		3/16/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/16/2001	BROMOMETHANE	1	U	µg/L
		3/16/2001	CHLOROETHANE	1	U	µg/L
		3/16/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/16/2001	ACETONE	5	R7	µg/L
		3/16/2001	CARBON DISULFIDE	1	U	µg/L
		3/16/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/16/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/16/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/16/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/16/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/16/2001	2-BUTANONE	5	U	µg/L
		3/16/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/16/2001	CHLOROFORM	1	U	µg/L
		3/16/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/16/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/16/2001	BENZENE	0.5	U	µg/L
		3/16/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/16/2001	TRICHLOROETHENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-04	IR04MW31A	3/16/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/16/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/16/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/16/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/16/2001	TOLUENE	1	U	µg/L
		3/16/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/16/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/16/2001	TETRACHLOROETHENE	1	U	µg/L
		3/16/2001	2-HEXANONE	5	U	µg/L
		3/16/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/16/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/16/2001	CHLOROBENZENE	1	U	µg/L
		3/16/2001	ETHYLBENZENE	1	U	µg/L
		3/16/2001	STYRENE	1	U	µg/L
		3/16/2001	XYLENE (TOTAL)	1	U	µg/L
		3/16/2001	BROMOFORM	1	U	µg/L
		3/16/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/16/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/16/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/16/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/16/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/16/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/16/2001	TOTAL DISSOLVED SOLIDS	3810000		µg/L
	IR04MW35A	3/19/2001	ALKALINITY	1000	U	µg/L
		3/19/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/19/2001	ALKALINITY (AS CACO3)	650000		µg/L
		3/19/2001	ALKALINITY, TOTAL (AS CACO3)	650000		µg/L
		3/19/2001	CHLORIDE	1080000		µg/L
		3/19/2001	SULFATE	168000		µg/L
		3/19/2001	NITRATE/NITRITE NITROGEN	890		µg/L
		3/19/2001	NITRITE NITROGEN	5	U	µg/L
		3/19/2001	NITRATE AS N	890		µg/L
		3/19/2001	CALCIUM	47100		µg/L
		3/19/2001	IRON	99.5	U1	µg/L
		3/19/2001	MAGNESIUM	211000		µg/L
		3/19/2001	NICKEL	28.9	J	µg/L
		3/19/2001	POTASSIUM	19200	J4	µg/L
		3/19/2001	SODIUM	680000		µg/L
		3/19/2001	CHLOROMETHANE	1	U	µg/L
		3/19/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/19/2001	BROMOMETHANE	1	U	µg/L
		3/19/2001	CHLOROETHANE	1	U	µg/L
		3/19/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/19/2001	ACETONE	5	R7	µg/L
		3/19/2001	CARBON DISULFIDE	1	U	µg/L
		3/19/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/19/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/19/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/19/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/19/2001	2-BUTANONE	5	U	µg/L
		3/19/2001	BROMOCHLOROMETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-04	IR04MW35A	3/19/2001	CHLOROFORM	1	U	µg/L
		3/19/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/19/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/19/2001	BENZENE	0.5	U	µg/L
		3/19/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/19/2001	TRICHLOROETHENE	1	U	µg/L
		3/19/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/19/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/19/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/19/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/19/2001	TOLUENE	1	U	µg/L
		3/19/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/19/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/19/2001	TETRACHLOROETHENE	1		µg/L
		3/19/2001	2-HEXANONE	5	U	µg/L
		3/19/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/19/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/19/2001	CHLOROBENZENE	1	U	µg/L
		3/19/2001	ETHYLBENZENE	1	U	µg/L
		3/19/2001	STYRENE	1	U	µg/L
		3/19/2001	XYLENE (TOTAL)	1	U	µg/L
		3/19/2001	BROMOFORM	1	U	µg/L
		3/19/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/19/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/19/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/19/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/19/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/19/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/19/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/19/2001	METHANE	5	J7	µg/L
		3/19/2001	ETHANE	4	UJ7	µg/L
		3/19/2001	ETHENE	3	UJ7	µg/L
		3/19/2001	TOTAL DISSOLVED SOLIDS	2780000		µg/L
	IR04MW36A	3/20/2001	ARSENIC	156		µg/L
		3/20/2001	SALINITY	1.1		µg/L
		3/20/2001	TOTAL DISSOLVED SOLIDS	1020000		µg/L
	IR04MW37A	3/21/2001	ALKALINITY	1000	U	µg/L
		3/21/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/21/2001	ALKALINITY (AS CACO3)	380000		µg/L
		3/21/2001	ALKALINITY, TOTAL (AS CACO3)	380000		µg/L
		3/21/2001	CHLORIDE	73600		µg/L
		3/21/2001	SULFATE	65700		µg/L
		3/21/2001	NITRATE/NITRITE NITROGEN	520		µg/L
		3/21/2001	NITRITE NITROGEN	5		µg/L
		3/21/2001	NITRATE AS N	520		µg/L
		3/21/2001	CALCIUM	16600		µg/L
		3/21/2001	CHLOROMETHANE	1	U	µg/L
		3/21/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/21/2001	BROMOMETHANE	1	U	µg/L
		3/21/2001	CHLOROETHANE	1	U	µg/L
		3/21/2001	1,1-DICHLOROETHENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-04	IR04MW37A	3/21/2001	ACETONE	5	R7	µg/L
		3/21/2001	CARBON DISULFIDE	1	U	µg/L
		3/21/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/21/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/21/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/21/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/21/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/21/2001	2-BUTANONE	5	U	µg/L
		3/21/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	CHLOROFORM	1	U	µg/L
		3/21/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/21/2001	BENZENE	0.5	U	µg/L
		3/21/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/21/2001	TRICHLOROETHENE	6		µg/L
		3/21/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/21/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/21/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/21/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/21/2001	TOLUENE	1	U	µg/L
		3/21/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/21/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/21/2001	TETRACHLOROETHENE	1	U	µg/L
		3/21/2001	2-HEXANONE	5	U	µg/L
		3/21/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/21/2001	CHLOROBENZENE	1	U	µg/L
		3/21/2001	ETHYLBENZENE	1	U	µg/L
		3/21/2001	STYRENE	1	U	µg/L
		3/21/2001	XYLENE (TOTAL)	1	U	µg/L
		3/21/2001	BROMOFORM	1	UJ7	µg/L
		3/21/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/21/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/21/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/21/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/21/2001	METHANE	6	J7	µg/L
		3/21/2001	ETHANE	4	UJ7	µg/L
		3/21/2001	ETHENE	3	UJ7	µg/L
		3/21/2001	TOTAL DISSOLVED SOLIDS	540000		µg/L
	IR04MW38A	3/20/2001	ALKALINITY	1000	U	µg/L
		3/20/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/20/2001	ALKALINITY (AS CACO3)	290000		µg/L
		3/20/2001	ALKALINITY, TOTAL (AS CACO3)	290000		µg/L
		3/20/2001	CHLORIDE	159000		µg/L
		3/20/2001	SULFATE	58900		µg/L
		3/20/2001	NITRATE/NITRITE NITROGEN	2400		µg/L
		3/20/2001	NITRITE NITROGEN	5	U	µg/L
		3/20/2001	NITRATE AS N	2400		µg/L
		3/20/2001	CALCIUM	19400		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-04	IR04MW38A	3/20/2001	IRON	476		µg/L
		3/20/2001	MAGNESIUM	57100		µg/L
		3/20/2001	POTASSIUM	6490	J4	µg/L
		3/20/2001	SODIUM	137000		µg/L
		3/20/2001	CHLOROMETHANE	1	U	µg/L
		3/20/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/20/2001	BROMOMETHANE	1	U	µg/L
		3/20/2001	CHLOROETHANE	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/20/2001	ACETONE	5	R7	µg/L
		3/20/2001	CARBON DISULFIDE	1	U	µg/L
		3/20/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/20/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/20/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	2-BUTANONE	5	U	µg/L
		3/20/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	CHLOROFORM	1	U	µg/L
		3/20/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/20/2001	BENZENE	0.5	U	µg/L
		3/20/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/20/2001	TRICHLOROETHENE	0.6	J	µg/L
		3/20/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/20/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/20/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/20/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/20/2001	TOLUENE	1	U	µg/L
		3/20/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/20/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	TETRACHLOROETHENE	1	U	µg/L
		3/20/2001	2-HEXANONE	5	U	µg/L
		3/20/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/20/2001	CHLOROBENZENE	1	U	µg/L
		3/20/2001	ETHYLBENZENE	1	U	µg/L
		3/20/2001	STYRENE	1	U	µg/L
		3/20/2001	XYLENE (TOTAL)	1	U	µg/L
		3/20/2001	BROMOFORM	1	UJ7	µg/L
		3/20/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/20/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/20/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/20/2001	METHANE	2	UJ7	µg/L
		3/20/2001	ETHANE	4	UJ7	µg/L
		3/20/2001	ETHENE	3	UJ7	µg/L
		3/20/2001	TOTAL DISSOLVED SOLIDS	800000		µg/L
		3/20/2001	NITRATE/NITRITE NITROGEN	2800		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-04	IR04MW38A	3/20/2001	CALCIUM	19600		µg/L
		3/20/2001	IRON	496		µg/L
		3/20/2001	MAGNESIUM	58000		µg/L
		3/20/2001	POTASSIUM	6520	J4	µg/L
		3/20/2001	SODIUM	139000		µg/L
		3/20/2001	CHLOROMETHANE	1	U	µg/L
		3/20/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/20/2001	CHLOROETHANE	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/20/2001	ACETONE	5	R7	µg/L
		3/20/2001	CARBON DISULFIDE	1	U	µg/L
		3/20/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/20/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/20/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	2-BUTANONE	5	U	µg/L
		3/20/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	CHLOROFORM	1	U	µg/L
		3/20/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/20/2001	BENZENE	0.5	U	µg/L
		3/20/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/20/2001	TRICHLOROETHENE	0.6	J	µg/L
		3/20/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/20/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/20/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/20/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/20/2001	TOLUENE	1	U	µg/L
		3/20/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	TETRACHLOROETHENE	1	U	µg/L
		3/20/2001	2-HEXANONE	5	U	µg/L
		3/20/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/20/2001	CHLOROBENZENE	1	U	µg/L
		3/20/2001	ETHYLBENZENE	1	U	µg/L
		3/20/2001	STYRENE	1	U	µg/L
		3/20/2001	XYLENE (TOTAL)	1	U	µg/L
		3/20/2001	BROMOFORM	1	UJ7	µg/L
		3/20/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/20/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/20/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/20/2001	BROMOMETHANE	1	U	µg/L
		3/20/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/20/2001	METHANE	2	UJ7	µg/L
		3/20/2001	ETHANE	4	UJ7	µg/L
		3/20/2001	ETHENE	3	UJ7	µg/L
	IR04MW39A	3/21/2001	ALKALINITY	1000	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-04	IR04MW39A	3/21/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/21/2001	ALKALINITY (AS CACO3)	410000		µg/L
		3/21/2001	ALKALINITY, TOTAL (AS CACO3)	410000		µg/L
		3/21/2001	CHLORIDE	609000		µg/L
		3/21/2001	SULFATE	48800		µg/L
		3/21/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/21/2001	NITRITE NITROGEN	5	U	µg/L
		3/21/2001	NITRATE AS N	10	U	µg/L
		3/21/2001	CALCIUM	6310		µg/L
		3/21/2001	CHLOROMETHANE	1	U	µg/L
		3/21/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/21/2001	BROMOMETHANE	1	U	µg/L
		3/21/2001	CHLOROETHANE	1	U	µg/L
		3/21/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/21/2001	ACETONE	5	U	µg/L
		3/21/2001	CARBON DISULFIDE	1	U	µg/L
		3/21/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/21/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/21/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/21/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/21/2001	CIS-1,2-DICHLOROETHENE	1		µg/L
		3/21/2001	2-BUTANONE	5	U	µg/L
		3/21/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	CHLOROFORM	1	U	µg/L
		3/21/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/21/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/21/2001	BENZENE	0.5	U	µg/L
		3/21/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/21/2001	TRICHLOROETHENE	2		µg/L
		3/21/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/21/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/21/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/21/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/21/2001	TOLUENE	1	U	µg/L
		3/21/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/21/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/21/2001	TETRACHLOROETHENE	1	U	µg/L
		3/21/2001	2-HEXANONE	5	U	µg/L
		3/21/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/21/2001	CHLOROBENZENE	1	U	µg/L
		3/21/2001	ETHYLBENZENE	1	U	µg/L
		3/21/2001	STYRENE	1	U	µg/L
		3/21/2001	XYLENE (TOTAL)	1	U	µg/L
		3/21/2001	BROMOFORM	1	U	µg/L
		3/21/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/21/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/21/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-04	IR04MW39A	3/21/2001	METHANE	120	J7	µg/L
		3/21/2001	ETHANE	4	UJ7	µg/L
		3/21/2001	ETHENE	3	UJ7	µg/L
		3/21/2001	TOTAL DISSOLVED SOLIDS	1450000		µg/L
		3/21/2001	ALKALINITY	1000	U	µg/L
		3/21/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/21/2001	ALKALINITY (AS CACO3)	350000		µg/L
		3/21/2001	ALKALINITY, TOTAL (AS CACO3)	350000		µg/L
		3/21/2001	CHLORIDE	606000		µg/L
		3/21/2001	SULFATE	48700		µg/L
		3/21/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/21/2001	NITRITE NITROGEN	5	U	µg/L
		3/21/2001	NITRATE AS N	10	U	µg/L
		3/21/2001	CHLOROMETHANE	1	U	µg/L
		3/21/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/21/2001	BROMOMETHANE	1	U	µg/L
		3/21/2001	CHLOROETHANE	1	U	µg/L
		3/21/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/21/2001	CARBON DISULFIDE	1	U	µg/L
		3/21/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/21/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/21/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/21/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/21/2001	CIS-1,2-DICHLOROETHENE	1		µg/L
		3/21/2001	2-BUTANONE	5	U	µg/L
		3/21/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	CHLOROFORM	1	U	µg/L
		3/21/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/21/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/21/2001	BENZENE	0.5	U	µg/L
		3/21/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/21/2001	TRICHLOROETHENE	2		µg/L
		3/21/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/21/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/21/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/21/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/21/2001	TOLUENE	1	U	µg/L
		3/21/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/21/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/21/2001	TETRACHLOROETHENE	1	U	µg/L
		3/21/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/21/2001	CHLOROBENZENE	1	U	µg/L
		3/21/2001	ETHYLBENZENE	1	U	µg/L
		3/21/2001	STYRENE	1	U	µg/L
		3/21/2001	XYLENE (TOTAL)	1	U	µg/L
		3/21/2001	BROMOFORM	1	U	µg/L
		3/21/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/21/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,4-DICHLOROBENZENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-04	IR04MW39A	3/21/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/21/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/21/2001	ACETONE	5	U	µg/L
		3/21/2001	2-HEXANONE	5	U	µg/L
		3/21/2001	TOTAL DISSOLVED SOLIDS	1260000		µg/L
	IR04MW40A	3/21/2001	CADMIUM	0.36	U1	µg/L
		3/21/2001	LEAD	1.3	UJ3	µg/L
		3/21/2001	NICKEL	56.5		µg/L
		3/21/2001	TOTAL DISSOLVED SOLIDS	14100000		µg/L
IR-05	IR05MW73A	3/19/2001	ALPHA-BHC	0.005	U	µg/L
		3/19/2001	BETA-BHC	0.005	U	µg/L
		3/19/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/19/2001	HEPTACHLOR	0.005	U	µg/L
		3/19/2001	ALDRIN	0.005	U	µg/L
		3/19/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/19/2001	ENDOSULFAN I	0.005	U	µg/L
		3/19/2001	DIELDRIN	0.01	U	µg/L
		3/19/2001	4,4'-DDE	0.01	U	µg/L
		3/19/2001	ENDRIN	0.01	U	µg/L
		3/19/2001	ENDOSULFAN II	0.01	U	µg/L
		3/19/2001	4,4'-DDD	0.01	U	µg/L
		3/19/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/19/2001	4,4'-DDT	0.01	U	µg/L
		3/19/2001	METHOXYCHLOR	0.05	U	µg/L
		3/19/2001	ENDRIN KETONE	0.01	U	µg/L
		3/19/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/19/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/19/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/19/2001	TOXAPHENE	0.5	U	µg/L
		3/19/2001	AROCLOR-1016	0.1	U	µg/L
		3/19/2001	AROCLOR-1221	0.2	U	µg/L
		3/19/2001	AROCLOR-1232	0.1	U	µg/L
		3/19/2001	AROCLOR-1242	0.1	U	µg/L
		3/19/2001	AROCLOR-1248	0.1	U	µg/L
		3/19/2001	AROCLOR-1254	0.1	U	µg/L
		3/19/2001	AROCLOR-1260	0.1	U	µg/L
		3/19/2001	DELTA-BHC	0.005	U	µg/L
		3/19/2001	TOTAL DISSOLVED SOLIDS	2210000		µg/L
		3/19/2001	ALPHA-BHC	0.005	U	µg/L
		3/19/2001	BETA-BHC	0.005	U	µg/L
		3/19/2001	DELTA-BHC	0.005	U	µg/L
		3/19/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/19/2001	HEPTACHLOR	0.005	U	µg/L
		3/19/2001	ALDRIN	0.005	U	µg/L
		3/19/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/19/2001	ENDOSULFAN I	0.005	U	µg/L
		3/19/2001	DIELDRIN	0.01	U	µg/L
		3/19/2001	4,4'-DDE	0.01	U	µg/L
		3/19/2001	ENDRIN	0.01	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-05	IR05MW73A	3/19/2001	ENDOSULFAN II	0.01	U	µg/L
		3/19/2001	4,4'-DDD	0.01	U	µg/L
		3/19/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/19/2001	4,4'-DDT	0.01	U	µg/L
		3/19/2001	METHOXYCHLOR	0.05	U	µg/L
		3/19/2001	ENDRIN KETONE	0.01	U	µg/L
		3/19/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/19/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/19/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/19/2001	TOXAPHENE	0.5	U	µg/L
		3/19/2001	AROCLOR-1016	0.1	U	µg/L
		3/19/2001	AROCLOR-1221	0.2	U	µg/L
		3/19/2001	AROCLOR-1232	0.1	U	µg/L
		3/19/2001	AROCLOR-1242	0.1	U	µg/L
		3/19/2001	AROCLOR-1248	0.1	U	µg/L
		3/19/2001	AROCLOR-1254	0.1	U	µg/L
		3/19/2001	AROCLOR-1260	0.1	U	µg/L
	IR05MW77A	3/19/2001	LEAD	1.6	U	µg/L
		3/19/2001	TOTAL DISSOLVED SOLIDS	8480000		µg/L
IR-11	IR11MW25A	3/9/2001	ALKALINITY	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	400000		µg/L
		3/9/2001	ALKALINITY, TOTAL (AS CACO3)	400000		µg/L
		3/9/2001	CHLORIDE	56900		µg/L
		3/9/2001	SULFATE	437000		µg/L
		3/9/2001	NITRATE/NITRITE NITROGEN	130		µg/L
		3/9/2001	NITRITE NITROGEN	5	U	µg/L
		3/9/2001	NITRATE AS N	130		µg/L
		3/9/2001	ANTIMONY	3.7	U1	µg/L
		3/9/2001	ARSENIC	15.3	U1	µg/L
		3/9/2001	CADMIUM	0.3	U	µg/L
		3/9/2001	CALCIUM	155000		µg/L
		3/9/2001	COPPER	4.1	U1	µg/L
		3/9/2001	IRON	686		µg/L
		3/9/2001	MAGNESIUM	49700		µg/L
		3/9/2001	NICKEL	3.9	J	µg/L
		3/9/2001	POTASSIUM	29600		µg/L
		3/9/2001	SODIUM	178000		µg/L
		3/9/2001	ALPHA-BHC	0.005	U	µg/L
		3/9/2001	BETA-BHC	0.005	U2	µg/L
		3/9/2001	DELTA-BHC	0.005	U	µg/L
		3/9/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/9/2001	HEPTACHLOR	0.005	U	µg/L
		3/9/2001	ALDRIN	0.005	U	µg/L
		3/9/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/9/2001	ENDOSULFAN I	0.005	U	µg/L
		3/9/2001	DIELDRIN	0.01	U	µg/L
		3/9/2001	4,4'-DDE	0.01	U	µg/L
		3/9/2001	ENDRIN	0.01	U	µg/L
		3/9/2001	ENDOSULFAN II	0.01	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-11	IR11MW25A	3/9/2001	4,4'-DDD	0.01	U	µg/L
		3/9/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/9/2001	4,4'-DDT	0.01	U	µg/L
		3/9/2001	METHOXYCHLOR	0.05	U	µg/L
		3/9/2001	ENDRIN KETONE	0.01	U	µg/L
		3/9/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/9/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/9/2001	GAMMA-CHLORDANE	0.005		µg/L
		3/9/2001	TOXAPHENE	0.5	U	µg/L
		3/9/2001	AROCLOR-1016	0.1	U	µg/L
		3/9/2001	AROCLOR-1221	0.2	U	µg/L
		3/9/2001	AROCLOR-1232	0.1	U	µg/L
		3/9/2001	AROCLOR-1242	0.1	U	µg/L
		3/9/2001	AROCLOR-1248	0.1	U	µg/L
		3/9/2001	AROCLOR-1254	0.1	U	µg/L
		3/9/2001	AROCLOR-1260	0.1	U	µg/L
		3/9/2001	CHLOROMETHANE	1	U	µg/L
		3/9/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/9/2001	BROMOMETHANE	1	UJ7	µg/L
		3/9/2001	CHLOROETHANE	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/9/2001	ACETONE	5	U4	µg/L
		3/9/2001	CARBON DISULFIDE	1	U	µg/L
		3/9/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/9/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/9/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	2-BUTANONE	5	U	µg/L
		3/9/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	CHLOROFORM	1	U	µg/L
		3/9/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/9/2001	BENZENE	0.5	U	µg/L
		3/9/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/9/2001	TRICHLOROETHENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/9/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/9/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/9/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/9/2001	TOLUENE	1	U	µg/L
		3/9/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/9/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	TETRACHLOROETHENE	1	U	µg/L
		3/9/2001	2-HEXANONE	5	U	µg/L
		3/9/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/9/2001	CHLOROBENZENE	1	U	µg/L
		3/9/2001	ETHYLBENZENE	1	U	µg/L
		3/9/2001	STYRENE	1	U	µg/L
		3/9/2001	XYLENE (TOTAL)	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-11	IR11MW25A	3/9/2001	BROMOFORM	1	U	µg/L
		3/9/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/9/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/9/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/9/2001	METHANE	4	J7	µg/L
		3/9/2001	ETHANE	4	UJ7	µg/L
		3/9/2001	ETHENE	3	UJ7	µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	1360000		µg/L
		3/9/2001	ALKALINITY	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	236000		µg/L
		3/9/2001	ALKALINITY, TOTAL (AS CACO3)	236000		µg/L
		3/9/2001	CHLORIDE	246000		µg/L
		3/9/2001	SULFATE	995000		µg/L
		3/9/2001	NITRATE/NITRITE NITROGEN	140		µg/L
		3/9/2001	NITRITE NITROGEN	5	U	µg/L
		3/9/2001	NITRATE AS N	140		µg/L
		3/9/2001	ANTIMONY	3.4	U1	µg/L
		3/9/2001	ARSENIC	17.2	U1	µg/L
		3/9/2001	CADMIUM	0.3	U	µg/L
		3/9/2001	CALCIUM	151000		µg/L
		3/9/2001	COPPER	2.5	U1	µg/L
		3/9/2001	IRON	707		µg/L
		3/9/2001	MAGNESIUM	49100		µg/L
		3/9/2001	NICKEL	3.1	J	µg/L
		3/9/2001	POTASSIUM	30200		µg/L
		3/9/2001	SODIUM	180000		µg/L
		3/9/2001	METHANE	2	UJ7	µg/L
		3/9/2001	ETHANE	4	UJ7	µg/L
		3/9/2001	ETHENE	3	UJ7	µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	2780000		µg/L
	IR11MW26A	3/9/2001	ALKALINITY	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	340000		µg/L
		3/9/2001	ALKALINITY, TOTAL (AS CACO3)	340000		µg/L
		3/9/2001	CHLORIDE	105000		µg/L
		3/9/2001	SULFATE	198000		µg/L
		3/9/2001	NITRATE/NITRITE NITROGEN	40		µg/L
		3/9/2001	NITRITE NITROGEN	5	U	µg/L
		3/9/2001	NITRATE AS N	40		µg/L
		3/9/2001	ANTIMONY	2.4	U	µg/L
		3/9/2001	ARSENIC	9.2	U1	µg/L
		3/9/2001	CADMIUM	0.3	U	µg/L
		3/9/2001	CALCIUM	82100		µg/L
		3/9/2001	COPPER	3.2	U1	µg/L
		3/9/2001	IRON	23.8	J	µg/L
		3/9/2001	MAGNESIUM	26200		µg/L
		3/9/2001	NICKEL	1.3	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-11	IR11MW26A	3/9/2001	POTASSIUM	15000		µg/L
		3/9/2001	SODIUM	146000		µg/L
		3/9/2001	CHLOROMETHANE	1	U	µg/L
		3/9/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/9/2001	BROMOMETHANE	1	UJ7	µg/L
		3/9/2001	CHLOROETHANE	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/9/2001	ACETONE	5	U	µg/L
		3/9/2001	CARBON DISULFIDE	1	U	µg/L
		3/9/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/9/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/9/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	2-BUTANONE	5	U	µg/L
		3/9/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	CHLOROFORM	1	U	µg/L
		3/9/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/9/2001	BENZENE	0.5	U	µg/L
		3/9/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/9/2001	TRICHLOROETHENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/9/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/9/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/9/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/9/2001	TOLUENE	1	U	µg/L
		3/9/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/9/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	TETRACHLOROETHENE	1	U	µg/L
		3/9/2001	2-HEXANONE	5	U	µg/L
		3/9/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/9/2001	CHLOROBENZENE	1	U	µg/L
		3/9/2001	ETHYLBENZENE	1	U	µg/L
		3/9/2001	STYRENE	1	U	µg/L
		3/9/2001	XYLENE (TOTAL)	1	U	µg/L
		3/9/2001	BROMOFORM	1	U	µg/L
		3/9/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/9/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/9/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/9/2001	METHANE	2	UJ7	µg/L
		3/9/2001	ETHANE	4	UJ7	µg/L
		3/9/2001	ETHENE	3	UJ7	µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	1030000		µg/L
	IR11MW27A	3/9/2001	ALKALINITY	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	352000		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-11	IR11MW27A	3/9/2001	ALKALINITY, TOTAL (AS CACO3)	352000		µg/L
		3/9/2001	CHLORIDE	783000		µg/L
		3/9/2001	SULFATE	1720000		µg/L
		3/9/2001	NITRATE/NITRITE NITROGEN	70		µg/L
		3/9/2001	NITRATE AS N	70		µg/L
		3/9/2001	NITRITE NITROGEN	5	U	µg/L
		3/9/2001	ANTIMONY	4.9	U1	µg/L
		3/9/2001	CADMIUM	0.3	U	µg/L
		3/9/2001	CALCIUM	381000		µg/L
		3/9/2001	COPPER	6.9	U1	µg/L
		3/9/2001	IRON	119		µg/L
		3/9/2001	MAGNESIUM	149000		µg/L
		3/9/2001	NICKEL	8.1	J	µg/L
		3/9/2001	POTASSIUM	59200		µg/L
		3/9/2001	SODIUM	726000		µg/L
		3/9/2001	ARSENIC	3.9	U1	µg/L
		3/9/2001	CHLOROMETHANE	1	U	µg/L
		3/9/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/9/2001	BROMOMETHANE	1	UJ7	µg/L
		3/9/2001	CHLOROETHANE	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/9/2001	ACETONE	5	U	µg/L
		3/9/2001	CARBON DISULFIDE	1	U	µg/L
		3/9/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/9/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/9/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	2-BUTANONE	5	U	µg/L
		3/9/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	CHLOROFORM	1	U	µg/L
		3/9/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/9/2001	BENZENE	0.5	U	µg/L
		3/9/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/9/2001	TRICHLOROETHENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/9/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/9/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/9/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/9/2001	TOLUENE	1	U	µg/L
		3/9/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/9/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	TETRACHLOROETHENE	1	U	µg/L
		3/9/2001	2-HEXANONE	5	U	µg/L
		3/9/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/9/2001	CHLOROBENZENE	1	U	µg/L
		3/9/2001	ETHYLBENZENE	1	U	µg/L
		3/9/2001	STYRENE	1	U	µg/L
		3/9/2001	XYLENE (TOTAL)	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-11	IR11MW27A	3/9/2001	BROMOFORM	1	U	µg/L
		3/9/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/9/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/9/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/9/2001	METHANE	5	J7	µg/L
		3/9/2001	ETHANE	4	UJ7	µg/L
		3/9/2001	ETHENE	3	UJ7	µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	4070000		µg/L
IR-12	IR12MW11A	3/13/2001	ALKALINITY	1000	U	µg/L
		3/13/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/13/2001	ALKALINITY (AS CACO3)	276000		µg/L
		3/13/2001	ALKALINITY, TOTAL (AS CACO3)	276000		µg/L
		3/13/2001	SULFATE	336000		µg/L
		3/13/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/13/2001	NITRITE NITROGEN	5	U	µg/L
		3/13/2001	NITRATE AS N	10	U	µg/L
		3/13/2001	CHLORIDE	384000		µg/L
		3/13/2001	CALCIUM	73600		µg/L
		3/13/2001	IRON	23.4	U	µg/L
		3/13/2001	MAGNESIUM	122000		µg/L
		3/13/2001	POTASSIUM	5630		µg/L
		3/13/2001	SODIUM	197000	J4	µg/L
		3/13/2001	CHLOROMETHANE	1	U	µg/L
		3/13/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/13/2001	BROMOMETHANE	1	U	µg/L
		3/13/2001	CHLOROETHANE	1	U	µg/L
		3/13/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/13/2001	ACETONE	5	R7	µg/L
		3/13/2001	CARBON DISULFIDE	1	U	µg/L
		3/13/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/13/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/13/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/13/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/13/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/13/2001	2-BUTANONE	5	U	µg/L
		3/13/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/13/2001	CHLOROFORM	1	U	µg/L
		3/13/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/13/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/13/2001	BENZENE	0.5	U	µg/L
		3/13/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/13/2001	TRICHLOROETHENE	1	U	µg/L
		3/13/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/13/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/13/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/13/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/13/2001	TOLUENE	1	U	µg/L
		3/13/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-12	IR12MW11A	3/13/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/13/2001	TETRACHLOROETHENE	1	U	µg/L
		3/13/2001	2-HEXANONE	5	U	µg/L
		3/13/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/13/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/13/2001	CHLOROBENZENE	1	U	µg/L
		3/13/2001	ETHYLBENZENE	1	U	µg/L
		3/13/2001	STYRENE	1	U	µg/L
		3/13/2001	XYLENE (TOTAL)	1	U	µg/L
		3/13/2001	BROMOFORM	1	U	µg/L
		3/13/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/13/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/13/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/13/2001	METHANE	14	J7	µg/L
		3/13/2001	ETHANE	4	UJ7	µg/L
		3/13/2001	ETHENE	3	UJ7	µg/L
		3/13/2001	TOTAL DISSOLVED SOLIDS	1340000		µg/L
	IR12MW13A	3/21/2001	ALKALINITY	1000	U	µg/L
		3/21/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/21/2001	ALKALINITY (AS CACO3)	770000		µg/L
		3/21/2001	ALKALINITY, TOTAL (AS CACO3)	770000		µg/L
		3/21/2001	CHLORIDE	173000		µg/L
		3/21/2001	SULFATE	86100		µg/L
		3/21/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/21/2001	NITRITE NITROGEN	5	U	µg/L
		3/21/2001	NITRATE AS N	10	U	µg/L
		3/21/2001	CALCIUM	67800		µg/L
		3/21/2001	CHLOROMETHANE	1	U	µg/L
		3/21/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/21/2001	BROMOMETHANE	1	U	µg/L
		3/21/2001	CHLOROETHANE	0.7	J	µg/L
		3/21/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/21/2001	ACETONE	5	R7	µg/L
		3/21/2001	CARBON DISULFIDE	1	U	µg/L
		3/21/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/21/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/21/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/21/2001	1,1-DICHLOROETHANE	0.3	J	µg/L
		3/21/2001	CIS-1,2-DICHLOROETHENE	0.3	J	µg/L
		3/21/2001	2-BUTANONE	5	U	µg/L
		3/21/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	CHLOROFORM	1	U	µg/L
		3/21/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/21/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/21/2001	BENZENE	0.4	J	µg/L
		3/21/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/21/2001	TRICHLOROETHENE	1	U	µg/L
		3/21/2001	1,2-DICHLOROPROPANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-12	IR12MW13A	3/21/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/21/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/21/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/21/2001	TOLUENE	1	U	µg/L
		3/21/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/21/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/21/2001	TETRACHLOROETHENE	1	U	µg/L
		3/21/2001	2-HEXANONE	5	U	µg/L
		3/21/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/21/2001	CHLOROBENZENE	9		µg/L
		3/21/2001	ETHYLBENZENE	1	U	µg/L
		3/21/2001	STYRENE	1	U	µg/L
		3/21/2001	XYLENE (TOTAL)	1	U	µg/L
		3/21/2001	BROMOFORM	1	UJ7	µg/L
		3/21/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/21/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/21/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/21/2001	ETHANE	4	UJ7	µg/L
		3/21/2001	ETHENE	3	UJ7	µg/L
		3/21/2001	METHANE	380	J7	µg/L
		3/21/2001	TOTAL DISSOLVED SOLIDS	950000		µg/L
		3/21/2001	ALKALINITY	1000	U	µg/L
		3/21/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/21/2001	ALKALINITY (AS CACO3)	770000		µg/L
		3/21/2001	ALKALINITY, TOTAL (AS CACO3)	770000		µg/L
		3/21/2001	CHLORIDE	173000		µg/L
		3/21/2001	SULFATE	86100		µg/L
		3/21/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/21/2001	NITRITE NITROGEN	5	U	µg/L
		3/21/2001	NITRATE AS N	10	U	µg/L
		3/21/2001	CALCIUM	67800		µg/L
		3/21/2001	CHLOROMETHANE	1	U	µg/L
		3/21/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/21/2001	BROMOMETHANE	1	U	µg/L
		3/21/2001	CHLOROETHANE	0.7	J	µg/L
		3/21/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/21/2001	ACETONE	5	R7	µg/L
		3/21/2001	CARBON DISULFIDE	1	U	µg/L
		3/21/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/21/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/21/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/21/2001	1,1-DICHLOROETHANE	0.3	J	µg/L
		3/21/2001	CIS-1,2-DICHLOROETHENE	0.3	J	µg/L
		3/21/2001	2-BUTANONE	5	U	µg/L
		3/21/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	CHLOROFORM	1	U	µg/L
		3/21/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-12	IR12MW13A	3/21/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/21/2001	BENZENE	0.4	J	µg/L
		3/21/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/21/2001	TRICHLOROETHENE	1	U	µg/L
		3/21/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/21/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/21/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/21/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/21/2001	TOLUENE	1	U	µg/L
		3/21/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/21/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/21/2001	TETRACHLOROETHENE	1	U	µg/L
		3/21/2001	2-HEXANONE	5	U	µg/L
		3/21/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/21/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/21/2001	CHLOROBENZENE	9		µg/L
		3/21/2001	ETHYLBENZENE	1	U	µg/L
		3/21/2001	STYRENE	1	U	µg/L
		3/21/2001	XYLENE (TOTAL)	1	U	µg/L
		3/21/2001	BROMOFORM	1	UJ7	µg/L
		3/21/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/21/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/21/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/21/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/21/2001	ETHANE	4	UJ7	µg/L
		3/21/2001	ETHENE	3	UJ7	µg/L
		3/21/2001	METHANE	380	J7	µg/L
		3/21/2001	TOTAL DISSOLVED SOLIDS	950000		µg/L
	IR12MW14A	3/13/2001	ALKALINITY	1000	U	µg/L
		3/13/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/13/2001	ALKALINITY (AS CACO3)	524000		µg/L
		3/13/2001	ALKALINITY, TOTAL (AS CACO3)	524000		µg/L
		3/13/2001	CHLORIDE	147000		µg/L
		3/13/2001	SULFATE	97800		µg/L
		3/13/2001	NITRATE/NITRITE NITROGEN	60		µg/L
		3/13/2001	NITRITE NITROGEN	5	U	µg/L
		3/13/2001	NITRATE AS N	60		µg/L
		3/13/2001	CALCIUM	56600		µg/L
		3/13/2001	IRON	23.4	U	µg/L
		3/13/2001	MAGNESIUM	94900		µg/L
		3/13/2001	POTASSIUM	582	U1	µg/L
		3/13/2001	SODIUM	136000	J4	µg/L
		3/13/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/13/2001	CHLOROMETHANE	1	U	µg/L
		3/13/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/13/2001	BROMOMETHANE	1	U	µg/L
		3/13/2001	CHLOROETHANE	1	U	µg/L
		3/13/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/13/2001	ACETONE	5	R7	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-12	IR12MW14A	3/13/2001	CARBON DISULFIDE	1	U	µg/L
		3/13/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/13/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/13/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/13/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/13/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/13/2001	2-BUTANONE	5	U	µg/L
		3/13/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/13/2001	CHLOROFORM	1	U	µg/L
		3/13/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/13/2001	BENZENE	0.5	U	µg/L
		3/13/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/13/2001	TRICHLOROETHENE	1	U	µg/L
		3/13/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/13/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/13/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/13/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/13/2001	TOLUENE	1	U	µg/L
		3/13/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/13/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/13/2001	TETRACHLOROETHENE	1	U	µg/L
		3/13/2001	2-HEXANONE	5	U	µg/L
		3/13/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/13/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/13/2001	CHLOROBENZENE	1	U	µg/L
		3/13/2001	ETHYLBENZENE	1	U	µg/L
		3/13/2001	STYRENE	1	U	µg/L
		3/13/2001	XYLENE (TOTAL)	1	U	µg/L
		3/13/2001	BROMOFORM	1	U	µg/L
		3/13/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/13/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/13/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/13/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/13/2001	METHANE	2	UJ7	µg/L
		3/13/2001	ETHANE	4	UJ7	µg/L
		3/13/2001	ETHENE	3	UJ7	µg/L
		3/13/2001	TOTAL DISSOLVED SOLIDS	810000		µg/L
	IR12MW17A	3/12/2001	ALKALINITY	1000	U	µg/L
		3/12/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/12/2001	ALKALINITY (AS CACO3)	788000		µg/L
		3/12/2001	ALKALINITY, TOTAL (AS CACO3)	788000		µg/L
		3/12/2001	CHLORIDE	107000		µg/L
		3/12/2001	SULFATE	74400		µg/L
		3/12/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/12/2001	NITRITE NITROGEN	5	U	µg/L
		3/12/2001	NITRATE AS N	10	U	µg/L
		3/12/2001	BARIUM	489		µg/L
		3/12/2001	CALCIUM	111000		µg/L
		3/12/2001	IRON	21400		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-12	IR12MW17A	3/12/2001	MAGNESIUM	117000		µg/L
		3/12/2001	POTASSIUM	17700		µg/L
		3/12/2001	SODIUM	109000	J4	µg/L
		3/12/2001	ALPHA-BHC	0.005	U	µg/L
		3/12/2001	BETA-BHC	0.06	J9	µg/L
		3/12/2001	DELTA-BHC	0.008	J9	µg/L
		3/12/2001	GAMMA-BHC (LINDANE)	0.005	UJ9	µg/L
		3/12/2001	HEPTACHLOR	0.005	U	µg/L
		3/12/2001	ALDRIN	0.005	UJ9	µg/L
		3/12/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/12/2001	ENDOSULFAN I	0.005	U	µg/L
		3/12/2001	DIELDRIN	0.01	U	µg/L
		3/12/2001	4,4'-DDE	0.01	U	µg/L
		3/12/2001	ENDRIN	0.01	U	µg/L
		3/12/2001	ENDOSULFAN II	0.01	U	µg/L
		3/12/2001	4,4'-DDD	0.01	U	µg/L
		3/12/2001	ENDOSULFAN SULFATE	0.01	UJ3	µg/L
		3/12/2001	4,4'-DDT	0.008	J	µg/L
		3/12/2001	METHOXYCHLOR	0.05	U	µg/L
		3/12/2001	ENDRIN KETONE	0.01	J9	µg/L
		3/12/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/12/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/12/2001	GAMMA-CHLORDANE	0.007	J9	µg/L
		3/12/2001	TOXAPHENE	0.5	U	µg/L
		3/12/2001	AROCLOR-1016	0.1	U	µg/L
		3/12/2001	AROCLOR-1221	0.2	U	µg/L
		3/12/2001	AROCLOR-1232	0.1	U	µg/L
		3/12/2001	AROCLOR-1242	0.1	U	µg/L
		3/12/2001	AROCLOR-1248	0.1	U	µg/L
		3/12/2001	AROCLOR-1254	0.1	U	µg/L
		3/12/2001	AROCLOR-1260	0.1	U	µg/L
		3/12/2001	CHLOROMETHANE	0.7	J	µg/L
		3/12/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/12/2001	BROMOMETHANE	1	U	µg/L
		3/12/2001	CHLOROETHANE	2		µg/L
		3/12/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/12/2001	ACETONE	14	U47	µg/L
		3/12/2001	CARBON DISULFIDE	1	U	µg/L
		3/12/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/12/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/12/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/12/2001	1,1-DICHLOROETHANE	1		µg/L
		3/12/2001	2-BUTANONE	5	U	µg/L
		3/12/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/12/2001	CHLOROFORM	1	U	µg/L
		3/12/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/12/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/12/2001	BENZENE	3		µg/L
		3/12/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/12/2001	TRICHLOROETHENE	1	U	µg/L
		3/12/2001	1,2-DICHLOROPROPANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-12	IR12MW17A	3/12/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/12/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/12/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/12/2001	TOLUENE	0.2	J	µg/L
		3/12/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/12/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/12/2001	TETRACHLOROETHENE	1	U	µg/L
		3/12/2001	2-HEXANONE	5	U	µg/L
		3/12/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/12/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/12/2001	ETHYLBENZENE	0.6	J	µg/L
		3/12/2001	STYRENE	1	U	µg/L
		3/12/2001	XYLENE (TOTAL)	6		µg/L
		3/12/2001	BROMOFORM	1	U	µg/L
		3/12/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/12/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,4-DICHLOROBENZENE	2	U2	µg/L
		3/12/2001	1,2-DICHLOROBENZENE	0.8	J	µg/L
		3/12/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/12/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/12/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/12/2001	ETHANE	4	UJ7	µg/L
		3/12/2001	ETHENE	3	UJ7	µg/L
		3/12/2001	TOTAL DISSOLVED SOLIDS	960000		µg/L
		3/12/2001	DIESEL RANGE ORGANICS	600	Z	µg/L
		3/12/2001	MOTOR OIL RANGE ORGANICS	200	Z	µg/L
		3/12/2001	GASOLINE RANGE ORGANICS	200	H	µg/L
		3/12/2001	CHLOROBENZENE	72		µg/L
		3/12/2001	METHANE	1000	J7	µg/L
	IR12MW18A	3/9/2001	ALKALINITY	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	716000		µg/L
		3/9/2001	ALKALINITY, TOTAL (AS CACO3)	716000		µg/L
		3/9/2001	CHLORIDE	393000		µg/L
		3/9/2001	SULFATE	86800		µg/L
		3/9/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/9/2001	NITRITE NITROGEN	5	U	µg/L
		3/9/2001	NITRATE AS N	10	U	µg/L
		3/9/2001	ANTIMONY	2.4	U	µg/L
		3/9/2001	ARSENIC	2.8	U1	µg/L
		3/9/2001	CADMIUM	0.3	U	µg/L
		3/9/2001	CALCIUM	84900		µg/L
		3/9/2001	COPPER	1.5	U	µg/L
		3/9/2001	IRON	206		µg/L
		3/9/2001	MAGNESIUM	132000		µg/L
		3/9/2001	NICKEL	124		µg/L
		3/9/2001	POTASSIUM	9350		µg/L
		3/9/2001	SODIUM	284000		µg/L
		3/9/2001	CHLOROMETHANE	1	U	µg/L
		3/9/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/9/2001	BROMOMETHANE	1	UJ7	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-12	IR12MW18A	3/9/2001	CHLOROETHANE	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/9/2001	ACETONE	5	U	µg/L
		3/9/2001	CARBON DISULFIDE	1	U	µg/L
		3/9/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/9/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/9/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	2-BUTANONE	5	U	µg/L
		3/9/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	CHLOROFORM	1	U	µg/L
		3/9/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/9/2001	BENZENE	0.5	U	µg/L
		3/9/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/9/2001	TRICHLOROETHENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/9/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/9/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/9/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/9/2001	TOLUENE	1	U	µg/L
		3/9/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/9/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	TETRACHLOROETHENE	1	U	µg/L
		3/9/2001	2-HEXANONE	5	U	µg/L
		3/9/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/9/2001	CHLOROBENZENE	1	U	µg/L
		3/9/2001	ETHYLBENZENE	1	U	µg/L
		3/9/2001	STYRENE	1	U	µg/L
		3/9/2001	XYLENE (TOTAL)	1	U	µg/L
		3/9/2001	BROMOFORM	1	U	µg/L
		3/9/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/9/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/9/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/9/2001	METHANE	420	J7	µg/L
		3/9/2001	ETHANE	4	UJ7	µg/L
		3/9/2001	ETHENE	3	UJ7	µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	1720000		µg/L
		3/9/2001	ALKALINITY	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	208000		µg/L
		3/9/2001	ALKALINITY, TOTAL (AS CACO3)	208000		µg/L
		3/9/2001	CHLORIDE	412000		µg/L
		3/9/2001	SULFATE	86400		µg/L
		3/9/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/9/2001	NITRITE NITROGEN	5	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-12	IR12MW18A	3/9/2001	NITRATE AS N	10	U	µg/L
		3/9/2001	ANTIMONY	2.4	U	µg/L
		3/9/2001	ARSENIC	4.3	U1	µg/L
		3/9/2001	CADMIUM	0.3	U	µg/L
		3/9/2001	CALCIUM	86700		µg/L
		3/9/2001	COPPER	1.5	U	µg/L
		3/9/2001	MAGNESIUM	135000		µg/L
		3/9/2001	NICKEL	122		µg/L
		3/9/2001	POTASSIUM	9280		µg/L
		3/9/2001	SODIUM	276000		µg/L
		3/9/2001	IRON	207		µg/L
		3/9/2001	METHANE	510	J7	µg/L
		3/9/2001	ETHANE	4	UJ7	µg/L
		3/9/2001	ETHENE	3	UJ7	µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	1700000		µg/L
	IR12MW19A	3/12/2001	ALKALINITY	1000	U	µg/L
		3/12/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/12/2001	ALKALINITY (AS CACO3)	568000		µg/L
		3/12/2001	ALKALINITY, TOTAL (AS CACO3)	568000		µg/L
		3/12/2001	CHLORIDE	899000		µg/L
		3/12/2001	SULFATE	295000		µg/L
		3/12/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/12/2001	NITRITE NITROGEN	5	U	µg/L
		3/12/2001	NITRATE AS N	10	U	µg/L
		3/12/2001	CALCIUM	88300		µg/L
		3/12/2001	IRON	184		µg/L
		3/12/2001	MAGNESIUM	254000		µg/L
		3/12/2001	POTASSIUM	4780	J	µg/L
		3/12/2001	SODIUM	436000	J4	µg/L
		3/12/2001	CHLOROMETHANE	1	U	µg/L
		3/12/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/12/2001	CHLOROETHANE	1	U	µg/L
		3/12/2001	1,1-DICHLOROETHENE	2		µg/L
		3/12/2001	ACETONE	5	R7	µg/L
		3/12/2001	CARBON DISULFIDE	1	U	µg/L
		3/12/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/12/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/12/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/12/2001	1,1-DICHLOROETHANE	15		µg/L
		3/12/2001	CIS-1,2-DICHLOROETHENE	0.6	J	µg/L
		3/12/2001	2-BUTANONE	5	U	µg/L
		3/12/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/12/2001	CHLOROFORM	1	U	µg/L
		3/12/2001	1,1,1-TRICHLOROETHANE	8		µg/L
		3/12/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/12/2001	BENZENE	0.5	U	µg/L
		3/12/2001	1,2-DICHLOROETHANE	1		µg/L
		3/12/2001	TRICHLOROETHENE	3		µg/L
		3/12/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/12/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/12/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-12	IR12MW19A	3/12/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/12/2001	TOLUENE	1	U	µg/L
		3/12/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/12/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/12/2001	TETRACHLOROETHENE	5		µg/L
		3/12/2001	2-HEXANONE	5	U	µg/L
		3/12/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/12/2001	CHLOROBENZENE	1	U	µg/L
		3/12/2001	ETHYLBENZENE	1	U	µg/L
		3/12/2001	STYRENE	1	U	µg/L
		3/12/2001	XYLENE (TOTAL)	1	U	µg/L
		3/12/2001	BROMOFORM	1	U	µg/L
		3/12/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/12/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/12/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/12/2001	BROMOMETHANE	1	U	µg/L
		3/12/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/12/2001	METHANE	42	J7	µg/L
		3/12/2001	ETHANE	4	UJ7	µg/L
		3/12/2001	ETHENE	3	UJ7	µg/L
		3/12/2001	TOTAL DISSOLVED SOLIDS	2430000		µg/L
	IR12MW20A	3/9/2001	ALKALINITY	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	424000		µg/L
		3/9/2001	ALKALINITY, TOTAL (AS CACO3)	424000		µg/L
		3/9/2001	CHLORIDE	317000		µg/L
		3/9/2001	SULFATE	144000		µg/L
		3/9/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/9/2001	NITRITE NITROGEN	5	U	µg/L
		3/9/2001	NITRATE AS N	10	U	µg/L
		3/9/2001	ANTIMONY	2.4	U	µg/L
		3/9/2001	ARSENIC	26		µg/L
		3/9/2001	CADMIUM	0.3	U	µg/L
		3/9/2001	CALCIUM	73600		µg/L
		3/9/2001	COPPER	2.3	U1	µg/L
		3/9/2001	IRON	122		µg/L
		3/9/2001	NICKEL	60.9		µg/L
		3/9/2001	POTASSIUM	6260		µg/L
		3/9/2001	SODIUM	160000		µg/L
		3/9/2001	MAGNESIUM	120000		µg/L
		3/9/2001	CHLOROMETHANE	1	U	µg/L
		3/9/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/9/2001	BROMOMETHANE	1	UJ7	µg/L
		3/9/2001	CHLOROETHANE	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/9/2001	ACETONE	5	U	µg/L
		3/9/2001	CARBON DISULFIDE	1	U	µg/L
		3/9/2001	METHYLENE CHLORIDE	2	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-12	IR12MW20A	3/9/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/9/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	2-BUTANONE	5	U	µg/L
		3/9/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	CHLOROFORM	1	U	µg/L
		3/9/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/9/2001	BENZENE	0.5	U	µg/L
		3/9/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/9/2001	TRICHLOROETHENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/9/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/9/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/9/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/9/2001	TOLUENE	1	U	µg/L
		3/9/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/9/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	TETRACHLOROETHENE	1	U	µg/L
		3/9/2001	2-HEXANONE	5	U	µg/L
		3/9/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/9/2001	CHLOROBENZENE	1	U	µg/L
		3/9/2001	ETHYLBENZENE	1	U	µg/L
		3/9/2001	STYRENE	1	U	µg/L
		3/9/2001	XYLENE (TOTAL)	1	U	µg/L
		3/9/2001	BROMOFORM	1	U	µg/L
		3/9/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/9/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/9/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/9/2001	METHANE	65	J7	µg/L
		3/9/2001	ETHANE	4	UJ7	µg/L
		3/9/2001	ETHENE	3	UJ7	µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	1300000		µg/L
		3/9/2001	GROSS BETA - RADIOACTIVITY	4.8	U	µg/L
		3/9/2001	GROSS ALPHA - RADIOACTIVITY	1.4	U	µg/L
IR-14	IR14MW09A	3/7/2001	ALKALINITY	1000	U	µg/L
		3/7/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/7/2001	ALKALINITY (AS CACO3)	300000		µg/L
		3/7/2001	ALKALINITY, TOTAL (AS CACO3)	300000		µg/L
		3/7/2001	CHLORIDE	1170000		µg/L
		3/7/2001	SULFATE	341000		µg/L
		3/7/2001	NITRATE/NITRITE NITROGEN	110		µg/L
		3/7/2001	NITRITE NITROGEN	5	U	µg/L
		3/7/2001	NITRATE AS N	110		µg/L
		3/7/2001	MERCURY	0.1	U	µg/L
		3/7/2001	CALCIUM	70100		µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-14	IR14MW09A	3/7/2001	IRON	274		µg/L
		3/7/2001	MAGNESIUM	88000		µg/L
		3/7/2001	NICKEL	87.5		µg/L
		3/7/2001	POTASSIUM	37500	J4	µg/L
		3/7/2001	SODIUM	895000	J4	µg/L
		3/7/2001	ALPHA-BHC	0.005	U	µg/L
		3/7/2001	BETA-BHC	0.005	U	µg/L
		3/7/2001	DELTA-BHC	0.005	U	µg/L
		3/7/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/7/2001	HEPTACHLOR	0.005	U	µg/L
		3/7/2001	ALDRIN	0.005	U	µg/L
		3/7/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/7/2001	ENDOSULFAN I	0.005	U	µg/L
		3/7/2001	DIELDRIN	0.01	U	µg/L
		3/7/2001	4,4'-DDE	0.01	U	µg/L
		3/7/2001	ENDRIN	0.01	U	µg/L
		3/7/2001	ENDOSULFAN II	0.01	U	µg/L
		3/7/2001	4,4'-DDD	0.01	U	µg/L
		3/7/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/7/2001	4,4'-DDT	0.01	U	µg/L
		3/7/2001	METHOXYCHLOR	0.05	U	µg/L
		3/7/2001	ENDRIN KETONE	0.01	U	µg/L
		3/7/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/7/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/7/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/7/2001	TOXAPHENE	0.5	U	µg/L
		3/7/2001	AROCLOR-1016	0.1	U	µg/L
		3/7/2001	AROCLOR-1221	0.2	U	µg/L
		3/7/2001	AROCLOR-1232	0.1	U	µg/L
		3/7/2001	AROCLOR-1242	0.1	U	µg/L
		3/7/2001	AROCLOR-1248	0.1	U	µg/L
		3/7/2001	AROCLOR-1254	0.1	U	µg/L
		3/7/2001	AROCLOR-1260	0.1	U	µg/L
		3/7/2001	METHANE	2	J7	µg/L
		3/7/2001	ETHANE	4	U	µg/L
		3/7/2001	ETHENE	3	U	µg/L
		3/7/2001	TOTAL DISSOLVED SOLIDS	2990000		µg/L
		3/7/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/7/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/7/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/7/2001	GROSS ALPHA - RADIOACTIVITY	1.8	U	µg/L
		3/7/2001	GROSS BETA - RADIOACTIVITY	27.3		µg/L
	IR14MW10A	3/8/2001	ANTIMONY	3.9	U1	µg/L
		3/8/2001	ARSENIC	2.5	U	µg/L
		3/8/2001	BARIUM	377		µg/L
		3/8/2001	CADMIUM	0.3	U	µg/L
		3/8/2001	LEAD	1.6	U	µg/L
		3/8/2001	NICKEL	3.2	J	µg/L
		3/8/2001	ALPHA-BHC	0.005	U	µg/L
		3/8/2001	BETA-BHC	0.005	U	µg/L
		3/8/2001	DELTA-BHC	0.005	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-14	IR14MW10A	3/8/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/8/2001	HEPTACHLOR	0.005	U	µg/L
		3/8/2001	ALDRIN	0.005	U	µg/L
		3/8/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/8/2001	ENDOSULFAN I	0.005	U	µg/L
		3/8/2001	DIELDRIN	0.01	U	µg/L
		3/8/2001	4,4'-DDE	0.01	U	µg/L
		3/8/2001	ENDRIN	0.01	U	µg/L
		3/8/2001	ENDOSULFAN II	0.01	U	µg/L
		3/8/2001	4,4'-DDD	0.01	U	µg/L
		3/8/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/8/2001	4,4'-DDT	0.01	U	µg/L
		3/8/2001	METHOXYCHLOR	0.05	U	µg/L
		3/8/2001	ENDRIN KETONE	0.01	U	µg/L
		3/8/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/8/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/8/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/8/2001	TOXAPHENE	0.5	U	µg/L
		3/8/2001	AROCLOR-1016	0.1	U	µg/L
		3/8/2001	AROCLOR-1221	0.2	U	µg/L
		3/8/2001	AROCLOR-1232	0.1	U	µg/L
		3/8/2001	AROCLOR-1242	0.1	U	µg/L
		3/8/2001	AROCLOR-1248	0.1	U	µg/L
		3/8/2001	AROCLOR-1254	0.1	U	µg/L
		3/8/2001	AROCLOR-1260	0.1	U	µg/L
		3/8/2001	PHENOL	1	U	µg/L
		3/8/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/8/2001	2-CHLOROPHENOL	1	U	µg/L
		3/8/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	2-METHYLPHENOL	1	U	µg/L
		3/8/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/8/2001	4-METHYLPHENOL	1	U	µg/L
		3/8/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/8/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/8/2001	NITROBENZENE	1	U	µg/L
		3/8/2001	ISOPHORONE	1	U	µg/L
		3/8/2001	2-NITROPHENOL	1	U	µg/L
		3/8/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/8/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/8/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/8/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	NAPHTHALENE	1	U	µg/L
		3/8/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/8/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/8/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/8/2001	2-METHYLNAPHTHALENE	1	UJ3	µg/L
		3/8/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/8/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/8/2001	2,4,5-TRICHLOROPHENOL	3	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-14	IR14MW10A	3/8/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/8/2001	2-NITROANILINE	3	U	µg/L
		3/8/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/8/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/8/2001	3-NITROANILINE	3	U	µg/L
		3/8/2001	ACENAPHTHENE	1	U	µg/L
		3/8/2001	2,4-DINITROPHENOL	3	U	µg/L
		3/8/2001	DIBENZOFURAN	1	U	µg/L
		3/8/2001	4-NITROPHENOL	3	U	µg/L
		3/8/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/8/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/8/2001	FLUORENE	1	U	µg/L
		3/8/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/8/2001	4-NITROANILINE	3	U	µg/L
		3/8/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/8/2001	4,6-DINITRO-2-METHYLPHENOL	3	U	µg/L
		3/8/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/8/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/8/2001	PENTACHLOROPHENOL	3	U	µg/L
		3/8/2001	PHENANTHRENE	1	U	µg/L
		3/8/2001	ANTHRACENE	1	U	µg/L
		3/8/2001	CARBAZOLE	1	U	µg/L
		3/8/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/8/2001	FLUORANTHENE	1	U	µg/L
		3/8/2001	PYRENE	1	U	µg/L
		3/8/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/8/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/8/2001	CHRYSENE	1	U	µg/L
		3/8/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/8/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/8/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/8/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/8/2001	BENZO(A)PYRENE	1	U	µg/L
		3/8/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/8/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/8/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/8/2001	ACENAPHTHYLENE	1	U	µg/L
		3/8/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/8/2001	CHLOROMETHANE	1	U	µg/L
		3/8/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/8/2001	BROMOMETHANE	1	UJ7	µg/L
		3/8/2001	CHLOROETHANE	1	U	µg/L
		3/8/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/8/2001	ACETONE	5	U	µg/L
		3/8/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/8/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/8/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/8/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/8/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/8/2001	2-BUTANONE	5	U	µg/L
		3/8/2001	BROMOCHLOROMETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-14	IR14MW10A	3/8/2001	CHLOROFORM	1	U	µg/L
		3/8/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/8/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/8/2001	BENZENE	0.5	U	µg/L
		3/8/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/8/2001	TRICHLOROETHENE	1	U	µg/L
		3/8/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/8/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/8/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/8/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/8/2001	TOLUENE	1	U	µg/L
		3/8/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/8/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/8/2001	TETRACHLOROETHENE	1	U	µg/L
		3/8/2001	2-HEXANONE	5	U	µg/L
		3/8/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/8/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/8/2001	CHLOROBENZENE	1	U	µg/L
		3/8/2001	ETHYLBENZENE	1	U	µg/L
		3/8/2001	STYRENE	1	U	µg/L
		3/8/2001	XYLENE (TOTAL)	1	U	µg/L
		3/8/2001	BROMOFORM	1	U	µg/L
		3/8/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/8/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/8/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/8/2001	CARBON DISULFIDE	1	U	µg/L
		3/8/2001	TOTAL DISSOLVED SOLIDS	7330000		µg/L
		3/8/2001	GROSS BETA - RADIOACTIVITY	60		µg/L
		3/8/2001	GROSS ALPHA - RADIOACTIVITY	28	U	µg/L
	IR14MW12A	3/9/2001	ANTIMONY	2.4	U	µg/L
		3/9/2001	ARSENIC	2.5	U	µg/L
		3/9/2001	CADMIUM	0.3	U	µg/L
		3/9/2001	COPPER	3.2	U1	µg/L
		3/9/2001	IRON	48.5	J	µg/L
		3/9/2001	NICKEL	1.3	U	µg/L
		3/9/2001	POTASSIUM	93300		µg/L
		3/9/2001	SODIUM	2090000		µg/L
		3/9/2001	ALPHA-BHC	0.005	U	µg/L
		3/9/2001	BETA-BHC	0.005	U	µg/L
		3/9/2001	DELTA-BHC	0.005	U	µg/L
		3/9/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/9/2001	HEPTACHLOR	0.005	U	µg/L
		3/9/2001	ALDRIN	0.005	U	µg/L
		3/9/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/9/2001	ENDOSULFAN I	0.005	U	µg/L
		3/9/2001	DIELDRIN	0.01	U	µg/L
		3/9/2001	4,4'-DDE	0.01	U	µg/L
		3/9/2001	ENDRIN	0.01	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-14	IR14MW12A	3/9/2001	ENDOSULFAN II	0.01	U	µg/L
		3/9/2001	4,4'-DDD	0.01	U	µg/L
		3/9/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/9/2001	4,4'-DDT	0.01	U	µg/L
		3/9/2001	METHOXYCHLOR	0.05	U	µg/L
		3/9/2001	ENDRIN KETONE	0.01	U	µg/L
		3/9/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/9/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/9/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/9/2001	TOXAPHENE	0.5	U	µg/L
		3/9/2001	AROCLOR-1016	0.1	U	µg/L
		3/9/2001	AROCLOR-1221	0.2	U	µg/L
		3/9/2001	AROCLOR-1232	0.1	U	µg/L
		3/9/2001	AROCLOR-1242	0.1	U	µg/L
		3/9/2001	AROCLOR-1248	0.1	U	µg/L
		3/9/2001	AROCLOR-1254	0.1	U	µg/L
		3/9/2001	AROCLOR-1260	0.1	U	µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	7590000		µg/L
		3/9/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/9/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/9/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/9/2001	GROSS BETA - RADIOACTIVITY	81		µg/L
		3/9/2001	GROSS ALPHA - RADIOACTIVITY	9	U	µg/L
IR-15	IR15MW06A	3/7/2001	ALKALINITY	1000	U	µg/L
		3/7/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/7/2001	ALKALINITY (AS CACO3)	532000		µg/L
		3/7/2001	ALKALINITY, TOTAL (AS CACO3)	532000		µg/L
		3/7/2001	CHLORIDE	1370000		µg/L
		3/7/2001	SULFATE	517000		µg/L
		3/7/2001	NITRATE/NITRITE NITROGEN	20		µg/L
		3/7/2001	NITRITE NITROGEN	5	U	µg/L
		3/7/2001	NITRATE AS N	20		µg/L
		3/7/2001	IRON	178		µg/L
		3/7/2001	LEAD	1.6	U	µg/L
		3/7/2001	MAGNESIUM	59700		µg/L
		3/7/2001	POTASSIUM	55500	J4	µg/L
		3/7/2001	SODIUM	1260000	J4	µg/L
		3/7/2001	THALLIUM	1.9	U	µg/L
		3/7/2001	CALCIUM	33100		µg/L
		3/7/2001	CHLOROMETHANE	1	U	µg/L
		3/7/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/7/2001	BROMOMETHANE	1	UJ7	µg/L
		3/7/2001	CHLOROETHANE	1	U	µg/L
		3/7/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/7/2001	ACETONE	5	U4	µg/L
		3/7/2001	CARBON DISULFIDE	1	U	µg/L
		3/7/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/7/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/7/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/7/2001	1,1-DICHLOROETHANE	1		µg/L
		3/7/2001	CIS-1,2-DICHLOROETHENE	0.2	J	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-15	IR15MW06A	3/7/2001	2-BUTANONE	5	U4	µg/L
		3/7/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	CHLOROFORM	1	U	µg/L
		3/7/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/7/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/7/2001	BENZENE	0.5	U	µg/L
		3/7/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/7/2001	TRICHLOROETHENE	0.4	J	µg/L
		3/7/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/7/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/7/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/7/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/7/2001	TOLUENE	1	U	µg/L
		3/7/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/7/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/7/2001	TETRACHLOROETHENE	1	U	µg/L
		3/7/2001	2-HEXANONE	5	UJ7	µg/L
		3/7/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/7/2001	CHLOROBENZENE	1	U	µg/L
		3/7/2001	ETHYLBENZENE	1	U	µg/L
		3/7/2001	STYRENE	1	U	µg/L
		3/7/2001	XYLENE (TOTAL)	1	U	µg/L
		3/7/2001	BROMOFORM	1	U	µg/L
		3/7/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/7/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/7/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/7/2001	METHANE	410	J7	µg/L
		3/7/2001	ETHANE	4	U	µg/L
		3/7/2001	ETHENE	3	U	µg/L
		3/7/2001	TOTAL DISSOLVED SOLIDS	3780000		µg/L
		3/7/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/7/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/7/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/7/2001	ALKALINITY	1000	U	µg/L
		3/7/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/7/2001	ALKALINITY (AS CACO3)	528000		µg/L
		3/7/2001	ALKALINITY, TOTAL (AS CACO3)	528000		µg/L
		3/7/2001	CHLORIDE	1400000		µg/L
		3/7/2001	SULFATE	514000		µg/L
		3/7/2001	NITRATE/NITRITE NITROGEN	20		µg/L
		3/7/2001	NITRITE NITROGEN	5	U	µg/L
		3/7/2001	NITRATE AS N	20		µg/L
		3/7/2001	CALCIUM	33500		µg/L
		3/7/2001	IRON	185		µg/L
		3/7/2001	MAGNESIUM	60200		µg/L
		3/7/2001	POTASSIUM	53800	J4	µg/L
		3/7/2001	SODIUM	1200000	J4	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-15	IR15MW06A	3/7/2001	CHLOROMETHANE	1	U	µg/L
		3/7/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/7/2001	BROMOMETHANE	1	UJ7	µg/L
		3/7/2001	CHLOROETHANE	1	U	µg/L
		3/7/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/7/2001	ACETONE	5	U	µg/L
		3/7/2001	CARBON DISULFIDE	1	U	µg/L
		3/7/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/7/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/7/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/7/2001	1,1-DICHLOROETHANE	1		µg/L
		3/7/2001	CIS-1,2-DICHLOROETHENE	0.2	J	µg/L
		3/7/2001	2-BUTANONE	5	U4	µg/L
		3/7/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	CHLOROFORM	1	U	µg/L
		3/7/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/7/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/7/2001	BENZENE	0.5	U	µg/L
		3/7/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/7/2001	TRICHLOROETHENE	0.4	J	µg/L
		3/7/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/7/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/7/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/7/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/7/2001	TOLUENE	1	U	µg/L
		3/7/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/7/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/7/2001	TETRACHLOROETHENE	1	U	µg/L
		3/7/2001	2-HEXANONE	5	UJ7	µg/L
		3/7/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/7/2001	CHLOROBENZENE	1	U	µg/L
		3/7/2001	ETHYLBENZENE	1	U	µg/L
		3/7/2001	STYRENE	1	U	µg/L
		3/7/2001	XYLENE (TOTAL)	1	U	µg/L
		3/7/2001	BROMOFORM	1	U	µg/L
		3/7/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/7/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/7/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/7/2001	METHANE	450	J7	µg/L
		3/7/2001	ETHANE	4	U	µg/L
		3/7/2001	ETHENE	3	U	µg/L
	IR15MW07A	3/16/2001	LEAD	1.6	U	µg/L
		3/16/2001	SILVER	1.1	U	µg/L
		3/16/2001	TOTAL DISSOLVED SOLIDS	2890000		µg/L
		3/16/2001	DIESEL RANGE ORGANICS	300	H	µg/L
		3/16/2001	MOTOR OIL RANGE ORGANICS	1000	M	µg/L
		3/16/2001	GASOLINE RANGE ORGANICS	50	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-15	IR15MW07A	3/16/2001	GROSS ALPHA - RADIOACTIVITY	-2.8	U	µg/L
		3/16/2001	GROSS BETA - RADIOACTIVITY	56		µg/L
	IR15MW08A	3/8/2001	ALKALINITY	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	456000		µg/L
		3/8/2001	ALKALINITY, TOTAL (AS CACO3)	456000		µg/L
		3/8/2001	CHLORIDE	211000		µg/L
		3/8/2001	SULFATE	521000		µg/L
		3/8/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/8/2001	CALCIUM	141000		µg/L
		3/8/2001	IRON	116	U1	µg/L
		3/8/2001	MAGNESIUM	76100		µg/L
		3/8/2001	POTASSIUM	24200		µg/L
		3/8/2001	SODIUM	302000	J4	µg/L
		3/8/2001	PHENOL	1	U	µg/L
		3/8/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/8/2001	2-CHLOROPHENOL	1	U	µg/L
		3/8/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	2-METHYLPHENOL	1	U	µg/L
		3/8/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/8/2001	4-METHYLPHENOL	1	U	µg/L
		3/8/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/8/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/8/2001	NITROBENZENE	1	U	µg/L
		3/8/2001	ISOPHORONE	1	U	µg/L
		3/8/2001	2-NITROPHENOL	1	U	µg/L
		3/8/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/8/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/8/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/8/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	NAPHTHALENE	1	U	µg/L
		3/8/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/8/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/8/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/8/2001	2-METHYLNAPHTHALENE	1	UJ3	µg/L
		3/8/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/8/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/8/2001	2,4,5-TRICHLOROPHENOL	3	U	µg/L
		3/8/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/8/2001	2-NITROANILINE	3	U	µg/L
		3/8/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/8/2001	ACENAPHTHYLENE	1	U	µg/L
		3/8/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/8/2001	3-NITROANILINE	3	U	µg/L
		3/8/2001	ACENAPHTHENE	1	U	µg/L
		3/8/2001	2,4-DINITROPHENOL	3	U	µg/L
		3/8/2001	DIBENZOFURAN	1	U	µg/L
		3/8/2001	4-NITROPHENOL	3	U	µg/L
		3/8/2001	2,4-DINITROTOLUENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-15	IR15MW08A	3/8/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/8/2001	FLUORENE	1	U	µg/L
		3/8/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/8/2001	4-NITROANILINE	3	U	µg/L
		3/8/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/8/2001	4,6-DINITRO-2-METHYLPHENOL	3	U	µg/L
		3/8/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/8/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/8/2001	PENTACHLOROPHENOL	3	U	µg/L
		3/8/2001	PHENANTHRENE	1	U	µg/L
		3/8/2001	ANTHRACENE	1	U	µg/L
		3/8/2001	CARBAZOLE	1	U	µg/L
		3/8/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/8/2001	FLUORANTHENE	1	U	µg/L
		3/8/2001	PYRENE	1	U	µg/L
		3/8/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/8/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/8/2001	CHRYSENE	1	U	µg/L
		3/8/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U4	µg/L
		3/8/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/8/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/8/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/8/2001	BENZO(A)PYRENE	1	U	µg/L
		3/8/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/8/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/8/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/8/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/8/2001	METHANE	400	J7	µg/L
		3/8/2001	ETHANE	4	UJ7	µg/L
		3/8/2001	ETHENE	3	UJ7	µg/L
		3/8/2001	TOTAL DISSOLVED SOLIDS	1830000		µg/L
		3/8/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/8/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/8/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/8/2001	GROSS BETA - RADIOACTIVITY	25.2		µg/L
		3/8/2001	GROSS ALPHA - RADIOACTIVITY	-0.6	U	µg/L
	IR15MW09F	3/9/2001	CHLOROMETHANE	1	U	µg/L
		3/9/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/9/2001	BROMOMETHANE	1	UJ7	µg/L
		3/9/2001	CHLOROETHANE	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/9/2001	ACETONE	5	U	µg/L
		3/9/2001	CARBON DISULFIDE	1	U	µg/L
		3/9/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/9/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/9/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	2-BUTANONE	5	U	µg/L
		3/9/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	CHLOROFORM	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-15	IR15MW09F	3/9/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/9/2001	BENZENE	0.5	U	µg/L
		3/9/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/9/2001	TRICHLOROETHENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/9/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/9/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/9/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/9/2001	TOLUENE	1	U	µg/L
		3/9/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/9/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	TETRACHLOROETHENE	1	U	µg/L
		3/9/2001	2-HEXANONE	5	U	µg/L
		3/9/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/9/2001	CHLOROBENZENE	1	U	µg/L
		3/9/2001	ETHYLBENZENE	1	U	µg/L
		3/9/2001	STYRENE	1	U	µg/L
		3/9/2001	XYLENE (TOTAL)	1	U	µg/L
		3/9/2001	BROMOFORM	1	U	µg/L
		3/9/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/9/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/9/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	2440000		µg/L
		3/9/2001	GROSS ALPHA - RADIOACTIVITY	-0.3	U	µg/L
		3/9/2001	GROSS BETA - RADIOACTIVITY	16.3		µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	2450000		µg/L
	IR15MW10F	3/9/2001	ANTIMONY	3.6	U1	µg/L
		3/9/2001	ARSENIC	6.5	U1	µg/L
		3/9/2001	CADMIUM	0.3	U	µg/L
		3/9/2001	COPPER	1.7	U1	µg/L
		3/9/2001	IRON	543		µg/L
		3/9/2001	NICKEL	4.3	J	µg/L
		3/9/2001	POTASSIUM	112000		µg/L
		3/9/2001	SODIUM	194	U	µg/L
		3/9/2001	CHLOROMETHANE	1	UJ7	µg/L
		3/9/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/9/2001	BROMOMETHANE	1	U	µg/L
		3/9/2001	CHLOROETHANE	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/9/2001	ACETONE	5	R7	µg/L
		3/9/2001	CARBON DISULFIDE	1	U	µg/L
		3/9/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/9/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/9/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-15	IR15MW10F	3/9/2001	2-BUTANONE	5	UJ7	µg/L
		3/9/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	CHLOROFORM	1	U	µg/L
		3/9/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/9/2001	BENZENE	0.5	U	µg/L
		3/9/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/9/2001	TRICHLOROETHENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/9/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/9/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/9/2001	4-METHYL-2-PENTANONE	5	UJ7	µg/L
		3/9/2001	TOLUENE	1	U	µg/L
		3/9/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/9/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	TETRACHLOROETHENE	1	U	µg/L
		3/9/2001	2-HEXANONE	5	UJ7	µg/L
		3/9/2001	DIBROMOCHLOROMETHANE	1	UJ7	µg/L
		3/9/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/9/2001	CHLOROBENZENE	1	U	µg/L
		3/9/2001	ETHYLBENZENE	1	U	µg/L
		3/9/2001	STYRENE	1	U	µg/L
		3/9/2001	XYLENE (TOTAL)	1	U	µg/L
		3/9/2001	BROMOFORM	1	UJ7	µg/L
		3/9/2001	1,1,2,2-TETRACHLOROETHANE	1	UJ7	µg/L
		3/9/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	UJ7	µg/L
		3/9/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	8390000		µg/L
IR-36	IR36MW11A	3/7/2001	ALPHA-BHC	0.005	UJ7	µg/L
		3/7/2001	BETA-BHC	0.005	U	µg/L
		3/7/2001	DELTA-BHC	0.005	UJ97	µg/L
		3/7/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/7/2001	HEPTACHLOR	0.005	U	µg/L
		3/7/2001	ALDRIN	0.005	U	µg/L
		3/7/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/7/2001	ENDOSULFAN I	0.005	U	µg/L
		3/7/2001	DIELDRIN	0.01	U	µg/L
		3/7/2001	4,4'-DDE	0.01	U	µg/L
		3/7/2001	ENDRIN	0.01	U	µg/L
		3/7/2001	ENDOSULFAN II	0.01	U	µg/L
		3/7/2001	4,4'-DDD	0.01	U	µg/L
		3/7/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/7/2001	4,4'-DDT	0.01	UJ7	µg/L
		3/7/2001	METHOXYCHLOR	0.05	U	µg/L
		3/7/2001	ENDRIN KETONE	0.01	U	µg/L
		3/7/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/7/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/7/2001	GAMMA-CHLORDANE	0.005	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW11A	3/7/2001	TOXAPHENE	0.5	U	µg/L
		3/7/2001	AROCLOR-1016	0.1	U	µg/L
		3/7/2001	AROCLOR-1221	0.2	U	µg/L
		3/7/2001	AROCLOR-1232	0.1	U	µg/L
		3/7/2001	AROCLOR-1242	0.1	U	µg/L
		3/7/2001	AROCLOR-1248	0.1	U	µg/L
		3/7/2001	AROCLOR-1254	0.1	U	µg/L
		3/7/2001	AROCLOR-1260	0.1	U	µg/L
		3/7/2001	CHLOROMETHANE	2	J30	µg/L
		3/7/2001	VINYL CHLORIDE	0.5	UJ0	µg/L
		3/7/2001	BROMOMETHANE	1	UJ70	µg/L
		3/7/2001	CHLOROETHANE	1	UJ0	µg/L
		3/7/2001	1,1-DICHLOROETHENE	1	UJ0	µg/L
		3/7/2001	ACETONE	5	UJ0	µg/L
		3/7/2001	CARBON DISULFIDE	1	U230	µg/L
		3/7/2001	METHYLENE CHLORIDE	2	UJ0	µg/L
		3/7/2001	TRANS-1,2-DICHLOROETHENE	1	UJ0	µg/L
		3/7/2001	TERT-BUTYL METHYL ETHER	1	UJ0	µg/L
		3/7/2001	1,1-DICHLOROETHANE	1	UJ0	µg/L
		3/7/2001	CIS-1,2-DICHLOROETHENE	1	J30	µg/L
		3/7/2001	2-BUTANONE	5	UJ0	µg/L
		3/7/2001	BROMOCHLOROMETHANE	1	UJ0	µg/L
		3/7/2001	CHLOROFORM	5	J30	µg/L
		3/7/2001	1,1,1-TRICHLOROETHANE	1	UJ0	µg/L
		3/7/2001	CARBON TETRACHLORIDE	0.4	J30	µg/L
		3/7/2001	BENZENE	0.5	UJ0	µg/L
		3/7/2001	1,2-DICHLOROETHANE	0.5	UJ0	µg/L
		3/7/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/7/2001	BROMODICHLOROMETHANE	1	UJ0	µg/L
		3/7/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/7/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/7/2001	TOLUENE	1	U	µg/L
		3/7/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/7/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/7/2001	TETRACHLOROETHENE	1	U	µg/L
		3/7/2001	2-HEXANONE	5	U	µg/L
		3/7/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/7/2001	CHLOROBENZENE	1	U	µg/L
		3/7/2001	ETHYLBENZENE	1	U	µg/L
		3/7/2001	STYRENE	1	U	µg/L
		3/7/2001	XYLENE (TOTAL)	1	U	µg/L
		3/7/2001	BROMOFORM	1	U	µg/L
		3/7/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/7/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/7/2001	1,2,4-TRICHLOROBENZENE	0.8	J3	µg/L
		3/7/2001	TOTAL DISSOLVED SOLIDS	3410000		µg/L
		3/7/2001	DIESEL RANGE ORGANICS	100	Z	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW11A	3/7/2001	MOTOR OIL RANGE ORGANICS	1000	Z	µg/L
		3/7/2001	GASOLINE RANGE ORGANICS	70	Z	µg/L
		3/7/2001	TRICHLOROETHENE	200		µg/L
		3/7/2001	GROSS ALPHA - RADIOACTIVITY	4.7	U	µg/L
		3/7/2001	GROSS BETA - RADIOACTIVITY	23.3		µg/L
		3/7/2001	ALPHA-BHC	0.005	UJ7	µg/L
		3/7/2001	BETA-BHC	0.005	U	µg/L
		3/7/2001	DELTA-BHC	0.005	UJ97	µg/L
		3/7/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/7/2001	HEPTACHLOR	0.005	U	µg/L
		3/7/2001	ALDRIN	0.005	U	µg/L
		3/7/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/7/2001	ENDOSULFAN I	0.005	U	µg/L
		3/7/2001	DIELDRIN	0.01	U	µg/L
		3/7/2001	4,4'-DDE	0.01	U	µg/L
		3/7/2001	ENDRIN	0.01	U	µg/L
		3/7/2001	ENDOSULFAN II	0.01	U	µg/L
		3/7/2001	4,4'-DDD	0.01	U	µg/L
		3/7/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/7/2001	4,4'-DDT	0.01	UJ7	µg/L
		3/7/2001	METHOXYCHLOR	0.05	U	µg/L
		3/7/2001	ENDRIN KETONE	0.01	U	µg/L
		3/7/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/7/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/7/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/7/2001	TOXAPHENE	0.5	U	µg/L
		3/7/2001	AROCLOR-1016	0.1	U	µg/L
		3/7/2001	AROCLOR-1221	0.2	U	µg/L
		3/7/2001	AROCLOR-1232	0.1	U	µg/L
		3/7/2001	AROCLOR-1242	0.1	U	µg/L
		3/7/2001	AROCLOR-1248	0.1	U	µg/L
		3/7/2001	AROCLOR-1254	0.1	U	µg/L
		3/7/2001	AROCLOR-1260	0.1	U	µg/L
		3/7/2001	CHLOROMETHANE	3	J30	µg/L
		3/7/2001	VINYL CHLORIDE	0.5	UJ0	µg/L
		3/7/2001	BROMOMETHANE	1	UJ70	µg/L
		3/7/2001	CHLOROETHANE	1	UJ0	µg/L
		3/7/2001	1,1-DICHLOROETHENE	1	UJ0	µg/L
		3/7/2001	ACETONE	12	U430	µg/L
		3/7/2001	CARBON DISULFIDE	1	UJ0	µg/L
		3/7/2001	METHYLENE CHLORIDE	2	UJ0	µg/L
		3/7/2001	TRANS-1,2-DICHLOROETHENE	1	UJ0	µg/L
		3/7/2001	TERT-BUTYL METHYL ETHER	1	UJ0	µg/L
		3/7/2001	1,1-DICHLOROETHANE	1	UJ0	µg/L
		3/7/2001	CIS-1,2-DICHLOROETHENE	1	J30	µg/L
		3/7/2001	2-BUTANONE	5	U430	µg/L
		3/7/2001	BROMOCHLOROMETHANE	1	UJ0	µg/L
		3/7/2001	CHLOROFORM	5	J30	µg/L
		3/7/2001	1,1,1-TRICHLOROETHANE	1	UJ0	µg/L
		3/7/2001	CARBON TETRACHLORIDE	0.3	J30	µg/L
		3/7/2001	BENZENE	0.5	UJ0	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW11A	3/7/2001	1,2-DICHLOROETHANE	0.5	UJ0	µg/L
		3/7/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/7/2001	BROMODICHLOROMETHANE	1	UJ0	µg/L
		3/7/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/7/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/7/2001	TOLUENE	1	U	µg/L
		3/7/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/7/2001	1,1,2-TRICHLOROETHANE	0.5	J3	µg/L
		3/7/2001	TETRACHLOROETHENE	1	U	µg/L
		3/7/2001	2-HEXANONE	5	UJ7	µg/L
		3/7/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/7/2001	CHLOROBENZENE	1	U	µg/L
		3/7/2001	ETHYLBENZENE	1	U	µg/L
		3/7/2001	STYRENE	1	U	µg/L
		3/7/2001	XYLENE (TOTAL)	1	U	µg/L
		3/7/2001	BROMOFORM	1	U	µg/L
		3/7/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/7/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/7/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/7/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/7/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/7/2001	GASOLINE RANGE ORGANICS	70	Z	µg/L
		3/7/2001	TRICHLOROETHENE	210		µg/L
		3/7/2001	GROSS BETA - RADIOACTIVITY	-0.4	U	µg/L
		3/7/2001	GROSS ALPHA - RADIOACTIVITY	0.4	U	µg/L
	IR36MW12A	3/7/2001	CHLOROMETHANE	1	U	µg/L
		3/7/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/7/2001	BROMOMETHANE	1	UJ7	µg/L
		3/7/2001	CHLOROETHANE	1	U	µg/L
		3/7/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/7/2001	ACETONE	5	U	µg/L
		3/7/2001	CARBON DISULFIDE	1	U2	µg/L
		3/7/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/7/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/7/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/7/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/7/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/7/2001	2-BUTANONE	5	U	µg/L
		3/7/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	CHLOROFORM	1	U	µg/L
		3/7/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/7/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/7/2001	BENZENE	0.5	U	µg/L
		3/7/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/7/2001	TRICHLOROETHENE	1	U	µg/L
		3/7/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/7/2001	BROMODICHLOROMETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW12A	3/7/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/7/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/7/2001	TOLUENE	1	U	µg/L
		3/7/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/7/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/7/2001	TETRACHLOROETHENE	1	U	µg/L
		3/7/2001	2-HEXANONE	5	UJ7	µg/L
		3/7/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/7/2001	CHLOROBENZENE	1	U	µg/L
		3/7/2001	ETHYLBENZENE	1	U	µg/L
		3/7/2001	STYRENE	1	U	µg/L
		3/7/2001	XYLENE (TOTAL)	1	U	µg/L
		3/7/2001	BROMOFORM	1	U	µg/L
		3/7/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/7/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/7/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/7/2001	TOTAL DISSOLVED SOLIDS	1400000		µg/L
	IR36MW14A	3/8/2001	ALKALINITY	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	630000		µg/L
		3/8/2001	ALKALINITY, TOTAL (AS CACO3)	630000		µg/L
		3/8/2001	CHLORIDE	1180000		µg/L
		3/8/2001	SULFATE	147000		µg/L
		3/8/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/8/2001	CALCIUM	37200		µg/L
		3/8/2001	MAGNESIUM	109000		µg/L
		3/8/2001	POTASSIUM	44800		µg/L
		3/8/2001	SODIUM	918000	J4	µg/L
		3/8/2001	IRON	39.7	U1	µg/L
		3/8/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/8/2001	BROMOMETHANE	1	UJ7	µg/L
		3/8/2001	CHLOROETHANE	1	U	µg/L
		3/8/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/8/2001	ACETONE	5	U	µg/L
		3/8/2001	CARBON DISULFIDE	1	U	µg/L
		3/8/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/8/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/8/2001	TERT-BUTYL METHYL ETHER	6		µg/L
		3/8/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/8/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/8/2001	2-BUTANONE	5	U	µg/L
		3/8/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/8/2001	CHLOROFORM	1	U	µg/L
		3/8/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/8/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/8/2001	BENZENE	0.5	U	µg/L
		3/8/2001	1,2-DICHLOROETHANE	0.5	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW14A	3/8/2001	TRICHLOROETHENE	1	U	µg/L
		3/8/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/8/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/8/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/8/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/8/2001	TOLUENE	1	U	µg/L
		3/8/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/8/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/8/2001	TETRACHLOROETHENE	1	U	µg/L
		3/8/2001	2-HEXANONE	5	U	µg/L
		3/8/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/8/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/8/2001	CHLOROBENZENE	1	U	µg/L
		3/8/2001	ETHYLBENZENE	1	U	µg/L
		3/8/2001	STYRENE	1	U	µg/L
		3/8/2001	XYLENE (TOTAL)	1	U	µg/L
		3/8/2001	BROMOFORM	1	U	µg/L
		3/8/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/8/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/8/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/8/2001	CHLOROMETHANE	1	U	µg/L
		3/8/2001	METHANE	110	J7	µg/L
		3/8/2001	ETHANE	4	UJ7	µg/L
		3/8/2001	ETHENE	3	UJ7	µg/L
		3/8/2001	TOTAL DISSOLVED SOLIDS	2880000		µg/L
		3/8/2001	ALKALINITY	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	660000		µg/L
		3/8/2001	ALKALINITY, TOTAL (AS CACO3)	660000		µg/L
		3/8/2001	CHLORIDE	1100000		µg/L
		3/8/2001	SULFATE	155000		µg/L
		3/8/2001	NITRATE/NITRITE NITROGEN	10		µg/L
		3/8/2001	CALCIUM	38400		µg/L
		3/8/2001	IRON	27	U1	µg/L
		3/8/2001	MAGNESIUM	110000		µg/L
		3/8/2001	POTASSIUM	45100		µg/L
		3/8/2001	SODIUM	921000	J4	µg/L
		3/8/2001	CHLOROMETHANE	1	U	µg/L
		3/8/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/8/2001	BROMOMETHANE	1	UJ7	µg/L
		3/8/2001	CHLOROETHANE	1	U	µg/L
		3/8/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/8/2001	ACETONE	5	U	µg/L
		3/8/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/8/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/8/2001	TERT-BUTYL METHYL ETHER	6		µg/L
		3/8/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/8/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW14A	3/8/2001	2-BUTANONE	5	U	µg/L
		3/8/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/8/2001	CHLOROFORM	1	U	µg/L
		3/8/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/8/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/8/2001	BENZENE	0.5	U	µg/L
		3/8/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/8/2001	TRICHLOROETHENE	1	U	µg/L
		3/8/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/8/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/8/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/8/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/8/2001	TOLUENE	1	U2	µg/L
		3/8/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/8/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/8/2001	TETRACHLOROETHENE	1	U	µg/L
		3/8/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/8/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/8/2001	CHLOROBENZENE	1	U	µg/L
		3/8/2001	ETHYLBENZENE	1	U	µg/L
		3/8/2001	STYRENE	1	U	µg/L
		3/8/2001	XYLENE (TOTAL)	1	U	µg/L
		3/8/2001	BROMOFORM	1	U	µg/L
		3/8/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/8/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/8/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/8/2001	CARBON DISULFIDE	0.2	J	µg/L
		3/8/2001	2-HEXANONE	5	U	µg/L
		3/8/2001	METHANE	120	J7	µg/L
		3/8/2001	ETHANE	4	UJ7	µg/L
		3/8/2001	ETHENE	3	UJ7	µg/L
	IR36MW125A	3/6/2001	CHLOROMETHANE	1	U	µg/L
		3/6/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/6/2001	BROMOMETHANE	1	U	µg/L
		3/6/2001	CHLOROETHANE	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/6/2001	ACETONE	5	U4	µg/L
		3/6/2001	CARBON DISULFIDE	1	U	µg/L
		3/6/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/6/2001	TRANS-1,2-DICHLOROETHENE	0.8	J	µg/L
		3/6/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/6/2001	2-BUTANONE	5	U4	µg/L
		3/6/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	CHLOROFORM	1	U	µg/L
		3/6/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/6/2001	BENZENE	0.5	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW125A	3/6/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/6/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/6/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/6/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/6/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/6/2001	TOLUENE	0.5	J	µg/L
		3/6/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/6/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	TETRACHLOROETHENE	1	U	µg/L
		3/6/2001	2-HEXANONE	5	U	µg/L
		3/6/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/6/2001	CHLOROBENZENE	1	U	µg/L
		3/6/2001	ETHYLBENZENE	1	U	µg/L
		3/6/2001	STYRENE	1	U	µg/L
		3/6/2001	XYLENE (TOTAL)	1	U	µg/L
		3/6/2001	BROMOFORM	1	U	µg/L
		3/6/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/6/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/6/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/6/2001	TOTAL DISSOLVED SOLIDS	690000		µg/L
		3/6/2001	CIS-1,2-DICHLOROETHENE	61		µg/L
		3/6/2001	TRICHLOROETHENE	55		µg/L
	IR36MW126A	3/7/2001	CHLOROMETHANE	1	U	µg/L
		3/7/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/7/2001	BROMOMETHANE	1	UJ7	µg/L
		3/7/2001	CHLOROETHANE	1	U	µg/L
		3/7/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/7/2001	ACETONE	5	U	µg/L
		3/7/2001	CARBON DISULFIDE	1	U	µg/L
		3/7/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/7/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/7/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/7/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/7/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/7/2001	2-BUTANONE	5	U	µg/L
		3/7/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	CHLOROFORM	1	U	µg/L
		3/7/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/7/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/7/2001	BENZENE	0.5	U	µg/L
		3/7/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/7/2001	TRICHLOROETHENE	0.5	J	µg/L
		3/7/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/7/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/7/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/7/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/7/2001	TOLUENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW126A	3/7/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/7/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/7/2001	TETRACHLOROETHENE	1	U	µg/L
		3/7/2001	2-HEXANONE	5	UJ7	µg/L
		3/7/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/7/2001	CHLOROBENZENE	1	U	µg/L
		3/7/2001	ETHYLBENZENE	1	U	µg/L
		3/7/2001	STYRENE	1	U	µg/L
		3/7/2001	XYLENE (TOTAL)	1	U	µg/L
		3/7/2001	BROMOFORM	1	U	µg/L
		3/7/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/7/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/7/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/7/2001	TOTAL DISSOLVED SOLIDS	550000		µg/L
		3/7/2001	CHLOROMETHANE	1	U	µg/L
		3/7/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/7/2001	BROMOMETHANE	1	UJ7	µg/L
		3/7/2001	CHLOROETHANE	1	U	µg/L
		3/7/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/7/2001	ACETONE	5	U4	µg/L
		3/7/2001	CARBON DISULFIDE	1	U	µg/L
		3/7/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/7/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/7/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/7/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/7/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/7/2001	2-BUTANONE	5	U4	µg/L
		3/7/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	CHLOROFORM	1	U	µg/L
		3/7/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/7/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/7/2001	BENZENE	0.5	U	µg/L
		3/7/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/7/2001	TRICHLOROETHENE	0.5	J	µg/L
		3/7/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/7/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/7/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/7/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/7/2001	TOLUENE	1	U	µg/L
		3/7/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/7/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/7/2001	TETRACHLOROETHENE	1	U	µg/L
		3/7/2001	2-HEXANONE	5	UJ7	µg/L
		3/7/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/7/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/7/2001	CHLOROBENZENE	1	U	µg/L
		3/7/2001	ETHYLBENZENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW126A	3/7/2001	STYRENE	1	U	µg/L
		3/7/2001	XYLENE (TOTAL)	1	U	µg/L
		3/7/2001	BROMOFORM	1	U	µg/L
		3/7/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/7/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/7/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/7/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/7/2001	TOTAL DISSOLVED SOLIDS	690000		µg/L
	IR36MW127A	3/26/2001	CHLOROMETHANE	1	U	µg/L
		3/26/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/26/2001	BROMOMETHANE	1	U	µg/L
		3/26/2001	CHLOROETHANE	1	U	µg/L
		3/26/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/26/2001	ACETONE	5	R7	µg/L
		3/26/2001	CARBON DISULFIDE	1	U	µg/L
		3/26/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/26/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/26/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/26/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/26/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/26/2001	2-BUTANONE	5	U	µg/L
		3/26/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/26/2001	CHLOROFORM	1	U	µg/L
		3/26/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/26/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/26/2001	BENZENE	0.5	U	µg/L
		3/26/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/26/2001	TRICHLOROETHENE	1	U	µg/L
		3/26/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/26/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/26/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/26/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/26/2001	TOLUENE	1	U	µg/L
		3/26/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/26/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/26/2001	TETRACHLOROETHENE	1	U	µg/L
		3/26/2001	2-HEXANONE	5	U	µg/L
		3/26/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/26/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/26/2001	CHLOROBENZENE	1	U	µg/L
		3/26/2001	ETHYLBENZENE	1	U	µg/L
		3/26/2001	STYRENE	1	U	µg/L
		3/26/2001	XYLENE (TOTAL)	1	U	µg/L
		3/26/2001	BROMOFORM	1	U	µg/L
		3/26/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/26/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/26/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/26/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/26/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW127A	3/26/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/26/2001	TOTAL DISSOLVED SOLIDS	8350000		µg/L
	IR36MW128A	3/6/2001	ALPHA-BHC	0.005	U	µg/L
		3/6/2001	BETA-BHC	0.005	U29	µg/L
		3/6/2001	DELTA-BHC	0.005	U	µg/L
		3/6/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/6/2001	HEPTACHLOR	0.005	U	µg/L
		3/6/2001	ALDRIN	0.005	U	µg/L
		3/6/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/6/2001	ENDOSULFAN I	0.005	U	µg/L
		3/6/2001	DIELDRIN	0.01	U	µg/L
		3/6/2001	4,4'-DDE	0.01	U	µg/L
		3/6/2001	ENDRIN	0.01	U	µg/L
		3/6/2001	ENDOSULFAN II	0.01	U	µg/L
		3/6/2001	4,4'-DDD	0.01	U	µg/L
		3/6/2001	ENDOSULFAN SULFATE	0.01	UJ3	µg/L
		3/6/2001	4,4'-DDT	0.01	U	µg/L
		3/6/2001	METHOXYCHLOR	0.05	U	µg/L
		3/6/2001	ENDRIN KETONE	0.01	U	µg/L
		3/6/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/6/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/6/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/6/2001	TOXAPHENE	0.5	U	µg/L
		3/6/2001	AROCLOR-1016	0.1	U	µg/L
		3/6/2001	AROCLOR-1221	0.2	U	µg/L
		3/6/2001	AROCLOR-1232	0.1	U	µg/L
		3/6/2001	AROCLOR-1242	0.1	U	µg/L
		3/6/2001	AROCLOR-1248	0.1	U	µg/L
		3/6/2001	AROCLOR-1254	0.1	U	µg/L
		3/6/2001	AROCLOR-1260	0.1	U	µg/L
		3/6/2001	CHLOROMETHANE	1	U	µg/L
		3/6/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/6/2001	BROMOMETHANE	1	U	µg/L
		3/6/2001	CHLOROETHANE	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/6/2001	ACETONE	5	U	µg/L
		3/6/2001	CARBON DISULFIDE	1	U2	µg/L
		3/6/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/6/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/6/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/6/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/6/2001	2-BUTANONE	5	U	µg/L
		3/6/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	CHLOROFORM	1	U	µg/L
		3/6/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/6/2001	BENZENE	0.5	U	µg/L
		3/6/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/6/2001	TRICHLOROETHENE	3		µg/L
		3/6/2001	1,2-DICHLOROPROPANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW128A	3/6/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/6/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/6/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/6/2001	TOLUENE	1	U	µg/L
		3/6/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/6/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	TETRACHLOROETHENE	1	U	µg/L
		3/6/2001	2-HEXANONE	5	U	µg/L
		3/6/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/6/2001	CHLOROBENZENE	1	U	µg/L
		3/6/2001	ETHYLBENZENE	1	U	µg/L
		3/6/2001	STYRENE	1	U	µg/L
		3/6/2001	XYLENE (TOTAL)	1	U	µg/L
		3/6/2001	BROMOFORM	1	U	µg/L
		3/6/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/6/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/6/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/6/2001	SALINITY	3.6		µg/L
		3/6/2001	TOTAL DISSOLVED SOLIDS	3050000		µg/L
	IR36MW135A	3/8/2001	CADMIUM	0.3	U	µg/L
		3/8/2001	TOTAL DISSOLVED SOLIDS	1460000		µg/L
	PA36MW04A	3/20/2001	COPPER	3	J	µg/L
		3/20/2001	ALPHA-BHC	0.005	U	µg/L
		3/20/2001	BETA-BHC	0.005	U	µg/L
		3/20/2001	DELTA-BHC	0.005	U	µg/L
		3/20/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/20/2001	HEPTACHLOR	0.005	U	µg/L
		3/20/2001	ALDRIN	0.005	U	µg/L
		3/20/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/20/2001	ENDOSULFAN I	0.005	U	µg/L
		3/20/2001	DIELDRIN	0.01	U	µg/L
		3/20/2001	4,4'-DDE	0.01	U	µg/L
		3/20/2001	ENDRIN	0.01	U	µg/L
		3/20/2001	ENDOSULFAN II	0.01	U	µg/L
		3/20/2001	4,4'-DDD	0.01	U	µg/L
		3/20/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/20/2001	4,4'-DDT	0.01	U	µg/L
		3/20/2001	METHOXYCHLOR	0.05	U	µg/L
		3/20/2001	ENDRIN KETONE	0.01	U	µg/L
		3/20/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/20/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/20/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/20/2001	TOXAPHENE	0.5	U	µg/L
		3/20/2001	AROCLOR-1016	0.1	U	µg/L
		3/20/2001	AROCLOR-1221	0.2	U	µg/L
		3/20/2001	AROCLOR-1232	0.1	U	µg/L
		3/20/2001	AROCLOR-1242	0.1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	PA36MW04A	3/20/2001	AROCLOR-1248	0.1	U	µg/L
		3/20/2001	AROCLOR-1254	0.1	U	µg/L
		3/20/2001	AROCLOR-1260	0.1	U	µg/L
		3/20/2001	CHLOROMETHANE	1	U	µg/L
		3/20/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/20/2001	BROMOMETHANE	1	U	µg/L
		3/20/2001	CHLOROETHANE	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/20/2001	CARBON DISULFIDE	1	U	µg/L
		3/20/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/20/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/20/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/20/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/20/2001	2-BUTANONE	5	U	µg/L
		3/20/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	CHLOROFORM	1	U	µg/L
		3/20/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/20/2001	BENZENE	0.5	U	µg/L
		3/20/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/20/2001	TRICHLOROETHENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/20/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/20/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/20/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/20/2001	TOLUENE	1	U	µg/L
		3/20/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/20/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/20/2001	2-HEXANONE	5	U	µg/L
		3/20/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/20/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/20/2001	CHLOROBENZENE	1	U	µg/L
		3/20/2001	ETHYLBENZENE	1	U	µg/L
		3/20/2001	STYRENE	1	U	µg/L
		3/20/2001	XYLENE (TOTAL)	1	U	µg/L
		3/20/2001	BROMOFORM	1	UJ7	µg/L
		3/20/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/20/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/20/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/20/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/20/2001	ACETONE	5	R7	µg/L
		3/20/2001	TETRACHLOROETHENE	1	U	µg/L
		3/20/2001	TOTAL DISSOLVED SOLIDS	15400000		µg/L
	PA36MW07A	3/12/2001	ALPHA-BHC	0.005	U	µg/L
		3/12/2001	BETA-BHC	0.005	U	µg/L
		3/12/2001	DELTA-BHC	0.005	U	µg/L
		3/12/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/12/2001	HEPTACHLOR	0.005	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	PA36MW07A	3/12/2001	ALDRIN	0.005	U	µg/L
		3/12/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/12/2001	ENDOSULFAN I	0.005	U	µg/L
		3/12/2001	DIELDRIN	0.01	U	µg/L
		3/12/2001	4,4'-DDE	0.01	U	µg/L
		3/12/2001	ENDRIN	0.01	U	µg/L
		3/12/2001	ENDOSULFAN II	0.01	U	µg/L
		3/12/2001	4,4'-DDD	0.01	U	µg/L
		3/12/2001	ENDOSULFAN SULFATE	0.01	UJ3	µg/L
		3/12/2001	4,4'-DDT	0.01	U	µg/L
		3/12/2001	METHOXYCHLOR	0.05	U	µg/L
		3/12/2001	ENDRIN KETONE	0.01	U	µg/L
		3/12/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/12/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/12/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/12/2001	TOXAPHENE	0.5	U	µg/L
		3/12/2001	AROCLOR-1016	0.1	U	µg/L
		3/12/2001	AROCLOR-1221	0.2	U	µg/L
		3/12/2001	AROCLOR-1232	0.1	U	µg/L
		3/12/2001	AROCLOR-1242	0.1	U	µg/L
		3/12/2001	AROCLOR-1248	0.1	U	µg/L
		3/12/2001	AROCLOR-1254	0.1	U	µg/L
		3/12/2001	AROCLOR-1260	0.1	U	µg/L
		3/12/2001	CHLOROMETHANE	1	UJ7	µg/L
		3/12/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/12/2001	BROMOMETHANE	1	U	µg/L
		3/12/2001	CHLOROETHANE	1	U	µg/L
		3/12/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/12/2001	ACETONE	5	U47	µg/L
		3/12/2001	CARBON DISULFIDE	1	U	µg/L
		3/12/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/12/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/12/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/12/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/12/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/12/2001	2-BUTANONE	5	U47	µg/L
		3/12/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/12/2001	CHLOROFORM	1	U	µg/L
		3/12/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/12/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/12/2001	BENZENE	0.5	U	µg/L
		3/12/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/12/2001	TRICHLOROETHENE	1	U	µg/L
		3/12/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/12/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/12/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/12/2001	4-METHYL-2-PENTANONE	5	UJ7	µg/L
		3/12/2001	TOLUENE	1	U	µg/L
		3/12/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/12/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/12/2001	TETRACHLOROETHENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	PA36MW07A	3/12/2001	2-HEXANONE	5	UJ7	µg/L
		3/12/2001	DIBROMOCHLOROMETHANE	1	UJ7	µg/L
		3/12/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/12/2001	CHLOROBENZENE	1	U	µg/L
		3/12/2001	ETHYLBENZENE	1	U	µg/L
		3/12/2001	STYRENE	1	U	µg/L
		3/12/2001	XYLENE (TOTAL)	1	U	µg/L
		3/12/2001	BROMOFORM	1	UJ7	µg/L
		3/12/2001	1,1,2,2-TETRACHLOROETHANE	1	UJ7	µg/L
		3/12/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/12/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	UJ7	µg/L
		3/12/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/12/2001	TOTAL DISSOLVED SOLIDS	7060000		µg/L
	PA36MW08A	3/8/2001	ALKALINITY	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	490000		µg/L
		3/8/2001	ALKALINITY, TOTAL (AS CACO3)	490000		µg/L
		3/8/2001	CHLORIDE	63700		µg/L
		3/8/2001	SULFATE	96600		µg/L
		3/8/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/8/2001	CALCIUM	43300		µg/L
		3/8/2001	IRON	98.4	U1	µg/L
		3/8/2001	MAGNESIUM	95600		µg/L
		3/8/2001	POTASSIUM	1980	U1	µg/L
		3/8/2001	SODIUM	99700	J4	µg/L
		3/8/2001	PHENOL	1	U	µg/L
		3/8/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/8/2001	2-CHLOROPHENOL	1	U	µg/L
		3/8/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	2-METHYLPHENOL	1	U	µg/L
		3/8/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/8/2001	4-METHYLPHENOL	1	U	µg/L
		3/8/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/8/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/8/2001	NITROBENZENE	1	U	µg/L
		3/8/2001	ISOPHORONE	1	U	µg/L
		3/8/2001	2-NITROPHENOL	1	U	µg/L
		3/8/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/8/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/8/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/8/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/8/2001	NAPHTHALENE	1	U	µg/L
		3/8/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/8/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/8/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/8/2001	2-METHYLNAPHTHALENE	1	UJ3	µg/L
		3/8/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	PA36MW08A	3/8/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/8/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/8/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/8/2001	2-NITROANILINE	2	U	µg/L
		3/8/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/8/2001	ACENAPHTHYLENE	1	U	µg/L
		3/8/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/8/2001	3-NITROANILINE	2	U	µg/L
		3/8/2001	ACENAPHTHENE	1	U	µg/L
		3/8/2001	2,4-DINITROPHENOL	2	U	µg/L
		3/8/2001	DIBENZOFURAN	1	U	µg/L
		3/8/2001	4-NITROPHENOL	2	U	µg/L
		3/8/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/8/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/8/2001	FLUORENE	1	U	µg/L
		3/8/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/8/2001	4-NITROANILINE	2	U	µg/L
		3/8/2001	4,6-DINITRO-2-METHYLPHENOL	2	UJ1	µg/L
		3/8/2001	4-BROMOPHENYL-PHENYLETHER	1	UJ1	µg/L
		3/8/2001	HEXACHLOROBENZENE	1	UJ1	µg/L
		3/8/2001	PENTACHLOROPHENOL	2	UJ1	µg/L
		3/8/2001	PHENANTHRENE	1	UJ1	µg/L
		3/8/2001	ANTHRACENE	1	UJ1	µg/L
		3/8/2001	CARBAZOLE	1	UJ1	µg/L
		3/8/2001	DI-N-BUTYLPHTHALATE	1	UJ1	µg/L
		3/8/2001	FLUORANTHENE	1	UJ1	µg/L
		3/8/2001	PYRENE	1	UJ1	µg/L
		3/8/2001	BUTYLBENZYLPHTHALATE	1	UJ1	µg/L
		3/8/2001	BENZO(A)ANTHRACENE	1	UJ1	µg/L
		3/8/2001	3,3'-DICHLOROBENZIDINE	1	UJ1	µg/L
		3/8/2001	CHRYSENE	1	UJ1	µg/L
		3/8/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U41	µg/L
		3/8/2001	DI-N-OCTYLPHTHALATE	1	UJ1	µg/L
		3/8/2001	BENZO(B)FLUORANTHENE	1	UJ1	µg/L
		3/8/2001	BENZO(K)FLUORANTHENE	1	UJ1	µg/L
		3/8/2001	BENZO(A)PYRENE	1	UJ1	µg/L
		3/8/2001	INDENO(1,2,3-CD)PYRENE	1	UJ1	µg/L
		3/8/2001	DIBENZ(A,H)ANTHRACENE	1	UJ1	µg/L
		3/8/2001	BENZO(G,H,I)PERYLENE	1	UJ1	µg/L
		3/8/2001	N-NITROSODIPHENYLAMINE	1	UJ1	µg/L
		3/8/2001	ETHANE	4	UJ7	µg/L
		3/8/2001	ETHENE	3	UJ7	µg/L
		3/8/2001	TOTAL DISSOLVED SOLIDS	940000		µg/L
		3/8/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/8/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/8/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/8/2001	METHANE	12000	J7	µg/L
	IR36MW120B	3/22/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/22/2001	XYLENE (TOTAL)	1	U	µg/L
		3/22/2001	BROMOFORM	1	U	µg/L
		3/22/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW120B	3/22/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/22/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/22/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/22/2001	STYRENE	1	U	µg/L
		3/22/2001	CHLOROFORM	1	U	µg/L
		3/22/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/22/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/22/2001	BENZENE	0.5	U	µg/L
		3/22/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/22/2001	TRICHLOROETHENE	1	U	µg/L
		3/22/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/22/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/22/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/22/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/22/2001	TOLUENE	1	U	µg/L
		3/22/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/22/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/22/2001	TETRACHLOROETHENE	1	U	µg/L
		3/22/2001	2-HEXANONE	5	U	µg/L
		3/22/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/22/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/22/2001	CHLOROBENZENE	1	U	µg/L
		3/22/2001	ETHYLBENZENE	1	U	µg/L
		3/22/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/22/2001	CHLOROMETHANE	1	U	µg/L
		3/22/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/22/2001	BROMOMETHANE	1	U	µg/L
		3/22/2001	CHLOROETHANE	1	U	µg/L
		3/22/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/22/2001	ACETONE	5	R7	µg/L
		3/22/2001	CARBON DISULFIDE	1	U	µg/L
		3/22/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/22/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/22/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/22/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/22/2001	2-BUTANONE	5	U	µg/L
		3/22/2001	TOTAL DISSOLVED SOLIDS	1500000		µg/L
		3/22/2001	TOTAL DISSOLVED SOLIDS	1470000		µg/L
	IR36MW123B	3/6/2001	CHLOROMETHANE	1	U	µg/L
		3/6/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/6/2001	BROMOMETHANE	1	U	µg/L
		3/6/2001	CHLOROETHANE	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/6/2001	ACETONE	5	U	µg/L
		3/6/2001	CARBON DISULFIDE	1	U	µg/L
		3/6/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/6/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/6/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHANE	1	U	µg/L

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PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW123B	3/6/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/6/2001	2-BUTANONE	5	U	µg/L
		3/6/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	CHLOROFORM	1	U	µg/L
		3/6/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/6/2001	BENZENE	0.5	U	µg/L
		3/6/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/6/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/6/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/6/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/6/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/6/2001	TOLUENE	1	U	µg/L
		3/6/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/6/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	TETRACHLOROETHENE	1	U	µg/L
		3/6/2001	2-HEXANONE	5	U	µg/L
		3/6/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/6/2001	CHLOROBENZENE	1	U	µg/L
		3/6/2001	ETHYLBENZENE	1	U	µg/L
		3/6/2001	STYRENE	1	U	µg/L
		3/6/2001	XYLENE (TOTAL)	1	U	µg/L
		3/6/2001	BROMOFORM	1	U	µg/L
		3/6/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/6/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/6/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/6/2001	TRICHLOROETHENE	1	U	µg/L
		3/6/2001	TOTAL DISSOLVED SOLIDS	1060000		µg/L
		3/6/2001	CHLOROMETHANE	1	U	µg/L
		3/6/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/6/2001	BROMOMETHANE	1	U	µg/L
		3/6/2001	CHLOROETHANE	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/6/2001	ACETONE	5	U	µg/L
		3/6/2001	CARBON DISULFIDE	1	U	µg/L
		3/6/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/6/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/6/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/6/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/6/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/6/2001	2-BUTANONE	5	U	µg/L
		3/6/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	CHLOROFORM	1	U	µg/L
		3/6/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/6/2001	BENZENE	0.5	U	µg/L
		3/6/2001	1,2-DICHLOROETHANE	0.5	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW123B	3/6/2001	TRICHLOROETHENE	1	U	µg/L
		3/6/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/6/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/6/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/6/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/6/2001	TOLUENE	1	U	µg/L
		3/6/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/6/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/6/2001	TETRACHLOROETHENE	1	U	µg/L
		3/6/2001	2-HEXANONE	5	U	µg/L
		3/6/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/6/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/6/2001	CHLOROBENZENE	1	U	µg/L
		3/6/2001	ETHYLBENZENE	1	U	µg/L
		3/6/2001	STYRENE	1	U	µg/L
		3/6/2001	XYLENE (TOTAL)	1	U	µg/L
		3/6/2001	BROMOFORM	1	U	µg/L
		3/6/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/6/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/6/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/6/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/6/2001	TOTAL DISSOLVED SOLIDS	1000000		µg/L
		3/9/2001	CHLOROMETHANE	1	U2	µg/L
		3/9/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/9/2001	BROMOMETHANE	1	UJ7	µg/L
		3/9/2001	CHLOROETHANE	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/9/2001	ACETONE	5	U	µg/L
		3/9/2001	CARBON DISULFIDE	0.7	J	µg/L
		3/9/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/9/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/9/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	2-BUTANONE	5	U	µg/L
		3/9/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	CHLOROFORM	1	U	µg/L
		3/9/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/9/2001	BENZENE	0.5	U	µg/L
		3/9/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/9/2001	TRICHLOROETHENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/9/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/9/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/9/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/9/2001	TOLUENE	1	U	µg/L
		3/9/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/9/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-36	IR36MW123B	3/9/2001	TETRACHLOROETHENE	1	U	µg/L
		3/9/2001	2-HEXANONE	5	U	µg/L
		3/9/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/9/2001	CHLOROBENZENE	1	U	µg/L
		3/9/2001	ETHYLBENZENE	1	U	µg/L
		3/9/2001	STYRENE	1	U	µg/L
		3/9/2001	XYLENE (TOTAL)	1	U	µg/L
		3/9/2001	BROMOFORM	1	U	µg/L
		3/9/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/9/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/9/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/9/2001	SALINITY	1.2		µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	1400000		µg/L
		3/9/2001	SALINITY	1.3		µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	1480000		µg/L
IR-39	IR39MW21A	3/9/2001	ALKALINITY	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/9/2001	ALKALINITY (AS CACO3)	384000		µg/L
		3/9/2001	ALKALINITY, TOTAL (AS CACO3)	384000		µg/L
		3/9/2001	CHLORIDE	939000		µg/L
		3/9/2001	SULFATE	256000		µg/L
		3/9/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/9/2001	NITRITE NITROGEN	5	U	µg/L
		3/9/2001	NITRATE AS N	10	U	µg/L
		3/9/2001	ANTIMONY	2.4	U	µg/L
		3/9/2001	ARSENIC	4.8	U1	µg/L
		3/9/2001	CADMIUM	0.3	U	µg/L
		3/9/2001	CALCIUM	254000		µg/L
		3/9/2001	COPPER	1.5	U	µg/L
		3/9/2001	IRON	2660		µg/L
		3/9/2001	MAGNESIUM	202000		µg/L
		3/9/2001	NICKEL	4	J	µg/L
		3/9/2001	POTASSIUM	38200		µg/L
		3/9/2001	SODIUM	264000		µg/L
		3/9/2001	ALPHA-BHC	0.005	U	µg/L
		3/9/2001	BETA-BHC	0.005	U	µg/L
		3/9/2001	DELTA-BHC	0.005	UJ9	µg/L
		3/9/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/9/2001	HEPTACHLOR	0.005	U	µg/L
		3/9/2001	ALDRIN	0.005	U	µg/L
		3/9/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/9/2001	ENDOSULFAN I	0.005	U	µg/L
		3/9/2001	DIELDRIN	0.01	U	µg/L
		3/9/2001	4,4'-DDE	0.01	U	µg/L
		3/9/2001	ENDRIN	0.01	U	µg/L
		3/9/2001	ENDOSULFAN II	0.01	U	µg/L
		3/9/2001	4,4'-DDD	0.01	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-39	IR39MW21A	3/9/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/9/2001	4,4'-DDT	0.01	U	µg/L
		3/9/2001	METHOXYCHLOR	0.05	U	µg/L
		3/9/2001	ENDRIN KETONE	0.01	U	µg/L
		3/9/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/9/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/9/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/9/2001	TOXAPHENE	0.5	U	µg/L
		3/9/2001	AROCLOR-1016	0.1	U	µg/L
		3/9/2001	AROCLOR-1221	0.2	U	µg/L
		3/9/2001	AROCLOR-1232	0.1	U	µg/L
		3/9/2001	AROCLOR-1242	0.1	U	µg/L
		3/9/2001	AROCLOR-1248	0.1	U	µg/L
		3/9/2001	AROCLOR-1254	0.1	U	µg/L
		3/9/2001	AROCLOR-1260	0.1	U	µg/L
		3/9/2001	PHENOL	1	U	µg/L
		3/9/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/9/2001	2-CHLOROPHENOL	1	UJ3	µg/L
		3/9/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/9/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/9/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/9/2001	2-METHYLPHENOL	1	U	µg/L
		3/9/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/9/2001	4-METHYLPHENOL	1	U	µg/L
		3/9/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/9/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L
		3/9/2001	NITROBENZENE	1	U	µg/L
		3/9/2001	ISOPHORONE	1	UJ3	µg/L
		3/9/2001	2-NITROPHENOL	1	U	µg/L
		3/9/2001	2,4-DIMETHYLPHENOL	1	UJ3	µg/L
		3/9/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/9/2001	2,4-DICHLOROPHENOL	1	UJ3	µg/L
		3/9/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/9/2001	NAPHTHALENE	1	UJ3	µg/L
		3/9/2001	4-CHLOROANILINE	1	UJ3	µg/L
		3/9/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/9/2001	4-CHLORO-3-METHYLPHENOL	1	UJ3	µg/L
		3/9/2001	2-METHYLNAPHTHALENE	1	UJ3	µg/L
		3/9/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/9/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/9/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/9/2001	2-CHLORONAPHTHALENE	1	UJ3	µg/L
		3/9/2001	2-NITROANILINE	2	U	µg/L
		3/9/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/9/2001	ACENAPHTHYLENE	1	UJ3	µg/L
		3/9/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/9/2001	3-NITROANILINE	2	U	µg/L
		3/9/2001	ACENAPHTHENE	0.6	J	µg/L
		3/9/2001	2,4-DINITROPHENOL	2	UJ3	µg/L
		3/9/2001	DIBENZOFURAN	1	U	µg/L
		3/9/2001	4-NITROPHENOL	2	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-39	IR39MW21A	3/9/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/9/2001	DIETHYLPHTHALATE	1	U	µg/L
		3/9/2001	FLUORENE	1	U	µg/L
		3/9/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/9/2001	4-NITROANILINE	2	U	µg/L
		3/9/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/9/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/9/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/9/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/9/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/9/2001	PHENANTHRENE	1	U	µg/L
		3/9/2001	ANTHRACENE	1	U	µg/L
		3/9/2001	CARBAZOLE	1	U	µg/L
		3/9/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/9/2001	FLUORANTHENE	0.3	J	µg/L
		3/9/2001	PYRENE	0.4	J	µg/L
		3/9/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/9/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/9/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/9/2001	CHRYSENE	0.1	J	µg/L
		3/9/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U	µg/L
		3/9/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/9/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/9/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/9/2001	BENZO(A)PYRENE	1	U	µg/L
		3/9/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/9/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/9/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/9/2001	CHLOROMETHANE	1	U	µg/L
		3/9/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/9/2001	BROMOMETHANE	1	UJ7	µg/L
		3/9/2001	CHLOROETHANE	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/9/2001	ACETONE	5	U4	µg/L
		3/9/2001	CARBON DISULFIDE	1	U	µg/L
		3/9/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/9/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/9/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/9/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/9/2001	2-BUTANONE	5	U	µg/L
		3/9/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	CHLOROFORM	1	U	µg/L
		3/9/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/9/2001	BENZENE	9		µg/L
		3/9/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/9/2001	TRICHLOROETHENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/9/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/9/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-39	IR39MW21A	3/9/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/9/2001	TOLUENE	1	U2	µg/L
		3/9/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/9/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/9/2001	TETRACHLOROETHENE	1	U	µg/L
		3/9/2001	2-HEXANONE	5	U	µg/L
		3/9/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/9/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/9/2001	CHLOROBENZENE	1	U	µg/L
		3/9/2001	ETHYLBENZENE	5		µg/L
		3/9/2001	STYRENE	1	U	µg/L
		3/9/2001	XYLENE (TOTAL)	1		µg/L
		3/9/2001	BROMOFORM	1	U	µg/L
		3/9/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/9/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/9/2001	1,2-DICHLOROBENZENE	0.3	J	µg/L
		3/9/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/9/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/9/2001	METHANE	760	J7	µg/L
		3/9/2001	ETHANE	4	UJ7	µg/L
		3/9/2001	ETHENE	3	UJ7	µg/L
		3/9/2001	TOTAL DISSOLVED SOLIDS	2620000		µg/L
	IR39MW23A	4/23/2001	ALUMINUM	41.8	U	µg/L
		4/23/2001	TOTAL DISSOLVED SOLIDS	8690000		µg/L
	IR39MW33A	4/17/2001	ALKALINITY	1000	U	µg/L
		4/17/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		4/17/2001	ALKALINITY (AS CACO3)	1010000		µg/L
		4/17/2001	ALKALINITY, TOTAL (AS CACO3)	1010000		µg/L
		4/17/2001	CHLORIDE	7150000		µg/L
		4/17/2001	SULFATE	400		µg/L
		4/17/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		4/17/2001	NITRITE NITROGEN	5	U	µg/L
		4/17/2001	NITRATE AS N	10	U	µg/L
		4/17/2001	BARIUM	4240		µg/L
		4/17/2001	CALCIUM	233000		µg/L
		4/17/2001	IRON	9840		µg/L
		4/17/2001	MAGNESIUM	684000		µg/L
		4/17/2001	POTASSIUM	64300	J4	µg/L
		4/17/2001	SODIUM	2950000	J4	µg/L
		4/17/2001	CHLOROMETHANE	1	U	µg/L
		4/17/2001	VINYL CHLORIDE	0.5	U	µg/L
		4/17/2001	BROMOMETHANE	1	U	µg/L
		4/17/2001	CHLOROETHANE	1	U	µg/L
		4/17/2001	1,1-DICHLOROETHENE	1	U	µg/L
		4/17/2001	ACETONE	14	U47	µg/L
		4/17/2001	CARBON DISULFIDE	1	U	µg/L
		4/17/2001	METHYLENE CHLORIDE	2	U	µg/L
		4/17/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		4/17/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		4/17/2001	1,1-DICHLOROETHANE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-39	IR39MW33A	4/17/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		4/17/2001	2-BUTANONE	5	U	µg/L
		4/17/2001	BROMOCHLOROMETHANE	1	U	µg/L
		4/17/2001	CHLOROFORM	1	U	µg/L
		4/17/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		4/17/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		4/17/2001	BENZENE	0.5	U	µg/L
		4/17/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		4/17/2001	TRICHLOROETHENE	1	U	µg/L
		4/17/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		4/17/2001	BROMODICHLOROMETHANE	1	U	µg/L
		4/17/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		4/17/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		4/17/2001	TOLUENE	1	U	µg/L
		4/17/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		4/17/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		4/17/2001	TETRACHLOROETHENE	1	U	µg/L
		4/17/2001	2-HEXANONE	5	U	µg/L
		4/17/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		4/17/2001	1,2-DIBROMOETHANE	1	U	µg/L
		4/17/2001	CHLOROBENZENE	1	U	µg/L
		4/17/2001	ETHYLBENZENE	1	U	µg/L
		4/17/2001	STYRENE	1	U	µg/L
		4/17/2001	XYLENE (TOTAL)	1	U	µg/L
		4/17/2001	BROMOFORM	1	U	µg/L
		4/17/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		4/17/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		4/17/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		4/17/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		4/17/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		4/17/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		4/17/2001	ETHANE	4	UJ7	µg/L
		4/17/2001	ETHENE	3	UJ7	µg/L
		4/17/2001	TOTAL DISSOLVED SOLIDS	13000000		µg/L
		4/17/2001	METHANE	5600	J7	µg/L
		4/17/2001	CHLOROMETHANE	1	U	µg/L
		4/17/2001	VINYL CHLORIDE	0.5	U	µg/L
		4/17/2001	CHLOROETHANE	1	U	µg/L
		4/17/2001	1,1-DICHLOROETHENE	1	U	µg/L
		4/17/2001	ACETONE	14	U47	µg/L
		4/17/2001	CARBON DISULFIDE	1	U	µg/L
		4/17/2001	METHYLENE CHLORIDE	2	U	µg/L
		4/17/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		4/17/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		4/17/2001	1,1-DICHLOROETHANE	1	U	µg/L
		4/17/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		4/17/2001	2-BUTANONE	5	U	µg/L
		4/17/2001	BROMOCHLOROMETHANE	1	U	µg/L
		4/17/2001	CHLOROFORM	1	U	µg/L
		4/17/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		4/17/2001	CARBON TETRACHLORIDE	0.5	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-39	IR39MW33A	4/17/2001	BENZENE	0.5	U	µg/L
		4/17/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		4/17/2001	TRICHLOROETHENE	1	U	µg/L
		4/17/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		4/17/2001	BROMODICHLOROMETHANE	1	U	µg/L
		4/17/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		4/17/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		4/17/2001	TOLUENE	1	U	µg/L
		4/17/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		4/17/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		4/17/2001	TETRACHLOROETHENE	1	U	µg/L
		4/17/2001	2-HEXANONE	5	U	µg/L
		4/17/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		4/17/2001	1,2-DIBROMOETHANE	1	U	µg/L
		4/17/2001	CHLOROBENZENE	1	U	µg/L
		4/17/2001	ETHYLBENZENE	1	U	µg/L
		4/17/2001	STYRENE	1	U	µg/L
		4/17/2001	XYLENE (TOTAL)	1	U	µg/L
		4/17/2001	BROMOFORM	1	U	µg/L
		4/17/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		4/17/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		4/17/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		4/17/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		4/17/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		4/17/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		4/17/2001	BROMOMETHANE	1	U	µg/L
IR-50	PA50MW10A	3/8/2001	ALKALINITY	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	268000		µg/L
		3/8/2001	ALKALINITY, TOTAL (AS CACO3)	268000		µg/L
		3/8/2001	SULFATE	90800		µg/L
		3/8/2001	NITRATE/NITRITE NITROGEN	2100		µg/L
		3/8/2001	CHLORIDE	682000		µg/L
		3/8/2001	CADMIUM	0.3	U	µg/L
		3/8/2001	CALCIUM	34300		µg/L
		3/8/2001	COPPER	1.5	U	µg/L
		3/8/2001	IRON	27.3	U1	µg/L
		3/8/2001	LEAD	1.6	U	µg/L
		3/8/2001	MAGNESIUM	87900		µg/L
		3/8/2001	POTASSIUM	17400		µg/L
		3/8/2001	SODIUM	407000	J4	µg/L
		3/8/2001	ZINC	4.3	U1	µg/L
		3/8/2001	CHLOROMETHANE	1	U	µg/L
		3/8/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/8/2001	CHLOROETHANE	1	U	µg/L
		3/8/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/8/2001	ACETONE	5	U	µg/L
		3/8/2001	CARBON DISULFIDE	1	U	µg/L
		3/8/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/8/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/8/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-50	PA50MW10A	3/8/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/8/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/8/2001	2-BUTANONE	5	U	µg/L
		3/8/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/8/2001	CHLOROFORM	1	U	µg/L
		3/8/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/8/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/8/2001	BENZENE	0.5	U	µg/L
		3/8/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/8/2001	TRICHLOROETHENE	0.4	J	µg/L
		3/8/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/8/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/8/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/8/2001	TOLUENE	1	U	µg/L
		3/8/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/8/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/8/2001	TETRACHLOROETHENE	1	U	µg/L
		3/8/2001	2-HEXANONE	5	U	µg/L
		3/8/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/8/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/8/2001	CHLOROBENZENE	1	U	µg/L
		3/8/2001	ETHYLBENZENE	1	U	µg/L
		3/8/2001	STYRENE	1	U	µg/L
		3/8/2001	XYLENE (TOTAL)	1	U	µg/L
		3/8/2001	BROMOFORM	1	U	µg/L
		3/8/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/8/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/8/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/8/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/8/2001	BROMOMETHANE	1	UJ7	µg/L
		3/8/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/8/2001	METHANE	2	UJ7	µg/L
		3/8/2001	ETHANE	4	UJ7	µg/L
		3/8/2001	ETHENE	3	UJ7	µg/L
		3/8/2001	TOTAL DISSOLVED SOLIDS	1710000		µg/L
IR-56	IR56MW39A	3/16/2001	ALKALINITY	1000	U	µg/L
		3/16/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/16/2001	ALKALINITY (AS CACO3)	390000		µg/L
		3/16/2001	ALKALINITY, TOTAL (AS CACO3)	390000		µg/L
		3/16/2001	CHLORIDE	133000		µg/L
		3/16/2001	SULFATE	62000		µg/L
		3/16/2001	NITRATE/NITRITE NITROGEN	10	U	µg/L
		3/16/2001	NITRITE NITROGEN	5	U	µg/L
		3/16/2001	NITRATE AS N	10	U	µg/L
		3/16/2001	CALCIUM	46000		µg/L
		3/16/2001	IRON	448		µg/L
		3/16/2001	MAGNESIUM	67000		µg/L
		3/16/2001	POTASSIUM	2640	J4	µg/L
		3/16/2001	SODIUM	105000		µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-56	IR56MW39A	3/16/2001	CHLOROMETHANE	1	U	µg/L
		3/16/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/16/2001	BROMOMETHANE	1	U	µg/L
		3/16/2001	CHLOROETHANE	1	U	µg/L
		3/16/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/16/2001	ACETONE	5	U47	µg/L
		3/16/2001	CARBON DISULFIDE	1	U	µg/L
		3/16/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/16/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/16/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/16/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/16/2001	2-BUTANONE	5	U	µg/L
		3/16/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/16/2001	CHLOROFORM	1	U	µg/L
		3/16/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/16/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/16/2001	BENZENE	0.5	U	µg/L
		3/16/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/16/2001	TRICHLOROETHENE	1	U	µg/L
		3/16/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/16/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/16/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/16/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/16/2001	TOLUENE	1	U	µg/L
		3/16/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/16/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/16/2001	TETRACHLOROETHENE	1	U	µg/L
		3/16/2001	2-HEXANONE	5	U	µg/L
		3/16/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/16/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/16/2001	CHLOROBENZENE	1	U	µg/L
		3/16/2001	ETHYLBENZENE	0.3	J	µg/L
		3/16/2001	STYRENE	1	U	µg/L
		3/16/2001	XYLENE (TOTAL)	1	U	µg/L
		3/16/2001	BROMOFORM	1	U	µg/L
		3/16/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/16/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/16/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/16/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/16/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/16/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/16/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/16/2001	METHANE	33	J7	µg/L
		3/16/2001	ETHANE	4	UJ7	µg/L
		3/16/2001	ETHENE	3	UJ7	µg/L
		3/16/2001	TOTAL DISSOLVED SOLIDS	700000		µg/L
		3/16/2001	DIESEL RANGE ORGANICS	300	LZ	µg/L
		3/16/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/16/2001	GASOLINE RANGE ORGANICS	600	H	µg/L
IR-72	IR72MW32A	3/16/2001	ALKALINITY	1000	U	µg/L
		3/16/2001	ALKALINITY (AS CACO3)	1000	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-72	IR72MW32A	3/16/2001	ALKALINITY (AS CACO3)	230000		µg/L
		3/16/2001	ALKALINITY, TOTAL (AS CACO3)	230000		µg/L
		3/16/2001	SULFATE	52600		µg/L
		3/16/2001	NITRATE/NITRITE NITROGEN	2600		µg/L
		3/16/2001	NITRITE NITROGEN	5	U	µg/L
		3/16/2001	NITRATE AS N	2600		µg/L
		3/16/2001	CHLORIDE	138000		µg/L
		3/16/2001	CALCIUM	18000		µg/L
		3/16/2001	IRON	25.2	U1	µg/L
		3/16/2001	MAGNESIUM	60600		µg/L
		3/16/2001	POTASSIUM	8010	J4	µg/L
		3/16/2001	SODIUM	132000		µg/L
		3/16/2001	ALPHA-BHC	0.005	U	µg/L
		3/16/2001	BETA-BHC	0.005	U	µg/L
		3/16/2001	DELTA-BHC	0.005	U	µg/L
		3/16/2001	GAMMA-BHC (LINDANE)	0.005	U	µg/L
		3/16/2001	HEPTACHLOR	0.005	U	µg/L
		3/16/2001	ALDRIN	0.005	U	µg/L
		3/16/2001	HEPTACHLOR EPOXIDE	0.005	U	µg/L
		3/16/2001	ENDOSULFAN I	0.005	U	µg/L
		3/16/2001	DIELDRIN	0.01	U	µg/L
		3/16/2001	4,4'-DDE	0.01	U	µg/L
		3/16/2001	ENDRIN	0.01	U	µg/L
		3/16/2001	ENDOSULFAN II	0.01	U	µg/L
		3/16/2001	4,4'-DDD	0.01	U	µg/L
		3/16/2001	ENDOSULFAN SULFATE	0.01	U	µg/L
		3/16/2001	4,4'-DDT	0.01	U	µg/L
		3/16/2001	METHOXYCHLOR	0.05	U	µg/L
		3/16/2001	ENDRIN KETONE	0.01	U	µg/L
		3/16/2001	ENDRIN ALDEHYDE	0.01	U	µg/L
		3/16/2001	ALPHA-CHLORDANE	0.005	U	µg/L
		3/16/2001	GAMMA-CHLORDANE	0.005	U	µg/L
		3/16/2001	TOXAPHENE	0.5	U	µg/L
		3/16/2001	AROCLOR-1016	0.1	U	µg/L
		3/16/2001	AROCLOR-1221	0.2	U	µg/L
		3/16/2001	AROCLOR-1232	0.1	U	µg/L
		3/16/2001	AROCLOR-1242	0.1	U	µg/L
		3/16/2001	AROCLOR-1248	0.1	U	µg/L
		3/16/2001	AROCLOR-1254	0.1	U	µg/L
		3/16/2001	AROCLOR-1260	0.1	U	µg/L
		3/16/2001	PHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHYL)ETHER	1	U	µg/L
		3/16/2001	2-CHLOROPHENOL	1	U	µg/L
		3/16/2001	1,3-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,4-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	1,2-DICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	2-METHYLPHENOL	1	U	µg/L
		3/16/2001	2,2'-OXYBIS(1-CHLOROPROPANE)	1	U	µg/L
		3/16/2001	4-METHYLPHENOL	1	U	µg/L
		3/16/2001	HEXACHLOROETHANE	1	UJ3	µg/L
		3/16/2001	N-NITROSO-DI-N-PROPYLAMINE	1	U	µg/L

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ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-72	IR72MW32A	3/16/2001	NITROBENZENE	1	U	µg/L
		3/16/2001	ISOPHORONE	1	U	µg/L
		3/16/2001	2-NITROPHENOL	1	U	µg/L
		3/16/2001	2,4-DIMETHYLPHENOL	1	U	µg/L
		3/16/2001	BIS(2-CHLOROETHOXY)METHANE	1	U	µg/L
		3/16/2001	2,4-DICHLOROPHENOL	1	U	µg/L
		3/16/2001	1,2,4-TRICHLOROBENZENE	1	UJ3	µg/L
		3/16/2001	NAPHTHALENE	1	U	µg/L
		3/16/2001	4-CHLOROANILINE	1	U	µg/L
		3/16/2001	HEXACHLOROBUTADIENE	1	UJ3	µg/L
		3/16/2001	4-CHLORO-3-METHYLPHENOL	1	U	µg/L
		3/16/2001	2-METHYLNAPHTHALENE	1	UJ7	µg/L
		3/16/2001	HEXACHLOROCYCLOPENTADIENE	1	UJ3	µg/L
		3/16/2001	2,4,6-TRICHLOROPHENOL	1	U	µg/L
		3/16/2001	2,4,5-TRICHLOROPHENOL	2	U	µg/L
		3/16/2001	2-CHLORONAPHTHALENE	1	U	µg/L
		3/16/2001	2-NITROANILINE	2	U	µg/L
		3/16/2001	DIMETHYLPHTHALATE	1	U	µg/L
		3/16/2001	ACENAPHTHYLENE	1	U	µg/L
		3/16/2001	2,6-DINITROTOLUENE	1	U	µg/L
		3/16/2001	3-NITROANILINE	2	U	µg/L
		3/16/2001	ACENAPHTHENE	1	U	µg/L
		3/16/2001	2,4-DINITROPHENOL	2	UJ7	µg/L
		3/16/2001	DIBENZOFURAN	1	U	µg/L
		3/16/2001	4-NITROPHENOL	2	UJ7	µg/L
		3/16/2001	2,4-DINITROTOLUENE	1	U	µg/L
		3/16/2001	DIETHYLPHTHALATE	1	U4	µg/L
		3/16/2001	FLUORENE	1	U	µg/L
		3/16/2001	4-CHLOROPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	4-NITROANILINE	2	U	µg/L
		3/16/2001	N-NITROSODIPHENYLAMINE	1	U	µg/L
		3/16/2001	4,6-DINITRO-2-METHYLPHENOL	2	U	µg/L
		3/16/2001	4-BROMOPHENYL-PHENYLETHER	1	U	µg/L
		3/16/2001	HEXACHLOROBENZENE	1	U	µg/L
		3/16/2001	PENTACHLOROPHENOL	2	U	µg/L
		3/16/2001	PHENANTHRENE	1	U	µg/L
		3/16/2001	ANTHRACENE	1	U	µg/L
		3/16/2001	CARBAZOLE	1	U	µg/L
		3/16/2001	DI-N-BUTYLPHTHALATE	1	U	µg/L
		3/16/2001	FLUORANTHENE	1	U	µg/L
		3/16/2001	PYRENE	1	U	µg/L
		3/16/2001	BUTYLBENZYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(A)ANTHRACENE	1	U	µg/L
		3/16/2001	3,3'-DICHLOROBENZIDINE	1	U	µg/L
		3/16/2001	CHRYSENE	1	U	µg/L
		3/16/2001	BIS(2-ETHYLHEXYL)PHTHALATE	1	U	µg/L
		3/16/2001	DI-N-OCTYLPHTHALATE	1	U	µg/L
		3/16/2001	BENZO(B)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(K)FLUORANTHENE	1	U	µg/L
		3/16/2001	BENZO(A)PYRENE	1	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-72	IR72MW32A	3/16/2001	INDENO(1,2,3-CD)PYRENE	1	U	µg/L
		3/16/2001	DIBENZ(A,H)ANTHRACENE	1	U	µg/L
		3/16/2001	BENZO(G,H,I)PERYLENE	1	U	µg/L
		3/16/2001	CHLOROMETHANE	1	U	µg/L
		3/16/2001	VINYL CHLORIDE	0.5	U	µg/L
		3/16/2001	CHLOROETHANE	1	U	µg/L
		3/16/2001	1,1-DICHLOROETHENE	1	U	µg/L
		3/16/2001	ACETONE	5	R7	µg/L
		3/16/2001	CARBON DISULFIDE	1	U	µg/L
		3/16/2001	METHYLENE CHLORIDE	2	U	µg/L
		3/16/2001	TRANS-1,2-DICHLOROETHENE	1	U	µg/L
		3/16/2001	TERT-BUTYL METHYL ETHER	1	U	µg/L
		3/16/2001	1,1-DICHLOROETHANE	1	U	µg/L
		3/16/2001	CIS-1,2-DICHLOROETHENE	1	U	µg/L
		3/16/2001	2-BUTANONE	5	U	µg/L
		3/16/2001	BROMOCHLOROMETHANE	1	U	µg/L
		3/16/2001	CHLOROFORM	1	U	µg/L
		3/16/2001	1,1,1-TRICHLOROETHANE	1	U	µg/L
		3/16/2001	CARBON TETRACHLORIDE	0.5	U	µg/L
		3/16/2001	BENZENE	0.5	U	µg/L
		3/16/2001	1,2-DICHLOROETHANE	0.5	U	µg/L
		3/16/2001	TRICHLOROETHENE	1	U	µg/L
		3/16/2001	1,2-DICHLOROPROPANE	1	U	µg/L
		3/16/2001	BROMODICHLOROMETHANE	1	U	µg/L
		3/16/2001	CIS-1,3-DICHLOROPROPENE	1	U	µg/L
		3/16/2001	4-METHYL-2-PENTANONE	5	U	µg/L
		3/16/2001	TOLUENE	1	U	µg/L
		3/16/2001	TRANS-1,3-DICHLOROPROPENE	0.5	U	µg/L
		3/16/2001	1,1,2-TRICHLOROETHANE	1	U	µg/L
		3/16/2001	TETRACHLOROETHENE	1	U	µg/L
		3/16/2001	DIBROMOCHLOROMETHANE	1	U	µg/L
		3/16/2001	1,2-DIBROMOETHANE	1	U	µg/L
		3/16/2001	CHLOROBENZENE	1	U	µg/L
		3/16/2001	ETHYLBENZENE	1	U	µg/L
		3/16/2001	STYRENE	1	U	µg/L
		3/16/2001	XYLENE (TOTAL)	1	U	µg/L
		3/16/2001	BROMOFORM	1	U	µg/L
		3/16/2001	1,1,2,2-TETRACHLOROETHANE	1	U	µg/L
		3/16/2001	1,3-DICHLOROBENZENE	1	U	µg/L
		3/16/2001	1,4-DICHLOROBENZENE	1	U	µg/L
		3/16/2001	1,2-DICHLOROBENZENE	1	U	µg/L
		3/16/2001	1,2-DIBROMO-3-CHLOROPROPANE	1	U	µg/L
		3/16/2001	1,2,4-TRICHLOROBENZENE	1	U	µg/L
		3/16/2001	BROMOMETHANE	1	U	µg/L
		3/16/2001	2-HEXANONE	5	U	µg/L
		3/16/2001	METHANE	2	UJ7	µg/L
		3/16/2001	ETHANE	4	UJ7	µg/L
		3/16/2001	ETHENE	3	UJ7	µg/L
		3/16/2001	TOTAL DISSOLVED SOLIDS	710000		µg/L
		3/16/2001	DIESEL RANGE ORGANICS	100	U	µg/L

TABLE 4-3

ANALYTICAL RESULTS FOR GROUNDWATER, MARCH AND APRIL 2001
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Site	Station	Sample Date	Analyte	Result	Qualifier	Units
IR-72	IR72MW32A	3/16/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/16/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
		3/16/2001	DIESEL RANGE ORGANICS	100	U	µg/L
		3/16/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/16/2001	GASOLINE RANGE ORGANICS	50	U	µg/L
IR-73	IR73MW04A	3/8/2001	ALKALINITY	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	1000	U	µg/L
		3/8/2001	ALKALINITY (AS CACO3)	596000		µg/L
		3/8/2001	ALKALINITY, TOTAL (AS CACO3)	596000		µg/L
		3/8/2001	CHLORIDE	1820000		µg/L
		3/8/2001	SULFATE	320000		µg/L
		3/8/2001	NITRATE/NITRITE NITROGEN	20		µg/L
		3/8/2001	CALCIUM	124000		µg/L
		3/8/2001	IRON	2450		µg/L
		3/8/2001	MAGNESIUM	171000		µg/L
		3/8/2001	POTASSIUM	78900		µg/L
		3/8/2001	SODIUM	1400000	J4	µg/L
		3/8/2001	ETHANE	4	UJ7	µg/L
		3/8/2001	ETHENE	3	UJ7	µg/L
		3/8/2001	METHANE	6	J7	µg/L
		3/8/2001	TOTAL DISSOLVED SOLIDS	3370000		µg/L
		3/8/2001	DIESEL RANGE ORGANICS	200	HZ	µg/L
		3/8/2001	MOTOR OIL RANGE ORGANICS	100	U	µg/L
		3/8/2001	GASOLINE RANGE ORGANICS	50	U	µg/L

Notes: All analytical results, detection limits, and screening criteria are shown in µg/L with the exception of salinity which is shown in salinity units.

Bold type indicates that the concentration in groundwater exceeded the applicable screening criterion.

Where duplicate results appear, the first value is the primary result and the second value is the duplicate.

a The higher of the HGAL or California MCL is shown.

b California Environmental Protection Agency, Regional Water Quality Control Board, Central Valley Region. 2000. "A Compilation of Water Quality Goals." August. Values shown are the more stringent between the national recommended criteria for saltwater aquatic life protection and the California toxics rule criteria for saltwater aquatic life protection in enclosed bays and estuaries. If neither of those values are listed, the USEPA chronic toxicity level is used. If none of the above are listed, one tenth of the USEPA acute toxicity level is used.

BHC Benzenehexachloride
CACO3 Calcium carbonate
D TPH sample pattern resembles diesel
DDD Dichlorodiphenyldichloroethane
DDE Dichlorodiphenyldichloroethene
DDT Dichlorodiphenyltrichloroethane
G TPH sample pattern resembles gasoline
HGAL Hunters Point Shipyard groundwater ambient level
IR Installation restoration
J Estimated result
L TPH sample pattern is in the lighter hydrocarbon end of the analyte's range in the standard
MCL Maximum contaminant level
µg/L Micrograms per liter
MW Monitoring well
PA Preliminary assessment
TPH Total petroleum hydrocarbons
U Not detected

TABLE 4-4

PARCEL E GROUNDWATER SCREENING CRITERIA
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Chemical	HGAL (mg/L)[a]	Aquatic Criteria (mg/L)[b]	Federal Primary MCL (mg/L)[c]	California Primary MCL (mg/L)[d]
Metals				
Aluminum	--	--	--	**1000**
Antimony	**43.26**	--	6	6
Arsenic		**36[g]**	50	50
Barium	504.2	--	2000	**1000**
Cadmium	**5.08**	9.3[g]	5	5
Chromium	15.66	1030[e,i]	100	**50**
Chromium VI	--	**50[g]**	--	--
Copper	**28.04**	3.1[g]	1300	1300
Lead	**14.44**	8.1[g]	15	15
Mercury	0.6	**0.94[g]**	2	2
Nickel	**96.48**	8.2[g]	--	100
Zinc	75.68	**81[g]**	--	--
Volatile Organic Compounds				
1,1-Dichloroethane	NA	--	--	**5**
1,2-Dichloroethane	NA	11300[e]	5	**0.5**
1,4-Dichlorobenzene	NA	129[f]	75	**5**
Benzene	NA	510[e]	5	**1**
Carbon Tetrachloride	NA	6400[f]	5	**0.5**
Tetrachloroethene	NA	450[f]	**5**	**5**
Trichloroethene	NA	200[e]	**5**	**5**
Vinyl Chloride	NA	--	2	**0.5**
Semivolatile Organic Compounds				
Pentachlorophenol	NA	7.9[g]	**1**	**1**
Polynuclear Aromatic Hydrocarbons				
2-Methylnaphthalene	NA	**30[e,k]**	--	--
Benzo(a)pyrene	NA	30[e,k]	**0.2**	**0.2**
Phenanthrene	NA	**30[e,k]**	--	--
Polychlorinated Biphenyls				
Aroclor-1242	NA	**0.03[g,h]**	0.5[h]	0.5[h]
Aroclor-1254	NA	**0.03[g,h]**	0.5[h]	0.5[h]
Aroclor-1260	NA	**0.03[g,h]**	0.5[h]	0.5[h]
Pesticides				
Chlorodane (alpha and gamma)	NA	**0.004[f,j]**	2[j]	0.1[j]
Dieldrin	NA	**0.0019[g]**	--	--
Endosulfan II	NA	**0.0087[g]**	--	--
Endrin	NA	**0.0023[g]**	2	2
Heptachlor	NA	**0.0036[g]**	0.4	0.01
Heptachlor epoxide	NA	**0.0036[g]**	0.2	0.01
Other				
Cyanide	NA	**1[g]**	200	200

TABLE 4-4

PARCEL E GROUNDWATER SCREENING CRITERIA
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Notes:

Chemicals included on this table are those with historical concentrations that exceeded one or more regulatory screening criteria in groundwater at Parcel E.

Values in bold text are those selected as evaluation criteria.

--	Criterion not available
HGAL	Hunters Point Shipyard groundwater ambient level; see note a
MCL	Maximum contaminant level
µg/L	Microgram per liter
NA	Not applicable

a PRC Environmental Management, Inc. 1996a. "Estimation of Hunters Point Shipyard Groundwater Ambient Levels Technical Memorandum." (HGAL) September 16.

b Aquatic criteria shown are the more stringent of the national recommended criteria for protection of saltwater aquatic life and the California toxics rule criteria for protection of saltwater aquatic life in enclosed bays and estuaries (continuous concentration [4-day average]). If neither of these values is available, the U.S. Environmental Protection Agency (EPA) chronic toxicity level is shown. If none of the above criterion was available, one tenth of the EPA acute toxicity level is shown. The source of these criteria is the August 2000 revision of the California Environmental Protection Agency, Regional Water Quality Control Board, Central Valley Region's "A Compilation of Water Quality Goals."

c EPA Office of Groundwater and Drinking Water. 2001. "Current Drinking Water Standards." Accessed on April 16, 2001. On-line address is http://www.epa.gov/safewater/mcl.html

d California Department of Health Services. 2001. "Drinking Water Standards." Accessed on April 9, 2001. On-line address is http://www.dhs.cahwnet.gov/org/ps/ddwem/chemicals/mcl/primarymcls.htm

e One tenth of EPA acute toxicity (lowest observed effect) level for saltwater aquatic life protection, see note b.

f EPA chronic toxicity (lowest observed effect) level for saltwater aquatic life protection, see note b.

g EPA recommended criteria, continuous concentration (4-day average), see note b.

h Criterion is for total polychlorinated biphenyls, but also applies to Aroclor-1260.

i Criterion is for chromium III; no criterion exists for total chromium.

j Criterion is for total chlordane, which includes both alpha and gamma isomers.

k Criterion is for polynuclear aromatic hydrocarbons as a class of compounds.

TABLE 4-5

EVALUATION OF DATA QUALITY OBJECTIVES FOR B-AQUIFER ZONE STUDY
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA
(Page 1 of 1)

State the Problem	Identify the Decision(s)	Identify Inputs to the Decision(s)	Develop Decision Rules	Related Field Activities	Responses, Comments, and Conclusions
The extent of contamination in the B-aquifer and its relationship to the A-aquifer at Parcels C, D, and E (and, potentially, at a part of Parcel B) have not been evaluated because chemical and hydrogeological data are insufficient to support an evaluation. Furthermore, TDS and yield data are insufficient to evaluate if cleanup to drinking water standards is necessary.	What is the nature and extent of contamination in the B-aquifer in (1) areas where Bay Mud does not separate the A- and B-aquifers, and (2) areas where the overlying A-aquifer is impacted by VOCs? What are the hydrogeologic conditions of the B-aquifer (particularly in the vicinity of existing A-aquifer groundwater RUs? Do TDS and yield values for the B-aquifer meet the state and/or federal criteria for exemption from potential use as a drinking water source?	Samples collected from six existing B-aquifer wells (including two nested A- and B-aquifer well pairs) and about 19 new nested A- and B-aquifer well pairs should be analyzed for vertical gradient, yield, TDS, chemical concentrations, porosity, permeability, and geologic characteristics. Validated chemical data (with detection limits below the relevant ARARs) for COPCs in groundwater will be collected from existing and new B-aquifer wells. Chemical data should be mapped in plane view and cross section and input into the GIS system to establish the extent of B-aquifer contamination. Groundwater elevation data from 18 existing B-aquifer wells (in Parcels C and E) and about 19 new B-aquifer wells (in Parcels B, C, and D) will be used to assess the magnitude and direction of the horizontal gradient of the B-aquifer.	Evaluate chemical and hydrogeologic data to assess the nature and extent of B-aquifer contamination. If data indicate that A-aquifer contamination has migrated to the B-aquifer and is not adequately characterized, then additional sampling locations will be proposed for Phase II sampling to characterize the extent of the plume. If a B-aquifer area does not contain chemicals at concentrations that exceed the most stringent primary MCL or HGAL (or aquatic criteria, as applicable), then the area will not be evaluated in the FS. Evaluate TDS and yield data from the B-aquifer and compare to state and federal exemption criteria for drinking water sources. If a B-aquifer area contains chemicals at concentrations that exceed the most stringent primary MCL or HGAL but the area meets the state and federal exemption criteria, then ecological risk and human health risk via the inhalation exposure pathway will be evaluated and areas that result in risks through these pathways will be evaluated in the FS. If a B-aquifer area contains chemicals at concentrations that exceed the most stringent primary MCL or HGAL and the area does not meet the state and federal exemption criteria, then the area will be evaluated in the FS. Note: If a B-aquifer area that meets the above criteria is part of a chemical plume that exceeds the most stringent primary MCL or HGAL, then the entire plume will be evaluated in the FS regardless of the state and federal exemption criteria.	Groundwater samples were collected from 11 existing B-aquifer monitoring wells at Parcel E during Phase II.	The maximum concentrations of chemicals that exceeded the evaluation criteria (see Table 4-4) in the B-aquifer are: aluminum, antimony, cadmium, chromium, chromium (VI), carbon tetrachloride, and tri-chloroethene. B-aquifer DQOs will be addressed after Phase II and Phase III data are combined and evaluated.

Notes:

ARAR	Applicable or relevant and appropriate requirement
MCL	Maximum contaminant level
COPC	Chemical of potential concern
DQO	Data quality objective
FS	Feasibility study
GIS	Geographic information system
HGAL	Hunters Point Shipyard groundwater ambient level
HPS	Hunters Point Shipyard
TDS	Total dissolved solids
VOC	Volatile organic compound

TABLE 4-6

EVALUATION OF DATA QUALITY OBJECTIVES FOR A-AQUIFER AND BEDROCK WATER-BEARING ZONE STUDY
PARCEL E INFORMATION PACKAGE
PHASE II GROUNDWATER DATA GAPS INVESTIGATION
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA
(Page 1 of 1)

State the Problem	Identify the Decision(s)	Identify Inputs to the Decision(s)	Develop Decision Rules	Related Field Activities	Responses, Comments, and Conclusions
Existing A-aquifer and bedrock water-bearing zone ecological and human health RU were developed on the basis of chemical data collected more than 4 years ago.	Are the RUs representative of current conditions at the site?	Validated chemical data (with detection limits below the relevant ARARs) for COPCs in groundwater will be collected from existing A-aquifer and bedrock water-bearing zone wells, as detailed in the FSP.	Chemical data will be used to revise the boundaries of the existing RUs. Revisions will be made based on the following decision rules: • If the results for both sampling rounds at a well are below the MCLs or aquatic criteria, then the boundaries of the existing RU will be revised (reduced) to reflect this change. • If the results for one or both sampling rounds at a well are not below the MCLs or aquatic criteria, the well will be retained in the RU; however, the boundary may be adjusted to reflect any changes. • If concentrations indicate that a plume has migrated, then additional sampling locations will be proposed for sampled in subsequent phases to characterize the extent of the plume.	No sampling was conducted at Parcel E during Phase I. Groundwater samples were collected from 100 A-aquifer monitoring wells and two bedrock water-bearing zone monitoring wells at Parcel E during Phase II.	Plume maps are drawn using Phase II analytical data (Figures 4-2 through 4-36). Phase II analytical results are presented in Table 4-3. A-aquifer and bedrock water-bearing zone DQOs will be addressed after Phase II and Phase III data are combined and evaluated.

Notes:

ARAR	Applicable or relevant and appropriate requirement	MCL	Maximum contaminant level
COPC	Chemical of potential concern	RU	Remedial unit
DQO	Data quality objective		

APPENDIX A

GROUNDWATER SAMPLING FIELD DATA SHEETS

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/20/01

Well Name IR01MW02B		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	14.74'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/20/01 @ 10:55	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	M. Slaughter	Well Depth	39.10' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	39.10'-14.74' = 24.36'	Well Installed by	
	E. Chong	Gallons/Foot	0.653 gallons/foot	Installation Date	
Sample ID	0111P008	Casing Volume	24.36' * .653= 16.08 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/20/01 Spec. Conductance: Standard 4490 umhos/cm at 25C Reading 3862 umhos/cm at ___ ^{0}C

pH: pH 4.00 - 4.26 at _ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 9.87 mg/L at 16.1 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 98.6

Turbidity - 0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
10:07	GPM	2.71	7.77	227.0	18.17	1892	0.3	8						
10:14	1.14	2.43	7.81	218.0	18.16	2095	0.4	16						
10:22	1.00	1.07	7.73	163.0	18.19	2390	0.4	24						
10:30	1.00	0.84	7.71	122.1	18.20	2311	0.5	32						
10:38	1.00	0.76	7.70	93.4	18.19	2256	0.4	40						
10:46	1.00	0.69	7.69	72.4	18.20	2246	0.5	48						
10:53	___ Prior to sampling 15.28' BTOC													

SAMPLE PARAMETERS

Al	Cr	CrVI	SVOCs	VOCs	Gen Min	Major Anions	MEE	NN	Alpha,Beta Alk	Sal TDS	Fe2+	Mn2+	DO

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 0.3 Mg/L
	DO Top 3.95 Mg/L / Mid 4.72 Mg/L / Bot 3.44 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/20/01

Well Name	IR01MW03A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	15.45'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/20/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	27.91' MEAS x RPTD	PID Reading (TOC)	1.2 ppm
	S. Penman	Feet of Water	27.91'-15.45' = 12.46'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653	Installation Date	
Sample ID	0111P009 @12:05	Casing Volume	12.46' * .653= 8.14 gallons	Development Date(s)	
Duplicate ID	0111P010 @12:25				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/20/01 Spec. Conductance: Standard 4490 umhos/cm at 25C Reading 3862 umhos/cm at ___ ^{0}C

pH: pH 4.00 - 4.26 at _ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 9.87 mg/L at 16.1 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 98.6

Turbidity - 0

PURGING

Time	Discharge Rate (gal/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:25		0.92	7.52	195.1	18.34	3089	2.4	4						
11:31	0.7	0.87	7.54	39.6	18.46	4838	2.0	8						
11:35	1.0	0.75	7.55	-47.1	18.35	4785	1.2	12						
11:38	1.33	0.72	7.54	-96.5	18.35	4749	1.4	16						
11:42	1.0	0.95	7.50	-137.7	18.36	4664	0.8	20						
11:46	1.0	0.82	7.45	-173.4	18.36	4604	0.5	24						
11:50	1.0	0.70	7.41	-188.7	18.34	4566	0.3	28						
11:54		0.73	7.37	-195.6	18.34	4527	0.3	32						
11:59	___ Prior to sampling 17.02' BTOC													
12:05	Sample 101 collected													
12:25	Sample 101 collected													

SAMPLE PARAMETERS

Al	Cu	Pb	Ni	Zn	PCB/PEST	SVOCs	Alk VOCs	TDS Gen Min	SAL MEE	NN	Alpha, Beta DO	Mn2+	Fe2+	Major Anions

Condition of Well Good This well was sampled in duplicate for Ra226/228 analysis.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-310

Field Chemistry Calibrations

Fractions	Mn2+ = 0.1 Mg/L
	Fe2+ = 0.6 Mg/L
	Do Top 1.04 Mg/L /Mid 0.87 Mg/L /Bot 0.76 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/20/01

Well Name	IR01MW05A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	17.9'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/20/01 @ 14:20	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	E. Chong	Well Depth	28.42' MEAS x RPTD	PID Reading (TOC)	2.2 ppm
	S. Penman	Feet of Water	28.42'-17.9' = 10.58'	Well Installed by	
		Gallons/Foot	0.653 gal/foot	Installation Date	
Sample ID	0111P011	Casing Volume	10.52*.653= 6.87 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/20/01 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - 4.26 at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter __ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span ____ Reading

PURGING

Time	Discharge Rate (gal/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
13:45		1.38	7.02	-199.1	18.51	11770	6.4	3						
13:48	1.0	1.25	6.58	-157.8	18.30	3439	4.3	6						
13:51	1.0	1.15	6.52	-149.0	18.28	3029	1.5	9						
13:54	1.0	1.11	6.50	-145.2	18.27	2815	0.4	12						
13:57	1.0	1.06	6.49	-143.7	18.27	2729	0.0	15						
14:00	1.0	0.98	6.48	-142.6	18.29	2681	0.1	18						
14:03	1.0	1.00	6.48	-142.0	18.27	2649	0.4	21						
14:06	1.0	0.96	6.48	-141.8	18.27	2593	0.3	24						
14:09	1.0	0.96	6.47	-141.3	18.26	2540	0.4	27						
14:18	__ Prior to sampling = 18.20' BTOC													
14:20	Sample collected													

SAMPLE PARAMETERS Alk TDS Gen Min MEE NN Major Anions Alpha, Beta Do Mn2+ Fe2+

Al	Sb	As	Cd	Cr	CrVI	Cu	Pb	Hq	Ni	Ag	Zn	PCBs	VOCs

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. Collected MS/MSD for VOCs only

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 1.2 Mg/L
	Fe2+ = 4.0 Mg/L
	Do Top 0.81 Mg/L /Mid 0.65 Mg/L /Bot 0.56 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/14/01

Well Name	IR01MW07A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	14.68'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/14/01 @ 14:10	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	24.72' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	24.72'-14.68' = 10.04'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653	Installation Date	
Sample ID	0110P017	Casing Volume	10.04' *.653= 6.56 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/14/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 11.02 mg/L at 10.9 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.5

Turbidity - st. 100 NTU/ Reading 100.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
08:52	GPM	4.03	6.49	10.6	14.55	1894	0.2	3						
08:55	1.0	2.76	6.57	-25.9	14.56	1876	16.1	6						
08:58	1.0	1.84	6.59	-50.9	14.67	1791	15.2	9						
09:01	1.0	1.31	6.62	-70.6	14.76	1739	3.5	12						
09:04	1.0	1.13	6.64	-80.4	14.87	1669	1.7	15						
09:07	1.0	0.96	6.65	-84.6	15.17	1586	5.1	18						
09:11	0.75	0.81	6.70	-87.1	15.23	1471	0.8	21						
09:22	0.27	2.87	6.87	0.3	15.45	1498	178.0	24						Dry @ 26 gallons
14:10	Sample collected													

SAMPLE PARAMETERS

Ni	TPH-e	TPH-p		Gen Min	MEE	NN	Major Anions	Alk	TDS	Alpha,Beta	DO	Mn2+	Fe2+

Condition of Well Good Mn2+ = .05 (however water did not change color at all)

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB	
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB	
Pump ES-60	Serial No.	N/A	
Water Level Meter Solinist	Serial No.	WLM .55	
D.O. Meter YSI 55	Serial No.	YSI 55.05	
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron	
Temp. Measure YSI 6820	Serial No.	97L0044AB	
Interface Probe N/A	Serial No.	N/A	
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361	

Field Chemistry Calibrations

Fractions	Mn2+ = 0.5 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 1.19 Mg/L /Mid 0.55 Mg/L /Bot 0.50 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/19/01

Well Name	IR01MW09B	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.08'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/19/01 @ 10:50	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	M. Slaughter	Well Depth	42.28' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	42.28'-6.08' = 36.2'	Well Installed by	
	J. Langston	Gallons/Foot	0.653	Installation Date	
Sample ID	0111P002	Casing Volume	36.2*.653= 23.64 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 @ 07:30 Spec. Conductance: Standard ___ umhos/cm at 25C Reading 1000 umhos/cm at 13.63 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.03 at 13.63 ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 9.72 mg/L at 17.2 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100.1

PURGING

Time	Discharge Rate (gal/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:39		1.39	7.38	31.1	16.42	2981	10.7	10						
09:47	1.25	1.06	7.36	12.7	17.51	2983	27.0	20						
09:59	0.83	0.72	7.41	-53.8	17.88	3244	2.5	30						
10:07	1.25	0.72	7.42	-75.3	17.89	3255	0.7	40						
10:18	0.91	0.72	7.43	-93.8	17.89	3273	0.2	50						
10:26	1.25	0.74	7.44	-100.8	17.92	3279	0.4	60						
10:34	1.25	0.73	7.44	-106.3	17.92	3287	0.4	70						
10:42	1.25	0.74	7.44	-111.2	17.89	3287	0.2	80						
10:50	___ Prior to sampling 8.34' BTOC													

SAMPLE PARAMETERS

TPH-e	TPH-p	VOCs	MEE	NN	Gen Min	Major Anions	Alk	TDS	Sal		Fe2+	Mn2+	DO

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 1.2 Mg/L
	Mn2+ = 1.1 Mg/L
	DO Top 1.63 Mg/L / Mid 1.25 Mg/L / Bot 1.05 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 04/24/01

Well Name	IR01MW16A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	24.1	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date		Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	_ MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
		Feet of Water		Well Installed by	
		Gallons/Foot		Installation Date	
Sample ID		Casing Volume		Development Date(s)	
Duplicate ID					

FIELD CHEMISTRY CALIBRATIONS

Date/Time 04/24/01 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas _Isobutylene___ PPM __100__ Span ___ Reading

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			

SAMPLE PARAMETERS

Al	Cu/Pb	Hg/Ni	PCBs	TPH-e	TPH-p	VOCs	Alpha, Beta	GenMin	MEE	Fe2+ NN	Mn2+ Major anions	DO TDS	Salinity

Condition of Well Good

Remarks Purged method with ES-60 submersible pump. Oz at TOC 0.6% after > 24 hrs venting, LEL > 100% - Did not sample

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	194194
Spec. Cond. Meter YSI 6820	Serial No.	194194
Pump ES-60	Serial No.	N/A
Water Level Meter Dipper T	Serial No.	2476
D.O. Meter YSI 6820	Serial No.	194194
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure YSI 6820	Serial No.	194194
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	N/A

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer@ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 04/24/01

Well Name	IR01MW17B	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	24.20'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	4/24/2001 @12:20	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	H. Cheng	Well Depth	58.20' MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
	M. Li	Feet of Water	58.20 - 24.20 = 34.00'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0116T004	Casing Volume	34.00' * 0.653 = 22.20 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 04/24/01 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at 15.5 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - 10.02 at 15.5 ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span ___ Reading 98.7

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
11:03		0.15	6.88	-106.9	18.53	1.696	2.8	10						
11:15		0.09	6.97	-36.0	18.51	3.447	5.4	20				31.20		
11:25		0.03	6.99	-34.3	18.54	3.655	0.9	30				31.20		
11:38		0.10	6.96	-19.4	18.56	3.745	-0.5	40				31.20		
11:47		0.09	6.95	-16.0	18.59	3.783	-0.7	50				31.10		
11:58		0.10	6.95	-15.6	18.60	3.808	-0.9	60				31.10		
12:08		0.08	6.96	-15.4	18.59	3.829	-0.8	70				31.20		

SAMPLE PARAMETERS

Al	Sb	Cd	PCBs	SVOCs	VOCs	alpha/beta	GenMin	MEE	NN	Major anions	Fe2+ AlK	Mn2+ TDS	DO Sal

Condition of Well no lock, otherwise good

Remarks Purged method with ES-60 submersible pump. Good recharge, Oz & LGL readings within H+S limits

FIELD EQUIPMENT

Ph Meter YSI 610-DM/6820	Serial No.	194196R
Spec. Cond. Meter YSI 610-DM/6820	Serial No.	194196R
Pump ES-60	Serial No.	N/A
Water Level Meter US-GGG-T-106E	Serial No.	2476
D.O. Meter 610-DM (YSI)/6820	Serial No.	194196R
Filter Apparatus N/A	Filters	N/A
Temp. Measure YSI 610-DM/6820	Serial No.	194196R
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361
gas meter GT 402.12	Serial No.	12046

Field Chemistry Calibrations

Fractions	Mn2+ 0.4 mg/L unfiltered
	Fe2+ 0.2 mg/L unfiltered
	DO (top) = 5.79 mg/L / (mid) 0.69 mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer@ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 04/16/01

Well Name	IR01MW18A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	20.35'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	04/17/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	D. Lloyd	Well Depth	33.68 MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	33.68 - 20.35 = 13.33'	Well Installed by	
	H. Cheng	Gallons/Foot	0.653	Installation Date	
Sample ID	0115D002 @8:55	Casing Volume	13.33' * 0.653 = 8.70 gal	Development Date(s)	
Duplicate ID	0115D003 @9:00				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 04/16/01 @ 07:45 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.532 umhos/cm at 19.6 ^{0}C (100 / 13.63)

pH: pH 4.00 - 3.98 at 19.6 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 97.7

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
12:29		0.71	7.07	-185.0	18.80	13.73	23.4	5						Sal 7.60
12:33		0.35	6.85	-163.9	18.96	10.43	359.0	10						5.93
12:37		0.33	6.81	-158.8	19.11	9.79	396.9	15						5.52
12:42		0.34	6.29	-158.4	19.18	9.477	966.4	20						
12:46		0.35	6.27	-158.0	19.17	9.33	1275.0	25						
		0.37	6.21	-155.6	19.16	9.236	1220.0	30						

SAMPLE PARAMETERS

Al	Cr	CrVI	Cu	Pb	Hg	Ni	Zn	PCBs	SVOCs	TPH-e	TPH-p	VOCs

alpha/beta Ra 226, 228 TDS Major Anions Alk Gen Min MEE NN

Condition of Well Good

Remarks Purged method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820	Serial No. 97E0627
Spec. Cond. Meter	YSI 6820	Serial No. 97E0627
Pump	ES-60	Serial No. N/A
Water Level Meter	Solinist model 101	Serial No. 23571
D.O. Meter	YSI 55	Serial No. YSI 55.05
Filter Apparatus	Disposable 10 Micron In-line	Filters .45 Micron
Temp. Measure	YSI 6820	Serial No. 97E0627
Interface Probe	N/A	Serial No. N/A
PID/OVA	thermo 580B OVM	Serial No. 61565333

Field Chemistry Calibrations

Fractions	unfiltered Fe2+ = 5.2 mg/L
	filtered Fe2+ = 4.2 mg/L
	unfiltered Mn2+ = 3.2 mg/L
Number of Bottles	filtered Mn2+ = 0.8 mg/L
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date

Well Name	IR01MW26B	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	19.7'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	4/23/2001 @12:15	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	59.7' x MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
Hwakong Cheng	John Fortuna	Feet of Water	59.7'-19.7'= 40'	Well Installed by	
Anita Teo, Margaret Li		Gallons/Foot	.653 gal/foot	Installation Date	
Sample ID	0116T002	Casing Volume	.653* 40' = 26.12 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100

FACTORY CALIBRATED

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
910		4.24	7.78	70.6	19.47	5697	1.3	10						
930		2.31	7.28	-71.9	18.81	8720	2.0	20						
950		0.47	7.09	-82.9	19.91	8260	2.2	30						
1000		0.42	7.11	-86.4	20.54	8165	2.6	40						
1105		0.35	7.04	-75.4	20.40	7751	0.5	50						
1110	DRY AT ~ 55 GALLONS													
1210		0.52	7.03	-73.3	21.27	7061	44.5	60						
	sampled at 12:15													

SAMPLE PARAMETERS

SVOCs	TPH-e	TPH-p	VOCs	Gen Min	MEE	NN	Major anions	ALK	TDS	Sal	alpha/beta DO	Fe2+	Mn2+

Condition of Well Good

Remarks Purged method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	194194
Spec. Cond. Meter YSI 6820	Serial No.	194194
Pump Grunros Bm1/Mp1	Serial No.	P193202969
Water Level Meter Dipper T	Serial No.	2476
D.O. Meter YSI 6820	Serial No.	194194
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure YSI 6820	Serial No.	194194
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	S/N 580U-58403-318

Field Chemistry Calibrations

Fractions		
	Fe2+ 2.6 mg/L unfiltered	DO top 4.38 mg/L
	Mn2+ .22 mg/L unfiltered	DO mid and bottom:
Number of Bottles		well too deep for DO cord
Sample Depth		
Field Notebook		
Sample Method and Rate	Bailer@ 200 mL/min	
Discharge Water Containerized?	Y	

GROUNDWATER
SAMPLING DATA SHEET

Date 03/22/01

Well Name	IR01MW31A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.58'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/22/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	24.65' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J.M	Feet of Water	24.65'-7.58' = 17.07'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111T018 @14:00	Casing Volume	17.07' * .653= 11.15 feet	Development Date(s)	
Duplicate ID	0111T019 @14:10				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/22/01 06:30 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 999 umhos/cm at ___ ^{0}C

pH: pH 4.00 - 3.97 at 14.40 ^{0}C pH 7.00 - 7.06 at 14.88 ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100.4

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
13:25		5.32	8.04	92.0	14.47	2825	65.9	5						
13:30		6.38	8.14	47.0	14.71	2212	106.5	10						
13:35		8.21	8.14	21.2	14.58	751	116.9	15						
13:40		9.56	8.06	4.8	14.45	116	111.2	20						
13:45		6.89	8.28	-13.9	14.41	2372	93.0	25						
13:50		4.89	8.41	0.8	14.65	2358	83.6	30						
13:55		4.89	8.41	0.8	14.65	2358	83.6	35						
Sample & duplication collected @ 14:00 dup. Labeled 14:10														

SAMPLE PARAMETERS 1.9Mg/L 10.5 Mg/L

Al	Pb	PCBs	VOCs	Gen Min	MEE	NN	Maj. Anion	Alk	TDS		Mn2+	Fe2+	DO

Condition of Well MEE & Gen Min. Duped * Hand Bailed*

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820/ 610DM	Serial No.	97B0440AA 194194R
Spec. Cond. Meter	YSI 6820/ 610DM	Serial No.	97B0440AA 194194R
Pump	hand bailed	Serial No.	N/A
Water Level Meter	solinst	Serial No.	23983
D.O. Meter	YSI 55	Serial No.	N/A
Filter Apparatus	N/A	Filters	N/A
Temp. Measure	YSI 6820/ 610DM	Serial No.	97B0440AA 194194R
Interface Probe	NA	Serial No.	N/A
PID/OVA	Determination	Serial No.	57032'311

Field Chemistry Calibrations

Fractions

DO top 0.52Mg/L Mid. 0.13Mg/L Bot. 0.06Mg/L

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 04/24/01

Well Name	IR01MW38A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	14.16'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	4/24/2001 @11:00	Static Elevation		PID Readings (background)	0.4 ppm
Sampling Personnel:	R. Erdman	Well Depth	25.50' MEAS ___ RPTD	PID Reading (TOC)	2.4 ppm
	J. Langston	Feet of Water	25.50 - 14.16 = 11.34'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0116P006	Casing Volume	11.34' * 0.653 = 7.41 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span ____ Reading

Calibrated using Auto Cal Solution of pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
09:55	400	15.8	7.19	109.10	18.55	6047	443.0					14.10		
09:59	250.0	9.50	7.19	109.60	17.82	6078	557.2					14.65		
10:04	200.0	0.85	7.19	109.70	17.81	6073	569.5					14.80		
10:07	125.0	0.80	7.2	111.00	17.86	6085	540.2					14.85		
10:10	125.0	0.76	7.21	111.80	17.94	6063	544.4					14.86		
10:15	125.0	0.71	7.21	112.10	17.98	6052	550.6					14.86		
10:20	125.00	0.50	7.22	112.00	17.97	5974	588.7					14.86		
10:25	125.00	0.44	7.22	111.80	17.98	5935	630.9					14.86		
10:30	125.0	0.42	7.21	111.70	17.97	5881	127.8					14.87		
10:35	125	0.37	7.21	110.90	18.01	5878	200.4					14.87		
10:40	125	0.37	7.22	110.90	18.05	5744	213.4					14.87		

SAMPLE PARAMETERS

VOCs	GenMin	MEE	NN	major anions	Alk	TDS			alpha/beta	Mn2+	Fe2+	DO	

Condition of Well Good

Remarks Purged method with ES-60 submersible pump. 2.0 mg/L 1.10 mg/L

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	194194
Spec. Cond. Meter YSI 6820	Serial No.	194194
Pump ES-60	Serial No.	N/A
Water Level Meter N/A	Serial No.	N/A
D.O. Meter N/A	Serial No.	N/A
Filter Apparatus N/A	Filters	N/A
Temp. Measure YSI 6820	Serial No.	194194
Interface Probe N/A	Serial No.	N/A
PID/OVA N/A	Serial No.	N/A

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer@ 200 mL/min
Discharge Water Containerized?	

GROUNDWATER
SAMPLING DATA SHEET

Date 03/19/01

Well Name	IR01MW42A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.40'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/19/01 @15:00	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	E. Chong	Well Depth	26.55' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	A. Taylor	Feet of Water	26.55 - 9.40 = 17.15'	Well Installed by	
	J. M.	Gallons/Foot	0.653	Installation Date	
Sample ID	0111T005	Casing Volume	17.15' * 0.653 = 11.20 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/19/01 07:30 Spec. Conductance: Standard ___ umhos/cm at 25C Reading 4.49 umhos/cm at 17.12 ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 9.2 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

Calibrated using Auto Cal solution for pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
14:35	2.5	4.39	7.15	10.3	18.89	22982	424.0	5						
14:37	2.5	2.48	7.19	-41.4	18.66	20138	202.7	10						
14:39	2.5	1.64	7.21	-47.2	18.59	19425	82.5	15						
14:41	2.5	1.28	7.21	-50.6	18.59	19160	40.9	20						
14:43	2.5	1.10	7.21	-52.7	18.59	18886	24.6	30						
Sample Collected @ 15:00														

SAMPLE PARAMETERS

Pb	VOCs		Gen Min	MEE	NN	Major Anions	AIK	TDS	Alpha/Beta				

Condition of Well H2O clear w/ grey tint well casing marked AW42A missing IR designation

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 610 DM	Serial No.	194195
Spec. Cond. Meter	YSI 610 DM	Serial No.	194195
Pump	N/A	Serial No.	N/A
Water Level Meter	solinst	Serial No.	23983
D.O. Meter	YSI 55	Serial No.	N/A
Filter Apparatus	N/A	Filters	N/A
Temp. Measure	YSI 610 DM	Serial No.	194195
Interface Probe	N/A	Serial No.	N/A
PID/OVA	determinator	Serial No.	57632-311

Field Chemistry Calibrations

Fractions	Fe2+ = 0.45Mg/L
	Mn2+ = 5.8 Mg/L
	DO top 0.42Mg/L Mid. 0.14Mg/L Bot. 0.09Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/16/01

Well Name	IR01MW43A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.69'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/16/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	24.71' MEAS X RPTD	PID Reading (TOC)	0.9 ppm
	S. Penman	Feet of Water	24.71'-9.69' = 15.02'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653	Installation Date	
Sample ID	0110P030 @13:30	Casing Volume	15.02*.653= 9.81 feet	Development Date(s)	
Duplicate ID	0110P031 @14:00				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading 1000 umhos/cm at 13.63 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.03 at 13.63 ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 10.14 mg/L at 14.7 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100.1

PURGING

Time	Discharge Rate (gal/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
12:09		2.38	6.97	-102.5	16.04	1407	4.8	4						
12:16	0.8	1.67	7.49	-135.0	17.68	21828	40.6	8						
12:19	1.33	1.28	7.22	-138.7	16.74	3653	15.8	12						
12:22		1.17	7.21	-139.8	16.69	4444	19.3	16						
12:26		1.05	7.44	-159.3	16.98	6680	4.0	20						
12:30		0.96	7.50	-162.3	17.23	9022	2.3	24						
12:33		0.90	7.54	-163.6	17.64	15024	3.8	28						
13:30	Sample @ 12.5' BTOC													

SAMPLE PARAMETERS

Sb	PCBs	Pest	SVOCs	TPH-e	TPH-p	Alpha/Beta	VOCs	Gen Min	Sal MEE	Mn2+ NN	Fe2+ Major Anions	DO ALK	TDS

Condition of Well Water appeared "sudsy." Dupes for salinity and PCBs

Remarks Purge method with ES-60 submersible pump. Sampled when well was 12.5' from TOC.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.2 Mg/L
	Fe2+ = 1.2 Mg/L
	Do Top 0.84 Mg/L /Mid 0.63 Mg/L /Bot 0.54 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/27/01

Well Name	IR01MW44A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.5'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/27/01 @9:10	Static Elevation		PID Readings (background)	0.1ppm
Sampling Personnel:	A. Taylor	Well Depth	10.66' MEAS X RPTD	PID Reading (TOC)	0.2ppm
	J.M	Feet of Water	10.66'-8.5' = 2.16'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112T008	Casing Volume	2.16' * .653 = 1.41'	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/27/01 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1050 umhos/cm at 14.94 ^{0}C

pH: pH 4.00 - 3.85 at 15.12 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.8

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
08:44	2.5	4.84	6.35	226.7	15.23	3971	52.8	0.83						
08:44:20	2.5	3.38	6.68	180.0	14.91	2196	52.1	1.66						
08:44:40	2.5	2.78	6.78	158.0	14.87	1608	50.9	2.49						
08:45	2.5	2.17	6.78	141.9	14.84	1551	49.9	3.32						
08:45:20	2.5	1.65	6.80	113.4	14.79	1702	49.7	4.2						
Sample collected @ 09:10 AM														

SAMPLE PARAMETERS

Zn	PCBs	Pest	TpH-e	TpH-p	Alpha/Beta	Gen Min	MEE	NN	Maj. Anion	AIK	TDS	Fe2+	DO Mn2+

Condition of Well Latck of bubbles bubbles in VOA's due to lack of

Remarks QA/QC in bottles & caps. Soapy/ Surfactant/slippery/foamy/gray/ashy

Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 680/ 610DM	Serial No. 9780440AA 194194R
Spec. Cond. Meter	YSI 680/ 610DM	Serial No. 9780440AA 194194R
Pump	NA	Serial No.
Water Level Meter	NA	Serial No.
D.O. Meter	solinist	Serial No. 23983
Filter Apparatus	YSI 55	Filters
Temp. Measure	YSI 680/ 610DM	Serial No. 9780440AA 194194R
Interface Probe		Serial No.
PID/OVA	Determinator	Serial No. 57032311

Field Chemistry Calibrations

Fractions Mn2+ = 1.5 Mg/L

Fe 2+ = 0.5 Mg/L

DO Top 4.1 Mg/L /Mid 3.7 Mg/L /Bot 3.5 Mg/L

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/28/01

Well Name	IR01MW47B	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	5.01'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/28/01	Static Elevation		PID Readings (background)	0.0ppm
Sampling Personnel:	D. Lloyd	Well Depth	46.64' MEAS X RPTD	PID Reading (TOC)	0.0ppm
	H. Cheng	Feet of Water	46.64'-5.01' = 38.63'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112D004 @10:13	Casing Volume	38.63' * .653= 25.23'	Development Date(s)	
Duplicate ID	0112D005 @10:18				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/28/01 07:01 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ____ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - 10.08 at 15 ^{0}C

Dissolved Oxygen: D.O. Meter ____ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 101.9

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:09		0.34	7.16	-127.0	17.53	8944	11.7	20						
09:29		0.30	7.09	-131.6	17.54	7692	6.3	40						
10:02		0.42	6.97	-138.9	17.61	6354	5.4	60						
10:12		0.44	6.97	-139.0	17.63	6322	2.5	70						
10:17		0.46	6.97	-139.4	17.65	6324	1.5	75						
10:19		0.46	6.97	-139.6	17.64	6331	1.4	77						
								95						
								100						
								1025						
								105						

SAMPLE PARAMETERS

SVOCs	VOCs	Alpha/Beta	Gen. Min	MEE	NN	Major Anion	AIK	TDS	Sal		Fe2+	Mn2+	DO

Condition of Well Good, no lock

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	97E1155AA
Spec. Cond. Meter YSI 6920	Serial No.	97E1155AA
Pump ES-60	Serial No.	
Water Level Meter solinst	Serial No.	25551
D.O. Meter YSI - 57	Serial No.	91L034311
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure YSI 6920	Serial No.	97E1155AA
Interface Probe	Serial No.	
PID/OVA Thermo 580B	Serial No.	580SN/V 68616-361

Field Chemistry Calibrations

Fractions Mn2+ Unfiltered = 0.17 Mg/L; Filtered 0.15 Mg/L
Fe2+ Unfiltered = 4.4 Mg/L; Filtered 32.9 Mg/L
Do Top 0.9 Mg/L /Mid 0.8 Mg/L /Bot 0.7 Mg/L

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/29/01

Well Name	IR01MW48A	Screen Interval			
Project	Phase II GW DGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.35'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/29/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	20.95' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	20.95'-8.35'= 12.6 feet	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112P017 @ 11:20	Casing Volume	.653*12.6' 8.23 gallons	Development Date(s)	
Duplicate ID	0112P018 @ 11:45				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/29/01 @ 07:30 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1010 umhos/cm at 13.56 ^{0}C

pH: pH 4.00 - 3.97 at 12.15 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 9.01 mg/L at 20.4 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 98.7

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
10:52	GPM	5.49	7.00	-144.6	15.57	7791	44.5	4						
10:54	2	4.13	7.39	-166.8	15.42	6856	44.6	8						
10:56	2	3.65	7.41	-166.4	15.36	6145	44.1	12						
10:58	2	3.77	7.47	-171.8	15.44	6087	42.4	16						
11:00	2	4.07	7.54	-181.4	15.52	6128	41.7	20						
11:02	2	4.22	7.67	-195.9	15.56	6158	41.7	24						
11:04	2	4.45	7.88	-217.8	15.60	6223	41.5	28						
11:06	2	4.46	7.98	-233.9	15.62	6359	42.3	32						
11:08	2	5.22	8.05	-246.6	15.62	6670	43.1	36						
11:15	V Prior to sampling = 8.51' BTOC													

SAMPLE PARAMETERS

Al	Ba/Cr	Cr VI	Cu	Pb	Zn	VOCs	Alpha/Beta	Gen. Min	MEE	NN	Mn2+ Maj. Anions	Fe2+ AIK	DO TDS/ Sal

Condition of Well Good Duplicate Gen min, MEE, NN, Maj. Anions, AIK, TDS

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820	Serial No. 97L0044AB
Spec. Cond. Meter	YSI 6820	Serial No. 97L0044AB
Pump	Grundfos	Serial No. ESS 1.75
Water Level Meter	solinist	Serial No. WLM .55
D.O. Meter	YSI 55	Serial No. YSI 55.05
Filter Apparatus	Disposable 10 Micron In-line	Filters .45 Micron
Temp. Measure	YSI 6820	Serial No. 97L0044AB
Interface Probe	NA	Serial No. NA
PID/OVA	Thermo 580B OVM	Serial No. 580u-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
	DO Top 1.44 Mg/L /Mid 0.72 Mg/L /Bot 0.38 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/29/01

Well Name	IR01MW53B	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	4.94'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/29/01 @ 10:20	Static Elevation		PID Readings (background)	0.0ppm
Sampling Personnel:	S. Penman	Well Depth	45.77 MEAS X RPTD	PID Reading (TOC)	0.0ppm
	J. Langston	Feet of Water	45.77'-4.94' = 40.83'	Well Installed by	
		Gallons/Foot	0.653 gal/foot	Installation Date	
Sample ID	0112P016	Casing Volume	40.83' * .653= 26.66 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/29/01 07:30 Spec. Conductance: Standard 100 umhos/cm at 25C Reading 1010 umhos/cm at 13.56 ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - 10.17 at 14.28 ^{0}C

Dissolved Oxygen: D.O. Meter 9.01 mg/L at 70.4 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 98. 7

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:43	GPM	9.92	7.39	244.3	17.19	3642	41.5	15						
09:49	2.5	3.13	7.00	227.8	17.52	3711	41.8	30						
09:54	3.0	2.82	6.98	202.9	17.53	3787	41.7	45						
10:00	2.5	2.66	6.92	168.1	17.55	3813	42.4	60						
10:06	2.5	2.47	6.98	142.5	17.55	3821	41.6	75						
10:12	2.5	1.88	6.98	117.5	17.56	3815	41.7	90						
10:18	V 5.23' BTOC prior to sampling													

SAMPLE PARAMETERS

Cd	TpH-e	TpH-p	VOCs	TDS	Sal								

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump Grundfos	Serial No.	ESS 1.75
Water Level Meter solinst	Serial No.	WLM 55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580u-68610-361

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/26/01

Well Name	IR01MW58A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.08'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/26/01	Static Elevation		PID Readings (background)	0.0
Sampling Personnel:	A. Taylor	Well Depth	18.47 MEAS ___ RPTD	PID Reading (TOC)	2.9 down to 2.0 after 1 min.
	J.M	Feet of Water	18.47'-6.08'= 12.39'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112T004 @14:15	Casing Volume	12.39' * .653 = 8.09 gallons	Development Date(s)	
Duplicate ID	0112T005 @14:35				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/26/01 07:00 Spec. Conductance: Standard ___ umhos/cm at 25C Reading ___ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - 7.00 at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 97.8

Calibrated using Auto Cal solution for pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
14:04	2.5	5.32	8.04	92.0	14.47	2825	65.9	5						
14:06	2.5	6.38	8.14	47.0	14.71	2212	106.5	10						
14:08	2.5	8.21	8.14	21.2	14.58	751	116.9	15						
14:10	2.5	9.56	8.00	64.8	14.45	116	111.2	20						
14:12	2.5	6.89	8.28	-13.9	14.41	2372	93.0	25						
14:18	2.5	6.87	8.25	-10.1	14.38	2370	92.5	35						
Sample time 14:15														
Duplicate time 14:35														
Duped TpH-e														

SAMPLE PARAMETERS

Ba	TpH-e	TpH-p	VOCs	Gen Min	MEE	NN	Maj. Anions	AlK	TDS	Fe2+	Mn2+	DO	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Spec. Cond. Meter	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Pump	NA	Serial No.	
Water Level Meter	solinst	Serial No.	23983
D.O. Meter	YSI 55	Serial No.	
Filter Apparatus	N/A	Filters	N/A
Temp. Measure	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Interface Probe		Serial No.	
PID/OVA	Determination	Serial No.	57032311

Field Chemistry Calibrations

Fractions	Fe2+ = 0.5 Mg/L
	Mn2+ = 0.7 Mg/L
	DO top 6.8Mg/L mid. 3.9Mg/L bot. 2.7Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/28/01

Well Name	IR01MW62A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	5.52'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/28/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	15.15 MEAS X RPTD	PID Reading (TOC)	2.6 ppm
	J. Langston	Feet of Water	15.15'-5.52'= 9.63'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112P010 @8:55	Casing Volume	9.63' * .653 = 6.29 gallons	Development Date(s)	
Duplicate ID	0112P011 @9:25				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/28/01 07:15 Spec. Conductance: Standard ___ umhos/cm at 25C Reading ___ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - 10.17 at 14.28 ^{0}C

Dissolved Oxygen: D.O. Meter 10.40 mg/L at 13.7 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 97.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
08:36	GPM	1.75	6.63	12.7	15.10	58	58.8	3						
08:37	3.0	1.34	6.90	-31.8	15.13	92	46.1	6						
08:39	1.5	1.11	7.20	-69.1	15.15	7517	44.4	9						
08:40	3.0	1.15	7.38	-107.0	15.20	7808	42.8	12						
08:41	3.0	1.11	7.49	-131.9	15.23	7690	43.3	15						
08:43	1.5	1.09	7.58	-156.4	15.25	7878	43.2	18						
08:44	3.0	1.09	7.63	-170.5	15.26	7808	43.1	21						
08:46	1.5	1.10	7.68	-184.8	15.28	7812	43.0	24						
08:48	1.5	1.04	7.71	-194.0	15.30	8107	42.7	27						
08:48	V prior to sampling = 5.68' BTOC													

SAMPLE PARAMETERS

SVOCs	Metals	Cr VI	MEE	NN	Maj. Anion	AlK	TDS		Mn2+	Fe2+	DO

Condition of Well Collected Duplicate for: As, Ba, Cd, Cr, Pd, Hg, Ni, Al, Sb, TDS

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter	Ysi 6820	Serial No.	97L0044AB
Pump	Grundfos	Serial No.	ESS 1.75
Water Level Meter	solinst	Serial No.	WLM .55
D.O. Meter	YSI 55	Serial No.	YSI 55.05
Filter Apparatus	Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure	YSI 6820	Serial No.	97L0044AB
Interface Probe	NA	Serial No.	NA
PID/OVA	Thermo 580B OVM	Serial No.	

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/29/01

Well Name	IR01MW63A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	5.1'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/29/01 @10:45	Static Elevation		PID Readings (background)	.3ppm
Sampling Personnel:	A. Taylor	Well Depth	19.56' MEAS ___ RPTD	PID Reading (TOC)	22.8ppm
	J.M	Feet of Water	19.56'-5.1'= 14.46'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112T016	Casing Volume	.653*14.46'= 9.44'	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/29/01 07:30 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1018 umhos/cm at -13.52 ^{0}C

pH: pH 4.00 - 3.26 at 12.53 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.4

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
10:16	2.5	14.72	8.22	33.3	15.56	9837	50.50	5						
10:18	2.5	15.46	8.19	-70.0	15.24	9594	49.51	10						
10:20	2.5	15.89	8.20	-105.8	15.28	9535	49.60	15						
10:22	2.5	16.68	8.20	-120.2	15.34	9391	48.90	20						
10:24	2.5	17.48	8.19	-132.0	15.41	9135	48.30	25						
10:30	2.5	18.00	8.18	-141.8	15.53	8888	47.50	35						
Sample collected @ 10:45														

SAMPLE PARAMETERS

Ba	TDS												

Condition of Well Good Tidal window 9-12 sampling - note: high PID reading, petso smell

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Spec. Cond. Meter	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Pump	NA	Serial No.	
Water Level Meter	solinist	Serial No.	23983
D.O. Meter	YSI 55	Serial No.	
Filter Apparatus	N/A	Filters	N/A
Temp. Measure	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Interface Probe		Serial No.	
PID/OVA	Determination	Serial No.	57032311

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/14-16/01, 3/19/01

Well Name	IR01MW366A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	14.64'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/15/01 @ 08:45	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	20.01' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	20.01'-14.64' = 5.37'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653 gallons/foot	Installation Date	
Sample ID	0110P019	Casing Volume	5.37*.653 = 3.51 feet	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/14/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 11.02 mg/L at 10.9 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.5

Turbidity - 100 NTU / 100.9 reading

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
13:40		3.16	7.16	16.2	16.84	4648	33.5	2						
13:41		2.22	7.09	21.2	16.61	4069	21.9	4						Dry @ 5 gallons
								6						

SAMPLE PARAMETERS

Cd	Cu	Hg	Ni	Zn	SVOCs	TPH-e	TPH-p	TDS	Alpha/Beta Gen Min	MEE	Fe2+ NN	Mn2+ Major Anions	DO Alk

Condition of Well Good

Remarks 3-15-01 @ 8:45 were only able to sample for MEE, NN, TPH-p, major anions, TDS, Alk, and 1 L SVOCs.
Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.8 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 1.11 Mg/L /Mid 0.74 Mg/L /Bot 0.65 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/21/01

Well Name	IR01MW367A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.95'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/21/01 @ 08:55	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	17.38' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	17.38'-9.95' = 7.43'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653 gal/foot	Installation Date	
Sample ID	0111P015	Casing Volume	7.43' * .653 = 4.85 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/21/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.39 at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 10.34 mg/L at 14.2 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.2

Turbidity - pre 68/ standard 100

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
08:35	GPM	1.42	8.29	-99.1	14.86	6916	42.6	2						
08:36	2.0	1.33	8.36	-105.2	14.59	6188	42.0	4						
08:37	2.0	1.21	8.35	-109.3	14.47	6039	90.1	6						
08:38	2.0	1.17	8.33	-118.4	15.55	6353	93.2	8						
08:39	2.0	1.28	8.25	-120.5	14.60	6426	45.5	10						
08:40	2.0	1.55	8.23	-120.4	14.69	6547	74.0	12						
08:42	1.0	1.50	8.28	-124.0	14.70	6534	60.6	14						
08:44	1.0	1.41	8.23	-126.1	14.58	6344	46.0	16						
08:46	1.0	1.31	8.21	-127.4	14.70	6597	46.6	18						
08:35	___ Prior to sampling 11.35' BTOC													

SAMPLE PARAMETERS

Zn	Pest	TPH-e	TPH-p	VOCs	Alpha/Beta	Gen Min	MEE	NN	Major Anions	Alk	TDS	Fe2+	DO Mn2+

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. MS/MSD for Alpha/Beta

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.3 Mg/L
	Fe2+ = 0.6 Mg/L
	Do Top 0.79 Mg/L /Mid 0.66 Mg/L /Bot 0.54 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/22/01

Well Name	IR01MW400A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.17'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/22/01 @ 08:55	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	22.57' MEAS X RPTD	PID Reading (TOC)	1.8 ppm
	S. Penman	Feet of Water	22.57'-8.17' = 14.4'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653	Installation Date	
Sample ID	0111P021	Casing Volume	14.4' * .653 9.4 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/22/01 @ 06:30 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 999 umhos/cm at 14.84 ^{0}C

pH: pH 4.00 - 3.98 at 14.95 ^{0}C pH 7.00 - 7.0 at 14.84 ^{0}C pH 10.00 - at ^{0}C

Dissolved Oxygen: D.O. Meter 10.19 mg/L at 14.7 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.9

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:43	GPM	2.28	7.33	-122.2	16.22	4335	448.2	5						
11:46	1.7	1.59	7.48	-195.9	16.31	6895	413.2	10						
11:49	1.7	1.13	7.56	-238.3	16.30	7909	78.9	15						
11:52	1.7	1.48	7.34	-244.2	15.54	2708	58.0	20						
11:55	1.7	1.17	7.41	.262.9	15.87	4426	65.4	25						
11:58	1.7	1.00	7.49	-278.8	15.80	4412	50.6	30						
12:02	1.3	0.92	7.53	-290.9	16.07	5173	60.2	35						
12:05	1.7	0.87	7.58	-298.1	15.92	4955	53.3	40						
12:09	___ Prior to sampling = 8.64' BTOC													

SAMPLE PARAMETERS

PCB	Gen Min	MEE	NN	Major Anions	Alk	TDS			Fe2+	Mn2+	DO		

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.4 Mg/L
	Do Top 1.10 Mg/L /Mid 0.74 Mg/L /Bot 0.61 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/22/01

Well Name	IR01MW401A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	10.33'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/22/01 @ 11:05	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	22.15' MEAS X RPTD	PID Reading (TOC)	0.8 ppm
	S. Penman	Feet of Water	22.15' -10.33' = 11.82'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111P020	Casing Volume	11.82' * .653= 7.72 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/22/01 @ 06:30 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 999 umhos/cm at 14.84 ^{0}C

pH: pH 4.00 - 3.98 at 14.94 ^{0}C pH 7.00 - 7.0 at 14.84 ^{0}C pH 10.00 - at ^{0}C

Dissolved Oxygen: D.O. Meter 10.19 mg/L at 14.7 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.9

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
10:43	GPM	1.98	7.12	-129.5	15.66	1596	192.0	3						
10:45	1.5	2.23	7.05	-100.1	15.66	1563	96.5	6						
10:48	1.0	2.61	7.03	-73.4	15.45	1600	58.9	9						
10:51	1.0	1.96	6.99	-62.6	15.51	1655	50.0	12						
10:53	1.5	1.64	6.98	-57.0	15.52	1715	43.1	15						
10:56	1.0	1.45	6.98	-53.3	15.56	1742	41.4	18						
10:59	1.0	1.33	6.97	-51.2	15.60	1758	41.2	21						
11:01	1.5	1.28	6.97	-49.3	15.65	1757	41.0	24						
11:04	___ Prior to sampling = 10.93' BTOC													

SAMPLE PARAMETERS

Metals	SVOCs	VOCs	MEE	NN	Major Anions	Alk	TDS				Fe2+	Mn2+	DO

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. Collected MS/MSD for VOCs.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.1 Mg/L
	Fe2+ = 0.4 Mg/L
	Do Top 4.42 Mg/L /Mid 1.69 Mg/L /Bot 0.66 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date

Well Name	IR01MW402A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.84'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	04/23/01	Static Elevation		PID Readings (background)	0.5 ppm
Sampling Personnel:		Well Depth	19.6' x MEAS ___ RPTD	PID Reading (TOC)	3.5 ppm
	Rick Erdman	Feet of Water	19.6'-7.84'= 11.76'	Well Installed by	
	Jerome Langston	Gallons/Foot	0.653	Installation Date	
Sample ID	0116P001@ 10:00	Casing Volume	11.76' * .653= 7.68 gallons	Development Date(s)	
Duplicate ID	0116P002@ 11:00				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C 100 13.63

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100

Calibrated using Auto Cal Solution for pH specific conductivity

PURGING

Time	Discharge Rate (gal/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
0856		0.08	7.69	159.1	16.17	7.04	46.2	initial	N/A			7.84		
0900	1.0	0.20	7.54	163.9	16.11	6.75	28.2	4	0.5			8.17		
0904	1.0	0.33	7.26	149.9	16.01	5.7	22.1	8	1			8.09		
0908	1.0	0.31	7.19	152.8	16.00	5.3	8.1	12	1.5			8.11		
0912	1.0	0.44	7.15	152.7	15.99	4.95	2.0	16	2			8.12		
0916	1.0	0.70	7.15	150.3	15.99	4.88	1.4	20	2.5			8.16		
0920	1.00	0.36	7.17	149.9	15.99	4.92	1.0	24	3			8.14		

SAMPLE PARAMETERS

TPH-e	TPH-p	Gen Min (filtered)	MEE	NN	major anions	ALK	TDS						

Condition of Well Poor Below Grade Completion, floods. Needs lock

Remarks collect field duplicate: Gen Mins, MEE, NN, major anions, Alk, TDS; Purged method with ES-60 submersible pump

FIELD EQUIPMENT

Ph Meter YSI 610-DM	Serial No.	194196	
Spec. Cond. Meter YSI 610-DM	Serial No.	194196	
Pump ES-60	Serial No.	N/A	
Water Level Meter Solinist	Serial No.	23571	
D.O. Meter YSI 610-DM	Serial No.	194196	
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 microns	
Temp. Measure YSI 610-DM	Serial No.	194196	
Interface Probe N/A	Serial No.	N/A	
PID/OVA OVM 580-B	Serial No.	580U-	

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	bailer @ 200ml/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/20/01

Well Name	IR01MW403A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.64'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/20/01	Static Elevation		PID Readings (background	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	21' MEAS ___ RPTD X	PID Reading (TOC)	0.0 ppm
	J.M	Feet of Water	21'-6.64' = 14.36'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111T007 @9:55	Casing Volume	14.36' * .653 9.38 gallons	Development Date(s)	
Duplicate ID	0111T008 @10:05				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/20/01 07:00 Spec. Conductance: Standard 4467 umhos/cm at 25C Reading 4490 umhos/cm at ___ ^{0}C

pH: pH 4.00 -3.79 at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 96.8

Calibrated using Auto Cal solution for pH specific conductivity 2 Sal -0 A&M O Turbidity -0.0 0.0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:27	2.5	1.47	7.39	7.59	16.69	6637	10.2	5						
09:29	2.5							10						
09:31	2.5	1.45	7.39	-76.0	15.71	3545	4.3	15						
09:33	2.5	1.41	7.50	-88.9	15.75	3053	1.2	20						
09:35	2.5	1.10	7.21	-52.7	18.59	18886	24.6	25						
09:37	2.5	1.33	7.59	-102.7	15.77	2914	0.10	30						
Sample collected @ 09:55														

SAMPLE PARAMETERS

Metals	SVOCs	VOCs	Gen Min	MEE	NN	Maj. Anion	AIK	TDS			Fe2+	Mn2+	DO

Condition of Well Good but flooded (flush mount) duped on Maj. Anions & AIK : time = 10:05

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 610DM	Serial No. 194195
Spec. Cond. Meter	YSI 610DM	Serial No. 194195
Pump	NA	Serial No. N/A
Water Level Meter	solinist	Serial No. 23983
D.O. Meter	YSI 55	Serial No. N/A
Filter Apparatus	N/A	Filters N/A
Temp. Measure	YSI 610DM	Serial No. 194195
Interface Probe	N/A	Serial No. N/A
PID/OVA	determinator	Serial No. 57632-311

Field Chemistry Calibrations

Fractions	Fe2+ = 0.65 Mg/L
	Mn2+ = 1.4 Mg/L
	DO top 0.41 Mg/L /Mid. 0.19 Mg/L /Bot. 0.08 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/06/01

Well Name	IR01MWI-2	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	10.48'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/06/01 @10:10	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	21.61' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	21.61'-10.48' = 11.13'	Well Installed by	
		Gallons/Foot	0.163	Installation Date	
Sample ID	0109P001	Casing Volume	11.13' * .163= 1.81 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/06/01 @ 07:00 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.00 at ___ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 9.86 mg/L at 13.7 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.3

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:49		21.76	6.72	41.4	17.51	4880	688.1	1						
09:59		25.25	6.82	34.7	17.27	4986	243.6	2						
10:00		20.07	6.87	25.0	17.17	5051	487.0	3						
10:00		24.93	6.88	14.3	17.20	5047	728.9	4						
10:01		22.71	6.89	5.4	17.24	5057	158.1	5						
10:01		19.58	6.90	0.2	17.26	5065	291.0	6						
10:02		20.60	6.91	-0.4	17.26	5076	259.7	7						
10:02		21.12	6.91	-2.8	17.26	5074	233.5	8						
10:05	___ Prior to sampling 10.73' BTOC													

SAMPLE PARAMETERS

Al	As	Ba	Be	Cr	CrVI	Cu	Pb	Hg	Ni	Zn	Alpha/Beta	TDS	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. Collected MS/MSD

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97B0440AA
Spec. Cond. Meter YSI 6820	Serial No.	97B0440AA
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97B0440AA
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	N/A
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/29/01

Well Name	IR01MWI-3	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	11.92'	Type	N/A
Well Location	Parcel E	Well Stick Up	12.2 @ 10:19	Measured with	N/A
Sample Date	03/29/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	D. Lloyd	Well Depth	20.85' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	H. Cheng	Feet of Water	20.85'-11.92'= 8.93'	Well Installed by	
		Gallons/Foot	0.163 gal/foot	Installation Date	
Sample ID	0112P007 @10:22	Casing Volume	8.93' * .163= 1.46 gallons	Development Date(s)	
Duplicate ID	0112D008 @10:27				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/29/01 07:30 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1079 umhos/cm at 12.7 ^{0}C

pH: pH 4.00 - 3.77 at 12.69 ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ____ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.3

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:45		NA ----------					Hi	~ 2						Dry
10:00		2.30	6.90	-14.1	19.70	8877	67.0	8.5						
10:01		1.86	6.78	-63.1	19.62	6670	40.0	3.0						Dry
10:02	Sampled													

SAMPLE PARAMETERS

Ni	Zn	PCBs	TpH-p	TpH-e	VOCs	SVOCs	Alpha/Beta	Gen Min	Fe2+ MEE	Mn2+ NN	DO Maj. Anion	AIK	TDS

Condition of Well Good no lock!

Remarks Purge method with ES-60 submersible pump. mosquitos

FIELD EQUIPMENT

Ph Meter	YSI- 6920	Serial Number	97E5511AA
Spec. Cond. Meter	YSI- 6920	Serial Number	97E5511AA
Pump	ES-60	Serial Number	N/A
Water Level Meter	solinst	Serial Number	25551
D.O. Meter	YSI- 57	Serial Number	91L40311
Filter Apparatus	Disposable 10 Micron	Filters	.45 Micron
Temp. Measure	YSI- 6920	Serial Number	97E5511AA
Interface Probe		Serial Number	N/A
PID/OVA	Thermo 580B	Serial Number	5805NU68616-361

Field Chemistry Calibrations

Fractions	Fe2+ Unflitered = 3.8 Mg/L; Filtered 0.3 Mg/L
	Mn2+ Unfiltered = 0.45 Mg/L; Filtered 0.45 Mg/L
	Do Top 1.7 Mg/L /Mid 0.9 Mg/L /Bot 0.8 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date

Well Name	IR01MWI-5	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	21.22'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	4/24/2001 @15:30	Static Elevation		PID Readings (background)	.5 ppm
Sampling Personnel:		Well Depth	29.4' x MEAS ___ RPTD	PID Reading (TOC)	3.5 ppm
	RE, NL	Feet of Water	29.4'-21.22'= 8.18'	Well Installed by	
		Gallons/Foot	.653 gal/foot	Installation Date	
Sample ID	0116P007	Casing Volume	8.18' * .653 = 5.34 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100

Calibrated Using Auto Cal Solution for pH specific conductivity

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
1440	125	0.66	6.83	109.7	24.31	4705	1601.4	initial	N/A			21.22		
1450	100.0	0.69	6.82	-99.0	23.74	4684	1599.0					21.51		
1455	100.0	0.69	6.83	-88.5	23.96	4686	1599.7					21.52		
1500	200.0	0.70	6.84	-96.5	23.49	4702	1598.3					21.52		
1505	150.0	0.66	6.85	-99.3	22.31	4644	1592.2					21.52		
1510	150.0	0.49	6.87	-102.6	22.48	4729	1592.0					21.52		
1515	150.00	0.51	6.87	-97.3	22.90	4694	1593.7					21.53		
1520	150.00	0.62	6.88	-93.7	22.31	4695	1591.6					21.54		
1525	150.0	0.65	6.88	-93.6	21.87	4730	1589.2					21.54		
1530	150	0.67	6.88	-92.7	21.93	4708	1591.7					21.54		
	begin sampling													

SAMPLE PARAMETERS

Sb	Ba	Cr	CrVI	Cu	Pb	Sal	Alk	Hg	TDS	Ni	NN	Zn	Major Anions	PCBs	Gen. Minerals	Pest	Fe2+	SVOCs	Mn2+	VOCs	DO	alpha/beta

Condition of Well 2" stainless steel casing; good

Remarks Purged method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820	Serial No.	N/A
Spec. Cond. Meter	YSI 6820	Serial No.	N/A
Pump	ES-60	Serial No.	N/A
Water Level Meter	Solinist	Serial No.	N/A
D.O. Meter	YSI 55	Serial No.	N/A
Filter Apparatus	Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure	YSI 6820	Serial No.	N/A
Interface Probe	N/A	Serial No.	N/A
PID/OVA	thermo 580B OVM	Serial No.	N/A

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer@ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/30/01

Well Name	IR01MWI-7	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	3.4'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/30/01	Static Elevation		PID Readings (background)	0.0ppm
Sampling Personnel:	A. Taylor	Well Depth	13.1' MEAS X RPTD	PID Reading (TOC)	0.1ppm
	J.M	Feet of Water	13.1'-3.4'= 9.7'	Well Installed by	
		Gallons/Foot	0.163	Installation Date	
Sample ID	0112T019 @11:10	Casing Volume	9.7' * .163= 1.58 gallons	Development Date(s)	
Duplicate ID	0112T020 @11:30				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 07:30 @ 03/30/01 Spec. Conductance: Standard 4490 umhos/cm at 25C Reading 4093 umhos/cm at 15.72 ^{0}C

pH: pH 4.00 - 4.15 at 14.49 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.3

NTU 88.9 on 0.00 standard temp. = 15.51

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
11:05	2.5	2.18	6.96	-123.0	16.45	37470	-10.7	1.25						
11:05	2.5	0.76	7.47	-242.7	14.66	38670	-20.8	2.5						
11:06	2.5	0.63	7.51	-253.9	14.54	38754	-27.7	3.75						
11:07	2.5	0.49	7.56	-268.4	14.51	38841	-32.0	5						
11:07	2.5	0.36	7.62	-280.2	14.70	38914	-29.9	7						
duplication and sample collected @ 11:10														
duplicate sample labeled @ 11:30														

SAMPLE PARAMETERS

metals	SVOCs	VOCs	Gen. Min	MEE	NN	Maj. Anions	AIK	TDS		Fe2+	Mn2+	DO	

Condition of Well H2O smell of sulfur or (H2S) or hydro Sulfide

Remarks Well cap broken off -- casing no longer water tight need to rustule a 2" well plug

Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 610DM/ 6820	Serial No.	9780440AA 194194R
Spec. Cond. Meter	YSI 610DM/ 6820	Serial No.	9780440AA 194194R
Pump	NA	Serial No.	N/A
Water Level Meter	solinist	Serial No.	23983
D.O. Meter	YSI 55	Serial No.	N/A
Filter Apparatus	N/A	Filters	N/A
Temp. Measure	YSI 610DM/ 6820	Serial No.	9780440AA 194194R
Interface Probe	NA	Serial No.	N/A
PID/OVA	Determination	Serial No.	57032311

Field Chemistry Calibrations

Fractions	Mn2+ = 11 Mg/L
	Fe2+ 0.0 Mg/L
	Do Top 4.7 Mg/L /Mid 1.9 Mg/L /Bot 1.2 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/29/01

Well Name	IR01MWI-8	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	4.5'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/29/01 @9:30	Static Elevation		PID Readings (background)	0.0ppm
Sampling Personnel:	A. Taylor	Well Depth	13.5' MEAS X RPTD	PID Reading (TOC)	0.0ppm
	J.M	Feet of Water	13.5-4.5' = 9 feet	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112T015	Casing Volume	.653* 9' = 5.88 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/29/01 07:30 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1018 umhos/cm at 13.52 ^{0}C

pH: pH 4.00 - 3.26 at 12.52 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.4

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
		7.85	7.00	339.5	13.47	30710	152.8	1.25						
		7.82	7.00	331.7	13.48	30698	152.9	2.5						
		7.15	7.30	277.6	13.27	31045	222.3	3.75						
		7.85	7.62	265.9	13.71	32582	143.0	5						
		5.60	7.79	208.4	13.61	29560	95.9	7						
	Sample collected @ 09:30													

SAMPLE PARAMETERS

metals	SVOCs	VOCs	MEE	NN	Maj. Anion	ALK	TDS				DO	Fe2+	Mn2+

Condition of Well Good Tidal window = 9- 12 MS/MSD on SVOCs and VOCs

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Spec. Cond. Meter	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Pump	NA	Serial No.	
Water Level Meter	solinist	Serial No.	
D.O. Meter	YSI 55	Serial No.	23983
Filter Apparatus	N/A	Filters	N/A
Temp. Measure	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Interface Probe		Serial No.	
PID/OVA	determination	Serial No.	57032311

Field Chemistry Calibrations

Fractions	Mn2+ = 1.8 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 3.8 Mg/L /Mid 1.8 Mg/L /Bot 1.4 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/28/01

Well Name	IR01MWI-9	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	4.5'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/28/01 @10:30	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	14.45' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	14.45'-4.5' = 9.95'	Well Installed by	
		Gallons/Foot	0.163	Installation Date	
Sample ID	0112P012	Casing Volume	9.95' * .163= 1.62 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/28/01 @ 07:15 Spec. Conductance: Standard ___ umhos/cm at 25C Reading 999 umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - 10.17 at 14.28 ^{0}C

Dissolved Oxygen: D.O. Meter 10.40 mg/L at 13.7 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 97.6

PURGING

Time	Discharge Rate (gal/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
10:15	GPM	3.39	7.11	-66.6	14.26	5187	53.0	1						
10:17	0.5	2.75	7.24	-96.4	13.99	4571	47.1	2						
10:18	1	2.52	7.28	-108.5	13.89	4096	45.6	3						
10:19	1	2.34	7.29	-115.9	13.85	3992	44.7	4						
10:20	1	2.27	7.29	-121.7	13.87	3920	44.7	5						
10:21	1	1.98	7.30	-131.1	13.90	4008	43.9	6						
10:22	1	1.89	7.30	-134.6	13.90	3986	44.1	7						
10:28	V = 4.96' BTOC prior to sampling													

SAMPLE PARAMETERS

Metals	Cr VI	PCBs	Pest	SVOCs	MEE	NN	Major Anions	TDS	Alk	DO	Fe2+	Mn 2+

Condition of Well Good MS/MSD for As, Ba, Cd, Cr, Cu, Pb, Ni, Zn, Pest, SVOCs

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820	Serial No. 97L0044AB
Spec. Cond. Meter	YSI 6820	Serial No. 97L0044AB
Pump	Grunfos	Serial No. ESS 1.75
Water Level Meter	solinist	Serial No. WLM .55
D.O. Meter	YSI 55	Serial No. YSI 55.05
Filter Apparatus	Disposable 10 Micron In-line	Filters .45 Micron
Temp. Measure	YSI 6820	Serial No. 97L0044AB
Interface Probe	NA	Serial No. NA
PID/OVA	Thermo 580B OVM	Serial No. N/A

Field Chemistry Calibrations

Fractions	Fe2+ = 1.2 Mg/L
	Mn2+ = 0.8 Mg/L
	Do Top 1.10 Mg/L /Mid 0.61 Mg/L /Bot 0.54 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/20/01

Well Name	IR02MW89A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.30'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/20/01 @13:03	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	D. Lloyd	Well Depth	22.30' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	P. Heart	Feet of Water	22.3'-7.30'= 15.00'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111D005	Casing Volume	.653* 15' 9.80 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/20/01 06:45 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.491 umhos/cm at 19 ^{0}C

pH: pH 4.00 - 4.01 at 19 ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at ____ ^{0}C

Dissolved Oxygen: D.O. Meter ____ mg/L at ____ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span ____ Reading

Turbidity read 0.1 / cal 0.0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
12:42		1.57	8.16	204.3	16.91	1580	3.6	10						
12:44		1.30	8.13	203.7	16.91	1583	3.6	15						
12:46		0.95	8.10	202.6	16.89	1586	2.0	20						
12:48		0.73	8.08	201.5	16.87	1591	1.3	25						
12:50		0.63	8.06	200.6	16.85	1606	-0.7	30						
12:51		0.60	8.06	200.1	16.85	1604	-0.7	32.5						
12:52		0.58	8.05	199.7	16.84	1605	-1.1	35						

SAMPLE PARAMETERS

Al	Ni	Alpha/Beta	TDS										

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	97E0511AA
Spec. Cond. Meter YSI 6920	Serial No.	97E0511AA
Pump ES-60	Serial No.	
Water Level Meter Solinist	Serial No.	2476
D.O. Meter	Serial No.	
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6920	Serial No.	97E0511AA
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B	Serial No.	580SNU-68616-361

Field Chemistry Calibrations

Fractions	N/A
	N/A
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/26/01

Well Name	IR02MW93A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.63'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/26/01 @13:45	Static Elevation		PID Readings (background	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	18.77' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	18.77'-7.63'= 11.14'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112P004	Casing Volume	.653*11.14'= 7.27 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/26/01 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ____ ^{0}C pH 7.00 - 7.03 at ____ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 10.0 mg/L at 15.4 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.8

Calibrated using Auto Cal solution for pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
12:58	GPM	1.41	8.63	101.7	17.54	12207	55.2	4						
13:01	1.33	1.05	8.66	94.0	17.34	11171	54.7	8						
13:07	0.7	1.14	8.67	84.4	17.35	9443	51.2	12						
13:12	0.7	0.88	8.67	79.7	17.18	8865	49.2	16						
13:18	0.7	0.46	8.67	73.1	17.22	8626	46.8	20	pump stopped					
13:31		0.49	8.64	75.8	17.72	9068	48.2	24						
13:40	0.7	1.06	8.65	63.4	17.47	8655	46.8	30						

SAMPLE PARAMETERS

Ni	Alpha/Beta	TDS											

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820	Serial No. 97L0044AB
Spec. Cond. Meter	YSI 6820	Serial No. 97L0044AB
Pump	ES 60	Serial No. N/A
Water Level Meter	solinist	Serial No. WLM .55
D.O. Meter	YSI 55	Serial No. YSI 55.05
Filter Apparatus	Disposable 10 Micron In-line	Filters .45 Micron
Temp. Measure	YSI 6820	Serial No. 97L0044AB
Interface Probe	N/A	Serial No. N/A
PID/OVA	Thermo 580B OVM	Serial No. 5804-68610-361

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/06/01

Well Name IR02MW97A	Screen Interval				
Project Phase II GDGI	Static Elevation	GND	TOC	Immiscible Phases Present?	N
Project No. G0069-011B040502	Static Water Level (from TOC)	7.9'		Type	N/A
Well Location Parcel E	Well Stick Up			Measured with	N/A
Sample Date 03/06/01 @12:30	Static Elevation			PID Readings (background)	0.0 ppm
Sampling Personnel: A. Taylor	Well Depth	22.05 MEAS	RPTD	PID Reading (TOC)	0.0 ppm
E. Chong	Feet of Water	22.05'-7.9'=	14.15 feet	Well Installed by	
	Gallons/Foot	0.653	gal/foot	Installation Date	
Sample ID 0109T007	Casing Volume	14.15' * .653=	9.24 gallons	Development Date(s)	
Duplicate ID N/A					

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/05/01 16:15 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - 6.98 at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.9

Factory calibrated

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:52		0.32	7.01	112.3	17.83	30038	1058.2	5						
11:54		0.04	7.04	59.0	16.43	28577	133.2	10						
11:56		0.00	6.92	39.3	15.26	19233	38.9	15						
11:58		0.15	6.98	48.1	14.81	14283	21.3	20						
12:00		0.44	7.02	65.6	14.68	13487	8.3	25						
12:02		0.66	7.04	72.0	14.66	13304	5.7	30						
12:04		1.01	7.04	79.2	14.65	13440	6.4	35						
12:06		1.17	7.04	81.3	14.65	13573	2.5	40						
12:30	Sample Collected													
	MS/MSD collected on PCB, PEST, & SVOC													

SAMPLE PARAMETERS

						Major Anions	Gen MIN	TDS	Alpha/Beta		DO	Fe2+	Mn2+
As	Ba	Cr	Cr VI	Ni	PCBs	PEST	SVOCs	TPH-e	TPH-p	VOCs	MEE	NN	Alk

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. MS/MSD for PCBs/Pest

FIELD EQUIPMENT

Ph Meter YSI 6820/ 610DM	Serial No.	152386R 97L0044
Spec. Cond. Meter YSI 6820/ 610DM	Serial No.	152386R 97L0044
Pump NA	Serial No.	N/A
Water Level Meter Solinist	Serial No.	23983
D.O. Meter YSI 55	Serial No.	N/A
Filter Apparatus N/A	Filters	N/A
Temp. Measure YSI 6820/ 610DM	Serial No.	152386R 97L0044
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B	Serial No.	SN 580V

Field Chemistry Calibrations

Fractions	Mn2+ = 2.2 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 3.5 Mg/L /Mid 0.27 Mg/L /Bot 0.25 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/27/01

Well Name	IR02MW101A1	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	11.46'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/27/01 @11:25	Static Elevation		PID Readings (background	0.0 ppm
Sampling Personnel:	D Lloyd	Well Depth	36.48' MEAS X RPTD	PID Reading (TOC)	0.1 ppm
	E. Chong	Feet of Water	36.48'-11.46'= 25.02'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112D002	Casing Volume	25.02' * .653= 16.34 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/27/01 07:40 Spec. Conductance: Standard ____ umhos/cm at 25C Reading 1004 umhos/cm at 15.10 ^{0}C

pH: pH 4.00 - 4.13 at 15.10 ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at ____ ^{0}C

Dissolved Oxygen: D.O. Meter ____ mg/L at ____ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 101

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
10:59		1:34	7.40	-97.5	18.85	22794	0.70	10						
11:08		0.36	7.36	-117.4	18.81	22743	1.10	20						Dry

SAMPLE PARAMETERS

Al	Cr/Cr VI	Ni	SVOCs	TDS									

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI- 6920	Serial No.	97E0511AA
Spec. Cond. Meter	YSI- 6920	Serial No.	97E0511AA
Pump	ES-60	Serial No.	
Water Level Meter	solinst	Serial No.	23983
D.O. Meter		Serial No.	
Filter Apparatus	N/A	Filters	N/A
Temp. Measure		Serial No.	
Interface Probe		Serial No.	
PID/OVA	Thermo 580B	Serial No.	580SN/V 68616-301

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	

GROUNDWATER
SAMPLING DATA SHEET

Date 03/27/01

Well Name	IR02MW101A2	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	11.58'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/27/01 @10:25	Static Elevation		PID Readings (background	0.0 ppm
Sampling Personnel:	D. Lloyd	Well Depth	18.92' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	E. Chong	Feet of Water	18.92'-11.58'= 7.34'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112D001	Casing Volume	.653* 7.34'= 4.79 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 3/21/01 07:40 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1004 umhos/cm at 15.10 ^{0}C

pH: pH 4.00 - 4.13 at 15.10 ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ____ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 101.00

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
10:05		3.25	7.05	395.4	17.83	3192	32.8	2.5						
10:06		0.77	7.09	350.1	17.57	3168	8.7	5						
10:08		0.64	7.10	257.1	17.53	3155	3.3	7.5						
10:10		0.58	7.15	213.7	17.62	3164	1.8	10						
10:11		0.58	7.19	215.7	17.74	3205	1.4	12.5						
10:13		0.59	7.21	231.1	17.89	3258	2.7	15						
10:15		0.60	7.27	233.0	18.07	3466	3.6	17.5						Dry
10:17														

SAMPLE PARAMETERS

Ba	Cd	Alpha/Beta	TDS										

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6920	Serial No.	97E0511AA
Spec. Cond. Meter	YSI 6920	Serial No.	97E0511AA
Pump	ES- 60	Serial No.	
Water Level Meter	Solinst	Serial No.	23983
D.O. Meter		Serial No.	
Filter Apparatus	N/A	Filters	N/A
Temp. Measure	YSI- 6920	Serial No.	97E0511AA
Interface Probe		Serial No.	
PID/OVA	Thermo 580B	Serial No.	580S/NV 68616-361

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/20/01

Well Name	IR02MW114A1	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.95'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/20/01 @ 14:50	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	M. Slaughter	Well Depth	11.96' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	5.01	Well Installed by	
	E. Chong	Gallons/Foot	0.653	Installation Date	
Sample ID	0111P010Z	Casing Volume	3.27 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/20/01 Spec. Conductance: Standard 4490 umhos/cm at 25C Reading 3862 umhos/cm at ___ ^{0}C

pH: pH 4.00 - 4.26 at _ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 9.87 mg/L at 16.1 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 98.6

Turbidity - 0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:03	GPM	8.33	6.50	182.7	13.62	1455	2.0	2						
09:03	2.0	8.13	6.66	186.6	13.50	1401	0.4	4						
09:05	1.0	6.86	6.84	193.9	13.77	1697	0.4	6						
09:06	2.0	5.57	6.93	196.8	14.09	2028	5.5	8						Dry @ 9 gallons/ 09:07
09:17	N/A	7.13	7.34	226.5	14.31	2001	10.5	10						Dry @ 10 gallons
14:48	___ Prior to sampling 9.02' BTOC													

SAMPLE PARAMETERS

Cd	TDS												

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	N/A
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/15/01

Well Name	IR02MW114A2	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	5.51'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/15/01 @ 14:55	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	M. Slaughter	Well Depth	26.81' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	26.81'-5.51'= 21.3'	Well Installed by	
	J. Langston	Gallons/Foot	0.653	Installation Date	
Sample ID	0110P024	Casing Volume	21.3' * .653 13.91 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/14/01 @ 17:00 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.493 umhos/cm at 18.72 ^{0}C

pH: pH 4.00 - 4.00 at ^{0}C pH 7.00 - at ^{0}C pH 10.00 - at ^{0}C

Dissolved Oxygen: D.O. Meter mg/L at ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.5

Turbidity - actual 0.0 / read 0.0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
13:51	GPM	3.23	7.62	65.1	14.97	2885	143.1	7						
13:57	1.16	1.96	7.56	48.1	16.21	2817	1053.0	14						
14:02	1.40	1.63	7.55	34.5	16.16	2648	1053.0	21						
14:08	1.16	2.55	7.60	28.8	16.52	2376	1055.0	28						
14:16	0.80	4.95	7.64	45.5	16.60	2192	335.0	35						
14:28	0.60	4.28	7.60	50.2	16.64	2002	349.0	42						
14:37	0.80	6.83	7.62	59.4	16.76	1890	419.0	49						
14:43	1.16	7.06	7.60	65.4	16.74	1835	218.0	56						

SAMPLE PARAMETERS

Al	Cd	Cr	CrVI	Cu	Ni	TDS			Alpha/Beta				

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	N/A
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/21/01

Well Name	IR02MW114A3	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.32'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/21/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	51.05' MEAS x RPTD	PID Reading (TOC)	0.0 ppm
	J. M.	Feet of Water	51.05'-8.32'= 42.73'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111T013 @11:55	Casing Volume	42.73' * .653= 27.90 gallons	Development Date(s)	
Duplicate ID	0111T014 @12:15				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/21/01 07:30 Spec. Conductance: Standard 7.07 umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ____ ^{0}C pH 7.00 - 7.07 at ____ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ____ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.0

Turbidity=100 stand; 58.1 read

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
11:25		8.44	7.91	271.7	16.37	18723	50.2	12.5	dry					
11:30		8.33	7.90	269.3	17.17	18598	83.2	7.5	dry					
11:40		7.60	7.37	261.6	17.42	19392	52.4	37.5	dry					
11:50		2.26	6.91	107.2	17.40	20060	49.1	45	dry					
11:55	Sample Collected													
12:15	Duplicate Collected													

SAMPLE PARAMETERS

Ba/Cd	TDS												

Condition of Well Pump only halfway (30') down hole-total lengthof pump wire and all it can handle. Pumped dry to that point.Will need longer and more powerful pump - michelle @ tetratech said to sample anyway. Dup. Collected for Ba only.

Remarks Well resampled after purging w/Grandfos deep pump on3/29/01 as sample 0112P015.

FIELD EQUIPMENT

Ph Meter	YSI 6820 w/610DM	Serial No.	97B0440AA 194194R	Fractions
Spec. Cond. Meter	YSI 6820 w/610 DM	Serial No.	97B0440AA 194194R	
Pump Submersible	ES-60	Serial No.	N/A	
Water Level Meter	Solinist	Serial No.	21231	Number of Bottles
D.O. Meter	YSI 55	Serial No.	98FO337A5	Sample Depth
Filter Apparatus	Disposable 10 Micron In-line	Filters	.45 micron	Field Notebook
Temp. Measure	YSI 6820 w/610 DM	Serial No.	97B0440AA 194194R	Sample Method and Rate: Bailer @ 200 mL/min
Interface Probe	N/A	Serial No.	N/A	
PID/OVA	Determinator	Serial No.	57032-311	Discharge Water Containerized? Y

Field Chemistry Calibrations

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/13/01

Well Name	IR02MW126A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.53'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/13/01 @ 10:55	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	M. Slaughter	Well Depth	15.83' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	15.85'-8.53'= 7.32'	Well Installed by	
	J. Langston	Gallons/Foot	0.653	Installation Date	
Sample ID	0110P011	Casing Volume	7.32'*.653= 4.77 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/13/01 @ 07:23 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1003 umhos/cm at 14.5 ^{0}C

pH: pH 4.00 - at ^{0}C pH 7.00 - at ^{0}C pH 10.00 - 10.01 at ^{0}C

Dissolved Oxygen: D.O. Meter 9.54 mg/L at 17.6 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
10:35	GPM	1.23	7.47	33.9	15.34	3887	7.2	2						
10:36	2	1.40	7.41	37.8	14.65	2724	34.5	4						
10:38	1	1.78	7.38	44.2	14.73	2694	38.5	6						
10:40	1	1.36	7.54	45.0	15.17	3307	5.9	8						
10:41	2	1.09	7.61	42.9	15.22	3575	1.8	10						
10:42	2	0.93	7.67	40.8	15.31	4016	1.7	12						
10:43	2	0.92	7.72	36.7	15.41	4718	20.4	14						
10:44	2	0.83	7.75	-26.3	15.46	5215	23.9	16						
10:46	1	0.72	7.76	-134.6	15.49	5667	14.7	20						
10:47	1	0.68	7.76	-146.3	15.50	5959	21.7	22						
10:54	___ Prior to sampling 9.51' BTOC													

SAMPLE PARAMETERS Ra 226,228 Alpha/Beta

Ba	Cu	Pb	Zn	PCBs	Gen Min	Major Anions	MEE	NN	Alk	TDS	Fe2+	Mn2+	DO

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 0.0 Mg/L
	DO Top 3.32 Mg/L / Mid 0.89 Mg/L / Bot 0.63 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/26/01

Well Name	IR02MW127B	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	11.1'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/26/01 @ 15:00	Static Elevation		PID Readings (background)	0.0ppm
Sampling Personnel:	S. Penman	Well Depth	67.31' MEAS X RPTD	PID Reading (TOC)	1.3ppm
	J. Langston	Feet of Water	67.31'-11.1'= 56.21'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112P005	Casing Volume	56.21' * .653= 36.71'	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/22/01 06:30 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 999 umhos/cm at 14.84 ^{0}C

pH: pH 4.00 - 3.98 at 14.95 ^{0}C pH 7.00 - 7.00 at 14.84 ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 10.14 mg/L at 14.7 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.9

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:06	GPM	1.45	7.08	-130.4	19.01	7775	58.0	15						
11:14	1.9	1.07	7.08	-173.8	19.47	7760	47.3	30						
11:24	1.5	1.15	7.11	-165.5	19.68	7720	48.8	45						
11:34	1.5	1.14	7.09	-176.1	19.45	7935	47.6	60						
11:39	well won't dry at 64 gallons													
11:47	Dry at 68 gallons													
14:50	V 28.10' BTOC													

SAMPLE PARAMETERS

Pest	VOCs	Alpha/Beta	Gen. Min	MEE	NN	Maj. Anion	AIK	TDS	Sal		DO	Mn2+	Fe2+

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820	Serial No. 97L0044AB
Spec. Cond. Meter	YSI 6820	Serial No. 97L0044AB
Pump	Grundfos	Serial No. ESS1.75
Water Level Meter	solinist	Serial No. WLM .55
D.O. Meter	YSI 55	Serial No. YSI 55.05
Filter Apparatus	Disposable 10 Micron In-line	Filters .45 Micron
Temp. Measure	YSI 6820	Serial No. 97L0044AB
Interface Probe	N/A	Serial No. N/A
PID/OVA	Thermo 580B OVM	Serial No. 580U-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 3.6 Mg/L
	Mn2+ = 2.6 Mg/L
	Do Top 1.47 Mg/L /Mid 0.69 Mg/L /Bot 0.67 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/14/01

Well Name	IR02MW141A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	12.52'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/14/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	17.91' MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	17.91'-12.52'= 5.39'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653	Installation Date	
Sample ID	0111P015 @10:30	Casing Volume	.653* 5.39'= 3.52'	Development Date(s)	
Duplicate ID	0111P016 @11:00				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/14/01 @ 07:30 Spec. Conductance: Standard ___ umhos/cm at 25C Reading ___ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 11.02 mg/L at 10.9 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.5

Turbidity 100 NTU = 100.6 reading

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
10:12	GPM	1.14	7.84	-100.5	19.40	11172	14.3	2						
10:13	2.0	0.98	7.88	-141.0	19.41	9869	2.7	4						
10:15	1.0	0.85	7.88	-168.4	19.42	9134	6.3	6						
10:16	2.0	0.87	7.70	-168.7	19.27	5517	3.9	8						
10:17	2.0	0.82	7.79	-173.5	19.29	5541	6.9	10						
10:19	1.0	0.71	7.85	-185.4	19.37	6316	7.1	12						
10:21	1.0	0.59	7.89	-196.7	19.42	7100	7.3	14						
10:23	2.0	0.53	7.90	-202.6	19.41	7420	0.3	16						
10:24	2.0	0.48	7.91	-206.3	19.40	7564	0.2	18						
10:26	___ Prior to sampling 13.01' BTOC													

SAMPLE PARAMETERS

Al	Sb	Ba	Cd	Cr	Cr VI	Alpha/beta Pb	Major Anions Hg	SVOCs Ni	Alk Ag	Gen Min Zn	DO Pest/PCBs	Mn2+ MEE	Fe2+ NN	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. Collected duplicate for Gen Min, MEE, NN, Major Anions, Alk, PCBs

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.3 Mg/L
	Fe2+ = 1.0 Mg/L
	Do Top 1.11 Mg/L /Mid 0.68 Mg/L /Bot 0.50 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/16/01

Well Name	IR02MW147A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	4.89'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/16/01 @12:00	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	10.25 MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	E. Chong	Feet of Water	10.25'-4.89'= 5.36 feet	Well Installed by	
		Gallons/Foot	0.653 gal/foot	Installation Date	
Sample ID	0110T023	Casing Volume	5.36' * .653 = 3.50 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 07:30 Spec. Conductance: Standard ___ umhos/cm at 25C Reading 4.49 umhos/cm at 17.12 ^{0}C

pH: pH 4.00 - 15 at 4.06 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 9.2 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.8

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:50		4.09	7.46	-5.3	14.25	21385	1.2	2.5						
11:51		6.27	7.49	14.7	14.05	20621	0.2	5						
11:52		3.55	7.32	-6.8	14.18	24079	-0.2	7.5						
11:53		1.36	7.05	-66.0	14.68	31585	0.9	10						
11:55		1.30	7.08	-63.0	14.53	31330	0.95	15						
Sample collected @ 12:00														

SAMPLE PARAMETERS

SVOCs	Alpha/Beta	TDS											

Condition of Well well base heavy eroded (see below)

Remarks Purge method with ES-60 submersible pump.

2' of concrete base below stick - up pipe is exposed due to erosion from bay shore

FIELD EQUIPMENT

Ph Meter	YSI 610 DM	Serial No.	194195
Spec. Cond. Meter	YSI 610 DM	Serial No.	194195
Pump	N/A	Serial No.	N/A
Water Level Meter	solinst	Serial No.	23983
D.O. Meter	N/A	Serial No.	N/A
Filter Apparatus	N/A	Filters	N/A
Temp. Measure	YSI 610 DM	Serial No.	same as Ph
Interface Probe	N/A	Serial No.	N/A
PID/OVA	determinator	Serial No.	57632-311

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/27/01

Well Name	IR02MW149A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	4.63'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/27/01 @ 10:20	Static Elevation		PID Readings (background)	0.0ppm
Sampling Personnel:	S. Penman	Well Depth	22.48' MEAS X RPTD	PID Reading (TOC)	0.8ppm
	J. Langston	Feet of Water	22.48'-4.63'= 17.85'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112P008	Casing Volume	17.85'*.653= 11.66 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/27/01 @ 07:00 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 875 umhos/cm at 15.33 ^{0}C

pH: pH 4.00 - 3.94 at 15.33 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.7

Calibrated using Auto Cal solution for pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
08:57	GPM	1.15	7.68	181.6	15.63	28443	43.5	5						
08:59	2.5	1.41	7.64	161.8	14.73	22291	43.0	10						
09:01	2.5	1.87	7.57	161.2	14.86	24910	43.3	15						
09:03	2.5	0.79	7.62	150.5	15.67	27628	43.2	20						
09:05	2.5	0.80	7.66	134.5	16.32	28408	43.4	25	Dry @ 29 gals 09:08					
09:11		2.21	7.57	78.3	17.78	28755	43.9	30	Dry @ 32 gals 09:18					
10:18	V Prior to sampling = 16.68' BTOC													

SAMPLE PARAMETERS

Cu	Alpha/beta	TDS											

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter	YSI 6820	Serial No.	97L0044AB
Pump	Grundfos	Serial No.	ESS 1.75
Water Level Meter	solinist	Serial No.	WLM 0.55
D.O. Meter	YSI 55	Serial No.	YSI 55.05
Filter Apparatus	Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure	YSI 6820	Serial No.	97L0044AB
Interface Probe	N/A	Serial No.	N/A
PID/OVA	Thermo 580B OVM	Serial No.	

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/12/01

Well Name	IR02MW175A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.72'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/12/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	M. Slaughter	Well Depth	29.63' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	29.63'-7.72'= 21.91'	Well Installed by	
		Gallons/Foot	0.653 gal/foot	Installation Date	
Sample ID	0110P002 @9:25	Casing Volume	21.91'*.653= 14.31 gallons	Development Date(s)	
Duplicate ID	0110P003 @10:00				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/12/01 @ 07:45 Spec. Conductance: Standard 4.495 umhos/cm at 25C Reading 4.49 umhos/cm at ___ ^{0}C

pH: pH 4.00 - 4.00 at _ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter_ mg/L at __ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.7

Turbidity read 0.0 / actual 0.0

PURGING

Time	Discharge Rate (gal/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
08:41		0.81	7.27	-116.2	16.34	38268	0.0	8						
08:46	1.60	0.59	7.29	-137.5	16.45	38746	0.3	16						
08:51	1.60	0.62	7.30	-128.2	16.14	38974	0.6	24						
08:58	1.14	0.55	7.30	-136.0	16.37	39216	0.4	32						
09:03	1.14	0.53	7.30	-140.5	16.33	39159	0.5	40						
09:09	1.33	0.47	7.30	-150.9	16.49	39540	0.6	48						
09:15	1.33	0.42	7.30	-157.4	16.53	39713	0.6	56						
09:20	___ Prior to sampling 8.13' BTOC													

SAMPLE PARAMETERS

Al	Pest	SVOCs	VOCs	Alpha/beta	Ra 226,228	TDS							

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. Collected duplicate for Radium 226, 228 only

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	N/A
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/12/01

Well Name	IR02MW179A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	10.74'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/12/01 @ 10:30	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	M. Slaughter	Well Depth	20.29' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	20.29'-10.74'= 9.55'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0110P004	Casing Volume	9.55'*.653 = 6.24 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/12/01 @ 07:45 Spec. Conductance: Standard 4.495 umhos/cm at 25C Reading 4.49 umhos/cm at ___ ^{0}C

pH: pH 4.00 - 4.00 at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.7

Turbidity read 0.0 / actual 0.0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:59	GPM	5.02	7.60	47.8	14.81	26180	93.4	3						
10:02	1.0	4.32	7.55	59.9	14.86	27179	45.2	6						
10:05	1.0	4.78	7.61	62.6	14.57	25234	55.6	9						
10:08	1.0	3.63	7.51	70.5	14.71	26759	23.1	12						
10:11	1.0	1.64	7.48	71.7	15.11	28705	4.9	15						
10:14	1.0	1.24	7.49	71.0	15.26	29304	0.9	18						
10:16	1.5	1.09	7.49	70.5	15.31	29571	0.3	21						
10:18	1.5	1.06	7.49	70.3	15.34	29673	0.2	24						
10:21	1.0	0.98	7.49	70.2	15.36	29780	0.3	27						
10:25	___ Prior to sampling 10.91' BTOC													

SAMPLE PARAMETERS

Cd	Ni	SVOCs	VOCs	Ra 226,228	TDS	Alpha/Beta							

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. Collected duplicate for Radium only.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	N/A
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/16/01

Well Name	IR02MW183A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.94'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/16/01 @13:15	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	34.29' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	E. Chong	Feet of Water	34.29'-8.94'= 25.35 feet	Well Installed by	
		Gallons/Foot	0.653 gallons/foot	Installation Date	
Sample ID	0110T024	Casing Volume	25.35' * .653= 16.55 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading 4.49 umhos/cm at 17.12 ^{0}C

pH: pH 4.00 - 4.06 at 15 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 9.2 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
12:45		1.76	7.46	-156.01	18.18	27101	45.5	10						
12:49		1.08	7.49	-177.4	17.92	24167	24.6	20						
12:53		0.87	7.45	-182.6	17.79	23655	1119.26	30						
12:57		0.76	7.43	-184.5	17.84	25643	396.5	40						
13:01		1.15	7.39	-173.2	17.95	27716	172.5	50						
13:05		1.10	7.35	-170.5	17.89	27315	171.5	68						H2O black with fine black silt
Sample collected @ 13:15														

SAMPLE PARAMETERS

SVOCs	TDS												

Condition of Well Black (silt water w/ blackish fine sand)

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 610 DM	Serial No. 194195
Spec. Cond. Meter	YSI 610 DM	Serial No. 194195
Pump	N/A	Serial No. N/A
Water Level Meter	solinst	Serial No. 23983
D.O. Meter		Serial No. N/A
Filter Apparatus	N/A	Filters N/A
Temp. Measure	YSI 610 DM	Serial No. 194195
Interface Probe	N/A	Serial No. N/A
PID/OVA	determinator	Serial No. 57632-311

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/13/01

Well Name	IR02MW206A1	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.27'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/13/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	M. Slaughter	Well Depth	9.48' MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	9.48'-7.27'= 2.21'	Well Installed by	
	J. Langston	Gallons/Foot	0.653	Installation Date	
Sample ID	0110P008 @8:30	Casing Volume	2.21' * .653= 1.44 gallons	Development Date(s)	
Duplicate ID	0110P009 @9:00				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/13/01 @ 07:23 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1003 umhos/cm at 14.5 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - 10.01 at __ ^{0}C

Dissolved Oxygen: D.O. Meter_ mg/L at __ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
08:14	GPM	4.77	7.71	169.8	12.65	29285	1.3	1						
08:15		5.71	7.43	185.8	12.23	25165	1.2	2						
08:16		4.97	7.44	190.9	12.25	29068	60.8	3						Dry @ 3 gallons
08:19		4.02	7.47	209.7	12.36	29120	2.7	4						
08:23		4.61	7.48	203.7	12.50	30754	9.3	5						
08:26		4.64	7.49	212.4	12.56	32558	2.0	6						
08:28	___ Prior to sampling 8.01' BTOC													

SAMPLE PARAMETERS

VOCs	Alpha/Beta	Ra 226,228	TDS										

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. Collected duplicate for VOCs & Gross Alpha Beta

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter N/A	Serial No.	N/A
Filter ApparatusN/A	Filters	N/A
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	N/A
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03-13-01

Well Name IR02MW206A2		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.57'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date 03/13/01 @ 9:30		Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	21.77' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	M. Slaughter	Feet of Water	21.77'-7.57'= 14.20'	Well Installed by	
	S. Penman	Gallons/Foot	0.653	Installation Date	
Sample ID	0110P010	Casing Volume	14.20'*.653= 9.27'	Development Date(s)	
Duplicate ID N/A					

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/13/01 @ 07:23 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1003 umhos/cm at 14.5 C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - 10.01 __ ^{0}C

Dissolved Oxygen: D.O. Meter 11.02 mg/L at 10.9 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:06	GPM	4.2	7.27	-113.2	14.65	38221	61.0	4						
09:09	1.3	4.07	7.67	-78.3	13.41	31602	150.1	8						
09:11	2.0	1.05	7.46	-96.3	13.47	37618	13.8	12						
09:13	2.0	0.58	7.41	-121.2	13.96	38483	6.5	16						
09:16	1.3	0.50	7.43	-128.2	14.03	38566	2.1	20						
09:18	2.0	0.44	7.44	-131.6	14.06	38694	3.7	24						
09:21	1.33	0.40	7.45	-134.4	14.07	38702	1.3	28						
09:23	2.00	0.36	7.45	-136.3	14.06	38730	0.2	32						
09:26	1.3	0.33	7.46	-137.9	14.06	38735	1.2	36						
09:28	prior to sampling 7.59													

SAMPLE PARAMETERS

VOCs	Alpha/Beta	Ra 226,228	TDS										

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter N/A	Serial No.	N/A
Filter Apparatus Disposable 10 Micron In-line	Filters	N/A
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.5 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 1.19 Mg/L /Mid 0.55 Mg/L /Bot 0.50 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	disposable bailer
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/13/01

Well Name IR02MW209A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.61'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date 03/13/01		Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	D. Lloyd	Well Depth	13.57' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	H. Cheng	Feet of Water	13.57'-6.61'= 6.96'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0110D002 @9:46	Casing Volume	6.96'*.653= 4.54 gallons	Development Date(s)	
Duplicate ID	0110D003 @9:51				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/12/01 + 03/13/01 Spec. Conductance: Standard 4.49 ms/cm at 25C Reading 4.49 ms/cm at 14.5 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at__ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.5

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:19		0.37	7.66	110.8	14.26	44801	0.1	10						
09:21		0.29	7.67	80.3	14.23	44751	-4.8	15						
09:23		0.26	7.67	54.8	14.22	44576	-6.0	20						
09:25		0.23	7.67	27.1	14.22	44588	-7.0	25						
09:27		0.22	7.68	20.6	14.21	44675	-7.0	27.5						
09:28		0.21	7.68	9.0	14.22	44675	-7.0	30						
09:29		0.21	7.68	2.4	14.22	44709	-7.2	32.5						
09:30		0.20	7.68	-3.1	14.23	44724	-7.4	35						
09:31		0.20	7.68	-8.0	14.22	447379	-7.3	37.5						

SAMPLE PARAMETERS

TDS	Ra 226,228	Alpha/Beta											

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97E0511AA
Spec. Cond. Meter YSI 6820	Serial No.	N/A
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	25551
D.O. Meter YSI 55	Serial No.	
Filter Apparatus Disposable 10 Micron In-line	Filters	
Temp. Measure YSI 6820	Serial No.	
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	disposable bailer
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/27/01

Well Name	IR02MW210B	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.55'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/27/01 @8:25	Static Elevation		PID Readings (background)	0.0ppm
Sampling Personnel:	S. Penman	Well Depth	32.30' MEAS X RPTD	PID Reading (TOC)	1.3ppm
	J. Langston	Feet of Water	32.3'-9.55'= 22.75'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112P007	Casing Volume	22.75' * .653= 14.86 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/27/01 @07:00 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 875 umhos/cm at 15.33 ^{0}C

pH: pH 4.00 - 3.94 at 15.33 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.7

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
07:58	GPM	1.16	6.66	256.5	18.51	27041	45.4	8						
08:01	2.7	1.03	6.91	173.6	18.56	27029	44.7	16						
08:04	2.7	0.96	7.04	83.5	18.57	27043	44.5	24						
08:07	2.7	0.92	7.09	30.3	18.58	27149	45.0	32						
08:10	2.7	0.87	7.12	3.0	18.58	27103	44.7	40						
08:13	2.7	0.83	7.13	-9.4	18.57	27325	44.9	48						
08:16	2.7	0.80	7.15	-23.0	18.57	27347	44.8	56						
08:22	V Prior to sampling = 9.96' BTOC													

SAMPLE PARAMETERS

VOCs	Alpha/Beta	TDS											

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter	YSI 6820	Serial No.	97L0044AB
Pump	Grundfos	Serial No.	ESS 1.75
Water Level Meter	solinst	Serial No.	WLM 0.55
D.O. Meter	YSI 55	Serial No.	
Filter Apparatus	Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure	YSI 6820	Serial No.	97L0044AB
Interface Probe	NA	Serial No.	N/A
PID/OVA	Thermo 580B OVM	Serial No.	

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date
3/19/01 3/20/01

Well Name IR02MW298A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.78'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/20/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	23.61' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	23.61'-6.78'= 16.83'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653	Installation Date	
Sample ID	0111P006 @8:20	Casing Volume	16.83' * .653= 10.99'	Development Date(s)	
Duplicate ID	0111P007 @8:30				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading 1000 umhos/cm at 13.63 C

pH: pH 4.00 - at - ^{0}C pH 7.00 - 7.03 at 13.63 ^{0}C pH 10.00 - at __^{0}C

Dissolved Oxygen: D.O. Meter 9.72 mg/L at 17.2 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100.1

Turbidity - st. 100 NTU/ Reading 100.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
13:42	GPM	1.64	7.76	-2.6	15.72	4175	0.0	5						
13:45	1.7	4.35	7.66	26.1	14.55	2864	0.3	10						
13:49	1.3	1.93	7.58	32.4	14.74	3207	0.3	15						
13:54	1.0	1.01	7.44	55.5	16.41	15805	7.5	20						dry @ 21 gal/dry @ 22 gal @ 14:07
								25						

SAMPLE PARAMETERS

Al	Cd	Cr	CrVI	Cu	Ni	Alpha/Beta	TDS						

Condition of Well Good

Remarks ms/msd for cd and A/B / du pes for TDS and X/B

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	disposable bailer
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/26/01

Well Name	IR02MW299A	Screen Interval			
Project	Phase II GW DGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	10.9'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/26/01 @8:40	Static Elevation		PID Readings (background)	0.0ppm
Sampling Personnel:	S. Penman	Well Depth	23.14 MEAS X RPTD	PID Reading (TOC)	2.4ppm
	J. Langston	Feet of Water	23.14'-10.9'= 12.24'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112P002	Casing Volume	12.24'*.653= 7.99 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/26/01 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ____ ^{0}C pH 7.00 - 7.03 at ____ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 10.0 mg/L at 15.4 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.8

Calibrated using Auto Cal solution for pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
08:23	GPM	1.38	7.33	92.1	16.62	7677	129.4	4						
08:25	2	1.56	7.32	78.3	16.47	7277	67.7	8						
08:27	2	1.45	7.33	74.7	16.49	7352	59.8	12						
08:29	2	1.18	7.36	61.7	16.53	7315	45.8	16						
08:31	2	1.03	7.37	44.1	16.57	7280	42.0	20						
08:33	2	1.00	7.37	38.6	16.58	7254	41.6	24						
08:35	2	0.95	7.37	27.1	16.60	7210	41.4	28						
08:38	1.33	0.92	7.37	19.6	16.67	7229	41.3	32						
08:39	V 11.28' BTO ~ prior to sampling													

SAMPLE PARAMETERS

Cu	VOCs	Alpha/Beta	TDS										

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter	YSI 6820	Serial No.	97L0044AB
Pump	Grundfos	Serial No.	ESS 1.75
Water Level Meter	solinst	Serial No.	WLM .55
D.O. Meter	YSI 55	Serial No.	YSI 55.05
Filter Apparatus	Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure	YSI 6820	Serial No.	97L0044AB
Interface Probe	N/A	Serial No.	N/A
PID/OVA	Thermo 580B OVM	Serial No.	5804-68610

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/28/01

Well Name	IR02MW300A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.7'	Type	N/A
Well Location	Parcel E	Well Stick Up	After Purgery 9.85'	Measured with	N/A
Sample Date	03/28/01	Static Elevation		PID Readings (background	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	24.77 MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J.M	Feet of Water	24.77'-9.85'= 15.07feet	Well Installed by	
		Gallons/Foot	0.653 gal/foot	Installation Date	
Sample ID	0112T012 @10:10	Casing Volume	15.07 * .653= 9.84 gals	Development Date(s)	
Duplicate ID	0112T013 @10:30				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/28/01 07:05 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ___ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - 10.67 at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 101.4

Calibrated using Auto Cal solution for pH specific conductivity

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:56	2.5	8.14	7.08	306.8	15.12	27195	59.1	5						
09:58	2.5	6.59	7.01	304.9	14.81	27095	53.1	10						
10:00	2.5	6.14	7.00	302.2	14.74	27059	50.2	15						
10:02	2.5	6.19	7.00	299.0	14.71	27121	51.7	20						
10:04	2.5	6.41	7.00	295.5	14.73	27161	51.9	25						
10:06	2.5	6.66	7.00	292.5	14.75	27184	50.9	30						
Sample & Duplicate collected @ 10:10														
Duplicate labeled @ 10:30 - Dup. On SVOC, VOC, & TDS only														

SAMPLE PARAMETERS

Cu	Ni	Zn	SVOCs	VOCs	Alpha/beta	TDS							

Condition of Well Combo lock does not open w/ any know combo's had to pry stick up cap off/lock needs to be cut off and replaced

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820/ 1610DM	Serial No.	9780441AA 194194R
Spec. Cond. Meter	YSI 6820/ 1610DM	Serial No.	9780441AA 194194R
Pump	NA	Serial No.	NA
Water Level Meter	solinst	Serial No.	23983
D.O. Meter	YSI 55	Serial No.	NA
Filter Apparatus	NA	Filters	NA
Temp. Measure	YSI 6820/ 1610DM	Serial No.	9780441AA 194194R
Interface Probe		Serial No.	
PID/OVA	Determinator	Serial No.	57032311

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/26/01

Well Name	IR02MW372A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	11.24'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/26/01 @10:15	Static Elevation		PID Readings (background)	0.0ppm
Sampling Personnel:	S. Penman	Well Depth	17.75' MEAS X RPTD	PID Reading (TOC)	2.4ppm
	J. Langston	Feet of Water	17.75'-11.24'= 6.51'	Well Installed by	
		Gallons/Foot	0.653 gallons/foot	Installation Date	
Sample ID	0112P003	Casing Volume	6.51' * .653 = 4.3 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/26/01 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ____ ^{0}C pH 7.00 - 7.03 at ____ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 10.0 mg/L at 15.4 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.8

Calibrated using Auto Cal solution for pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:45	GPM	1.28	7.57	295.8	17.43	2686	47.1	2						
09:47	1	1.10	7.76	269.7	17.39	2683	48.9	4						
09:49	1	1.00	7.85	129.1	17.62	2724	50.1	6						
09:51	1	0.92	7.93	-17.9	18.34	3847	68.1	8						
09:57	0.33	1.07	8.03	-102.7	18.73	3139	53.0	10						
09:59	1	1.01	8.06	-137.6	18.40	2896	47.1	12						
10:03	0.5	0.99	8.10	-163.9	18.33	2869	44.9	14						
10:06	0.7	0.97	8.12	-171.8	18.36	2872	44.9	16						
10:13	0.3	0.93	8.17	-185.0	18.43	2918	45.2	18						
10:14	8 12.98' BTOC		Prior to sampling											

SAMPLE PARAMETERS

Pest	VOCs	Alpha/Beta	Gen min	MEE	NN	Maj. Anion	Alk	TDS	Sal		DO	Fe2+	Mn2+

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820	Serial No. 97L0044AB
Spec. Cond. Meter	YSI 6820	Serial No. 97L0044AB
Pump	Grundfos	Serial No. ESS.1.75
Water Level Meter	solinst	Serial No. WLM .55
D.O. Meter	YSI 55	Serial No. YSI 55.05
Filter Apparatus	Disposable 10 Micron In-line	Filters .45 Micron
Temp. Measure	YSI 6820	Serial No. 97L0044AB
Interface Probe	NA	Serial No. NA
PID/OVA	Thermo 580B OVM	Serial No. 5804-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 0.2 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/26/01

Well Name	IR02MW373A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.9'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/26/01 @9:25	Static Elevation		PID Readings (background)	0.0ppm
Sampling Personnel:	A. Taylor	Well Depth	10.7' MEAS ___ RPTD	PID Reading (TOC)	2ppm after a min
	J.M	Feet of Water	10.7'-8.9'= 1.8 feet	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112T001	Casing Volume	1.8' * .653= 1.18 feet	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/26/01 07:00 Spec. Conductance: Standard ___ umhos/cm at 25C Reading ___ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - 7.00 at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 97.8

Calibrated using Auto Cal solution for pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:14	2.5	6.75	6.08	390.1	14.32	1725	67.0	1.25						
09:14:30	2.5	5.13	6.28	388.1	14.14	1717	54.3	2.5						
09:15	2.5	4.69	6.36	386.8	14.14	1692	49.5	3.75						
09:15:30	2.5	4.45	6.39	386.1	14.14	1684	48.9	5						
09:16	2.5	4.21	6.42	385.6	14.15	1694	48.9	6.25						
09:16:30	2.5	3.71	6.46	384.8	14.17	1699	49.0	7.5						
09:17	2.5	3.31	6.48	383.9	14.18	1707	49.1	8.75						
09:17:30	2.5	2.95	6.50	383.2	14.20	1715	49.1	10						
Sample time 09:25 A.M														

SAMPLE PARAMETERS

Sb/Cd	Cu/Pb	Ni/Zn	PCBs	Alpha/Beta	Gen min	MEE	NN	Maj. Anion	AIK	TDS	Fe2+	Mn2+	DO

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. Collect MS/MSD for PCBs

FIELD EQUIPMENT

Ph Meter	YSI 6820/ 610 DM	Serial No.	9780440AA 194194R
Spec. Cond. Meter	YSI 6820/ 610 DM	Serial No.	9780440AA 194194R
Pump	NA	Serial No.	
Water Level Meter	solinst	Serial No.	23983
D.O. Meter	YSI 55	Serial No.	
Filter Apparatus	NA	Filters	N/A
Temp. Measure	YSI 6820/ 610 DM	Serial No.	9780440AA 194194R
Interface Probe		Serial No.	
PID/OVA	determinator	Serial No.	57032311

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 2.5 Mg/L
	DO Top 4.15Mg/L /Mid. 1.3Mg/L /Bot 0.45Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR02MWB-1	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	4.56'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03-14-01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	M.Slaughter	Well Depth	20.91' MEAS x RPTD	PID Reading (TOC)	0.0 ppm
	S Penman	Feet of Water	20.91'-4.56'= 16.35'	Well Installed by	
	J Langson	Gallons/Foot	0.163	Installation Date	
Sample ID	0110P01	Casing Volume	16.35' * .163= 2.67 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/14/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ____ ^{0}C

pH: pH 4.00 - at ____ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at ____ ^{0}C

Dissolved Oxygen: D.O. Meter 11.02 mg/L at 10.9 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.5

Turbidity - st. 100 NTU/ Reading 100.6

PURGING

Time	Discharge Rate (gal/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
11:29	1	4.72	7.11	-130.5	17.14	25027	1.0							
11:30	1.0	3.27	7.28	-119.2	16.31	16173	2.0							
11:31	1.0	2.41	7.05	-99.1	15.87	18946	3.0							
11:32	1.0	2.61	7.19	-105.8	15.88	15946	4.0							
11:33	1.0	2.08	7.06	-133.4	16.08	22095	5.0							
11:34	1.0	2.00	7.16	-144.9	16.69	22822	6.0							
11:35	1.0	1.91	7.12	-144.3	16.40	19164	7.0							
11:36	1.0	1.67	7.06	-142.3	16.70	23406	8.0							
11:37	1.0	1.60	7.06	-140.0	17.12	23526	9.0							
11:45	N/A	4.48	7.21	-90.2	17.95	25437	10.0							
12:55	_traingle - = 17.64 didn't recover to 80% and tide is in.													

SAMPLE PARAMETERS

Al	As	Cr	CrVI	Cu	Ni	Zn	alpha/ beta	radium	TDS				

Condition of Well

Remarks

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/15/01

Well Name	IR02MWB-1	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	☐
Project No.	G0069-011B040502	Static Water Level (from TOC)	5.1'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/15/01 @ 11:55	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	M. Slaughter	Well Depth	20.91' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	20.91'-5.1'= 15.81'	Well Installed by	
	S. Penman	Gallons/Foot	0.163	Installation Date	
Sample ID	0110P022	Casing Volume	15.81' * .163= 2.58 gallons	Development Date(s)	
Duplicate ID	0110P023 @ 12:05				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/14/01 @ 07:00 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.493 umhos/cm at 18.72 ^{0}C

pH: pH 4.00 - 4.00 at ^{0}C pH 7.00 - at ^{0}C pH 10.00 - at ^{0}C

Dissolved Oxygen: D.O. Meter mg/L at ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.5

Turbidity - Actual 0 / Read 0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
08:06	GPM	5.59	6.52	236.1	16.60	24621	20.4	1						
08:06		5.12	6.68	230.6	16.22	24030	27.5	2						
08:07		5.33	6.73	226.9	15.60	23233	13.4	3						
08:07		6.54	6.63	188.7	15.37	23779	6.5	4						
08:09		4.95	6.69	161.9	16.02	25643	2.4	5						
08:10		4.04	6.88	162.1	16.32	25365	2.1	6						
08:10		3.56	7.00	163.8	16.54	24936	2.0	7						
08:11		2.70	7.15	160.9	16.94	26812	7.4	8						

SAMPLE PARAMETERS

Al	As	Cr	CrVI	Cu	Ni	Zn	Alpha/Beta	Ra 226, 228	TDS				

Condition of Well no lock on well Dup for Cr, Al, As, Cu, Ni, Zn

Remarks Purge method with ES-60 submersible pump. MS/MSD for gross alpha/beta

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB	Fractions
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB	
Pump ES-60	Serial No.	N/A	
Water Level Meter Solinist	Serial No.	WLM .55	Number of Bottles
D.O. Meter YSI 55	Serial No.	YSI 55.05	Sample Depth
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron	Field Notebook
Temp. Measure YSI 6820	Serial No.	97L0044AB	Sample Method and Rate
Interface Probe N/A	Serial No.	N/A	Bailer @ 200 mL/min
PID/OVA Thermo 580B OVM	Serial No.	580U-68610-361	Discharge Water Containerized? Y

Field Chemistry Calibrations

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/28/01

Well Name	IR02MWB-2	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.7'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/28/01 @8:50	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	20.61' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J.M	Feet of Water	20.61'-9.7'= 10.91'	Well Installed by	
		Gallons/Foot	0.163	Installation Date	
Sample ID	0112T011	Casing Volume	.163* 10.91 = 1.78 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/28/01 07:05 Spec. Conductance: Standard ___ umhos/cm at 25C Reading ___ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - 10.67at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 101.4

Calibrated using Auto Cal solution for pH specific conductivity

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
08:45	2.5	6.88	6.43	355.0	15.44	16913	66.3	1.25						
08:45:30	2.5	6.07	6.67	355.1	14.75	17077	76.6	250						
08:46	2.5	5.16	6.74	355.1	14.85	17002	119.5	3.75						
08:46:30	2.5	4.39	6.77	354.9	14.95	17032	73.0	5						
08:47	2.5	4.13	6.77	354.81	14.93	17115	67.6	6.25						
08:47:30	2.5	3.96	6.76	354.1	14.97	17373	57.3	7.5						
Sample collected @ 08:50														

SAMPLE PARAMETERS

Al/ Cr	Cr VI	Cu/ Pb	Hg/Ni	Tl/Zn	VOCs	Alpha/Beta	Ra 226,228	Gen Min	MEE	NN	Maj. Anion	AIK	TDS

Condition of Well stick up (~ 1' high) H2O w/ only shgeer inside stick up pipe-- no indication of well ID

Remarks 2" steel well pipe (casing) -- screw on cap (steel) only well in area -- corresponds to map
Behind piles of wood frames behind fenced area. Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820/ 610DM	Serial No.	978040AA 194194R	Field Chemistry Calibrations
Spec. Cond. Meter	YSI 6820/ 610DM	Serial No.	978040AA 194194R	Fractions
Pump	NA	Serial No.		Fe2+ = 0.0 Mg/L
Water Level Meter	solinst	Serial No.		Mn2+ = 0.0 Mg/L
D.O. Meter	YSI 55	Serial No.	23983	Number of Bottles
Filter Apparatus	N/A	Filters	N/A	Sample Depth
Temp. Measure	YSI 6820/ 610DM	Serial No.	978040AA 194194R	Field Notebook
Interface Probe		Serial No.		Sample Method and Rate
PID/OVA	Dterminator	Serial No.	57032311	Bailer @ 200 mL/min
				Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/15/01

Well Name IR02MWB-3		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	☐
Project No.	G0069-011B040502	Static Water Level (from TOC)	10.26'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date 03/15/01		Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	18.84' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	M. Slaughter	Feet of Water	18.84'-10.26'= 7.58'	Well Installed by	
	J. Langston	Gallons/Foot	0.163	Installation Date	
Sample ID	0110P020 @11:00	Casing Volume	7.58' * .163= 1.24 gallons	Development Date(s)	
Duplicate ID	0110P021 @11:30				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/14/01 @ 10:00 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.493 umhos/cm at 18.72 ^{0}C

pH: pH 4.00 - 4.00 at _ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 10.72 mg/L at 12.3 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.5

Turbidity - st. 100 NTU/ Reading 100.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
10:45		4.18	7.55	24.8	16.62	18461	64.7	1						
10:46		3.48	7.45	-0.7	16.03	13656	195.0	2						
10:47		2.86	7.54	-29.3	15.99	13627	192.8	3						
10:47		2.73	7.52	-51.2	15.99	13874	189.3	4						
10:48		2.46	7.51	-71.8	16.01	14308	16.4	5						
10:49		2.32	7.51	-84.5	16.03	14594	23.5	6						
10:50		2.15	7.51	-99.7	16.05	14912	27.0	7						
10:53		3.04	7.60	-118.4	16.14	12465	33.2	8						
10:54		2.20	7.58	-130.2	15.93	11708	23.0	9						
10:55		1.83	7.56	-161.9	16.00	15463	16.2	10						
10:59		10.35	prior to sampling											

SAMPLE PARAMETERS

Al	Sb	Cd/Cr	CrVI	Cu/Pb	Hg/Ni	Zn	Pest	SVOCs	Alpha/Beta	Ra 226,228	GenMin	MEE	NN

Condition of Well NO lock on well, hinge on well lid broken

Remarks Dups for SVOCs, Al, Sb, Cd, Cr, Cu, Pb, Hg, Ni, Zn

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Top DO = 1.35 Mg/L @ 15 C

bottom DO = 0.77 11 @ 15.8 C

Field Chemistry Calibrations

Fractions	Fe2+ = 0.2 Mn 2+ = 0.0
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	disposable bailer
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03-13-01

Well Name	IR02MWB-5	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	No
Project No.	G0069-011B040502	Static Water Level (from TOC)	4.95'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/13/2001@ 10:54	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	16.86' MEAS x RPTD	PID Reading (TOC)	0.0 ppm
	D Lloyd	Feet of Water	16.86'-4.95'= 11.91'	Well Installed by	
	H. Cheng	Gallons/Foot	0.163	Installation Date	
Sample ID	0110D004	Casing Volume	11.91' * .163= 1.94 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/12,13/01@ 7:40,7:5 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.49 umhos/cm at 14.5 ^{0}C

pH: pH 4.00 - 4.00 at 14.5 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 11.02 mg/L at 10.9 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
10:29		8.08	7.14	75.7	15.31	28508	1536	1						
10:30		4.47	7.39	58.2	15.05	23366	690	2.5						
10:31		2.27	7.43	49.8	14.98	23047	241	4						
10:32		1.49	7.44	48.3	14.97	23081	149	5.5						
10:32		0.89	7.44	43.0	14.96	23073	188	8.5						

SAMPLE PARAMETERS

Ni	PCBs	alpha /beta	Ra 226,228	GenMin	MEE	NN	Major anions	Alk	TDS		Fe2+	Mn2+	DO

Condition of Well: Well stovepipe pushed to point of non-functionality, cap good. Casing bent such that boiler won't fit down.

Remarks: Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97E0511AA
Spec. Cond. Meter YSI 6820	Serial No.	97E0511AA
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	25551
D.O. Meter YSI 57	Serial No.	91L0B4311
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97E0511AA
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B	Serial No.	580V-68616-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 1.25 Mg/L /Mid 0.90 Mg/L /Bot 0.90 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

Mn2+ (unfiltered) = .6 mg/L

Fe2+ (unfiltered) = 0 mg/L

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR03MW218A2	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	Y
Project No.	G0069-011B040502	Static Water Level (from TOC)	11.1'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/14/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	23.2' MEAS x RPTD	PID Reading (TOC)	let well air out
	A. Taylor	Feet of Water	23.2'-11.1'= 12.1'		after 5min=1.2ppm
	E. Chong	Gallons/Foot	0.653	Well Installed by	
Sample ID	0110T012 @12:20	Casing Volume	.653* 12.1'= 7.90 gallons	Installation Date	
Duplicate ID	0110T013 @12:30			Development Date(s)	

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/14/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C 4.45 Reading ____ umhos/cm at 17 ^{0}C

pH: pH 4.00 - 4.02 at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at__ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.8

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:49		3.99	7.87	-78.2	16.86	23390	-22.1	5						
11:51		1.77	7.99	-116.8	16.88	22980	14.5	10						dry
11:52		9.90	7.90	-52.1	17.36	24359	9.5	12.5						dry
12:05		9.37	7.90	22.7	18.02	21087	-3.4	15						dry
12:22		9.05	8.03	5.6	17.74	20459	-17.5	18						dry
	Sample 0110T012 and 0110T013 collected - waited for 80% recovery.													

SAMPLE PARAMETERS

Ba/Cu	Pb	Zn	TPH-e	TPH-p	VOCs	Alpha/beta	Ra 226,228	Gen Min	MEE	Fe2+ NN	Mn2+ Major Anions	DO Alk	Sal TDS

Condition of Well Good Duplicate on Ba,Cu, Pb and Zn.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI DM-610	Serial No.	194195
Spec. Cond. Meter YSI DM-610	Serial No.	194195
Pump submersible	Serial No.	N/A
Water Level Meter Solinist	Serial No.	23938
D.O. Meter YSI 55.8	Serial No.	YSI 55.8
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSIDM-610	Serial No.	194195
Interface Probe N/A	Serial No.	N/A
PID/OVA E1 - Determinator	Serial No.	57032-311

Field Chemistry Calibrations

Fractions	Mn2+ = 11.0 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top .42 Mg/L /Mid .26 Mg/L /Bot .05 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/13/01

Well Name	IR03MW218A3	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	10.76'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/14/01 @12:35	Static Elevation		PID Readings (background)	2.1ppm
Sampling Personnel:	A. Taylor	Well Depth	34.2 MEAS x RPTD	PID Reading (TOC)	900.00ppm
	E. Chong	Feet of Water	34.2'-10.76'= 23.44'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0110T014	Casing Volume	.653*23.44' = 15.31 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/14/01 Spec. Conductance: Standard ____ umhos/cm at 25C Reading 4.49 umhos/cm at 17.12 ^{0}C

pH: pH 4.00 - 4.6 at 17.12 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 9.2 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 9.96

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:54		0.53	7.34	-145.5	17.69	32558	3.5	5						
11:56		0.45	7.40	-163.0	17.55	32567	6.3	10						
11:58		2.42	7.44	-159.4	17.39	32570	12.8	15						
12:00		1.57	7.45	-155.0	17.34	32577	14.5	20						
12:02		0.76	7.46	-171.0	17.55	32613	7.6	25						
12:04		0.42	7.49	-1968.0	17.81	32612	4.2	30						
12:06		8.11	7.64	-40.5	19.82	32259	1130.0	35						
12:08		6.98	7.59	-41.0	18.25	32487	29.2	40						
12:10		5.74	7.74	20.3	19.12	32471	456.9	45						
H2O turned silty @ 12:06														

SAMPLE PARAMETERS

Ba	VOCs	Alpha/Beta	Ra 226,228	Gen min	MEE	NN	Maj. Anion	AIK	TDS	Sal	Fe2+	Mn2+	DO

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter		Serial No.	194195
Spec. Cond. Meter		Serial No.	194195
Pump		Serial No.	N/A
Water Level Meter		Serial No.	7015-16
D.O. Meter		Serial No.	23983
Filter Apparatus	N/A	Filters	N/A
Temp. Measure		Serial No.	194195
Interface Probe		Serial No.	N/A
PID/OVA		Serial No.	57032-311

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 1.0 Mg/L
	DO top 0.23Mg/L Mid. 0.16Mg/L Bot 0.06Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/06/01

Well Name	IR03MW224A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.90'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/06/01 @12:05	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	15.35' MEAS x RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	15.35'-9.90'= 5.45'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109P003	Casing Volume	.653*5.45'= 3.56 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/06/01 07:00 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.00 at ___ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 9.86 mg/L at 13.7 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.3

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:12	GPM	5.08	7.39	123.7	14.91	1202	42.8	2						H20 odor
11:12		8.40	7.23	63.7	14.84	1769	35.5	4						
11:13		19.10	7.09	-75.9	14.90	6042	48.0	6						
11:14		21.78	7.08	-101.8	15.16	7696	49.9	8						
11:15		21.41	7.07	-122.0	15.42	9298	31.8	10						
11:16		19.61	7.07	-137.9	15.66	12273	41.2	12						
11:18		16.31	7.18	-181.5	16.44	22457	29.3	14						
11:20		15.63	7.27	-199.7	16.71	25553	13.8	16						Dry @ 16 gallons
11:22		14.65	7.32	-209.4	16.77	26075	8.3	18	Dry at 19.6 gal					Dry @ 18.5 gallons
11:57		9.86	7.51	-164.9	16.96	28750	92.9	20						
11:58		7.76	7.41	-201.7	16.75	29230	63.7	22						
	before sampling10.02' BTOC													

SAMPLE PARAMETERS				MEE	NN	Major Anions		Alk			Fe2+	Mn2+	DO
Al	As	Ba	Cr	Cr VI	Cu	Ni	PCBs	SVOCs	TPH-e	TPH-p	VOCs	Alph/Beta	Gen Min

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97B0440AA
Spec. Cond. Meter YSI 6820	Serial No.	97B0440AA
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .50
D.O. Meter YSI 55	Serial No.	YSI 55.08
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97B0440AA
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 1.11 Mg/L /Mid 1.07 Mg/L /Bot 1.17 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/15/01

Well Name	IR03MW342A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.42'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/15/01	Static Elevation		PID Readings (background)	0.0ppm
Sampling Personnel:	A. Taylor	Well Depth	16.5' MEAS ___ RPTD	PID Reading (TOC)	0.0ppm
	E. Chong	Feet of Water	16.5'-8.42'= 8.08'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0110T017 @11:20	Casing Volume	8.08' * .653= 5.28 gallons	Development Date(s)	
Duplicate ID	0110T018 @11:30				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/15/01 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ___ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM ___ Span 100 Reading 100.2

Calibrated using Auto Cal solution for pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
10:50		8.75	6.24	95.1	15.18	4802	28.7							
10:54		5.32	6.91	27.5	14.31	4250	9.9							
10:58		2.91	7.16	8.6	14.32	4378	5.6							
11:02		2.04	7.23	-4.6	14.34	4628	2.2							
11:06		1.51	7.36	-17.7	14.38	4174	1.7							
11:10		1.29	7.44	26.9	14.40	4649	0.9							
Sample Collected @ 11:20														
Dup. Marked @ 11:30														

SAMPLE PARAMETERS

Al/As	Ba/Cr	Cr VI	Cu/ Pb	Hg/Ni	Zn	Alpha/Beta PCBs	MEE SVOCs	Major Anions TPH-e	TPH-p	Fe2+ VOCs	Mn2+ Gen Min	DO NN

Condition of Well

Remarks VOCs duped

FIELD EQUIPMENT

Ph Meter YSI 610 DM	Serial Number	194195
Spec. Cond. Meter same as Ph	Serial Number	194195
Pump N/A	Serial Number	N/A
Water Level Meter WLO solinst	Serial Number	23983
D.O. Meter YSI 55	Serial Number	N/A
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure same as Ph	Serial Number	same as Ph
Interface Probe N/A	Serial Number	N/A
PID/OVA El Determinator	Serial Number	57632-311

Field Chemistry Calibrations

Fractions	Fe2+ = 0.6 Mg/L
	Mn2+ = 0.3 Mg/L
	DO Top 0.38Mg/L /Mid 0.15Mg/L /Bot. 0.22Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/12/01

Well Name IR04MW13A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.78'	Type	
Well Location	Parcel E	Well Stick Up		Measured with	
Sample Date	03/12/01 @ 14:20	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	22.85' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	M. Slaughter	Feet of Water	22.85 - 9.78 = 13.07'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0110P006	Casing Volume	13.07' * 0.653 = 8.53 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/12/01 @ 07:45 Spec. Conductance: Standard 4.495 umhos/cm at 25C Reading 4.49 umhos/cm at ___ ^{0}C

pH: pH 4.00 - 4.00 at _ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 10.63 mg/L at 12.6 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.7

Turbidity - read - 0 / actual 0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
13:34	GPM	1.65	7.35	45.4	16.58	4849	1.3	4						
13:37	1.3	0.93	7.31	42.9	16.63	4815	1.7	8						
13:40	1.3	0.82	7.35	47.2	16.99	4705	5.9	12						
13:44	1.3	0.76	7.35	55.9	17.24	4763	1.0	16						pump stopped
13:51	N/A	2.02	7.40	73.2	17.23	4530	13.3	20						
13:57	N/A	2.30	7.42	84.0	17.15	4484	19.8	24						pump stopped
14:04	N/A	1.69	7.43	89.1	17.40	4632	36.2	28						
14:13	N/A	1.66	7.43	95.3	17.49	4754	41.8	32						
14:15	N/A	2.69	7.45	94.8	17.12	4295	10.8	34						
14:18														

SAMPLE PARAMETERS

VOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS		Fe2+	Mn2+	Do		

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	9710044AB
Spec. Cond. Meter YSI 6820	Serial No.	9710044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	disposable
Temp. Measure YSI 6820	Serial No.	9710044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 0.0 Mg/L
	Do Top 1.42 Mg/L /Mid 0.82 Mg/L /Bot 0.71 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03-16-01

Well Name	IR04MW31A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.87'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/16/01 @ 9:00	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	27.78' MEAS RPTD	PID Reading (TOC)	0.0 ppm
Langston	S Penman,	Feet of Water	27.78 - 9.87 = 17.91'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653	Installation Date	
Sample ID	0110P026	Casing Volume	17.91' * 0.653 = 11.69 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 @ 07:30 Spec. Conductance: Standard ___ umhos/cm at 25C Reading 1000 umhos/cm at 13.63 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.03 at 13.63 ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100.1

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
8:32	GPM	1.66	7.47	271.1	17.42	4646	7.5	5						
08:35	1.7	1.37	7.50	249.0	17.53	4724	12.9	10						
08:38	1.7	1.78	7.56	231.3	16.53	4154	3.1	15						
08:41	1.7	1.15	7.53	228.7	16.95	4356	12.6	20						
08:44	1.7	0.93	7.51	212.4	17.56	4878	10.9	25						
08:47	1.7	0.86	7.51	199.1	17.58	4959	6.6	30						
08:50	1.7	0.81	7.51	187.4	17.59	5046	3.3	35						
08:53	1.7	0.77	7.51	177.6	17.57	5086	2.8	40						
08:56	1.7	0.76	7.51	171.4	17.57	5098	3.1	45						
08:58	___ prior to sampling = 10.17' BTOC													

SAMPLE PARAMETERS

As	VOCs	TDS											

Condition of Well Good well has no lock

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM-55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580-68610-361

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/19/01

Well Name	IR04MW35A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.58'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/19/01 @ 1200	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Langston	Well Depth	28.94' MEAS RPTD	PID Reading (TOC)	0.0 ppm
	S Penman	Feet of Water	28.94 - 9.58 = 19.36'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653	Installation Date	
Sample ID	0111P003	Casing Volume	19.36' * 0.653 = 12.64 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading 1000 umhos/cm at 13.63 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.05 at 13.63 ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 9.72 mg/L at 17.2 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100.1

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:29	GPM	4.13	7.65	84.0	16.03	1605	0.1	6						
11:32	2.0	3.50	7.52	93.1	16.05	1766	0.1	12						
11:36	1.5	2.95	7.56	91.1	16.37	2286	0.4	18						
11:40	1.5	2.91	7.54	91.4	16.45	3092	0.1	24						
11:44	1.5	2.96	7.53	88.6	16.44	3416	0.1	30						
11:47	1.5	3.00	7.52	87.4	16.42	3593	0.1	36						
11:51	1.5	3.03	7.52	85.0	16.40	3787	0.3	42						
11:55	1.5	3.05	7.51	82.4	16.38	3911	0.4	48						
11:59	1.5	3.07	7.51	81.0	16.38	3981	0.5	54						
12:00	prior to sampling 10.02' BTOC													

SAMPLE PARAMETERS

Ni	VOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS				Fe2+	Mn2+	DO

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM.55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	58OU-68610-361

Field Chemistry Calibrations

Fractions	
	Fe2+ = 0.0 Mg/L
	Mn2+ = 0.0 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/21/01

Well Name IR04MW36A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.27'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/20/01 @11:21	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	D Lloyd	Well Depth	26.34' MEAS x RPTD	PID Reading (TOC)	0.0 ppm
	P Heart	Feet of Water	26.34'-8.31'= 18.03'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111D004	Casing Volume	18.03'*.653 = 12.05 gallons	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/20/01 @ 06:45 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.491 umhos/cm at ___ 18.58C

pH: pH 4.00 - 4.01 at 18.48C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.2

Turb 0.1 0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
1057		0.49	7.30	-52.7	16.33	1222	2.8	15						
1059		0.48	7.29	-62.5	16.23	1124	-0.2	20						
1101		0.46	7.29	-71.8	16.17	1080	-1.2	25						
1103		0.45	7.29	-75.4	16.14	1052	-1.5	30						
1105		0.45	7.29	-78.5	16.12	1032	-1.7	35						
1107		0.45	7.29	-78.5	16.11	1034	-1.8	40						
1109		0.45	7.29	-81.1	16.11	1045	-1.8	45						

SAMPLE PARAMETERS

As	TDS	Sal											

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920 w/610 DM	Serial No.	97E0511AA
Spec. Cond. Meter YSI 6920 w/610 DM	Serial No.	97E0511AA
Pump ES-60	Serial No.	N/A
Water Level Meter Heron Dipper-T	Serial No.	2476
D.O. Meter YSI 6920	Serial No.	91L034311
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6920 w/610 DM	Serial No.	97E0511AA
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B	Serial No.	580 51NU68616-361

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/21/01

Well Name IR04MW37A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.75'	Type	
Well Location	Parcel E	Well Stick Up		Measured with	
Sample Date	03/21/01 @ 11:30	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	24.05' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	24.05 - 7.75 = 16.30'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653	Installation Date	
Sample ID	0111P017	Casing Volume	16.30' * 0.653 = 10.64 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/21/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.39 at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.2

Turbidity - pre 68/standard 100

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
10:57	GPM	1.42	8.02	45.3	15.13	1258	44.0	5						
11:01	1.25	1.12	7.98	33.9	15.39	1266	44.0	10						
11:05	1.25	0.97	7.97	19.8	15.47	1278	42.9	15						
11:10	1.00	0.85	7.96	6.6	15.57	1306	42.3	20						
11:13	1.70	0.82	7.96	3.0	15.66	1325	42.1	25						
11:17	1.25	0.75	7.96	-4.9	15.76	1344	41.5	30						
11:20	1.70	0.72	7.96	-10.1	15.78	1357	41.3	35						
11:23	1.70	0.69	7.96	-14.6	15.80	1360	41.1	40						
11:26	1.70	0.68	7.95	-18.6	15.85	1365	41.0	45						
11:28	Prior to sampling 8.12' BTOC													

SAMPLE PARAMETERS

VOCs	Gen Min	MEE	NN	Major anions	TDS	Alk				Fe2+	Mn2+	DO	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. Collect MS/MSD for VOCs

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions

DO Top 1.51 Mg/L /Mid 1.06 Mg/L /Bot 0.55 Mg/L

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/20/01

Well Name IR04MW38A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.60'	Type	
Well Location	Parcel E	Well Stick Up		Measured with	
Sample Date	03/20/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	D. Lloyd	Well Depth	21.71' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	P. Heart	Feet of Water	21.71 - 8.60 = 13.11'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111D002 @9:50	Casing Volume	13.11' * 0.653 = 8.56 gal	Development Date(s)	
Duplicate ID	0111D003 @9:55				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/20/01 @ 06:45 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.491 umhos/cm at 18.98 ^{0}C

pH: pH 4.00 - 3.99 at 18.98 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.2

Turbidity - 0.1

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:31		2.41	7.28	292.7	16.67	1133	18.0	10						
09:33		2.43	7.31	290.6	16.61	1130	8.8	15						
09:35		2.50	7.32	289.0	16.59	1129	3.5	20						
09:37		2.55	7.33	287.0	16.59	1129	0.8	25						
09:39		2.59	7.34	286.0	16.59	1130	-0.2	30						
09:40		2.60	7.34	285.0	16.60	1129	-0.5	32.5						
09:41		2.60	7.34	285.0	16.61	1129	-0.6	35						
09:42		2.61	7.34	284.0	16.62	1129	-0.8	37.5						

SAMPLE PARAMETERS

VOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS				Fe2+	Mn2+	DO	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920 w/610-DM	Serial No.	97E0511AA
Spec. Cond. Meter YYSI 6920 w/610-DM	Serial No.	97E0511AA
Pump ES-60	Serial No.	N/A
Water Level Meter Heron Dipper -T	Serial No.	2476
D.O. Meter YSI 57	Serial No.	91L034311
Filter Apparatus Disposable 10 micron in-line	Filters	.45 micron
Temp. Measure YSI 6920 w/610-DM	Serial No.	97E0511AA
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580 S/N U68616-361

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 0.0 Mg/L
	Do Top 1.9 Mg/L /Mid 1.65 Mg/L /Bot0.65 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/21/01

Well Name	IR04MW39A	Screen Interval			
Project	Phase II GW DGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.56'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/21/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	25.00' MEAS ___ RPTD X	PID Reading (TOC)	0.0 ppm
	J. M.	Feet of Water	25.00 - 6.56 = 18.44'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111T011 @10:05	Casing Volume	18.44' * 0.653 = 12.04 gal	Development Date(s)	
Duplicate ID	0111T012 @10:15				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/21/01 07:30 Spec. Conductance: Standard ___ umhos/cm at 25C Reading ___ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99

Calibrated using Auto Cal Solution for pH specific conductivity. turb. Stand = 100, reading = 58.1

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:47	2.5	0.29	8.49	233.9	18.50	3723	50.6	5						
09:49	2.5	0.25	8.60	237.6	18.33	2959	47.6	10						
09:51	2.5	0.24	8.61	240.6	18.28	2918	47.6	15						
09:53	2.5	0.25	8.61	243.0	18.21	2880	47.4	20						
09:55	2.5	0.25	8.62	244.2	18.14	2860	47.3	25						
09:57	2.5	0.24	8.62	244.5	18.10	2834	47.1	30						
09:59	2.5	0.25	8.62	244.2	18.14	2860	47.3	35						
10:01	2.5	0.24	8.62	244.5	18.10	2834	47.1	40						
Sample Collected @ 10:05; Dup. Labeled 10:15														

SAMPLE PARAMETERS

VOCs	Gen Min	MEE	NN	Maj. Anions	AIK	TDS			Fe2+	Mn2+	DO		

Condition of Well (Dup VOC NN + AIK & Maj. Anions & TDS) (Vault Flooded)

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820 / 610DM	Serial No. 97B0440AA 194194R
Spec. Cond. Meter	YSI 6820 / 610DM	Serial No. 97B0440AA 194194R
Pump	NA	Serial No. NA
Water Level Meter	solinst	Serial No. 23983
D.O. Meter	YSI 55	Serial No. NA
Filter Apparatus	NA	Filters NA
Temp. Measure	YSI 6820 / 610DM	Serial No. 97B0440AA 194194R
Interface Probe	NA	Serial No. NA
PID/OVA	Determinator	Serial No. 57032-311

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 0.5 Mg/L
	DO top 0.22Mg/L Mid. 0.14Mg/L Bot. 0.13Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/21/01

Well Name IR04MW40A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	☐
Project No.	G0069-011B040502	Static Water Level (from TOC)	5.70'	Type	
Well Location	Parcel E	Well Stick Up		Measured with	
Sample Date 03/21/01 @ 10:25		Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	25.29' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	M. Slaughter	Feet of Water	25.29 - 5.70 = 19.59'	Well Installed by	
	J. Langston	Gallons/Foot	0.653	Installation Date	
Sample ID	0111P016	Casing Volume	19.59' * 0.653 = 12.79 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/21/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - 7.39 at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.2

Turbidity - pre 68 / standard 100

PURGING

Time	Discharge Rate (gal/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
09:44		3.67	7.49	-67.7	15.33	2689	45.4	6						
09:49	1.2	1.39	7.23	-34.3	16.40	14791	47.3	12						
09:54	1.2	1.18	7.17	-29.4	16.96	19965	42.0	18						
09:59	1.2	1.12	7.16	-28.2	17.03	20310	41.5	21						
10:02	1.0	1.10	7.16	-27.2	17.05	20373	41.3	24						
10:06	1.5	1.08	7.16	-26.4	17.06	20354	41.2	30						
10:11	1.2	1.07	7.16	-25.2	17.07	20296	41.3	36						
10:16	1.2	1.08	7.16	-24.3	17.07	20176	41.4	42						
10:22	Prior to sampling = 6.43' BTOC													

SAMPLE PARAMETERS

Cd	Pb	Ni	TDS										

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. Collected MS/MSD for Cd

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/19/01

Well Name	IR05MW73A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	5.25'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/19/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	9.75' MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
	J. M.	Feet of Water	9.75 - 5.25 = 4.50'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111T002 @9:55	Casing Volume	4.50' * 0.653 = 2.93 gal	Development Date(s)	
Duplicate ID	0111T003 @10:30				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/19/01 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading 4.49 umhos/cm at 17.12 ^{0}C

pH: pH 4.00 - 4.06 at 15 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 9.2 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
09:45	2.5	5.52	7.35	293.7	14.72	3287	1.9	2.5						
09:46	2.5	4.22	7.40	294.5	14.87	3251	-0.1	5						
09:47	2.5	3.62	7.43	295.4	14.84	3250	-0.3	7.5						
09:48	2.5	3.32	7.45	296.0	14.82	3251	-0.6	10						
09:49	2.5	3.12	7.46	296.4	14.83	3272	-0.5	12.5						
Sample collected @ 09:55														
Dup. Collected @ 09:55-- labeled 10:30														

SAMPLE PARAMETERS

PCBs	TDS												

Condition of Well Dup on PCBs only

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 610- DM	Serial No.	194195
Spec. Cond. Meter	YSI 610-DM	Serial No.	194195
Pump		Serial No.	
Water Level Meter	WLM Solinst	Serial No.	23983
D.O. Meter		Serial No.	
Filter Apparatus	Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure	YSI 610- DM	Serial No.	194195
Interface Probe	NA	Serial No.	NA
PID/OVA	determinator	Serial No.	57032-311

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/19/01

Well Name	IR05MW77A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.25'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/19/01 @11:55	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	34.15' MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
	J.M	Feet of Water	34.15 - 6.25 = 27.90'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111T004	Casing Volume	27.90' * 0.653 = 18.22 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/19/01 07:30 Spec. Conductance: Standard ___ umhos/cm at 25C Reading 4.49 umhos/cm at 7.12 ^{0}C

pH: pH 4.00 - 4.06 at 15 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 9.2 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
11:28	2.5	4.1	7.45	278.8	17.91	6923	270.0	7.5						Clear
11:32		2.95	7.45	266.9	18.39	13302	0.7	15						
11:35		1.57	7.47	258.5	18.38	13332	0.0	22.5						
11:39		1.13	7.47	250.6	18.40		-0.3	30						
11:42		1.04	7.48	240.9	18.41	13378	-0.5	37.5						
11:45		0.99	7.49	231.9	18.42	13441	-0.6	44						
11:48		4.38	7.55	230.2	18.41	12467	-0.4	51.5						
11:51		1.55	7.50	223.7	18.42	12465	-0.7	59						
11:54		1.50	7.56	223.5	18.41	12466	-0.71	66.5						
Sample collected @ 11:55														

SAMPLE PARAMETERS

Pb	TDS												

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 610- DM	Serial No.	194195
Spec. Cond. Meter	YSI 610- DM	Serial No.	194195
Pump	NA	Serial No.	23983
Water Level Meter	WLM Solinst	Serial No.	NA
D.O. Meter	disposable	Serial No.	
Filter Apparatus	NA	Filters	NA
Temp. Measure	YSI 610-DM	Serial No.	194195
Interface Probe	NA	Serial No.	NA
PID/OVA	determinator	Serial No.	57032-311

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/16/01

Well Name	IR05MW85A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.38'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/16/01 @11:00	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	23.00' MEAS ___ RPTD X	PID Reading (TOC)	0.0 ppm
	E. Chong	Feet of Water	23.00 - 8.38 = 14.62'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0110T022	Casing Volume	14.62' * 0.653 = 6.24 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading 4.49 umhos/cm at 17.12 ^{0}C

pH: pH 4.00 - 4.00 at 15 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 9.2 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
10:34		2.43	7.65	39.0	17.50	9041	23.0	6						
10:37		1.48	7.52	34.0	16.01	3623	1.2	12						
10:40		1.09	7.47	41.0	15.88	3701	-0.4	18						
10:43		0.97	7.47	42.3	15.84	3667	-0.4	24						
10:46		1.14	7.58	13.9	16.37	3353	-0.1	30						
10:50		1.05	7.57	13.75	16.40	3353	-0.15	40						
Sample collected @ 11:00														

SAMPLE PARAMETERS

As	Cd	Hg	Cu	SVOCs	TDS								

Condition of Well Good.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 610 DM	Serial No.	194195
Spec. Cond. Meter	YSI 610 DM	Serial No.	194195
Pump		Serial No.	
Water Level Meter	WLO solinst	Serial No.	23983
D.O. Meter		Serial No.	
Filter Apparatus	Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure	YSI 610 DM	Serial No.	194195
Interface Probe	N/A	Serial No.	N/A
PID/OVA	El determinator	Serial No.	57632-311

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/09/01

Well Name IR11MW25A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	☐
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.52'	Type	
Well Location	Parcel E	Well Stick Up		Measured with	
Sample Date	03/09/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	11.13' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	11.13 - 7.52 = 3.61'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109P014 @13:45	Casing Volume	3.61' * 0.653 = 2.36 gal	Development Date(s)	
Duplicate ID	0109P015 @14:05				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/09/01 @ 07:35 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at 25.0 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - 10.00 at 14.6 ^{0}C

Dissolved Oxygen: D.O. Meter 10.95 mg/L at 11.4 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.8

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:09	GPM	4.78	6.39	26.4	13.20	5203	20.3	1						
09:10	1.0	4.24	6.52	15.1	12.61	4065	5.4	2						
09:10		2.99	6.49	1.6	12.59	4974	4.8	3						
09:11		2.52	6.56	-11.2	12.84	6571	21.4	4						went dry @ 4 gallons
09:15	purge again approx 0.5 gallons							4.5	gallons total					
13:40	B.S. = 7.56' BTOC													

SAMPLE PARAMETERS

Pest	VOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS				Fe2+	Mn2+	DO

Condition of Well Good Duplicate samples on Genmin, Mee, NN, MajorAnions, Alk, TDS

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	97L0044
Spec. Cond. Meter YSI 6920	Serial No.	97L0044
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.059
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6920	Serial No.	97L0044
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 1.09 Mg/L /Mid 0.77 Mg/L /Bot 0.68 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/09/01

Well Name IR11MW26A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.56'	Type	
Well Location	Parcel E	Well Stick Up		Measured with	
Sample Date	03/09/01 @ 10:20	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	10.00' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	10.00 - 7.56 = 2.44'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109P012	Casing Volume	2.44' * 0.653 = 1.59 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/09/01 @ 07:35 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at 25.0 ^{0}C

pH: pH 4.00 - at - ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - 10.00 at 14.6 ^{0}C

Dissolved Oxygen: D.O. Meter 10.95 mg/L at 11.4 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.8

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
10:03	GPM	6.16	7.46	15.7	16.65	1401	3.4	1						
10:03		6.24	7.42	13.9	14.80	1326	0.1	2						
10:04		6.49	7.35	20.6	14.62	1260	0.4	3						
10:04		6.45	7.31	26.2	14.56	1243	0.5	4						
10:05		6.33	7.26	33.1	14.55	1245	0.4	5						
10:05		5.96	7.24	41.0	14.54	1254	0.7	6						
10:06		5.79	7.23	47.2	14.55	1256	0.5	7						
10:18	BS = 7.56' BTOC													

SAMPLE PARAMETERS

VOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS				Fe2+	Mn2+	DO	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	97L0044
Spec. Cond. Meter YSI 6920	Serial No.	97L0044
Pump ES-60	Serial No.	ES60
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	N/A
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6920	Serial No.	97L0044
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 0.0 Mg/L
	Do Top 5.10 Mg/L /Mid N/A /Bot 2.14 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/09/01

Well Name IR11MW27A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.15'	Type	
Well Location	Parcel E	Well Stick Up		Measured with	
Sample Date	03/09/01 @ 14:40	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	11.08' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	11.08 - 7.15 = 3.95'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109P016	Casing Volume	3.95' * 0.653 = 2.56 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/09/01 @ 07:35 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at 25 ^{0}C

pH: pH 4.00 - at - ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - 10.00 at 14.6 ^{0}C

Dissolved Oxygen: D.O. Meter 10.95 mg/L at 11.4 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.8

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:11	GPM	3.96	7.13	-35.7	15.01	7794	18.0	1						
11:12		4.18	7.09	-15.5	17.38	5613	4.8	2						
11:13		4.37	7.00	-0.7	14.07	5410	4.8	3						
11:13		4.83	6.90	12.6	14.25	5851	2.2	4						
11:14		6.25	6.82	24.7	14.69	9365	2.6	5						dry at 5 gallons
11:20		purged an addional 0.5 gallons												
14:35	7.58' BTOC prior to sampling													

SAMPLE PARAMETERS

Cu	VOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS			Fe2+	Mn2+	DO	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	97L0044
Spec. Cond. Meter YSI 6920	Serial No.	97L0044
Pump ES-60	Serial No.	ES60
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6920	Serial No.	97L0044
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 0.0 Mg/L
	DO Top 2.47 Mg/L /Mid 2.69 Mg/L /Bot 0.86 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/13/01

Well Name IR12MW11A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.90'	Type	
Well Location	Parcel E	Well Stick Up		Measured with	
Sample Date	03/13/01 @ 14:25	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	19.61' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	M. Slaughter	Feet of Water	19.61 - 6.90 = 12.71'	Well Installed by	
	J. Langston	Gallons/Foot	0.653	Installation Date	
Sample ID	0110P013	Casing Volume	12.71' * 0.653 = 8.30 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/13/01 @ 07:23 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1003 umhos/cm at 14.5 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 9.54 mg/L at 17.6 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

Calibrated using Auto Cal Solution for pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
14:03	GPM	3.20	7.47	54.5	15.19	2203	18.2	4						
14:06	1.33	2.53	7.42	60.2	15.45	2174	14.8	8						
14:09	1.33	1.78	7.41	62.5	16.01	2143	32.3	12						
14:11	2.00	1.37	7.41	61.6	16.23	2123	20.1	16						
14:13	2.00	1.01	7.41	60.3	16.42	2102	7.2	20						
14:15	2.00	0.81	7.41	58.9	16.52	2097	2.1	24						
14:17	2.00	0.72	7.42	58.1	16.59	2091	8.1	28						
14:20		0.66	7.42	57.8	16.56	2085	6.9	32						
14:23	water level prior to sampling = 8.13' BTOC													

SAMPLE PARAMETERS

VOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS				Fe2+	Mn2+	DO	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM.55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 1.2 Mg/L
	DO Top 2.44 Mg/L /Mid 2.46 Mg/L /Bot 2.28 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/21/01

Well Name IR12MW13A		Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	10.32'	Type	
Well Location	Parcel E	Well Stick Up		Measured with	
Sample Date	03/21/01 @ 13:55	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	22.02' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	22.02 - 10.32 = 11.70'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111P018	Casing Volume	11.70' * 0.653 = 7.64 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/21/01 @ 07:30 Spec. Conductance: Standard __ umhos/cm at 25C Reading __ umhos/cm at __ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.39 at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter_ mg/L at__ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.2

Turbidity - Pre 68 / standard 100

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
13:27	GPM	2.31	7.00	-103.3	15.14	1602	42.1	4						
13:30	1.33	3.25	6.82	-70.0	15.23	1777	41.6	8						
13:33	1.33	2.53	6.79	-58.1	15.26	1818	41.4	12						
13:36	1.33	1.79	6.77	-45.2	15.26	1837	41.3	16						
13:40	1.00	1.65	6.77	-42.1	15.27	1876	41.3	20						
13:43	1.33	1.54	6.77	-39.2	15.27	1889	41.2	24						
13:46	1.33	1.46	6.76	-36.9	15.25	1880	41.3	28						
13:49	1.33	1.39	6.76	-33.9	15.24	1887	41.2	32						
13:53	10.71' BTOC Prior to sampling													

SAMPLE PARAMETERS

VOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS				Fe2+	Mn2+	DO	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 0.6 Mg/L
	Mn2+ = 3.8 Mg/L
	DO Top 0.89 Mg/L /Mid 0.69 Mg/L /Bot 0.53 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 3/13/01

Well Name	IR12MW14A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.97'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/13/01 @ 12:25	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	19.58' MEAS RPTD	PID Reading (TOC)	0.0 ppm
	M. Slaughter	Feet of Water	19.58 - 6.97 = 12.61'	Well Installed by	
	J. Langston	Gallons/Foot	0.653	Installation Date	
Sample ID	0110P012	Casing Volume	12.61' * 0.653 = 8.23 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/13/01 @ 07:23 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1003 umhos/cm at 14.5 ^{0}C

pH: pH 4.00 - at - ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - 10.01 at __ ^{0}C

Dissolved Oxygen: D.O. Meter 9.54 mg/L at 17.6 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
12:06	GPM	4.07	7.19	2.6	15.77	1471	10.6	4						
12:09	1.33	2.01	7.15	13.8	15.76	1441	4.0	8						
12:12	1.33	1.54	7.13	26.9	15.77	1423	1.7	12						
12:15	1.23	1.17	7.13	23.2	15.84	1382	0.2	16						
12:17	2.00	1.03	7.13	38.9	15.87	1368	0.9	20						
15:19	2.00	0.93	7.11	43.7	15.89	1357	0.1	24						
12:22	1.33	0.86	7.10	47.4	15.88	1350	0.2	28						
12:24	prior to sampling = 7.22' BTOC													

SAMPLE PARAMETERS

VOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS	Fe2+	Mn2+	DO				

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM.55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 0.0 Mg/L
	DO Top 2.17 Mg/L /Mid 1.69 Mg/L /Bot 0.66 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/12/01

Well Name	IR12MW17A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.06'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/12/01 @12:00	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	16.70' MEAS ___ RPTD X	PID Reading (TOC)	0.0 ppm
	P. Hart	Feet of Water	16.07 - 6.06 = 10.64'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0110T002	Casing Volume	10.64' * 0.653 = 6.95 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/12/01 07:30 Spec. Conductance: Standard ___ umhos/cm at 25C Reading ___ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

L set to Atmos 0 sal 0 turb 0.0 cal. Read = 0.0 Calibrated using Auto Cal Solution for pH specific conductivity

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:47		2.45	7.31	-95.3	15.99	1677	4.0							
11:49		1.14	7.21	-98.8	16.02	1682	8.0							
11:51		0.69	7.16	-98.6	16.14	1663	12.0							
11:53		0.65	7.14	-98.5	16.18	1716	16.0							
11:55		0.83	7.14	-96.3	16.25	1728	20.0							
11:57		0.99	7.13	-94.1	16.56	1743	24.0							
Sample collected @ 12:00														

SAMPLE PARAMETERS

Ba	Pest	TpH-e	TpH-p	VOCs	Gen min	MEE	NN	Maj Anions	Alk	TDS	Fe2+	Mn2+	DO

Condition of Well no well plug -- PVC cap only (1")

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 610 DM/ 6820	Serial No.	194195R 97B0440	Fractions Fe2+ = 5.0 Mg/L
Spec. Cond. Meter	YSI 610 DM/ 6820	Serial No.	194195R 97B0440	Mn2+ = 10.0Mg/L
Pump	N/A	Serial No.	23983	Do top 0.578Mg/L Mid. 0.24Mg.L Bot. 0.25Mg/L
Water Level Meter	solinst	Serial No.	N/A	Number of Bottles
D.O. Meter	YSI 55D	Serial No.	N/A	Sample Depth
Filter Apparatus	N/A	Filters	N/A	Field Notebook
Temp. Measure	YSI 610 DM/ 6820	Serial No.	194195R 97B0440	Sample Method and Rate
Interface Probe	N/A	Serial No.	N/A	Bailer @ 200 mL/min
PID/OVA	determinator	Serial No.	57032-3	Discharge Water Containerized? Y

Field Chemistry Calibrations

GROUNDWATER
SAMPLING DATA SHEET

Date 03/09/01

Well Name	IR12MW18A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.95'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/09/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	22.60' MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
	E. Chong	Feet of Water	22.60 - 8.95 = 13.65'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109T022 @9:15	Casing Volume	13.65' * 0.653 = 8.91 gal	Development Date(s)	
Duplicate ID	0109T023 @9:45				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/09/01 07:13 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - 10.00 at 12.4 ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM ___ Span 100 Reading 98.9

atmos 10 sal 0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
09:00		2.64	6.72	38.5	17.23	2465	20.6	5						
09:04		0.88	6.61	8.1	17.27	2460	10.5	10						
09:06		0.50	6.58	-22.3	17.37	2468	5.9	15						
09:08		0.55	6.57	-36.3	17.30	24.55	4.6	20						
09:10		0.54	6.58	-38.5	17.35	24.58	4.65	25						
Sample and dup. Taken @ 09:15 am -- dup. Recorded @ 09:45														

SAMPLE PARAMETERS

As	Ni	VOCs	Gen min	MEE	NN	Maj. Anions	AIK	TDS		Fe2+	Mn2+	DO	

Condition of Well Good New lock put on (6835/ 12G88/6000)

Remarks Purge method with ES-60 submersible pump. Dup on Gen.Min, MEE, NN,Maj. An,Alk,TDS

FIELD EQUIPMENT

Ph Meter YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Spec. Cond. Meter YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Pump N/A	Serial No.	N/A
Water Level Meter solinst	Serial No.	25551
D.O. Meter YSI 55 DO	Serial No.	
Filter Apparatus N/A	Filters	N/A
Temp. Measure YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Interface Probe N/A	Serial No.	N/A
PID/OVA	Serial No.	57032-3

Field Chemistry Calibrations

Fractions	Fe2+ = 0.20 Mg/L
	Mn2+ = 0.1 Mg/L
	DO top 0.55Mg/L Mid. 0.02Mg/L Bot. 0.08Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/12/01

Well Name IR12MW19A	Screen Interval				
Project Phase II GDGI	Static Elevation	GND	TOC	Immiscible Phases Present?	
Project No. G0069-011B040502	Static Water Level (from TOC)	8.29'		Type	N/A
Well Location Parcel E	Well Stick Up			Measured with	N/A
Sample Date 03/12/01 @11:40	Static Elevation			PID Readings (background)	0.0 ppm
Sampling Personnel: S. Penman	Well Depth	20.85' MEAS X RPTD		PID Reading (TOC)	0.0 ppm
M. Slaughter	Feet of Water	20.85 - 8.29 = 12.56'		Well Installed by	
	Gallons/Foot	0.653		Installation Date	
Sample ID 0110P005	Casing Volume	12.56' * 0.653 = 8.20 gal		Development Date(s)	
Duplicate ID N/A					

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/12/01 @ 07:45 Spec. Conductance: Standard 4.495 umhos/cm at 25C Reading 4.49 umhos/cm at __ ^{0}C

pH: pH 4.00 - 4.00 at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 10.63 mg/L at 12.6 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.7

Turbidity - Read 0 / Actual 0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
11:17	GPM	0.79	7.30	27.5	17.19	4291	1.7	4						
11:20	1.33	0.50	7.21	11.9	17.25	4262	0.8	8						
11:22	2.00	0.42	7.26	4.1	17.32	4256	0.6	12						
11:24	2.00	0.39	7.20	2.5	16.75	4075	2.4	16						
11:27	1.33	0.32	7.24	-1.4	17.26	4195	0.7	20						
11:29	2.00	0.27	7.25	-7.8	17.35	4198	0.0	24						
11:32	1.33	0.25	7.25	-12.0	17.39	4177	0.2	28						
11:34	2.00	0.22	7.25	-15.2	17.40	4169	0.3	32						
11:38	Prior to sampling = 8.32' BTOC													

SAMPLE PARAMETERS

VOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS				Fe2+	Mn2+	DO	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 50	Serial No.	YSI50
Filter Apparatus Disposable 10 Micron In-line	Filters	Disposable
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Fe2+ = 0.2 Mg/L
	Mn2+ = 0.8 Mg/L
	DO Top 1.25 Mg/L /Mid 0.84 Mg/L /Bot 0.75 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/09/01

Well Name	IR12MW20A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.04'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/09/01 @12:25	Static Elevation		PID Readings (background)	0.02 ppm
Sampling Personnel:	A. Taylor	Well Depth	23.30' MEAS ___ RPTD X	PID Reading (TOC)	0.0 ppm
	E. Chong	Feet of Water	23.30 - 9.04 = 14.26'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109T025	Casing Volume	14.26' * 0.653 = 9.31 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/09/01 07:13 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - 10 at 12.4 ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 98.9

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
12:05		4.93	6.95	-6.7	17.69	1805	0.9	5						
12:08		1.06	6.79	-15.1	17.79	1809	1.0	10						
12:11		0.74	6.78	-19.2	17.91	1812	0.5	15						
12:14		0.58	6.77	-18.09	18.09	1812	0.0	20						
12:17		0.53	6.77	-18.0	18.22	1822	0.3	25						
12:20		0.44	6.77	-30.5	18.10	1825	0.3	30						
sample collected @12:25														

SAMPLE PARAMETERS

As	VOCs	Alpha/Beta	Gen min	MEE	NN	Maj. Anions	AIK	TDS		Fe2+	Mn2+	DO	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Spec. Cond. Meter	YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Pump	N/A	Serial No.	N/A
Water Level Meter	solinst	Serial No.	25551
D.O. Meter	YSI 55 DO	Serial No.	
Filter Apparatus	N/A	Filters	N/A
Temp. Measure	YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Interface Probe	N/A	Serial No.	N/A
PID/OVA		Serial No.	57032-3

Field Chemistry Calibrations

Fractions	Fe2+ =0.0 Mg/L
	Mn2+ = 1.0 Mg/L
DO top 0.36Mg/L /Mid. 0.36Mg/L /Bot 0.14Mg/L	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR14MW09A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.62'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/7/2001 @14:40	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	15.57' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	A. Taylor	Feet of Water	15.57 - 8.62 = 6.95'	Well Installed by	
	P. Heart	Gallons/Foot	0.653	Installation Date	
Sample ID	0109T013	Casing Volume	6.95' * 0.653 = 4.54 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/6/01 @ 1600 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.49 umhos/cm at 10 ^{0}C

pH: pH 4.00 - 4.00 at 10 ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.7

factory calibrated turb cal =0.0 read=0.0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
14:25		9.49	8.13	27.8	15.25	4852	3.2							
14:26		7.94	7.74	32.7	15.05	4911	0.8							
14:28		7.89	7.67	31.8	15.04	4919	2.2							
14:30		7.49	7.61	30.7	15.04	4932	1.0							
14:32		7.64	7.59	31.9	15.04	4944	0.4							
14:40	Sample Collected.													

SAMPLE PARAMETERS

PCBs/ Pest	Alpha/Beta	TPH-p	TPH-e	Gen min	MEE	NN	aj. Anio	AIK	TDS	Fe2+	Mn2+	DO	

Condition of Well Well stick-up labelled 06 (missing A ...written correctly inside.)

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820 w/610 data logger	Serial No.	97B0440AA 152386R
Spec. Cond. Meter YSI 6820 w/610 data logger	Serial No.	97B0440AA 152386R
Pump N/A	Serial No.	N/A
Water Level Meter Solinist	Serial No.	25570
D.O. Meter YSI 55 DO	Serial No.	98F0337
Filter Apparatus N/A	Filters	N/A
Temp. Measure YSI 6820 w/610 data logger	Serial No.	97B0440AA 152386R
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo env. Instr. 580	Serial No.	S/N 580

Field Chemistry Calibrations

Fractions	Mn2+ = 0.3 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 0.99 Mg/L /Mid 0.82 Mg/L /Bot 0.79 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

Hach Mn2+	factory calibrated
Hach Fe2+	factory calibrated

GROUNDWATER
SAMPLING DATA SHEET

Date 03/08/01

Well Name	IR14MW10A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.17'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/08/01 @13:30	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	16.18' MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
	P. Hart	Feet of Water	16.18 - 8.17 = 8.01'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109T018	Casing Volume	8.01' * .653 = 5.23 gals	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/07/01 Spec. Conductance: Standard ___ umhos/cm at 25C Reading 4.49 umhos/cm at 17.17 ^{0}C

pH: pH 4.00 - 4.40 at 17.14 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.3

2 sal 0, Atmo 0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
13:33		3.06	7.94	0.6	15.89	9905	1.1							
13:35		2.10	7.87	-1.2	15.90	10869	1.4							
13:37		1.34	7.85	-5.0	15.97	11143	0.4							
13:38		1.24	7.84	-5.7	15.99	12081	0.2							
13:39		1.15	7.83	-7.3	16.03	12260	0.1							
Sample Collected @ 13:30														

SAMPLE PARAMETERS

Sb	As	Ba	Cd	Pb	Ni	PCBs	SVOCs	VOCs	Alpha/Beta	TDS			

Condition of Well Good MS/MSD for PCBs and SVOCs

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Spec. Cond. Meter YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Pump N/A	Serial No.	N/A
Water Level Meter solinst	Serial No.	25551
D.O. Meter N/A	Serial No.	N/A
Filter Apparatus N/A	Filters	N/A
Temp. Measure YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Interface Probe N/A	Serial No.	N/A
PID/OVA Ther. Env. Past 580	Serial No.	580 V

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 3/09/01

Well Name	IR14MW12A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.93'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/09/01 @ 13:15	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	18.50' MEAS RPTD	PID Reading (TOC)	0.0 ppm
	E. Chong	Feet of Water	18.50 - 7.93 = 10.57'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109P013	Casing Volume	10.57' * 0.653 = 6.90 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/09/01 @ 07:35 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at 25 ^{0}C

pH: pH 4.00 - at - ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - 10.00 at 14.6 ^{0}C

Dissolved Oxygen: D.O. Meter 10.95 mg/L at 11.4 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.8

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
12:50	GPM	2.26	7.29	56.4	17.48	33058	13.8	3						
15:52	1.5	3.47	7.24	45.2	17.44	32805	4.6	6						
12:54	1.5	4.10	7.22	31.3	17.42	32486	6.6	9						
12:55	3.0	4.58	7.55	0.6	16.60	4590	7.5	12						
12:57	1.5	7.23	7.34	29.6	15.68	10538	2.1	15						
12:59	1.5	7.44	7.33	39.2	15.68	10656	1.4	18						
13:01	1.5	7.86	7.32	47.1	15.70	10991	0.4	21						
13:03	1.5	8.17	7.33	52.8	15.71	11227	0.3	24						
13:05	1.5	8.46	7.31	56.8	15.72	11321	0.5	27						
13:07	1.5	8.70	7.31	60.8	15.72	11424	0.1	30						
13:13	7.98' BTOC prior to sampling													

SAMPLE PARAMETERS

Cd	Ni	Pest	TPH-e	TPH-p	TDS	Alpha/beta							

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	97L0044
Spec. Cond. Meter YSI 6920	Serial No.	97L0044
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6920	Serial No.	97L0044
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo 580B	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/07/01

Well Name	IR15MW06A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.91'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/07/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	20.90' MEAS RPTD	PID Reading (TOC)	0.0 ppm
	P. Heart	Feet of Water	20.90 - 9.91 = 10.99'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109T011 @12:10	Casing Volume	10.99' * 0.653 = 7.18 gal	Development Date(s)	
Duplicate ID	0109T012 @12:20				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/6/01 @ 16:00 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.49 umhos/cm at 10 ^{0}C

pH: pH 4.00 - 4.00 at 10 C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.7

FACTORY CALIBRATED, CAL=0.0, READ=0.0 TURB.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
11:43		8.29	7.87	-89.2	17.56	5090	8.40	5						
11:47		8.47	7.84	-93.4	17.98	5038	5.90	10						
11:49		8.72	7.83	-96.1	17.96	5069	4.70	15						
11:51		9.30	7.84	-81.1	17.54	5302	1.00	25						
11:55		9.30	7.83	-89.4	17.47	5253	0.30	30						
12:10	Sample collected - duplicate collected at same time (labelled as 12:20)													

SAMPLE PARAMETERS

Pb	Tl	TPH-e	TPH-p	VOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS	Fe2+	Mn2+	DO

Condition of Well Good dup on VOCs, MEE, NN, GenMin, Major anions, and Alk

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820 w/610 DM	Serial No.	97B0440AA 152386R
Spec. Cond. Meter YSI 6820 w/610 DM	Serial No.	97B0440AA 152386R
Pump N/A	Serial No.	N/A
Water Level Meter Solinist	Serial No.	25570
D.O. Meter YSI 55	Serial No.	98F0337
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820 w/610 DM	Serial No.	97B0440AA 152386R
Interface Probe N/A	Serial No.	N/A
PID/OVA Therm. Env. Inst. 580	Serial No.	S/N 580

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 1.3 Mg/L
	DO Top 0.75 Mg/L /Mid 1.3 Mg/L /Bot 0.53 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/16/01

Well Name	IR15MW07A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	11.06'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/16/01 @9:15	Static Elevation		PID Readings (background)	1.3 ppm
Sampling Personnel:	A. Taylor	Well Depth	19.82' MEAS ___ RPTD	PID Reading (TOC)	1.3ppm
	E. Chong	Feet of Water	19.82 - 11.06 = 8.76'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0110T021	Casing Volume	8.76' * .653 = 5.72 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 07:30 Spec. Conductance: Standard ___ umhos/cm at 25C Reading 4.49 umhos/cm at 17.12 ^{0}C

pH: pH 4.00 - 4.06 at 15.1 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 9.2 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
09:04		2.67	7.10	40.3	17.58	18007	11.5	2.5						
09:05		1.37	7.46	-25.6	16.96	6932	190.5	5						
09:06		1.31	7.61	-12.4	16.44	3706	3.3	7.5						
09:07		1.17	7.60	2.9	16.39	3520	0.7	10						
09:08		1.07	7.53	9.8	16.38	3450	2.1	12.5						
09:09		1.14	7.58	13.9	16.37	3353	0.1	15						
09:10		1.20	7.53	15.4	16.37	3305	0.2	17.5						
Sample Collected @ 09:15														

SAMPLE PARAMETERS

Pb	Ag	TpH-e	TpH-p	Alpha/Beta	TDS								

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 610 DM	Serial No.	194195
Spec. Cond. Meter	YSI 610 DM	Serial No.	194195
Pump	N/A	Serial No.	N/A
Water Level Meter	WLO solinst	Serial No.	23983
D.O. Meter	N/A	Serial No.	N/A
Filter Apparatus	Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure	YSI 610 DM	Serial No.	194195
Interface Probe	N/A	Serial No.	N/A
PID/OVA	El Determinator	Serial No.	57632-311

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR15MW08A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	10.55'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/8/01 @ 09:25	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	22.14' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	22.14 - 10.55 = 11.59'	Well Installed by	
	J. Langston	Gallons/Foot	0.653	Installation Date	
Sample ID	0109P005	Casing Volume	11.59' * 0.653 = 7.56 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/08/01 @07:00 Spec. Conductance: Standard ____ umhos/cm at 25C Reading 4.49 umhos/cm at 17.12 ^{0}C

pH: pH 4.00 - 4.00 at 17.12 ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at ____ ^{0}C

Dissolved Oxygen: D.O. Meter 9.20 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (gal/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
08:58		0.42	6.89	149.3	16.41	3041	239.0	4						
09:00		0.67	6.96	120.3	15.65	2662	883.0	8						
09:01		0.70	6.98	108.7	15.47	2533	58.4	12						
09:03		0.50	6.98	93.9	15.46	2594	36.3	16						
09:05		0.41	7.00	91.2	15.25	2430	17.6	20						
09:08		0.38	6.99	98.8	15.06	2371	4.8	24						
09:10		0.33	7.00	94.7	15.12	2438	8.1	28						
09:12		0.31	7.00	83.4	15.18	2477	6.5	32						
09:24		BS=	11.61											

SAMPLE PARAMETERS

SVOCs	TPH-e	TPH-p	alpha /beta	GenMin	MEE	NN	major anions	Alk	TDS		Fe2+	Mn2+	DO

Condition of Well Good.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	YSI6920.09
Spec. Cond. Meter YSI 6920	Serial No.	YSI6920.09
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM.55
D.O. Meter YSI 55	Serial No.	YSI55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6920	Serial No.	YSI6920.09
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top0.69 Mg/L /Mid 0.57 Mg/L /Bot 0.38 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03/08/01 + 03/09/01

Well Name	IR15MW09F	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.51'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/09/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	30.52' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	30.52 - 9.51 = 21.01'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109P010 @ 08:00	Casing Volume	21.01' * 0.653 = 13.71 gal	Development Date(s)	
Duplicate ID	0109P011 @ 08:30				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/08/01 @ 07:00 Spec. Conductance: Standard ___ umhos/cm at 25C Reading 4.49 umhos/cm at 17.12 ^{0}C

pH: pH 4.00 - 4.00 at 17.12 ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter 9.20 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
14:28	GPM	1.02	7.38	177.4	17.09	3635	1.4	5						
14:33	1	2.99	7.19	179.6	17.49	3587	30.6	10						
14:38	1	5.45	7.31	185.8	17.60	3616	34.9	15						
14:43	1	3.85	7.17	192.2	17.76	3615	43.3	20						
14:49	0.83	3.21	7.16	199.8	18.25	3809	114.3	25	purged dry @ 25 gallons					
07:58	_triangle 12.46 prior to sampling - 03-09-01.													

SAMPLE PARAMETERS

VOCs	Alpha/Beta	TDS											

Condition of Well Good. Collected duplicate for TDS only.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	YSI6920.09
Spec. Cond. Meter YSI 6920	Serial No.	YSI6920.09
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM.55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure YSI 6920	Serial No.	YSI6920.09
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR15MW10F	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	9.25'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/9/2001 @12:48	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	30.33' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	D. Lloyd	Feet of Water	30.33 - 9.25 = 21.08'	Well Installed by	
	P. Heart	Gallons/Foot	0.653	Installation Date	
Sample ID	0109D013Z	Casing Volume	21.08' * 0.653 = 13.76 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/9/01 @ 07:10/7:40 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at 12.4 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 -10.00 at 12.4 ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 98.7

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
11:37		1.67	7.66	110.4	17.78	9564	-2.8	5						
11:40		7.68	8.03	90.7	17.53	9575	-5.5	10						
11:43		7.48	7.99	59.9	17.39	9630	-5.4	15						
11:46		6.37	7.79	26.0	17.50	9705	13.2	20						
11:49		2.02	7.38	18.4	17.97	10360	20.3	25						
11:52		0.43	7.17	16.5	18.00	11325	10.2	30						DRY
11:55								35						
								40						
								45						
								50						
								55						

SAMPLE PARAMETERS

As	VOCs	TDS											

Condition of Well Good.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920 w/610D	Serial No.	97E0511AA
Spec. Cond. Meter YSI 6920 w/610D	Serial No.	97E0511AA
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	23983
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6920 w/610D	Serial No.	97E0511AA
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B	Serial No.	5805NV6861 6-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR36MW11A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.30'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/07/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	21.08' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	A. Taylor	Feet of Water	21.08 - 7.30 = 13.78'	Well Installed by	
	E. Chong	Gallons/Foot	0.653	Installation Date	
Sample ID	0109D011 @11:00	Casing Volume	13.78' * 0.653 = 8.99 gal	Development Date(s)	
Duplicate ID	0109D014 @11:10				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/06/01 @ 15:47 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.00 umhos/cm at ___ ^{0}C

pH: pH 4.00 - 4.0 at 4.0 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter_ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
10:32		1.19	7.48	231.7	17.05	4734	6.1	5						
10:34		1.09	7.40	248.8	16.77	4564	4.3	10						
10:36		1.01	7.36	252.1	16.70	4473	8.8	15						
10:38		1.01	7.49	252.7	16.46	4585	20.0	20						
10:40		0.95	7.50	252.6	16.40	4602	21.2	25						
10:42		0.89	7.51	252.0	16.37	4610	11.5	30						
10:44		0.88	7.51	251.0	16.40	4630	15.1	35						
11:00	Sample collected.													

SAMPLE PARAMETERS

Pest	TPH-e	TPH-P	VOCs	alpha /beta	TDS								

Condition of Well Good.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820 w/610DM	Serial No.	194195
Spec. Cond. Meter YSI 6820 w/610DM	Serial No.	194195
Pump ES-60	Serial No.	N/A
Water Level Meter WLM.53	Serial No.	25551
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI6820 w/610DM	Serial No.	194195
Interface Probe N/A	Serial No.	N/A
PID/OVAThermo Env. Instr.	Serial No.	S/N 578

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR36MW12A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	5.83'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/7/2001 @9:40	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	20.76' MEAS x RPTD	PID Reading (TOC)	0.0 ppm
	A. Taylor	Feet of Water	20.76 - 5.83 = 14.93'	Well Installed by	
	P. Heart	Gallons/Foot	0.653	Installation Date	
Sample ID	0109T010	Casing Volume	14.93' * 0.653 = 9.74 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/6/01 @ 16:00 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.49 umhos/cm at 10 ^{0}C

pH: pH 4.00 - 4.00 at 10 C pH 7.00 - at ___ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.7

factory calibrated, turbidity cal = 0.0 reading =0.0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
09:21	8.73	8.73	8.51	-77.0	16.29	4965	0.9	5						
09:23	8.62	8.62	8.51	-95.5	16.30	5002	-0.4	10						
09:26	8.7	8.70	8.51	-102.0	16.31	5045	-0.8	20						
09:28	8.39	8.39	8.51	-114.8	16.34	5209	-0.5	25						
09:31	8.67	8.67	8.51	-119.5	16.34	5255	-0.8	30						
09:33	8.6	8.60	8.51	-120.5	16.34	5296	-1.0	35						
09:40	Sample collected.													

SAMPLE PARAMETERS

TPH-e	TPH-p	alpha /beta	GenMin	MEE	NN	major anions	Alk	TDS			Fe2+	Mn2+	DO

Condition of Well Good.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820 w/610 DM	Serial No.	97B0440AA 152386R
Spec. Cond. Meter YSI 6820 w/610DM	Serial No.	97B0440AA 152386R
Pump N/A	Serial No.	N/A
Water Level Meter Solinist	Serial No.	25570
D.O. Meter YSI 55	Serial No.	98F0337
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820 w/610DM	Serial No.	97B0440AA 152386R
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo env. Instr. 580	Serial No.	S/N 580 V

Field Chemistry Calibrations

Fractions	Mn2+ =factory calibrated
	Fe2+ = factory calibrated
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR36MW14A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	5.19'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/08/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	15.53' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	15.53 - 5.19 = 10.34'	Well Installed by	
	S. Penman	Gallons/Foot	0.653	Installation Date	
Sample ID	0109P006 @11:15	Casing Volume	10.34' * 0.653 = 6.75 gal	Development Date(s)	
Duplicate ID	0109P007@11:45				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/08/01 @ 07:00 Spec. Conductance: Standard __ umhos/cm at 25C Reading 4.49 umhos/cm at 17.12 ^{0}C

pH: pH 4.00 - 4.00 at 17.12 ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 9.2 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
10:50	GPM	0.7	7.57	145.5	16.75	4967	3.7	3						
10:51	3.0	0.40	7.56	124.6	16.89	4948	3.3	6						
10:53	1.5	0.58	7.57	117.2	16.78	4961	2.6	9						
10:55	1.5	0.82	7.56	107.8	16.85	5005	2.1	12						
10:56	3.0	0.35	7.55	99.1	16.85	5111	1.5	15						
10:58	1.5	0.33	7.56	92.2	16.84	5122	1.8	18						
11:00	1.50	0.27	7.55	87.2	16.83	5133	1.3	21						
11:01	3.00	0.24	7.55	82.9	16.82	5138	1.2	24						
11:03	1.5	0.21	7.55	77.4	16.81	5131	1.5	27						
11:10		BS = .	5.19	(BTOC)										

SAMPLE PARAMETERS

VOCs	GenMin	MEE	NN	major anions	Alk	TDS					Fe2+	Mn2+	DO

Condition of Well Good.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	YSI 6920.09
Spec. Cond. Meter YSI 6920	Serial No.	YSI 6920.09
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM.55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6920	Serial No.	YSI 6920.09
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	58011-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 0.81 Mg/L /Mid 0.53 Mg/L /Bot 0.40 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/22/01

Well Name	IR36MW120B	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	3.60'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/22/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	74.50' MEAS ___ RPTD X	PID Reading (TOC)	0.0 ppm
	J. M.	Feet of Water	74.50 - 3.60 = 70.90'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111T016 @11:05	Casing Volume	70.90' * 0.653 = 46.30 gal	Development Date(s)	
Duplicate ID	0111T017 @11:15				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/22/01 06:30 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 999 umhos/cm at ___ ^{0}C

pH: pH 4.00 - 3.97 at 14.40 ^{0}C pH 7.00 - 7.06 at 14.88 ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100.4

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
10:13	2.5	0.42	7.35	302.5	17.57	2319	47.4	20						water clear good recharge
10:21	2.5	0.34	7.43	298.9	17.87	2325	47.5	40						water clear good recharge
10:29	2.5	0.29	7.45	295.5	17.92	2360	47.2	60						water clear good recharge
10:37	2.5	0.25	7.45	292.4	17.99	2365	47.1	80						water clear good recharge
10:45	2.5	0.23	7.46	288.5	17.98	2365	47.0	100						water clear good recharge
10:52	2.5	0.22	7.46	284.2	18.03	2359	46.9	120						water clear good recharge
11:00	2.5	0.21	7.46	279.7	17.97	2359	46.9	140						water clear good recharge
Sample & Duplication collected @ 11:05														
Dup. Labeled @ 11:15														

SAMPLE PARAMETERS

VOCs	TDS												

Condition of Well Duplicate on TDS

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 680/ 610 DM	Serial No.	97B0440AA 194194R
Spec. Cond. Meter	YSI 680/ 610 DM	Serial No.	97B0440AA 194194R
Pump	NA	Serial No.	NA
Water Level Meter	solinst	Serial No.	23983
D.O. Meter	YSI 55	Serial No.	NA
Filter Apparatus	NA	Filters	NA
Temp. Measure	YSI 680/ 610 DM	Serial No.	97B0440AA 194194R
Interface Probe	N/A	Serial No.	NA
PID/OVA	determinator	Serial No.	57032-311

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR36MW123B	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	4.42'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/06/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	64.91' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	D. Lloyd	Feet of Water	64.91 - 4.42 = 60.49'	Well Installed by	
	P. Heart	Gallons/Foot	0.653	Installation Date	
Sample ID	0109D006 @11:47	Casing Volume	60.49' * 0.653 = 39.49 gal	Development Date(s)	
Duplicate ID	0109D007 @11:53				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/05/01@16:13,16:47 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at 11.3 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.00 at 11.3 ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 98.2

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
11:08		2.54	7.58	292.6	19.01	2126	12.5	20						
11:16		1.37	7.60	287.4	18.99	2125	10.4	40						
11:24		1.12	7.58	272.7	18.96	2125.00	10.7	60						
11:32		0.73	7.52	265.2	18.94	2133	9.4	80						
11:40		0.57	7.50	255.3	18.94	2133	12.0	100						
11:48		0.41	7.49	247.9	18.93	2134	8.7	120						
11:50		0.39	7.49	246.2	18.94	2134	10.3	125						
11:52		0.36	7.48	244.5	18.95	2135	5.1	130						

SAMPLE PARAMETERS

VOCs	TDS												

Condition of Well Good.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	97E0511A
Spec. Cond. Meter YSI 6920	Serial No.	97E0511A
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	23983
D.O. Meter YSI 6920	Serial No.	97E0511A
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6920	Serial No.	97E0511A
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580V-68616-361

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR36MW125A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.60'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/6/2001 @15:00	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	8.60' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	A. Taylor	Feet of Water	8.60 - 6.60 = 2.00'	Well Installed by	
	E.Chong	Gallons/Foot	0.653	Installation Date	
Sample ID	0109T008	Casing Volume	2.00' * 0.653 = 1.31 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/05/01 @ 16:15 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 -6.98 at ___ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at__ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.9

factory calibrated

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
14:50		15.44	8.08	204.3	19.59	1706	39.7	1.3						well dry
14:54		11.87	7.79	181.5	15.95	1555	7.6	2						well dry second and third time
14:56		12.00	7.73	181.3	15.53	1614	22.8	2.5						80% recovery from dry well
14:59		13.00	7.71	180.2	17.73	1382	14.2	3						
15:00	Sample collected. Well went dry twice; sample collected at 80% on third time.													

SAMPLE PARAMETERS

VOCs	TDS												

Condition of Well Good.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820 w/610 DM	Serial No.	97L0044/ 152386R
Spec. Cond. Meter YSI 6820 w/610DM	Serial No.	97L0044/ 152386R
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	3557
D.O. Meter YSI 55	Serial No.	98F0337
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820 w/610 DM	Serial No.	97L0044/ 152386R
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	Sn 580 V

Field Chemistry Calibrations

Fractions

Mn2+ =Pocket colormeter - Factory Calibrated

Fe2+ =Model FR 18c - Factory Calibrated

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR36MW126A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.60'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/07/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	14.50' MEAS X RPTD	PID Reading (TOC)	4.9 ppm
	E. Chong	Feet of Water	14.50 - 6.60 = 7.90'	Well Installed by	
	A. Taylor	Gallons/Foot	0.653	Installation Date	
Sample ID	0109D012 @13:00	Casing Volume	7.90' * 0.653 = 5.15 gal	Development Date(s)	
Duplicate ID	0109D015 @13:10				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/06/01 @ 13:47 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.49 umhos/cm at ___ ^{0}C

pH: pH 4.00 - 4.0 at 4.0 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter __ mg/L at __ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
14:50		17.79	7.82	188.0	17.88	2286	82.3	5						
14:52		6.03	7.31	232.7	15.64	23.98	2.4	10						
14:54		3.2	7.28	238.6	16.15	23.99	-2.9	15						
14:46		2.92	7.26	241.9	16.73	2400	-6.3	20						
14:58		2.47	7.25	246.6	17.21	2400	-5.2	25						
15:00		2.67	7.46	255.7	17.21	23.83	1460.0	30						

SAMPLE PARAMETERS

VOCs	TDS												

Condition of Well Good.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820 w/610DM	Serial No.	97B0440AA 194 195R
Spec. Cond. Meter YSI 6820 w/610DM	Serial No.	97B0440AA 194 195R
Pump ES-60	Serial No.	N/A
Water Level Meter WLM.53	Serial No.	25551
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus N/A	Filters	N/A
Temp. Measure YSI 6820 w/610 DM	Serial No.	97B0440AA 194 195R
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	Sn 580 V

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/26/01

Well Name	IR36MW127A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	5.90'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/26/01 @12:55	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	26.01' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. M.	Feet of Water	26.01 - 5.90 = 20.11'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0112T002	Casing Volume	20.11' * 0.653 = 13.13 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/26/01 07:00 Spec. Conductance: Standard ___ umhos/cm at 25C Reading ___ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 97.8

Calibrated using Auto Cal solution for pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
12:43	2.5	7.32	7.38	67.2	18.34	13118	57.1	5						
12:45	2.5	7.31	7.38	68.6	18.21	13150	50.4	10						
12:47	2.5	6.95	7.39	68.6	18.05	13171	48.6	15						
12:49	2.5	6.57	7.41	66.4	17.86	13167	49.6	20						
12:51	2.5	6.87	7.40	62.3	17.76	13130	52.4	25						
12:53	2.5	7.59	7.40	57.3	17.81	13069	56.2	30						
12:55	2.5	8.40	7.41	49.9	18.02	13043	59.6	35						
12:57	2.5	8.73	7.43	42.1	18.25	13031	57.1	40						

SAMPLE PARAMETERS

VOCs	TDS												

Condition of Well some water in curb box, otherwise ook sample 12:55

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Spec. Cond. Meter	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Pump	solinst	Serial No.	N/A
Water Level Meter	YSI 55	Serial No.	N/A
D.O. Meter	YSI 55	Serial No.	N/A
Filter Apparatus	NA	Filters	N/A
Temp. Measure	YSI 6820/ 610DM	Serial No.	9780440AA 194194R
Interface Probe	N/A	Serial No.	N/A
PID/OVA	Determinator	Serial No.	57032311

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 03-06-01

Well Name	IR36MW128A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	8.57'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/6/2001 @14:01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	21.20' MEAS X RPTD	PID Reading (TOC)	2.2 ppm
	D. Lloyd	Feet of Water	21.20 - 8.57 = 12.63'	Well Installed by	
	P. Heart	Gallons/Foot	0.653	Installation Date	
Sample ID	0109D008	Casing Volume	12.63' * 0.653 = 8.24 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/05/01@16:13,16:47 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at 11.3 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.00 at 11.3 ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter_ mg/L at__ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 98.2

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
13:22	2.5g/min	1.37	7.42	-91.1	14.94	5541	12.5	10						
13:24	2.5g/min	2.64	7.41	-71.2	14.81	4876	11.4	15						
13:26	2.5g/min	3.36	7.43	-62.4	14.77	4385	9.4	20						
13:28	2.5g/min	3.69	7.44	-59.2	14.76	4071	8.6	25						
13:29	2.5g/min	3.86	7.43	-57.1	14.75	3936	8.4	27.5						
13:30	2.5g/min	3.93	7.44	-57.1	14.75	3895	9.1	30						
13:31	2.5g/min	3.99	7.44	-56.8	14.75	3824	7.1	32.5						
13:32	2.5g/min	4.05	7.44	-56.6	14.75	3788	9.4	35						
13:33	2.5g/min	4.10	7.44	-56.5	14.75	3736	9.0	37.5						
13:34	2.5g/min	4.16	7.44	-55.8	14.74	3715	9.8	40						
13:35	2.5g/min	4.21	7.44	-55.6	14.74	3687	9.3	42.5						

SAMPLE PARAMETERS

Pest	VOCs	TDS	Sal										

Condition of Well Good.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	97E0511A
Spec. Cond. Meter YSI 6920	Serial No.	97E0511A
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	23983
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus N/A	Filters	N/A
Temp. Measure YSI 6920	Serial No.	97E0511A
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580SN
		V68616-361

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR36MW129B	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	4.78'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/09/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	67.72' MEAS X RPTD	PID Reading (TOC)	3.1 ppm
	D. Lloyd	Feet of Water	67.72 - 4.78 = 62.94'	Well Installed by	
	P. Heart	Gallons/Foot	0.653	Installation Date	
Sample ID	0109D011 @10:44	Casing Volume	62.94' * 0.653 = 41.09 gal	Development Date(s)	
Duplicate ID	0109D012 @10:49				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/9/01 @ 07:10,07:4 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at 12.4 ^{0}C

pH: pH 4.00 - at ^{0}C pH 7.00 - at ^{0}C pH 10.00 -10.00 at 12.4 ^{0}C

Dissolved Oxygen: D.O. Meter mg/L at ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 98.7

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
09:43		9.3	7.17	163.1	17.82	1887	-4.0	20						
09:53		6.22	7.15	37.5	17.86	1965	1.8	40						
10:03		4.30	7.16	8.7	17.88	1978	0.0	60						
10:13		2.80	7.18	-6.4	17.89	1962	-3.6	80						
10:23		1.90	7.18	-16.7	17.90	1973	-5.4	100						
10:33		3.00	7.18	-24.3	17.91	1983	-6.3	120						
10:38		2.47	7.17	-27.5	17.91	1987	-6.8	130						

SAMPLE PARAMETERS

VOCs	TDS	Sal											

Condition of Well Good.

Remarks Purged method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920/610DM	Serial No.	97E1511AA
Spec. Cond. Meter YSI 6920/610DM	Serial No.	97E1511AA
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	23983
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820/610DM	Serial No.	97E1511AA
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580B10 68616-361

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/08/01

Well Name	IR36MW135A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.70'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/08/01 @14:50	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	26.12' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	P. Hart	Feet of Water	26.12 - 6.70 = 19.42'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109T019	Casing Volume	19.42' * 0.653 = 12.68 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/07/01 17:09 Spec. Conductance: Standard ___ umhos/cm at 25C Reading 4.49 umhos/cm at 12.14 ^{0}C

pH: pH 4.00 - 4.40 at 17.14 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 92.5

2 sal 0, Atmos 0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
14:33		4.44	8.27	108.2	18.87	3553	3.6	4						
14:35		4.79	8.27	106.1	18.74	3393	1.9	8						
14:37		6.06	8.40	101.1	18.08	2678	-10.0	12						
14:39		6.01	8.46	99.2	17.98	2478	-0.2	16						
14:41		5.60	8.49	96.9	17.96	2299	-0.5	20						
14:43		5.48	8.49	95.5	17.97	2226	-0.5	24						
14:45		5.14	8.49	93.6	17.97	2166	-0.5	28						
14:47		5.13	8.48	91.2	17.98	2098	-0.6	32						
14:49		5.01	8.49	89.7	17.97	2046	-0.7	36						
14:51		4.99	8.48	88.9	17.97	2026	-0.8	40						
Sample collected @ 14:50														

SAMPLE PARAMETERS

Cd	TDS												

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820 / 610 DM	Serial No.	194195R 97B0440
Spec. Cond. Meter YSI 6820 / 610 DM	Serial No.	194195R 97B0440
Pump N/A	Serial No.	N/A
Water Level Meter Solinst	Serial No.	2551
D.O. Meter N/A	Serial No.	N/A
Filter Apparatus N/A	Filters	N/A
Temp. Measure YSI 6820 / 610 DM	Serial No.	194195R 97B0440
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo env. Past 580	Serial No.	580

Field Chemistry Calibrations

Fractions

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/09/01

Well Name	IR39MW21A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.70'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/09/01@10:25	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	15.20' MEAS X RPTD	PID Reading (TOC)	2.6 ppm
	E. Chong	Feet of Water	15.20 - 6.70 = 8.50'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109T024	Casing Volume	8.50' * 0.653 = 5.55 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/09/01 07:13 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading 1000 umhos/cm at ___ ^{0}C

pH: pH 4.00 - at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - 10 at 12.4 ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 98.9

atmos 0 sal 0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
10:14		9.51	6.95	-28.6	16.42	3572	113.0	4						
10:16		5.34	6.81	-99.1	14.95	3910	40.2	8						
10:18		3.55	6.91	-134.1	14.70	3984	6.4	12						
10:20		2.70	6.96	-140.0	14.65	3881	2.9	16						
10:22		2.10	6.99	-143.3	14.63	3803	190.0	20						
Sample collected @ 10:25														

SAMPLE PARAMETERS

Sb	PCBs	Pest	SVOCs	VOCs	Gen min	MEE	NN	Maj. Anion	Alk	TDS	Fe2+	Mn2+	DO

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. MS/MSD on : Sb and PCBs

FIELD EQUIPMENT

Ph Meter	YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Spec. Cond. Meter	YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Pump	N/A	Serial No.	N/A
Water Level Meter	solinst	Serial No.	25551
D.O. Meter	YSI 55 DO	Serial No.	N/A
Filter Apparatus	N/A	Filters	N/A
Temp. Measure	YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Interface Probe	N/A	Serial No.	N/A
PID/OVA	Determinator EI env. Inst	Serial No.	57032-3

Field Chemistry Calibrations

Fractions	Fe2+ = 1.6 Mg/L
	Mn2+ = 0.0 Mg/L
DO Top 2.5Mg/L /Mid 0.7Mg/L /Bot 0.5Mg/L	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 04/23/01

Well Name	IR39MW23A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.36'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	4/23/2001 @13:35	Static Elevation		PID Readings (background)	0.5 ppm
Sampling Personnel:	R. E.	Well Depth	20.50' MEAS ___ RPTD	PID Reading (TOC)	1.5 ppm
	J. L.	Feet of Water	20.50 - 6.36 = 14.14'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0116P003	Casing Volume	14.14' * 0.653 = 9.23 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time Spec. Conductance: Standard ____ umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C 100 13.63

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span ____ Reading

Calibrated using Auto Cal Solution for pH specific conductivity.

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
13:05		0.93	7.37	17.5	17.40	10.29	121.9	initial		TOC	1.5	6.36		
13:08		0.47	7.25	5.4	17.25	10.35	26.8	4				6.78		
13:13		-1.32	7.20	-15.9	17.28	10.28	46.5	8	1			6.79		
13:17		0.48	7.19	-21.7	17.30	10.27	30.4	12				6.79		
13:21		0.64	7.17	-37.3	17.33	10.67	19.6	16	2			6.81		
13:25		0.85	7.15	-43.4	17.38	11.39	15.1	20				6.81		
13:29		0.94	7.14	-45.8	17.39	11.8	16.8	24	3			6.81		
13:33		1.19	7.13	-46.1	17.40	11.94	11.7	28				6.81		

SAMPLE PARAMETERS

Al	TDS												

Condition of Well Poor; below grade, lid broken

Remarks Purged method with ES-60 submersible pump. X MS/MSD AL FIELD FILTERED

FIELD EQUIPMENT

Ph Meter YSI 610-DM	Serial No.	194196
Spec. Cond. Meter YSI 610-DM	Serial No.	194196
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	2357
D.O. Meter YSI 610-DM	Serial No.	194196
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure YSI 610-DM	Serial No.	194196
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

 Date 04/17/01

Well Name	IR39MW33A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	5.22'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	04/17/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	D. Lloyd	Well Depth	23.61' MEAS X RPTD	PID Reading (TOC)	7.1 ppm
	J. Langston	Feet of Water	23.61 - 5.22 = 18.39'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0115D004 @13:51	Casing Volume	18.39' * 0.653 = 12.01 gal	Development Date(s)	
Duplicate ID	0115D005 @13:57				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 04/17/01 @ 07:45 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.53 umhos/cm at 19.6 ^{0}C (100 13.63)

pH: pH 4.00 - 3.98 at 19.6 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span ___ Reading 97.7

turb: cal = 0.0 reading 2.0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
13:08		2.34	6.88	-126.6	18.36	33.69	51.2	5						
13:12		1.00	6.79	119.0	17.61	16.77	29.3	10						
13:15		0.99	6.77	116.7	17.60	16.54	13.4	15						
13:18		1.00	6.77	115.5	17.62	17.62	13.0	20						
13:21		0.98	6.73	115.4	17.63	17.62	48.4	25						
13:24		1.00	6.73	115.9	17.60	17.24	14.4	30						
13:27		1.03	6.72	116.4	17.62	18.07	6.2	35						
13:29		1.04	6.72	116.7	17.62	18.42	11.2	37.5						
13:30		1.05	6.72	116.9	17.62	18.54	16.4	40						

SAMPLE PARAMETERS

Ba	VOCs	GenMin	MEE	NN	Major anions	AlK	TDS			Fe2+	Mn2+	DO	

Condition of Well Good

Remarks Purged method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97E0627
Spec. Cond. Meter YSI 6820	Serial No.	97E0627
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist model 101	Serial No.	23571
D.O. Meter YSI 55	Serial No.	95J37664
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 Micron
Temp. Measure YSI 6820	Serial No.	97E0627
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B PID	Serial No.	61565333

Field Chemistry Calibrations

Fractions	unfiltered Fe2+ = 4.5 mg/L
	filtered Fe2+ = 3.0 mg/L
	unfiltered Mn2+ = 11.0 mg/L
Number of Bottles	filtered Mn2+ = 11.0 mg/L
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR56MW39A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.90'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3-16-01 @ 1130	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	20.99' MEAS X RPTD	PID Reading (TOC)	4.9 ppm
	M. Slaughter	Feet of Water	20.99 - 7.90 = 13.09'	Well Installed by	
	J. Langston	Gallons/Foot	0.653	Installation Date	
Sample ID	0110P029	Casing Volume	13.09' * 0.653 = 8.54 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading 100 umhos/cm at 13.63 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - 7.03 at 13.63 ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 10.14 mg/L at 14.7 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100.1

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
11:06	GPM	3.15	7.38	49.2	15.71	1147	0.3	4						
11:09	1.33	1.83	7.35	-66.2	15.62	1150	0.2	8						
11:11	2	1.50	7.35	-76.9	15.64	1154	0.5	12						
11:13	2	1.33	7.36	-80.8	15.65	1153	0.5	16						
11:16	1.38	1.18	7.36	-84.8	15.66	1156	0.5	20						
11:20	1	1.07	7.35	-87.7	15.66	1160	0.5	24						
11:22	2	0.99	7.35	-89.7	15.66	1159	0.5	28						
11:25	1.33	0.96	7.36	-90.3	15.65	1160	0.4	32						
11:28	_triangle Prior to sampling = 8.72 BTOC													

SAMPLE PARAMETERS

TPH-e	TPH-p	VOCs	GenMin	MEE	NN	Major Anions	Alk	TDS			Fe2+	Mn2+	DO

Condition of Well No lock on well and bolts on well lid are stripped. Strong petroleum smell from well.

Remarks Purged method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.6 Mg/L
	Fe2+ = 0.8 Mg/L
	Do Top 0.96 Mg/L /Mid 0.61 Mg/L /Bot 0.52 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	IR72MW32A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	☐
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.87'	Type	
Well Location	Parcel E	Well Stick Up		Measured with	
Sample Date	03/16/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	S. Penman	Well Depth	21.77' MEAS X RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	21.77 - 7.87 = 13.90'	Well Installed by	
	M. Slaughter	Gallons/Foot	0.653	Installation Date	
Sample ID	0110P027 @10:00	Casing Volume	13.90' * 0.653 = 9.07 gal	Development Date(s)	
Duplicate ID	0110P028 @10:15				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/16/01 @ 07:30 Spec. Conductance: Standard ____ umhos/cm at 25C Reading 1000 umhos/cm at 13.63 ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 -7.03 at 13.63 ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter 10.14 mg/L at 14.7 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 100.1

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:40	GPM	3.54	7.92	206.5	17.24	1122	1.6	4						
09:43	1.3	2.98	7.85	213	16.95	1133	0.6	8						
09:45	2.0	3.12	7.87	214.8	17.19	1119	1.7	12						
09:47	2.0	3.13	7.87	217.1	17.22	1117	0.9	16						
09:49	2.0	3.12	7.87	219.1	17.23	1120	0.3	20						
09:51	2.0	3.14	7.87	219.9	17.23	1121	0.2	24						
09:53	2.00	3.10	7.87	220.90	17.25	1126	0.1	28						
09:55	2.00	3.07	7.86	222.60	17.25	1126	0.2	32						
09:58	_triangle 7.91 (BTOC) prior to sampling													

SAMPLE PARAMETERS

Pest	SVOCs	TPH-e	TPH-p	VOCs	GenMin	MEE	NN	Major anions	Alk	TDS	Fe2+	Mn2+	DO

Condition of Well No lock on well. Duplicates for TPH-p, TPH-e.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6820	Serial No.	97L0044AB
Spec. Cond. Meter YSI 6820	Serial No.	97L0044AB
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM .55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6820	Serial No.	97L0044AB
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 2.62 Mg/L /Mid2.18 Mg/L /Bot0.63 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/08/01

Well Name	IR73MW04A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	11.05'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/08/01 @9:35	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	24.25' MEAS ___ RPTD X	PID Reading (TOC)	0.0 ppm
	P. Hart	Feet of Water	24.25 - 11.05 = 13.20'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109T016	Casing Volume	13.20' * 0.653 = 8.62 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/07/01 17:40 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.49 umhos/cm at 17.14 ^{0}C

pH: pH 4.00 - 4.06 at 17.14 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.3

cal to 0 Atmos & 0 sal

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
09:19		3.73	7.25	30.7	17.80	3719	4.2	5						
09:21		3.60	7.42	-20.9	17.84	4553	1.9	10						
09:23		3.49	7.48	-51.7	17.89	5066	1.1	15						
09:25		3.47	7.53	-67.0	17.89	4846	0.7	20						
09:27		3.41	7.54	-72.0	17.90	4880	0.4	25						
Sample collected @ 09:35														

SAMPLE PARAMETERS

TpH-e	TpH-p	Gen min	MEE	NN	AlK	Major Anions	TDS			Fe2+	Mn2+	DO	

Condition of Well Good

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Spec. Cond. Meter YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Pump N/A	Serial No.	N/A
Water Level Meter solinst	Serial No.	25551
D.O. Meter YSI 55 DO	Serial No.	N/A
Filter Apparatus N/A	Filters	N/A
Temp. Measure YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo env. 580	Serial No.	580U

Field Chemistry Calibrations

Fractions Fe2+ = 1.5 Mg/L

Mn2+ = 1.2 Mg/L

DO top 0.75Mg/L Mid. 0.50Mg/L Bot 0.21Mg/L

Number of Bottles

Sample Depth

Field Notebook

Sample Method and Rate

Bailer @ 200 mL/min

Discharge Water Containerized? Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/20/01

Well Name	PA36MW04A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	7.90'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/20/01 @13:50	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	20.82' MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
	J.M	Feet of Water	20.82 - 7.90 = 12.92'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0111T009	Casing Volume	12.92' * 0.653= 5.51 gals	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/20/01 07:00 Spec. Conductance: Standard 4467 umhos/cm at 25C Reading 4490 umhos/cm at ___ ^{0}C

pH: pH 4.00 - 3.79 at ___ ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 96.8

Calibrated using Auto Cal solution for pH specific conductivity Turbidity - 0.1, 0.0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
13:50	2.5	2.16	7.50	-41.9	16.29	1392	5.2	5						
13:52	2.5	2.14	7.50	-43.4	16.29	21398	5.0	10						
13:54	2.5	2.00	7.48	-47.4	16.28	21458	2.9	15						
13:56	2.5	1.96	7.48	-45.9	16.28	1449	1.5	20						
13:58	2.5	1.90	7.48	-43.6	16.27	21474	1.5	25						
13:60	2.5	1.84	7.48	-42.4	16.27	21504	1.1	30						

SAMPLE PARAMETERS

Cu	Pest	VOCs	TDS										

Condition of Well ok, but flooded, bolted Sample time 13:50; curb box flooded; evidence of leakage into well

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 610DM	Serial No.	194194R
Spec. Cond. Meter	YSI 610DM	Serial No.	194194R
Pump	NA	Serial No.	NA
Water Level Meter	solinst	Serial No.	23983
D.O. Meter	NA	Serial No.	NA
Filter Apparatus	NA	Filters	NA
Temp. Measure	YSI 610DM	Serial No.	194194R
Interface Probe	NA	Serial No.	NA
PID/OVA	determinator	Serial No.	57632-311

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Well Name	PA36MW07A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	4.80'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	3/12/2001 @15:00	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	20.00' MEAS x RPTD	PID Reading (TOC)	0.0 ppm
	A. Taylor	Feet of Water	20.00 - 4.80 = 5.20'	Well Installed by	
	P. Heart	Gallons/Foot	0.653	Installation Date	
Sample ID	0110T003	Casing Volume	5.20' * 0.653 = 3.39 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/12/01 @ 07:30 Spec. Conductance: Standard 1000 umhos/cm at 25C Reading ____ umhos/cm at ___ ^{0}C

pH: pH 4.00 - at _ ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter__ mg/L at__ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

Calibrated using Auto Cal solution for pH specific conductivity. Turb=0.0 cal, 0.0 read

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
14:15		0.81	7.80	-52.3	17.40	9764	3.7							
14:25		0.76	7.75	-58.5	16.56	9157	6.8							
14:30		0.51	7.74	-54.7	17.80	10254	2.8							
														well dry
														collected after well was over
														%80 recharged
15:00	Sample collected.													

SAMPLE PARAMETERS

Pest	VOCs	TDS											

Condition of Well Edge of PVC cracked but appears to be water-tight still.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter	YSI 6820 w/610DM	Serial No.	97B0440AA 194 195R	Fractions
Spec. Cond. Meter	YSI 6820 w/610DM	Serial No.	97B0440AA 194 195R	
Pump	N/A	Serial No.	N/A	
Water Level Meter	Solinist	Serial No.	23983	Number of Bottles
D.O. Meter	YSI 55	Serial No.	YSI 55.05	Sample Depth
Filter Apparatus	Disposable 10 Micron In-line	Filters	.45 micron	Field Notebook
Temp. Measure	YSI 6820 w/610 DM	Serial No.	97B0440AA 194 195R	Sample Method and Rate: Bailer @ 200 mL/min
Interface Probe	N/A	Serial No.	N/A	
PID/OVA	Determinator	Serial No.	Sn 580 V	Discharge Water Containerized? Y

Field Chemistry Calibrations

GROUNDWATER
SAMPLING DATA SHEET

Well Name	PA36MW08A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC	Immiscible Phases Present?	☐
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.20'	Type	
Well Location	Parcel E	Well Stick Up		Measured with	
Sample Date	3/8/2001 @13:35	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:		Well Depth	21.44' MEAS x RPTD	PID Reading (TOC)	0.0 ppm
	S. Penman	Feet of Water	21.44 - 6.20 = 15.24'	Well Installed by	
	J. Langston	Gallons/Foot	0.653	Installation Date	
Sample ID	0109P008	Casing Volume	15.24' * 0.653 = 9.95 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/8/01 @ 07:00 Spec. Conductance: Standard ____ umhos/cm at 25 C Reading 49.9 umhos/cm at 17.12 ^{0}C

pH: pH 4.00 - 4.00 at 17.12 ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at ____ ^{0}C

Dissolved Oxygen: D.O. Meter 9.20 mg/L at 12.8 ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100 Reading 99.6

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	PID/OVA Reading Location	Value	Depth to Water (ft)	Salinity	Comments
13:11	GPM	0.64	7.40	69.5	14.54	1288	15.0	5						
13:14	1.66	0.43	7.38	43.3	14.59	1278	1.4	10						
13:17	1.66	0.35	7.37	31.4	14.64	1269	1.5	15						
13:20	1.66	0.29	7.37	23.8	14.63	1260	1.8	20						
13:23	1.66	0.25	7.36	17.2	14.63	1262	1.6	25						
13:26	1.66	0.23	7.36	11.3	14.60	1266	1.9	30						
13:29	1.66	0.21	7.36	7.1	14.65	1263	1.3	35						
			6.22' BTOC prior to sampling											
13:32	triangle	6.22' BTOC prior to sampling												

SAMPLE PARAMETERS

SVOCs	TPH-e	TPH-p	GenMin	MEE	NN	Major anions	Alk	TDS			Fe2+	Mn2+	DO

Condition of Well Well movement cover is broken, needs to be replaced.

Remarks Purge method with ES-60 submersible pump.

FIELD EQUIPMENT

Ph Meter YSI 6920	Serial No.	YSI 6920.09
Spec. Cond. Meter YSI 6920	Serial No.	YSI 6920.09
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	WLM.55
D.O. Meter YSI 55	Serial No.	YSI 55.05
Filter Apparatus Disposable 10 Micron In-line	Filters	.45 micron
Temp. Measure YSI 6920	Serial No.	YSI 6920.09
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	58011-68610-361

Field Chemistry Calibrations

Fractions	Mn2+ = 0.0 Mg/L
	Fe2+ = 0.0 Mg/L
	Do Top 0.93 Mg/L /Mid 0.55 Mg/L /Bot 0.42 Mg/L
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

GROUNDWATER
SAMPLING DATA SHEET

Date 03/08/01

Well Name	PA50MW10A	Screen Interval			
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	10.81'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	03/08/01 @11:15	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	A. Taylor	Well Depth	17.15' MEAS ___ RPTD	PID Reading (TOC)	0.0 ppm
	P. Hart	Feet of Water	17.15 - 10.81 = 6.34'	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	0109T017	Casing Volume	6.34 * 0.653 = 4.14 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 03/07/01 17:00 Spec. Conductance: Standard 4.49 umhos/cm at 25C Reading 4.49 umhos/cm at 17.16 ^{0}C

pH: pH 4.00 - 4.40 at 17.19 ^{0}C pH 7.00 - at ___ ^{0}C pH 10.00 - at ___ ^{0}C

Dissolved Oxygen: D.O. Meter ___ mg/L at ___ ^{0}C PID: Calibration Gas Isobuylene PPM 100 Span 100 Reading 99.3

2 sal 0, Atm. 0

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged)		PID/OVA Reading		Depth to Water (ft)	Salinity	Comments
								Gallons	Casing Vol.	Location	Value			
11:00		6.49	8.10	115.4	17.12	2924	0.9	2.5						
11:01		6.17	7.91	111.9	17.17	2903	0.9	5						
11:02		6.04	7.84	110.7	17.20	3046	0.4	7.5						
11:03		5.93	7.80	110.1	17.21	3138	0.7	10						
11:04		5.65	7.77	110.5	17.22	3349	2.0	12.5						
11:05		5.46	7.75	111.0	17.22	3481	1.7	15						
Sample Collected @ 11:15														

SAMPLE PARAMETERS

Cd	Cu/ Pb	Zn	VOCs	Gen Min	MEE	NN	Maj. Anions	AIK	TDS		Fe2+	Mn2+	DO

Condition of Well Good

Remarks Purge method with ES-60 submersible pump. clean H2O

FIELD EQUIPMENT

Ph Meter YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Spec. Cond. Meter YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Pump N/A	Serial No.	N/A
Water Level Meter solinst	Serial No.	25551
D.O. Meter YSI 55 DO	Serial No.	N/A
Filter Apparatus N/A	Filters	N/A
Temp. Measure YSI 610 DM/ 6820	Serial No.	194195R 97B0440
Interface Probe N/A	Serial No.	N/A
PID/OVA Thermo onv. Pust 580	Serial No.	580U

Field Chemistry Calibrations

Fractions	Fe2+ = 0.0 Mg/L
	Mn2+ = 0.3 Mg/L
DO top 2.70 Mg/L/Mid. 2.86Mg/L/Bot. 2.06Mg/L	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	Bailer @ 200 mL/min
Discharge Water Containerized?	Y

APPENDIX B

CHAIN-OF-CUSTODY FORMS

2886

Tetra Tech EM Inc.
San Francisco Office

135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

Chain of Custody Record

Page 1 of 1

Project name: Phase II GDG1	PO#: 012203	Lab: Severn Trent	
Project number: 20069011B040502	TtEMI technical contact: Kameron MOEZZI 415-222-8298	Field samplers: Stephen Pearman, Jerome Longstaff	
	TtEMI project manager: Tony Li	Field samplers' signatures:	

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Nickel, mercury	NTE	NH3	Anions	Alkalinity	TDS	Solinity	Al, Ba, Be, Cr, Cu, Pb, Hg, Ni, Zn	Al, As, Ba, Cr, Cu, Ni
01090001	IR01MW1-2 MS/MSD	3/6/01	1010	Water			3														X		X	
01090002	Trip Blank	3/6/01	1145	water	4					X				X										
01090003	IR03MW224A	3/6/01	1205	Water	11	6	4			X	X	X		X	X	X	X	X	X	X	X		X	

Preservative Added: HCl; HCl; HNO3; HCl; HCl; HNO3; HNO3

	Name (print)	Company Name	Date	Time
Relinquished by:	Stephen Pearman	Environmental Sampling Services	3/6/01	1600
Received by: Shipped via FedEx #				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

10 Day Turnaround Time. Metals and General Minerals were field filtered.
Please analyze for TDS on 0109P003 if possible without the required volume.

Ref: g0069011b040502
Dept:

Date: 06MAR01
Wgt: 60 LBS

SHIPPING	$46.88
SPECIAL	$0.00
HANDLING	$0.00
TOTAL	$46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 1908

WHITE-Laboratory Copy YELLOW-Pro

2909

Tetra Tech EM Inc.
San Francisco Office

135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

Chain of Custody Record

Page 1 of 1

PO# 012203	Lab: Severn Trent	
Project name: Phase II GDGI	TtEMI technical contact: Kamran Moozzi 415 222 8278	Field samplers: Andrew Taylor
Project number: G0069011B040502	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HCl, HNO3, HCl, H2SO4, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	general minerals	NN	Nitrogen Ammonia	Alkalinity	TDS	Salinity	As, Ba, Cd, Cr, Ni	HNO3
0109T005	TRIP BLANK	3/6/01	0800	H2O	6								X				X									
0109T006	IR28MW211F	3/6/01	1015	H2O	8					3			X						X	X	X	X	X			
0109T007	IR02MW97A	3/6/01	1230	H2O	11	10				3			X	X	X		X	X	X	X	X	X	X		X	X
0109T008	IR36MW125A	3/6/01	1500	H2O	3					1			X										X			

	Name (print)	Company Name	Date	Time
Relinquished by: ANDREW TAYLOR	ANDREW TAYLOR	GAIA	3/6/01	1600
Received by: Shipped via Fedex 4843 1899 1882				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 day TAT - MS/MSD for PCB/pest + SVOC on sample 0109T007

Ref: g0069011b040502
Dept:

Date: 06MAR01 SHIPPING $46.88
Wgt: 60 LBS SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 1882

ory Copy YELLOW-Project Office Copy

2910

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San Francisco Office

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Fax 415-543-5480

Chain of Custody Record

PO#	012208
Lab:	Paragon
Project name:	Phase II GDGI
TtEMI technical contact:	Rameen Moezzi
Field samplers:	~~Stephen Penman~~ Andrew Taylor
Project number:	G0069011B040502
TtEMI project manager:	415 222 8278 Tony Li
Field samplers' signatures	

Preservative Added: HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables 8015B
01097007	IR02MW97A	3/6/01	1230	H_2O			2								X
01097P001	IR01MW1-2 MS/MSD	3/6/01	1010	water			4								X
01097P003	IR03MW224A	3/6/01	1205	water			2								X

	Name (print)	Company Name	Date	Time
Relinquished by:	Stephen Penman	Environmental Sampling Services	3/6/01	1600
Received by: Shipped via FedEx #4843 1899 1893				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: g0069011b040502
Dept:

Date: 06MAR01
Wgt: 55 LBS

SHIPPING	$42.95
SPECIAL	$0.00
HANDLING	$0.00
TOTAL	$42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 1893

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Chain of Custody Record

Page 1 of 1

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PO# Ø122Ø3

Lab: Severn Trent

Project name: Phasell GW GDI

TtEMI technical contact: Rameen Moezzi 415.222.8278

Field samplers: D. Lloyd

Project number: GØØ69Ø11BØ4Ø5Ø2

TtEMI project manager: Tong Li

Field samplers' signatures: D'Art Lloyd

Preservative Added: HCl, HCl, HNO3

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	0.5L Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	VOCs	TDS	Pest	Sal	As, Ba, Cd, Cr, Ni
Ø1Ø9DØØ5	Trip Blank (D1)	3/6/01	0811	Water	2												X				
Ø1Ø9DØØ6	1R36MW123B pump + bailer	3/6/01	1147	water	3					1							X	X			
Ø1Ø9DØØ7	1R36MW123B Duplicate pump + bailer		1153		3					1							X	X			
Ø1Ø9DØØ8	1R36MW128A pump + bailer MS/MSD		1401		6	4				2							X	X	X	X	
Ø1Ø9DØØ5	Trip Blank		0811		4										X		X				
Ø1Ø9DØØ9	Equipment Rinsate: D.T.W meter		1429		6	4				1					X	X	X		X		X

D'Art Lloyd

	Name (print)	Company Name	Date	Time
Relinquished by: D'Art Lloyd	D'Art Lloyd	R+ME1E1	3/6/01	1615
Received by: Shipped via FedEx # 4843 1899 1871				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 Day T.A.T
Metals are field filtered

Ref: g0069011b040502
Dept:

Date: 06MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 1871

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Chain of Custody Record

Page 1 of 1

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PO# Ø122Ø4

Lab: C+T

Project name: Phase II GDGI

TtEMI technical contact: Raureen Moezzi 415 222 8278

Field samplers: Andrew Taylor

Project number: 6ØØ69Ø118Ø4Ø5Ø2

TtEMI project manager: Tong Li

Field samplers' signatures:

Preservative Added

No./Container Types

Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	HEXAVALENT CR
Ø1Ø9TØØ7	IR02MW97A	3/6/01	1230	H2O						1									X
Ø1Ø9PØØ1	IR01MWI-2 MS/MSD	3/6/01	1010	water						2									X
Ø1Ø9PØØ3	IR03MW224A	3/6/01	1005	water						1									X
Ø1Ø9DØØ9	EQUIPMENT Rinsate (DTW meter)	3/6/01	1429	water						1									X

	Name (print)	Company Name	Date	Time
Relinquished by: Andrew Taylor	ANDREW TAYLOR	GAIA	3/06/01	1600
Received by: George Lumbre	GEORGE Lumbre	C&T	3/6/01	1600
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

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Chain of Custody Record

Page 1 of 1

PO#	012203
Lab:	Severn Trent
Project name:	Phase II GDGI
TtEMI technical contact:	Kameron Moezzi 415 222 8278
Field samplers:	Andrew Taylor
Project number:	G0069011B040502
TtEMI project manager:	Tong Li
Field samplers' signatures:	[signature]

Preservative Added: HCl, HCl, HNO3, HCl, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 mL Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Gen Min	Metals	Metals (Wipes)	Alkalinity	TDS, TSS
0109T009	TRIP	3/7/01	0800	H2O	6						X				X						
0109T010	IR36MW12A	3/7/01	0940	H2O	2					3					X	X	X	X	X	X	
0109T011	IR15MW06A	3/7/01	1210	H2O	2					3	X				X	X	X	X	X	X	X
0109T012	Dup on IR15MW06A	3/7/01	1220	H2O	8					3	X						X	X	X		

	Name (print)	Company Name	Date	Time
Relinquished by: Andrew Taylor	ANDREW TAYLOR	GAIA	3/7/01	1600
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 07MAR01 SHIPPING $39.01
Wgt: 50 LBS SPECIAL $0.00
HANDLING $0.00
TOTAL $39.01

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 1952

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Chain of Custody Record

PO#: 012203

Lab: STL

Project name: PHASE II GDGI

TtEMI technical contact: RAMEEN MOEZZI

Field samplers: Ed Chong

Project number: G0069011B040502

TtEMI project manager: TONG LI

Field samplers' signatures: [signature]

Preservative Added: HCl (CLP VOA); HCl (TPH Purgeables)

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 mL Poly			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	TDS
0109D010	trip blank	3/7/01	0900	H2O	4								X				X		
0109D012	1R36MW12BA	3/7/01	1300	H2O	3					1			X						X
0109D014	1R36MW11A DUP	3/7/01	1110	H2O	6								X				X		
0109D011	1R36MW11A	3/7/01	1100	H2O	6					1			X				X		X
0109D015	1R36MW12BA DUP	3/7/01	1310	H2O	3					1			X						X
0109D013	1R36MW126A	3/7/01	1500	H2O	3					1			X						X

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Ed Chong	TtEMI	3/7/01	1600
Received by: Shipped via FedEx #4843 1899 1996				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:
Date: 07MAR01
Wgt: 50 LBS
SHIPPING $39.01
SPECIAL $0.00
HANDLING $0.00
TOTAL $39.01
SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 1996

-03

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Chain of Custody Record

Page 1 of 1

PO# 012203	Lab: SEVERN TRENT	
Project name: PHASE II GDG1	TtEMI technical contact: 415 222 8278 RAMEEN MOEZZI	Field samplers: Andrew Taylor
Project number: G0069011B040502	TtEMI project manager: TONG LI	Field samplers' signatures: [signature]

Preservative Added: HCl, HCl, HNO3, HCl, H2SO4, HNO3

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Hg, Ni	Gen Min	MGE	NN	Mg or Anions	Alkalinity	TDS	Pb Th
0109T013	IR14MW09A	3/7/01	1440	H2O	8	4				3			X		X	X	X	X	X	X	X	X	X	
0109T014	EQUIP RINSE	3/7/01	1530	H2O	6	4				1	X		X		X	X	X							X

	Name (print)	Company Name	Date	Time
Relinquished by: Andrew Taylor	ANDREW TAYLOR	GAIA	3/07/01	1600
Received by: Shipped Via FedEx # 4843 1899 1974				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 07MAR01
Wgt: 55 LBS

SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 1974

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Chain of Custody Record

PO# 012203

Lab: Severn Trent

Project name: Phase II GD61

TtEMI technical contact: Ramon Moezzi (415) 222-8278

Field samplers: Stephen Penman, Jerome Langston

Project number: 6069011B040502

TtEMI project manager: Tony Li

Field samplers' signatures:

Preservative Added: HCl, HCl, HNO3, HCl, H2SO4

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General Minerals	MEE	NN	Major Anions	Alkalinity	TDS
01090004	Trip Blank	3/8/01	0745	water	4						X				X							
01090005	1R15MW08A	3/8/01	0925	water	8	4	2			3		X			X	X	X	X	X	X	X	X
01090006	1R36MW14A	3/8/01	1115	water	8					3	X						X	X	X	X	X	X
01090007	1R36MW14A Duplicate	3/8/01	1145	water	8					3	X						X	X	X	X		
~~01090008~~	~~PA36MW08A~~	~~3/8/01~~		~~water~~	~~8~~	~~4~~				~~3~~		~~X~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		

AP

	Name (print)	Company Name	Date	Time
Relinquished by:	Stephen Penman	Environmental Sampling Services	3/8/01	1600
Received by: Shipped Via FedEx Airbill # 4843 1899 2043				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

All General Minerals were filtered in the field

Ref: g0069011b040502
Dept:

Date: 08MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2043

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Chain of Custody Record

PO#	012203
Lab:	Severn-Trent
Project name:	Phase II GDGI
TtEMI technical contact:	Kameen Moezzi (415) 222
Field samplers:	Stephen Penman, Jerome Langston
Project number:	G0069011B040502
TtEMI project manager:	Tong Li
Field samplers' signatures:	

Preservative Added: HCl, HNO3, H2SO4

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 500ml Poly			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General Minerals	MEE	NH3	Major Anions	Alkalinity	TDS				
01090008	PA30MW08A	3/8/01	1335	water	8	4	—	—	—	3	—	—	X	—	—		X	X	X	X	X	X	X	X	—	—	—	—

	Name (print)	Company Name	Date	Time
Relinquished by:	Stephen Penman	Environmental Sampling Services	3/8/01	1600
Received by:	Shipped via FedEx Airbill # 4843 1899 2054			
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

All General Minerals Samples were filtered in the field

Ref: g0069011b040502
Dept:

Date: 08MAR01
Wgt: 60 LBS

SHIPPING	$46.88
SPECIAL	$0.00
HANDLING	$0.00
TOTAL	$46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2054

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Chain of Custody Record

Page 1 of 1

PO# 012203	Lab: Severn Trent	
Project name: Phase II G DG-1	TtEMI technical contact: Rameen Moozzi 415 222 8278	Field samplers: Andrew Taylor
Project number: G0069011B0 40502	TtEMI project manager: Tang Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HCl, HNO3, HCl, H2SO4, HNO3, HNO3, HNO3

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	gen minerals	MEE	NN	Major Anions	TDS	Alkalinity	Ba	Cd, Cu, Pb, Zn	Sb, As, Ba, Cd, Pb, Ni
0109T015	TRIP BLANK	3/8/01	0800	H2O	4						X				X										
0109T016	IR73MW04A	3/8/01	0935	H2O	8	2				3					X	X	X	X	X	X	X	X			
0109T017	PA50MW10A	3/8/01	1115	H2O	8					3	X						X	X	X	X	X	X		X	
0109T018	* IR14MW10A	3/8/01	1330	H2O	3	8				2	X	X	X								X				X

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	ANDREW TAYLOR	GAIA	3/8/01	1600
Received by: Shipped via FedEx Acct # 4843 1899 2032				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Ref: g0069011b040502
Dept:

Date: 08MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2032

Turnaround time/remarks:

* MS/MSD on 0109T018, PCB and SVOC only
indiv. Metals for 0109T018 include Sb, As, Ba, Cd, Pb and Ni

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Chain of Custody Record

Page 1 of 1

PO# 012203	Lab: SEVERN TRENT	
Project name: PHASE II LDGI	TtEMI technical contact: [illegible] RAMEEN MOEZZI	Field samplers: ANDREW TAYLOR
Project number: G0069011B040502	TtEMI project manager: TONG LI	Field samplers' signatures: [signature]

Preservative Added: HCl, HNO3, HCl, H2SO4, HNO3, HNO3, HNO3

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml Poly			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General Minerals	MEE	NH3	Major Anions	TDS	Alkalinity	Cd	Cu, Pb, Zn, Sb	As, Ba	Ni
0109T016	1R73MW04A	3/8/01	0935	H2O	8	2				3							X	X	X	X	X	X	X	X				
0109T019	1R36MW135A	3/8/01	1450	H2O						2													X		X			
0109T020	EQUIP RINSE	3/8/01	1530	H2O	6	6				1			X	X	X		X	X							X	X	X	X

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	ANDREW TAYLOR	GAIA	3/8/01	1600
Received by: Shipped via FedEx Ave 11 4843 1899 2021				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 0109T020 includes the individual metals Cu, Pb, Cd, Zn, Sb, As, Ba and Ni (bottled in one 500 preserved poly)

Ref: g0069011b040502
Dept:

Date: 08MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2021

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-08

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Chain of Custody Record

Page 1 of 1

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PO# 012208	Lab: PARAGON	
Project name: PHASE II GDGI	TtEMI technical contact: 415 222 8278 RAMEEN MOEZZI	Field samplers: ANDREW TAYLOR STEVEN PENMAN
Project number: G0069011B040502	TtEMI project manager: TONG LI	Field samplers' signatures: [signature]

Preservative Added: NO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	X/B
0109T010	IR36MW12A	3/7/01	0940	H_2O			2									X
0109T013	IR14MW09A	↓	1430	↓			2									X
0109D011	IR36MW11A	↓	1100	↓			2									X
0109D014	IR36MW11A DUP	↓	1110	↓			2									X
0109T018	IR14MW10A	3/8/01	1330	↓			2									X
0109P005	IR15MW08A	↓	0925	↓			2									X
0109T020	equipment rinsate	↓	1530	↓			2									X
0109T025	IR12MW20A	3/9/01	1225	↓			2									X
0109D014Z	EQUIP, RINSATE	3/9/01	1359	↓			2									X
0109P013	IR14MW12A	↓	1315	↓			2									X
0109P010	IR15MW09F	↓	0800	↓			2									X

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	ANDREW TAYLOR	GAIA	3/9/01	1600
Received by: SHIPPED VIA FEDEX AIRBILL # 4843 1899 2124				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: g0069011b040502
Dept:

Date: 09MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $3.50
HANDLING $0.00
TOTAL $50.38

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 2124

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Chain of Custody Record

Page 1 of 1

PO# Ø122Ø3	Lab: Severn Trent	
Project name: PHASE II GDG1	TtEMI technical contact: Rameen Moezzi (415)222-8278	Field samplers: Stephen Penman, Jerome Langston
Project number: GØØ69Ø11BØ4Ø5Ø2	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HNO3, HCl, H2SO4, HNO3

No./Container Types: 40 ml VOA, 1 Liter Amber, 1 Liter Poly, Brass Tube, Glass Jar, 1500ml Poly

Analysis Required: CLP VOA, CLP SVOA, CLP Pest/PCBs, CLP Metals, TPH Purgeables, TPH Extractables, General Minerals, MEE, NH, Major Anions, Alkalinity, TDS, Cu

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1500ml Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General Minerals	MEE	NH	Major Anions	Alkalinity	TDS	Cu
Ø1Ø9PØ15	Duplicate of IR11MW25A	3/09/01	1405	Water	5					3							X	X	X	X	X	X	
Ø1Ø9PØ16	IR11MW27A	3/09/01	1440	Water	8					3	X						X	X	X	X	X	X	X

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Stephen Penman	Environmental Sampling Services	3/09/01	1600
Received by: Shipped Via FedEx Airbill 4843 1899 2157				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Metals and General Minerals were filtered in the field

Ref: G0069011B040502
Dept:

Date: 09MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $3.50
HANDLING $0.00
TOTAL $50.38

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 2157

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San Francisco Office

135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

Chain of Custody Record

PO# 012203

Lab: Severn Trent

Project name: Phase II GDGI

TtEMI technical contact: Romeen Moezzi (415) 222-9279

Field samplers: Stephen Harmon, Jerome Langston

Project number: G0069011B040502

TtEMI project manager: Tony Li

Field samplers' signatures:

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 500ml Poly			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General Minerals	MEE	NN	Major Anions	Alkalinity	TDS	Cu	Co, Ni		
0041P001	Trip Blank	3/09/01	0745	water									X				X											
0109P010	IR15MW09F	3/09/01	0800	water	3					1			X											X				
0111P011	Duplicate of IR15MW09F	3/09/01	0830	water						1														X				
0107P012	IR11MW26A	3/09/01	1020	water	3					3			X						X	X	X	X	X	X				
0109P013	IR14MW12A	3/09/01	1315	water	3	4				2				X			X	X						X		X		
0109P014	IR11MW25A	3/09/01	1345	water	3	2				3			X	X					X	X	X	X	X	X				

	Name (print)	Company Name	Date	Time
Relinquished by:	Stephen Harmon	Environmental Sampling Services	3/9/01	1600
Received by:	Shipped via FedEx Airbill No. 4843 1899 2135			
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Metals and General minerals were filtered in the field

Ref: g0069011b040502
Dept:

Date: 09MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $3.50
HANDLING $0.00
TOTAL $50.38

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 2135

WHITE–Laboratory Copy YELLOW–Project Office Copy

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Chain of Custody Record

Page 1 of 1

Project name: Phase II G DGI	TtEMI technical contact: Rameen Mueezi 415 222 8278	PO#: 012203	Lab: Severn Trent
Project number: G0069011B040502	TtEMI project manager: Tony Li	Field samplers: Andrew Taylor	Field samplers' signatures: [signature]

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Sulfide/Sulfate	TPHE	UR	Nitrate/Nitrite	Alkalinity	N			
0109T021	TRIP BLANK	3/9/01	0800	H2O	2						X														
0109T022	IR12MW18A	3/9/01	0915	H2O	8					3	X						X	X	X	X	X	X			
0109T023	Duplicate of IR12MW18A	3/9/01	0945	H2O	5					3							X	X	X	X	X				
0109T024	MS/MSD IR39MW21A	3/9/01	1025	H2O	8	6				3	X	X					X	X	X	X	X	X			
0109T025	IR12MW20A	3/9/01	1325	H2O	5					3	X						X	X	X	X	X	X			

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	ANDREW TAYLOR	GAIA	3/9/01	1600
Received by: [signature]				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 day TAT
Metals are field filtered

Ref: g0069011b040502
Dept:

Date: 09MAR01 SHIPPING $46.88
Wgt: 60 LBS SPECIAL $3.50
HANDLING $0.00
TOTAL $50.38

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 2102

WHITE-Laboratory Copy YELLOW-Pr

2B

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Chain of Custody Record

PO#	Ø122Ø3
Lab:	Severn Trent
Project name:	Phase II 6W 6D1
TtEMI technical contact:	Rameen Moezzi 415 222 8278
Field samplers:	D. Lloyd
Project number:	6ØØ69Ø11BØ4Ø5Ø2
TtEMI project manager:	Tony Li
Field samplers' signatures:	D'Art Floyd

Preservative Added: HCl, HCl, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	0.5 L Poly			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	VOCs	Ca, Ni	As	Pest	TDS	Sal				
Ø1Ø9ØØ1Ø Z	Trip Blank	3-9-01	0737	H_2O	4												X	-	X									
Ø1Ø9DØ1 Z	1R36MW129B Pump + bailer		1044		3					2									X				X					
Ø1Ø9DØ12-Z	Duplicate " "		1049							2													X					
Ø1Ø9DØ13 Z	1R15MW1DF Pump + bailer		1248		3					2									X	-	X	-	X					
Ø1Ø9DØ14 Z	Equipment Rinsate (DI water)		1559		6	6				1			X	X	X					X	X				X			

	Name (print)	Company Name	Date	Time
Relinquished by: D'Art Floyd	D'Art Floyd	R+M EIEI	3/9/01	1615
Received by: [illegible]				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaro
Ref: g0069011b040502
Dept:

Date: 09MAR01
Wgt: 60 LBS

SHIPPING	$46.88
SPECIAL	$3.50
HANDLING	$0.00
TOTAL	$50.38

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 2113

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Chain of Custody Record

Page 1 of 1

PO# 012203

Lab: Severn Trent ~~Longmont~~ (AT)

Project name: Phase II GDGI

TtEMI technical contact: Romeen Mozzi 415 222 8278

Field samplers: Andrew Taylor

Project number: G0069011B040502

TtEMI project manager: Tony Li

Field samplers' signatures: [illegible]

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Total Minerals	Water	NN	Mercury Anions	Alkalinity	TDS	RA
0110T001	TRIP Blank	3/12/01	0800	H2O	4						X				X								
0110T002	IR12MW17A	3/12/01	1200	H2O	4	4				3	X	X			X	X	X	X	X	X	X	X	
0110T003	PA36MW07A	3/12/01	1500	H2O	3	2				1	X	X									X		

Preservative Added: HCl, HCl, HCl, HNO3

	Name (print)	Company Name	Date	Time
Relinquished by: Andrew Taylor	ANDREW TAYLOR	GAIA	3/12/01	1600
Received by: Shipped via FEDEX # 4843 1899 2179				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: Metals & Minerals are field filtered

Ref: G0069011B040502
Dept:

Date: 12MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2179

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Chain of Custody Record

Page 1 of 1

Project name:	TtEMI technical contact:	Field samplers:
Phase II GOGI	Karen Morell 415-222-8272	Stephen Proman, Michelle Slaughter
Project number:	**TtEMI project manager:**	**Field samplers' signatures:**
G0069011B040502	Tony Li	

PO# 012203

Lab: Severn Trent

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 Liter poly	1 liter poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General Minerals	MTE	NH2	Preservatives	Cl	Cl/N	AL
0110P001	trip blank	3/12/01	2000	water	X							X				X								
0110P002	IR02MW175A	3/12/01	0925	water	3	4	2					X	X	X								X		X
0110P004	IR02MW179A	3/12/01	1030	water	3	2	2					X	X									X		X
0110P005	IR12MW19A	3/12/01	1140	water	8		3					X						X	X	X	X	X		
0110P006	IR12MW13A	3/12/01	1420	water	8		3					X						X	X	X	X	X	X	

	Name (print)	Company Name	Date	Time
Relinquished by:	Michelle Slaughter	Tetra Tech EM Inc	3/12/01	2210
Received by:	Fed Ex # 4843 1899 2168			
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 day turnaround

General Minerals and metals were filtered in the field.

Ref: G0069011B040502
Dept:

Date: 12MAR01
Wgt: 60 LBS

SHIPPING	$46.88
SPECIAL	$0.00
HANDLING	$0.00
TOTAL	$46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2168

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Chain of Custody Record

Page 1 of 1

Project name: Phase II GDG1	PO# 012203	Lab: Severn Trent
Project number: G0069011B040502	TtEMI technical contact: Rameen Moezzi 415 222	Field samplers: Andrew Taylor
	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly		CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Cu Zn Cd Ni	AL, Ba
011OT004	EQUIP. RINSATE	3/12/01	1530	~~H2O~~	6	6	—			1	—	X	X	X	—	X	X	X	X

Preservative Added: HCl, HCl, HNO3

	Name (print)	Company Name	Date	Time
Relinquished by: Andrew Taylor	ANDREW TAYLOR	GAIA	3/12/01	1600
Received by: Shipped via FedEx # 4843 1899 2180				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:
6 40mL VOAs are included in sample 011OT004

Ref: G0069011B040502
Dept:

Date: 12MAR01
Wgt: 50 LBS

SHIPPING	$39.01
SPECIAL	$0.00
HANDLING	$0.00
TOTAL	$39.01

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2180

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Chain of Custody Record

Page 1 of 1

Project name: Phase II GDG1	PO#: 012203	Lab: Severn Trent
Project number: G0069011B040502	TtEMI technical contact: Rameen Moezzi 415-222-8278	Field samplers: M. Slaughter, J. Langston, S. Penman
	TtEMI project manager: Tony Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HNO3, HCl, HNO3, HCl, H2SO4, HNO3

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly	1 gallon cube	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General Minerals	MCC	NN	Major Anions	Alkalinity	TDS	Salinity	Bio/Cu/Pb/Zn
0110P007	trip blank	3/13/01	0800	water								X													
0110P008	IR02MW206A1	3/13/01	0830	water	3					1		X											X		
0110P009	dupe of IR02MW206A	3/13/01	0900	water	3							X													
0110P010	IR02MW206A2	3/13/01	0930	water	3					1		X		X									X		
0110P011	IR02MW126A	3/13/01	1055	water	5	2				3				X				X	X	X	X	X	X	X	
0110P012	IR12MW14A	3/13/01	1225	water	8					3		X						X	X	X	X	X	X		
0110P013	IR12MW11A	3/13/01	1425	water	4					3		X						X	X	X	X	X	X		

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	[illegible] Slaughter	Tetra Tech EM Inc.	3/13/01	1500
Received by: Fed Ex # 4843 1899 2249				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 day turnaround
Metals & Minerals are field filtered

Ref: G0069011B040502
Dept:

Date: 13MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2249

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Chain of Custody Record

Page 1 of 1

PO# 012202 ~~010~~	Lab: Severn Trent	
Project name: Phase II GDGI	TtEMI technical contact: Rameen Moezzi 415-222-8278	Field samplers: S. Penman, J. Langston / M. Slaughter
Project number: 6000901180405002	TtEMI project manager: Tony Li	Field samplers' signatures: [signature]

Preservative Added: HCl, Nitric, Sulfuric, NaOH, HNO3, HCl, Nitric, Sulfuric, NaOH, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Total Metals	TOC	NO3/NO2	Other Anions	Alkalinity	TDS	Sulfate	AL, As, Cr, Cu, Ni	AL, Cd, Cr, Cu, Ni
0110P022	IR02MWB-1	3-15-01	1155	H2O			2														X		X	
0110P023	dupe for IR02MWB-1	3-15-01	1205	H2O			1																X	
0110P024	IR02MW114A2	3-15-01	1415	H2O			2														X		X	

HC

	Name (print)	Company Name	Date	Time
Relinquished by: Michelle Slaughter	Michelle Slaughter	Tetra Tech EMI	3-15-01	1600
Received by: Fedex # 4843 1899 2400				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ten day turn around

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Chain of Custody Record

Page 1 of 1

Project name: PHASE II GDGI	PO#: Ø122Ø3	Lab: SEVERN TRENT	
Project number: GØØ69Ø11BØ4Ø5Ø2	TtEMI technical contact: 415 222 87 78 RAMEEN MOEZZI	Field samplers: D'Art Lloyd	
	TtEMI project manager: TONG LI	Field samplers' signatures: D'Art Lloyd	

Preservative Added: HNO3, HCl, HNO3, HNO3, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 mL POLY	CLP VOA	CLP SVOA	CLP ~~Pest~~/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General Minerals	MEE	NN	Major Anions	Alkalinity	TDS	Ni	Ba, Cu, Pb, Zn
Ø11ØDØØ1	Trip Blank	3/13/Ø1	Ø8ØØ	H2O	4						X				X									
Ø11ØDØØ2	1R02MW2OGA pump		Ø946							1												X		
Ø11ØDØØ3	Duplicate pump		Ø951							1												X		
Ø11ØDØØ4	1R02MWB-5 bailer & pump		1Ø54		5	2				3			X				X	X	X	X	X	X	X	
Ø11ØDØØ5	equipment rinsate DTW		143Ø		6	4				1	X		X		X	X							X	X

	Name (print)	Company Name	Date	Time
Relinquished by: D'Art Lloyd	D'Art Lloyd	R+M E1E1	3/13/01	1615
Received by: Shipped Via FedEx # 4843 1899 2227				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: Metals samples Field filtered
10 Day T.A.T.

Ref: G0069011B040502
Dept:

Date: 13MAR01
Wgt: 55 LBS

SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2227

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Chain of Custody Record

Page 1 of 1

PO# 012208	Lab: Paragon	
Project name: Phase II GP61	TtEMI technical contact: Rameen Moezzi	Field samplers: Andrew Taylor, Stephen Penman
Project number: G0069011B040502	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added: HNO3, HNO3

No./Container Types: 40 ml VOA, 1 Liter Amber, 1 Liter Poly, Brass Tube, Glass Jar, 1 gal cube

Analysis Required: CLP VOA, CLP SVOA, CLP Pest/PCBs, CLP Metals, TPH Purgeables, TPH Extractables, α/β, Ra-226, -228

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 gal cube	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	α/β	Ra-226, -228
0110T004	equip. rinsate	3/12/01	1530	H_2O			1			1							X	X
0110P002	IR02MW175A	3/12/01	0925	H_2O			1			1							X	X
0110P003	IR02MW175A dupe	3/12/01	1000	H_2O						1								X
0110P004	IR02MW179A	3/12/01	1030	H_2O			1			1							X	X

3-13-01

	Name (print)	Company Name	Date	Time
Relinquished by: Michelle Slaughter [signature]	[signature]	Tetra Tech EMI	3-13-01	1545
Received by: FedEx # 4843 1899 2271				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 13MAR01
Wgt: 55 LBS

SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2271

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Chain of Custody Record

Page 1 of 1

PO# 012208	Lab: Paragon	
Project name: Phase II GPG1	TtEMI technical contact: Rameen Murzel	Field samplers: D'art Lloyd
Project number: G0069011B040502	TtEMI project manager: Tony Li	Field samplers' signatures: Michelle Slaughter for D'art Lloyd

Preservative Added

Sample ID	Sample Description/Notes	Date	Time	Matrix	No./Container Types: 40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 gallon cube	Analysis Required: CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	X/B	Ra-226, 228
0110D002	IR02MW209A pump	3/13/01	0946	H_2O			1			1							X	X
0110D003	dupe pump	3/13/01	0951	H_2O			2										X	
0110D004	IR02MWB-5 bailer & pump	3/13/01	1054	H_2O			1			1							X	X
0110D005	equipment rinsate DTW	3/13/01	1430	H_2O			2			1							X	X

	Name (print)	Company Name	Date	Time
Relinquished by: Michelle Slaughter	Michelle Slaughter	Tetra Tech EMI	3-13-01	1545
Received by: Fed Ex # 4843 1899 2260				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 13MAR01
Wgt: 55 LBS

SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2260

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Chain of Custody Record

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PO# Ø12208	Lab: PARAGON	
Project name: PHASE II GDG1	TtEMI technical contact: RAMEEN MOEZZI	Field samplers: ANDREW TAYLOR
Project number: G0069011B040502	TtEMI project manager: TONG LI	Field samplers' signatures: [signature] for Andrew Taylor

Preservative Added: HNO3, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 Gallon Cube	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	α/β	Ra-226, -228
0110T012	1R03MW218A2	3/14/01	1220	H_2O			1			1							X	X
0110T014	1R03MW218A3	|	1235	|			1			1							X	X
0110P018	equipment rinsate	|	1545	|			1			1							X	X

[signature] 3/14/01

	Name (print)	Company Name	Date	Time
Relinquished by: [signature] for →	Andrew Taylor	GAIA	3/14/01	1600
Received by: Fed Ex # 4843 1899 2352				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: g0069011b040502
Dept:

Date: 14MAR01
Wgt: 55 LBS

SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2352

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1-03

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Fax 415-543-5480

Page 1 of 1

Project name: Phase II GDG1	PO#: 012208	Lab: Paragon
Project number: G0069011B040502	TtEMI technical contact: Ramesh Moezzi	Field samplers: Stephen Penman
	TtEMI project manager: Tung Li	Field samplers' signatures: [signature]

Preservative Added: Hydrazine, Hydrazine

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 gallon cube	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	X/B	Ra-226, 228
0110P008	IR02MW206A1	3/13/01	0830	H_2O			1			1							X	X
0110P009	dupe IR02MW206A1	3/13/01	0900	H_2O			2										X	
0110P010	IR02MW206A2	3/13/01	0930	H_2O			1			1							X	X
0110P011	IR02MW126A	3/13/01	1055	H_2O			1			1							X	X
~~0110T012~~	~~IR03MW218A2~~	~~3/14/01~~	~~1220~~	~~H_2O~~			~~1~~			~~1~~							~~X~~	~~X~~
~~0110T014~~	~~IR03MW218A3~~	~~3/14/01~~	~~1235~~	~~H_2O~~			~~1~~			~~1~~							~~X~~	~~X~~

HC
HC
HC

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Michelle Slaughter	Tetra Tech EMI	3/14/01	1600
Received by: Fed Ex # 4843-1899-2308				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: g0069011b040502
Dept:

Date: 14MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2308

WHITE-Laboratory Copy YELLOW-Project Office Copy

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San Francisco Office

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San Francisco, CA 94105
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Fax 415-543-5480

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Chain of Custody Record

Page 1 of 1

Project name: Phase II GD61	PO#: 012203
Project number: G0011 9911 B040502	TtEMI technical contact: Rameen Moezzi 415-222-8278
	TtEMI project manager: Tony Li
	Lab: Severn Trent
	Field samplers: M Slaughter, J Langston / S Pearman
	Field samplers' signatures:

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly 500 mL	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Gen Minerals	MCE	NH3	Metals Aqueous	Alkalinity	TDS	Cl	NO3	Al Sb Ba Cd	Cu Fe Pb Mn
0110P014	trip blank	3-14-01	0730	H2O	4					X				X											
0110P015	IR02MW141A	3-14-01	1020	H2O	5	4	2				X	X				X	X	X	X	X	X		X	X	X
0110P016	dupe of IR02MW141A	3-14-01	1130	H2O	5	2	3					X				X	X	X	X						
0110P017	IR01MW07A	3-14-01	1410	H2O	8	2	3							X	X	X	X	X	X	X			X		
0110P018	Rinsate	3-14-01	1545	H2O	1																				

	Name (print)	Company Name	Date	Time
Relinquished by:				
Received by:		Tetra Tech	3/14/01	1600
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

10 day turnaround

Ref: g0069011b040502
Dept:

Date: 14MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2341

WHITE-Laboratory Copy YELLOW-Project Office Copy

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San Francisco Office

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Chain of Custody Record

PO#: [illegible]

Lab: [illegible]

Project name: Phase II [illegible]

TtEMI technical contact: [illegible]

Field samplers: [illegible]

Project number: [illegible]

TtEMI project manager: [illegible]

Field samplers' signature: [illegible]

Preservative Added

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
011OT009	TRIP	3/14/01	0800	H2O	4						X				X									
011OT010	* IR25MW18A	3/14/01	0900	H2O		1										X								
011OT011	* IR25MW19A	3/14/01	0930	H2O	6						X				X									
011OT012	IR03MW218A2	3/14/01	1220	H2O	11					3	X				X	X	X	X	X	X	X	X		
011OT013	IR03MW218A2 Dup	3/14/01	1230	H2O						1												X		
011OT014	IR03MW218A3	3/14/01	1235	H2O	3					3	X					X	X	X	X	X	X	X	X	

	Name (print)	Company Name	Date	Time
Relinquished by:	[illegible]	[illegible]	[illegible]	1600
Received by:	[illegible]			
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

* Continuation of sampling from previous day

Ref: g0069011b040502
Dept:

Date: 14MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2320

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PO# 012204	Lab: C&T	
Project name: Phase II GWGM	TtEMI technical contact: Rameen Moezzi 415-222-8278	Field samplers: S. Penman, M. Slaughter / J. Langston
Project number: G0069011B040502	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly 500mL	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Cr VI
011OP015	IR02MW141A	3/14/01	1030	H2O			1									X
011OP018	rinseate	3-14-01	1545	H2O			1									X

Michelle Slaughter 3-14-01

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Michelle Slaughter	Tetra Tech, EM Inc	3-14-01	15:15
Received by: [signature]	George Lumbre	C&T	3/14/01	4:02
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

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PO# 012203	Lab: Severn Trent	
Project name: Phase II GD61	TtEMI technical contact: Ramen Mezzi 415-222-8278	Field samplers: ~~[illegible]~~ S. Penman
Project number: G0069011C040502	TtEMI project manager: Tung Li	Field samplers' signatures: [signature]

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	~~1 Liter Poly~~ 500 ml	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	~~Gas Mn~~	~~Gas Fe~~	~~NH3~~	Al, Antimony, Ba	Cd, Co, Cu	Hg, Ni	Ag, Zn
0110P018	rinseate	3-14-01	1545	H2O	6	6	1			X	X	X			X				X	X	X	X

Preservative Added: HCl, HNO3, HCl, HNO3, HNO3, HNO3, HNO3

Analysis Required

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	michelle slaughter	tetra tech EMI	3-14-01	1550
Received by: Fed ex # 4843 1899 2330				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 day turnaround

Ref: g0069011b040502
Dept:

Date: 14MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2330

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Chain of Custody Record

Page 1 of 1

PO# 012203	Lab: Severn Trent	
Project name: Phase II GDGI	TtEMI technical contact: Rameen Muczzi 415-222-8278	Field samplers: M. Slaughter, J Langston, S. Peaman
Project number: G0069011B040502	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HNO3, HNO3, HCl, H2SO4, HNO3, HNO3, HNO3

No./Container Types: 40 ml VOA, 1 Liter Amber, 1 Liter Poly 500 ml, Brass Tube, Glass Jar, 7/16/01

Analysis Required: CLP VOA, CLP SVOA, CLP Pest/PCBs, CLP Metals, TPH Purgeables, TPH Extractables, Cyanide Minerals, OMEE, NN, Major anions, Alkalinity, TDS, Salinity, Zn, Al, Sb, Cd/Cr, Cu, Pb, Hg, Ni, Zn

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly 500 ml	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Cyanide Minerals	OMEE	NN	Major anions	Alkalinity	TDS	Salinity	Zn	Al, Sb, Cd/Cr, Cu	Pb, Hg, Ni, Zn
0110P018	~~field~~ trip blanks	3-15-01	0800	H_2O	4					X				X											
0110P019	IR01MW366A	3-15-01	0845	H_2O	8	1	2				X			X			X	X	X	X	X		X		
0110P020	IR02MWB-3	3-15-01	1100	H_2O	5	4	[illegible]				X	X				X	X	X	X	X	X			X	X
0110P021	dupe for IR02MWB-3	3-15-01	1130	H_2O	-	2	1				X													X	X

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Michelle Slaughter	Tetra Tech EMI	3-15-01	
Received by: Fed Ex # 4843 1899 2400				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 day turnaround
NO Zn for 0110P019
for sample 0110P019 we were only able to get 1 Liter for SVOCs

Ref: G0069011B040502
Dept:

Date: 15MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2400

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Page 1 of 1

135 Main St. Suite 1800
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415-543-4880
Fax 415-543-5480

PO# Ø122Ø3

Lab: Severn Trent

Project name: Phase II GDGI

TtEMI technical contact: Rameen Moezzi 415-222 8278

Field samplers: Andrew Taylor

Project number: GØØ69Ø11BØ4Ø5Ø2

TtEMI project manager: Tong Li

Field samplers' signatures:

Preservative Added: HCl, HCl, HNO3, HCl, H2SO4, HNO3, HNO3

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	gen minerals	Mee	NO	Major Anions	Alkalinity	TDS	Al, As, Ba, Zn	Cr, Cu, Pb, Hg, Ni	
Ø11ØTØ15	TRIP BLANK	3/15/01	0800	H2O	4						X				X										
Ø11ØTØ16	IR25MW19A	3/15/01	0900	H2O		1										X									
Ø11ØTØ17	IR03MW342A	3/15/01	1120	H2O	11	6				3	X	X	X		X	X	X	X	X	X	X	X	X	X	
Ø11ØTØ18	IR03MW342A dup	3/15/01	1130	H2O	3						X														

	Name (print)	Company Name	Date	Time
Relinquished by: Andrew Taylor	Andrew Taylor	GAIA Consulting	3/15/01	1600
Received by: [illegible] # 4843 1899 2363				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: g0069011b040502
Dept:

Date: 15MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2363

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Chain of Custody Record

Page 1 of 1

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PO# Ø122Ø4

Lab: C + T

Project name: PHASE II GDGI

TtEMI technical contact: RAMEEN MOEZZI

Field samplers: ANDREW TAYLOR

Project number: GØØ69Ø11BØ4Ø5Ø2

TtEMI project manager: TONG LI

Field samplers' signatures:

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500mL Poly			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	CrVI											
Ø11ØTØ17	1R03MW342A	3/15/Ø1	112Ø	H_2O						1									X											
0110T019	equipment rinsate	3/15/01	1500	H_2O						1									X											

	Name (print)	Company Name	Date	Time
Relinquished by:	ANDREW TAYLOR	GMA	3/15/01	
Received by:	GEORGE LUMBRE	C&T	3/15/01	1538
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

WHITE–Laboratory Copy YELLOW–Project Office Copy

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Tetra Tech EM Inc.
San Francisco Office

Chain of Custody Record

Page 1 of 1

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415-543-4880
Fax 415-543-5480

PO# Ø122Ø4	Lab: C & T	
Project name: Phase II GWGD	TtEMI technical contact: Rameen Moezzi 415-222-8278	Field samplers: M. Slaughter S. Penman / J. Langston
Project number: GØØ69Ø11BØ4Ø5Ø2	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added

No./Container Types

Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly 500 ml	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Cr VI
Ø11ØPØ2Ø	IRO2MWB-3	3-15-01	1100	H_2O			1									X
Ø11ØPØ22	IRO2MWB-1	3-15-01	1155	H_2O			1									X
Ø11ØPØ24	IRO2MW114A2	3-15-01	1455	H_2O			1									X

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Michelle Slaughter	Tetra Tech, EMI	3-15-01	1530
Received by: [signature]	George Lumbo	C&T	3/15/01	1538
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

WHITE–Laboratory Copy YELLOW–Project Office Copy

DB.

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San Francisco Office

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Page 1 of 1

135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

PO# 612203

Lab: Severn Trent

Project name: Phase II 6061

TtEMI technical contact: Kameen Moezzi

Field samplers: A. Taylor E. Chang

Project number: 600690118050 2

TtEMI project manager: Tong Li

Field samplers' signatures: E. Chang A. Taylor

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 mL			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Al As Cr Cu Ni Zn	Sb Be Pb Hg										
0110T019	~~Rinse Aid~~ Equipment Rinsate	3/15/01	~~13~~ 1500	H_2O	6	6	—	—	—	1	—	—	X	X	X	—	X	X	X	X	X	—	—	—	—	—	—	—	—	—

Preservative Added: HCL, HCL, HNO3, HNO3, HNO3

Analysis Required

		Name (print)	Company Name	Date	Time
Relinquished by:	A Taylor	Andy Taylor	Gaia	3/15/01	~~0~~1500
Received by:	Fed X # 484318992411				
Relinquished by:					
Received by:					
Relinquished by:					
Received by:					
Relinquished by:					
Received by:					

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 15MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2411

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-03

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San Francisco Office

Chain of Custody Record

Page 1 of 1

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415-543-4880
Fax 415-543-5480

PO# 012203	Lab: Severn Trent	
Project name: Phase II GDG1	TtEMI technical contact: Ra Meen Moezzi 415-	Field samplers: M Slaughter J. Langston/S. Penman
Project number: G0069011B040502	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HCl, HCl, HCl, HCl, HNO3

No./Container Types

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly 500 ml	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General Minerals	MEE	NN	Major Anions	Alkalinity	TDS	Salinity	Ash
0110P025	trip blank	3-16-01	[illegible]	H2O	4					X				X									
0110P026	IR04MW31A	[illegible]-16-01	0900	H2O	3	-	2			X											X	-	X
0110P027	IR72MW32A	[illegible]-16-01	1000	H2O	11	6	3			X	X	X	-	X	X	X	X	X	X	X	X	-	
0110P028	dupe IR72MW32A	[illegible]-16-01	[illegible]	H2O	3	2								X	X								

[signature] 3-16-01

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Michelle Slaughter	Tetra Tech EMI	3-16-01	1500
Received by: [signature] # 4843 1899 2477				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 day turnaround

Ref: G0069011B040502
Dept:

Date: 16MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $3.50
HANDLING $0.00
TOTAL $50.38

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 2477

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San Francisco Office

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Chain of Custody Record

Page 1 of 1

PO# 012203	Lab: Severn Trent	
Project name: Phase I GDG1	TtEMI technical contact: Ramiro Moezzi 415 2228278	Field samplers: Andrew Taylor
Project number: G0069011B040502	TtEMI project manager: Tony L.	Field samplers' signatures: [signature]

Preservative Added: HCl, HCl, HNO, HNO

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500mL poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	TDS	Pb, Ag	As, Cd, Cy, Hg
0110T020	trip blank	3/16/01	0800	H2O	2										X				
0110T021	IR15MW07A	3/16/01	0915	H2O	3	2				2					X	X	X	X	
0110T022	IR05MW085A	3/16/01	1100	H2O		2				2		X					X		X
0110T023	IR02MW147A	3/16/01	1200	H2O		2				1		X					X		
0110T024	IR02MW183A	3/16/01	1315	H2O		2				1		X					X		

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	ANDREW TAYLOR	GAIA	3/16/01	1600
Received by: [illegible]				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 16MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $3.50
HANDLING $0.00
TOTAL $50.38

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 2466

WHITE -Laboratory Copy YELLOW-Project Office Copy

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Chain of Custody Record

Page 1 of 1

Project name: Phase II GDG1	PO# 012203	Lab: Severn Trent
Project number: G00690110E0[illegible]	TtEMI technical contact: Rameen Muzzi 415-222-8278	Field samplers: M Slaughter, J. Lengston / S. Penman
	TtEMI project manager: Tony Li	Field samplers' signatures: [illegible]

Preservative Added: HCl, HCl, HNO3, HCl, HNO3, HCl, HNO3, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	~~1 Liter~~ Poly 500 ml	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General Minerals	MEE	NN	Major anions	Alkalinity	TDS	Salinity	Antimony
~~[illegible]~~ 0110P029	IR56MW39A	3-16-01	1130	H_2O	11	2	3			X				X	X	X	X	X	X	X	X		
0110P030	IR01MW43A	3-16-01	1330	H_2O	11	6	3			X	X	X		X	X	X	X	X	X	X	X	X	X

	Name (print)	Company Name	Date	Time
Relinquished by: [illegible]	Michelle Slaughter	Tetra Tech EMI	3-16-01	500
Received by: Fed Ex # 4843 1899 2488				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 day turnaround

Ref: G0069011B040502
Dept:

Date: 16MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $3.50
HANDLING $0.00
TOTAL $50.38

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 2488

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San Francisco Office

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San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

Chain of Custody Record

PO# Ø122Ø3

Lab: Severn Trent

Project name: Phase II EDGI

TtEMI technical contact: Doreen Mozzi 415-222-8278

Field samplers: M. Slaughter, J. Langston / S. Pennington

Project number: 6000901180405Ø2

TtEMI project manager: Tong Li

Field samplers' signatures:

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General minerals	Cyanide	Anions	Hardness	TDS	Metals	As, Se, Pb, Cd, Cr	Hg, Ag, Ba, Se, Na	
Ø11ØPØ31	dupe IR01MW43A	3-16-01	1100	H2O		2	1					X									X			
Ø11ØPØ19A	IR01MW366A (cont.)	3-16-01	1500	H2O		2					X				X									
Ø11ØPØ32	rinseate	3-16-01	1515	H2O	6	6	1			X	X	X		X	X							X	X	

Preservative Added: HCl; HNO3; HCl; HNO3; HCl; H2SO4; NaOH; NaOH

Analysis Required

	Name (print)	Company Name	Date	Time
Relinquished by:	Michelle Slaughter	Tetra Tech EMI	3/16/01	1515
Received by: FedEx # 4843 1899 2499				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 day turnaround

WHITE–Laboratory Copy YELLOW–Project Office Copy

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Page 1 of 1

PO# 012203	Lab: Severn Trent	
Project name: Phase II GDG1	TtEMI technical contact: Rameen Moezzi 415-[illegible]	Field samplers: [illegible]
Project number: G0069011B040502	TtEMI project manager: Tong Li	Field samplers' signatures: [illegible]

Preservative Added: HCl, HNO3, HCl, HNO3, HCl, H2SO4

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly 500 ML	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Sensitive Minerals	MFE	NH3	Phosphorus	Alkalinity	TDS	Sulfate	Nitrate	Chloride
0111P001	trip blank	3-19-01	0800	H2O	4					X				X										
0111P002	IR01MW09B	[illegible]	[illegible]	[illegible]	11	2	3			X				X	X	X	X	X	X	X	X	X		
0111P003	IR04 MW 35A	[illegible]	[illegible]	[illegible]	8		3			X						X	X	X	X	X	X		X	
0110P019B	IR01MW366A	3-19-01	[illegible]	[illegible]			1									X							X	X
0111P004	rinseate	3-19-01	1510	H2O	6	2	1			X					X	X							X	

	Name (print)	Company Name	Date	Time
Relinquished by: [illegible]	Michelle Slaughter	Tetra Tech EM	[illegible]	1330
Received by: [illegible] 4843 1899 2536				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: [illegible] day turnaround

Ref: G0069011B040502
Dept:

Date: 19MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2536

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Page 1 of 1

PO# 012203	Lab: Severn Trent	
Project name: Phase II GOGI	TtEMI technical contact: Ramon Muzzi 415 227 8778	Field samplers: Andrew Taylor
Project number: G0069011B040502	TtEMI project manager: Tony Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HNO3, HNO3, HCl, HCl

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	TDS	Pb	Gen Mineral	Mleo	NN	Major Anions	Alkalinity
0111T001	TRIP BLANK	3/19/01	0800	H2O	2						X												
0111T002	IR05MW73A	3/19/01	0955	H2O		2				1	X		X				X						
0111T003	Duplicate IR05MW73A	3/19/01	1030	H2O		2							X										
0111T004	IR05MW77A	3/19/01	1155	H2O						2							X	X					
0111T005	IR01MW42A	3/19/01	1500	H2O	3					3	X						X	X	X	X	X	X	X

	Name (print)	Company Name	Date	Time
Relinquished by: ANDREW TAYLOR	ANDREW TAYLOR	GAIA	03/19/01	1600
Received by: [illegible] 4843 [illegible]				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 19MAR01
Wgt: 50 LBS

SHIPPING $39.01
SPECIAL $0.00
HANDLING $0.00
TOTAL $39.01

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2558

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PO# 012203	Lab: Severn Trent	
Project name: Phase II GDG1	TtEMI technical contact: Kameen Moezzi 415 222 8278	Field samplers: Andrew Taylor
Project number: G0069011B040502	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HNO3, HCl H2SO4, HNO3, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	MEE	NN	gen. mineral	Alkalinity	Magnesium	TDS	CU	Bro 7/14/01
0111T006	TRIP BLANK	3/20/01	0800	H2O							X													
0111T007	IR01MW403A	3/20/01	0955	H2O	8	2				3	X	X		X			X	X	X	X	X	X		
0111T008	Duplicate IR01MW403A	3/20/01	1005	H2O						2										X	X			
0111T009	PA36MW04A	3/20/01	1350	H2O	3	2				2	X		X									X	X	

	Name (print)	Company Name	Date	Time
Relinquished by: Andrew Taylor	ANDREW TAYLOR	GAIA	3-20-01	1450
Received by: Fed Ex # 4843 1899 2628				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 day TAT

For sampled ID # 0111T007 preservative was cause

Ref: G0069011B040502
Dept:

Date: 20MAR01
Wgt: 50 LBS

SHIPPING $39.01
SPECIAL $0.00
HANDLING $0.00
TOTAL $39.01

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2628

For sample 0111T007, preservative was washed out of 40 ML VOAs because it reacted w/ the water

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PO# Ø122Ø3	Lab: Severn Trent	
Project name: Phase II GDGI	TtEMI technical contact: Ramesh Moezzi (415) 222-2278	Field samplers: Stephen Penman
Project number: G0069011B040502	TtEMI project manager: Tony Li	Field samplers' signatures: [signature]

Preservative Added: HNO3, HNO3, H2SO4, HCl, HNO3

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 500ml Poly	CLP VOA	CLP SVOA	CLP PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Al, Sb, As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn	Alkalinity	TDS	Major Anions	NN	MEE	General Minerals	Cd
Ø111PØ11	IR01MW05A	3/20/01	1420	water	11	2	—	—	—	3	X	—	X	—	—	—	X	X	X	X	X	X	X	—
Ø111PØ1Ø	IR02MW114A1	3/20/01	1450	water	—	—	—	—	—	2	—	—	—	—	—	—	—	—	X	—	—	—	—	X
Ø111PØ12	Equipment Rinsate - Solinst	3/20/01	1530	water	3	4	1	—	—	1	X	X	X	—	—	—	X	—	—	—	—	—	—	—

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Stephen Penman	Environmental Sampling Services	3/20/01	1600
Received by: FedEx Airbill No. 4843-1899 2640				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Ref: G0069011B040502
Dept:
Date: 20MAR01
Wgt: 55 LBS
SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95
SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2640

Turnaround time/remarks:

Extra volume was collected from Ø111PØ11 for VOCs, MS/MSD test for PCBs & Pests on sample # 0111PØ12

10 day turnaround

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PO# Ø12203	Lab: C & T	
Project name: Phase II GDG1	TtEMI technical contact: Rameen Moezzi 415-222-8278	Field samplers: M. Slaughter, E. Chang / S. Penman
Project number: GØØ69Ø11BØ4Ø5Ø2	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added

No./Container Types: 40 ml VOA, 1 Liter Amber, 1 Liter Poly, Brass Tube, Glass Jar

Analysis Required: CLP VOA, CLP SVOA, CLP Pest/PCBs, CLP Metals, TPH Purgeables, TPH Extractables, Cr VI

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Cr VI
Ø111PØØ~~7~~6	IR02MW298A	3-20-01	0830	H_2O			1									X
Ø111PØØ8	IRØ1MWØ2B	3-20-01	1055	H_2O			1									X
~~Ø111PØØ9~~																
Ø111PØ11	IRØ1MWØ5A	3-20-01	1420	H_2O			1									X

3-20-01

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Michelle Slaughter	Tetra Tech EMI	3-20-01	1530
Received by: Fed Ex #				
Relinquished by:				
Received by: [signature]	George Lumbre	C & T	3/20/01	3:45
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: ~~[illegible] for Ø111PØØ7~~

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Page 1 of 1

Project name:	Phase II GDGI
Project number:	G0060011B040502
PO#	012203
TtEMI technical contact:	Ramon Moczzi (415) 222-8278
TtEMI project manager:	Tong Li
Lab:	Severn Trent
Field samplers:	M. Slaughter, E. Chang / S. Primer
Field samplers' signatures:	

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly Sulfuric	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	General Minerals	MEE	NO3	Sulfate	Alkalinity	TDS	Total Fe	AL	Ca	Cr	AL/Ca/Fe/Pb/Ni/Zn
0111P005	trip blank	3-20-01	0810	H2O	2					X																
0111P006	IR02MW298A	3-20-01	0820	H2O			3														X		X	X		
0111P007	dupe IR02MW298A	3-20-01	0830	H2O			1														X					
0111P008	IR01MW02B	3-20-01	1055	H2O	8	2	3			X	X				X	X	X	X	X	X	X				X	
0111P009	IR01MW03A	3-20-01	1200	H2O	8	4	3			X	X	X			X	X	X	X	X	X	X					X

	Name (print)	Company Name	Date	Time
Relinquished by:	Michelle Slaughter	Tetra Tech EMI	3-20-01	1600
Received by: Fed Ex # 4843 1899 2639				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:
CA is missing for 0111P006

Ref: G0069011B040502
Dept:

Date: 20MAR01
Wgt: 55 LBS
SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95
SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2639

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-003

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Page 1 of 1

Project name: Phase II GW GDI	PO#: 012203	Lab: Severn Trent	
Project number: 0000911BMP502	TtEMI technical contact: Ramsey Mousa 415.222.8278	Field samplers: D'Art Lloyd	
	TtEMI project manager: Tony Li	Field samplers' signatures: D'Art Lloyd	

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	250 ml Jar			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	VOCs	NH3	As	TDS	Sal	Gen Min	HEE	NM	Major Anions	Air
0111D001	Trip Blank	3/20/01	0830	Water	2														X									
0111D002	IR04MW38A pump+bailer		0950		8					3									X			X		X	X	X	X	X
0111D003	Duplicate pump+bailer		0955		8					1									X					X	X	X		
0111D004	IR04MW36A pump		1121							3											X	X	X					
0111D005	IR02MW39A pump		1303							2										X		X						

Preservative Added: HCl, HNO3, HNO3, HNO3, HCl, HCl

	Name (print)	Company Name	Date	Time
Relinquished by: D'Art Lloyd	D'Art Lloyd	R+M EIEI	3/20/01	1615
Received by: Shipped via FEDEX # 4843 1899 2570				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 Day T.A.T
Metals field filtered + preserved

Ref: G0069011B040502
Dept:

Date: 20MAR01
Wgt: 50 LBS

SHIPPING	$39.01
SPECIAL	$0.00
HANDLING	$0.00
TOTAL	$39.01

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2570

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.03

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Chain of Custody Record

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Page 1 of 1

PO# Ø122Ø3	Lab: Severn Trent	
Project name: Phase II GDGI	TtEMI technical contact: Roman Moezzi (415)222-8278	Field samplers: S. Penman, J. Langston, M. Slaughter
Project number: G0069011BØ4Ø5Ø2	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HNO3, HCl, HNO3, HCl, HNO3, HNO3, HNO3

No./Container Types: 40 ml VOA, 1 Liter Amber, 1 Liter Poly 500ml, Brass Tube, Glass Jar

Analysis Required: CLP VOA, CLP SVOA, CLP Pest/PCBs, CLP Metals, TPH Purgeables, TPH Extractables, Conical Nitrate, MEP, NN, [illegible], [illegible], TDS, [illegible], Zn, Cd, Pb, Ni, Cd

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly 500ml	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Conical Nitrate	MEP	NN	[illegible]	[illegible]	TDS	[illegible]	Zn	Cd, Pb, Ni	Cd
Ø111PØ14	Trip blank	3-21-01	0800	H_2O	4					X				X											
Ø111PØ15	IR01MW367A	↓	0825	↓	11	4	3			X		X		X	X	X	X	X	X	X	X		X		
Ø111PØ16	IR04MW40A	↓	1025	↓			3														X			X	X
Ø111PØ17	IR04MW37A	↓	1130	↓	11		3			X					X	X	X	X	X	X					
Ø111PØ18	IR12MW13A	↓	1355	↓	8		3			X					X	X	X	X	X	X					
Ø111PØ13	EQUIPMENT Rinsate	↓	1450	↓	6	4	1			X		X		X	X								X	X	

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Stephen Penman	Environmental Sampling Services	3/21/01	1600
Received by: FedEx Airbill No. 4843 1899 2710				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Ref: G0069011B040502
Dept:

Date: 21MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2710

Turnaround time/remarks:
10 day turnaround
[illegible] Ø111PØ16 [illegible] for Cd
sample Ø111PØ17 [illegible] for VOCs

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Page 1 of 1

PO# 012203	Lab: Severn Trent	
Project name: Phase II GDG1	TtEMI technical contact: Rameen Moezzi 415 222 8278	Field samplers: Andrew Taylor
Project number: G0069011B040502	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HCl, HNO3, HCl, H2SO4, HNO3, HNO3

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	gen mineral	MEE	NN	Mag. Anions	TDS	Alkalinity	Bal Cd	Bal
0111T010	TRIP BLANK	3/21/01	0800	H2O	2						X													
0111T011	IR04MW39A	3/21/01	1005	H2O	8					3	X						X	X	X	X	X	X		
0111T012	Duplicate IR04MW39A	3/21/01	1015	H2O	5					2	X								X	X	X	X		
0111T013	IR02MW114A3	3/21/01	1155	H2O						2											X		X	
0111T014	Duplicate IR02MW114A3	3/21/01	1215	H2O						1														X

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	ANDREW TAYLOR	GAIA Consulting	3/21/01	1600
Received by: [illegible]				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: [illegible]

Ref: g0069011B040502
Dept:

Date: 21MAR01
Wgt: 50 LBS

SHIPPING $39.01
SPECIAL $0.00
HANDLING $0.00
TOTAL $39.01

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2709

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23.

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Page 1 of 1

Project name:	Phase II GDGI
Project number:	G0069011B040502
PO#	012208
TtEMI technical contact:	Ramen Murzi 415 222
TtEMI project manager:	Tong Li
Lab:	PARSON
Field samplers:	A. Taylor, M. Slaughter, D. Lloyd
Field samplers' signatures:	[illegible] for above field samplers

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest./PCBs	CLP Metals	TPH Purgeables	TPH Extractables	X/B
0110P017	IR01MW07A	3/14/01	1410	H2O			2									X
0110P019	IR01MW36dA	3/19/01	1425				2									X
0110P022	IR02MWB-1	3/15/01	1155				2									X
0110P024	IR02MW114A2	3/15/01	1455				2									X
0110P030	IR01MW43A	3/16/01	1330				2									X
0110P032	Equipment rinsate	3/16/01	1515				2									X
0111D005	IR02MW89A	3/20/01	1303				2									X
0110T019	Equipment rinsate	3/15/01	1500				2									X

	Name (print)	Company Name	Date	Time
Relinquished by:	[illegible]			
Received by:	[illegible] Ex # 4243 1899 2683	M. Slaughter	Tetra Tech EMI	3/21/01 1600
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 21MAR01 SHIPPING $46.88
Wgt: 60 LBS SPECIAL $0.00
HANDLING $0.00
SERVICE: PRIORITY OVERNIGHT TOTAL $46.88
TRACK: 4843 1899 2683

WHITE-Laboratory Copy YELLOW-Project Office Copy

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Project name: Phase II-GDG1	PO#: Ø12Ø8	Lab: Paragon
Project number: G0069011B040502	TtEMI technical contact: (415) 222-6278 Ramon Morezi	Field samplers: Dart Lloyd, Stephen Penman / Andrew Taylor
	TtEMI project manager: Tong Li	Field samplers' signatures: Michelle Slaughter for the above field sampling

Preservative Added: HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	X/B
0110T017	IR03MW342A	3/15/01	1120	H2O			2									X
0111T005	IRØ1MW42A	3/19/01	1500				2									X
0110T023	IRØ2MW147A	3/16/01	1200				2									X
0110T021	IR15MWØ7A	3/16/01	0915				2									X
0111P006	IRØ2MW298A	3/20/01	0820				4									X
0111P007	dupe IR02MW298A	3/20/01	0830				2									X
0111P008	IRØ1MWØ2B	3/20/01	1055				2									X
0111P011	IRØ1MWØ5A	3/20/01	1420				2									X

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Michelle Slaughter	Tetra Tech EMI	3/21/01	1600
Received by: Fed Ex # 4843 1899 2694				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: MS/MSD for sample Ø111PØØ6

Ref: G0069011B040502
Dept:

Date: 21MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2694

WHITE-Laboratory Copy YELLOW-Project Office Copy

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San Francisco Office

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Fax 415-543-5480

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Chain of Custody Record

Page 1 of 1

PO# 012203	Lab: Severn Trent	
Project name: Phase II GDG1	TtEMI technical contact: Rameen Moezzi (415) 222-8278	Field samplers: S. Penman, J. Longston, M. Slaughter
Project number: 0069011B040502	TtEMI project manager: Tony Li	Field samplers' signatures: [signature]

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly 500 ml	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Gneral Minerals	VOC	NN	[illegible]	[illegible]	[illegible]	[illegible]
D111P019	trip blank	3/22/01	0800	H2O	2					X												
D111P020	IR01MW401A	↓	1105	↓	11	2	3			X	X		X			X	X	X	X	X	X	
D111P021	IR01MW400A	↓		↓	5	2	3					X				X	X	X	X	X	X	

Preservative Added: HNO3, HCl, H2SO4

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Stephen Penman	Environmental Sampling Services	3/22/01	1600
Received by: Shipped Fed Ex Airbill No 4843 1899 2786				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: 10 day turnaround
Sample D111P020 [illegible] for VOCs

Ref: G0069011B040502
Dept:

Date: 22MAR01
Wgt: 55 LBS

SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2786

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Chain of Custody Record

Page 1 of 1

PO# 012203	Lab: Severn Trent	
Project name: Phase II GDG1	TtEMI technical contact: Rameen Moezzi (415) 222-8278	Field samplers: Stephen Penman, Michelle Stoughton, Jerome Longston
Project number: G0269011B040502	TtEMI project manager: Tony Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 Stoml Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables
0111P022	EQUIPMENT RINSEATE	3/22/01	1515	water	3	4				1	X	X	X	X		

3-22-01

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Stephen Penman	Environmental Sampling Services	3/22/01	1600
Received by: Shipped FedEx Air bill No 4843 1899 2775				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

10 day Turnaround

WHITE–Laboratory Copy YELLOW–Project Office Copy

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Chain of Custody Record

Page 1 of 1

PO#	
Lab:	
Project name:	
TtEMI technical contact:	
Field samplers:	
Project number:	
TtEMI project manager:	
Field samplers' signatures:	

Preservative Added: HCl

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	Soil Acetate	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	TOC	Gen Chem Pkg	MEE	NH3	PO4	Hardness	Alkalinity
0111T015	TRIP BLANK	3/22/01	0800	H2O	2						X												
0111T016	IR36MW120B	3/22/01	1105	H2O	3					1	X					X							
0111T017	Duplicate IR36mw120B	3/22/01	1115	H2O						1						X							
0111T018	IR01MW31A	3/22/01	1400	H2O	8	2				3	X	X				X	X	X	X	X	X		
0111T019	duplicate IR01mw31A	3/22/01	1410	H2O	3					1							X	X					

	Name (print)	Company Name	Date	Time
Relinquished by:	Andrew Tarcos	GAA	3/22/01	1600
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 22MAR01
Wgt: 55 LBS

SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2775

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Chain of Custody Record

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Page 1 of 1

PO# Ø122Ø3	Lab: Severn Trent	
Project name: Phase II GDG1	TtEMI technical contact: Rameen Moezzi (415) 222-3278	Field samplers: S. Penman, J. Langston
Project number: G0069011B040502	TtEMI project manager: Tony Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HNO3, HNO3, HCl, H2O, NaOH

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1500 ml Poly	CLP VOA	CLP SVOA	CLP Pest/~~PCBs~~	CLP Metals	TPH Purgeables	TPH Extractables	Cu	TDS	Conc. Minerals	MEE	NN	Major Anions	Alkalinity	TDS	Salinity	NH
Ø112PØØ1	Trip Blank	3/26/01	0730	water	2						X															
Ø112PØØ2	IR02MW299A	3/26/01	0840	water	3					2	X						X	X								
Ø112PØØ3	IR02MW372A	3/26/01	1015	water	8	2				3	X		X						X	X	X	X	X	X	X	
Ø112PØØ4	IR02MW93A	3/26/01	1345	water						2														X		X
Ø112PØØ5	IR02MW127B	3/26/01	1500	water	8	2				3	X		X						X	X	X	X	X	X	X	

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Stephen Penman	Environmental Sampling Services	3/26/01	1600
Received by: Shipped FedEx Airbill #4843 1899 2856				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:
Please analyze for salinity on Ø112PØØ5
Metals & Minerals field filtered

Ref: G0069011B040502
Dept:

Date: 26MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2856

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Page 1 of 1

Project name: Phase II CORC	PO# 012203	Lab: Severn Trent
Project number: G0000 011B04 0502	TtEMI technical contact: Ramon Mezzetti 415 222 8225	Field samplers: Andrew Taylor
	TtEMI project manager: Taylor	Field samplers' signatures:

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	TDS	Se, Cd, Cu	Pb, Ni, Zn	Sum m.Metals	CN, F, Cl	NO3	Mercury	Alkalinity	MS/MSD
0112T001	IR02MW373A MS/MSD	3/26/01	0925	H2O	6	4				2			X				X	X	X	X	X	X	X	X	
0112T002	IR36MW127A	3/26/01	1255	H2O	3					1							X								
0112T003	TRIP BLANK	3/26/01	0800	H2O	4						X														
0112T004	IR01MW58A	3/26/01	1415	H2O	11	2				3	X			X	X	X				X	X	X	X		X
0112T005	Duplicate IR01MW58A	3/26/01	1435	H2O	11	2					X			X	X	X				X	X	X	X		X

Preservative Added: HCl, HCl, HNO3, HNO3, H2SO4

	Name (print)	Company Name	Date	Time
Relinquished by: Andrew Taylor	Andrew Taylor	GTA	3/26/01	1400
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Ref: G0069011B040502
Dept:
Date: 26MAR01
Wgt: 60 LBS

SHIPPING	$46.88
SPECIAL	$0.00
HANDLING	$0.00
TOTAL	$46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2867

Turnaround time/remarks: MS/MSD on PCB for Sample 0112T001
10 day TAT [illegible] for samples 0112T002 and 0112T004 [illegible]

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Page 1 of 1

PO# 012203	Lab: Severn Trent	
Project name: Phase II GDG1	TtEMI technical contact: 415 222-8278 Kameen Moezz	Field samplers: Andrew Taylor
Project number: G0069011B040502	TtEMI project manager: Tony L.	Field samplers' signatures: [signature]

Preservative Added: HCl, HCl, HNO3, HNO3

No./Container Types

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	TADWC Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Sb, Ba, Cd, Cu	Pb, Ni, Zn
Ø112TØØ6	equipment rinsate	3/26/01	1530	H_2O	6	4	—	—	—	1	X	-	X	-	X	X	X	X

	Name (print)	Company Name	Date	Time
Relinquished by: Andrew Taylor [signature]	Andrew Taylor	GAIA	3/26/01	1600
Received by: Shipped via FedEx # 4843 1899 2878				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 26MAR01
Wgt: 50 LBS

SHIPPING $39.01
SPECIAL $0.00
HANDLING $0.00
TOTAL $39.01

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2878

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Chain of Custody Record

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PO#	012203
Lab:	Severn Trent
Project name:	Phase II RDGI
TtEMI technical contact:	Ramon Alvarez (415) 522-[illegible]
Field samplers:	Stephen Bowman, Steven Langston
Project number:	6006911B040502
TtEMI project manager:	Tong Li
Field samplers' signatures:	[signature]

Preservative Added: HCl, HCl, HNO3, HNO3, HCl, HCl, HNO3, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 Liter Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	As, Ba, Ni	Gen. Minerals	MEE NN	Major Anions	Alkalinity	TDS	Cu	Gen. Chem. Tin
0112P006	Trip Blank	3/27/01	0700	water	6						X				X									
0112P007	IR02MW210B	3/27/01	0825	water	3					1	X											X		
0112P008	IR02MW149A	3/27/01	1020	water						2												X		
0112P009	equipment rinsate	3/27/01	1330	water	6	6				1	X	X	X		X	X	X					X	X	

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Stephen Bowman	Environmental Sampling Services	3/27/01	1600
Received by: Shipped via Fedex Airbill No 4843 1899 2937				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 27MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2937

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Chain of Custody Record

Page 1 of 1

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PO#	012204
Lab:	Curtis + Thompkins
Project name:	Phase II GWGD1
TtEMI technical contact:	Rameen Moezzi 415.222.8278
Field samplers:	D. Lloyd
Project number:	G0069011B04502
TtEMI project manager:	Tony Li
Field samplers' signatures:	D'Art Lloyd

Preservative Added

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	0.5L Poly		CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Cr VI
0112D002	IR02MW101A1 pump	3/27/01	1125	H2O						X								X

	Name (print)	Company Name	Date	Time
Relinquished by: D'Artagnan Lloyd	D'Artagnan Lloyd	R+M EIEI	3/27/01	1310
Received by: R Morley	Rob Easley	Washington Group	3/27/01	1315
Relinquished by: George Lumbre	George Lumbre	CST	3/27/01	3:57
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

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-03

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Chain of Custody Record

Page 1 of 1

PO# Ø122Ø3	Lab: Severn Trent	
Project name: Phase II GW GDI	TtEMI technical contact: Rameem Moez Zi 415-222-2578	Field samplers: D. Lloyd
Project number: 6ØØ69Ø11B04Ø5Ø2	TtEMI project manager: Tony Li	Field samplers' signatures: [illegible]

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	OSL Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Ba, Cd	TDS	Al, Cr, Ni	SVOCs
Ø112DØØ1	1RØ2MW1Ø1A2 Pump	3/27/01	1025	Water						2							X	X		
Ø112DØØ2	1RØ2MW1Ø1A1 Pump	↓	1025	↓		2				2								X	X	X

Preservative Added: HNO3, HNO3

	Name (print)	Company Name	Date	Time
Relinquished by: D'Artagnan Lloyd	D'Artagnan Lloyd	R+M EIEI	3/27/01	1615
Received by: Shipped VIA FEDEX # 484318992889				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: Metal Samples Field Filtered/Preserved
10 Day T.A.T.

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Page 1 of 1

Project name:	PO#:
Project number:	TtEMI technical contact:
	TtEMI project manager:
	Lab:
	Field samplers:
	Field samplers' signatures:

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar		CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables						
	Trip Blank																					
	IR01MW44A				11																	

Preservative Added: HCl

	Name (print)	Company Name	Date	Time
Relinquished by:	Andrew Taylor			
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Ref: G0069011B040502
Dept:
Date: 27MAR01
Wgt: 60 LBS
SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88
SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 2948

Turnaround time/remarks: [illegible]

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PO# Ø122Ø3

Lab: Curtis & Tompkins ~~Severn Trent~~ XP

Project name: Phase II GD61

TtEMI technical contact: Rameen Moezzi (415) 222-8278

Field samplers: Stephen Penman, Josh Meider, Jerome Lanston

Project number: 6ØØ69Ø11BØ4Ø5Ø2

TtEMI project manager: Tony Li

Field samplers' signatures: [signature]

Preservative Added

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 500 ml Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Cr VI
Ø112TØ11	IR02MWB-2	3/28/01	0850	water						1							X
Ø112PØ1Ø	IR01MW62A	3/28/01	0855	water						1							X
Ø112PØ12	IR01MWI-9	3/28/01	1030	water						1							X
Ø112PØ13	EQUIPMENT Rinseate	3/28/01	1330	water						1							X

XP 3/28/01

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Stephen Penman	Environmental Sampling Services	3/28/01	1600
Received by: ~~Shipped FedEx Airbill No.~~ HC				
Relinquished by:				
Received by: [signature]	GEORGE LUMBRI	C&T	3/28/01	1600
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

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Chain of Custody Record

PO# Ø12Ø3

Lab: Severn Trent

Project name: Phase II GDSI

TtEMI technical contact: Ramiro Moezzi (415) 222-2278

Field samplers: Stephen Tenamo, Jerome Longstaff

Project number: GØØ69Ø11B4Ø5Ø2

TtEMI project manager: Tony Li

Field samplers' signatures:

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 500ml Poly		CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables									
Ø112PØ1Ø	IRØ1MW6JA	3/28/01	0855	water	5	2	—	—	—	3	—	—	X	—	X	—	—	X	X	X	X	X	X	—	—	—
Ø112PØ11	Duplicate from IRØ1MW62A	3/28/01	0925	water	—	—	—	—	—	2	—	—	—	—	X	—	—	—	—	—	—	—	X	X	—	—
Ø112PØ12	IRØ1MWI-9	3/28/01	1030	water	5	8	—	—	—	4	—	—	X	X	X	—	—	X	X	X	X	X	X	—	X	X

Preservative Added: HNO3, HNO3, HCl, H2SO4, HNO3

Analysis Required: Cu, Pb, Ni, Zn; Ag, Be, Cd, Cr, Cu, Pb, Hg, Ni, Zn; MEE; NN; Major Anions; Alk; TDS; As, Ba, Cd, Cr, Pb, Hg, Ni, Al, Sb; As, Ba, Cd, Cr, Cu, Pb, Hg, Ni, Zn; Ag, Ba, Cd, Cr, Cu, Pb, Ni, Zn

	Name (print)	Company Name	Date	Time
Relinquished by:	Stephen Tenamo	Environmental Sampling Services	3/28/01	1600
Received by: Shipped FedEx Airbill No. 4843 1899 3040				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Ref: G0069011B040502
Dept:
Date: 28MAR01
Wgt: 60 LBS

SHIPPING	$46.88
SPECIAL	$0.00
HANDLING	$0.00
TOTAL	$46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3040

Turnaround time/remarks:
1st set of metals listed Above = Al, Sb, As, Ba, Cd, Cr, Cu, Pb, Hg, Ni, Zn
2nd set of metals listed Above = As, Ba, Cd, Cr, Pb, Hg, Ni, Al, Sb
3rd set of metals listed Above = Al, Sb, As, Ba, Cd, Cr, Cu, Pb, Hg, Ni, Zn
4th set of metals listed Above is a MS/MSD for (As, Ba, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
Sample Ø112PØ12 MS/MSD for Antimony [illegible] metals above

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Chain of Custody Record

Project name:	TtEMI technical contact:	Field samplers:
Project number:	TtEMI project manager:	Field samplers' signatures:
	PO#	Lab:

Preservative Added: HCl, HNO3, HNO3, NaOH, HCl, H2SO4, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	Poly 500 mL	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	As, Cr, Cu, Pb	Hg, Ni, Th, Zn	Cations Minerals	MEI	N	Major Anions	Alkalinity	TDS	Cu, Ni, Zn
Ø112TØ1Ø	TRIP BLANK	3/28/01	0800	H2O	2						X														
Ø112TØ11	IRØ2 MW B-2	3/28/01	0850	H2O	8					3	X						X	X	X	X	X	X	X	X	
Ø112TØ12	IRØ2 MW 3ØØA	3/28/01	1010	H2O	3	2				2	X	X												X	X
Ø112TØ13	Duplicate IRØ2 MW 3ØØA	3/28/01	1030	H2O	3	2				1	X	X												X	
Ø112RØ1R	equipment rinsate	[illegible]	[illegible]	H2O	3	4				1	X	X	X												X

	Name (print)	Company Name	Date	Time
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 28MAR01 SHIPPING $42.95
Wgt: 55 LBS SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3061

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Fax 415-543-5480

Chain of Custody Record

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PO# 012208	Lab: Paragon	
Project name: Phase II GD61	TtEMI technical contact: Ramon Muzzi	Field samplers: Steven Penman
Project number: 60069011B040502	TtEMI project manager: Tony Li	Field samplers' signatures: [signature]

Preservative Added: H_2SO_4

Sample ID	Sample Description/Notes	Date	Time	Matrix	No./Container Types: 40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	Analysis Required: CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	α/β
0112P013	equipment rinsate	3/28/01	1330	H_2O	—		1									X
0112T012	~~1F02MWB-2~~ 1F02MW 300A	↓	1010	↓	—		1									X

HC

	Name (print)	Company Name	Date	Time
Relinquished by: Stephen Penman [signature]	Stephen Penman	ESS	3/28/01	1600
Received by: Shipped via FedEx 4843 1899 3050				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Laboratory Copy YELLOW–Project Office Copy

-B

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Chain of Custody Record

Page 1 of 1

Project name: Phase II GDGI	PO#: 012208	Lab: Paragon
Project number: G0069011B040502	TtEMI technical contact: Roman Muzzi	Field samplers: Steven Penman
	TtEMI project manager: Tony L.	Field samplers' signatures: [signature]

Preservative Added: HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Gross α/β
0112P002	1R02MW299A	3/26/01	0840	H_2O			1									X
0112T001	1R02MW373A MS/MSD	↓	0925	↓			2									X
0112P003	1R02MW372A		1015				1									X
0112P004	1R02MW93A		1115				1									X
0112P005	1R02MW127B	↓	1500				1									X
0112P007	1R02MW210B	3/27/01	0825				1									X
0112P008	1R02MW149A	↓	1020				1									X
0112D001	1R02MW101A2 MS/MSD		1025				2									X
0112T008	1R01MW44A		0910				1									X
0112T009	Dup 1R01MW44A		0930				1									X
0112P009	equipment rinsate	↓	1330				1									X
0112D004	1R01MW47B	3/28/01	1013	↓			1									X

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Stephen Penman	Environmental Sampling Services	3/28/01	1600
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 28MAR01
Wgt: 65 LBS

SHIPPING	$50.82
SPECIAL	$0.00
HANDLING	$0.00
TOTAL	$50.82

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3050

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Chain of Custody Record

Page 1 of 1

PO# 011203	Lab: Severn Trent	
Project name: Phase II GDGI	TtEMI technical contact: Rameen Moezzi 415 222 8278	Field samplers: D'Art Lloyd
Project number: G0069011B040502	TtEMI project manager: Tong Li	Field samplers' signatures: D'Art Lloyd

Preservative Added: HCl, HNO3, HCl, H2SO4

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 mL Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	SVOCs	Gen Min	MEE	NN	Major Anions	Alk	Sal	TDS
~~0112-D003~~	~~Trip Blank~~	~~3/28/01~~		~~H2O~~	~~4~~						X				X									
0112D001	1R01MW47B pump + bailer	3/28/01	1013	Water	8	2				3	X						X	X	X	X	X	X	X	X
0112D005	1R01MW47B (dup) pump + bailer	↓	1018	↓	5					3								X	X	X	X	X	X	X
0112D003	Trip Blank	↓	0713	↓	2						X													

	Name (print)	Company Name	Date	Time
Relinquished by: D'Art Lloyd	D'Art Lloyd	R+M EIEI	3/28/01	1615
Received by: Shipped Via FEDEX# 4843 1899 3006				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: Metals/Gen Min Samples Preserved and field filtered
10 Day T.A.T.

Ref: g0069011b040502
Dept:

Date: 28MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3006

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Page 1 of 1

PO# Ø122Ø3	Lab: Severn Trent	
Project name: Phase II GDG1	TtEMI technical contact: Ramon Moezzi (415) 222-9278	Field samplers: Stephen Penman
Project number: GØØ69Ø11BØ405Ø2	TtEMI project manager: Tong Li	Field samplers' signatures: [signature]

Preservative Added: HCl, HCl, HNO3, HNO3, HNO3

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 500ml Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Al	TDS	Co	Salinity	Al, Ba, Cr, Cu, Pb, Zn	Gen. Minerals	Mer	NH	Major Anions	Alkalinity
Ø112PØ14	Trip Blank	3/29/01	0800	water	4						X				X											
Ø112PØ15	IR02MW114A3	3/29/01	0845	water						2							X	X								
Ø112PØ16	IR01MW53B	3/29/01	1020	water	6	2				3	X				X	X		X	X	X						
Ø112PØ17	IR01MW48A	3/29/01	1120	water	8					3	X							X		X	X	X	X	X	X	X
Ø112PØ18	Duplicate of IR01MW48A	3/29/01	1145	water	5					3								X				X	X	X	X	X

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	Stephen Penman	Environmental Sampling Services	3/29/01	1600
Received by: Shipped FedEx Airbill No. 4843 1899 3109				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 29MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3109

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Chain of Custody Record

Page 1 of 1

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PO# 012203

Lab: Curtis & Tompkins

Project name: Phase II GDGI

TtEMI technical contact: Romeon Morezzi (415) 222-8278

Field samplers: S. Penman

Project number: G00G0118040502

TtEMI project manager: Tong Li

Field samplers' signatures:

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 500 ml Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Cr VI (Hexavalent Cr)
0112P017	IR01MW48A	3/29/01	1120	water						1							X
0112T017	EQUIPMENT RINSEATE	3/29/01	1530	water						1							X

Preservative Added

Analysis Required

	Name (print)	Company Name	Date	Time
Relinquished by:	Stephen Penman	Environmental Sampling Services	3/29/01	3:41
Received by:	G. LUMPRE	CET	3/29/01	3:41
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

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Chain of Custody Record

Project name: Phase II GDGI	PO#: 012203	Lab: Severn Trent	
Project number: G-0069011B040502	TtEMI technical contact: Kameen Mazzi 415 721 8278	Field samplers: Andrew Taylor	
	TtEMI project manager: Tony Li	Field samplers' signatures: [signature]	

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Sep. Ammonia	NH	Major Anions	Alkalinity	TDS	TSS
0112T014	TRIP BLANK	3/29/01	0800	H2O	2						X											
0112T015	IR01MW1-8 MS/MSD	3/29/01	0930	H2O	11	4				3	X	X		X			X	X	X	X	X	
0112T016	IR01MW63A	3/29/01	1045	H2O						2											X	X

Preservative Added: HCl, HNO3, HCl, H2SO4, HNO3

	Name (print)	Company Name	Date	Time
Relinquished by: ANDREW TAYLOR [signature]	ANDREW TAYLOR	GAIA Consulting	3/29/01	1600
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: MS/MSD on SVOC and VOC for sample 0112T015

Ref: G0069011B040502
Dept:

Date: 29MAR01 SHIPPING $46.88
Wgt: 60 LBS SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3120

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-08

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3446

Chain of Custody Record

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Page 1 of 1

PO# [illegible]	Lab: Severn Trent	
Project name: Phase II GW GD 1	TtEMI technical contact: Ramona Moezzi 415 222 2278	Field samplers: D'Art Lloyd
Project number: [illegible]	TtEMI project manager: Tong Li	Field samplers' signatures: D'Art Lloyd

Preservative Added: HCl, HCl, [illegible]

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	[illegible]	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Ni, Zn	PCBs	SVOCs	Gen Min	MEE	NN	Major Anions	Alk	TDS	Metals
Ø112 DØØ6	trip blank	3/29/01	0815	H_2O	4						X				X											
Ø112 DØØ7	1R01MWI-3		1022		[illegible]						X				X	X	X	X	X	X	X	X	X	X	X	
Ø112 DØØ8	Dup 1R01MWI-3				[illegible]										X											
[illegible]	1R01MWI-3		[illegible]		[illegible]						X				X	X	X	X	X	X	X	X	X	X	X	

	Name (print)	Company Name	Date	Time
Relinquished by: D'Art Lloyd	[illegible]	[illegible]	[illegible]	[illegible]
Received by: [illegible]				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: [illegible]

Ref: G0069011B040502
Dept:

Date: 29MAR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3110

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Chain of Custody Record

Page 1 of 1

PO# Ø122Ø3

Lab: Severn Trent

Project name: Phase II GDGI

TtEMI technical contact: Rameen Moezzi 415 222 8278

Field samplers: Andrew Taylor

Project number: GØØ69Ø11BØ4Ø5Ø2

TtEMI project manager: Tong Li

Field samplers' signatures:

Preservative Added: HCl, HNO3, HNO3, HCl, H2SO4

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	Sugar Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	gen mineral	MEE	NN	Major Anions	Alkalinity	TDS
Ø112TØ18	TRIP BLANK	3/30/01	0800	H2O	2						X											
Ø112TØ19	IR01MWI-7	3/30/01	1110	H2O	8	2				3	X	X		X			X	X	X	X	X	X
Ø112TØ2Ø	Duplicate IR01MWI-7	3/30/01	1130	H2O	3						X											
Ø112TØ21	Equip. Rinsate	3/30/01	1500	H2O	3	2				1	X	X		X								

	Name (print)	Company Name	Date	Time
Relinquished by: Andrew Taylor	ANDREW TAYLOR	GAIA	3/30/01	1600
Received by: Shipped via FedEx # 4843 1899 3234				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 30MAR01
Wgt: 50 LBS

SHIPPING $39.01
SPECIAL $3.50
HANDLING $0.00
TOTAL $42.51

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 3234

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Chain of Custody Record

PO#	012203
Lab:	Severn Trent
Project name:	Powell GW LDI
TtEMI technical contact:	Duncan Moore 415.772.8278
Field samplers:	D'Art Lloyd
Project number:	6006901180402
TtEMI project manager:	Tony L.
Field samplers' signatures:	D'Art Lloyd

Preservative Added: HCl, HNO3, HCl, HCl, HCl, HCl, HNO3, NaOH

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	SVOCs	PCBs	TDS	Cyanide	Gen Ph	Al (Cr, Cu, Fe, Mn, Ni, Zn)	Hg	Hg	Hg	Hg	Hg
0115D001	Trip Blank	4/17/01	0759	Water	4						X				X												
0115D002	IR01MW18A pump + bailer		0855		11	6				3	X				X	X	X	X	X	X	X	X	X	X	X	X	X
0115D003	IR01MW18A (duplicate) pump + bailer		0900		3					1	X																X
0115D004	IR39MW33A pump + bailer		1351		8					3	X	X							X	X			X	X	X		
0115D005	IR39MW33A (duplicate) pump + bailer		1353		3						X																
0115D006	Equipment Rinsate		1516		4	6				1																	

	Name (print)	Company Name	Date	Time
Relinquished by: D'Art Lloyd	D'Art Lloyd	TtEMI	4/17/01	1615
Received by: Shipped via Federal Express				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: Metals samples field filtered/preserved
10 Day T.A.T.

Ref: G0069011B040502
Dept:

Date: 17APR01
Wgt: 60 LBS

SHIPPING	$46.88
SPECIAL	$0.00
HANDLING	$0.00
TOTAL	$46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3680

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Page 1 of 1

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PO# 012204	Lab: Curtis + Thompkins	
Project name: Phase II GW 6D1	TtEMI technical contact: Rameen Moezzi 415.222.8278	Field samplers: D'Art Lloyd
Project number: G0069011B040562	TtEMI project manager: Tong Li	Field samplers' signatures: D'Art Lloyd

Preservative Added

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	0.5L Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Cr VI
0115D002	1R01MW18A	4/17/01	0855	Water						X							X
0115D007	equipment rinsate DTW	↓	1522	↓						X							X

No./Container Types

Analysis Required

	Name (print)	Company Name	Date	Time
Relinquished by: D'Art Lloyd	D'Art Lloyd	R+M E161	4/17/01	4:00
Received by: Jerry Lanse	George Lanse	CEI	4/17/01	4:00
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

WHITE-Laboratory Copy YELLOW-Project Office Copy

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Chain of Custody Record

Page 1 of 1

PO# Ø122Ø3	Lab: SevernTrent	
Project name: Pharell GW GDI	TtEMI technical contact: Rameen Moezzi 415 222 8238	Field samplers: D'Art Lloyd
Project number: [illegible]	TtEMI project manager: Tong Li	Field samplers' signatures: D'Art Lloyd

Preservative Added

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	0.5L Poly	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	[illegible]
Ø115DØØ6	Trip Blank	4/17/01	1513	Water	4	—	—	—	—	—	X	—	—	—	X	—	—
~~Ø115DØØ7~~	~~Equipment Rinsate~~		~~1522~~		~~4~~	~~6~~	—	—	—	~~1~~	~~X~~	—	—	—	X	X	X
Ø115DØØ7	Equipment Rinsate DTW	4/17/01	1522	Water	6	6	—	—	—	1	X	—	—	—	X	X	X

	Name (print)	Company Name	Date	Time
Relinquished by: D'Art Lloyd	D'Art Lloyd	R+M E(E)		
Received by: Shipped Via [illegible]				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 17APR01
Wgt: 55 LBS

SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3690

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Chain of Custody Record

PO#	012208
Lab:	PARAGON
Project name:	PHASE II GDGI
TtEMI technical contact:	RAMEEN MOEZZI
Field samplers:	JEROME LANGSTON
Project number:	G0069011B040502
TtEMI project manager:	TONG LI
Field samplers' signatures:	

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 Gal. Cubit	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	HNO3	HCl
0112D007	IR01MWI-3	3/29/01	1022	H2O			1										X	
0112D008	IR01MWI-3 DUP	↓	1027	↓			1										X	
0112P017	IR01MW48A		1120				1										X	
0112T017	rinsate (dtw)		1530				1										X	
0115D002	IR01MW18A	4/17/01	855				2			1							X	X
0115D007	rinsate (dtw)	↓	1522	↓			2			1							X	X

	Name (print)	Company Name	Date	Time
Relinquished by:				
Received by:	JEROME LANGSTON	R&M	4/20/01	1600
Relinquished by:	Shipped via FedEx # 4843 1899 3760			
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 20APR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $3.50
HANDLING $0.00
TOTAL $50.38

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 3760

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Chain of Custody Record

Page 1 of 1

PO#	012208
Lab:	PARAGON
Project name:	PHASE II [illegible]
TtEMI technical contact:	PAUL [illegible]
Field samplers:	JEROME LANGSTON
Project number:	G0069011B040502
TtEMI project manager:	TONY L
Field samplers' signatures:	

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	1 Liter Clear Glass			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	HNO3 x/8	HNO3 Lab 2228									
0111P009	1R01MW03A	3/20/01	1205	H_2O			1			1									X	X									
0111P010	1R01MW03A DUPLICATE	↓	1225	↓						1										X									
0111P012	rinsate (dtw)	↓	1530	↓			1			1									X	X									
0111P015	1R01MW367A MS/MSD	3/21/01	855	↓			2												X										
0111P013	rinsate (dtw)	↓	1450	↓			1												X										
0112T011	1R02MW8-2	3/28/01	850	↓			2			1									X	X									

Preservative Added: HNO3 (x/8), HNO3 (Lab 2228)

Analysis Required: CLP VOA, CLP SVOA, CLP Pest/PCBs, CLP Metals, TPH Purgeables, TPH Extractables

	Name (print)	Company Name	Date	Time
Relinquished by:	JEROME LANGSTON	T&M	4/20/01	1600
Received by:	Shipped via FedEx 4843 1899 3782			
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 20APR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $3.50
HANDLING $0.00
TOTAL $50.38

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 3782

WHITE-Laboratory Copy YELLOW-Project Office Copy

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Chain of Custody Record

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Page 1 of 1

PO# 012208	Lab: Paragon	
Project name: Phase II GW GDI	TtEMI technical contact: Ramern Moezzi 415.222.8278	Field samplers: D'Art Lloyd
Project number: G0069011B040502	TtEMI project manager: Tong Li	Field samplers' signatures: D'Art Lloyd

Preservative Added: HNO3 HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	Gal Cube	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	L/P	Ra-226/228
0110P015	1R02MW141A	3/14/01	1030	H_2O			1			1							X	X
0110P020	1R02MWB-3	3/15/01	1100	↓			1			1							X	X
0110P022	1R02MWB-1	↓	1155	↓			1			1							X	X
0110T019	rinsate (dtw)	↓	1500	↓						1								X

HC

	Name (print)	Company Name	Date	Time
Relinquished by:	[illegible]	[illegible]		
Received by: Shipped via Fedex 4843 1899 3771	[illegible]	R&M	4/20/01	1600
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 20APR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $3.50
HANDLING $0.00
TOTAL $50.38

SERVICE: PRIORITY SATURDAY
TRACK: 4843 1899 3771

WHITE-Laboratory Copy YELLOW-Project Office Copy

3379

NDB

Tetra Tech EM Inc.
San Francisco Office

135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

Chain of Custody Record

Page 1 of 1

PO# 012203	Lab: SVT	
Project name: PHASE II GDG1	TtEMI technical contact: RAMEEN MOEZZI (415) 222-8278	Field samplers: RICK ERDMAN, JEROME LANGSTON
Project number: G0069011B0502	TtEMI project manager: TONG LI	Field samplers' signatures: Rick Erdman

Preservative Added: HCL, HNO3, HCL, H2SO4, HNO3

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	~~1 Liter~~ Poly 500ml	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	* IND. METALS: Al	TDS	MEE	NN	*GEN. MINERALS	MAJOR ANIONS	ALKALINITY
0116P001	IR01MW402A	4/23/01	1000	AQUEOUS	8	2	3							✓	✓	✓	✓	✓	✓	✓	✓	✓
0116P002	FD OF P001	↓	1100	↓	5	-	3										✓	✓	✓	✓	✓	✓
0116P003	IR39MW23A	↓	1335	↓			2									✓	✓					
0116P004	TRIP BLANK	↓	1400	↓	2	-								✓								

HC

	Name (print)	Company Name	Date	Time
Relinquished by: Rick Erdman	RICK ERDMAN	ONSITE	4/23/01	1500
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:
. 10 DAY TAT
* FIELD FILTERED

Ref: G0069011B040502
Dept:

Date: 23APR01
Wgt: 55 LBS

SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3819

WHITE-Laboratory Copy YELLOW-Project Office Copy

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San Francisco Office

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Chain of Custody Record

Page ____ of ____

PO# [illegible]	Lab: SEVERN TRENT	
Project name: HPS PHASE II GDG1	TtEMI technical contact: RAMEEN MOEZZI	Field samplers: [illegible]
Project number: G0069011B040502	TtEMI project manager: TONG LI	Field samplers' signatures: [illegible]

Preservative Added

No./Container Types

Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	[illegible]	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ø116T[illegible]	trip blank	4/23/01	[illegible]	H_2O	4						X				X										
Ø116T[illegible]	1R01MW26B	↓	[illegible]	↓	11	4					X	X			X	X	X	X	X	X	X	X	X	X	
Ø116T[illegible]	equipment rinsate	↓	1600	↓	6	4					X	X			X	X									X

	Name (print)	Company Name	Date	Time
Relinquished by: [illegible]	[illegible]	TtEMI	[illegible]	[illegible]
Received by: [illegible]				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: [illegible]

Ref: G0069011B040502
Dept:

Date: 23APR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3820

WHITE-Laboratory Copy YELLOW-Project Office Copy

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San Francisco Office

Chain of Custody Record

Page 1 of 1

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San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

PO# 012204	Lab: C & T	
Project name: PHASE II GDG1	TtEMI technical contact: RAMEEN MOEZZI	Field samplers: HWAKING CHENG, RICK ERDMAN, JEROME LANGSTON
Project number: G0069011B040502	TtEMI project manager: TONG LI	Field samplers' signatures: Rick Erdman

Preservative Added

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	HEXAVALENT CHROME
Ø116PØØ7	IR MW I-5	4/24/01	1530	WATER	—	—	1	—	—	—	—	—	—	—	—	✓
Ø116TØØ6	equipment rinsate	↓	1530	↓	—	—	1	—	—	—	—	—	—	—	—	✓

	Name (print)	Company Name	Date	Time
Relinquished by: Rick Erdman	RICK ERDMAN	R & M	4/24/01	1545
Received by: Lumbre	G. Lumbre	C & M	4/24/01	1615
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

24-hr HOLD

WHITE-Laboratory Copy YELLOW-Project Office Copy

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Chain of Custody Record

Page 1 of 1

PO# Ø122Ø3	Lab: SEVERN TRENT	
Project name: IPS PHASE II GDG1	TtEMI technical contact: KAIREEN WAVE221	Field samplers: HUAKONG CHENG MARGARET LI
Project number: G0069011B040502	TtEMI project manager: TONG LI	Field samplers' signatures: Hukong Cheng

Preservative Added: HCl, HNO3, HCl, H2SO4, HNO3, HNO3, HNO3

No./Container Types / Analysis Required

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml Poly			CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Gen Min	MEE	Nin	Major Anions	Alkalinity	Al, Sb, Cd	TDS	Salinity	Benzene	Gen Chem
Ø116TØØ4	1R01MW17B	4/24/01	1220	H_2O	8	4	—	—	—	3	—	—	X	X	X	—	—	—	X	X	X	X	X	X	X	X	—	—
Ø116TØØ5	trip blank	↓	0800	↓	2	—	—	—	—	—	—	—	X	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ø116TØØ6	equipment rinsate	↓	1530	↓	3	4	—	—	—	1	—	—	X	X	X	—	—	—	—	—	—	—	—	X	—	—	X	X

	Name (print)	Company Name	Date	Time
Relinquished by: Hukong Cheng	HUAKONG CHENG	TtEMI	4/24/01	1600
Received by: SHIPPED VIA FEDEX AIRBILL # 4843 1899 3874				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:
METALS & MINERALS FIELD FILTERED

Ref: G0069011B040502
Dept:

Date: 24APR01
Wgt: 60 LBS

SHIPPING $46.88
SPECIAL $0.00
HANDLING $0.00
TOTAL $46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3874

WHITE–Laboratory Copy YELLOW–Project Office Copy

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San Francisco Office

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San Francisco, CA 94105
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Fax 415-543-5480

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Chain of Custody Record

Page 1 of 1

Project name: HP [illegible]	PO#: 012208	Lab: PARAGON
Project number: [illegible]	TtEMI technical contact: RAMEEN MOEZZI	Field samplers: HUAKONG CHENG, MARGARET LI
	TtEMI project manager: [illegible]	Field samplers' signatures: [illegible]

Preservative Added: [illegible]

Sample ID	Sample Description/Notes	Date	Time	Matrix	No./Container Types: 40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	Analysis Required: CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	[illegible]
0116T004	1R01MW17B	4/24/01	1220	H_2O			1									1
0116T006	equipment rinsate	↓	1530	↓			1									1

	Name (print)	Company Name	Date	Time
Relinquished by: [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Received by: [illegible] 4843 1899 3885				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 24APR01
Wgt: 55 LBS

SHIPPING $42.95
SPECIAL $0.00
HANDLING $0.00
TOTAL $42.95

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3885

WHITE–Laboratory Copy YELLOW–Project Office Copy

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3380

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San Francisco Office

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Chain of Custody Record

Page 1 of 1

PO#	012208
Lab:	SEVERN TRENT
Project name:	PHASE II UDCA
TtEMI technical contact:	RAMEEN MOEZZI (415) 222-8278
Field samplers:	RICK ERDMAN, JEROME LANGSTON
Project number:	6006901 1B040502
TtEMI project manager:	TONG LI
Field samplers' signatures:	Rick Erdman

Preservative Added: HCL, –, –, HCL, HCL, NaOH, NaOH, –, –, –, HNO3, HNO3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	½ Liter Poly	Brass Tube	Glass Jar				CLP VOC	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	MEE	Gen. Minerals	NN	Major anions, TKN	Alkalinity	Sulfide, Sulfate	Pb, Cr, Cu, Zn			
0116P005	TRIP BLANK	4/24/01	1000	WATER	4								✓				✓		~~EE~~ ~~TPH~~									
0116P006	IR01MW38	4/24/01	1100	WATER	8		3						✓						✓	✓	✓	✓	✓					
0116P007	IR01MW1-5	4/24/01	1530	WATER	8	4	3						✓	✓	✓				✓	✓	✓	✓		✓	✓	✓		

	Name (print)	Company Name	Date	Time
Relinquished by: Rick Erdman	RICK ERDMAN	R+M	4/24/01	1700
Received by: Shipped via FedEx # 4843 1899 3896				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

~ 10 DAY TAT

Ref: G0069011B040502
Dept:

Date: 24APR01
Wgt: 60 LBS

SHIPPING	$46.88
SPECIAL	$0.00
HANDLING	$0.00
TOTAL	$46.88

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3896

WHITE–Laboratory Copy YELLOW–Project Office Copy

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Fax 415-543-5480

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Chain of Custody Record

Page 1 of 1

PO# 012208	Lab: PARAGON	
Project name: HPS PHASE II [illegible]	TtEMI technical contact: RAMEEN MOEZZI	Field samplers: HWAKONG CHENG JOHN FORTUNA
Project number: [illegible]	TtEMI project manager: TONG LI	Field samplers' signatures: [signature]

Preservative Added: HNO_3

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	X/3
0116T002	HC ~~IR10MW26B~~ IR01MW26B	4/23/01	1215	H_2O			1									1
0116T003	Equipment Rinsate	4/23/01	1600	H_2O			1									1

HC

	Name (print)	Company Name	Date	Time
Relinquished by: [signature]	HWAKONG CHENG	TtEMI	4/24/01	1700
Received by: Shipped Via FedEx 4843 1899 3885				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks: FED EX #

WHITE–Laboratory Copy YELLOW–Project Office Copy

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Fax 415-543-5480

3386

Chain of Custody Record

Page 1 of 1

PO# 012208	Lab: PARAGON	
Project name: PHASE II GDG1	TtEMI technical contact: RAMEEN MOEZZI (415) 222-8278	Field samplers: RICK ERDMAN, JEROME LANGSTON
Project number: G0069011B040502	TtEMI project manager: TONG LI	Field samplers' signatures: Rick Erdman

Preservative Added: HNO3

No./Container Types: 40 ml VOA, 1 Liter Amber, 1 Liter Poly, Brass Tube, Glass Jar

Analysis Required: CLP VOA, CLP SVOA, CLP Pest/PCBs, CLP Metals, TPH Purgeables, TPH Extractables, Diesel/B

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables	Diesel/B
0116P006	IR01MW38A	4/24/01	1100	WATER			✓									✓
0116P007	IR01MWI-5	4/24/01	1530	WATER			✓									✓

	Name (print)	Company Name	Date	Time
Relinquished by: Rick Erdman	RICK ERDMAN	R&M	4/24/01	1700
Received by: Shipped via Fedex # 4843 1899 3885				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

WHITE-Laboratory Copy YELLOW-Project Office Copy

-03

3424

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San Francisco Office

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San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

Chain of Custody Record

Page 1 of 1

PO# 012203

Lab: Severn Trent

Project name: Phase II GDGI

TtEMI technical contact: Kameen Moezzi 415 222 8278

Field samplers: Andrew Taylor

Project number: G0069011B040502

TtEMI project manager: Tony L

Field samplers' signatures:

Sample ID	Sample Description/Notes	Date	Time	Matrix	40 ml VOA	1 Liter Amber	1 Liter Poly	Brass Tube	Glass Jar	500 ml poly		CLP VOA	CLP SVOA	CLP Pest/PCBs	CLP Metals	TPH Purgeables	TPH Extractables
0112T017	EQUIP RINSATE	3/29/01	1530	H2O	6	6				1		X	X	X	X	X	X

Preservative Added: HCl, HCl

	Name (print)	Company Name	Date	Time
Relinquished by:	Andrew Taylor	GATA	3/29/01	1600
Received by: Shipped via FedEx 4843 1899 3131				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Ref: G0069011B040502
Dept:

Date: 29MAR01
Wgt: 50 LBS

SHIPPING $39.01
SPECIAL $0.00
HANDLING $0.00
TOTAL $39.01

SERVICE: PRIORITY OVERNIGHT
TRACK: 4843 1899 3131

WHITE-Laboratory Copy YELLOW-Project Office Copy

E

SOP Volume: Client Services
Section 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd

COOLER RECEIPT CHECKLIST

Login#: 150691 Date Received: 3/6/01 Number of Coolers: 1
Client: Tetra Tech Project: Phase II GDGL

A. Preliminary Examination Phase
Date Opened: 3/6/01 By (print): June Brookfield (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES NO
How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
Type of ice: wet ice/Blue Ice Temperature: Chilled

B. Login Phase
Date Logged In: 3/6/01 By (print): James Brookfield (sign) [signature]

1. Describe type of packing in cooler: Ziplocks
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO NA
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO NA
9. Was the client contacted concerning this sample delivery? ..... YES NO
If YES, give details below.
Who was called? _____ By whom? _____ Date: _____

Additional Comments:

Filename: F:\qc\forms\cooler.wpd Rev 1, 4/95

Mar-07-01 06:15pm From-CURTIS & TOMPKINS 5104860532 T-256 P.03/04 F-260

Paragon Analytics, Inc. -- Fort Collins, Colorado

CONDITION OF SAMPLE UPON RECEIPT FORM

CLIENT: TTEMI PROJECT MANAGER: KC

WORKORDER NO: 0103037 INITIALS: M. DATE: 3-7-01

1. Does this project require any special handling in addition to standard Paragon procedures?		Yes	No
IS PRE-SCREENING REQUIRED? (radiochemistry, DOE, etc.)		Yes	No
2. Are custody seals provided on the cooler? If so, how many 2	N/A	Yes	No
3. Are the custody seals on sample containers intact?	N/A	Yes	No
4. Is there a Chain-of-Custody (COC) or other representative documents, letters, or shipping memos?		Yes	No
5. Is the COC complete? Relinquished: Yes ✓ No___ Analyses Requested: Yes ✓ No___	N/A	Yes	No
6. Is the COC in agreement with the samples received? No. of Samples: Yes ✓ No___ Sample ID's: Yes ✓ No___ Matrix: Yes ✓ No___ No. of Containers: Yes ✓ No___	N/A	Yes	No
7. Were COC (if applicable) and sample labels legible?		Yes	No
8. Were airbills present and/or removable?		Yes	No
9. Are all aqueous samples requiring chemical preservation preserved correctly (excluding volatile organics)?	N/A	Yes	No
Are all aqueous non-preserved samples at the correct pH?		Yes	No
10. Is there enough sample for requested analyses? If so, were samples placed in the proper containers?		Yes	No
11. Are all samples within holding times for the requested analyses?		Yes	No
12. Were all sample containers received intact? (not broken or leaking, etc.)		Yes	No
13. Are samples requiring no headspace (volatiles, reactive cyanide/sulfide, radon), headspace free? Size of bubble: ___ < green pea; ___ > green pea (List sample IDs and affected containers on Page 2)	N/A	Yes	No
14. Is Paragon to dispose of samples?		Yes	No
15. Were the sample(s) shipped on ice?	N/A	Yes	No
16. Were cooler temperatures measured at 2 - 6 °C ?	N/A	Yes	No
17. Were all samples cooled that should have been cooled?	NA	Yes	No

Cooler #'s 1 Mgr 1

Temperature Ambient 6°C °C

Project Manager Signature / Date: KDC / 3-14-01

A NO RESPONSE TO ANY QUESTION (EXCEPT # 1 and #14 REQUIRES THE COMPLETION OF PAGE 2 OF THIS FORM

F

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT Page 1 of 1

Received By (Print Name): Scott Lavigne Log-in Date: 3/7/01

Received By (Signature): Scott L

Case Number: GWDGAPS

Sample Delivery Group No: 82003

ETR Number: 82003

REMARKS:

1. **Custody Seal** ~~Present~~/Absent* ~~Intact~~/Broken
2. **Custody Seal Nos.:** N/A
3. **Chain-of-Custody Records** ~~Present~~/Absent*
4. **Sample Information Sheets** ~~Present~~/Absent*
5. **Airbill** ~~Airbill~~/Sticker ~~Present~~/Absent*
6. **Airbill No.:** 4843 1899 1852 ; 1856
7. **Sample Tags** ~~Present~~/Absent* **Sample Tag Numbers** ~~Listed~~/Not Listed on Chain-of-Custody
8. **Sample Condition:** ~~Intact~~/Broken* ~~Leaking~~
9. **Does information on the custody records, sample information sheets, sample tags and labels agree?** ~~Yes~~/No* See Remarks
10. **Date Received at Lab:** 3/7/01
11. **Time Received:** 0930
12. **Cooler Temperature:** 3.3°C

Sample Transfer

Fraction: All

Area #: LVL4

By: SML

On: 3/7/01

CORRESPONDING			
CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0109D006	N/A	446719	Were air bubbles present
0109D007		446720	in any VOA vials? NO
0109D008		446721	Samples received
0109D005		446722	Intact, As were
0109D009		446723	custody seals on
0109T005		446724	outside of coolers.
0109T006		446725	* Received 3
0109T007		446726	vials with no
0109T008		446727	ID. By process
0109P001		446728	of Elimination
0109P002		446729	They belong with
0109P003		446730	0109T008.
VSBLK12		446731	
	SML	3/7/01	

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

E

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT

Page 1 of 1

Received By (Print Name): Jeremy Sink

Log-in: 3/8/01

Received By (Signature): Jeremy Sink

Case Number: GWDGAPS

Sample Delivery Group No: 82003

ETR Number: 82016

REMARKS:

1. Custody Seal — Present/~~Absent~~* — Intact/~~Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records — Present/~~Absent~~*
4. Sample Information Sheets — ~~Present/Absent~~*
5. Airbill — ~~Airbill/Sticker~~ — Present/~~Absent~~*
6. Airbill No.: 4843 7899 1985 (1974) (1996) (1952)
7. Sample Tags — Present/~~Absent~~* — Sample Tag Numbers — ~~Listed/Not Listed~~ on Chain-of-Custody
8. Sample Condition: Intact/~~Broken~~* ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? Yes/~~No~~*
10. Date Received at Lab: 3/8/01
11. Time Received: 0930
12. Cooler Temperature: 3.3 33°C

Sample Transfer

Fraction: All

Area #: Level 4 fridge

By: JE8

On: 3/8/01

CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMA OF SA	CONDITION SHIPMENT, TC.
0109T009	N/A	446826	Were air	es present
0109T010		446827	in any VO	als? NO
0109T011		446828	Sampl	rec'd
0109T012		446829	intac	d/custody
0109T013		446830	seals	n place.
0109T014		446831	Sampl	D: 0109D010
0109D010		446832	six (	ials rec'd
0109D012		446833	differ	t from COC
0109D014		446834	~~No~~	~~time sent~~
0109D011		446835	~~for~~	~~ED~~
0109D015		446836	~~0109~~	6 JE8 3/8/01
0109D013	"	446844	Sampl	D 0109D013
			mislo	d on COC contain
			used	D from
			~~Cont~~	for log in
			CC	
		JE8	3/8/01	

* Contact Project Director

Reviewed by: _____

Date: _____

Logbook No.: _____

Logbook Page No.: _____

E

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT

Page 1 of 1

Received By (Print Name): Jeremy Sink

Log-in Date: 3/10/01

Received By (Signature): Jeremy Sink

Case Number: GWDGAP5

Sample Delivery Group No: 82034

ETR Number: 82034

REMARKS:

1. Custody Seal ~~Present/Absent*~~ ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent*~~
4. Sample Information Sheets ~~Present/Absent*~~
5. Airbill ~~Airbill/Sticker~~ ~~Present/Absent*~~
6. Airbill No.: 484318992157 (2135) (2113) (2102)
7. Sample Tags ~~Present/Absent*~~ Sample Tag Numbers ~~Listed/Not Listed~~ on Chain-of-Custody
8. Sample Condition: ~~Intact/Broken*~~ ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No*~~
10. Date Received at Lab: 3/10/01
11. Time Received: 1130
12. Cooler Temperature: 2,4,5,5°C

Sample Transfer

Fraction: All

Area #: Level 4 fridge

By: JEB

On: 3/10/01

CORRESPONDING

CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0109D010	N/A	446941	Were air bubbles present
0109D011		446942	in any VOA vials? NO
0109D012		446943	Samples rec'd
0109D013		446944	intact w/custody
0109D014		446945	seals in place
0109P009		446946	Sample ID
0109P010		446947	0109P009 not
0109P011		446948	marked for
0109P012		446949	analysis on
0109P013		446950	Coc. Volume
0109P014		446951	sent for VOC
0109P015		446952	and TPAG
0109P016		446953	analysis, okay
0109T021		446954	to log in for
0109T022		446955	above parameters
0109T023		446956	per client
0109T024		446957	
0109T025		446958	
VSBLK13		446959	

JEB 3/10/01

* Contact Project Director

Reviewed by: _____

Logbook No.: _____

Date: _____

Logbook Page No.: _____

Paragon Analytics, Inc. -- Fort Collins, Colorado

CONDITION OF SAMPLE UPON RECEIPT FORM

CLIENT: ITEMI PROJECT MANAGER: KC

WORKORDER NO: 0103037 INITIALS: M DATE: 3-10-01

1. Does this project require any special handling in addition to standard Paragon procedures?		Yes	(No)
IS PRE-SCREENING REQUIRED? (radiochemistry, DOE, etc.)		Yes	(No)
2. Are custody seals provided on the cooler? If so, how many 2	N/A	(Yes)	No
3. Are the custody seals on sample containers intact?	(N/A)	Yes	No
4. Is there a Chain-of-Custody (COC) or other representative documents, letters, or shipping memos?		(Yes)	No
5. Is the COC complete? Relinquished: Yes ✓ No___ Analyses Requested: Yes ✓ No___	N/A	(Yes)	No
6. Is the COC in agreement with the samples received? No. of Samples: Yes ✓ No___ Sample ID's: Yes ✓ No___ Matrix: Yes ✓ No___ No. of Containers: Yes ✓ No___	N/A	(Yes)	No
7. Were COC (if applicable) and sample labels legible?		(Yes)	No
8. Were airbills present and/or removable?		(Yes)	No
9. Are all aqueous samples requiring chemical preservation preserved correctly (excluding volatile organics)?	N/A	Yes	(No)
Are all aqueous **non-preserved** samples at the correct pH?		Yes	No
10. Is there enough sample for requested analyses? If so, were samples placed in the proper containers?		(Yes)	No
11. Are all samples within holding times for the requested analyses?		(Yes)	No
12. Were all sample containers received intact? (not broken or leaking, etc.)		(Yes)	No
13. Are samples requiring no headspace (volatiles, reactive cyanide/sulfide, radon), headspace free? **Size of bubble: ___ < green pea; ___ > green pea** (List sample IDs and affected containers on Page 2)	(N/A)	Yes	No
14. Is Paragon to dispose of samples?		(Yes)	No
15. Were the sample(s) shipped on ice?	N/A	(Yes)	No
16. Were cooler temperatures measured at 2 - 6 °C ?	N/A	(Yes)	No
17. Were all samples cooled that should have been cooled?	NA	Yes	No

Cooler #'s 1

Temperature 3°C °C

Project Manager Signature / Date: KDC / 3-14-01

A NO RESPONSE TO ANY QUESTION (EXCEPT # 1 and #14 REQUIRES THE COMPLETION OF PAGE 2 OF THIS FORM

E

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT Page 1 of 1

Received By (Print Name): Glen Corcoran Log-in Date: 3-12-01

Received By (Signature): Glen Corcoran

Case Number: GWDGAPS

Sample Delivery Group No: 82040

ETR Number: 82040

REMARKS:

1. Custody Seal ~~Present~~/~~Absent*~~
   Intact/~~Broken~~
2. Custody Seal Nos.: NA
3. Chain-of-Custody Records ~~Present~~/~~Absent*~~
4. Sample Information Sheets ~~Present~~/~~Absent*~~
5. Airbill ~~Airbill~~/Sticker
   ~~Present~~/~~Absent*~~
6. Airbill No.: 4843 1899 2054
7. Sample Tags ~~Present~~/~~Absent*~~
   Sample Tag Numbers ~~Listed~~/Not Listed
   ~~on Chain-of-Custody~~
8. Sample Condition: Intact/~~Broken*~~
   ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree?
   Yes/~~No*~~
10. Date Received at Lab: 3-10-01
11. Time Received: 1600
12. Cooler Temperature: 5°

Sample Transfer

Fraction: All

Area #: Level 4

By: Glen Corcoran

On: 3-12-01

CORRESPONDING			
CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0109T016	NA	447025	Were air bubbles present
0109T019		447026	in any VOA vials?
0109T020		447027	
0109T015		447028	Samples arrived
0109T017		447029	intact with custody
0109T018		447030	seals in place.
0109P004		447031	
0109P005		447032	
0109P006		447033	
0109P007		447034	
0109P008		447035	
VSBLK14		447036	
			GSC 3-12-01

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

E

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT Page 1 of 1

Received By (Print Name): Scott Lavigne Log-in Date: 3/13/01

Received By (Signature): Scott L

Case Number: GWDGAPS

Sample Delivery Group No: 82052

ETR Number: 82052

REMARKS:

1. Custody Seal ~~Present/Absent*~~ ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent*~~
4. Sample Information Sheets ~~Present/Absent*~~
5. Airbill ~~Airbill/Sticker~~ ~~Present/Absent*~~
6. Airbill No.: 4843187 9 2180 " " 2179 " " 2168
7. Sample Tags ~~Present/Absent*~~ Sample Tag Numbers ~~Listed~~/Not Listed on Chain-of-Custody
8. Sample Condition: ~~Intact/Broken*~~ ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No~~ See Remarks
10. Date Received at Lab: 3/13/01
11. Time Received: 0930
12. Cooler Temperature: 3°30 40

Sample Transfer

Fraction: All

Area #: LVL 4

By: SLM

On: 3/13/01

CORRESPONDING

CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0110T001	N/A	447119	Were air bubbles present
0110T002		447120	in any VOA vials? NO
0110T003		447121	Samples received
0110T004		447122	Intact, As were
0110P001		447123	Custody Seals on
0110P002		447124	outside of cooler.
0110P004		447125	* Received 1 1L
0110P005		447126	Bottle That does
0110P006		447127	not match up
VSCKIS ~~0110P007~~	SWL	447128	With The Coc.
		SML	3/13/01

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

E

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT Page 1 of 1

Received By (Print Name): Scott Lavigne Log-in Date: 3/14/01

Received By (Signature): Scott L

Case Number: GWDGAPS

Sample Delivery Group No: 82052

ETR Number: 82069

REMARKS:

1. Custody Seal ~~Present/Absent~~*
   ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent~~*
4. Sample Information Sheets ~~Present/Absent~~*
5. Airbill ~~Airbill/Sticker~~
   ~~Present/Absent~~*
6. Airbill No.: 48431899 2227 " " 2249 " " 2250
7. Sample Tags ~~Present/Absent~~
   Sample Tag Numbers ~~Listed/Not Listed~~
   ~~on Chain-of-Custody~~
8. Sample Condition: ~~Intact/Broken~~*
   ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree?
   ~~Yes/No~~*
10. Date Received at Lab: 3/14/01
11. Time Received: 0930
12. Cooler Temperature: 3°3°3°

Sample Transfer

Fraction: All

Area #: LVL4

By: SWL

On: 3/14/01

CORRESPONDING

CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0110D001	N/A	447194	Were air bubbles present
0110D002		447195	in any VOA vials? NO
0110D003		447196	Samples received
0110D004		447197	Intact, As were
0110D005		447198	custody seals on
0110P007		447199	outside of cooler.
0110P008		447200	
0110P009		447201	
0110P010		447202	
0110011		447203	
0110012		447204	
0110013		447205	
0110005		447206	
0110006		447207	
0110007		447208	
0110008		447209	
	SWL	3/14/01	

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

SOP Volume: Client Services
Section. 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd

COOLER RECEIPT CHECKLIST

Login#: 150859 Date Received: 3/14/01 Number of Coolers: 1
Client: Tetra Tech Project: Phase II GWG PI

A. Preliminary Examination Phase
Date Opened: 3/13/01 By (print): James Brownfield (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES NO
How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
Type of ice: Wet Ice Temperature: Chilled

B. Login Phase
Date Logged In: 3/14/01 By (print): S. Stanley (sign) [signature]

1. Describe type of packing in cooler: Ziplocks
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
If YES, give details below.
Who was called? _____ By whom? _____ Date: _____

Additional Comments:

Paragon Analytics, Inc. -- Fort Collins, Colorado

CONDITION OF SAMPLE UPON RECEIPT FORM

CLIENT: TTEMI PROJECT MANAGER: KC

WORKORDER NO: 0103080 INITIALS: M DATE: 3-14-01

1. Does this project require any special handling in addition to standard Paragon procedures?		Yes	No
IS PRE-SCREENING REQUIRED? (radiochemistry, DOE, etc.)		Yes	No
2. Are custody seals provided on the cooler? If so, how many 2/cooler	N/A	Yes	No
3. Are the custody seals on sample containers intact?	N/A	Yes	No
4. Is there a Chain-of-Custody (COC) or other representative documents, letters, or shipping memos?		Yes	No
5. Is the COC complete? Relinquished: Yes ✓ No___ Analyses Requested: Yes ✓ No___	N/A	Yes	No
6. Is the COC in agreement with the samples received? No. of Samples: Yes ✓ No___ Sample ID's: Yes ✓ No___ Matrix: Yes ✓ No___ No. of Containers: Yes ✓ No___	N/A	Yes	No
7. Were COC (if applicable) and sample labels legible?		Yes	No
8. Were airbills present and/or removable?		Yes	No
9. Are all aqueous samples requiring chemical preservation preserved correctly (excluding volatile organics)?	N/A	Yes	No
Are all aqueous **non-preserved** samples at the correct pH?		Yes	No
10. Is there enough sample for requested analyses? If so, were samples placed in the proper containers?		Yes	No
11. Are all samples within holding times for the requested analyses?		Yes	No
12. Were all sample containers received intact? (not broken or leaking, etc.)		Yes	No
13. Are samples requiring no headspace (volatiles, reactive cyanide/sulfide, radon), headspace free? **Size of bubble:** ___ < green pea; ___ > green pea (List sample IDs and affected containers on Page 2)	N/A	Yes	No
14. Is Paragon to dispose of samples?		Yes	No
15. Were the sample(s) shipped on ice?	N/A	Yes	No
16. Were cooler temperatures measured at 2 - 6 °C ?	N/A	Yes	No
17. Were all samples cooled that should have been cooled?	NO	Yes	No

Cooler #'s 1 2

Temperature 1°C 4°C °C

Project Manager Signature / Date: KC / 3-14-01

A NO RESPONSE TO ANY QUESTION (EXCEPT # 1 and #14 REQUIRES THE COMPLETION OF PAGE 2 OF THIS FORM

FORM 201r12 fm (08/30/2000)

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 150871 Date Received: 3/15/01 Number of Coolers: 1
Client: Tetra Tech Project: Phase II GPG1

A. Preliminary Examination Phase
Date Opened: 3/15/01 By (print): Janet Brookfield (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number:
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? Seal date: Seal name:
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: wet ice Temperature: Chilled

B. Login Phase
Date Logged In: 3/15/01 By (print): Janet Brookfield (sign) [signature]

1. Describe type of packing in cooler: ziplocs
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? By whom? Date:

Additional Comments:

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT

Page 1 of 1

Received By (Print Name): Glen Cameron

Log-in Date: 3-15-01

Received By (Signature): Glen Cameron

Case Number: GWDGAPS

Sample Delivery Group No: 82088

ETR Number: 82088

REMARKS:

1. Custody Seal (Present/~~Absent*~~) (Intact/~~Broken~~)
2. Custody Seal Nos.: NA
3. Chain-of-Custody Records (Present/~~Absent*~~)
4. Sample Information Sheets (~~Present~~/Absent*)
5. Airbill (~~Airbill~~/Sticker) (~~Present~~/~~Absent*~~)
6. Airbill No.: 4843 1899 2320
7. Sample Tags (~~Present~~/Absent*)
   Sample Tag Numbers (~~Listed~~/Not Listed) (~~on Chain of Custody~~)
8. Sample Condition: (Intact/~~Broken~~*) (~~Leaking~~)
9. Does information on the custody records, sample information sheets, sample tags and labels agree? (Yes/~~No*~~)
10. Date Received at Lab: 3-15-01
11. Time Received: 0930
12. Cooler Temperature: 3°

Sample Transfer

Fraction: All

Area #: Cooler 4

By: Glen Cameron

On: 3-15-01

CORRESPONDING			
CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0110T009	NA	447328	Were air bubbles present
0110T010		447329	in any VOA vials?
0110T011		447330	
0110T012		447331	Samples arrived intact
0110T013		447332	with custody seals in
0110T014		447333	place.
0110P014		447334	
0110P015		447335	
0110P016		447336	
0110P017		447337	
VSBLK16		447341	
			GJC 3-15-01

* Contact Project Director

Reviewed by: _____

Date: _____

Logbook No.: _____

Logbook Page No.: _____

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Page 1 of 1

Lab Name: Severn Trent Laboratories - VT

Received By (Print Name): Scott Lavigne

Log-in Date: 3/16/01

Received By (Signature): Scott L

Case Number: GWDGAPS

Sample Delivery Group No: 82088

ETR Number: 82105

REMARKS:

1. Custody Seal ~~Present/Absent*~~ ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent*~~
4. Sample Information Sheets ~~Present/Absent*~~
5. Airbill ~~Airbill Sticker~~ ~~Present/Absent*~~
6. Airbill No.: 4843189 2330 2363 2400 2411
7. Sample Tags ~~Present/Absent*~~ Sample Tag Numbers ~~Listed~~ Not Listed on Chain-of-Custody
8. Sample Condition: ~~Intact/Broken*~~ ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No*~~ See Remarks
10. Date Received at Lab: 3/16/01
11. Time Received: 0920
12. Cooler Temperature: 2°3°3°4°

Sample Transfer

Fraction: All

Area #: LVL4

By: SWL

On: 3/16/01

CORRESPONDING

CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0110T019	N/A	447420	Were air bubbles present
0110T015		447421	in any VOA vials? NO
0110T016		447422	Samples received
0110T017		447423	Intact, AS were
0110T018		447424	Custody Seals on
0110P018Z		447425	outside of coolers.
0110P019		447426	*COC 2943
0110P020		447427	Sample ID 0110P018
0110P021		447428	were to be received
0110P022		447429	3/15/01 but arrived
0110P023		447430	on 3/16/01. will
0110P024		447431	Log in accordingly.
USBLK17		447432	2 different samples
0110P018		447463	collected with the
			Same ID: 0110P018
			OK to add a Z
			To End of ID
			on COC: 2945 To
			differentiate per
			KFY.
	SWL	3/16/01	

* Contact Project Director

Reviewed by: _____

Date: _____

Logbook No.: _____

Logbook Page No.: _____

SM.0012A.111698

E

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT Page 1 of 1

Received By (Print Name): Scott Lavigne Log-in Date: 3/19/01

Received By (Signature): Scott Z

Case Number: GWDGAPS

Sample Delivery Group No: 82126

ETR Number: 82126

REMARKS:

1. Custody Seal ~~Present/Absent*~~ ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent*~~
4. Sample Information Sheets ~~Present/Absent*~~
5. Airbill ~~Airbill/Sticker~~ ~~Present/Absent*~~
6. Airbill No.: 1843189 92466 " 2499 " 2477
7. Sample Tags ~~Present/Absent*~~ Sample Tag Numbers ~~Listed~~ Not Listed on Chain-of-Custody
8. Sample Condition: ~~Intact/Broken*~~ ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No*~~ See Remarks
10. Date Received at Lab: 3/17/01
11. Time Received: 1100
12. Cooler Temperature: 4°4°3°

Sample Transfer

Fraction: All

Area #: LVL4

By: SAM

On: 3/17/01

CORRESPONDING

CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0110P025	N/A	447606	Were air bubbles present
0110P026		447607	in any VOA vials? NO
0110P027		447608	Samples received
0110P028		447609	Intact, As were
0110P029		447610	custody Seals on
0110P030		447611	outside of cooler.
0110P031		447612	* To differentiate
0110P019		447613	IDS from previous
0110P032		447614	Samples received,
0110T020		447615	An "A" was
0110T021		447616	added to the
0110T022		447617	End of ID.
0110T023		447618	0110P019. Per KFK.
0110T024		447619	
VSBLK17		447620	
	SAM	3/19/01	

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT

Page 1 of 1

Received By (Print Name): Scott Lavigne

Log-in Date: 3/20/01

Received By (Signature): Scott L

Case Number: GWDGAPS

Sample Delivery Group No: 82126

ETR Number: 82144

REMARKS:

1. Custody Seal ~~Present/Absent*~~ ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent*~~
4. Sample Information Sheets ~~Present/Absent*~~
5. Airbill ~~Airbill/Sticker~~ ~~Present/Absent*~~
6. Airbill No.: 4843189912536 12555
7. Sample Tags ~~Present/Absent*~~ Sample Tag Numbers ~~Listed/Not Listed~~ on Chain-of-Custody
8. Sample Condition: ~~Intact/Broken*~~ ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No*~~ See Remarks
10. Date Received at Lab: 3/20/01
11. Time Received: 0930
12. Cooler Temperature: 5° 2°

Sample Transfer

Fraction: All

Area #: LCL4

By: SML

On: 3/20/01

CORRESPONDING			
CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0111P001	N/A	447814	Were air bubbles present
0111P002		447815	in any VOA vials? NO
0111P003		447816	Samples received
0110P019B		447817	Intact, as were
0111P004		447818	custody seals on
0111T001		447819	outside of coolers,
0111T002		447820	& Received Two
0111T003		447821	Samples with the
0111T004		447822	same ID 0110P002
0111T005	✓	447823	One of the samples
			is supposed to be
			0110P003. But were
			unable to differentiate
			samples by the
			different times
	SML	3/20/01	

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT Page 1 of 1

Received By (Print Name): Scott Lavigne Log-in Date: 3/21/01

Received By (Signature): Scott L

Case Number: GWDGAPS

Sample Delivery Group No: 82157

ETR Number: 82157

REMARKS:

1. Custody Seal ~~Present/Absent*~~ ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent*~~
4. Sample Information Sheets ~~Present/Absent*~~
5. Airbill ~~Airbill/Sticker~~ ~~Present/Absent*~~
6. Airbill No.: 484318992628 112640 ~~12639~~
7. Sample Tags ~~Present/Absent*~~ Sample Tag Numbers ~~Listed/Not Listed~~ on Chain-of-Custody
8. Sample Condition: ~~Intact/Broken*~~ Leaking
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No*~~ See Remarks
10. Date Received at Lab:
11. Time Received: 0930
12. Cooler Temperature: 3°3°3°5°

Sample Transfer

Fraction: All

Area #: LVL4

By: Sml

On: 3/21/01

CORRESPONDING

CLIENT SAMPLE #	SAMPLE-TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0111P011	N/A	447969	Were air bubbles present
0111P010		447970	in any VOA vials? NO
0111P012		447971	Samples received
0111T006		447972	Intact, AS were
0111T007		447973	custody seals on
0111T008		447974	outside of coolers
0111T009		447975	ID 0111P009 does
0111P005		447976	not request Salinity
0111P006		447977	on COC. OK TO
0111P007		447978	run for Salinity
0111P008		447979	Per Client.
0111P009		447980	~~X~~ Sample ID
0111D001		447981	0111D003 asks
0111D002		447984	for N/N on
0111D003		447985	COC, But did not
0111D004		447986	received a NP poly
0111D005		447987	OK To run for
VSBLK18		447988	Nitrate/Nitrite
			only per KFY
	Sml	3/21/01	

* Contact Project Director

Reviewed by: Logbook No.:

Date: Logbook Page No.:

Paragon Analytics, Inc. -- Fort Collins, Colorado

CONDITION OF SAMPLE UPON RECEIPT FORM

CLIENT: TTEMI PROJECT MANAGER: KC

WORKORDER NO: 0103184 INITIALS: MC DATE: 3-29-01

1. Does this project require any special handling in addition to standard Paragon procedures?		Yes	No
IS PRE-SCREENING REQUIRED? (radiochemistry, DOE, etc.)		Yes	No
2. Are custody seals provided on the cooler? If so, how many 2	N/A	Yes	No
3. Are the custody seals on sample containers intact?	N/A	Yes	No
4. Is there a Chain-of-Custody (COC) or other representative documents, letters, or shipping memos?		Yes	No
5. Is the COC complete? Relinquished: Yes ✓ No___ Analyses Requested: Yes ✓ No___	N/A	Yes	No
6. Is the COC in agreement with the samples received? No. of Samples: Yes ✓ No___ Sample ID's: Yes ✓ No___ Matrix: Yes ✓ No___ No. of Containers: Yes___ No X	N/A	Yes	No
7. Were COC (if applicable) and sample labels legible?		Yes	No
8. Were airbills present and/or removable?		Yes	No
9. Are all aqueous samples requiring chemical preservation preserved correctly (excluding volatile organics)?	N/A	Yes	No
Are all aqueous **non-preserved** samples at the correct pH?		Yes	No
10. Is there enough sample for requested analyses? If so, were samples placed in the proper containers?		Yes	No
11. Are all samples within holding times for the requested analyses?		Yes	No
12. Were all sample containers received intact? (not broken or leaking, etc.)		Yes	No
13. Are samples requiring no headspace (volatiles, reactive cyanide/sulfide, radon), headspace free? **Size of bubble: ___ < green pea; ___ > green pea** (List sample IDs and affected containers on Page 2)	N/A	Yes	No
14. Is Paragon to dispose of samples?		Yes	No
15. Were the sample(s) shipped on ice?	N/A	Yes	No
16. Were cooler temperatures measured at 2 - 6 °C ?	N/A	Yes	No
17. Were all samples cooled that should have been cooled?	NA	Yes	No

Cooler #'s 1

Temperature 3°C °C

Project Manager Signature / Date: KDC / 3-30-01

A NO RESPONSE TO ANY QUESTION (EXCEPT # 1 and #14 REQUIRES THE COMPLETION OF PAGE 2 OF THIS FORM

Paragon Analytics, Inc. -- Fort Collins, Colorado

CONDITION OF SAMPLE UPON RECEIPT FORM

CLIENT: TTEMI PROJECT MANAGER: KC

WORKORDER NO: 0104176 INITIALS: [illegible] DATE: 4-21-01

1. Does this project require any special handling in addition to standard Paragon procedures?		Yes	No
IS PRE-SCREENING REQUIRED? (radiochemistry, DOE, etc.)		Yes	No
2. Are custody seals provided on the cooler? If so, how many 2/cooler	N/A	Yes	No
3. Are the custody seals on sample containers intact?	N/A	Yes	No
4. Is there a Chain-of-Custody (COC) or other representative documents, letters, or shipping memos?		Yes	No
5. Is the COC complete? Relinquished: Yes ✓ No___ Analyses Requested: Yes ✓ No___	N/A	Yes	No
6. Is the COC in agreement with the samples received? No. of Samples: Yes ✓ No___ Sample ID's: Yes ✓ No___ Matrix: Yes ✓ No___ No. of Containers: Yes ✓ No___	N/A	Yes	No
7. Were COC (if applicable) and sample labels legible?		Yes	No
8. Were airbills present and/or removable?		Yes	No
9. Are all aqueous samples requiring chemical preservation preserved correctly (excluding volatile organics)?	N/A	Yes	No
Are all aqueous **non-preserved** samples at the correct pH?		Yes	No
10. Is there enough sample for requested analyses? If so, were samples placed in the proper containers?		Yes	No
11. Are all samples within holding times for the requested analyses?		Yes	No
12. Were all sample containers received intact? (not broken or leaking, etc.)		Yes	No
13. Are samples requiring no headspace (volatiles, reactive cyanide/sulfide, radon), headspace free? **Size of bubble: ___ < green pea; ___ > green pea** (List sample IDs and affected containers on Page 2)	N/A	~~Yes~~ [illegible] 4-21	No
14. Is Paragon to dispose of samples?		Yes	No
15. Were the sample(s) shipped on ice?	N/A	Yes	No
16. Were cooler temperatures measured at 2 - 6 °C ?	N/A	Yes	No
17. Were all samples cooled that should have been cooled?	NA	Yes	No

Cooler #'s	1	2	3				
Temperature	1°C	3°C	0°C				°C

Project Manager Signature / Date: KDC/4-24-01

A NO RESPONSE TO ANY QUESTION (EXCEPT # 1 and #14 REQUIRES THE COMPLETION OF PAGE 2 OF THIS FORM

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT Page 1 of 1

Received By (Print Name): Jeremy Sink Log-in Date: 3/22/01

Received By (Signature): Jeremy Sink

Case Number: GWDGAPS

Sample Delivery Group No: 82157

ETR Number: 82170

REMARKS:

1. Custody Seal ~~Present/Absent*~~ ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent*~~
4. Sample Information Sheets ~~Present/Absent*~~
5. Airbill ~~Airbill/Sticker~~ ~~Present/Absent*~~
6. Airbill No.: 4543189927 10(2709)
7. Sample Tags ~~Present/Absent*~~ Sample Tag Numbers ~~Listed/Not Listed on Chain of Custody~~
8. Sample Condition: ~~Intact/Broken*~~ ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No*~~
10. Date Received at Lab: 3/22/01
11. Time Received: 1245
12. Cooler Temperature: 3.5

Sample Transfer

Fraction: All

Area #: Cool 4 fridge

By: JEB

On: 3/22/01

CORRESPONDING			
CLIENT SAMPLE #	SAMPLE-TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0111P014	N/A	448069	Were air bubbles present
0111P015		448070	in any VOA vials? no
0111P016		448071	Samples rec'd
0111P017		448072	intact, w/custody
0111P018		448073	seals in place.
0111P013		448074	Sample ID 0111P015
0111T010		448075	and 0111T014
0111T011		448076	metals bottles
0111T012		448077	not preserved
0111T013		448078	added HNO_3 per
0111T014		448079	KFY

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

Paragon Analytics, Inc. -- Fort Collins, Colorado

CONDITION OF SAMPLE UPON RECEIPT FORM

CLIENT: TTEMI PROJECT MANAGER: DF

WORKORDER NO: 0103143 INITIALS: M DATE: 3-22-01

1. Does this project require any special handling in addition to standard Paragon procedures?		Yes	No
IS PRE-SCREENING REQUIRED? (radiochemistry, DOE, etc.)		Yes	No
2. Are custody seals provided on the cooler? If so, how many 2 / cooler	N/A	Yes	No
3. Are the custody seals on sample containers intact?	N/A	Yes	No
4. Is there a Chain-of-Custody (COC) or other representative documents, letters, or shipping memos?		Yes	No
5. Is the COC complete? Relinquished: Yes ✓ No___ Analyses Requested: Yes ✓ No___	N/A	Yes	No
6. Is the COC in agreement with the samples received? No. of Samples: Yes ✓ No___ Sample ID's: Yes ✓ No___ Matrix: Yes ✓ No___ No. of Containers: Yes ✓ No___	N/A	Yes	No
7. Were COC (if applicable) and sample labels legible?		Yes	No
8. Were airbills present and/or removable?		Yes	No
9. Are all aqueous samples requiring chemical preservation preserved correctly (excluding volatile organics)?	N/A	Yes	No
Are all aqueous **non-preserved** samples at the correct pH?		Yes	No
10. Is there enough sample for requested analyses? If so, were samples placed in the proper containers?		Yes	No
11. Are all samples within holding times for the requested analyses?		Yes	No
12. Were all sample containers received intact? (not broken or leaking, etc.)		Yes	No
13. Are samples requiring no headspace (volatiles, reactive cyanide/sulfide, radon), headspace free? **Size of bubble: ___ < green pea; ___ > green pea** (List sample IDs and affected containers on Page 2)	N/A	Yes	No
14. Is Paragon to dispose of samples?		Yes	No
15. Were the sample(s) shipped on ice?	N/A	Yes	No
16. Were cooler temperatures measured at 2 - 6 °C ?	N/A	Yes	No
17. Were all samples cooled that should have been cooled?	N/A	Yes	No

Cooler #'s 1 2 ___ ___ ___ ___

Temperature 1°C 4°C ___ ___ ___ ___ °C

Project Manager Signature / Date: KDC / 3-23-01

A NO RESPONSE TO ANY QUESTION (EXCEPT # 1 and #14 REQUIRES THE COMPLETION OF PAGE 2 OF THIS FORM

E

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT Page 1 of 1

Received By (Print Name): Jeremy Sink Log-in Date: 3/23/01

Received By (Signature): [signature]

Case Number: GWDGAPS

Sample Delivery Group No: 82193

ETR Number: 82193

REMARKS:

1. Custody Seal ~~Present/Absent*~~ ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent*~~
4. Sample Information Sheets ~~Present/Absent*~~
5. Airbill ~~Airbill/Sticker~~ ~~Present/Absent*~~
6. Airbill No.: 48431899 2786 (2775)
7. Sample Tags ~~Present/Absent*~~ Sample Tag Numbers ~~Listed/Not Listed~~ on Chain-of-Custody
8. Sample Condition: ~~Intact/Broken*~~ ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No*~~
10. Date Received at Lab: 3/23/01
11. Time Received: 1000
12. Cooler Temperature: 2.3

Sample Transfer

Fraction: All

Area #: Level 4 fridge

By: JEF

On: 3/23/01

CORRESPONDING

CLIENT SAMPLE #	SAMPLE-TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0111T015	N/A	448318	Were air bubbles present
0111T016		448319	in any VOA vials? NO
0111T017		448320	Samples rec'd
0111T018		448321	intact w/custody
0111T019		448322	seals in place.
0111P019		448323	Sample ID
0111P020		448324	0111P021 time
0111P021		448325	not listed on
0111P022		448326	COC used
VSBLK19		448327	time from
			container for
			log in. Added
			HNO_3 to sample
			0111T018 for
			preservation

JEF 3/23/01

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 150955 Date Received: 3/20/01 Number of Coolers: 1
Client: Tetra Tech Project: Phase II GDGI

A. Preliminary Examination Phase
Date Opened: 3/20/01 By (print): James Broughfield (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES NO
How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
Type of ice: Wet Ice/Blue ice Temperature: Chilled

B. Login Phase
Date Logged In: 3/21/01 By (print): James Broughfield (sign) [signature]

1. Describe type of packing in cooler: Ziplocks
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO NA
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO NA
9. Was the client contacted concerning this sample delivery? ..... YES NO
If YES, give details below.
Who was called? _____ By whom? _____ Date: _____

Additional Comments: Did not receive 0111P007
received 0111P006 sampled 3/20/01 @ 820

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 151085 Date Received: 3/27/01 Number of Coolers: 0 in a bucket
Client: Tetra Tech Project: Phase II GW601

A. Preliminary Examination Phase
Date Opened: 3/27/01 By (print): James Brownfield (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Ice Temperature: Chilled

B. Login Phase
Date Logged In: 3/27/01 By (print): James Brownfield (sign) [signature]

1. Describe type of packing in cooler: Bubbles
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO N/A
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO N/A
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT Page 1 of 1

Received By (Print Name): Scott Lavigne Log-in Date: 3/27/01

Received By (Signature): Scott L

Case Number: GWDGAPS

Sample Delivery Group No: 82219

ETR Number: 82219

REMARKS:

1. Custody Seal ~~Present/Absent~~* ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent~~*
4. Sample Information Sheets ~~Present/Absent~~*
5. Airbill ~~Airbill/Sticker~~ ~~Present/Absent~~*
6. Airbill No.: 4843789 9 2856 11 2867 11 2878
7. Sample Tags ~~Present/Absent~~*
   Sample Tag Numbers ~~Listed/Not~~ Listed on Chain-of-Custody
8. Sample Condition: ~~Intact/Broken~~* ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No~~* See Remarks
10. Date Received at Lab: 3/27/01
11. Time Received: 0945
12. Cooler Temperature: 3°3°4°

Sample Transfer

Fraction: All

Area #: LVL4

By: Sam

On: 3/27/01

CORRESPONDING

CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0112P001	N/A	448490	Were air bubbles present
0112P002		448491	in any VOA vials? NO.
0112P003		448492	Samples received
0112P004		448493	with 1 Broken
0112P005		448494	Vial for TPH-P
0112T001		448495	for ID 0112T006
0112T002		448496	But There is
0112T003		448497	Sufficient volume
0112T004		448498	for analysis in
0112T005		448499	Remaining vials
0112T006		448500	
VSBLK20		448501	* Due to Breakage in Lab for ID 0112T004 for nitrate/Nitrite OK to pour off NP Poly and revial in a H2SO4 P. vials per KFY
	Sam	3/27/01	

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT Page 1 of 1

Received By (Print Name): Scott M Lavigne Log-in Date: 3/28/01

Received By (Signature): Scott L

Case Number: GWDGA05

Sample Delivery Group No: 82219

ETR Number: 82237

REMARKS:

1. Custody Seal ~~Present~~/Absent* ~~Intact~~/Broken
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present~~/Absent*
4. Sample Information Sheets ~~Present~~/Absent*
5. Airbill ~~Airbill~~/Sticker ~~Present~~/Absent*
6. Airbill No.: 4843189911 2889 2948 112337
7. Sample Tags ~~Present~~/Absent* Sample Tag Numbers ~~Listed~~/Not Listed on Chain-of-Custody
8. Sample Condition: ~~Intact~~/Broken* Leaking
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes~~/No*
10. Date Received at Lab: 3/28/01
11. Time Received: 0930
12. Cooler Temperature: 3° 4° 4°

Sample Transfer

Fraction: All

Area #: LVL4

By: SML

On: 3/28/01

CORRESPONDING			
CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0112D001	N/A	448615	Were air bubbles present
0112D002		448616	in any VOA vials? NO
0112T007		448617	Samples received
0112T008		448618	Intact, AS were
0112P006		448619	custody seals on
0112P007		448620	outside of coolers.
0112P008		448621	—
0112P009		448622	
		SML	3/28/01

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd

COOLER RECEIPT CHECKLIST

Login#: 151113 Date Received: 3/28/01 Number of Coolers: 1
Client: Tetra Tech Project: Phase II GDGI

A. Preliminary Examination Phase
Date Opened: 3/28/01 By (print): James Brownfield (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES (NO)
   How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO
6. Did you sign the custody papers in the appropriate place? ..... (YES) NO
7. Was project identifiable from custody papers? ..... (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... (YES) NO
   Type of ice: Wet Ice Temperature: Chilled

B. Login Phase
Date Logged In: 3/28/01 By (print): James Brownfield (sign) [signature]

1. Describe type of packing in cooler: Ziplocks
2. Did all bottles arrive unbroken? ..... (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... (YES) NO
4. Did bottle labels agree with custody papers? ..... (YES) NO
5. Were appropriate containers used for the tests indicated? ..... (YES) NO
6. Were correct preservatives added to samples? ..... YES NO N/A
7. Was sufficient amount of sample sent for tests indicated? ..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO N/A
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd

COOLER RECEIPT CHECKLIST

Login#: 151131 Date Received: 3/29/01 Number of Coolers: 1
Client: Tetra Tech Project: Phase II GDCF

A. **Preliminary Examination Phase**
Date Opened: 3/29/01 By (print): James Brantley (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Ice Temperature: Chilled

B. **Login Phase**
Date Logged In: 3/29/01 By (print): James Brantley (sign) [signature]

1. Describe type of packing in cooler: Zip lock
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO N/A
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO N/A
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Page 1 of 1

Lab Name: Severn Trent Laboratories - VT

Received By (Print Name): Jeremy Sink

Log-in Date: 3/29/01

Received By (Signature): Jeremy Sink

Case Number: GWDGAPS

Sample Delivery Group No: 82252

ETR Number: 82252

REMARKS:

1. Custody Seal ~~Present/Absent*~~ ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent*~~
4. Sample Information Sheets ~~Present/Absent*~~
5. Airbill ~~Airbill/Sticker~~ ~~Present/Absent*~~
6. Airbill No.: 4843/8993061(3006)(3040)
7. Sample Tags ~~Present/Absent*~~ Sample Tag Numbers ~~Listed/Not Listed~~ on Chain-of-Custody
8. Sample Condition: ~~Intact/Broken*~~ ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No*~~
10. Date Received at Lab: 3/29/01
11. Time Received: 0930
12. Cooler Temperature: 4,4,4°C

Sample Transfer

Fraction: All

Area #: Level 9 fridge

By: JES

On: 3/29/01

CORRESPONDING

CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0112T010	N/A	448714	Were air bubbles present
0112T011		448715	in any VOA vials? NO
0112T012		448716	Samples rec'd
0112T013		448717	intact w/custody
0112P013		448718	seals in place
0112P010		448719	2 vials not
0112P011		448720	marked for ID,
0112P012		448721	used unique
0112D004		448722	date and time
0112D005		448723	to match
0112D003		448724	
VS32K21		448725	

JES 3/29/01

* Contact Project Director

Reviewed by: _____

Date: _____

Logbook No.: _____

Logbook Page No.: _____

SM.0012A.111698

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Page 1 of 1

Lab Name: Severn Trent Laboratories - VT

Received By (Print Name): Jeremy Sink

Log-in Date: 3/30/01

Received By (Signature): Jeremy Sink

Case Number: GLVDGAPS

Sample Delivery Group No: 82252

ETR Number: 82274

REMARKS:

1. Custody Seal ~~Present/Absent*~~ ~~Intact/Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent*~~
4. Sample Information Sheets ~~Present/Absent*~~
5. Airbill ~~Airbill/Sticker~~ ~~Present/Absent*~~
6. Airbill No.: 4842318993110 (3131) (3109) (3120)
7. Sample Tags ~~Present/Absent*~~ Sample Tag Numbers ~~Listed/Not Listed~~ ~~on Chain-of-Custody~~
8. Sample Condition: ~~Intact/Broken*~~ ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No*~~
10. Date Received at Lab: 3/30/01
11. Time Received: 0930
12. Cooler Temperature: 2.3, 3.5°C

Sample Transfer

Fraction: All

Area #: West Offbridge

By: JES

On: 3/30/01

CORRESPONDING			
CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0112T017	N/A	448928	Were air bubbles present
0112D006		448929	in any VOA vials? NO
0112D007		448930	Samples rec'd
0112D008		448931	intact w/custody
0112P014		448932	seals in place
0112P015		448933	Sample 0112P015
0112P016		448934	marked for Al
0112P017		448935	should be Cd,
0112P018		448936	Ba only per
0112T014		448937	client. Sample
0112T015		448938	0112D007 not
0112T016	—	448939	preserved, added
			HNO3 per KEY

* Contact Project Director

Reviewed by: _____

Date: _____

Logbook No.: _____

Logbook Page No.: _____

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Page 1 of 1

Lab Name: Severn Trent Laboratories - VT

Log-in Date: 3/31/01

Received By (Print Name): Jeremy Sink

Received By (Signature): Jeremy Sink

Case Number: GNDGAPS

Sample Delivery Group No: 82289

ETR Number: 82289

REMARKS:

1. Custody Seal Present/~~Absent~~* Intact/~~Broken~~
2. Custody Seal Nos.: N/A
3. Chain-of-Custody Records ~~Present/Absent*~~
4. Sample Information Sheets ~~Present/Absent*~~
5. Airbill ~~Airbill/Sticker~~ ~~Present/Absent*~~
6. Airbill No.: 484318993234
7. Sample Tags ~~Present/Absent*~~ Sample Tag Numbers ~~Listed/Not Listed~~ on Chain-of-Custody
8. Sample Condition: ~~Intact/Broken*~~ ~~Leaking~~
9. Does information on the custody records, sample information sheets, sample tags and labels agree? ~~Yes/No*~~
10. Date Received at Lab: 3/31/01
11. Time Received: 1040
12. Cooler Temperature: 3°C

Sample Transfer

Fraction: All

Area #: Level 4 fridge

By: JEB

On: 3/31/01

CORRESPONDING

CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
Ø112TØ18	N/A	448977	Were air bubbles present
Ø112TØ19		448978	in any VOA vials? NO
Ø112TØ20		448979	Samples rec'd
Ø112TØ21		448980	intact w/custody
VSBLK22		448981	seals in place.
			Sample Ø112TØ19
			not preserved
			added HNO_3 per
			KFY.

JEB 3/31/01

* Contact Project Director

Reviewed by: _____

Date: _____

Logbook No.: _____

Logbook Page No.: _____

SM.0012A.111698

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd

COOLER RECEIPT CHECKLIST

Login#: 151505 Date Received: 4/17/01 Number of Coolers: 1
Client: Tetra Tech Project: Phase II GW GDF

A. Preliminary Examination Phase
Date Opened: 4/17/01 By (print): James Brownfield (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Ice Temperature: Chilled

B. Login Phase
Date Logged In: 4/17/01 By (print): James Brownfield (sign) [signature]

1. Describe type of packing in cooler: Ziplocks
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO N/A
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO N/A
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT

Page 1 of 1

Received By (Print Name): Jeremy Sink

Log-in Date: 4/18/01

Received By (Signature): Jeremy Sink

Case Number: GWDGAP5

Sample Delivery Group No: 82498

ETR Number: 82498

REMARKS:

1. **Custody Seal** ~~Present/Absent~~*
   ~~Intact/Broken~~
2. **Custody Seal Nos.:** N/A
3. **Chain-of-Custody Records** ~~Present/Absent~~*
4. **Sample Information Sheets** ~~Present/Absent~~*
5. **Airbill** ~~Airbill/Sticker~~
   ~~Present/Absent~~*
6. **Airbill No.:** 4154318993680(3090)
7. **Sample Tags** ~~Present/Absent~~*
   Sample Tag Numbers ~~Listed/Not Listed~~
   ~~on Chain-of-Custody~~
8. **Sample Condition:** ~~Intact/Broken~~*
   ~~Leaking~~
9. **Does information on the custody records, sample information sheets, sample tags and labels agree?**
   ~~Yes/No~~*
10. **Date Received at Lab:** 4/18/01
11. **Time Received:** 0930
12. **Cooler Temperature:** 4.5°C

Sample Transfer

Fraction: All

Area #: Cooler 4/fridge

By: JES

On: 4/18/01

CORRESPONDING			
CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0115D001	N/A	450393	Were air bubbles present
0115D002		450394	in any VOA vials? NO
0115D003		450395	Samples rec'd
0115D004		450396	intact w/custody
0115D005		450397	seals in place
0115D006		450398	Vials rec'd
0115D007		450399	w/out Sample ID
VS34K23	—	450400	used unique
			sample date and
			time to verify.
			The following
			samples required
			additional HNO_3:
			0115D002, 0115D003,
			0115D004.
			JES 4/18/01

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT

Page 1 of 1

Received By (Print Name): Glen Corcoran

Log-in Date: 4-24-01

Received By (Signature): Glen Corcoran

Case Number: GWDGAPS

Sample Delivery Group No: ~~0423~~ 04

ETR Number:

REMARKS:

1. **Custody Seal** (Present)/~~Absent*~~ (Intact)/~~Broken~~
2. **Custody Seal Nos.:** NA
3. **Chain-of-Custody Records** (Present)/~~Absent*~~
4. **Sample Information Sheets** ~~Present~~/(Absent*)
5. **Airbill** ~~Airbill Sticker~~ (Present)/~~Absent*~~
6. **Airbill No.:** 4843 1899 3819
7. **Sample Tags** ~~Present~~/(Absent*)
   Sample Tag Numbers ~~Listed~~/~~Not Listed on Chain-of-Custody~~
8. **Sample Condition:** (Intact)/~~Broken*~~ ~~Leaking~~
9. **Does information on the custody records, sample information sheets, sample tags and labels agree?** (Yes)/~~No*~~
10. **Date Received at Lab:** 04-24-01
11. **Time Received:** 0930
12. **Cooler Temperature:** 3°/2°

Sample Transfer

Fraction: All

Area #: Level 4

By: G. Corcoran

On: 4-24-01

CORRESPONDING			
CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0116P001	NA	450979	Were air bubbles present
0116P002		450980	in any VOA vials?
0116P003		450981	
0116P004		450982	Samples arrived
0116T001		450983	intact with custody
0116T002		450984	seals in place.
0116T003		450985	
VHBK24		450988	
			GX 4-24-01

* Contact Project Director

Reviewed by: [signature]

Logbook No.:

Date: 04/27/01

Logbook Page No.:

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number . of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 151640 Date Received: 4/24/01 Number of Coolers: 1
Client: Tetra Tech Project: _____

A. Preliminary Examination Phase
Date Opened: 4/24/01 By (print): James Brownfield (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES (NO)
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler?..... YES (NO)
   How many and where? _____ Seal date: _____ Seal name: _____
3. ~~Were custody seals unbroken and intact at the date and time of arrival?~~..... ~~YES NO~~
4. Were custody papers dry and intact when received?..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)?..... (YES) NO
6. Did you sign the custody papers in the appropriate place?..... (YES) NO
7. Was project identifiable from custody papers?..... (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... (YES) NO
   Type of ice: Wet Ice Temperature: Chilled

B. Login Phase
Date Logged In: 4/24/01 By (print): James Brownfield (sign) [signature]

1. Describe type of packing in cooler: Ziplocks
2. Did all bottles arrive unbroken?..... (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)?... (YES) NO
4. Did bottle labels agree with custody papers?..... (YES) NO
5. Were appropriate containers used for the tests indicated?..... (YES) NO
6. Were correct preservatives added to samples?..... YES NO N/A
7. Was sufficient amount of sample sent for tests indicated?..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below..... YES NO N/A
9. Was the client contacted concerning this sample delivery?..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

_____

SEVERN TRENT LABORATORIES LOG-IN SHEET - Form DC-1

Lab Name: Severn Trent Laboratories - VT

Page 1 of 1

Received By (Print Name): Glen Corcoran

Log-in Date: 4 25 01

Received By (Signature): Glen Corcoran

Case Number: GWDGAPS

Sample Delivery Group No: 82586

ETR Number: 82601

REMARKS:

1. **Custody Seal** Present/~~Absent*~~ Intact/~~Broken~~
2. **Custody Seal Nos.:** NA
3. **Chain-of-Custody Records** Present/~~Absent*~~
4. **Sample Information Sheets** ~~Present~~/Absent*
5. **Airbill** ~~Airbill~~/Sticker Present/~~Absent*~~
6. **Airbill No.:** 4843 1899 3896
7. **Sample Tags** ~~Present~~/Absent* **Sample Tag Numbers** ~~Listed~~/Not Listed ~~on Chain-of-Custody~~
8. **Sample Condition:** Intact/~~Broken*~~ ~~Leaking~~
9. **Does information on the custody records, sample information sheets, sample tags and labels agree?** Yes/~~No*~~
10. **Date Received at Lab:** 04.25.01
11. **Time Received:** 0930
12. **Cooler Temperature:** 4°/2°

Sample Transfer

Fraction: All

Area #: Level 4

By: G. Corcoran

On: 4.25.01

CORRESPONDING

CLIENT SAMPLE #	SAMPLE TAG #	ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
0116T004	NA	451085	Were air bubbles present
0116T005		451086	in any VOA vials?
0116T006		451087	
0116P005		451088	Samples arrived intact
0116P006		451089	with custody seals
0116P007		451090	in place.
			Sample "0116T006"
			noted to test for VOA
			sent unfilled vials,
			can't analyze, no
			volume.
			GJC 4.25.01

* Contact Project Director

Reviewed by: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

Paragon Analytics, Inc. -- Fort Collins, Colorado

CONDITION OF SAMPLE UPON RECEIPT FORM

CLIENT: TTEMI PROJECT MANAGER: KC

WORKORDER NO: 0104193 INITIALS: YL DATE: 4-25-01

1. Does this project require any special handling in addition to standard Paragon procedures?		Yes	No
IS PRE-SCREENING REQUIRED? (radiochemistry, DOE, etc.)		Yes	No
2. Are custody seals provided on the cooler? If so, how many 3	N/A	Yes	No
3. Are the custody seals on sample containers intact?	N/A	Yes	No
4. Is there a Chain-of-Custody (COC) or other representative documents, letters, or shipping memos?		Yes	No
5. Is the COC complete? Relinquished: Yes ✓ No___ Analyses Requested: Yes ✓ No___	N/A	Yes	No
6. Is the COC in agreement with the samples received? No. of Samples: Yes ✓ No___ Sample ID's: Yes ✓ No___ Matrix: Yes ✓ No___ No. of Containers: Yes ✓ No___	N/A	Yes	No
7. Were COC (if applicable) and sample labels legible?		Yes	No
8. Were airbills present and/or removable?		Yes	No
9. Are all aqueous samples requiring chemical preservation preserved correctly (excluding volatile organics)?	N/A	Yes	No
Are all aqueous **non-preserved** samples at the correct pH?		Yes	No
10. Is there enough sample for requested analyses? If so, were samples placed in the proper containers?		Yes	No
11. Are all samples within holding times for the requested analyses?		Yes	No
12. Were all sample containers received intact? (not broken or leaking, etc.)		Yes	No
13. Are samples requiring no headspace (volatiles, reactive cyanide/sulfide, radon), headspace free? **Size of bubble: ___ < green pea; ___ > green pea** (List sample IDs and affected containers on Page 2)	N/A	Yes	No
14. Is Paragon to dispose of samples?		Yes	No
15. Were the sample(s) shipped on ice?	N/A	Yes	No
16. Were cooler temperatures measured at 2 - 6 °C ?	N/A	Yes	No
17. Were all samples cooled that should have been cooled?	NA	Yes	No

Cooler #'s 1

Temperature 6°C °C

Project Manager Signature / Date: KX/4-26-01

A NO RESPONSE TO ANY QUESTION (EXCEPT # 1 and #14 REQUIRES THE COMPLETION OF PAGE 2 OF THIS FORM

APPENDIX C

HISTORICAL WATER LEVELS AND GROUNDWATER ELEVATION CONTOUR MAPS

(Note: groundwater elevation contour maps included in CD-ROM version only; for hard copy maps, please refer to Figures 2 through 6 in "Revised Information Package for the Phase I Groundwater Data Gaps Investigation" dated January 8, 2001)

FIGURES

Figure

C-1 GROUNDWATER ELEVATION MAP, A-AQUIFER, FEBRUARY 1994

C-2 GROUNDWATER ELEVATION MAP, A-AQUIFER, MAY 1995

C-3 GROUNDWATER ELEVATION MAP, A-AQUIFER, NOVEMBER 1995

C-4 GROUNDWATER ELEVATION MAP, A-AQUIFER, APRIL 1996

C-5 A-AQUIFER GROUNDWATER ELEVATIONS, JULY 12, 2000

TABLES

Table

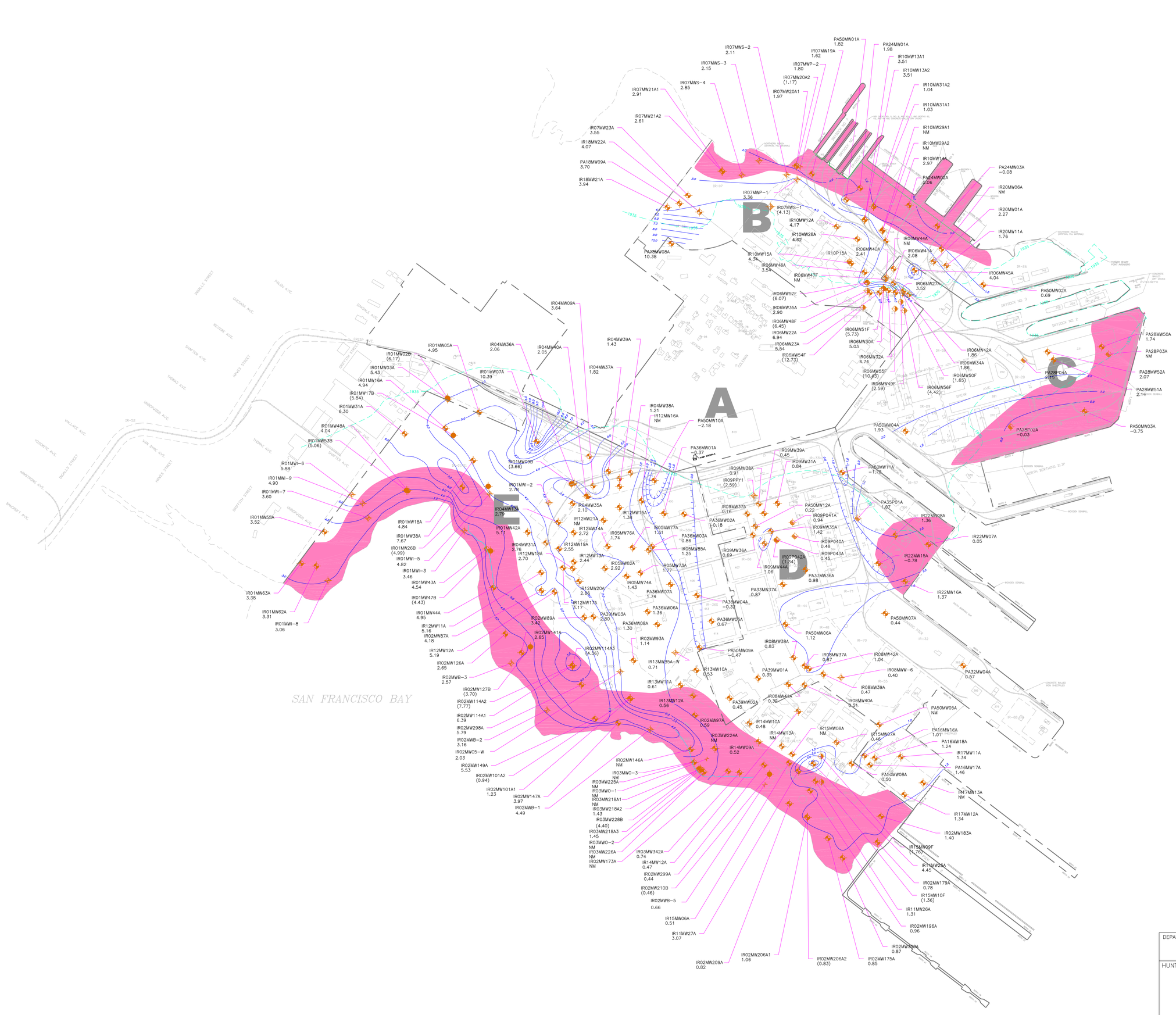
C-1 BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS, FEBRUARY 18, 1994

C-2 BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS, MAY 22, 1995

C-3 BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS, NOVEMBER 2, 1995

C-4 BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS, APRIL 11, 1996

C-5 BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS, JULY 12, 2000


A
B
C
D
E
SAN FRANCISCO BAY
IR07MWS-2 2.11
IR07MWS-3 2.15
IR07MWS-4 2.85
IR07MW21A1 2.91
IR07MW21A2 2.61
IR07MW23A 3.55
IR18MW22A 4.07
PA18MW09A 3.70
IR18MW21A 3.94
PA50MW01A 1.82
IR07MW19A 1.62
IR07MWP-2 1.80
IR07MW20A2 (1.17)
IR07MW20A1 1.97
PA24MW01A 1.98
IR10MW13A1 3.51
IR10MW13A2 3.51
IR10MW31A2 1.04
IR10MW31A1 1.03
IR10MW29A1 NM
IR10MW29A2 NM
IR10MW14A 2.97
PA24MW03A -0.08
PA24MW02A 0.06
IR20MW06A NM
IR20MW01A 2.27
IR20MW11A 1.76
IR07MWP-1 3.36
IR07MWS-1 (4.13)
IR10MW12A 4.17
IR10MW28A 4.62
PA18MW08A 10.38
IR10MW15A 4.34
IR06MW46A 3.54
IR10P15A
IR06MW40A 2.41
IR06MW44A NM
IR06MW41A 2.08
IR06MW45A 4.04
IR06MW47F NM
IR06MW27A 3.52
PA50MW02A 0.69
IR06MW52F (6.07)
IR06MW35A 2.90
IR06MW48F (6.45)
IR06MW22A 6.94
IR06MW23A 5.54
IR06MW54F (12.73)
IR06MW51F (5.73)
IR06MW30A 5.03
IR06MW32A 4.74
IR06MW55F (10.43)
IR06MW49F (2.59)
IR06MW42A 1.86
IR06MW34A 1.86
IR06MW50F (1.65)
IR06MW56F (4.42)
PA28MW50A 1.74
PA28P03A NM
PA28MW52A 2.07
PA28MW51A 2.14
PA28P04A 2.15
PA28P02A -0.03
PA50MW03A -0.75
PA50MW04A 1.93
IR04MW09A 3.64
IR04MW36A 2.06
IR04MW40A 2.05
IR04MW39A 1.43
IR04MW37A 1.82
IR01MW05A 4.95
IR01MW02B (6.17)
IR01MW03A 5.43
IR01MW07A 10.39
IR01MW16A 4.94
IR01MW17B (5.84)
IR01MW31A 6.30
IR01MW48A 4.04
IR01MW53B (5.06)
IR01MW09B (3.66)
IR01MWI-6 5.88
IR01MWI-9 4.90
IR01MWI-7 3.60
IR01MW55A 3.52
IR01MWI-2 2.78
IR04MW13A 2.79
IR01MW42A 5.11
IR01MW18A 4.84
IR01MW38A 7.67
IR01MW26B (4.99)
IR01MWI-5 4.82
IR01MWI-3 3.46
IR01MW43A 4.54
IR01MW47B (4.43)
IR01MW44A 4.95
IR12MW11A 5.16
IR02MW87A 4.18
IR12MW12A 5.19
IR02MW126A 2.65
IR02MWB-3 2.57
IR02MW127B (3.70)
IR02MW114A2 (7.77)
IR02MW114A1 6.39
IR02MW298A 5.79
IR02MWB-2 3.16
IR02MWC5-W 2.03
IR02MW149A 5.53
IR02MW101A2 (0.94)
IR02MW101A1 1.23
IR02MW147A 3.97
IR02MWB-1 4.49
IR01MW63A 3.38
IR01MW62A 3.31
IR01MWI-8 3.06
IR04MW35A 2.10
IR12MW21A NM
IR12MW14A 2.72
IR12MW19A 2.55
IR12MW13A 2.44
IR12MW18A 2.70
IR04MW31A 2.76
IR05MW76A 1.74
IR05MW82A 2.92
IR05MW74A 1.43
IR12MW20A 2.86
IR12MW17A 3.17
IR02MW89A 3.42
IR02MW141A 2.65
IR02MW114A3 (4.36)
IR04MW38A 1.21
IR12MW16A NM
PA50MW10A -2.18
PA36MW01A -0.37
IR09MW39A 0.45
IR09MW31A 0.84
IR09MW38A 0.91
IR09PPY1 (2.59)
PA50MW11A 1.78
PA35P01A 1.67
IR12MW15A 1.38
IR05MW77A 1.31
PA36MW03A 0.86
IR05MW85A 1.25
IR05MW73A 1.77
PA36MW07A 1.74
PA36MW06A 1.36
PA36MW08A 1.30
PA39MW03A 2.80
IR02MW93A 1.14
IR13MW95A-W 0.71
IR13MW11A 0.61
IR13MW12A 0.56
IR02MW97A 0.59
IR03MW224A NM
IR14MW09A 0.52
IR02MW146A NM
IR03MWO-3 NM
IR03MW225A NM
IR03MWO-1 NM
IR03MW218A1 NM
IR03MW218A2 1.43
IR03MW228B (4.40)
IR03MW218A3 1.45
IR03MWO-2 NM
IR03MW226A NM
IR02MW173A NM
IR03MW342A 0.74
IR14MW12A 0.47
IR02MW299A 0.44
IR02MW210B (0.46)
IR02MWB-5 0.66
IR15MW06A 0.51
IR11MW27A 3.07
IR02MW209A 0.82
IR02MW206A1 1.06
IR02MW206A2 (0.83)
IR02MW175A 0.85
IR02MW200A 0.87
IR09MW37A 0.16
PA50MW12A 0.22
IR09P041A 0.94
IR09MW35A 1.42
IR09P040A 0.48
IR09P043A 0.45
IR09MW36A 0.69
IR09P042A (1.34)
IR09MW44A 1.06
PA33MW36A 0.98
PA36MW02A -0.18
PA33MW37A 0.87
PA36MW04A -0.32
PA36MW05A 0.67
PA50MW06A 1.12
IR08MW38A 0.83
PA50MW09A -0.47
IR13MW10A 0.53
PA39MW01A 0.35
IR08MW37A 0.67
IR08MW42A 1.04
IR08MW-6 0.40
IR08MW39A 0.47
IR08MW40A 0.51
PA39MW02A 0.45
IR08MW41A 0.32
IR14MW10A 0.48
IR14MW13A NM
IR15MW08A NM
IR15MW07A 0.46
PA50MW05A NM
PA16MW16A 1.01
PA16MW18A 1.24
IR17MW11A 1.34
PA16MW17A 1.46
PA50MW08A 0.50
IR17MW13A NM
IR17MW12A 1.34
IR02MW183A 1.40
IR15MW09F (1.76)
IR11MW25A 4.45
IR02MW179A 0.78
IR15MW10F (1.36)
IR11MW26A 1.31
IR02MW196A 0.96
IR22MW08A 1.36
IR22MW07A 0.05
IR22MW15A -0.78
IR22MW16A 1.37
PA50MW07A 0.44
PA32MW04A 0.57
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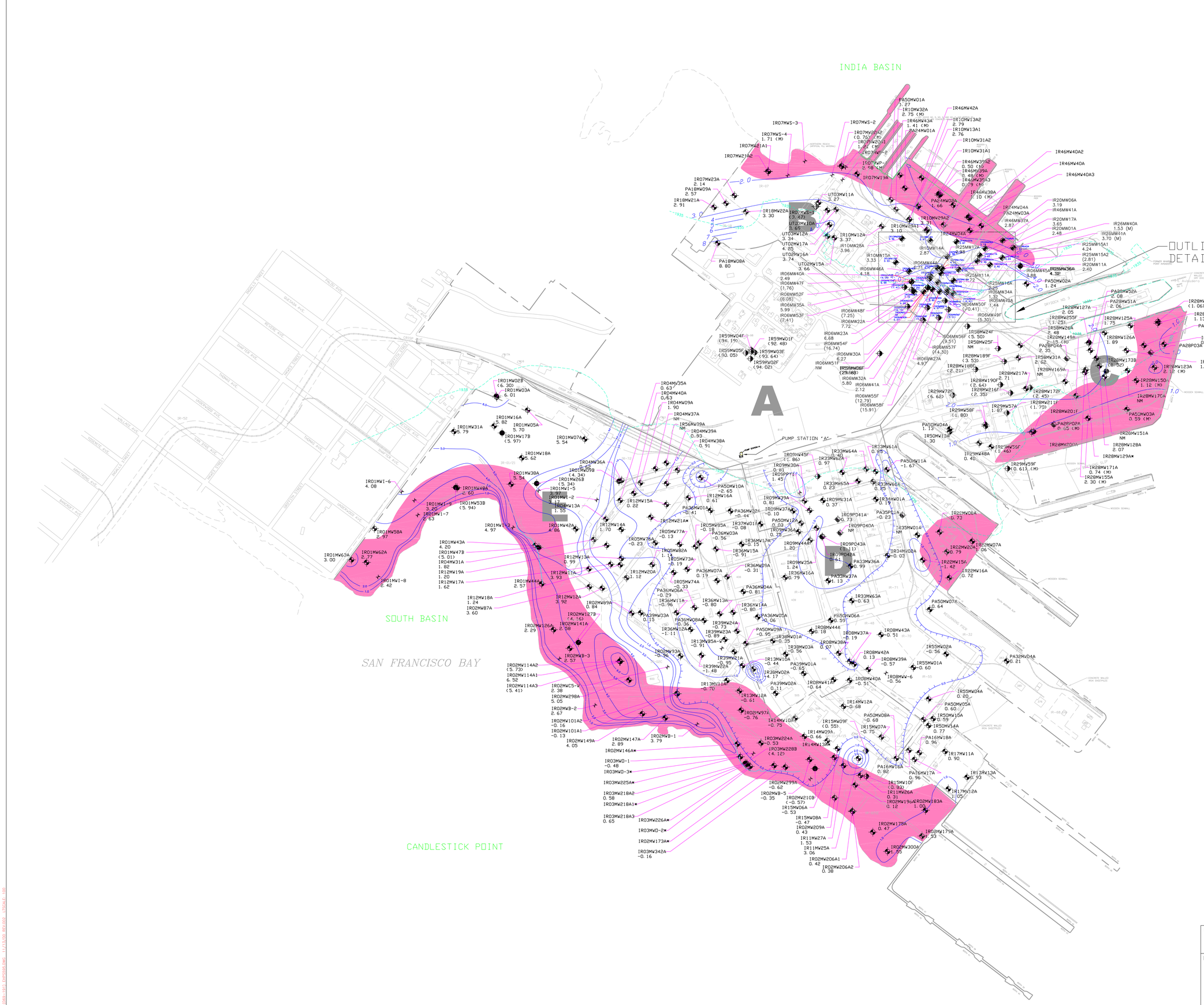
IR-110
IR-111



EXPLANATION

- A–AQUIFER MONITORING WELL
- B–AQUIFER MONITORING WELL
- BEDROCK WATER–BEARING ZONE MONITORING WELL
- A–AQUIFER PIEZOMETER
- PRE–RI A–AQUIFER MONITORING WELL
- PRE–RI BEDROCK MONITORING WELL
- TIDAL INFLUENCE ZONE
- APPROXIMATE SHEEL PILE WALL LOCATION
- 1935 — APPROXIMATE 1935 SHORELINE LOCATION
- PARCEL BONDARY
- IR SITE BOUNDARY
- 512 — LOCATION OF EXISTING BUILDING
- RAILROAD TRACK
- 3.0 — WATER–LEVEL ELEVATION CONTOUR (FEET ABOVE MSL) (CONTOUR INTERAVAL = 1 FOOT)
- -3.0 — WATER–LEVEL ELEVATION CONTOUR (FEET BELOW MSL)
- 0.85 — GROUNDWATER ELEVATION (FEET ABOVE MSL) MEASURED MAY 1996
- (1.11) — GROUNDWATER ELEVATION NOT USED IN CONTOURING (FEET ABOVE MSL)

NOTES:

1) ALL WATER LEVELS WERE MEASURED MAY 22, 1995

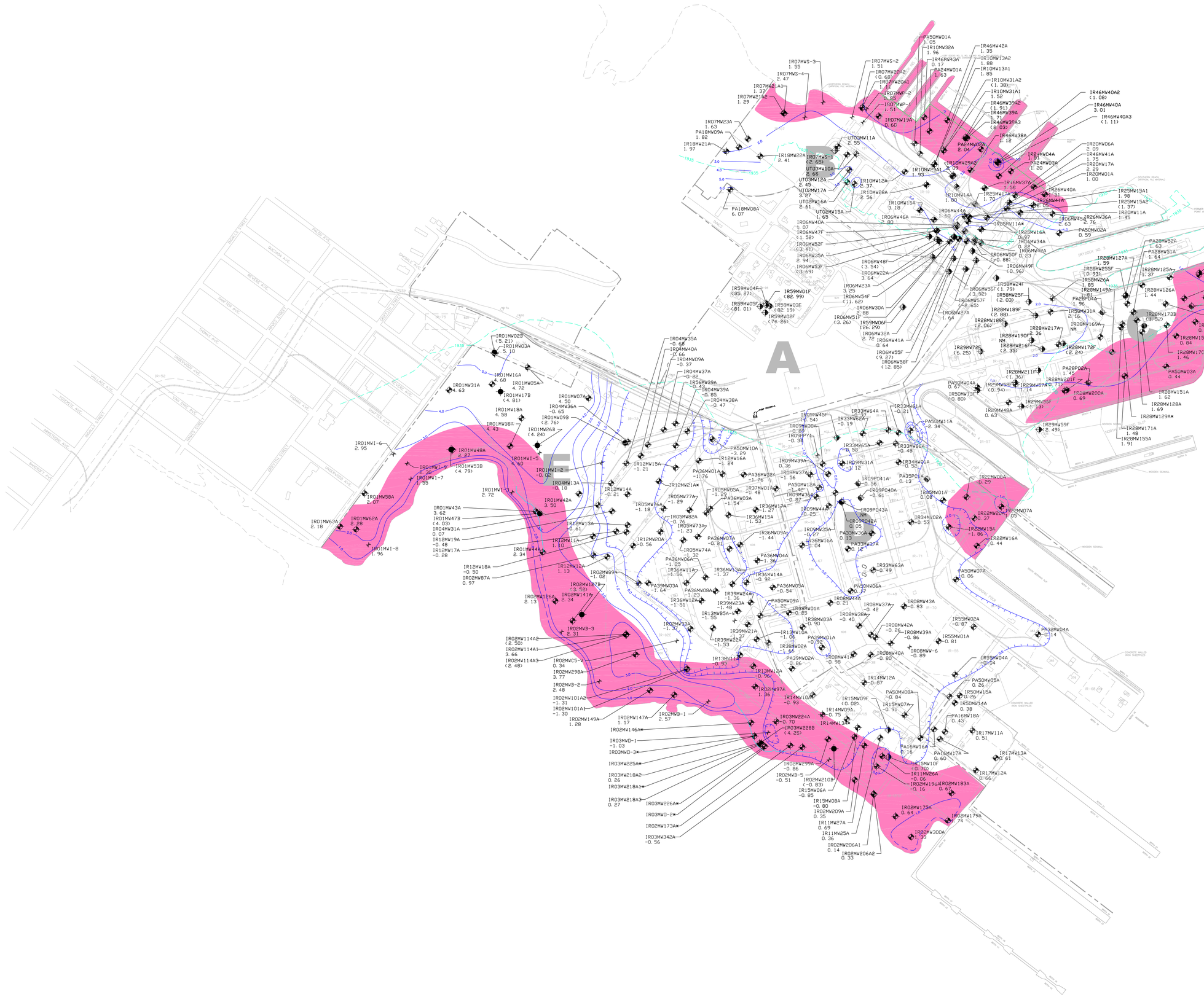
2) BECAUSE FACILITY–WIDE GROUNDWATER LEVELS WERE TAKEN OVER A 7.5–HOUR PERIOD, GROUNDWATER COTOURS MAY BE AFFECTED IN AREAS WITH TIDAL INFLUENCE. TIDAL FLUCTUATION OBSERVED DURING DATA COLLECTION PERIOD RANGED FROM 0.6 TO 5.2 FEET ABOVE MSL

300 0 300 600
SCALE IN FEET

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
SOUTHWEST DIVISION
SAN BRUNO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE C-2
GROUNDWATER ELEVATION MAP
A-AQUIFER, MAY 1995



NOTES:

1) ALL WATER LEVELS WERE MEASURED NOVEMBER 2, 1995

2) BECAUSE FACILITY–WIDE GROUNDWATER LEVELS WERE TAKEN OVER A 7–HOUR PERIOD, GROUNDWATER COTOURS MAY BE AFFECTED IN AREAS WITH TIDAL INFLUENCE. TIDAL FLUCTUATION OBSERVED DURING DATA COLLECTION PERIOD RANGED FROM 1.7 TO 6.9 FEET ABOVE MSL

3) MEAN WATER–LEVEL ELEVATIONS WERE CALCULATED USING HOURLY MEASUREMENTS TAKEN OVER A 72–HOUR PERIOD AND METHODOLOGY DESCRIBED BY SERFES (1991)

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION

SAN BRUNO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE C-3

GROUNDWATER ELEVATION MAP

A-AQUIFER, NOVEMBER 1995

EXPLANATION

- A–AQUIFER MONITORING WELL
- B–AQUIFER MONITORING WELL
- BEDROCK WATER–BEARING ZONE MONITORING WELL
- A–AQUIFER PIEZOMETER
- TIDAL INFLUENCE ZONE
- APPROXIMATE SHEET PILE WALL LOCATION
- 1935 APPROXIMATE 1935 SHORELINE LOCATION
- PARCEL BONDARY
- IR SITE BOUNDARY
- 512 LOCATION OF EXISTING BUILDING
- RAILROAD TRACK
- 3.0 WATER–LEVEL ELEVATION CONTOUR (FEET ABOVE MSL) (CONTOUR INTERAVAL = 1 FOOT)
- -3.0 WATER–LEVEL ELEVATION CONTOUR (FEET BELOW MSL)
- 4.60 GROUNDWATER ELEVATION (FEET ABOVE MSL) MEASURED APRIL 1996
- (4.24) GROUNDWATER ELEVATION NOT USED IN CONTOURING (FEET ABOVE MSL)

NOTES:

1) ALL WATER LEVELS WERE MEASURED APRIL 11, 1996
2) BECAUSE FACILITY–WIDE GROUNDWATER LEVELS WERE TAKEN OVER A 10–HOUR PERIOD, GROUNDWATER CONTOURS MAY BE AFFECTED IN AREAS WITH TIDAL INFLUENCE
3) GROUNDWATER LEVELS WERE NOT MEASURED FOR THE MONITORING WELLS AT PARCEL B

300 0 300 600
SCALE IN FEET

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

SOUTHWEST DIVISION
SAN BRUNO, CALIFORNIA

HUNTERS POINT SHIPYARD — SAN FRANCISCO, CALIFORNIA

FIGURE C-4

GROUNDWATER ELEVATION MAP
A-AQUIFER, APRIL 1996

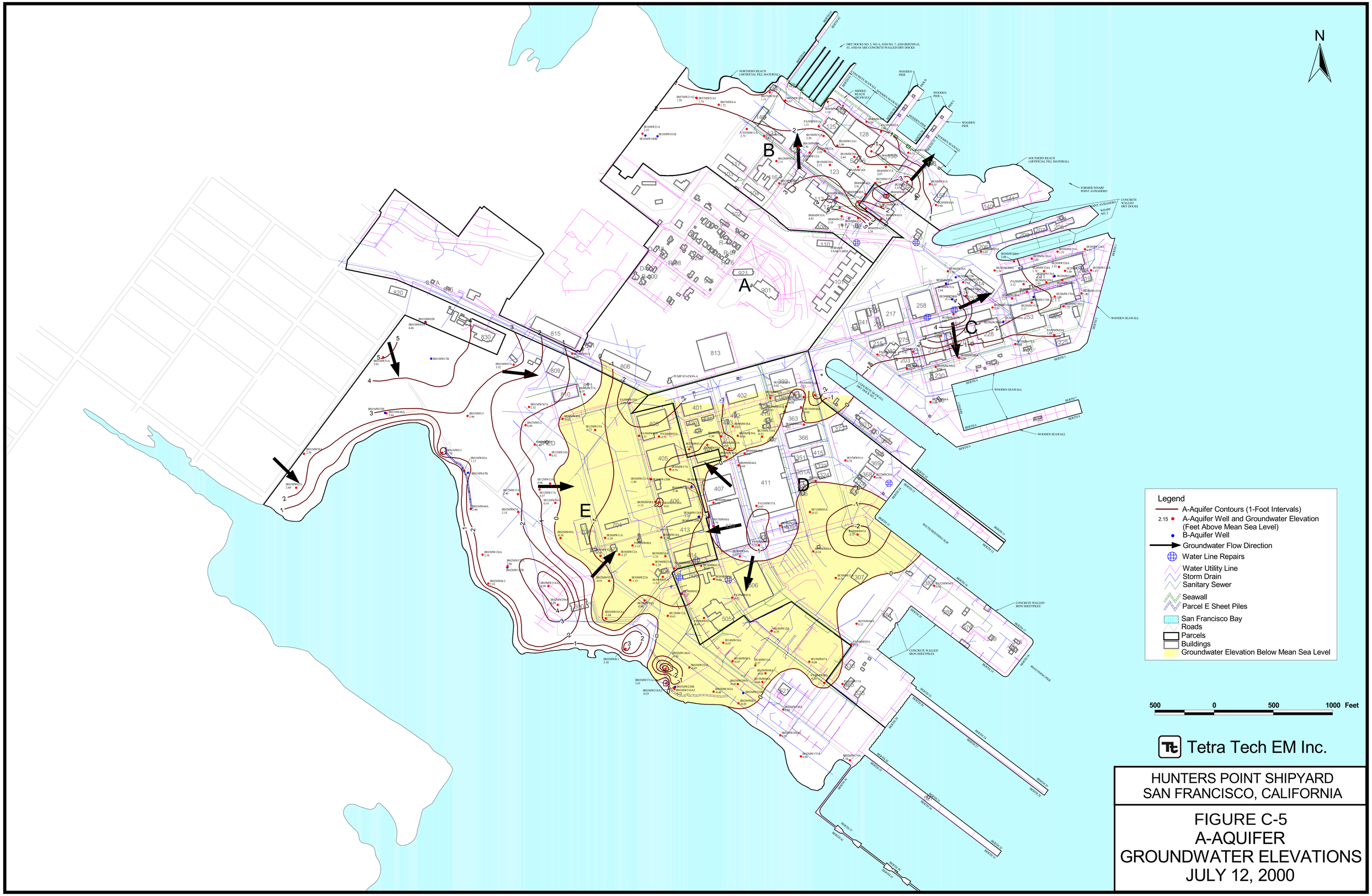

N
A
B
C
D
E
Legend
A-Aquifer Contours (1-Foot Intervals)
2.15 A-Aquifer Well and Groundwater Elevation (Feet Above Mean Sea Level)
B-Aquifer Well
Groundwater Flow Direction
Water Line Repairs
Water Utility Line
Storm Drain
Sanitary Sewer
Seawall
Parcel E Sheet Piles
San Francisco Bay
Roads
Parcels
Buildings
Groundwater Elevation Below Mean Sea Level
500 0 500 1000 Feet
Tetra Tech EM Inc.
HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA
FIGURE C-5
A-AQUIFER
GROUNDWATER ELEVATIONS
JULY 12, 2000

TABLE C-1

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
FEBRUARY 18, 1994
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
B	IR-06	IR06MW22AD	10.08	3.14	6.94
		IR06MW23A	9.77	4.23	5.54
		IR06MW27A	11.75	8.23	3.52
		IR06MW30A	9.87	4.84	5.03
		IR06MW32AD	10.02	5.28	4.74
		IR06MW35A	9.77	6.87	2.90
		IR06MW46A	9.49	5.95	3.54
		IR06MW48F	10.03	3.58	6.45
		IR06MW49F	11.29	8.70	2.59
		IR06MW50F	10.40	8.75	1.65
		IR06MW51F	10.19	4.46	5.73
		IR06MW52F	9.84	3.77	6.07
		IR06MW54F	35.02	22.29	12.73
		IR06MW55F	32.34	21.91	10.43
		IR06MW56F	25.04	20.62	4.42
	IR-07	IR07MW19A	9.60	7.98	1.62
		IR07MW20A1	9.65	7.68	1.97
		IR07MW20A2	9.27	8.10	1.17
		IR07MW21A1	14.65	11.74	2.91
		IR07MW21A2	14.42	11.81	2.61
		IR07MW23A	15.76	12.21	3.55
		IR07MWP-1	9.87	6.51	3.36
		IR07MWP-2	9.77	7.97	1.80
		IR07MWS-1	10.25	6.12	4.13
		IR07MWS-2D	9.13	7.02	2.11
		IR07MWS-3	9.75	7.60	2.15
		IR07MWS-4D	13.22	10.37	2.85
	IR-10	IR10MW12A	9.07	4.90	4.17
		IR10MW13A1	9.90	6.39	3.51
		IR10MW13A2	9.96	6.45	3.51
		IR10MW14A	10.24	7.27	2.97
		IR10MW15A	9.70	5.36	4.34
		IR10MW28A	13.65	9.03	4.62
		IR10MW31A1D	9.86	8.83	1.03
		IR10MW31A2	9.96	8.92	1.04
	IR-18	IR18MW21AD	17.11	13.17	3.94
		IR18MW22A	18.11	14.04	4.07
		PA18MW08A	24.67	14.29	10.38
		PA18MW09A	17.66	13.96	3.70
	IR-20	IR20MW01A	8.31	6.04	2.27
		IR20MW11A	10.52	8.76	1.76

TABLE C-1

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
FEBRUARY 18, 1994
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
B	IR-24	PA24MW01A	10.12	8.14	1.98
		PA24MW02A	9.43	9.37	0.06
		PA24MW03AD	9.97	10.05	-0.08
	IR-50	PA50MW01A	9.14	7.32	1.82
		PA50MW02A	7.80	7.11	0.69
C	IR-25	IR06MW34A	10.38	8.52	1.86
		IR06MW40A	10.10	7.69	2.41
		IR06MW41A	9.77	7.69	2.08
		IR06MW42A	11.88	10.02	1.86
		IR06MW45A	9.93	5.89	4.04
	IR-28	PA28MW50A	8.60	6.86	1.74
		PA28MW51A	8.39	6.25	2.14
		PA28MW52A	8.58	6.51	2.07
		PA28P02A	7.73	7.76	-0.03
		PA28P04A	8.37	6.22	2.15
	IR-50	PA50MW03A	6.85	7.60	-0.75
		PA50MW04A	7.49	5.56	1.93
D	IR-08	IR08MW37A	4.28	3.41	0.87
		IR08MW38A	6.91	6.08	0.83
		IR08MW39A	5.05	4.58	0.47
		IR08MW40A	5.41	4.90	0.51
		IR08MW41A	6.34	6.02	0.32
		IR08MW42A	4.15	3.11	1.04
		IR08MWW-6	4.88	4.48	0.40
	IR-09	IR09MW31A	8.49	7.65	0.84
		IR09MW35A	8.72	7.30	1.42
		IR09MW36A	8.85	8.16	0.69
		IR09MW37A	9.04	8.88	0.16
		IR09MW38A	9.00	8.09	0.91
		IR09MW39A	8.16	7.71	0.45
		IR09MW44A	8.78	7.72	1.06
		IR09P040A	9.05	8.57	0.48
		IR09P041A	8.86	7.92	0.94
		IR09P042A	8.91	7.57	1.34
		IR09P043A	8.96	8.51	0.45
		IR09PPY1	8.78	6.19	2.59
	IR-16	PA16MW16A	8.58	7.57	1.01
		PA16MW17A	8.51	7.05	1.46
		PA16MW18A	8.36	7.12	1.24
	IR-17	IR17MW11A	7.85	6.51	1.34
		IR17MW12A	7.72	6.38	1.34
	IR-22	IR22MW07A	7.61	7.56	0.05
		IR22MW08A	8.82	7.46	1.36

TABLE C-1

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
FEBRUARY 18, 1994
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
D	IR-22 (cont.)	IR22MW15A	8.93	9.71	-0.78
		IR22MW16A	7.89	6.52	1.37
	IR-32	PA32MW04A	6.96	6.39	0.57
	IR-33	PA33MW36A	9.24	8.26	0.98
		PA33MW37A	9.27	8.40	0.87
	IR-35	PA35P01A	8.14	7.07	1.07
	IR-39	PA39MW01A	4.61	4.26	0.35
		PA39MW02A	6.40	5.95	0.45
	IR-50	PA50MW06A	7.59	6.47	1.12
		PA50MW07A	8.71	8.27	0.44
		PA50MW08A	7.47	6.97	0.50
		PA50MW09A	5.10	5.57	-0.47
		PA50MW11A	7.59	9.37	-1.78
		PA50MW12A	8.56	8.34	0.22
E	IR-01	IR01MW02B	20.68	14.51	6.17
		IR01MW03A	20.30	14.87	5.43
		IR01MW05A	21.41	16.46	4.95
		IR01MW07A	19.00	8.61	10.39
		IR01MW09B	10.01	6.35	3.66
		IR01MW16A	22.83	17.89	4.94
		IR01MW17B	23.90	18.06	5.84
		IR01MW18A	19.96	15.12	4.84
		IR01MW26B	17.73	12.74	4.99
		IR01MW31A	13.77	7.47	6.30
		IR01MW38A	12.53	4.86	7.67
		IR01MW42A	12.93	7.82	5.11
		IR01MW43A	12.22	7.68	4.54
		IR01MW44A	9.12	4.17	4.95
		IR01MW47B	12.28	7.85	4.43
		IR01MW48A	10.94	6.90	4.04
		IR01MW53B	9.98	4.92	5.06
		IR01MW58A	9.12	5.60	3.52
		IR01MW62A	8.09	4.78	3.31
		IR01MW63A	8.00	4.62	3.38
		IR01MWI-2	13.21	10.43	2.78
		IR01MWI-3	13.78	10.32	3.46
		IR01MWI-5	15.62	10.80	4.82
		IR01MWI-6	9.55	3.67	5.88
		IR01MWI-7	5.81	2.21	3.60
		IR01MWI-8	6.64	3.58	3.06
		IR01MWI-9	8.00	3.10	4.90
	IR-02	IR02MW87A	8.46	4.28	4.18
		IR02MW89A	10.08	6.66	3.42

TABLE C-1

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
FEBRUARY 18, 1994
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
E	IR-02 (cont.)	IR02MW93A	7.28	6.14	1.14
		IR02MW97A	8.95	8.36	0.59
		IR02MW101A1	11.19	9.96	1.23
		IR02MW101A2	11.22	10.28	0.94
		IR02MW114A1	13.69	7.30	6.39
		IR02MW114A2	12.43	4.66	7.77
		IR02MW114A3	13.29	8.93	4.36
		IR02MW126A	11.49	8.84	2.65
		IR02MW127B	14.63	10.93	3.70
		IR02MW141A	15.55	12.90	2.65
		IR02MW147A	8.36	4.39	3.97
		IR02MW149A	8.72	3.19	5.53
		IR02MW175A	7.74	6.89	0.85
		IR02MW179A	9.82	9.04	0.78
		IR02MW183A	10.40	9.00	1.40
		IR02MW196A	8.01	7.05	0.96
		IR02MW206A1	7.42	6.36	1.06
		IR02MW206A2	7.41	6.58	0.83
		IR02MW209A	6.34	5.52	0.82
		IR02MW210B	9.16	8.70	0.46
		IR02MW298A	11.95	6.16	5.79
		IR02MW299A	10.54	10.10	0.44
		IR02MW300A	9.00	8.13	0.87
		IR02MWB-1	8.64	4.15	4.49
		IR02MWB-2	11.88	8.72	3.16
		IR02MWB-3	12.94	10.37	2.57
		IR02MWB-5	4.70	4.04	0.66
		IR02MWC5-W	7.49	5.46	2.03
	IR-03	IR03MW218A2	9.21	7.78	1.43
		IR03MW218A3	8.85	7.40	1.45
		IR03MW228B	8.74	4.34	4.40
		IR03MW342A	8.46	7.72	0.74
	IR-04	IR04MW09A	9.27	5.63	3.64
		IR04MW13A	12.54	9.75	2.79
		IR04MW31A	12.53	9.77	2.76
		IR04MW35A	11.11	9.01	2.10
		IR04MW36A	9.78	7.72	2.06
		IR04MW37A	9.49	7.67	1.82
		IR04MW38A	9.76	8.55	1.21
		IR04MW39A	7.86	6.43	1.43
		IR04MW40A	7.10	5.05	2.05
	IR-05	IR05MW73A	6.59	4.82	1.77
		IR05MW74A	7.40	5.97	1.43

TABLE C-1

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
FEBRUARY 18, 1994
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
E	IR-05 (cont.)	IR05MW76A	4.97	3.23	1.74
		IR05MW77A	10.43	9.12	1.31
		IR05MW82A	12.00	9.08	2.92
		IR05MW85A	9.80	8.55	1.25
	IR-11	IR11MW25A	11.40	6.95	4.45
		IR11MW26A	9.29	7.98	1.31
		IR11MW27A	9.84	6.77	3.07
	IR-12	IR12MW11A	11.67	6.51	5.16
		IR12MW12A	8.40	3.21	5.19
		IR12MW13A	12.51	10.07	2.44
		IR12MW14A	9.21	6.49	2.72
		IR12MW15A	7.26	5.88	1.38
		IR12MW17A	12.48	9.31	3.17
		IR12MW18A	12.35	9.65	2.70
		IR12MW19A	13.02	10.47	2.55
		IR12MW20A	12.28	9.62	2.66
	IR-13	IR13MW10A	3.56	3.03	0.53
		IR13MW11A	4.84	4.23	0.61
		IR13MW12A	4.20	3.64	0.56
		IR13MWB5A-W	5.93	5.22	0.71
	IR-14	IR14MW09A	9.96	9.44	0.52
		IR14MW10A	8.88	8.40	0.48
		IR14MW12A	8.54	8.07	0.47
	IR-15	IR15MW06A	11.08	10.57	0.51
		IR15MW07A	11.12	10.66	0.46
		IR15MW09F	11.48	9.72	1.76
		IR15MW10F	10.95	9.59	1.36
	IR-36	PA36MW01A	7.64	8.01	-0.37
		PA36MW02A	8.01	8.19	-0.18
		PA36MW03A	9.26	8.40	0.86
		PA36MW04A	7.32	7.64	-0.32
		PA36MW05A	7.40	6.73	0.67
		PA36MW06A	8.94	7.58	1.36
		PA36MW07A	6.80	5.06	1.74
		PA36MW08A	7.69	6.39	1.30
	IR-39	PA39MW03A	10.46	7.66	2.80
	IR-50	PA50MW10A	8.44	10.62	-2.18

Notes:

IR Installation Restoration
MSL Mean sea level
TOC Top of casing

TABLE C-2

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
MAY 22, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
A	IR-59	IR59MW01F	121.36	28.88	92.48
		IR59MW02F	124.34	30.32	94.02
		IR59MW03F	124.14	30.50	93.64
		IR59MW04F	120.37	26.18	94.19
		IR59MW05F	120.75	30.70	90.05
		IR59MW06F	31.88	2.20	29.68
B	IR-24	IR24MW04A	11.16	9.92	1.24
	IR-06	IR06MW22AD	10.08	2.36	7.72
		IR06MW23A	9.77	3.09	6.68
		IR06MW27A	11.75	6.78	4.97
		IR06MW30A	9.87	3.60	6.27
		IR06MW32AD	10.02	4.22	5.80
		IR06MW35A	9.77	3.78	5.99
		IR06MW46A	9.49	5.31	4.18
		IR06MW47F	9.68	7.92	1.76
		IR06MW48F	10.03	2.78	7.25
		IR06MW49F	11.29	5.99	5.30
		IR06MW50F	10.40	10.81	-0.41
		IR06MW52F	9.84	3.76	6.08
		IR06MW53F	10.51	3.10	7.41
		IR06MW54F	35.02	18.28	16.74
		IR06MW55F	32.34	19.55	12.79
		IR06MW56F	25.04	15.53	9.51
		IR06MW57F	28.02	13.72	14.30
		IR06MW58F	25.91	10.00	15.91
	IR-07	IR07MW19A	9.60	8.65	0.95
		IR07MW20A1	9.65	8.44	1.21
		IR07MW20A2	9.27	8.51	0.76
		IR07MW21A1	14.65	12.84	1.81
		IR07MW21A2	14.42	12.75	1.67
		IR07MW23A	15.76	13.62	2.14
		IR07MWP-1	9.87	6.89	2.98
		IR07MWP-2	9.77	7.05	2.72
		IR07MWS-1	10.25	6.78	3.47
		IR07MWS-2D	9.13	7.25	1.88
		IR07MWS-3	9.75	7.66	2.09
		IR07MWS-4D	13.22	11.51	1.71
	IR-10	IR10MW12A	9.07	5.70	3.37
		IR10MW13A1	9.90	7.14	2.76
		IR10MW13A2	9.96	7.17	2.79
		IR10MW14A	10.24	7.37	2.87
		IR10MW15A	9.70	6.37	3.33
		IR10MW28A	13.65	9.69	3.96

TABLE C-2

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
MAY 22, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
B	IR-10 (cont.)	IR10MW29A1	9.25	6.15	3.10
		IR10MW29A2	9.04	5.73	3.31
		IR10MW31A1D	9.86	8.39	1.47
		IR10MW31A2	9.96	8.54	1.42
		IR10MW32A	9.81	7.06	2.75
	IR-18	IR18MW21AD	17.11	14.20	2.91
		IR18MW22A	18.11	14.81	3.30
		PA18MW08A	24.67	15.87	8.80
		PA18MW09A	17.66	15.09	2.57
	IR-20	IR20MW01A	8.31	5.83	2.48
		IR20MW06A	9.85	6.66	3.19
		IR20MW11A	10.52	8.12	2.40
		IR20MW17A	10.51	6.86	3.65
	IR-23	UT03MW10A	10.60	6.91	3.69
		UT03MW11A	9.93	6.66	3.27
		UT03MW12A	10.02	6.68	3.34
	IR-24	IR24MW04	11.16	9.92	1.24
		PA24MW01A	10.12	8.34	1.78
		PA24MW02A	9.43	7.77	1.66
		PA24MW03AD	9.97	9.22	0.75
	IR-26	IR26MW36A	8.28	3.96	4.32
		IR26MW40A	9.89	8.36	1.53
		IR26MW41A	10.12	6.42	3.70
	IR-46	IR46MW37A	9.56	6.69	2.87
		IR46MW38A	9.82	8.72	1.10
		IR46MW39A	9.73	9.25	0.48
		IR46MW39A2	9.32	8.82	0.50
		IR46MW39A3	9.47	8.68	0.79
		IR46MW40A	9.39	6.87	2.52
		IR46MW40A2	9.33	7.78	1.55
		IR46MW40A3	9.28	7.84	1.44
		IR46MW41A	9.54	7.03	2.51
		IR46MW42A	9.53	8.16	1.37
		IR46MW43A	9.03	7.62	1.41
	IR-50	PA50MW01A	9.14	7.87	1.27
		PA50MW02A	7.80	6.56	1.24
	IR-62	UT02MW15A	12.57	8.91	3.66
		UT02MW16A	9.91	6.17	3.74
		UT02MW17A	10.12	5.87	4.25
C	IR-06	IR06MW34A	10.38	9.06	1.32
		IR06MW40A	10.10	7.61	2.49
		IR06MW41A	9.77	7.65	2.12
		IR06MW42A	11.88	10.44	1.44

TABLE C-2

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
MAY 22, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
C	IR-06 (cont.)	IR06MW44A	9.68	3.97	5.71
		IR06MW45A	9.93	6.05	3.88
	IR-25	IR25MW11A	10.45	8.73	1.72
		IR25MW15A1	7.84	3.60	4.24
		IR25MW15A2	7.38	4.57	2.81
		IR25MW16A	11.08	8.83	2.25
		IR25MW17A	10.28	7.30	2.98
	IR-28	IR28MW122A	7.47	6.57	0.90
		IR28MW123A	7.95	5.83	2.12
		IR28MW124A	7.08	5.95	1.13
		IR28MW125A	7.86	6.11	1.75
		IR28MW126A	7.72	5.83	1.89
		IR28MW127A	7.60	5.55	2.05
		IR28MW128A	8.11	6.04	2.07
		IR28MW129A*	8.83	20.43	-11.60
		IR28MW136A	7.49	5.87	1.62
		IR28MW140F	7.56	6.50	1.06
		IR28MW149A	8.93	6.78	2.15
		IR28MW150A	8.14	7.02	1.12
		IR28MW155A	8.60	6.30	2.30
		IR28MW171A	6.69	5.95	0.74
		IR28MW172F	8.59	6.14	2.45
		IR28MW173B	8.07	6.55	1.52
		IR28MW188F	9.64	7.43	2.21
		IR28MW189F	8.87	5.34	3.53
		IR28MW190F	10.06	7.42	2.64
		IR28MW200A	8.31	7.09	1.22
		IR28MW201F	8.03	8.71	-0.68
		IR28MW211F	8.57	6.87	1.70
		IR28MW216F	8.38	6.03	2.35
		IR28MW217A	8.98	6.27	2.71
		IR28MW255F	7.76	6.51	1.25
		IR58MW31A	8.93	6.31	2.62
		PA28MW50A	8.60	7.16	1.44
		PA28MW51A	8.39	6.33	2.06
		PA28MW52A	8.58	6.50	2.08
		PA28P02A	7.73	7.08	0.65
		PA28P03A	7.71	6.40	1.31
		PA28P04A	8.37	6.02	2.35
	IR-29	IR29MW48A	8.00	7.60	0.40
		IR29MW56F	8.27	6.81	1.46
		IR29MW57A	7.52	5.65	1.87
		IR29MW58F	8.65	6.85	1.80

TABLE C-2

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
MAY 22, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
C	IR-29 (cont.)	IR29MW59F	8.21	7.60	0.61
		IR29MW72F	9.27	2.65	6.62
	IR-50	IR50MW13F	7.80	6.50	1.30
		PA50MW03A	6.85	6.26	0.59
		PA50MW04A	7.49	6.36	1.13
	IR-58	IR58MW24F	15.48	9.98	5.50
		IR58MW26A	8.25	5.77	2.48
D	IR-08	IR08MW37A	4.28	4.47	-0.19
		IR08MW38A	6.91	6.84	0.07
		IR08MW39A	5.05	5.62	-0.57
		IR08MW40A	5.41	5.92	-0.51
		IR08MW41A	6.34	6.98	-0.64
		IR08MW42A	4.15	4.02	0.13
		IR08MW43A	8.82	9.33	-0.51
		IR08MW44A	5.91	5.73	0.18
		IR08MWW-6	4.88	5.44	-0.56
	IR-09	IR09MW31A	8.49	8.12	0.37
		IR09MW35A	8.72	7.48	1.24
		IR09MW36A	8.85	8.10	0.75
		IR09MW37A	9.04	9.14	-0.10
		IR09MW38A	9.00	8.19	0.81
		IR09MW39A	8.16	7.35	0.81
		IR09MW44A	8.78	7.58	1.20
		IR09MW45F	8.46	6.60	1.86
		IR09P041A	8.86	8.13	0.73
		IR09P042A	8.91	8.30	0.61
		IR09P043A	8.96	7.85	1.11
		IR09PPY1	8.78	7.33	1.45
	IR-16	PA16MW16A	8.58	7.76	0.82
		PA16MW17A	8.51	7.55	0.96
		PA16MW18A	8.36	7.40	0.96
	IR-17	IR17MW11A	7.85	6.95	0.90
		IR17MW12A	7.72	6.67	1.05
		IR17MW13A	6.98	6.05	0.93
	IR-22	IR22MW07A	7.61	6.55	1.06
		IR22MW08A	8.82	8.09	0.73
		IR22MW15A	8.93	10.35	-1.42
		IR22MW16A	7.89	7.17	0.72
		IR22MW20A	7.79	7.00	0.79
	IR-32	PA32MW04A	6.96	6.75	0.21
	IR-33	IR33MW61A	12.23	11.38	0.85
		IR33MW62A	8.60	7.63	0.97
		IR33MW63A	7.83	8.46	-0.63

TABLE C-2

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
MAY 22, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
D	IR-33 (cont.)	IR33MW64A	9.36	8.96	0.40
		IR33MW65A	8.28	8.05	0.23
		IR33MW66A	8.85	8.60	0.25
		PA33MW36A	9.24	8.25	0.99
		PA33MW37A	9.27	8.14	1.13
	IR-34	IR34MW01A	8.58	8.39	0.19
		IR34MW02A	8.11	8.14	-0.03
	IR-35	PA35P01A	8.14	8.37	-0.23
	IR-36	IR36MW16A	8.21	7.42	0.79
	IR-37	IR37MW01A	7.67	7.75	-0.08
	IR-38	IR38MW01A	4.26	4.61	-0.35
		IR38MW02A	2.90	7.07	-4.17
		IR38MW03A	3.98	4.54	-0.56
	IR-39	PA39MW01A	4.61	5.26	-0.65
		PA39MW02A	6.40	6.29	0.11
	IR-50	IR50MW14A	6.86	6.09	0.77
		IR50MW15A	6.89	6.30	0.59
		PA50MW05A	6.13	5.53	0.60
		PA50MW06A	7.59	7.00	0.59
		PA50MW07A	8.71	8.07	0.64
		PA50MW08A	7.47	8.15	-0.68
		PA50MW09A	5.10	6.05	-0.95
		PA50MW11A	7.59	9.26	-1.67
		PA50MW12A	8.56	8.53	0.03
	IR-55	IR55MW01A	5.14	5.74	-0.60
		IR55MW02A	7.24	7.80	-0.56
		IR55MW04A	4.87	4.67	0.20
E	IR-01	IR01MW02B	20.68	14.38	6.30
		IR01MW03A	20.30	14.29	6.01
		IR01MW05A	21.41	15.71	5.70
		IR01MW07A	19.00	13.46	5.54
		IR01MW09B	10.01	5.67	4.34
		IR01MW16A	22.83	17.01	5.82
		IR01MW17B	23.90	17.93	5.97
		IR01MW18A	19.96	14.34	5.62
		IR01MW26B	17.73	12.39	5.34
		IR01MW31A	13.77	7.98	5.79
		IR01MW38A	12.53	6.99	5.54
		IR01MW42A	12.93	8.07	4.86
		IR01MW43A	12.22	8.02	4.20
		IR01MW44A	9.12	6.55	2.57
		IR01MW47B	12.28	7.27	5.01
		IR01MW48A	10.94	8.34	2.60

TABLE C-2

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
MAY 22, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
E	IR-01 (cont.)	IR01MW53B	9.98	4.04	5.94
		IR01MW58A	9.12	6.15	2.97
		IR01MW62A	8.09	5.32	2.77
		IR01MW63A	8.00	5.00	3.00
		IR01MWI-2	13.21	10.04	3.17
		IR01MWI-3	13.78	8.81	4.97
		IR01MWI-5	15.62	11.65	3.97
		IR01MWI-6	9.55	5.47	4.08
		IR01MWI-7	5.81	3.18	2.63
		IR01MWI-8	6.64	4.22	2.42
		IR01MWI-9	8.00	4.80	3.20
	IR-02	IR02MW87A	8.46	4.86	3.60
		IR02MW89A	10.08	9.24	0.84
		IR02MW93A	7.28	8.21	-0.93
		IR02MW93A	7.28	8.24	-0.96
		IR02MW97A	8.95	9.71	-0.76
		IR02MW101A1	11.19	11.32	-0.13
		IR02MW101A2	11.22	11.38	-0.16
		IR02MW114A1	13.69	7.17	6.52
		IR02MW114A2	12.43	6.70	5.73
		IR02MW114A3	13.29	7.88	5.41
		IR02MW126A	11.49	9.20	2.29
		IR02MW127B	14.63	10.47	4.16
		IR02MW141A	15.55	12.97	2.58
		IR02MW146A*	9.13	12.80	-3.67
		IR02MW147A	8.36	5.47	2.89
		IR02MW149A	8.72	4.67	4.05
		IR02MW173A*	9.51	13.88	-4.37
		IR02MW175A	7.69	7.22	0.47
		IR02MW179A	9.82	8.29	1.53
		IR02MW183A	10.40	9.40	1.00
		IR02MW196A	8.01	7.89	0.12
		IR02MW206A1	7.42	7.00	0.42
		IR02MW206A2	7.41	7.03	0.38
		IR02MW209A	6.34	5.91	0.43
		IR02MW210B	9.16	9.73	-0.57
		IR02MW298A	11.95	6.90	5.05
		IR02MW299A	10.54	11.16	-0.62
		IR02MW300A	9.00	7.45	1.55
		IR02MWB-1	8.64	4.85	3.79
		IR02MWB-2	11.88	9.21	2.67
		IR02MWB-3	12.94	10.37	2.57
		IR02MWB-5	4.70	5.05	-0.35
		IR02MWC5-W	7.49	5.11	2.38

TABLE C-2

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
MAY 22, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
E	IR-03	IR03MW218A1*	8.67	7.38	1.29
		IR03MW218A2	9.21	8.63	0.58
		IR03MW218A3	8.85	8.20	0.65
		IR03MW224A	9.56	10.09	-0.53
		IR03MW225A*	9.08	13.22	-4.14
		IR03MW226A*	9.30	9.49	-0.19
		IR03MW228B	8.74	4.62	4.12
		IR03MW342A	8.46	8.62	-0.16
		IR03MWO-1	7.64	8.12	-0.48
		IR03MWO-2*	9.14	10.88	-1.74
		IR03MWO-3*	8.58	12.23	-3.65
	IR-04	IR04MW09A	9.27	7.37	1.90
		IR04MW13A	12.54	10.99	1.55
		IR04MW31A	12.53	10.71	1.82
		IR04MW35A	11.11	10.48	0.63
		IR04MW36A	9.78	9.16	0.62
		IR04MW38A	9.76	8.85	0.91
		IR04MW39A	7.86	6.93	0.93
		IR04MW40A	7.10	6.47	0.63
	IR-05	IR05MW73A	6.59	6.78	-0.19
		IR05MW74A	7.40	7.73	-0.33
		IR05MW76A	4.97	5.20	-0.23
		IR05MW77A	10.43	10.56	-0.13
		IR05MW82A	12.00	10.86	1.14
		IR05MW85A	9.80	9.98	-0.18
	IR-11	IR11MW25A	11.40	8.34	3.06
		IR11MW26A	9.29	8.98	0.31
		IR11MW27A	9.84	8.31	1.53
	IR-12	IR12MW11A	11.67	7.74	3.93
		IR12MW12A	8.40	4.48	3.92
		IR12MW13A	12.51	11.52	0.99
		IR12MW14A	9.21	7.51	1.70
		IR12MW15A	7.26	7.04	0.22
		IR12MW16A	8.57	7.96	0.61
		IR12MW17A	12.48	10.86	1.62
		IR12MW18A	12.35	11.11	1.24
		IR12MW19A	13.02	11.82	1.20
		IR12MW20A	12.28	11.16	1.12
		IR12MW21A*	10.42	11.07	-0.65
	IR-13	IR13MW10A	3.56	4.00	-0.44
		IR13MW11A	4.84	5.54	-0.70
		IR13MW12A	4.20	4.81	-0.61
		IR13MWB5A-W	5.93	6.84	-0.91

TABLE C-2

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
MAY 22, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
E	IR-14	IR14MW09A	9.96	10.62	-0.66
		IR14MW10A	8.88	9.63	-0.75
		IR14MW12A	8.54	9.22	-0.68
		IR14MW13A*	9.74	11.25	-1.51
	IR-15	IR15MW06A	11.08	11.61	-0.53
		IR15MW07A	11.12	11.87	-0.75
		IR15MW08A	11.75	12.22	-0.47
		IR15MW09F	11.48	10.93	0.55
		IR15MW10F	10.95	10.12	0.83
	IR-36	IR36MW09A	4.90	5.21	-0.31
		IR36MW11A	8.51	9.47	-0.96
		IR36MW12A	7.13	8.24	-1.11
		IR36MW13A	8.96	9.76	-0.80
		IR36MW14A	5.42	6.22	-0.80
		IR36MW15A	7.04	7.95	-0.91
		IR36MW17A	8.25	8.40	-0.15
		PA36MW01A	7.64	8.05	-0.41
		PA36MW02A	8.01	8.45	-0.44
		PA36MW03A	9.26	9.82	-0.56
		PA36MW04A	7.32	8.13	-0.81
		PA36MW05A	7.40	7.46	-0.06
		PA36MW06A	8.94	9.23	-0.29
		PA36MW07A	6.80	6.61	0.19
		PA36MW08A	7.69	8.05	-0.36
	IR-39	IR39MW21A	7.92	8.87	-0.95
		IR39MW22A	6.28	7.76	-1.48
		IR39MW23A	5.54	6.43	-0.89
		IR39MW24A	4.80	5.53	-0.73
		PA39MW03A	10.46	10.31	0.15
	IR-50	PA50MW10A	8.44	11.09	-2.65

Notes:

* Well contains free floating product; water level elevation not shown on Figure C-2.

IR Installation Restoration

MSL Mean sea level

TOC Top of casing

TABLE C-3

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
NOVEMBER 2, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
A	IR-59	IR59MW01F	121.36	38.37	82.99
		IR59MW02F	124.34	50.08	74.26
		IR59MW03F	124.14	41.95	82.19
		IR59MW04F	120.37	35.10	85.27
		IR59MW05F	120.75	39.74	81.01
		IR59MW06F	31.88	5.59	26.29
B	IR-06	IR06MW22AD	10.08	6.44	3.64
		IR06MW23A	9.77	6.52	3.25
		IR06MW27A	11.75	10.11	1.64
		IR06MW30A	9.87	6.99	2.88
		IR06MW32AD	10.02	7.30	2.72
		IR06MW35A	9.77	6.83	2.94
		IR06MW46A	9.49	6.69	2.80
		IR06MW47F	9.68	8.16	1.52
		IR06MW48F	10.03	6.49	3.54
		IR06MW49F	11.29	10.33	0.96
		IR06MW50F	10.40	11.28	-0.88
		IR06MW51F	10.19	6.93	3.26
		IR06MW52F	9.84	6.43	3.41
		IR06MW53F	10.51	6.82	3.69
		IR06MW54F	35.02	23.40	11.62
		IR06MW55F	32.34	23.07	9.27
		IR06MW56F	25.04	21.12	3.92
		IR06MW57F	28.02	30.67	-2.65
		IR06MW58F	25.91	13.06	12.85
	IR-07	IR07MW19A	9.60	9.00	0.60
		IR07MW20A1	9.65	8.54	1.11
		IR07MW20A2	9.27	8.59	0.68
		IR07MW21A1	14.65	13.28	1.37
		IR07MW21A2	14.42	13.13	1.29
		IR07MW23A	15.76	14.13	1.63
		IR07MWP-1	9.87	8.36	1.51
		IR07MWP-2	9.77	8.92	0.85
		IR07MWS-1	10.25	7.60	2.65
		IR07MWS-2D	9.13	7.62	1.51
		IR07MWS-3	9.75	8.20	1.55
		IR07MWS-4D	13.22	10.75	2.47
	IR-10	IR10MW12A	9.07	6.70	2.37
		IR10MW13A1	9.90	8.05	1.85
		IR10MW13A2	9.96	8.08	1.88
		IR10MW14A	10.24	8.44	1.80
		IR10MW15A	9.70	6.52	3.18
		IR10MW28A	13.65	11.09	2.56

TABLE C-3

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
NOVEMBER 2, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
B	IR-10 (cont.)	IR10MW29A1	9.25	7.32	1.93
		IR10MW29A2	9.04	6.95	2.09
		IR10MW31A1D	9.86	8.34	1.52
		IR10MW31A2	9.96	8.58	1.38
		IR10MW32A	9.81	7.85	1.96
	IR-18	IR18MW21AD	17.11	15.14	1.97
		IR18MW22A	18.11	15.70	2.41
		PA18MW08A	24.67	18.60	6.07
		PA18MW09A	17.66	15.84	1.82
	IR-20	IR20MW01A	8.31	7.31	1.00
		IR20MW06A	9.85	7.76	2.09
		IR20MW11A	10.52	9.07	1.45
		IR20MW17A	10.51	8.22	2.29
		UT03MW10A	10.60	7.92	2.68
		UT03MW11A	9.93	7.38	2.55
		UT03MW12A	10.02	7.57	2.45
	IR-24	IR24MW04A	11.16	9.35	1.81
		PA24MW01A	10.12	8.49	1.63
		PA24MW02A	9.43	7.39	2.04
		PA24MW03AD	9.97	8.77	1.20
	IR-26	IR26MW36A	8.28	5.52	2.76
		IR26MW40A	9.89	8.38	1.51
		IR26MW41A	10.12	8.07	2.05
	IR-46	IR46MW37A	9.56	7.98	1.58
		IR46MW38A	9.82	8.70	1.12
		IR46MW39A	9.73	8.02	1.71
		IR46MW39A2	9.32	7.41	1.91
		IR46MW39A3	9.47	7.44	2.03
		IR46MW40A	9.39	6.38	3.01
		IR46MW40A2	9.33	8.25	1.08
		IR46MW40A3	9.28	8.17	1.11
		IR46MW41A	9.54	7.79	1.75
		IR46MW42A	9.53	8.18	1.35
		IR46MW43A	9.03	8.86	0.17
	IR-50	PA50MW01A	9.14	8.09	1.05
		PA50MW02A	7.80	7.21	0.59
	IR-62	UT02MW15A	12.57	10.92	1.65
		UT02MW16A	9.91	7.30	2.61
		UT02MW17A	10.12	6.85	3.27
C	IR-25	IR06MW34A	10.38	10.16	0.22
		IR06MW40A	10.10	9.03	1.07
		IR06MW41A	9.77	9.13	0.64
		IR06MW42A	11.88	11.65	0.23

TABLE C-3

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
NOVEMBER 2, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
C	IR-25 (cont.)	IR06MW44A	9.68	8.08	1.60
		IR06MW45A	9.93	7.30	2.63
		IR25MW11A*	10.45	9.51	0.94
		IR25MW15A1	7.84	5.86	1.98
		IR25MW15A2	7.38	6.01	1.37
		IR25MW16A	11.08	10.11	0.97
		IR25MW17A	10.28	8.58	1.70
	IR-28	IR28MW122A	7.47	5.91	1.56
		IR28MW123A	7.95	7.55	0.40
		IR28MW124A	7.08	6.21	0.87
		IR28MW125A	7.86	6.49	1.37
		IR28MW126A	7.72	6.28	1.44
		IR28MW127A	7.60	6.01	1.59
		IR28MW128A	8.11	6.42	1.69
		IR28MW129A*	8.83	7.25	1.58
		IR28MW136A	7.49	6.22	1.27
		IR28MW140F	7.56	6.48	1.08
		IR28MW149A	8.93	7.12	1.81
		IR28MW150A	8.14	7.30	0.84
		IR28MW151A	8.50	6.88	1.62
		IR28MW155A	8.60	6.69	1.91
		IR28MW170A	8.67	7.21	1.46
		IR28MW171A	6.69	5.21	1.48
		IR28MW172F	8.59	6.35	2.24
		IR28MW173B	8.07	6.55	1.52
		IR28MW188F	9.64	7.58	2.06
		IR28MW189F	8.87	5.99	2.88
		IR28MW200A	8.31	7.62	0.69
		IR28MW201F	8.03	7.32	0.71
		IR28MW211F	8.57	7.21	1.36
		IR28MW216F	8.38	6.03	2.35
		IR28MW217A	8.98	6.62	2.36
		IR28MW255F	7.76	6.83	0.93
		IR58MW31A	8.93	6.77	2.16
		PA28MW50A	8.60	7.55	1.05
		PA28MW51A	8.39	6.75	1.64
		PA28MW52A	8.58	6.95	1.63
		PA28P02A	7.73	6.28	1.45
		PA28P03A	7.71	6.78	0.93
		PA28P04A	8.37	6.41	1.96
	IR-29	IR29MW48A	8.00	7.37	0.63
		IR29MW56F	8.27	7.14	1.13
		IR29MW57A	7.52	6.38	1.14

TABLE C-3

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
NOVEMBER 2, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
C	IR-29 (cont.)	IR29MW58F	8.65	7.71	0.94
		IR29MW59F	8.21	5.72	2.49
		IR29MW72F	9.27	3.02	6.25
	IR-50	IR50MW13F	7.80	7.00	0.80
		PA50MW03A	6.85	6.41	0.44
		PA50MW04A	7.49	6.82	0.67
	IR-58	IR58MW24F	15.48	13.69	1.79
		IR58MW25F	9.82	7.79	2.03
		IR58MW26A	8.25	6.40	1.85
D	IR-08	IR08MW37A	4.28	4.70	-0.42
		IR08MW38A	6.91	7.31	-0.40
		IR08MW39A	5.05	5.91	-0.86
		IR08MW40A	5.41	6.21	-0.80
		IR08MW41A	6.34	7.32	-0.98
		IR08MW42A	4.15	4.41	-0.26
		IR08MW43A	8.82	9.65	-0.83
		IR08MW44A	5.91	6.12	-0.21
		IR08MWW-6	4.88	5.77	-0.89
	IR-09	IR09MW31A	8.49	9.61	-1.12
		IR09MW35A	8.72	8.99	-0.27
		IR09MW36A	8.85	9.72	-0.87
		IR09MW37A	9.04	10.60	-1.56
		IR09MW38A	9.00	9.89	-0.89
		IR09MW39A	8.16	7.80	0.36
		IR09MW44A	8.78	9.03	-0.25
		IR09MW45F	8.46	7.92	0.54
		IR09P040A	9.05	9.66	-0.61
		IR09P041A	8.86	9.42	-0.56
		IR09P042A	8.91	8.86	0.05
		IR09PPY1	8.78	9.12	-0.34
	IR-16	PA16MW16A	8.58	8.42	0.16
		PA16MW17A	8.51	7.91	0.60
		PA16MW18A	8.36	7.93	0.43
	IR-17	IR17MW11A	7.85	7.34	0.51
		IR17MW12A	7.72	7.06	0.66
		IR17MW13A	6.98	6.37	0.61
	IR-22	IR22MW07A	7.61	6.56	1.05
		IR22MW08A	8.82	8.53	0.29
		IR22MW15A	8.93	10.79	-1.86
		IR22MW16A	7.89	7.45	0.44
		IR22MW20A	7.79	7.42	0.37
	IR-32	PA32MW04A	6.96	7.10	-0.14
	IR-33	IR33MW61A	12.23	12.44	-0.21

TABLE C-3

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
NOVEMBER 2, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
D	IR-33 (cont.)	IR33MW62A	8.60	8.79	-0.19
		IR33MW63A	7.83	8.32	-0.49
		IR33MW64A	9.36	9.73	-0.37
		IR33MW65A	8.28	8.86	-0.58
		IR33MW66A	8.85	9.33	-0.48
		PA33MW36A	9.24	9.11	0.13
		PA33MW37A	9.27	9.15	0.12
	IR-34	IR34MW01A	8.58	9.10	-0.52
		IR34MW02A	8.11	8.64	-0.53
	IR-35	IR35MW01A	8.84	8.76	0.08
		PA35P01A	8.14	8.01	0.13
	IR-36	IR36MW16A	8.21	8.25	-0.04
	IR-37	IR37MW01A	7.67	9.15	-1.48
	IR-38	IR38MW01A	4.26	5.11	-0.85
		IR38MW02A	2.90	4.56	-1.66
		IR38MW03A	3.98	4.88	-0.90
	IR-39	PA39MW01A	4.61	5.53	-0.92
		PA39MW02A	6.40	7.26	-0.86
	IR-50	IR50MW14A	6.86	6.48	0.38
		IR50MW15A	6.89	6.63	0.26
		PA50MW05A	6.13	5.87	0.26
		PA50MW06A	7.59	7.42	0.17
		PA50MW07A	8.71	8.77	-0.06
		PA50MW08A	7.47	8.31	-0.84
		PA50MW09A	5.10	6.32	-1.22
		PA50MW11A	7.59	9.93	-2.34
		PA50MW12A	8.56	9.98	-1.42
	IR-55	IR55MW01A	5.14	5.95	-0.81
		IR55MW02A	7.24	8.11	-0.87
		IR55MW04A	4.87	4.91	-0.04
E	IR-01	IR01MW02B	20.68	15.47	5.21
		IR01MW03A	20.30	15.20	5.10
		IR01MW05A	21.41	16.69	4.72
		IR01MW07A	19.00	14.50	4.50
		IR01MW09B	10.01	7.25	2.76
		IR01MW16A	22.83	18.15	4.68
		IR01MW17B	23.90	19.09	4.81
		IR01MW18A	19.96	15.38	4.58
		IR01MW26B	17.73	13.49	4.24
		IR01MW31A	13.77	9.14	4.63
		IR01MW38A	12.53	8.10	4.43
		IR01MW42A	12.93	9.43	3.50
		IR01MW43A	12.22	8.60	3.62

TABLE C-3

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
NOVEMBER 2, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
E	IR-01 (cont.)	IR01MW44A	9.12	6.78	2.34
		IR01MW47B	12.28	8.25	4.03
		IR01MW48A	10.94	8.67	2.27
		IR01MW53B	9.98	5.19	4.79
		IR01MW58A	9.12	7.05	2.07
		IR01MW62A	8.09	5.81	2.28
		IR01MW63A	8.00	5.82	2.18
		IR01MWI-2	13.21	13.23	-0.02
		IR01MWI-3	13.78	11.06	2.72
		IR01MWI-5	15.62	11.02	4.60
		IR01MWI-6	9.55	6.60	2.95
		IR01MWI-7	5.81	4.26	1.55
		IR01MWI-8	6.64	4.68	1.96
		IR01MWI-9	8.00	5.70	2.30
	IR-02	IR02MW87A	8.46	7.49	0.97
		IR02MW89A	10.08	11.10	-1.02
		IR02MW93A	7.28	8.63	-1.35
		IR02MW93A	7.28	8.65	-1.37
		IR02MW97A	8.95	7.59	1.36
		IR02MW101A1	11.19	12.49	-1.30
		IR02MW101A2	11.22	12.53	-1.31
		IR02MW114A1	13.69	10.03	3.66
		IR02MW114A2	12.43	9.93	2.50
		IR02MW114A3	13.29	10.81	2.48
		IR02MW126A	11.49	9.36	2.13
		IR02MW127B	14.63	11.11	3.52
		IR02MW141A	15.55	13.21	2.34
		IR02MW146A*	9.13	12.04	-2.91
		IR02MW147A	8.36	7.19	1.17
		IR02MW149A	8.72	7.44	1.28
		IR02MW173A*	9.51	13.76	-4.25
		IR02MW175A	7.69	7.05	0.64
		IR02MW179A	9.82	8.08	1.74
		IR02MW183A	10.40	9.73	0.67
		IR02MW196A	8.01	8.17	-0.16
		IR02MW206A1	7.42	7.28	0.14
		IR02MW206A2	7.41	7.08	0.33
		IR02MW209A	6.34	5.99	0.35
		IR02MW210B	9.16	9.99	-0.83
		IR02MW298A	11.95	8.18	3.77
		IR02MW299A	10.54	11.40	-0.86
		IR02MW300A	9.00	7.67	1.33
		IR02MWB-1	8.64	6.17	2.47

TABLE C-3

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
NOVEMBER 2, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
E	IR-02 (cont.)	IR02MWB-2	11.88	2.48	9.40
		IR02MWB-3	12.94	10.63	2.31
		IR02MWB-5	4.70	5.21	-0.51
		IR02MWC5-W	7.49	7.15	0.34
	IR-03	IR03MW218A1*	8.67	8.41	0.26
		IR03MW218A2	9.21	8.95	0.26
		IR03MW218A3	8.85	8.58	0.27
		IR03MW224A	9.56	10.26	-0.70
		IR03MW225A*	9.08	13.39	-4.31
		IR03MW226A*	9.30	9.46	-0.16
		IR03MW228B	8.74	4.49	4.25
		IR03MW342A	8.46	9.02	-0.56
		IR03MWO-1	7.64	8.67	-1.03
		IR03MWO-2*	9.14	11.60	-2.46
		IR03MWO-3*	8.58	12.54	-3.96
	IR-04	IR04MW09A	9.27	9.64	-0.37
		IR04MW13A	12.54	12.72	-0.18
		IR04MW31A	12.53	12.46	0.07
		IR04MW35A	11.11	11.79	-0.68
		IR04MW36A	9.78	10.43	-0.65
		IR04MW37A	9.49	9.71	-0.22
		IR04MW38A	9.76	10.23	-0.47
		IR04MW39A	7.86	8.71	-0.85
		IR04MW40A	7.10	7.76	-0.66
	IR-05	IR05MW73A	6.59	7.82	-1.23
		IR05MW74A	7.40	8.72	-1.32
		IR05MW76A	4.97	6.15	-1.18
		IR05MW77A	10.43	11.72	-1.29
		IR05MW82A	12.00	12.76	-0.76
		IR05MW85A	9.80	11.09	-1.29
	IR-11	IR11MW25A	11.40	11.04	0.36
		IR11MW26A	9.29	9.35	-0.06
		IR11MW27A	9.84	9.15	0.69
	IR-12	IR12MW11A	11.67	10.57	1.10
		IR12MW12A	8.40	7.27	1.13
		IR12MW13A	12.51	13.12	-0.61
		IR12MW14A	9.21	9.42	-0.21
		IR12MW15A	7.26	8.47	-1.21
		IR12MW16A	8.57	9.81	-1.24
		IR12MW17A	12.48	12.76	-0.28
		IR12MW18A	12.35	12.85	-0.50
		IR12MW19A	13.02	13.50	-0.48
		IR12MW20A	12.28	12.84	-0.56
		IR12MW21A*	10.42	NA	NA

TABLE C-3

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
NOVEMBER 2, 1995
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
E	IR-13	IR13MW10A	3.56	4.62	-1.06
		IR13MW11A	4.84	5.77	-0.93
		IR13MW12A	4.20	5.16	-0.96
		IR13MWB5A-W	5.93	7.48	-1.55
	IR-14	IR14MW09A	9.96	10.71	-0.75
		IR14MW10A	8.88	9.81	-0.93
		IR14MW12A	8.54	9.41	-0.87
		IR14MW13A*	9.74	11.59	-1.85
	IR-15	IR15MW06A	11.08	11.93	-0.85
		IR15MW07A	11.12	12.03	-0.91
		IR15MW08A	11.75	12.55	-0.80
		IR15MW09F	11.48	11.46	0.02
		IR15MW10F	10.95	10.25	0.70
	IR-36	IR36MW09A	4.90	6.34	-1.44
		IR36MW11A	8.51	10.07	-1.56
		IR36MW12A	7.13	8.64	-1.51
		IR36MW13A	8.96	10.33	-1.37
		IR36MW14A	5.42	6.34	-0.92
		IR36MW15A	7.04	8.57	-1.53
		IR36MW17A	8.25	9.52	-1.27
		PA36MW01A	7.64	9.40	-1.76
		PA36MW02A	8.01	9.77	-1.76
		PA36MW03A	9.26	10.80	-1.54
		PA36MW04A	7.32	8.68	-1.36
		PA36MW05A	7.40	7.94	-0.54
		PA36MW06A	8.94	10.19	-1.25
		PA36MW07A	6.80	7.61	-0.81
		PA36MW08A	7.69	8.92	-1.23
	IR-39	IR39MW21A	7.92	9.29	-1.37
		IR39MW22A	6.28	7.81	-1.53
		IR39MW23A	5.54	7.02	-1.48
		IR39MW24A	4.80	6.16	-1.36
		PA39MW03A	10.46	12.10	-1.64
	IR-50	PA50MW10A	8.44	11.73	-3.29
	IR-56	IR56MW39A	9.84	10.27	-0.43

Notes:

* Well contains free floating product; water level elevation not shown on Figure C-3.

IR Installation Restoration

MSL Mean sea level

NA Not applicable

TOC Top of casing

TABLE C-4

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
APRIL 11, 1996
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
C	IR-28	PA28P02A	7.73	6.58	1.15
		PA28P03A	7.71	6.44	1.27
		PA28P04A	8.37	6.06	2.31
		PA28MW50A	8.60	7.26	1.34
		PA28MW51A	8.39	6.42	1.97
		PA28MW52A	8.58	6.57	2.01
		IR28MW122A	7.47	7.10	0.37
		IR28MW123A	7.95	7.75	0.20
		IR28MW124A	7.08	5.93	1.15
		IR28MW125A	7.86	6.23	1.63
		IR28MW126A	7.72	5.94	1.78
		IR28MW127A	7.60	5.62	1.98
		IR28MW128A	8.11	6.11	2.00
		IR28MW136A	7.49	6.00	1.49
		IR28MW140F	7.56	7.31	0.25
		IR28MW149A	8.93	6.80	2.13
		IR28MW150A	8.14	7.35	0.79
		IR28MW151A	8.50	6.56	1.94
		IR28MW155A	8.60	6.48	2.12
		IR28MW169A	9.69	7.51	2.18
		IR28MW170A	8.67	6.91	1.76
		IR28MW171A	6.69	5.54	1.15
		IR28MW172F	8.59	5.78	2.81
		IR28MW173B	8.07	6.36	1.71
		IR28MW188F	9.64	7.36	2.28
		IR28MW189F	8.87	5.40	3.47
		IR28MW190F	10.06	7.55	2.51
		IR28MW200A	8.31	8.25	0.06
		IR28MW201F	8.03	6.71	1.32
		IR28MW211F	8.57	6.88	1.69
		IR28MW216F	8.38	5.46	2.92
		IR28MW217A	8.98	6.17	2.81
		IR28MW255F	7.76	6.51	1.25
		IR28MW268A	9.80	5.91	3.89
		IR28MW269A	7.84	7.81	0.03
		IR28MW270A	7.61	7.74	-0.13
		IR28MW271A	7.06	6.85	0.21
		IR28MW272A	7.85	6.30	1.55
		IR28MW273F	9.01	7.26	1.75
		IR28MW275F	8.62	6.61	2.01
		IR28MW287A	9.31	6.92	2.39
		IR28MW290A	8.14	5.63	2.51
		IR28MW293A	7.50	6.19	1.31
		IR28MW294A	7.78	6.52	1.26
		IR28MW295A	7.62	6.20	1.42
		IR28MW297A	7.68	6.43	1.25
		IR28MW298A	8.05	7.32	0.73
		IR28MW299B	9.62	6.87	2.75
		IR28MW300F	9.67	7.10	2.57
		IR28MW308A	7.64	5.37	2.27

TABLE C-4

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
APRIL 11, 1996
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
C	IR-28 (cont.)	IR28MW309B	9.11	9.00	0.11
		IR28MW310F	7.95	5.99	1.96
		IR28MW311A	8.09	5.31	2.78
		IR28MW312F	8.45	7.29	1.16
		IR28MW313F	12.17	8.89	3.28
	IR-29	IR29MW48A	8.00	7.61	0.39
		IR29MW56F	8.27	6.53	1.74
		IR29MW57A	7.52	5.79	1.73
		IR29MW58F	8.65	7.50	1.15
		IR29MW59F	8.21	7.65	0.56
		IR29MW72F	9.27	2.63	6.64
		IR29MW84A	8.10	8.08	0.02
		IR29MW85F	9.66	16.59	-6.93
	IR-50	PA50MW03A	6.85	6.59	0.26
		PA50MW04A	7.49	6.74	0.75
		IR50MW13F	7.80	6.91	0.89
	IR-57	IR57MW30A	8.02	19.36	-11.34
	IR-58	IR58MW24F	15.48	8.84	6.64
		IR58MW25F	9.82	5.63	4.19
		IR58MW26A	8.25	5.64	2.61
		IR58MW31A	8.93	5.74	3.19
		IR58MW32B	8.80	7.58	1.22
		IR58MW33B	9.07	6.32	2.75
	IR-64	IR64MW05A	7.84	6.03	1.81
D	IR-05	IR05MW85A	9.80	9.32	0.48
	IR-08	IR08MW37A	4.25	4.58	-0.33
		IR08MW38A	6.91	7.11	-0.20
		IR08MW39A	5.05	5.75	-0.70
		IR08MW40A	5.41	5.99	-0.58
		IR08MW41A	6.34	7.21	-0.87
		IR08MW42A	4.15	4.25	-0.10
		IR08MW43A	8.82	9.50	-0.68
		IR08MW44A	5.91	6.01	-0.10
		IR08MWW-6	4.88	5.52	-0.64
	IR-09	IR09MW31A	8.49	8.17	0.32
		IR09MW35A	8.72	7.42	1.30
		IR09MW36A	8.85	8.17	0.68
		IR09MW37A	9.04	9.17	-0.13
		IR09MW38A	9.00	8.25	0.75
		IR09MW39A	8.16	7.88	0.28
		IR09MW44A	8.78	7.67	1.12
		IR09MW45F	8.46	6.97	1.50
		IR09P040A	9.05	9.24	-0.19
		IR09P041A	8.86	8.65	0.21
	IR-16	PA16MW16A	8.58	7.59	0.99
		PA16MW17A	8.51	7.72	0.79
		PA16MW18A	8.36	7.52	0.84
	IR-17	IR17MW11A	7.85	7.01	0.84
		IR17MW12A	7.72	6.72	1.00
		IR17MW13A	6.98	6.07	0.91

TABLE C-4

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
APRIL 11, 1996
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
D	IR-22	IR22MW07A	7.61	6.22	1.39
		IR22MW08A	8.82	8.40	0.42
		IR22MW15A	8.93	10.63	-1.70
		IR22MW16A	7.89	7.50	0.39
		IR22MW20A	7.79	7.32	0.47
	IR-32	PA32MW04A	6.96	6.97	-0.01
	IR-33	IR33MW61A	12.23	11.23	1.00
		IR33MW62A	8.60	7.48	1.12
		IR33MW63A	7.83	8.12	-0.29
		IR33MW64A	9.36	8.84	0.52
		IR33MW65A	8.28	7.91	0.37
		IR33MW66A	8.85	8.57	0.28
		PA33MW36A	9.24	8.25	0.99
		PA33MW37A	9.27	8.37	0.90
	IR-34	IR34MW01A	8.58	8.27	0.31
		IR34MW02A	8.11	8.35	-0.24
		IR34MW35A	8.15	8.26	-0.11
	IR-35	IR35MW01A	8.84	8.59	0.25
	IR-36	IR36MW16A	8.21	7.76	0.45
	IR-37	IR37MW01A	7.67	7.62	0.05
	IR-38	IR38MW01A	4.26	4.86	-0.60
		IR38MW02A	2.90	4.61	-1.71
		IR38MW03A	3.98	4.52	-0.54
	IR-39	PA39MW01A	4.61	5.39	-0.78
		PA39MW02A	6.40	7.11	-0.71
	IR-44	IR44MW08A	7.28	6.78	0.51
	IR-50	IR50MW14A	6.86	6.18	0.69
		IR50MW15A	6.89	6.28	0.61
		PA50MW05A	6.13	5.59	0.54
		PA50MW06A	7.59	7.15	0.44
		PA50MW07A	8.71	8.47	0.25
		PA50MW08A	7.47	8.19	-0.72
		PA50MW09A	5.10	6.04	-0.94
		PA50MW11A	7.59	9.27	-1.68
		PA50MW12A	8.56	8.55	0.01
	IR-55	IR55MW01A	5.14	6.84	-1.70
		IR55MW02A	7.24	7.95	-0.71
		IR55MW04A	4.87	4.68	0.19
	IR-67	IR67MW04A	8.21	7.61	0.60
	IR-70	IR70MW04A	9.86	10.50	-0.64
		IR70MW07A	10.94	11.54	-0.60
		IR70MW11A	9.08	9.52	-0.44
		IR70MW12A	8.47	9.11	-0.64
	IR-71	IR71MW03A	8.36	8.92	-0.56
E	IR-01	IR01MW02B	20.68	14.23	6.45
		IR01MW03A	20.30	14.26	6.04
		IR01MW05A	21.41	15.57	5.84
		IR01MW07A	19.00	13.37	5.63
		IR01MW09B	10.01	5.92	4.09
		IR01MW16A	22.83	17.00	5.83

TABLE C-4

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
APRIL 11, 1996
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
E	IR-01 (cont.)	IR01MW17B	23.90	15.81	8.09
		IR01MW18A	19.96	14.21	5.75
		IR01MW26B	17.73	12.30	5.43
		IR01MW31A	13.77	7.38	6.39
		IR01MW38A	12.53	6.88	5.65
		IR01MW42A	12.93	7.67	5.26
		IR01MW43A	12.22	7.95	4.27
		IR01MW44A	9.12	6.49	2.63
		IR01MW47B	12.28	7.34	4.94
		IR01MW48A	10.94	8.33	2.61
		IR01MW53B	9.98	4.31	5.67
		IR01MW58A	9.12	5.82	3.30
		IR01MW62A	8.09	5.44	2.65
		IR01MW63A	8.00	4.99	3.01
		IR01MW366A	14.47	9.91	4.56
		IR01MW367A	12.16	9.42	2.74
		IR01MWI-2	13.21	10.31	2.90
		IR01MWI-3	13.78	10.18	3.60
		IR01MWI-6	9.55	4.76	4.79
		IR01MWI-7	5.81	3.35	2.46
		IR01MWI-8	6.64	4.35	2.29
		IR01MWI-9	8.00	4.52	3.48
	IR-02	IR02MW87A	8.46	4.45	4.01
		IR02MW89A	10.08	8.35	1.73
		IR02MW93A	7.28	8.36	-1.08
		IR02MW97A	8.95	9.75	-0.80
		IR02MW101A1	11.19	11.08	0.11
		IR02MW101A2	11.22	11.23	-0.01
		IR02MW114A1	13.69	6.91	6.78
		IR02MW114A2	12.43	6.14	6.29
		IR02MW114A3	13.29	7.43	5.86
		IR02MW126A	11.49	9.28	2.21
		IR02MW127B	14.63	10.90	3.73
		IR02MW141A	15.55	13.26	2.29
		IR02MW146*	9.13	9.13	0.00
		IR02MW147A	8.36	5.38	2.98
		IR02MW175A	7.69	7.04	0.65
		IR02MW179A	9.82	9.20	0.62
		IR02MW183A	10.40	9.42	0.98
		IR02MW196A	8.01	7.94	0.07
		IR02MW206A1	7.42	7.28	0.14
		IR02MW206A2	7.41	7.31	0.10
		IR02MW209A	6.34	6.37	-0.03
		IR02MW210B	9.16	9.90	-0.74
		IR02MW298A	11.95	6.84	5.11
		IR02MW299A	10.54	11.24	-0.70
		IR02MW300A	9.00	8.19	0.81
		IR02MW372A	14.26	11.70	2.56
		IR02MW373A	11.34	9.04	2.30
		IR02MWB-1	8.64	5.17	3.47

TABLE C-4

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
APRIL 11, 1996
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
E	IR-02 (cont.)	IR02MWB-2	11.88	9.45	2.43
		IR02MWB-3	12.94	10.73	2.21
		IR02MWB-5	4.70	5.35	-0.65
	IR-03	IR03MW218A1*	8.67	7.55	1.12
		IR03MW218A2	9.21	8.96	0.25
		IR03MW218A3	8.85	8.25	0.60
		IR03MW224A	9.56	10.31	-0.75
		IR03MW225A*	9.08	10.31	-1.23
		IR03MW226A*	9.30	9.50	-0.20
		IR03MW228B	8.74	5.15	3.59
		IR03MW342A	8.46	8.94	-0.48
		IR03MW371A*	9.58	8.89	0.69
		IR03MWO-1*	7.64	8.45	-0.81
		IR03MWO-2*	9.14	11.47	-2.33
		IR03MWO-3*	8.58	12.72	-4.14
	IR-04	IR04MW09A	9.27	6.52	2.75
		IR04MW13A	12.54	10.26	2.28
		IR04MW31A	12.53	9.40	3.13
		IR04MW35A	11.11	9.92	1.19
		IR04MW36A	9.78	8.59	1.19
		IR04MW37A	9.49	7.61	1.88
		IR04MW38A	9.76	8.57	1.19
		IR04MW39A	7.86	6.61	1.25
		IR04MW40A	7.10	5.95	1.15
	IR-05	IR05MW73A	6.59	5.99	0.60
		IR05MW74A	7.40	7.01	0.39
		IR05MW76A	4.97	4.55	0.42
		IR05MW77A	10.43	9.94	0.49
		IR05MW82A	12.00	10.00	2.00
		IR05MW85A	9.80	9.32	0.48
	IR-11	IR11MW25A	11.40	7.95	3.45
		IR11MW26A	9.29	8.52	0.77
		IR11MW27A	9.84	7.76	2.08
	IR-12	IR12MW11A	11.67	6.99	4.68
		IR12MW12A	8.40	3.71	4.69
		IR12MW13A	12.51	10.78	1.73
		IR12MW14A	9.21	7.21	2.00
		IR12MW15A	7.26	6.49	0.77
		IR12MW16A	8.57	7.76	0.81
		IR12MW17A	12.48	10.18	2.30
		IR12MW18A	12.35	10.35	2.00
		IR12MW19A	13.02	11.09	1.93
		IR12MW20A	12.28	10.41	1.87
	IR-13	IR13MW10A	3.56	4.43	-0.87
		IR13MW11A	4.84	5.68	-0.84
		IR13MW12A	4.20	4.99	-0.79
	IR-14	IR14MW09A	9.96	10.70	-0.74
		IR14MW10A	8.88	9.68	-0.80
		IR14MW12A	8.54	9.29	-0.75
	IR-15	IR15MW06A	11.08	11.53	-0.45

TABLE C-4

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
APRIL 11, 1996
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well	TOC Elevation (feet msl)	Depth to Water from TOC (feet msl)	Groundwater Elevation (feet msl)
E	IR-15 (cont.)	IR15MW07A	11.12	11.89	-0.77
		IR15MW08A	11.75	12.30	-0.55
		IR15MW09F	11.48	10.56	0.92
		IR15MW10F	10.95	10.11	0.84
	IR-36	IR36MW09A	4.90	4.74	0.16
		IR36MW11A	8.51	9.52	-1.01
		IR36MW12A	7.13	8.00	-0.87
		IR36MW13A	8.96	9.52	-0.56
		IR36MW14A	5.42	6.03	-0.61
		IR36MW15A	7.04	7.81	-0.77
		IR36MW17A	8.25	8.23	0.02
		IR36MW120B	7.10	3.65	3.45
		IR36MW121A	7.00	7.70	-0.70
		IR36MW122A	7.69	8.42	-0.73
		IR36MW123B	7.59	4.44	3.15
		IR36MW125A	6.59	6.84	-0.25
		IR36MW126A	5.20	2.00	3.21
		IR36MW127A	6.45	6.27	0.19
		IR36MW128A	7.84	8.75	-0.91
		IR36MW129B	8.05	4.78	3.28
		IR36MW135A	7.91	8.95	-1.04
		PA36MW01A	7.64	7.97	-0.33
		PA36MW02A	8.01	8.38	-0.37
		PA36MW03A	9.26	9.11	0.15
		PA36MW04A	7.33	8.01	-0.68
		PA36MW05A	7.40	7.65	-0.25
		PA36MW06A	8.94	8.72	0.22
		PA36MW07A	6.80	6.06	0.75
		PA36MW08A	7.69	7.54	0.16
	IR-39	IR39MW21A	7.92	8.21	-0.29
		IR39MW22A	6.28	7.16	-0.88
		IR39MW23A	5.54	6.09	-0.55
		IR39MW24A	4.80	5.31	-0.51
		IR39MW33A	4.40	5.16	-0.76
		IR39MW35A	5.56	5.95	-0.39
		IR39MW36A	4.66	5.71	-1.05
		PA39MW03A	10.46	9.37	1.09
	IR-50	PA50MW10A	8.44	10.65	-2.21
	IR-56	IR56MW39A	9.84	8.27	1.57
	IR-72	IR72MW32A	10.08	8.03	2.05
		IR72MW33A	12.03	8.25	3.78
	IR-73	IR73MW04A	13.48	12.53	0.95

Notes:

* Well contains free floating product; water level elevation not shown on Figure C-4.

IR Installation Restoration

MSL Mean sea level

TOC Top of casing

TABLE C-5

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
JULY 12, 2000
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Well	TOC Elevation (feet msl)[a]	Depth to Water (feet below TOC)	Groundwater Elevation (feet msl)
B	IR06MW22A	10.00	4.65	5.35
	IR06MW32A	9.90	4.63	5.27
	IR06MW35A	9.73	4.88	4.85
	IR06MW46A	9.46	5.74	3.72
	IR07MW19A	9.56	8.59	0.97
	IR07MW20A1	9.26	8.15	1.11
	IR07MW21A1	14.68	12.94	1.74
	IR07MW21A2	14.42	12.92	1.50
	IR07MWS-4	15.83	14.11	1.72
	IR10MW12A	9.08	6.70	2.38
	IR10MW13A1	9.92	7.96	1.96
	IR10MW14A	10.23	7.96	2.27
	IR10MW28A	13.57	10.85	2.72
	IR10MW29A1	9.15	6.71	2.44
	IR10MW32A	9.77	7.57	2.20
	IR10MW33A	10.17	7.91	2.26
	IR18MW100B	17.94	13.85	4.09
	IR18MW101B	18.89	14.99	3.90
	IR18MW21A	17.56	15.21	2.35
	IR20MW17A	10.51	7.16	3.35
	IR26MW41A	10.15	10.00	0.15
	IR26MW44A	8.25	7.35	0.90
	IR46MW37A	9.58	7.51	2.07
	IR46MW38A	9.78	9.06	0.72
	IR46MW39A	9.75	8.92	0.83
	IR46MW43A	8.98	7.88	1.10
	IR61MW05A	10.11	7.75	2.36
	IR62MW07A	10.20	7.89	2.31
	IR62MW08A	10.35	7.73	2.62
	PA24MW02A	9.46	8.40	1.06
	PA24MW03A	10.09	9.78	0.31
	PA50MW01A	9.18	7.97	1.21
	UT03MW11A	9.94	7.21	2.73
	UT03MW12A	10.10	7.47	2.63
C	IR06MW40A	10.08	8.10	1.98
	IR06MW41A	9.78	8.16	1.62
	IR06MW42A	11.89	10.51	1.38
	IR06MW44A	9.81	7.00	2.81
	IR06MW45A	9.92	5.90	4.02
	IR25MW16A	11.02	9.00	2.02
	IR25MW17A	10.31	7.67	2.64
	IR28MW122A	7.48	5.61	1.87
	IR28MW123A	8.09	6.69	1.40

TABLE C-5

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
JULY 12, 2000
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Well	TOC Elevation (feet msl)[a]	Depth to Water (feet below TOC)	Groundwater Elevation (feet msl)
C	IR28MW124A	7.14	5.91	1.23
	IR28MW125A	7.74	6.21	1.53
	IR28MW126A	7.76	5.95	1.81
	IR28MW128A	8.11	5.98	2.13
	IR28MW136A	7.55	5.91	1.64
	IR28MW149A	8.92	6.76	2.16
	IR28MW150A	7.87	6.65	1.22
	IR28MW151A	8.57	6.40	2.17
	IR28MW155A	8.57	6.30	2.27
	IR28MW169A	9.69	7.39	2.30
	IR28MW170A	8.76	6.78	1.98
	IR28MW171A	6.67	5.79	0.88
	IR28MW173B	8.06	6.36	1.70
	IR28MW200A	8.28	7.88	0.40
	IR28MW217A	8.98	4.17	4.81
	IR28MW268A	7.90	5.82	2.08
	IR28MW286A	9.81	6.96	2.85
	IR28MW287A	9.31	6.80	2.51
	IR28MW298A	8.04	7.98	0.06
	IR28MW299B	9.60	6.67	2.93
	IR28MW308A	7.63	5.25	2.38
	IR28MW309B	9.09	7.35	1.74
	IR28MW311A	8.08	4.59	3.49
	IR28MW314B	8.68	7.06	1.62
	IR28MW324A	8.79	7.01	1.78
	IR28MW326A	8.75	7.22	1.53
	IR28MW333A	8.71	7.23	1.48
	IR28MW338A	8.83	6.98	1.85
	IR28MW340A	8.65	6.85	1.80
	IR29MW48A	8.04	7.57	0.47
	IR29MW57A	7.67	6.25	1.42
	IR29MW84A	8.09	7.80	0.29
	IR58MW26A	8.24	5.96	2.28
	IR58MW31A	8.97	6.33	2.64
	IR58MW32B	8.77	6.35	2.42
	IR58MW33B	9.06	6.43	2.63
	IR64MW05A	7.83	6.18	1.65
	PA28MW51A	8.41	6.29	2.12
	PA50MW03A	7.03	5.95	1.08
	PA50MW04A	7.56	6.15	1.41
D	IR08MW44A	5.94	5.91	0.03
	IR09MW35A	8.71	8.24	0.47
	IR09MW36A	8.87	9.13	-0.26

TABLE C-5

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
JULY 12, 2000
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Well	TOC Elevation (feet msl)[a]	Depth to Water (feet below TOC)	Groundwater Elevation (feet msl)
D	IR09MW37A	9.15	10.34	-1.20
	IR09MW38A	9.02	9.69	-0.67
	IR09MW39A	8.18	8.68	-0.50
	IR09MW44A	8.78	8.10	0.68
	IR09MW52A	9.59	10.52	-0.93
	IR22MW20A	7.84	6.90	0.94
	IR33MW116A	8.38	8.91	-0.53
	IR33MW61A	12.26	12.16	0.10
	IR33MW62A	8.21	8.30	-0.10
	IR33MW63A	7.80	7.65	0.15
	IR33MW64A	9.30	9.28	0.02
	IR33MW65A	8.32	8.35	-0.03
	IR33MW66A	8.91	8.87	0.04
	IR34MW01A	8.62	8.61	0.01
	IR34MW02A	8.03	8.02	0.01
	IR35MW01A	8.85	8.07	0.78
	IR36MW16A	8.26	7.56	0.70
	IR37MW01A	7.59	8.67	-1.08
	IR38MW01A	4.28	4.91	-0.63
	IR38MW02A	2.88	4.45	-1.57
	IR38MW03A	4.00	4.60	-0.60
	IR39MW21A	7.92	9.23	-1.31
	IR39MW22A	6.34	7.49	-1.15
	IR39MW23A	5.61	6.96	-1.35
	IR39MW24A	4.80	6.13	-1.33
	IR39MW33A	4.31	5.24	-0.93
	IR55MW04A	4.80	4.48	0.32
	IR67MW04A	8.17	7.38	0.79
	IR70MW04A	9.82	10.06	-0.24
	IR70MW11A	9.04	9.28	-0.24
	IR71MW03A	8.33	8.45	-0.12
	PA16MW17A	8.45	7.62	0.83
	PA32MW04A	7.05	6.54	0.51
	PA33MW37A	9.27	8.32	0.95
	PA39MW01A	4.53	5.04	-0.51
	PA39MW02A	6.26	6.75	-0.49
	PA50MW05A	6.07	5.54	0.53
	PA50MW06A	7.64	6.48	1.16
	PA50MW07A	8.71	11.08	-2.37
	PA50MW08A	7.48	7.76	-0.28
	PA50MW09A	5.00	6.94	-1.94
	PA50MW11A	7.66	9.89	-2.23
	PA50MW12A	8.62	9.69	-1.07

TABLE C-5

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
JULY 12, 2000
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Well	TOC Elevation (feet msl)[a]	Depth to Water (feet below TOC)	Groundwater Elevation (feet msl)
E	IR01MW02B	20.61	15.64	4.97
	IR01MW03A	19.97	15.51	4.46
	IR01MW07A	19.02	15.70	3.32
	IR01MW17B	23.85	18.95	4.90
	IR01MW31A	13.81	8.80	5.01
	IR01MW367A	12.12	9.80	2.32
	IR01MW43A	12.16	10.99	1.17
	IR01MW44A	9.22	6.82	2.40
	IR01MW47B	12.31	8.02	4.29
	IR01MW48A	10.96	8.02	2.94
	IR01MW53B	10.01	4.85	5.16
	IR01MW58A	9.19	6.81	2.38
	IR01MW62A	7.91	5.23	2.68
	IR01MWI-2	13.22	12.73	0.49
	IR01MWI-3	13.80	10.02	3.78
	IR01MWI-5	15.44	12.48	2.96
	IR02MW101A1	11.23	12.27	-1.04
	IR02MW114A1	13.63	8.64	4.99
	IR02MW126A	11.36	9.02	2.34
	IR02MW127B	14.59	11.21	3.38
	IR02MW146A	11.34	15.64	-4.30
	IR02MW175A	7.74	6.84	0.90
	IR02MW179A	9.82	8.48	1.34
	IR02MW196A	8.05	7.56	0.49
	IR02MW206A1	7.43	6.92	0.51
	IR02MW210B	9.17	9.52	-0.35
	IR02MW298A	11.80	7.51	4.29
	IR02MW299A	10.56	11.01	-0.45
	IR02MW372A	14.21	11.55	2.66
	IR02MW87A	8.48	6.34	2.14
	IR02MW89A	10.08	10.44	-0.36
	IR02MW93A	7.25	8.16	-0.91
	IR02MWB-1	8.47	5.37	3.10
	IR02MWB-3	12.95	10.40	2.55
	IR02MWB-5	4.74	5.03	-0.29
	IR03MW218A2	12.26	12.51	-0.25
	IR03MW218A3	12.00	12.25	-0.25
	IR03MW224A	10.92	11.39	-0.47
	IR03MW228B	12.12	7.78	4.34
	IR03MW342A	8.48	8.94	-0.46
	IR03MW371A	12.48	10.67	1.81
	IR04MW13A	12.55	12.08	0.47
	IR04MW37A	9.54	9.19	0.35

TABLE C-5

BASEWIDE GROUNDWATER ELEVATION MEASUREMENT RESULTS
JULY 12, 2000
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Parcel	Well	TOC Elevation (feet msl)[a]	Depth to Water (feet below TOC)	Groundwater Elevation (feet msl)
E	IR04MW40A	7.16	7.18	-0.02
	IR12MW11A	11.68	9.28	2.40
	IR12MW13A	12.52	12.46	0.06
	IR12MW14A	10.46	9.94	0.52
	IR12MW15A	7.28	7.99	-0.71
	IR12MW17A	12.46	11.89	0.57
	IR12MW20A	12.27	12.13	0.14
	IR13MW12A	4.12	4.74	-0.63
	IR14MW09A	9.93	10.39	-0.47
	IR14MW10A	8.89	9.36	-0.47
	IR14MW12A	8.52	8.87	-0.35
	IR14MW13A	9.75	10.02	-0.27
	IR15MW06A	11.11	11.15	-0.04
	IR15MW07A	11.18	11.26	-0.08
	IR15MW08A	11.70	11.73	-0.03
	IR36MW09A	5.00	6.15	-1.15
	IR36MW11A	8.55	9.84	-1.29
	IR36MW120B	7.05	4.33	2.72
	IR36MW121A	6.96	8.45	-1.49
	IR36MW122A	7.64	9.10	-1.46
	IR36MW123B	7.55	4.85	2.70
	IR36MW126A	5.16	4.75	0.41
	IR36MW128A	8.01	9.36	-1.35
	IR36MW129B	7.80	5.33	2.47
	IR36MW12A	7.18	8.45	-1.27
	IR36MW135A	7.85	9.15	-1.30
	IR36MW14A	5.52	6.86	-1.34
	IR36MW17A	8.36	9.12	-0.76
	IR74MW01A	13.16	12.25	0.91
	PA36MW01A	7.64	9.15	-1.51
	PA36MW02A	8.02	9.53	-1.51
	PA36MW08A	7.65	8.80	-1.15
	PA50MW10A	8.45	11.34	-2.89

Notes:

a TOC elevations are based on the survey data collected during July through September 2000.

msl Mean sea level

TOC Top of casing

ATTACHMENT 1

WELL DEVELOPMENT RECORDS

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RE-
WELL DEVELOPMENT RECORD
DO NO. 109

Location: H.P.S
Personnel: AiOSA /
Date: 01/23/01
Method of Development:
☐ Surging ☐ Bailing ☐ Pumping
Weather: Raining

Well/Piez. No.: IR01 MW 42A
Date Installed: 10/25/90
Csg. Diameter (I.D.): 4
Total Depth (ft. BGL): 25'
Screened Interval (ft. BGL): 16.5 to 25.0

Equipment Nos.: pH Meter _____ EC Meter _____ Turbidity Meter _____
Equipment decontaminated prior to development: Y _____ N _____

Describe These # are from below the top of the casing
The top of the casing is: 1.59 Feet A.G.L.

Date	Time	Water Level ~~(ft. BGL)~~	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
01/22/01	1430	10.48	—	—	—	—	—	INITIAL
01/23/01	1428	10.48	—	—	—	—	—	INITIAL
				CHUNKS	of		Cement	CAME UP
+ PLASTIC		[illegible]	W/	BAILER.		TO	WAS	26.2 FROM
			TOP			OF		CASING
ONE PIECE		of PASTIC						
BROUGHT		UP ≈	3 INCHES		of	CONCRET.		

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

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EK –

WELL DEVELOPMENT RECORD
DO NO. 109

Location: Hunters Point Shipyard
Personnel: Steve McNerney
Date: 1/25/01
Method of Development:
☐ Surging ☐ Bailing ☐ Pumping
Weather: Cold.

Well/Piez. No.: 1R01MW42A
Date Installed: 10/25/01
Csg. Diameter (I.D.): 4"
Total Depth (ft. BGL): 25'
Screened Interval (ft. BGL): 16.5'-25.0'

Equipment Nos.: pH Meter 803051 EC Meter Same Turbidity Meter Same
Equipment decontaminated prior to development: Y ✓ N ____

Describe All Water Level Measurements Will Be Recorded From The Top Of Well Casing That Is 1.59' Above Ground Level T.D. 26.54

Date	Time	Water Level (ft. ~~BGL~~ from TOC)	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
1/25/01	7:15	10.53	—	—	—	—	—	Initial Reading
Noticed That We Have A Soft Bottom And Pulling Rock With Bailer.								
Took Another T.D. = 26.61 At 7:40 Still Bailing.								
1/25/01	7:50	10.53	40	—	—	—	—	Started Surging Well
Took Another TD = 26.59 At 7:50 – Difference Could Have Been Due To Spaces B/twn Rocks								
1/25/01	805	~~10.53~~ 12.41'	60	—	—	—	—	TD – 26.59
1/25/01	820	12.41	—	—	—	—	—	Start Pumping @ 2 GPM Submersible Pump
1/25/01	827	12.41'	74	16.8	6.90	16.6	999	
1/25/01	833	10.87'	86	17.3	7.09	15.7	996	Take Every 10 Min
1/25/01	851	10.89	122	15.7	7.19	14.8	262	
1/25/01	909	10.91'	158	15.5	7.26	14.1	76	
1/25/01	910 –	Increase Flow To 3 GPM						
1/25/01	922	11.05'	194	15.5	7.25	13.6	12	
~~1/25/01~~	~~934~~		~~230~~	~~1/25~~	Increase	Flow	To 4 GPM	11.21' W.L.
1/25/01	931	11.23	230	15.5	7.16	13.1	41	
~~1/25/01~~	~~940~~		~~266~~					
1/25/01	935	12.45'	Increase To 10 GPM					

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

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RE-
WELL DEVELOPMENT RECORD
DO NO. 109

Location: HUNTERS POINT SHIPYARD
Personnel: STEVE McNERNEY
Date: 1/25/01
Method of Development:
☒ Surging ☒ Bailing ☒ Pumping
Weather: 40'S, WINDY, CHANCE OF RAIN
Equipment Nos.: pH Meter 808051 EC Meter SAME Turbidity Meter SAME
Equipment decontaminated prior to development: Y ✓ N ____

Well/Piez. No.: 1R01MW42A
Date Installed: 10/25/00
Csg. Diameter (I.D.): 4"
Total Depth (ft. BGL): 25'
Screened Interval (ft. BGL): 16.5'-25.0'

Describe ____

Date	Time	Water Level FROM TOC ~~(ft. BGL)~~	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
1/25/01	935	12.45	270	15.9	7.15	13.2	765	
1/25/01	940	12.51	320	17.5	7.13	13.1	397	
1/25/01	943	—	350	DECREASE RATE TO 2 GPM				
1/25/01	1001	11.04	386	16.3	7.31	12.8	6	
1/25/01	1019	11.07	422	17.2	7.29	12.4	3	
1/25/01	1037	11.07	458	16.4	7.37	12.3	4	

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

NOTE: PUMPING USING A 3 15/16" ELECTRICAL SUBMERSIBLE PUMP SO TEMPERATURE WITH VARY

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DE –
WELL DEVELOPMENT RECORD
DO NO. 109

Location: HPS
Personnel: SJ/TT/AJ/JC
Date: 02/16/01
Method of Development:
☐ Surging ☐ Bailing ☒ Pumping (PARASTALTIC)

Well/Piez. No.: IR01MW I-8
Date Installed:
Csg. Diameter (I.D.): 2
Total Depth (ft. BGL): 12.5

Weather: CLOUDY ; 50s
Screened Interval (ft. BGL):
Equipment Nos.: pH Meter ____ EC Meter ____ Turbidity Meter ____
Equipment decontaminated prior to development: Y X N ____

Describe TOP of CASING IS 2.28 AGL COND IS 762,
BEWARE OF BLACK MOON'S BEWARE OF TIDE!

Date	Time	Water Level (ft. BGL)	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
01/22/01	1449	1.83 BGL	—	—	—	—	—	INITIAL
02/16/01	1230	3.84	—	—	—	—	—	INITIAL / BOTTOM AT 13.1'
"	1240	9.00	7	11.8	7.35	40.5	436	GREYISH IN COLOR
"	1250	10.46	15	11.2	7.46	40.4	96	
"	1254	10.85	20	11.3	7.61	40.4	45	
"	1301	—	30	11.1	7.65	40.4	29	W.L. BELOW TUBING – CANT MEAS.
"	1307	—	36	11.2	7.66	40.4	43	
"	1311	—	41	10.9	7.67	40.4	12	
"	1315	—	45	11.0	7.69	40.3	9	
"	1320	—	50	11.0	7.69	40.3	~~109~~	
"	1325	—	55	11.0	7.70	40.3	2	
"	1330	—	60	10.9	7.70	40.3	5	

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

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WELL DEVELOPMENT RECORD
DO NO. 109

Location: H.P.S.
Personnel: AiOSA / AMAN
Date: 02/08/01
Method of Development:
☐ Surging ☑ Bailing ☐ Pumping
Weather:
Equipment Nos.: pH Meter _____ EC Meter _____ Turbidity Meter _____
Equipment decontaminated prior to development: Y ✓ N _____

Well/Piez. No.: IR01MW I-9
Date Installed: SEPT / 86
Csg. Diameter (I.D.): 2"
Total Depth (ft. BGL): 13'
Screened Interval (ft. BGL): 3' - 13'

Describe THESE NUMBERS ARE BELOW TOP of CASING

Date	Time	Water Level ~~(ft. BGL)~~	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
01/30/01	1455	4.59	—	—	—	—	—	INITIAL
02/08/01	15:40		2 gal.	13.7	6.96	8.07	230	Dark Black
02/09/01	1515	5.02	7	—	—	—	—	"
.7GPM 2/16/01	0800	3.60	—	—	—	—	—	INITIAL READING JL/SJ/AS
2/16/01	0830	3.80	14	12.7	6.72	6.51	1	INITIALLY BLACK
2/16/01	0835	6.25	15	SPED UP PUMP TO APPROX. .8 GPM				
"	0841	6.55	20	—	—	—	—	SPED UP PUMP AGAIN TO "
"	0855	6.30	32.5	13.1	7.22	6.48	46	WAS MOVING TUBING UP & DOWN TO STIR UP FINES — BLACK WATER
"	0902	—	37.5	STOP TO SURGE W/				SURGE BLOCK
"	0905	SURGE BLOCK CONSTRUCTED BY S. AIOSA BROKE - UPPER WASHER SEAL CAME RIGHT OFF						
		AND WENT DOWN WELL - GOING TO TRY TO USE PARASTOLTIC AT HIGH SPEED						
"	0930	6.90	43.5	13.5	7.23	6.50	695	~~GREY~~ DK GREY
"	0935	7.95	50	13.3	7.26	6.44	89	(DTB 14.09)
"	0940	8.00	55	13.4	7.26	6.44	186	
"	0948	8.45	65	13.5	7.28	6.35	91	
"	0958	8.59	75	13.8	7.28	6.32	10	
"	1006	8.23	85	13.7	7.27	6.32	12	

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

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RE-
WELL DEVELOPMENT RECORD
DO NO. 109

Location: HPS
Well/Piez. No.: IR01MWI-9
Personnel: AMAN/S JACKSON/J CEKAWSKI/A JENSEN/T TINGEY
Date Installed: SEPT/86'
Date: 02/16/01
Csg. Diameter (I.D.): 2"
Method of Development:
Total Depth (ft BGL): 14.09
☐ Surging ☐ Bailing ☒ Pumping PARASTALTIC
Weather: SUNNY, MID TO UPPER 50S
Screened Interval (ft. BGL): 3'-13'
Equipment Nos.: pH Meter _____ EC Meter _____ Turbidity Meter _____
Equipment decontaminated prior to development: Y X N _____

Describe _____

Date	Time	Water Level (ft. BGL)	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
02/16/01	1010	8.41	90	13.7	7.27	6.34	11	
02/16/01	1015	7.20	95	13.7	7.27	6.35	9	DROP IN WTR LEVEL DUE TO HAVING STOP PUMP - TUBING CAME OUT RECHARGE
"	1020	—	100	—	—	—	—	HAD TO STOP NO MORE RM IN TA

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

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WELL DEVELOPMENT RECORD
DO NO. 109

Location: Hunters Point
Personnel: Steve McNerney
Date: 1/19/01
Method of Development:
☑ Surging ☑ Bailing ☑ Pumping
Weather: Cold

Well/Piez. No.: 1R02MW300A
Date Installed: 6/2/92
Csg. Diameter (I.D.): 4"
Total Depth (ft. BGL): 22.8
Screened Interval (ft. BGL): 7.8" - 22.8'

Equipment Nos.: pH Meter 808051 EC Meter Same Turbidity Meter Same
Equipment decontaminated prior to development: Y ✓ N ____

Describe Well May Be Dog Legged Or Bent/Switched To Smaller Bailer = 3"x10'
3.5"x10' Bailer Would Not Drop To Bottom Of Well. Dropped Approx 15' Only

Date	Time	Water Level (ft. BGL)	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
1/19/01	8:24	6.71	—	—	—	—	—	Initial Reading
1/19/01	8:24	T.D. Of Well Initial Reading						22.2 Soft Bottom Water Is Br
1/19/01	8:35	6.71	5	13.6	6.98	36.5	310	Real Sandy First Bail Sand + Silt
1/19/01	9:10	T.D Of Well After Removing Sand + Silt						24.65 Note: See Fadl
Appears To Have Some Thing Floating On Water. Water Is Brown In Color								
1/19/01	9:36	6.85	50	—	—	—	—	Setting Up To Pump.
1/19/01	10:01	6.88	Start The Pump At Approx ~~2gpm~~ 3.5					3.5gpm. Meter Start 40305.58
1/19/01	10:05	7.63	81	14.6	7.4	36.7	144	H_2O Light Brown In Color
1/19/01	10:14	7.82	111	15.3	7.48	36.4	1	Water Clearing Up
1/19/01	10:19	7.95	131	15.4	7.51	36.6	1	
1/19/01	10:24	8.01	151	15.5	7.5	36.6	1	Increase Flow To 8gpm.
1/19/01	10:32	8.81	171	15.1	7.55	36.5	2	
1/19/01	10:35	9.05	191	15.2	7.56	36.5	1	
1/19/01	10:38	9.15	231	15.1	7.6	36.6	1	Slow Flow To 2gpm
1/19/01	10:42	8.08	241	15.9	7.6	36.6	1	
1/19/01	10:46	8.04	251	16.1	7.6	36.6	1	Pump Heating H_2O
1/19/01	10:51	8.04	261	15.8	7.52	35.8	3	Shut Pump Down

BWV = 38.48 x 3 = 115.43

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

May Need Video Of This Well Due To First Bailer Getting Stuck In Well.

ConcOP-Q:\General\Forms\Well_Dvlp.doc
7/5/00

This Is Not At Ground Level/Measurements Taken From Top Of Well Casing That Is 1.76 Above Ground.

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RE-
WELL DEVELOPMENT RECORD
DO NO. 109

Location: Hunters Point Shipyard
Well/Piez. No.: 1R02MW373A
Personnel: Steve McWeeney
Date Installed: 10/31/95
Date: 1/24/01
Csg. Diameter (I.D.): 4"
Method of Development:
Total Depth (ft. BGL): 10.5'
☑ Surging ☑ Bailing ☑ Pumping
Weather: Cold And Rain
Screened Interval (ft. BGL): 5'-10'
Equipment Nos.: pH Meter 808051 EC Meter Same Turbidity Meter Same
Equipment decontaminated prior to development: Y ✓ N ____

Describe Well Casing Is 3.06 Above Ground Level. All Water Level Readings Will Be Recorded From Top Of Well Casing.

Date	Time	Water Level (ft. BGL)	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
1/24/01	7:40	8.80	—	—	—	—	—	Initial Reading
Total Depth To Top Of Casing = 10.7 Initial Reading.								
1/24/01	8:20	8.85	10	14.8	6.88	3.42	>999	Initial Parameters
	Noticed A Lot Of Silt In Bucket After Surging Well							
1/24/01	8:40	—	—	—	—	—	—	Start Pump At 1gpm.
1/24/01	8:52	—	22	16.5	7.09	3.97	9	
1/24/01	9:04	—	34	16.9	7.11	4.07	5	
1/24/01	9:16	—	46	16.5	7.15	4.24	3	Increase Flow To 2gpm
1/24/01	9:22	—	58	16.1	7.15	4.48	1	
1/24/01	9:28	—	70	16.1	7.17	4.73	0	Increase Flow To 2.5gpm.
1/24/01	9:38	—	92.5	16.0	7.19	5.01	4	Small Amount Of Sediment.
1/24/01	9:48	—	115	15.6	7.18	5.15	3	Shut The Flow To 2gpm.
1/24/01	9:58	—	135	16.1	7.19	5.06	8	
1/24/01	10:08	—	155	15.8	7.19	5.07	3	Very Slight Amount Of Sediment.
1/24/01	10:18	—	175	16.1	7.19	5.05	4	
1/24/01	10:20	Shut	Down	Truck	And	Pump.	This	Well Is Re-Developed.

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

Unable To Obtain Water Level Readings Due To Solinst Hitting Top Of 3 15/16" Electrical Submersible Pump.

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WELL DEVELOPMENT RECORD

DO NO. 109 Looking For IR04MW31A

Location: Hunters Point Shipyard
Well/Piez. No.: IR04MW031 On Well
Personnel: Steve McNerney
Date Installed: 11/15/90
Date: 1/19/01
Csg. Diameter (I.D.): 4"
Method of Development:
Total Depth (ft. BGL): 26'

☐ Surging ☑ Bailing ☐ Pumping

Weather: Chilly, Sunny
Screened Interval (ft. BGL): 11'-26'
Equipment Nos.: pH Meter 803051 EC Meter Same Turbidity Meter Same
Equipment decontaminated prior to development: Y ✓ N ____

Describe Top Of Well Casing 1.45' Above Ground Level
Appears To Have Floating Product On Water Surface And Left Bottom

Date	Time	Water Level (ft. BGL)	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
1/19/01	12:55	11.93	—	—	—	—	—	Initial Reading
1/19/01	1:05	11.93	5	17.5	7.26	6.69	999	Initial Parameters
Sand And Silt In This Well Try To Remove By Bailing.								
1/19/01	1:20	27.47	40	—	—	—	—	Recheck T.D. After Bailing.
Pulled Approx 1' Of Silt And Sand From Well / A Little Gravel (See Fall)								
1/19/01	2:02	12.31	45	—	—	—	—	Initial Before Pumping
1/19/01	2:07	14.41	55	19.8	7.35	7.36	<999	Pump At ~~2gpm~~ JM: 1.5 gpm
1/19/01	2:18	14.95	75	20.4	7.28	8.45	<999	Turning Flow Up To 4.0 gpm
1/19/01	2:30	22.9	105	20.0	7.33	7.74	< 999	Dark Brown In Color.
1/19/01	2:32	Water Level Dropping To Fast So We Decreased Flow To 1 gpm						
1/19/01	2:49	14.45	125	21.4	7.34	7.90	7.34	Water Is Clearing Up.
1/19/01	3:09	14.31	~~145~~ 144	Water Level Check.				
1/19/01	3:13	14.31	145	20.4	7.23	7.51	124	
1/19/01	3:33	15.33	165	20.6	7.35	7.81	99	Flow Down To Less Than 1 gpm.
1/19/01	3:45	15.47	185	20.3	7.33	8.14	134	Shut Pump Down For Today.
1/22/01	7:02	11.91	—	—	—	—	—	Initial Reading
1/22/01	7:26	12.24	189	15.5	6.93	6.88	703	Initial Parameters Light Brown In Color.

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

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WELL DEVELOPMENT RECORD
DO NO. 109

Location: Hunters Point Shipyard
Personnel: Steve McNerney
Date: 1/22/01
Method of Development:
☑ Surging ☑ Bailing ☑ Pumping

Well/Piez. No.: 1R04MW031
Date Installed: 11/15/90
Csg. Diameter (I.D.): 4"
Total Depth (ft. BGL): 26'

Weather:
Screened Interval (ft. BGL): 11'-26'

Equipment Nos.: pH Meter 808051 EC Meter Same Turbidity Meter Same
Equipment decontaminated prior to development: Y ✓ N

Describe

Date	Time	Water Level (ft. BGL)	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
1/22/01	8:12	12.48	235	18.6	7.6	7.35	27	1st W.V. Today
1/22/01	9:02	12.63	285	18.7	7.57	7.27	10	2nd " "
1/22/01	9:52	12.73	335	19.7	7.62	7.34	13	3rd " "
1/22/01	10:45	12.83	385	19.5	7.6	7.42	12	Slow Pump Down To .5gpm
1/22/01	11:15	12.56	400	21.3	7.25	6.03	20	Shut Pump Down.
	Temperature Variation Due To The Use Of An Electrical 3 15/16" Submersible Pump.							

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

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RE-WELL DEVELOPMENT RECORD
DO NO. 109

Location: Hunters Point Shipyard
Personnel: Steve McWrenky
Date: 1/25/01
Method of Development:
☐ Surging ☐ Bailing ☐ Pumping
Weather: Windy, Cold
Equipment Nos.: pH Meter 808051 EC Meter Sawyer Turbidity Meter Sawyer
Equipment decontaminated prior to development: Y ✓ N ____

Well/Piez. No.: 1R12MW19A
Date Installed: 8/13/1992
Csg. Diameter (I.D.): 4"
Total Depth (ft. BGL): 21'
Screened Interval (ft. BGL): 6'-21'

Describe This Well Was Repaired Yesterday. Equipped With A Christy Box At Grade Level.

Date	Time	Water Level ~~(ft. BGL)~~ FROM TOC	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
1/25/01	1125	11.63	—	—	—	—	—	TD-19.29 INITIAL READINGS
	SOFT BOTTOM - PULLING OUT ROCKS AND BROKEN PVC IN BAILER							
	WHICH ARE MOST LIKELY DUE TO THE FACT WELL WAS BROKEN OFF AT SURFACE							
1/25/01	1155	10.81/~~20.55~~	55	—	—	—	—	END BAILING / START SURGING
1/25/01	1210	10.71	75	—	—	—	—	BAILED ANOTHER 20 GAL
1/25/01	1220	10.71	START PUMPING AT 1 GPM					
1/25/01	1220	10.71		17.7	7.14	4.73	999	
1/25/01	1252	11.11	107	16.4	7.27	4.56	7	HAD TO CHANGE BATTERY RECAL. HORIBA
1/25/01	1324	11.14	139	16.9	6.14	4.56	~~4772~~	SOME SEDIMENT
1/25/01	1330	11.34	145	—	—	—	—	INCREASED TO 2 GPM
1/25/01	1346	11.56	177	18.2	7.13	4.66	5	INCREASE TO 3 GPM
1/25/01	1402	11.99	~~209~~ 222	18.1	7.12	4.73	11	
1/25/01	1417	12.09	267	17.9	7.12	4.68	12	DECREASE TO 2 GPM
1/25/01	1433	11.71	299	18.1	7.12	4.56	5	
1/25/01	1445	11.73	323	18.2	7.13	4.56	2	
1/25/01	1455	11.73	343	18.5	7.11	4.56	3	

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

Temperature variations due to 3 15/16" diam. electrical submersible pump

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RE-WELL DEVELOPMENT RECORD
DO NO. 109

Location: Hunters Point Shipyard
Well/Piez. No.: PA36MW03A
Personnel: Steve McNerney
Date Installed: 2/10/93
Date: 1/23/01
Csg. Diameter (I.D.): 4"
Method of Development:
Total Depth (ft. BGL): 16'
☑ Surging ☑ Bailing ☐ Pumping
Weather:
Screened Interval (ft. BGL): 6'-16'
Equipment Nos.: pH Meter 808051 EC Meter Same Turbidity Meter Same
Equipment decontaminated prior to development: Y ✓ N

Describe Well Casing Is 1.6' Above Ground Level. All Measurements For Water Level Are Taken From Top Of Well Casing.

Date	Time	Water Level (ft. BGL)	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
1/23/01	9:10	9.64	—	—	—	—	—	Initial Reading
1/23/01	9:12	9.64	—	15.1	7.52	15.8	>999	Initial Parameters
1/23/01	9:20	9.66	16	—	—	—	—	Initial Surge Depth
Alot Of Sediment Came Out Of Bailer During Initial Parameter Reading. H2O Dark Gr								
1/23/01	9:50	9.65	29	—	—	—	—	Start At 1gpm
1/23/01	10:15	9.99	44	19.0	4.36	2.40	19	Sediment In Sample / Heavy
1/23/01	10:40	9.99	69	18.6	4.40	2.37	9	Slight Amount Of Sediment.
1/23/01	10:50	10.24	79	—	—	—	—	Increase Flow To 2 Gal/Min
1/23/01	11:02	10.31	94	16.5	4.50	2.36	10	Notice Some Heavy Sediment In Sample
1/23/01	11:15	10.35	119	17.7	4.51	2.36	6	" "
1/23/01	11:27	10.31	134	17.8	4.48	2.38	5	
1/23/01	11:40	10.31	159	17.9	4.46	2.36	2	Increase Flow To 3gpm
1/23/01	11:48	11.01	173	18.0	4.43	2.36	20	
1/23/01	11:56	11.03	197	17.5	4.46	2.32	4	
1/23/01	12:04	11.09	221	17.6	4.46	2.32	4	
1/23/01	12:12	11.10	245	17.3	4.44	2.33	1	Shut Pump Down
This Well Is Re-Developed. Had To Restart Pump Due To PH Error.								

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

Left Rubber Boot On PH Sensor. See Fail And 2nd Well Development Record!

Used 3 15/16" Electric Submersible Pump On This Well.

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WELL DEVELOPMENT RECORD
DO NO. 109

Location: Hunters Point Shipyard
Personnel: Steve McNurney
Date: 1/23/01
Method of Development:
☑ Surging ☑ Bailing ☑ Pumping
Weather: Raining
Equipment Nos.: pH Meter 808051 EC Meter Same Turbidity Meter Same
Equipment decontaminated prior to development: Y ✓ N ____

Well/Piez. No.: PA36MW03A
Date Installed: 2/10/93
Csg. Diameter (I.D.): 4"
Total Depth (ft. BGL): 16'
Screened Interval (ft. BGL): 6'-16'

Describe ____

Date	Time	Water Level (ft. BGL)	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments
1/23/01	12:28	10.71	269	17.5	7.66	2.32	7	New PH Readings
1/23/01	12:36	10.74	293	17.5	7.69	2.29	3	
1/23/01	12:44	10.75	317	17.7	7.65	2.29	4	
Forgot To Remove Rubber Boot From PH Sensor So Readings On								
First Page Is Incorrect PH Readings.								

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

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RE-

WELL DEVELOPMENT RECORD
DO NO. 109

Location: Hunters Point Shipyard
Well/Piez. No.: PA36MW04A
Personnel: Steve McNerney
Date Installed: _____
Date: 1/17/01
Csg. Diameter (I.D.): 4"
Method of Development:
Total Depth (ft. BGL): 21.0
☑ Surging ☑ Bailing ☑ Pumping
Weather: _____
Screened Interval (ft. BGL): _____
Equipment Nos.: pH Meter 808051 EC Meter Same Turbidity Meter Same
Equipment decontaminated prior to development: Y ✓ N _____

Describe _____

10.40 = WV

Date	Time	Water Level (ft. BGL)	Volume Removed (gal.)	Temp (°C)	pH	EC	Turbidity	Comments	
1/17/01	1:25	5.0	20	—	—	—	—	Initial Reading.	
Total Depth 20.75 Well Cap Was Loose / Ground H2O May Have Leaked In									
Bob From WDC Stated There Was A Little Sand And Mud. No Odor.									
Start Pumping	1/17/01	2:27	8.0	31	16.8	7.32	12.5	87	1st W.V.	2gpm
	1/17/01	2:42	8.0	41	17.0	7.45	10.7	87	2nd W.V.	
	1/17/01	2:48	8.0	51	17.0	7.64	10.7	31	3rd W.V.	
	1/17/01	2:58	8.0	71	17.2	7.39	10.7	85	5th W.V.	
Turned Well Pump Up.	1/17/01	3:02	8.0	91	17.0	7.38	11.6	30	7th W.V.	4gpm.
	1/17/01	3:07	8.0	111	17.1	7.36	11.6	32	9th W.V.	
	1/17/01	3:12	8.0	131	17.0	7.37	11.6	35	11th W.V.	
	1/17/01	3:16	8.0	151	17.0	7.35	11.6	115	Turned Pump Down	1.5gpm
	1/17/01	3:27	8.0	171	17.5	7.43	10.3	5		
	1/17/01	3:33	8.0	181	17.4	7.41	10.5	2	1st Parameter For Development.	
	1/17/01	3:39	8.0	191	17.3	7.4	10.5	2	2nd "	
	1/17/01	3:48	8.0	211	17.8	7.39	10.5	2	Well Is Developed.	
	Total Gallons That Were Removed = 181 GPM Values Are Approx.								

See FADL And Meter Readings.

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity – Reported to the nearest 10% mhos/cm of instrument set range
- Water temperature – Reported to nearest 0.1°C

GROUNDWATER MONITORING WELL DEVELOPMENT/REDEVELOPMENT DATA SHEET

 Date: 04/23/01

Well Name	IR39MW23A	Screen Interval	6-21'		
Project	Phase II GDGI	Static Elevation	GND TOC .	Immiscible Phases Present?	N
Project No.	G0069-011B040502	Static Water Level (from TOC)	6.47'	Type	N/A
Well Location	Parcel E	Well Stick Up		Measured with	N/A
Sample Date	04/20/01	Static Elevation		PID Readings (background)	0.0 ppm
Sampling Personnel:	J. Fortuna	Well Depth	19.33' MEAS 21.5 RPTD	PID Reading (TOC)	0.0 ppm
	J. Langston	Feet of Water	12.86	Well Installed by	
		Gallons/Foot	0.653	Installation Date	
Sample ID	N/A	Casing Volume	8.40 gal	Development Date(s)	
Duplicate ID	N/A				

FIELD CHEMISTRY CALIBRATIONS

Date/Time 4/20/01 Spec. Conductance: Standard 1,000 umhos/cm at 25C Reading 1,000 umhos/cm at 14.02 ^{0}C (100 13.63)

pH: pH 4.00 - 4.00 at 14.02 ^{0}C pH 7.00 - at ____ ^{0}C pH 10.00 - at __ ^{0}C

Dissolved Oxygen: D.O. Meter __ mg/L at ___ ^{0}C PID: Calibration Gas Isobutylene PPM 100 Span 100.2 Reading

Turbidity calibrated to 0 ntu standard; reading 0.0 ntu

PURGING

Time	Discharge Rate (mL/min)	Dissolved Oxygen (mg/L)	pH	Eh/ORP (mV)	Temp (^{0}C)	Specific Conduct (umhos/cm at ^{0}C)	Turbidity (NTU)	Cumulative Volume of Water Removed (Purged) Gallons	Casing Vol.	Comments
1235	Surge well vigorously for several minutes; begin pumping at 1245									
1254		3.53	7.57	41.0	17.35	9.18	1549	12	1.4	Brown, Muddy
1303		1.27	7.27	6.5	17.38	10.71	1220	25	3.0	
1309		1.16	7.31	5.9	17.23	11.18	810	35	4.2	Some clearing of water
1315	Surge well vigorously for several minutes									
1340		1.86	7.31	13.0	16.95	11.34	1548	50	6.0	
1350		3.09	7.29	6.0	16.97	12.02	1019	60	7.1	
1355	Resurge well vigorously for several minutes									
1417		2.86	7.35	27.6	16.84	11.76	1547	75	8.9	
1430		2.03	7.26	7.1	16.73	0.706	767	85	10.1	
1442		3.03	7.23	-7.0	16.99	13.33	320	100	11.9	Water rapidly clearing
1450		2.47	7.20	-20.1	17.04	13.68	186	110	13.1	

ADDITIONAL NOTES:

THIS SHEET REPERESENTS REDEVELOPMENT. Original development record not available.
Well development complete at 13.1 well volumes of water removed.
Well depth after development = 20.50' (firm bottom)

Condition of Well Poor; below grade, lid broken

FIELD EQUIPMENT

Ph Meter YSI 6820w/ 610-DM	Serial No.	97E0627
Spec. Cond. Meter YSI 6820 w/ 610-DM	Serial No.	97E0627
Pump ES-60	Serial No.	N/A
Water Level Meter Solinist	Serial No.	2357
D.O. Meter YSI 6820/ w 610-DM	Serial No.	97E0627
Filter Apparatus NA	Filters	
Temp. Measure YSI 6820 w/610-DM	Serial No.	97E0627
Interface Probe N/A	Serial No.	N/A
PID/OVA thermo 580B OVM	Serial No.	580U-61565-333

Field Chemistry Calibrations

Fractions	
Number of Bottles	
Sample Depth	
Field Notebook	
Sample Method and Rate	
Discharge Water Containerized?	Y