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FINAL
APRIL TO JUNE 2004
EIGHTEENTH QUARTERLY
GROUNDWATER SAMPLING REPORT
PARCEL B, HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

July 22, 2005

Revised March 31, 2006

Under Contract With:

CDM

CDM Federal Programs Corporation
9444 Farnham Street, Suite 210
San Diego, California 92123
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Prepared Under:
Naval Facilities Engineering Command
Contract No. N68711-00-D-0004
Delivery Order 0074

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PARCEL B, HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

Kleinfelder Project No. 41330-2.09

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ABBREVIATIONS AND ACRONYMS

APPL	Agriculture & Priority Pollutants Laboratories, Inc.
ASTM	American Society for Testing and Materials
Bay	San Francisco Bay
°C	Degrees Celsius
CLP	Contract Laboratory Program
COC	Chain-of-custody
DBCP	1,2-dibromo-3-chloropropane
DCE	Dichloroethene
DI	Deionized
ELAP	Environmental Laboratory Accreditation Program
EPA	U.S. Environmental Protection Agency
FSP	Field sampling plan
HGAL	Hunters Point groundwater ambient level
HPS	Hunters Point Shipyard
IR	Installation Restoration
LDC	Laboratory Data Consultants, Inc.
µg/L	Microgram per liter
MS/MSD	Matrix spike/matrix spike duplicate
Navy	U.S. Department of the Navy
PAH	Polynuclear aromatic hydrocarbon
PCB	Polychlorinated biphenyl
POC	Point-of-compliance
Q17	Quarter Seventeen
Q18	Quarter Eighteen
Q20	Quarter Twenty
QA/QC	Quality assurance and quality control
RAMP	Remedial Action Monitoring Plan
RPD	Relative percent difference

SAP	Sampling and Analysis Plan
SFPUC	San Francisco Public Utilities Commission
SOP	Standard operating procedure
SVOC	Semivolatile organic compound
TCE	Trichloroethene
TtEMI	Tetra Tech EM, Inc.
TIZ	Tidally influenced zone
TPH	Total petroleum hydrocarbon
TPHe	Total petroleum hydrocarbons as extractables
TPHg	Total petroleum hydrocarbons as gasoline
VOC	Volatile organic compound
ZVI	Zero valent iron injection treatability study

1.0 INTRODUCTION

Kleinfelder Inc. (Kleinfelder) prepared this quarterly groundwater sampling report for the second quarter of the fifth year of groundwater monitoring (or Quarter Eighteen [Q18]) under the Remedial Action Monitoring Plan (RAMP) (Tetra Tech EM, Inc. [TtEMI], 1999) at Parcel B of Hunters Point Shipyard (HPS) in San Francisco, California (Figure 1), for the U.S. Department of the Navy (Navy), Naval Facilities Engineering Command, Southwest Division. Parcel boundaries presented in Figure 1 have recently been redefined. These changes will be documented in the Quarter 20 (Q20) report. Groundwater monitoring for Q18 encompasses the period from April through June 2004. Field sampling was conducted between June 1 and August 2, 2004, in accordance with the Draft Sampling and Analysis Plan (SAP) Basewide Groundwater Monitoring Program (TtEMI, 2003). The Draft SAP contains all requirements for Parcel B monitoring (as outlined in the RAMP) and for Parcels C, D, and E monitoring.

Groundwater elevations were measured on June 14, 2004. This quarterly report contains groundwater analytical data collected from Parcel B wells and groundwater elevation data collected from Parcel B, C, D, and E wells. Groundwater sampling was performed at Parcel C, D, and E wells during this quarterly event and is presented in a separate report. The work was performed by Kleinfelder and Brown and Caldwell under Navy Contract N68711-00-D-0004, Delivery Order 0074.

During the Parcel B remedial investigation (PRC, LFR, and Uribe & Associates, 1996), the Navy sampled 98 groundwater monitoring wells. Twenty-four of these wells were originally included under the RAMP program. Since then, six of the original wells were decommissioned, and eight existing or newly-installed monitoring wells were added to the RAMP. In addition, replacement wells for five of the original six decommissioned RAMP wells were re-installed in March 2004, bringing the total RAMP well count to 31. The Navy currently monitors these 31 Parcel B wells under the RAMP program. Six Supplemental Characterization wells (installed in 2003), which are not part of the RAMP, have been also included in quarterly sampling events since Quarter Seventeen (Q17) to monitor the progress of the Zero Valent Iron (ZVI) Injection Treatability Study. Four of the 31 RAMP wells in Parcel B are scheduled to be sampled semi-annually and did not require sampling during Q18. However, groundwater from two of these four wells (IR07MW23A and IR07MW27A) was inadvertently sampled and submitted for laboratory analysis. Therefore, during Q18, 35 Parcel B wells were sampled; 29 RAMP wells and the six ZVI treatability study wells. The RAMP wells at Parcel B are grouped into the following eight categories:

- **Point-of-Compliance (POC) Monitoring Wells:** Located near the high-tide line of the tidally influenced zone (TIZ), which is the POC.
- **Sentinel Monitoring Wells:** Located near the inland edge of the approximate 5-year buffer zone.
- **Post-Remedial Action Monitoring Wells:** Five wells located near remedial action excavations in Installation Restoration (IR) Site 07, or IR-07.
- **Volatile Organic Compound (VOC) Monitoring Wells:** Located in and near the VOC plume in IR-10.
- **On- and Offsite Migration Monitoring Wells:** Two wells along the western boundary of Parcel B.
- **Utility Line Monitoring Well:** One well located near IR-06.

All of these wells are sampled quarterly, except for the Sentinel wells, which are sampled semi-annually. The wells that are monitored as part of this Parcel B program are listed in Table 1. Table 1 also includes well construction details.

In addition to the RAMP wells listed above, the Navy sampled the following types of wells during Q18:

- **Hexavalent Chromium Monitoring Well:** RAMP VOC monitoring well IR10MW12A to monitor hexavalent chromium near Building 123.
- **Supplemental Characterization Monitoring Wells:** Monitoring wells IR26MW46A, IR26MW47A, and IR26MW48A. These wells were installed in the vicinity of exploratory excavation –05 in January 2002 to evaluate the potential risk from groundwater in eastern IR-26 to aquatic receptors in the Bay. Six additional wells (IR10MW61A, IR10MW62A, IR10MW71A, IR10MW76A, IR10MW79A, and IR10MW80A) were installed in August and September 2003 to delineate the plume beneath IR-10 and to monitor the progress of the ZVI treatability study.

Figure 2 shows the locations of RAMP wells, IR sites, decommissioned wells, and wells added to the program.

The groundwater monitoring program for Parcel B has the following objectives:

- Assess whether "trigger-level" concentrations are exceeded along the inland edge of the TIZ (trigger levels are contaminant concentrations at which additional actions may be necessary).
- Evaluate the effect of remedial actions involving contaminated soil on analyte concentrations in A-aquifer groundwater at IR-07 and IR-26.
- Evaluate the migration of hazardous substances in A-aquifer groundwater from IR-06 and IR-10 to the San Francisco Bay (Bay).
- Evaluate on- and offsite migration of hazardous substances in A-aquifer groundwater from the area northwest of IR-07 and IR-18.
- Monitor the potential degradation of trichloroethene (TCE) to byproducts (including vinyl chloride) in A-aquifer groundwater at IR-10 and IR-24.

Section 2.0 discusses groundwater elevation survey procedures and the interpretation of the groundwater potentiometric surface for Q18. Section 3.0 discusses groundwater sampling procedures, analytical methods, analytical results, and the quality of the data. Section 4.0 presents conclusions based on Q18 results. Section 5.0 lists the references used to prepare this report. A full evaluation of the data will be reported in the Annual Groundwater Monitoring Report (at the conclusion of Q20).

The appendices for this report are organized as follows:

- Appendix A presents the analytical results from the sampling event and compares the results with trigger levels.
- Appendices B and C present monitoring well sampling sheets and chain-of-custody records for the sampling event, respectively.
- Appendix D includes data validation reports for the Q18 sampling event.
- Appendix E presents the field duplicate pair results.
- Appendix F provides a copy of the batch wastewater discharge permit for disposal of the purge groundwater and equipment rinsate generated during Q18.
- Appendix G provides records of field variance.
- Appendix H provides the response to comments on the draft report.

Table 1
Monitoring Well Sampling Inventory
Eighteenth Quarterly Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Type of Monitoring Well	Monitoring Well	Sampling Frequency	Date Installed	Well Casing Diameter	Screened Interval[5]
Point of Compliance (POC)	IR07MW19A	Quarterly	12/6/1990	4-inch	6 to 15.75 feet
	IR07MWS-2		6/28/1999	4-inch	3 to 17.6 feet
	IR26MW41A		11/11/1994	4-inch	6 to 20.7 feet
	IR46MW37A		3/17/1994	4-inch	6 to 20.85 feet
	IR07MWS-4		3/3/2004	4-inch	6 to 16 feet
POC & Volatile Organic Compounds (VOC)	IR10MW31A1[2]	Quarterly	5/3/1999	4-inch	7 to 17 feet
	PA50MW01A[2]		3/8/1993	4-inch	6 to 15.84 feet
Sentinel	IR07MW23A	Semi-annually[4]	12/6/1990	4-inch	7 to 17 feet
	IR07MW27A		4/8/1999	4-inch	11 to 21 feet
	IR61MW05A[3]		7/28/1995	4-inch	6 to 21 feet
	UT03MW11A[3]		5/19/1994	4-inch	5 to 20 feet
Sentinel and VOC	IR06MW45A	Quarterly - VOC only Semi-annually[4] for remaining analytes	9/17/1991	4-inch	4 to 13.2 feet
	IR10MW28A[2]		9/19/1991	2-inch	7 to 17 feet
	IR25MW17A		5/19/1994	4-inch	5.5 to 19.8 feet
Post-Remedial Action	IR07MW20A1	Quarterly	12/10/1990	4-inch	6 to 23.64 feet
	IR07MW21A1		3/3/2004	4-inch	6 to 16 feet
	IR07MW24A		3/3/2004	4-inch	5 to 15 feet
	IR07MW25A		3/3/2004	4-inch	8 to 18 feet
	IR07MW26A		3/3/2004	4-inch	5 to 15 feet
Hexavalent Chromium & VOC	IR10MW12A	Quarterly	12/30/1988	4-inch	3 to 18 feet
VOC	IR10MW13A1	Quarterly	12/22/1988	4-inch	5 to 19.92 feet
	IR10MW14A		1/4/1989	4-inch	5 to 19.53 feet
	IR10MW33A		6/28/1999	4-inch	5 to 15.27 feet
	IR10MW59A		3/16/2001	4-inch	8.5 to 17.5 feet
	IR25MW37A		11/30/2000	4-inch	7 to 16 feet
On- and Offsite Migration	IR07MW28A	Quarterly	5/11/1999	4-inch	5 to 15 feet
	IR18MW21A		5/6/1999	4-inch	12 to 19.15 feet
Utility Line	IR06MW42A	Quarterly	6/5/1990	4-inch	8.5 to 13.5 feet
Supplemental Characterization Wells	IR26MW46A	Quarterly	1/16/2002	4-inch	7 to 17 feet
	IR26MW47A		1/17/2002	4-inch	5 to 15 feet
	IR26MW48A		1/17/2002	4-inch	9 to 19 feet
	IR10MW61A		8/5/2003	4-inch	11 to 21 feet
	IR10MW62A		8/5/2003	4-inch	11 to 21 feet
	IR10MW71A		8/17/2003	4-inch	14 to 24 feet
	IR10MW76A		8/15/2003	4-inch	8 to 18 feet
	IR10MW79A		9/12/2003	4-inch	11 to 21 feet
	IR10MW80A		9/12/2003	4-inch	11 to 21 feet

Notes:
1. For at least 5 years.
2. These wells are also classified as monitoring wells for volatiles.
3. Not sampled during Quarter 18.
4. Usually first and third quarters; during both the dry and wet seasons.
5. Screened interval data from Draft SAP (TtEMI, 2003).

2.0 GROUNDWATER ELEVATIONS

Groundwater elevation data are collected during each quarterly sampling event. This section discusses groundwater level measurement procedures (Section 2.1) and the interpretation of groundwater potentiometric surface contours for Q18 (Section 2.2).

2.1 GROUNDWATER LEVEL MEASUREMENT PROCEDURES

The Navy measured groundwater levels in monitoring wells located in Parcels B, C, D, and E to obtain basewide data about local groundwater flow patterns. The Navy measured water levels at these wells in accordance with the Draft SAP (TtEMI, 2003). Measuring and sampling procedures are also discussed in detail in the Data Management Plan (Kleinfelder, 2004), which is part of the planning documents for quarterly sampling. Section 8.3.3.2 of the Draft SAP (TtEMI, 2003) details the procedures that were followed during measurement of water levels on June 14, 2004. Depth to water was measured using an electronic water-level indicator. During a single day within a 9-hour period, groundwater levels were measured in 316 of the 415 monitoring wells listed for Parcels B, C, D, and E in Table G-1 of the Draft SAP (TtEMI, 2003), starting at low tide to reduce tidal influence on the measurements. Several wells were inaccessible due to being covered by natural and artificial objects, or were found damaged and could not be measured. Water levels were not measured in 11 wells that could not be found by the measuring crew at Parcel B. However, all wells listed in the Draft SAP (TtEMI, 2003) for groundwater level measurement were attempted to be measured in the field. Of the 316 monitoring wells measured, 52 were from Parcel B, 89 were from Parcel C, 61 were from Parcel D, and 114 were from Parcel E. Data collected during Q18 are consistent with previous quarters for Parcels B, C, D, and E groundwater level monitoring.

The Navy calculated groundwater elevations in feet above mean sea level (based on the National Geodetic Vertical Datum from 1929) by subtracting depth to water from surveyed top-of-casing elevations. Table 2 summarizes the depth-to-water measurements and groundwater elevations for each measured well. Figure 3 shows the basewide groundwater elevation contours for the A-aquifer generated from water levels measured during Q18.

2.2 INTERPRETATION OF Q18 GROUNDWATER ELEVATION CONTOURS

Basewide groundwater movement in the A-aquifer during Q18 continues to be towards the shoreline and San Francisco Bay. Parcels B and E continue to have depressions and mounds, whereas Parcels C and D generally appear to have fairly low-magnitude groundwater gradients.

Variations in the groundwater elevation have occurred between Q17 and Q18. The two most significant are the pronounced mound generally centered at IR01MW12A in Parcel E is gone, as is the pronounced depression generally centered at IR12MW12A in Parcel E. Furthermore, the area identified as below sea level appears to have expanded. Several wells were not measured during Q18, because of well head damage (subsequently repaired), inaccessibility (subsequently cleared), or blockages in the well itself (under review with repairs planned). As a result, some slight variations in localized groundwater movement direction were anticipated; however, overall groundwater movement trends appear to have remained relatively unchanged.

Areas of groundwater elevations below sea level occur along the shorelines of Parcels B, C, D, and E. The most pronounced area of groundwater elevations below sea level continues to occur along the eastern edge of Parcel E. This particular area of groundwater elevations below sea level trends north-south.

Several areas onsite have had water line and sewer line repairs. Leakage from these lines has affected the historical direction of groundwater movement. As these lines are repaired or taken out of service, further alteration of the A-aquifer groundwater gradient is expected. However, caution must be exercised not to attribute changes in the groundwater elevation and direction to these repairs when natural variations may be the actual cause. Therefore, additional data will need to be collected before a definite correlation can be established.

Overall, groundwater movement for each parcel can be described as follows:

- Parcel B: Groundwater flows north-northeast towards the shoreline and the Bay. There appears to be a small, trough-like depression in the IR-07/IR-18 area on the northwestern portion of Parcel B. This trough appears consistent with previous quarters, and may be the consequence of groundwater moving into Parcel B from offsite. The possibility also exists that fill material in this particular area may be influencing groundwater movement. A groundwater mound is present in the vicinity of well IR20MW17A. Data from adjacent wells IR06MW45A and IR26MW41A, which comprise the IR-20 mound in the previous quarters, was again not available this quarter. Low groundwater elevations are still present adjacent to the mound to the east in the vicinity of well IR25MW17A and the west at IR-26, creating a groundwater divide that is slightly less pronounced than in Q17. This divide appears somewhat consistent with previous quarters of monitoring.
- Parcel C: In general, groundwater flows towards the shoreline and the Bay, which is to the east-southeast in Parcel C. Groundwater movement may be influenced by the higher topography and steep groundwater gradient in the vicinity of the boundary with Parcel A.

There appears to be a slight groundwater mound centered beneath Buildings 231 and 211, producing low-angle gradients to the north and south. The southeastern portion of this parcel continues to be an area of relative flat gradient, and may still represent an area where sewer line repairs may be influencing groundwater elevations. This area shows a slightly more dynamic gradient when compared to Q17; however, the relative change is fairly subtle.

- Parcel D: Groundwater gradients are fairly low in Parcel D. There is a low-relief groundwater "mound" oriented southwest-northeast in the vicinity of Building 411. This mound appears slightly more pronounced that in Q17, and may reflect the effects of sewer line repairs and the consequential equilibrium adjustments in the natural groundwater elevation. However, this assessment still requires significantly more data, and will require further review pending forthcoming water level measurements during future quarters. The depression that occurs below sea level on the western boundary of Parcel D continues to influence groundwater flow to the west along the parcel boundary with Parcel E.

- Parcel E: Groundwater movement in Parcel E is very complex. The largest mound in the parcel, centered on IR01MW12A was not plotted, as it is considered a questionable data point and will be monitored closely over the following quarters. A small mound still exists in the vicinity of IR02MW114A2. The cause of the mound near IR01MW114A2 is still unclear, but continues to perpetuate at the site. A broad, low-angle depression of lesser magnitude appears to slightly persist in the vicinity of IR12MW12A. Groundwater from the eastern portion of Parcel E appears to flow into this depression. This depression is generally consistent with previous quarters, and will require further review to verify.

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Table 2
Summary of Basewide Groundwater Level Measurements, June 14, 2004
Eighteenth Quarterly (April-June) 2004 Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Monitoring Well ID No.	Time	Depth to Groundwater (feet below TOC)	TOC Elevation (feet above msl)	Groundwater Elevation (feet above msl)
A	PA18MW08A	NM	NM	24.67	NM
B	IR06MW46A	not recorded	6.18	9.46	3.28
B	IR07MW19A	13:34	9.04	9.56	0.52
B	IR07MW20A1	13:28	8.63	9.26	0.64
B	IR07MW21A1	9:13	14.85	16.26	1.41
B	IR07MW23A	9:48	13.9	15.76	1.86
B	IR07MW24A	9:09	12.445	13.89	1.45
B	IR07MW25A	8:35	10.86	12.67	1.81
B	IR07MW26A	9:23	12.23	14.50	2.27
B	IR07MW27A	9:34	12.96	16.15	3.19
B	IR07MW28A	8:45	10.03	12.03	2
B	IR07MW93A	17:35	17.44	19.53	2.09
B	IR07MW94A	9:41	13.52	15.15	1.63
B	IR07MW95A	8:49	14.45	16.60	2.15
B	IR07MWS-2	9:30	10.13	12.71	2.58
B	IR07MWS-4	9:20	15.125	16.78	1.66
B	IR10MW12A	14:32	5.89	9.08	3.19
B	IR10MW13A1	14:20	7.115	9.92	2.81
B	IR10MW14A	15:22	7.705	10.23	2.53
B	IR10MW28A	15:36	10.3	13.57	3.27
B	IR10MW29A1	15:19	6.08	9.15	3.07
B	IR10MW31A1	13:54	9.37	10.34	0.97
B	IR10MW32A	13:50	7.02	9.77	2.75
B	IR10MW33A	14:03	7.21	10.17	2.96
B	IR10MW59A	NM	NM	13.79	NM
B	IR10MW61A	NM	NM	10.05	NM
B	IR10MW79A	NM	NM	NA	NM
B	IR10MW80A	NM	NM	NA	NM
B	IR18MW100B	9:59	13.975	17.94	3.97
B	IR18MW101B	10:04	15.11	18.89	3.78
B	IR18MW200A	8:57	24.195	26.96	2.76
B	IR18MW21A	17:42	15.155	17.56	2.41
B	IR18MW91A	9:02	15.13	18.75	3.62
B	IR18MW92A	10:14	17.86	20.70	2.84
B	IR20MW17A	10:15	7.305	10.51	3.21
B	IR24MW06A	9:28	10.165	10.25	0.09
B	IR25EW01A	NM	NM	10.81	NM
B	IR25MW60A1	NM	NM	9.57	NM
B	IR25MW60A2	11:18	7.94	9.48	1.54
B	IR26MW40A	9:50	8.565	9.89	1.33
B	IR26MW41A	10:00	7.125	10.15	3.03

Table 2 (Continued)
Summary of Basewide Groundwater Level Measurements, June 14, 2004
Eighteenth Quarterly (April-June) 2004 Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Monitoring Well ID No.	Time	Depth to Groundwater (feet below TOC)	TOC Elevation (feet above msl)	Groundwater Elevation (feet above msl)
B	IR26MW43A	11:34	7.15	7.09	-0.06
B	IR26MW44A	11:46	7.63	8.25	0.62
B	IR26MW46A	11:22	6.805	8.08	1.27
B	IR26MW47A	11:15	7.03	7.75	0.72
B	IR26MW48A	11:08	7.32	8.13	0.81
B	IR46MW37A	10:30	7.21	9.58	2.37
B	IR46MW38A	10:13	9.2	9.78	0.58
B	IR46MW39A	10:19	9.7	9.75	0.05
B	IR46MW41A	9:35	7.31	10.00	2.69
B	IR46MW43A	10:55	8.73	8.98	0.25
B	IR46MW46A	10:30	8.8	9.61	0.81
B	IR46MW47A	9:55	9.53	9.69	0.16
B	IR46MW48A	9:24	9.21	8.89	-0.32
B	IR60MW08A	13:11	8.97	9.40	0.43
B	IR61MW05A	14:37	6.87	10.11	3.24
B	IR62MW07A	10:39	6.835	10.20	3.37
B	IR62MW08A	10:47	6.89	10.35	3.46
B	PA24MW02A	9:35	9.51	9.46	-0.05
B	PA50MW01A	13:44	7.95	9.18	1.23
B	PA50MW02A	11:39	7.835	7.80	-0.04
B	UT02MW15A	10:34	8.94	12.57	3.63
B	UT03MW11A	10:21	6.845	9.94	3.1
B	UT03MW12A	10:29	6.78	10.10	3.32
C	IR06MW22A	NM	NM	10.00	NM
C	IR06MW32A	16:04	5.3	9.90	4.6
C	IR06MW34A	13:22	9.53	10.37	0.84
C	IR06MW35A	14:20	5.3	9.73	4.43
C	IR06MW40A	13:52	8.4	10.08	1.68
C	IR06MW41A	NM	NM	9.78	NM
C	IR06MW42A	13:11	10.9	11.89	0.99
C	IR06MW44A	NM	NM	9.81	NM
C	IR06MW45A	11:22	7.27	9.89	2.62
C	IR06MW47F	14:03	7.9	9.66	1.76
C	IR06MW49F	16:01	8.8	11.49	2.69
C	IR06MW50F	13:35	10.7	10.38	-0.32
C	IR06MW52F	14:17	5.3	9.70	4.4
C	IR06MW54F	14:48	23.5	35.02	11.52
C	IR06MW55F	14:40	22.32	32.34	10.02
C	IR06MW56F	NM	NM	25.04	NM
C	IR06MW57F	16:30	17.35	28.02	10.67
C	IR06MW58F	NM	NM	25.91	NM

Table 2 (Continued)
Summary of Basewide Groundwater Level Measurements, June 14, 2004
Eighteenth Quarterly (April-June) 2004 Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Monitoring Well ID No.	Time	Depth to Groundwater (feet below TOC)	TOC Elevation (feet above msl)	Groundwater Elevation (feet above msl)
C	IR06MW59A1	14:12	5.19	9.46	4.27
C	IR25MW11A	NM	NM	10.45	NM
C	IR25MW16A	11:32	9.405	11.02	1.61
C	IR25MW17A	11:10	8.065	10.31	2.24
C	IR25MW18A	NM	NM	10.46	NM
C	IR25MW20A	NM	NM	10.48	NM
C	IR25MW37A	11:04	6.955	10.07	3.12
C	IR25MW37B	10:50	7.025	10.21	3.18
C	IR25MW38B	NM	NM	10.44	NM
C	IR25MW39A	11:47	8.47	11.21	2.74
C	IR25MW39B	11:42	9.945	11.25	1.3
C	IR25MW42B	NM	NM	10.01	NM
C	IR25MW50A	NM	NM	10.02	NM
C	IR25MW53A	NM	NM	11.07	NM
C	IR25MW54A	NM	NM	11.12	NM
C	IR25MW55A	NM	NM	10.39	NM
C	IR25MW61A1	10:43	7.945	9.56	1.62
C	IR25MW61A2	10:46	7.42	9.67	2.25
C	IR25MW900B	12:02	15.135	11.02	-4.12
C	IR25MW901B	NM	NM	10.98	NM
C	IR25MW902B	NM	NM	11.02	NM
C	IR28MW122A	13:50	6.2	7.48	1.28
C	IR28MW123A	11:19	7.3	8.09	0.79
C	IR28MW125A	14:17	7.68	7.74	0.06
C	IR28MW126A	14:20	6.5	7.76	1.26
C	IR28MW127A	13:20	6.15	7.63	1.48
C	IR28MW136A	NM	NM	7.55	NM
C	IR28MW140F	13:40	6.5	7.66	1.16
C	IR28MW150A	11:10	7.3	7.87	0.57
C	IR28MW151A	NM	NM	8.57	NM
C	IR28MW155A	14:11	7.65	8.57	0.92
C	IR28MW169A	8:13	8.02	9.69	1.67
C	IR28MW170A	NM	NM	8.76	NM
C	IR28MW171A	10:20	7	6.67	-0.33
C	IR28MW171B	10:45	6.4	7.19	0.79
C	IR28MW172F	8:45	6.68	8.57	1.9
C	IR28MW173B	11:33	6.7	8.06	1.36
C	IR28MW188F	8:05	7.655	9.64	1.98
C	IR28MW189F	NM	NM	8.87	NM
C	IR28MW190F	NM	NM	10.06	NM
C	IR28MW200A	10:20	8.38	8.28	-0.1

Table 2 (Continued)
Summary of Basewide Groundwater Level Measurements, June 14, 2004
Eighteenth Quarterly (April-June) 2004 Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Monitoring Well ID No.	Time	Depth to Groundwater (feet below TOC)	TOC Elevation (feet above msl)	Groundwater Elevation (feet above msl)
C	IR28MW201F	10:28	7.32	8.04	0.72
C	IR28MW216F	9:15	6.3	8.38	2.08
C	IR28MW217A	9:05	6.94	8.98	2.04
C	IR28MW221A	14:10	8.2	9.56	1.36
C	IR28MW221B	14:10	8.2	9.58	1.38
C	IR28MW255F	NM	NM	7.83	NM
C	IR28MW268A	13:28	6.5	7.90	1.4
C	IR28MW271A	14:40	6.8	7.06	0.26
C	IR28MW272A	16:33	7.2	7.85	0.65
C	IR28MW272F	16:33	7.38	8.19	0.81
C	IR28MW286A	9:30	8.015	9.81	1.79
C	IR28MW287A	13:40	7.09	9.31	2.22
C	IR28MW290A	NM	NM	8.14	NM
C	IR28MW297A	16:30	7.5	7.68	0.18
C	IR28MW298A	15:05	7.3	8.04	0.74
C	IR28MW299B	10:00	7.55	9.60	2.05
C	IR28MW308A	14:25	6.02	7.63	1.61
C	IR28MW309B	13:02	7	9.06	2.06
C	IR28MW310F	9:35	6	7.62	1.62
C	IR28MW311A	NM	NM	8.02	NM
C	IR28MW311A-R1	9:45	5.74	7.90	2.16
C	IR28MW313F	10:15	9.755	12.17	2.42
C	IR28MW314B	NM	NM	8.68	NM
C	IR28MW315A	9:56	6.725	8.84	2.12
C	IR28MW315B	10:05	7.01	9.03	2.02
C	IR28MW315F	10:12	7.35	8.97	1.62
C	IR28MW324A	NM	NM	8.79	NM
C	IR28MW326A	NM	NM	8.75	NM
C	IR28MW333A	NM	NM	8.71	NM
C	IR28MW334A	NM	NM	8.78	NM
C	IR28MW338A	NM	NM	8.83	NM
C	IR28MW339A	15:00	7.15	8.47	1.32
C	IR28MW340A	14:55	7.35	8.65	1.3
C	IR28MW342F	13:10	7.31	8.86	1.55
C	IR28MW350F	NM	NM	9.83	NM
C	IR28MW351F	13:46	7.49	9.00	1.51
C	IR28MW352A	11:00	6.54	8.05	1.51
C	IR28MW353A	NM	NM	8.19	NM
C	IR28MW353B	NM	NM	7.33	NM
C	IR28MW354B	NM	NM	8.19	NM
C	IR28MW394A	14:52	6.8	9.26	2.46

Table 2 (Continued)
Summary of Basewide Groundwater Level Measurements, June 14, 2004
Eighteenth Quarterly (April-June) 2004 Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Monitoring Well ID No.	Time	Depth to Groundwater (feet below TOC)	TOC Elevation (feet above msl)	Groundwater Elevation (feet above msl)
C	IR28MW394B	15:00	7.9	9.02	1.12
C	IR28MW395F	8:55	7.1	9.12	2.02
C	IR28MW396A	8:25	7.45	8.99	1.54
C	IR28MW396B	8:36	7.445	9.09	1.64
C	IR28MW397A	13:45	6.905	9.13	2.22
C	IR28MW397B	13:30	7.44	9.37	1.92
C	IR28MW398A	11:45	7.585	9.33	1.74
C	IR28MW398B	11:40	7.24	8.92	1.68
C	IR28MW399B	11:36	7.5	7.82	0.32
C	IR28MW400B	NM	NM	8.88	NM
C	IR28MW401B	NM	NM	8.58	NM
C	IR28MW910A	NM	NM	8.93	NM
C	IR28MW914A	NM	NM	9.45	NM
C	IR28MW932F	13:19	7.35	8.87	1.52
C	IR28MW933F4	NM	NM	9.02	NM
C	IR28MW933F5	NM	NM	9.02	NM
C	IR28MW934F4	NM	NM	9.05	NM
C	IR28MW934F5	NM	NM	9.05	NM
C	IR29MW48A	11:35	7.5	8.04	0.54
C	IR29MW57A	NM	NM	7.67	NM
C	IR29MW58F	11:43	7.2	8.54	1.34
C	IR29MW84A	NM	NM	8.09	NM
C	IR29MW85F	11:52	6.15	9.66	3.51
C	IR30MW01F	NM	NM	8.92	NM
C	IR30MW03F	8:20	2.66	8.89	6.23
C	IR30MW04F	8:40	4.88	8.96	4.08
C	IR50MW13F	8:50	6.34	7.68	1.34
C	IR58MW24F	10:30	12.585	15.48	2.9
C	IR58MW25F	13:00	7.6	9.72	2.12
C	IR58MW26A	13:15	6.195	8.24	2.05
C	IR58MW31A	14:05	6.855	8.97	2.11
C	IR58MW31F	14:10	7.955	9.22	1.27
C	IR58MW32B	NM	NM	8.77	NM
C	IR58MW33B	14:00	6.92	9.06	2.14
C	IR64MW05A	10:50	6.315	7.83	1.51
C	PA28MW51A	14:40	7	8.41	1.41
C	PA50MW03A	11:02	6.65	7.03	0.38
C	PA50MW04A	8:55	6.175	7.56	1.38
D	IR08MWW-6	NM	NM	4.88	NM
D	IR09MW31A	10:36	9.11	8.42	-0.69
D	IR09MW35A	10:00	8.16	8.71	0.55

Table 2 (Continued)
Summary of Basewide Groundwater Level Measurements, June 14, 2004
Eighteenth Quarterly (April-June) 2004 Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Monitoring Well ID No.	Time	Depth to Groundwater (feet below TOC)	TOC Elevation (feet above msl)	Groundwater Elevation (feet above msl)
D	IR09MW36A	13:26	8.945	8.87	-0.08
D	IR09MW37A	13:09	10.01	9.15	-0.87
D	IR09MW38A	10:15	9.495	9.02	-0.47
D	IR09MW39A	9:45	8.45	8.18	-0.27
D	IR09MW44A	13:31	9.15	8.78	-0.37
D	IR09MW45F	8:42	8.31	8.46	0.15
D	IR09MW51F	8:25	8.105	8.64	0.53
D	IR09MW52A	NM	NM	9.59	NM
D	IR09MW54B	10:10	9.66	9.26	-0.4
D	IR09MW55B	9:58	8.515	9.07	0.55
D	IR09MW61A	8:10	9.31	8.49	-0.82
D	IR09MW62A	8:37	9.61	8.50	-1.11
D	IR09MW63A	8:16	8.135	8.66	0.52
D	IR17MW11A	13:09	7.17	7.85	0.68
D	IR17MW12A	9:17	6.95	7.72	0.77
D	IR17MW13A	9:42	6.26	6.98	0.72
D	IR22MW07A	10:31	7.765	7.74	-0.02
D	IR22MW08A	NM	NM	8.77	NM
D	IR22MW15A	10:56	10.53	10.83	0.3
D	IR22MW16A	10:22	7.32	7.86	0.54
D	IR22MW20A	10:43	7.385	7.84	0.46
D	IR33MW116A	10:49	8.8	8.38	-0.42
D	IR33MW120B	14:44	7.39	9.45	2.06
D	IR33MW121B	13:39	4.92	7.20	2.28
D	IR33MW61A	9:01	12.22	12.26	0.04
D	IR33MW62A	NM	NM	8.21	NM
D	IR33MW63A	11:36	7.545	7.80	0.26
D	IR33MW64A	8:56	9.45	9.30	-0.15
D	IR33MW65A	9:22	8.53	8.32	-0.21
D	IR33MW66A	9:13	9.07	8.91	-0.16
D	IR34MW01A	NM	NM	8.62	NM
D	IR34MW02A	11:09	8.27	8.03	-0.24
D	IR34MW36A	9:36	8.775	8.80	0.02
D	IR34MW36B	9:34	9.39	9.23	-0.16
D	IR34MW37A	10:58	8.72	8.78	0.06
D	IR34MW37B	10:56	8.65	8.60	-0.04
D	IR35MW01A	11:11	8.55	8.85	0.3
D	IR36MW16A	NM	NM	8.26	NM
D	IR37MW01A	NM	NM	7.59	NM
D	IR37MW26B	13:04	7.94	8.14	0.2
D	IR44MW08A	13:42	6.11	7.24	1.13

Table 2 (Continued)
Summary of Basewide Groundwater Level Measurements, June 14, 2004
Eighteenth Quarterly (April-June) 2004 Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Monitoring Well ID No.	Time	Depth to Groundwater (feet below TOC)	TOC Elevation (feet above msl)	Groundwater Elevation (feet above msl)
D	IR50MW15A	NM	NM	6.84	NM
D	IR55MW01A	13:20	5.62	5.14	-0.48
D	IR55MW02A	13:05	7.75	7.27	-0.48
D	IR55MW04A	13:27	4.62	4.80	0.18
D	IR67MW04A	16:07	7.215	8.17	0.96
D	IR70MW04A	12:00	10.27	9.82	-0.45
D	IR70MW11A	12:10	9.395	9.04	-0.36
D	IR70MW12A	12:50	8.94	8.44	-0.5
D	IR71MW03A	15:04	8.66	8.31	-0.35
D	IR71MW04A	14:51	7.885	7.70	-0.18
D	IR71MW12B	14:58	6.03	8.23	2.2
D	PA16MW17A	8:27	7.76	8.45	0.69
D	PA16MW18A	8:47	7.39	8.37	0.98
D	PA32MW04A	NM	NM	7.05	NM
D	PA33MW36A	NM	NM	9.24	NM
D	PA33MW37A	11:48	8.02	9.27	1.25
D	PA50MW05A	13:41	5.66	6.07	0.41
D	PA50MW06A	13:51	6.45	7.64	1.19
D	PA50MW07A	12:16	8.415	8.71	0.29
D	PA50MW11A	9:07	9.695	7.66	-2.04
D	PA50MW12A	13:19	9.36	8.62	-0.74
E	IR01MW02B	10:43	15.32	20.61	5.29
E	IR01MW03A	10:37	14.78	19.89	5.11
E	IR01MW05A	NM	NM	22.56	NM
E	IR01MW07A	NM	NM	19.02	NM
E	IR01MW09B	NM	NM	10.05	NM
E	IR01MW10A	NM	NM	13.75	NM
E	IR01MW11A	NM	NM	17.96	NM
E	IR01MW12A	NM	NM	18.25	NM
E	IR01MW16A	10:09	20.68	24.66	3.98
E	IR01MW17B	10:24	24.72	29.55	4.83
E	IR01MW18A	11:01	19.9	23.61	3.72
E	IR01MW26B	11:25	19.64	24.02	4.38
E	IR01MW31A	9:53	8.82	13.81	4.99
E	IR01MW366A	NM	NM	17.31	NM
E	IR01MW366B	NM	NM	16.57	NM
E	IR01MW367A	NM	NM	12.12	NM
E	IR01MW38A	11:14	13.52	17.37	3.85
E	IR01MW400A	NM	NM	11.58	NM
E	IR01MW402A	NM	NM	12.51	NM
E	IR01MW403A	NM	NM	13.00	NM

Table 2 (Continued)
Summary of Basewide Groundwater Level Measurements, June 14, 2004
Eighteenth Quarterly (April-June) 2004 Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Monitoring Well ID No.	Time	Depth to Groundwater (feet below TOC)	TOC Elevation (feet above msl)	Groundwater Elevation (feet above msl)
E	IR01MW403B	NM	NM	10.43	NM
E	IR01MW42A	8:35	9.64	13.28	3.64
E	IR01MW43A	12:07	9.95	12.16	2.21
E	IR01MW44A	NM	NM	9.22	NM
E	IR01MW47B	12:02	7.95	12.31	4.36
E	IR01MW48A	9:25	8.62	10.96	2.34
E	IR01MW53B	9:20	5.3	10.01	4.71
E	IR01MW58A	8:41	6.96	9.19	2.23
E	IR01MW62A	8:26	5.78	7.91	2.13
E	IR01MWI-2	8:20	12.41	13.22	0.81
E	IR01MWI-3	11:55	11.75	13.80	2.05
E	IR01MWI-5	11:30	20.65	24.51	3.86
E	IR01MWI-7	8:49	3.61	5.81	2.2
E	IR01MWI-8	8:34	4.63	6.64	2.01
E	IR01MWI-9	8:55	5.77	8.04	2.27
E	IR01MWLF1A	NM	NM	20.80	NM
E	IR01MWLF2A	NM	NM	19.52	NM
E	IR01MWLF4A	NM	NM	14.88	NM
E	IR01MWLF4B	NM	NM	14.40	NM
E	IR02MW101A1	15:27	11.44	11.23	-0.21
E	IR02MW101A2	15:29	11.46	11.22	-0.24
E	IR02MW114A1	14:35	8.05	13.63	5.58
E	IR02MW114A2	14:00	7.85	12.43	4.58
E	IR02MW114A3	14:10	9.13	13.29	4.16
E	IR02MW126A	NM	NM	11.36	NM
E	IR02MW127B	NM	NM	14.59	NM
E	IR02MW146A	NM	NM	11.30	NM
E	IR02MW147A	15:56	6.27	8.36	2.09
E	IR02MW149A	13:10	5.24	8.72	3.48
E	IR02MW173A	NM	NM	9.51	NM
E	IR02MW175A	10:21	7.7	7.74	0.04
E	IR02MW179A	10:00	10.13	9.82	-0.31
E	IR02MW183A	10:06	9.71	10.40	0.69
E	IR02MW196A	13:26	8.11	8.05	-0.06
E	IR02MW206A1	10:38	7.73	7.43	-0.3
E	IR02MW206A2	NM	NM	7.41	NM
E	IR02MW209A	10:44	6.43	6.34	-0.09
E	IR02MW210B	14:35	9.77	9.17	-0.6
E	IR02MW298A	14:38	7.41	11.79	4.38

Table 2 (Continued)
Summary of Basewide Groundwater Level Measurements, June 14, 2004
Eighteenth Quarterly (April-June) 2004 Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Monitoring Well ID No.	Time	Depth to Groundwater (feet below TOC)	TOC Elevation (feet above msl)	Groundwater Elevation (feet above msl)
E	IR02MW299A	14:40	11.15	10.56	-0.59
E	IR02MW300A	10:30	9.08	9.00	-0.08
E	IR02MW372A	NM	NM	14.21	NM
E	IR02MW373A	NM	NM	11.34	NM
E	IR02MW89A	14:59	10.28	10.08	-0.2
E	IR02MW93A	14:48	8.18	7.25	-0.93
E	IR02MW97A	14:10	9.6	9.00	-0.6
E	IR02MWB-1	16:02	5.56	8.46	2.9
E	IR02MWB-2	NM	NM	11.88	NM
E	IR02MWB-3	NM	NM	12.95	NM
E	IR02MWB-5	NM	NM	4.74	NM
E	IR02MWC5-W	NM	NM	7.49	NM
E	IR02P97AA	14:15	7.4	7.09	-0.31
E	IR02P97AB	NM	NM	7.54	NM
E	IR03MW218A1	NM	NM	11.92	NM
E	IR03MW218A2	11:02	12.41	12.26	-0.15
E	IR03MW218A3	11:00	11	12.00	0.99
E	IR03MW224A	14:00	11.545	10.92	-0.62
E	IR03MW225A	NM	NM	12.27	NM
E	IR03MW226A	NM	NM	11.81	NM
E	IR03MW228B	10:48	7.9	12.12	4.22
E	IR03MW342A	11:45	9.01	8.48	-0.53
E	IR03MW369A	NM	NM	10.01	NM
E	IR03MW370A	NM	NM	11.19	NM
E	IR03MW371A	13:35	11.105	12.48	1.38
E	IR03MW372A	NM	NM	8.18	NM
E	IR03MW373B	13:55	3.685	7.87	4.19
E	IR03MWO-1	NM	NM	11.92	NM
E	IR03MWO-2	NM	NM	11.55	NM
E	IR03MWO-3	not recorded	7.81	9.22	1.41
E	IR04MW13A	NM	NM	12.55	NM
E	IR04MW31A	10:50	11.92	12.53	0.61
E	IR04MW36A	NM	NM	9.84	NM
E	IR04MW37A	NM	NM	9.54	NM
E	IR04MW38A	NM	NM	9.76	NM
E	IR04MW40A	NM	NM	7.16	NM
E	IR05MW73A	14:13	6.92	6.59	-0.33

Table 2 (Continued)
Summary of Basewide Groundwater Level Measurements, June 14, 2004
Eighteenth Quarterly (April-June) 2004 Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Monitoring Well ID No.	Time	Depth to Groundwater (feet below TOC)	TOC Elevation (feet above msl)	Groundwater Elevation (feet above msl)
E	IR05MW76A	15:31	5.43	4.97	-0.46
E	IR05MW82A	15:31	11.7	12.00	0.3
E	IR05MW85A	15:20	10.42	10.00	-0.42
E	IR08MW38A	13:58	6.99	6.82	-0.17
E	IR08MW40A	NM	NM	5.41	NM
E	IR08MW44A	NM	NM	5.94	NM
E	IR11MW25A	NM	NM	11.40	NM
E	IR11MW26A	13:37	9.22	9.33	0.11
E	IR11MW27A	10:51	9	9.88	0.88
E	IR12MW11A	9:15	9.17	11.68	2.51
E	IR12MW12A	11:20	5.91	8.40	2.49
E	IR12MW13A	NM	NM	12.52	NM
E	IR12MW14A	10:25	8.53	9.23	0.7
E	IR12MW15A	10:30	7.69	7.28	-0.42
E	IR12MW16A	15:50	9.04	8.57	-0.47
E	IR12MW17A	NM	NM	12.46	NM
E	IR12MW20A	9:53	11.92	12.27	0.35
E	IR12MW21A	NM	NM	10.42	NM
E	IR13MW12A	15:05	4.86	4.12	-0.74
E	IR13MWB5A-W	14:20	7.28	5.93	-1.35
E	IR14MW09A	11:13	10.6	9.93	-0.67
E	IR14MW10A	11:20	9.58	8.89	-0.69
E	IR14MW12A	11:24	9.16	8.52	-0.64
E	IR15MW06A	10:57	11.65	11.11	-0.54
E	IR15MW07A	13:53	11.79	11.18	-0.61
E	IR15MW10F	13:32	10.28	10.98	0.7
E	IR36MW09A	14:49	5.71	5.00	-0.71
E	IR36MW11A	not recorded	9.79	8.55	-1.24
E	IR36MW120B	13:14	4.395	7.05	2.66
E	IR36MW121A	13:19	8.2	6.96	-1.24
E	IR36MW122A	15:26	8.87	7.64	-1.23
E	IR36MW123B	15:24	4.77	7.55	2.78
E	IR36MW125A	13:31	7.36	6.55	-0.81
E	IR36MW126A	14:46	5.5	5.16	-0.34
E	IR36MW127A	13:27	7.28	6.45	-0.83
E	IR36MW128A	15:44	9.205	8.01	-1.2
E	IR36MW129B	15:42	6.11	7.80	1.69

Table 2 (Continued)
Summary of Basewide Groundwater Level Measurements, June 14, 2004
Eighteenth Quarterly (April-June) 2004 Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Monitoring Well ID No.	Time	Depth to Groundwater (feet below TOC)	TOC Elevation (feet above msl)	Groundwater Elevation (feet above msl)
E	IR36MW12A	14:39	8.43	7.18	-1.25
E	IR36MW135A	15:00	9.12	7.85	-1.27
E	IR36MW137A	NM	NM	7.76	NM
E	IR36MW14A	15:45	6.98	5.52	-1.46
E	IR36MW15A	13:10	8.34	7.04	-1.3
E	IR36MW17A	NM	NM	8.36	NM
E	IR38MW01A	14:29	4.865	4.28	-0.59
E	IR38MW02A	14:44	4.66	2.88	-1.78
E	IR38MW03A	NM	NM	4.00	NM
E	IR39MW21A	15:13	9.25	7.92	-1.33
E	IR39MW22A	14:58	7.56	6.34	-1.22
E	IR39MW23A	14:15	7.02	5.61	-1.41
E	IR39MW24A	15:40	6.24	4.80	-1.44
E	IR39MW33A	15:08	5.44	4.31	-1.13
E	IR39MW36A	16:28	6.15	4.66	-1.49
E	IR72MW32A	NM	NM	10.08	NM
E	IR72MW33A	NM	NM	12.00	NM
E	IR73MW04A	10:12	12.79	13.48	0.69
E	IR74MW01A	10:20	12.86	13.16	0.3
E	IR75MW05B	NM	NM	15.57	NM
E	IR76MW13A	NM	NM	19.69	NM
E	PA36MW01A	13:04	8.76	7.64	-1.12
E	PA36MW02A	12:44	9.16	8.02	-1.14
E	PA36MW04A	15:59	8.47	7.33	-1.14
E	PA36MW05A	NM	NM	7.40	NM
E	PA36MW07A	13:55	7.38	6.80	-0.58
E	PA36MW08A	14:31	8.68	7.65	-1.03
E	PA39MW01A	14:23	5.21	4.53	-0.68
E	PA39MW02A	14:50	6.85	6.13	-0.72
E	PA50MW08A	13:57	8.08	7.48	-0.6
E	PA50MW09A	15:25	6.33	5.00	-1.33
E	PA50MW10A	9:20	10.245	8.45	-1.8

Acronyms/Abbreviations:
ID identification
TOC top of casing
msl mean sea level
NA not applicable

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3.0 GROUNDWATER SAMPLING

3.1 GROUNDWATER SAMPLING PROCEDURES

This section discusses sampling procedures, analytical methods, analytical results, data quality, as well as any Q18 deviations from the Draft SAP (TtEMI, 2003).

Low-flow sampling procedures were used, where technically feasible, to obtain groundwater samples from wells during Q18 as described in the Draft SAP (TtEMI, 2003). However, for many wells, low-flow purging was not achievable due to limitations of the flow-through cell and pump combination. The flow-though caused back pressure in the system limiting the ability to obtain low-flow rates with the pump used. Table 2 identifies wells where low-flow purging was not achieved. During low-flow sampling, if a drawdown of more than 0.33 foot at a discharge rate of 0.15 L/min was exceeded, then a modified low-flow purge protocol was attempted. The modified low-flow protocol involved turning the pump off, waiting for water level to rise to 0.33 foot below the initial water level, and resuming purging at a reduced rate of 0.1 L/min. The modified procedure was repeated until stabilization of parameters was reached. If these procedures did not yield sufficient sample volume, low-flow sampling was considered technically unfeasible and the well was purged by a standard purging method. For standard purge methods, a well is considered ready for sampling after removal of three well volume and stabilization of parameters. If parameters are not stable after three well volumes, the well was purged again until parameters stabilize or a maximum of 5 well volumes were removed. If the well runs dry during purging, the well was allowed to recharge to a minimum of 80 percent, one set of parameters was measured and the well was sampled. Refer to Appendix A of the "Draft Technical Memorandum, Parcel B Groundwater Evaluation" (TtEMI, 2001) for a discussion of low-flow study results.

The Navy collected all Q18 groundwater samples at Parcel B in accordance with the Draft SAP (TtEMI, 2003), RAMP, and the applicable SOP for groundwater sampling, which is included in the field sampling plan (FSP) (TtEMI, 2000a). Tables 3 and 4 list the analyses performed for each well and the samples collected at each well, respectively.

The wells were purged until water quality parameters stabilized as measured with a Horiba U-10 water quality meter. At a minimum, eight liters of groundwater were purged before groundwater samples were collected. However, in some instances, where recharge rates were insufficient, a minimum of two liters of groundwater were purged prior to collecting the groundwater samples. The field team monitored groundwater temperature, pH, turbidity, specific conductance, and

dissolved oxygen with a Horiba U-10, and oxidation-reduction potential with a separate probe manufactured by Oakton Instruments at regular intervals during purging at a rate of roughly once per liter of water removed. Field personnel recorded parameters on monitoring well sampling sheets, which are included in Appendix B of this report. Purging was complete when measurements of groundwater parameters stabilized in accordance with the Draft SAP (TtEMI, 2003). This procedure removes stagnant, standing water from the well. It is replaced with groundwater flowing into the well casing directly from the aquifer, thereby providing a more representative groundwater sample.

After purging was complete, field personnel collected a groundwater sample. Samples were collected in order of decreasing sensitivity to volatilization or to oxidation-reduction reactions. Table 3 of SOP No. 10, included in Appendix A of the FSP for the RAMP (TtEMI, 2000a), summarizes the preferred order of sample collection.

All groundwater samples were collected in the field and shipped, within analytical method holding times, on ice in sealed coolers and maintained at 4°C plus or minus 2°C to the approved receiving laboratory, Agriculture & Priority Pollutants Laboratories, Inc. (APPL) of Fresno, California in accordance with Draft SAP (TtEMI, 2003). APPL is not presented in the Partial List of Navy-Approved Laboratories in Appendix D of the Draft SAP (TtEMI, 2003), but APPL is in fact a Navy-approved laboratory. Per Navy contract requirements and in accordance with Section 9.0 of the SAP, an analytical laboratory quality audit was performed on APPL on February 26 and 27, 2004. No significant discrepancies were identified to preclude the use of APPL for the analytical services on this HPS program.

During groundwater sampling activities, all portions of the electronic water-level indicators exposed to groundwater were decontaminated before each use by washing with a mixture of tap water and Liquinox soap solution and rinsed with tap water then deionized (DI) water. Submersible pumps and flow-through cells were decontaminated before each use by washing the exterior of each pump with DI water and Liquinox soap solution and then pumping a solution of DI water and Liquinox soap through the pump. The pump was then flushed with tap water followed by DI water. New or dedicated Teflon-lined polyethylene tubing was used for pumping each well.

Purge water from the wells and equipment rinsate from the decontamination of well sample equipment were placed in U.S. Department of Transportation-approved 55-gallon drums and transferred to a 5,000-gallon holding tank located at the staging area. Approximately 2,000 gallons of purge water resulted from the Q18 sampling event of Parcels B, C, D, and E. The

water was tested, and analytical results met sanitary sewer discharge criteria established by the City of San Francisco. The San Francisco Public Utilities Commission (SFPUC) approved a Batch Discharge Permit allowing the Navy to discharge the 2,000 gallons of purge water and rinsate into the sanitary sewerage system. On September 2 and 3, 2004, the Navy discharged the purge water and rinsate from Q18 into a sanitary sewer manhole in Spear Street on HPS. Historically at HPS, disposed water from groundwater sampling events has met the City of San Francisco's discharge requirements. A copy of the SFPUC Batch Discharge Permit is included as Appendix F.

Table 3
Summary of Wells Sampled and Analyses Performed June 2004
Eighteenth Quarterly Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Well Type	Well ID[a]	VOCs (8260B)	VOCs (OLM04.2/ OLC03.2)	Metals (6010B or ILM05.3)	Hex Chrom (7196A)	Mercury (7470A or ILM05.3)	TPHe (8015-M)	TPHg (8015)	SVOCs (8270C or OLM04.2)	Pest/PCB (OLC03.2)
POC	IR07MW19A		X	X	X	X	X	X		
POC	IR07MWS-2		X	X	X	X	X	X		
POC	IR07MWS-4		X	X	X	X	X	X		
POC	IR26MW41A		X	X	X	X	X	X		
POC	IR46MW37A		X	X	X	X	X	X		
POC and VOC	IR10MW31A1		X	X	X	X	X	X		
POC and VOC	PA50MW01A		X	X	X	X	X	X		
Sentinel	IR07MW23A		X	X	X	X	X	X		
Sentinel	IR07MW27A		X	X	X	X	X	X	X	X
Sentinel and VOC	IR06MW45A[a]		X	X	X	X	X	X		
Sentinel and VOC	IR10MW28A[b]		X							
Sentinel and VOC	IR25MW17A[b]		X							
Post-Remedial Action	IR07MW20A1		X	X	X	X	X	X		
Post-Remedial Action	IR07MW21A1		X	X	X	X	X	X		
Post-Remedial Action	IR07MW24A		X	X	X	X	X	X		
Post-Remedial Action	IR07MW25A		X	X	X	X	X	X		
Post-Remedial Action	IR07MW26A		X	X	X	X	X	X		
Hexavalent Chromium and VOC	IR10MW12A		X		X					
VOC	IR10MW13A1		X							
VOC	IR10MW14A		X							
VOC	IR10MW33A		X							
VOC	IR10MW59A		X							
VOC	IR25MW37A		X							
On- and Offsite Migration	IR07MW28A		X	X	X	X	X	X	X	X
On- and Offsite Migration	IR18MW21A		X	X	X	X	X	X	X	X

Table 3 (Continued)
Summary of Wells Sampled and Analyses Performed June 2004
Eighteenth Quarterly Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Well Type	Well ID	VOCs (8260B)	VOCs (OLM04.2/ OLC03.2)	Metals (6010B or ILM05.3)	Hex Chrom (7196A)	Mercury (7470A or ILM05.3)	TPHe (8015-M)	TPHg (8015)	SVOCs (8270C or OLM04.2)	Pest/PCB (OLC03.2)
Utility Line	IR06MW42A		X	X	X	X	X	X	X	X
Supplemental	IR10MW61A	X								
Supplemental	IR10MW62A	X								
Supplemental	IR10MW71A	X								
Supplemental	IR10MW76A	X								
Supplemental	IR10MW79A	X								
Supplemental	IR10MW80A	X								
Supplemental	IR26MW46A			X	X	X			X	X
Supplemental	IR26MW47A			X	X	X			X	X
Supplemental	IR26MW48A			X	X	X			X	X

Notes:
[a] The groundwater sample collected from Sentinel/VOC Well IR06MW45A was inadvertently analyzed for metals, hexavalent chromium, mercury, TPHe, and TPHg.
[b] Sampling was overlooked for this well during the Q18 sampling event. The sample was later collected on August 2, 2004.

8015-M	Modified version of Method 8015
Hex Chrom	Hexavalent chromium
ID	Identification
ILM	Inorganic low-concentration
OLC	Organic low-concentration
OLM	Organic low-medium
OLM04.2/ OLC03.2	OLM04.2guidance/OLC03.2 low reporting levels
PCB	Polychlorinated biphenyl
Pest	Pesticide
POC	Point-of-compliance
SVOC	Semi-volatile organic compound
TPHe	Total petroleum hydrocarbons as extractables
TPHg	Total petroleum hydrocarbons as gasoline
VOC	Volatile organic compound

Table 4
Summary of Quarterly Groundwater Samples Collected June 2004
Eighteenth Quarterly Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Sample ID	Well ID	Sample Type	Well Type	Sample Date	Sample Time	Sample Method
Groundwater Samples							
B	0423H009	IR07MW19A[a]	Groundwater	POC	6/2/04	1015	Pump
B	0424T016	IR07MWS-2	Groundwater	POC	6/7/04	1045	Pump
B	0424T015	IR07MWS-4	Groundwater	POC	6/7/04	916	Pump
B	0424G018	IR26MW41A	Groundwater	POC	6/7/04	1125	Pump
B	0424C021	IR46MW37A[a]	Groundwater	POC	6/8/04	1030	Pump
B	0424H019	IR10MW31A1[a]	Groundwater	POC and VOC	6/7/04	915	Pump
B	0424T020	PA50MW01A	Groundwater	POC and VOC	6/8/04	1128	Pump
B	0423C006	IR07MW23A	Groundwater	Sentinel	6/3/04	930	Pump
B	0423S007	IR07MW27A[a]	Groundwater	Sentinel	6/3/04	1105	Pump
B	0423T006	IR06MW45A[a]	Groundwater	Sentinel and VOC	6/3/04	1030	Pump
B	0432S062	IR10MW28A	Groundwater	Sentinel and VOC	8/2/04	1031	Pump
B	0432S063	IR25MW17A[a]	Groundwater	Sentinel and VOC	8/2/04	1132	Pump
B	0423G006	IR07MW20A1	Groundwater	Post-Remedial Action	6/2/04	900	Pump
B	0423S006	IR07MW21A1[a]	Groundwater	Post-Remedial Action	6/3/04	930	Pump
B	0423T007	IR07MW24A	Groundwater	Post-Remedial Action	6/3/04	1148	Pump
B	0423H008	IR07MW25A[a]	Groundwater	Post-Remedial Action	6/2/04	915	Pump
B	0423G007	IR07MW26A	Groundwater	Post-Remedial Action	6/3/04	1025	Pump
B	0424H020	IR10MW12A	Groundwater	Hexavalent Chromium and VOC	6/7/04	1020	Pump
B	0423C009	IR10MW13A1	Groundwater	VOC	6/3/04	1505	Pump
B	0423C008	IR10MW14A[a]	Groundwater	VOC	6/3/04	1400	Pump
B	0423S001	IR10MW33A[a]	Groundwater	VOC	6/1/04	1555	Pump
B	0423G001	IR10MW59A[a]	Groundwater	VOC	6/1/04	1540	Pump
B	0423H001	IR25MW37A[a]	Groundwater	VOC	6/1/04	1430	Pump
B	0424C015	IR07MW28A[a]	Groundwater	On- and Offsite Mitigation	6/7/04	930	Pump
B	0424C016	IR18MW21A	Groundwater	On- and Offsite Mitigation	6/7/04	1045	Pump
B	0423C007	IR06MW42A[a]	Groundwater	Utility Line	6/3/04	1150	Pump
B	0423T002	IR10MW61A	Groundwater	Supplemental	6/2/04	933	Pump
B	0423C002	IR10MW62A	Groundwater	Supplemental	6/2/04	938	Pump
B	0423G002	IR10MW71A[a]	Groundwater	Supplemental	6/2/04	915	Pump
B	0423S002	IR10MW76A[a]	Groundwater	Supplemental	6/2/04	1005	Pump
B	0423H002	IR10MW79A[a]	Groundwater	Supplemental	6/1/04	1610	Pump
B	0423H003	IR10MW80A[a]	Groundwater	Supplemental	6/2/04	930	Pump
B	0424G016	IR26MW46A[a]	Field Duplicate	Supplemental	6/7/04	910	Pump
B	0424G015	IR26MW46A[a]	Groundwater	Supplemental	6/7/04	905	Pump
B	0424S017	IR26MW47A[a]	Field Duplicate	Supplemental	6/7/04	1040	Pump
B	0424S016	IR26MW47A[a]	Groundwater	Supplemental	6/7/04	1030	Pump
B	0424S018	IR26MW48A[a]	Groundwater	Supplemental	6/7/04	932	Pump

Table 4 (Continued)
Summary of Quarterly Groundwater Samples Collected June 2004
Eighteenth Quarterly Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Parcel	Sample ID	Well ID	Sample Type	Well Type	Sample Date	Sample Time	Sample Method
Field Quality Control							
B	PA50EB039	PA50MW01A	Equipment Rinsate	POC and VOC	6/8/04	1145	Pour
B	IR25EB077	IR25MW17A	Equipment Rinsate	Sentinel and VOC	8/2/04	1159	Pour
B	IR10EB026	IR10MW13A1	Equipment Rinsate	VOC	6/3/04	1530	Pour
B	IR10EB015	IR10MW33A	Equipment Rinsate	VOC	6/1/04	1640	Pour
B	IR10EB014	IR10MW59A	Equipment Rinsate	VOC	6/1/04	1630	Pour
B	IR25EB016	IR25MW37A	Equipment Rinsate	VOC	6/1/04	1445	Pour
B	IR07TB011	NA	Trip Blank	NA	6/2/04	1445	NA
B	IR07TB012	NA	Trip Blank	NA	6/3/04	1445	NA
B	IR07TB013	NA	Trip Blank	NA	6/3/04	1445	NA
B	IR10TB008	NA	Trip Blank	NA	6/1/04	1445	NA
B	IR10TB013	NA	Trip Blank	NA	6/4/04	1500	NA
B	IR10TB016	NA	Trip Blank	NA	6/7/04	1439	NA
B	IR10TB030	NA	Trip Blank	NA	8/2/04	1420	NA

Notes:

[a] Low-flow sampling criteria was not achieved as described in the Draft SAP (TtEMI, 2003) See Appendix G for Records of Field Variance.

ID Identification
NA Not applicable
POC Point-of-compliance
VOC Volatile organic compounds

3.2 LABORATORY ANALYSES

Samples are collected based on the sampling frequency outlined in Table 1. Sentinel wells were sampled during Q17 and are to be sampled semi-annually. During Q18, groundwater from two Sentinel wells (IR07MW23A and IR07MW27A) was inadvertently sampled and submitted for laboratory analysis, and the groundwater sample collected from Sentinel/VOC Well IR06MW45A was inadvertently analyzed for metals, hexavalent chromium, mercury, total petroleum hydrocarbons as extractables (TPHe), and total petroleum hydrocarbons as gasoline (TPHg).

Appendix C presents the chain-of-custody (COC) forms that accompanied the samples collected during Q18. Groundwater samples were analyzed in accordance with the Draft SAP (TtEMI, 2003) using the following analytical methods from the U.S. Environmental Protection Agency (EPA) Contract Laboratory Program (CLP) and *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW-846, 3rd Edition):

- VOCs by EPA Method 8260B or CLP OLM04.2/OLC03.2 (OLM04.2 guidance/OLC03.2 low reporting levels for RAMP groundwater samples only);
- Total metals by EPA Methods 6010B or CLP ILM05.3 (for RAMP groundwater samples only);
- Hexavalent chromium EPA Method 7196A;
- Mercury by EPA Method 7470A or CLP ILM05.3 (for RAMP groundwater samples only);
- TPHe (i.e., diesel and waste oil) by EPA Method 8015-M;
- TPHg by EPA Method 8015;
- Semivolatile organic compounds (SVOCs) by EPA Method 8270C or CLP OLM04.2 (for RAMP groundwater sample only); and/or
- Organochloride pesticides and polychlorinated biphenyls (PCBs) by CLP OLM03.2.

In addition, other parameters such as total suspended solids were included in the laboratory analyses. All analyses and results are presented in Appendix A. Note that the originally referenced EPA CLP metals Method ILM04.0 was updated by the EPA with EPA CLP metals Method ILM05.3 in March 2004. The updated CLP method continues to meet the requirements specified in the Draft SAP (TtEMI, 2003).

3.3 GROUNDWATER SAMPLING ANALYTICAL RESULTS

This section discusses analytical results from Q18 for each type of well sampled. Appendix A summarizes Q18 analytical results. Groundwater samples were analyzed for total metals during Q18 rather than dissolved metals in accordance with the Draft SAP (TTEMI, 2003). All metals results presented in Appendix A represent total metal concentrations.

The RAMP does not define trigger levels for monitoring well IR10MW12A or for the wells installed in IR-26. Table 5 presents proposed trigger levels pertaining to these wells. Although the six ZVI wells are called Supplemental Characterization wells, samples are only analyzed for VOCs, and therefore, their results are compared to RAMP trigger levels for VOCs. Table 6 lists the general trigger levels for each RAMP well type, and Table 7 presents chemical-specific trigger levels for the RAMP wells. The discussion in Section 3.3 also presents results for cis-1,2-dichloroethylene (cis-1,2-DCE), trans-1,2-dichloroethylene (trans-1,2-DCE), TCE, and vinyl chloride, which are typical chlorinated ethene breakdown products.

3.3.1 POC Monitoring Wells

Five POC wells and two POC/VOC wells, including VOC compliance, were sampled during Q18. The proposed trigger level for barium (504 µg/L) was exceeded in POC well PA50MW01A, with a reported concentration of 600 µg/L. No other trigger levels were exceeded.

Cis-1,2-DCE was detected in Wells IR26MW41A and PA50MW01A at 0.29 and 0.25 µg/L, respectively (estimated values flagged with J qualifiers). Trans-1,2-DCE, TCE, and vinyl chloride were not detected above the reporting limit of 0.5 µg/L.

3.3.2 Sentinel Monitoring Wells

Two Sentinel and three Sentinel/VOC wells were sampled for low-level VOCs during Q18. Sentinel wells are sampled biannually for VOCs, metals, hexavalent chromium, TPH as gasoline, and TPH as diesel. Sentinel/VOC wells are sampled biannually for metals, hexavalent chromium, TPH as gasoline, and TPH as diesel, and quarterly for low-level VOCs. During Q18, no trigger levels were exceeded.

Cis-1,2-DCE was detected in Well IR07MW23A at 0.53 µg/L. Trans-1,2-DCE, TCE, and vinyl chloride were not detected above the reporting limit of 0.5 µg/L.

Table 5
Summary of Proposed Trigger Levels For Additional IR-10 and IR -26 Groundwater Sampling Results Eighteenth Quarterly Groundwater Sampling Report, Parcel B Hunters Point Shipyard, San Francisco, California

Monitoring Well	Chemical	Trigger Level[a]
IR10MW12A[b] (hexavalent chromium well)	Hexavalent chromium	50 µg/L (based on NAWQC)
IR26MW46A, IR26MW47A, and IR26MW48A (Supplemental Characterization wells)	Aroclor-1260	0.20 µg/L (based on analytical QL)[c]
	Arsenic	36 µg/L (based on NAWQC)
	Chlordane[d]	0.01 µg/L (based on analytical QL)[c]
	Copper	28.0 µg/L (based on HGAL)
	Chromium (total)	1,030 µg/L (based on NAWQC)
	Hexavalent chromium	50 µg/L (based on NAWQC)
	Lead	14.4 µg/L (based on HGAL)
	Manganese	8,140 µg/L (based on HGAL)
	Mercury	0.60 µg/L (based on HGAL)
	Zinc	81 µg/L (based on NAWQC)
	Benzo(a)anthracene	300 µg/L (based on NAWQC)
	Benzo(a)pyrene	300 µg/L (based on NAWQC)
	Benzo(b)fluoranthene	300 µg/L (based on NAWQC)
	Benzo(k)fluoranthene	300 µg/L (based on NAWQC)
	Chrysene	300 µg/L (based on NAWQC)
	Dibenzo(a,h)anthracene	300 µg/L (based on NAWQC)
	Indeno(1,2,3-cd)pyrene	300 µg/L (based on NAWQC)

Notes:

a Action and screening levels are the higher of the applicable NAWQC for exposure of aquatic organisms (if no criterion for chronic exposure is available, 1/10th of the criterion for acute exposure is used) or the HGAL, unless otherwise specified.

b A significant increase in vinyl chloride concentrations at this well will result in notification of the Base Realignment and Closure Cleanup Team.

c Screening levels for these compounds are based on analytical QL specific to the laboratory subcontracted for this project. The QL for Aroclor 1260 is 0.09 µg/L, which satisfies the NAWQC criteria of 0.19 µg/L. For Q17, the QL for Aroclors was 0.2 µg/L, which satisfies the NAWQC criteria. For chlordane, the lowest attainable QL of 0.01 µg/L is used as a trigger level.

d No criteria for chlordane were noted in the remedial action monitoring plan or the record of decision (TtEMI, 1999, 1997).

µg/L Microgram per liter
HGAL Hunters Point groundwater ambient level
IR Installation Restoration
NAWQC National Ambient Water Quality Criteria
QL Quantitation limit

Sources:

TtEMI 1997. "Final Record of Decision, Parcel B, Hunters Point Shipyard, San Francisco, California." October 9.

TtEMI 1999. "Final Remedial Action Monitoring Plan, Parcel B, Hunters Point Shipyard, San Francisco, California." July 2.

Table 6
Summary of Trigger Levels For RAMP Groundwater Sampling Results
Eighteenth Quarterly Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Monitoring Well Type	Trigger Levels
POC Monitoring Wells	NAWQC or HGALs, whichever is higher[a]; TPH trigger levels from the petroleum hydrocarbons CAP
Sentinel Monitoring Wells	Ten times the trigger levels for POC monitoring wells
Post-Remedial Action Monitoring Wells	Same as the trigger levels for POC monitoring wells
VOC Monitoring Wells	For vinyl chloride, same as the trigger levels for POC monitoring well. For TCE and cis-1,2-DCE, 10 times the trigger levels for POC monitoring wells or measured increase in vinyl chloride. Inhalation trigger levels for monitoring well inside building.
On- and Offsite Migration Monitoring Wells	Well IR07MW28A: same as POC well trigger levels Well IR18MW21A: 10 times POC well trigger levels
Utility Line Monitoring Well	Southeast Water Pollution Control Plant discharge requirements

Notes:

a Or the lowest attainable laboratory quantitation limit, if that is higher

CAP Corrective action plan
DCE Dichloroethene
HGAL Hunters Point groundwater ambient level
NAWQC National Ambient Water Quality Criteria
POC Point-of-compliance
RAMP Remedial Action Monitoring Plan
TCE Trichloroethene
TPH Total petroleum hydrocarbons
VOC Volatile organic compound

Table 7
Comparison of Trigger Level Criteria for RAMP Wells
Eighteenth Quarterly Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

Constituent	POC Well Trigger Level (µg/L)[a]	Sentinel Well Trigger Level (µg/L)[b]	VOC Well Trigger Level (µg/L)[c]	Utility Line Well Trigger Level (µg/L)[d]	HGAL (µg/L)[e]	NAWQC (µg/L)[e]	Parcel B ROD Trigger Level (µg/L)[f]
TPH-d and TPH-g	NA	NA	NA	NA	NA	NA	NA[g]
PAHs	300	3,000	NA	NA	NA	300	--
PCBs[h]	0.19	1.9	NA	5,000[i]	NA	0.1[j]	--
1,2-Dichloroethene	85[k]	85[k]	85	NA	NA	224,000	85[l]
Trichloroethene	114[m]	114[m]	114	NA	NA	2,000[n]	114[l]
Vinyl Chloride	55	55[o]	55	200	NA	55[p]	55[l]
Antimony	500	5,000	NA	15,000[i]	43.3	500	500
Arsenic	36	360	NA	4,000	27.3	36	--
Barium	504	5,040	NA	100,000[i]	504	NA	5,000
Beryllium	1.4	14	NA	750[i]	1.4	NA	1.4
Cadmium	9.3	93	NA	500	5.08	9.3	9.3
Chromium	15.7	157	NA	5,000	15.7	10,300	1,030[q]
Hexavalent Chromium	NA	NA	NA	5,000[i]	NA	50	50
Cobalt	20.8	208	NA	80,000[i]	20.8	NA	--
Copper	28	280	NA	4,000	28	2.4	28.04
Lead	14.4	144	NA	1,500	14.4	8.1	14.44
Manganese	8,140	81,400	NA	NA	8,140	NA	8,140
Mercury	0.6	6	NA	50	0.6	0.03	0.6
Nickel	96.5	965	NA	2,000	96.5	8.2	96.5
Silver	7.43	74.3	NA	600	7.43	0.92	7.43
Thallium	13	130	NA	7,000[i]	13	2,130	213
Zinc	81	810	NA	7,000	75.7	81	75.7

Notes:

a POC well trigger levels are based on the HGAL or the NAWQC, whichever is higher, unless otherwise noted (TtEMI, 1999). POC well trigger levels apply to POC wells, Post-Remedial action wells, and On- and Offsite Migration well IR07MW28A (TtEMI, 1999).

b Sentinel well trigger levels are 10 times the POC well trigger levels, unless otherwise noted (TtEMI, 1999). Sentinel well trigger levels apply to sentinel wells and on- and offsite migration well IR18MW21A (TtEMI, 1999).

c VOC well trigger levels are based on concentrations exceeding numerical criteria or exhibit a measured increase in the concentration of vinyl chloride, whichever occurs first.

d Utility Line well trigger levels are based on Southeast Water Pollution Control Plant discharge requirements (TtEMI, 1999).

Table 7 (Continued)
Comparison of Trigger Level Criteria for RAMP Wells
Seventeenth Quarterly Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

e Concentrations are listed as reported in Table 5 of the final Parcel B RAMP (TtEMI, 1999), except for 1,2-dichloroethene, trichloroethene, chromium, and thallium. The NAWQCs listed in the 1999 RAMP for 1,2-dichloroethene, trichloroethene, chromium, and thallium were $1/10^{th}$ the acute exposures; the NAWQCs listed in this table are the only NAWQCs applicable, those for acute exposure. The value listed for hexavalent chromium is from Table 10 of the final Parcel B ROD (TtEMI, 1997).

f Concentrations are listed as reported in Table 10 of the final Parcel B ROD (TtEMI, 1997).

g TPH is not a Comprehensive Environmental Response, Compensation, and Liability Act contaminant. A trigger level of 1,250 µg/L was included in the RAMP for screening purposes (TtEMI, 1999). The trigger level specified in the TPH Corrective Action Plan for Parcel B (TtEMI, 2001) is 1,400 µg/L at the shoreline, increasing to 20,000 µg/L at a distance of 250 feet inland.

h PCBs with applicable trigger levels include Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260. Note that if the lowest attainable laboratory quantitation limit (QL) is higher than the trigger level (as for the POC wells and one of the migration wells), the QL is used as the trigger level.

i Soluble Threshold Limit Concentration, *California Code of Regulations*, Title 22, Section 66261.24(a)(2)(A) (TtEMI, 1999).

j Great Lakes Water Quality Initiative Tier II level criterion for PCBs (TtEMI, 1999).

k POC and sentinel well trigger levels for 1,2-dichloroethene were reduced from 22,400 and 224,000 µg/L, respectively, as listed in the Parcel B RAMP (TtEMI, 1999), to a trigger level of 85 µg/L for both wells, since 1,2-dichloroethene criteria are based on human health.

l Human health-based criteria were developed for VOCs that may represent a human health risk to a future resident at Parcel B. Concentrations of these VOCs in groundwater correspond with an excess lifetime cancer risk of 10^{-6} and were selected as a groundwater remedial action objective for protection of human health based on groundwater-to-indoor-air modeling analysis (TtEMI, 1997).

m POC and sentinel well trigger levels for trichloroethene were reduced from 200 and 2,000 µg/L, respectively, as listed in the Parcel B RAMP (TtEMI, 1999), to a trigger level of 114 µg/L for both wells, since trichloroethene criteria are based on human health.

n NAWQC for trichloroethene is 1/10th acute exposures based on additional toxicity information for aquatic life (TtEMI, 1999).

o The sentinel well trigger level for vinyl chloride was reduced from 550 µg/L, as listed in the Parcel B RAMP (TtEMI, 1999), to 55 µg/L, since the vinyl chloride criterion is based on human health.

p Because no NAWQC have been specified for vinyl chloride, a concentration of 55 µg/L was used based on the human health risk assessment for VOCs (TtEMI, 1999).

q The ROD trigger level is for chromium III, no ROD trigger level has been established for total chromium.

--	Concentration not listed in original table	PAH	Polynuclear aromatic hydrocarbon	TtEMI	Tetra Tech EM Inc.
µg/L	Microgram per liter	PCB	Polychlorinated biphenyl	TPH-d	Total petroleum hydrocarbons as diesel
HGAL	Hunters Point groundwater ambient level	POC	Point-of-compliance	TPH-g	Total petroleum hydrocarbons as gasoline
NA	Not applicable	RAMP	Remedial action monitoring plan	VOC	Volatile organic compound
NAWQC	National Ambient Water Quality Criteria	ROD	Record of decision		

3.3.3 Post-Remedial Action Monitoring Wells

During Q18, five Post-Remedial Action wells were sampled, which included four of the wells installed during Q17. No trigger levels were exceeded.

Cis-1,2-DCE was detected in Well IR07MW24A at 0.21 μg/L (estimated value flagged with J qualifier). Trans-1,2-DCE, TCE, and vinyl chloride were not detected above the reporting limit of 0.5 μg/L.

3.3.4 Hexavalent Chromium Monitoring Well

One Hexavalent Chromium/VOC well was sampled during Q18. According to previous reports, hexavalent chromium has historically been reported at concentrations above the aquatic criterion (50 μg/L) in this monitoring well. During Q18, hexavalent chromium was detected in IR10MW12A at 170 μg/L. VOC Trigger levels for VOC wells were considered for comparison; these trigger levels were not exceeded.

Cis-1,2-DCE, trans-1,2-DCE, TCE, and vinyl chloride were not detected above the reporting limit of 0.5 μg/L.

3.3.5 VOC Monitoring Wells

During Q18, five VOC wells were sampled for low-level VOCs. No trigger levels were exceeded. Vinyl chloride was detected in one of the five wells (IR10MW13A1) during Q18 at 0.71 μg/L. Table 8 lists the historical detections of vinyl chloride and other VOCs in groundwater near IR-10.

Cis-1,2-DCE, trans-1,2-DCE, and TCE were detected in Well IR10MW33A at 14, 11, and 1.6 μg/L, respectively. TCE was also detected in Well IR10MW59A at 1.1 μg/L. Vinyl chloride was not detected above the reporting limit of 0.5 μg/L.

3.3.6 On- and Offsite Migration Monitoring Wells

During Q18, two On- and Offsite Migration wells were sampled. No trigger levels were exceeded.

Cis-1,2-DCE was detected in Wells IR07MW28A and IR18MW21A at 0.20 and 0.34 μg/L, respectively (estimated values flagged with J qualifiers). Trans-1,2-DCE, TCE, and vinyl chloride were not detected above the reporting limit of 0.5 μg/L.

Table 8
Historical Results for TCE, DCE, and Vinyl Chloride at Monitoring Wells In and Near the VOC Groundwater Plume in IR-10[a]
Eighteenth Quarterly Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

	RI	RI	RI	RI	RI	RI	RI	RI	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18
IR10MW12A																										
Sampling Date	3/9/89	8/21/90	7/12/91	1/15/92	11/9/93	2/17/94	5/12/94	8/30/94	NS	NS	NS	NS	10/11/00	1/18/01	4/25/01	7/19/01	03/13/02	05/30/02	08/29/02	11/02/02	03/12/03	5/22/03	8/20/03	11/11/03	3/23/04	6/7/04
1,2-DCE (total)	5 U	0.5 U	0.5 U	5 U	NA	NA	NA	NA					NA	NA	NA	NA	NA	NA	NA	2 U	NA	NA	NA	NA	NA	NA
cis-1,2-DCE	NA	NA	NA	NA	1 U	1 U	0.5 U	0.5 U					0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-DCE	NA	NA	NA	NA	1 U	1 U	0.5 U	0.5 U					0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
TCE	5 U	0.5 U	0.5 U	5 U	1 U	1 U	0.5 U	0.5 U					0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U
Vinyl Chloride	10 U	1 U	1 U	10 U	1 U	1 U	0.5 U	0.5 U					0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IR10MW13A1																										
Sampling Date	3/9/89	8/22/90	7/12/91	1/13/92	11/9/93	2/17/94	5/12/94	8/31/94	NS	NS	NS	NS	10/13/00	1/18/01	4/25/01	7/18/01	03/13/02	05/31/02	08/29/02	11/12/02	03/6/03	5/21/03	8/18/03	11/11/03	3/22/04	6/3/04
1,2-DCE (total)	66	27	19	11	NA	NA	NA	NA					NA	NA	13.7	NA	NA	NA	NA	6	NA	NA	NA	NA	NA	NA
cis-1,2-DCE	NA	NA	NA	NA	9	8	10	15					9	8	13	11	5	6	4	NA	0.5 U	10	13	14	13	18
trans-1,2-DCE	NA	NA	NA	NA	1	0.6	0.8	1					0.6	0.6	0.7	0.8	0.5 U	0.4	0.3	NA	0.5 U	0.8	0.9	1	1.1	1.5
TCE	31	13	0.5 U	9	10	8	8	8					8	5	10	9	6	7	6	8	0.5 U	8	9	8	7.6	8.2
Vinyl Chloride	3	1 U	1 U	10 U	1 U	1 U	0.5 U	0.5 U					0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.71
IR10MW14A																										
Sampling Date	3/9/89	8/22/90	7/12/91	1/13/92	11/9/93	2/17/94	5/12/94	8/31/94	NS	NS	NS	NS	10/13/00	NS	4/25/01	7/19/01	03/14/02	05/31/02	08/29/02	11/12/02	03/5/03	5/21/03	8/14/03	11/6/03	3/22/04	6/3/04
1,2-DCE (total)	5 U	0.5 U	4	5 U	NA	NA	NA	NA					NA		NA	NA	NA	NA	NA	2 U	NA	NA	NA	NA	NA	NA
cis-1,2-DCE	NA	NA	NA	NA	1	1 U	0.5 U	0.5 U					0.3		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-DCE	NA	NA	NA	NA	2	1	0.5 U	0.5 U					0.4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.3 U	0.5 U	0.5 U	0.3 U	0.5 U	0.5 U
TCE	5 U	0.6	4	2	4	2	0.5 U	0.5 U					2		0.7	0.4	0.5 U	0.3	0.5	0.3	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	10 U	1 U	1 U	10 U	1 U	1 U	0.5 U	0.5 U					0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IR10MW28A																										
Sampling Date	10/31/91	1/13/92	11/9/93	2/22/94	5/16/94	8/22/94	NS	NS	9/3/99	1/12/00	NS	NS	10/11/00	1/18/01	4/26/01	07/19/01	03/14/02	06/04/02	09/04/02	11/12/02	03/11/03	5/22/03	8/19/03	11/11/03	3/25/04	8/2/04
1,2-DCE (total)	5 U	5 U	NA	NA	NA	NA			NA	NA			NA	NA	0.6	NA	NA	NA	NA	0.4	NA	NA	NA	NA	0.5 U	NA
cis-1,2-DCE	NA	NA	1 U	2 U	1 U	1 U			3 U	0.6			3 U	1 U	0.6	0.4	0.5	0.4	0.4	NA	0.5 U	0.5 U	0.4 J	0.4 J	0.5 U	0.4 J
trans-1,2-DCE	NA	NA	1 U	2 U	1 U	1 U			3 U	2 U			3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
TCE	38	28	27	30	42	45			54	40			40	32	25	17	19	21	17	11	6	20	15	12	0.5 U	7.4
Vinyl Chloride	10 U	10 U	1 U	2 U	1 U	1 U			2 U	1 U			3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IR10MW31A1																										
Sampling Date	12/23/93	8/11/94	5/23/95	NS	NS	NS	NS	NS	9/3/99	1/12/00	4/28/00	7/10/00	10/16/00	1/17/01	4/20/01	7/19/01	03/14/02	06/14/02	08/29/02	11/19/02	03/6/03	5/21/03	8/14/03	11/5/03	3/22/04	6/7/04
1,2-DCE (total)	10 U	10 U	10 U						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 U	NA	NA	NA	NA	0.5 U	NA
cis-1,2-DCE	NA	NA	NA						1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-DCE	NA	NA	NA						1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.3 U	0.5 U	0.5 U	0.3 U	0.5 U	0.5 U
TCE	10 U	10 U	10 U						1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	10 U	10 U	10 U						0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IR10MW33A[b]																										
Sampling Date	NS	NS	NS	NS	NS	NS	NS	NS	9/3/99	1/12/00	4/27/00	7/10/00	10/13/00	1/19/01	4/25/01	7/19/01	03/21/02	05/30/02	08/29/02	11/14/02	03/6/03	5/22/03	8/18/03	11/11/03	3/30/04	6/1/04
1,2-DCE (total)									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	NA	NA	NA	NA	NA	NA
cis-1,2-DCE									10	13	12	13	14	10	11	14	9	6	3	NA	5	7	7	6	13	14
trans-1,2-DCE									1 U	0.3	1 U	1 U	0.6	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	NA	0.3 U	0.3 U	0.3 U	0.3 U	6.8	11
TCE									19	23	25	25	18	13	22	25	23	17	10	16	18	22	23	13	5.1	1.6
Vinyl Chloride									0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 8 (Continued)
Historical Results for TCE, DCE, and Vinyl Chloride at Monitoring Wells
In and Near the VOC Groundwater Plume in IR-10[a]
Seventeenth Quarterly Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

	RI	RI	RI	RI	RI	RI	RI	RI	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18
IR10MW59A[c]																										
Sampling Date	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4/25/01	7/23/01	03/18/02	05/31/02	09/03/02	11/13/02	03/6/03	5/22/03	8/19/03	11/11/03	3/30/04	6/1/04
1,2-DCE (total)															NA	NA	NA	NA	NA	3	NA	NA	NA	NA	NA	NA
cis-1,2-DCE															4.0	2	2	3	4	NA	4	3	3	3 J	0.5 U	0.5 U
trans-1,2-DCE															0.5 U	0.5 U	5 U	0.5 U	0.5 U	NA	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
TCE															340	210	240	240	330	410	350	270	300	180	1.9	1.1
Vinyl Chloride															0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
IR10MW61A[c]																										
Sampling Date	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3/23/04	6/2/04
1,2-DCE (total)																									NA	NA
cis-1,2-DCE																									170 D	150 D
trans-1,2-DCE																									4.8	6.5 J
TCE																									9	6 J
Vinyl Chloride																									25	120 D
IR10MW62A[c]																										
Sampling Date	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3/23/04	6/2/04
1,2-DCE (total)																									NA	NA
cis-1,2-DCE																									0.95	0.82
trans-1,2-DCE																									0.5 U	0.5 U
TCE																									1.1	0.83
Vinyl Chloride																									0.5 U	0.5 U
IR10MW71A[c, f]																										
Sampling Date	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3/26/04	6/2/04
1,2-DCE (total)																									NA	NA
cis-1,2-DCE																									30	71
trans-1,2-DCE																									10 U	1.5
TCE																									650	570
Vinyl Chloride																									10 U	10 U
IR10MW76A[c]																										
Sampling Date	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3/30/04	6/8/04
1,2-DCE (total)																									NA	NA
cis-1,2-DCE																									0.29 J	0.25 J
trans-1,2-DCE																									0.5 U	0.5 U
TCE																									0.52	0.76
Vinyl Chloride																									0.5 U	0.5 U
IR10MW79A[c]																										
Sampling Date	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3/25/04	6/1/04
1,2-DCE (total)																									NA	NA
cis-1,2-DCE																									0.5 U	0.5 U
trans-1,2-DCE																									0.5 U	0.5 U
TCE																									0.5 U	0.5 U
Vinyl Chloride																									0.5 U	0.5 U
IR10MW80A[c]																										
Sampling Date	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3/30/04	6/1/04
1,2-DCE (total)																									NA	NA
cis-1,2-DCE																									0.5 U	0.5 U

Table 8 (Continued)
Historical Results for TCE, DCE, and Vinyl Chloride at Monitoring Wells In and Near the VOC Groundwater Plume in IR-10[a]
Seventeenth Quarterly Groundwater Sampling Report, Parcel B
Hunters Point Shipyard, San Francisco, California

	RI	RI	RI	RI	RI	RI	RI	RI	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18
trans-1,2-DCE																									0.5 U	0.5 U
TCE																									0.5 U	0.5 U
Vinyl Chloride																									0.5 U	0.5 U
IR25MW37A[d]																										
Sampling Date	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	01/19/01	4/27/01	7/23/01	03/18/02	05/31/02	08/29/02	11/14/02	03/5/03	5/21/03	8/18/03	11/10/04	3/30/04	6/1/04
1,2-DCE (total)														NA	NA	NA	NA	NA	NA	2 U	NA	NA	NA	NA	NA	NA
cis-1,2-DCE														0.5 U	0.4 J	0.7 J	0.5 U	0.4	0.5 U	NA	7	0.3 J	0.3 J	0.4 J	0.5 U	0.5 U
trans-1,2-DCE														0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5	0.5 U	0.5 U	0.3 U	0.5 U	0.5 U
TCE														0.5 U	0.3 J	0.3 J	0.5 U	0.4	0.4	2 U	7	0.3 J	0.5 U	0.3 J	0.5 U	0.5 U
Vinyl Chloride														0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PA50MW01A																										
Sampling Date	3/16/93	8/17/94	6/14/95	NS	NS	NS	NS	NS	9/1/99	1/13/00	4/28/00	7/10/00	10/12/00	1/17/01	5/1/01	7/20/01	03/18/02	06/04/02	09/03/02	11/18/02	03/5/03	5/21/03	8/14/03	11/5/03	3/29/04	6/8/04
1,2-DCE (total)	10 U	10 U	10 U						10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 U	NA	NA	NA	NA	NA	NA
cis-1,2-DCE	NA	NA	NA						NA	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.25 J
trans-1,2-DCE	NA	NA	NA						NA	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.3 U	0.5 U	0.5 U
TCE	10 U	10 U	10 U						10 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	10 U	10 U	10 U						10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	10 U

Notes:

a All concentrations reported in micrograms per liter.
b Monitoring well installed in 1999; therefore, historical data are not available.
c Monitoring well installed in 2001; therefore, historical data are not available.
d Monitoring well installed in 2000; therefore, historical data are not available.
e Monitoring well installed in 2003; therefore, historical data are not available.
f Values listed represent post-injection ZVI treatability study results.
Several historical results for Supplemental Characterization Well IR10MW71A (installed in August 2003) are not part of the sampling quarters in table. These additional TCE results are presented below:
610 µg/L (pre-injection, Sept. 2003)
1,200 µg/L (post-injection, Oct. 2003)
810 µg/L (Nov. 2003)
860 µg/L (Jan. 2004)

DCE Dichloroethene
IR Installation Restoration
µg/L Microgram per liter
NA Not analyzed
NS Not sampled
Q Quarter
RI Remedial investigation
TCE Trichloroethene
U Not detected; concentration reported is analytical reporting limit
VOC Volatile organic compound
ZVI Zero-valent iron injection

3.3.7 Utility Line Monitoring Well

One Utility Line well (IR06MW42A) was sampled during Q18. No trigger levels were exceeded.

Cis-1,2-DCE , trans-1,2-DCE, TCE, and vinyl chloride were not detected above the reporting limit of 0.5 μg/L.

3.3.8 Supplemental Characterization Wells

During Q18, nine Supplemental Characterization wells were sampled. Since the RAMP does not define trigger levels for these wells, results for the wells installed in IR-26 were compared to the proposed trigger levels in Table 5. During Q18, the proposed trigger level for mercury (0.6 μg/L) was exceeded in well IR26MW47A with a reported concentration of 1.0 μg/L.

VOC concentrations in the six ZVI wells were compared to RAMP trigger levels defined in Tables 6 and 7. TCE was present at 570 μg/L at IR10MW71A. This concentration exceeds the RAMP trigger level for TCE (Table 7).

In the ZVI treatability study area,

- Well IR10MW61A contained the following VOC concentrations: cis-1,2-DCE at 150 μg/L, trans-1,2-DCE at 6.5 μg/L, TCE at 6.0 μg/L, and vinyl chloride at 120 μg/L.
- Well IR10MW62A contained the following VOC concentrations: cis-1,2-DCE at 0.82 μg/L and TCE at 0.83 μg/L.
- Well IR10MW71A contained the following VOC concentrations: cis-1,2-DCE at 71 μg/L, trans-1,2-DCE at 1.5 μg/L, and TCE at 570 μg/L (as mentioned above).
- Well IR10MW76A contained the following VOC concentrations: cis-1,2-DCE at 0.25 μg/L (estimated value flagged with J qualifier) and TCE at 0.76 μg/L.

3.4 DATA QUALITY

Field and laboratory personnel implemented standard quality assurance and quality control (QA/QC) techniques to provide a method for evaluating the quality of data collected during this sampling event. Field QA/QC consisted of collecting field duplicate pairs, equipment rinsate blanks, trip blanks, and matrix spike/matrix spike duplicates (MS/MSD) in accordance with the Draft SAP (TtEMI, 2003). Field duplicate samples were collected for groundwater samples at monitoring wells IR26MW46A and IR26MW47A. These results were screened against the trigger levels and are included in Appendix A. Six equipment rinsate blanks were collected from

Parcel B and laboratory-prepared trip blanks containing analyte-free water were included in each of the coolers that contained groundwater samples for VOC analyses. Additional sample volumes were collected for MS/MSD sample pairs to meet the requirements of the Draft SAP (TtEMI, 2003).

Appendix E presents the relative percent differences (RPDs) for field duplicate pair results. Because neither the RAMP nor the Draft SAP (TtEMI, 2003) establishes a maximum acceptable RPD for field duplicate pairs, a generally accepted conservative standard of 30 RPD was considered. The RPD for mercury at IR26MW46A exceeded 30 RPD. However, in this case, the original concentration of 0.058 μg/L was detected below the reporting limit, while the duplicate sample concentration was not detected at a reporting limit of 0.2 μg/L.

The data validation company Laboratory Data Consultants, Inc. (LDC) validated the data in accordance with procedures presented in the following documents:

- USEPA CLP National Functional Guidelines for Organic Data Review (EPA, 1999);
- USEPA CLP National Functional Guidelines for Inorganic Data Review (EPA, 1994); and
- Draft Sampling and Analysis Plan, Basewide Groundwater Monitoring Program, Hunters Point Shipyard, San Francisco, California, November. (TtEMI, 2003).

Appendix D presents all the LDC validation reports placed on a compact disc. The reports evaluated QA/QC criteria associated with the data, including the following parameters:

- Sample collection, holding times, and blank sample analytical results to assess sample contamination and representativeness;
- Sample duplicate and MS/MSD results to assess precision; and
- Surrogate spike, laboratory control sample, and MS/MSD results to assess accuracy.

A total of 2,580 individual analytical results were generated for primary groundwater samples and groundwater field duplicates. As a result of the validation, 155 of the detected results were qualified as estimated because of analytical discrepancies. Of the 2,580 analytical results, two were rejected. Both samples were for analysis of 1,2-dibromo-3-chloropropane (DBCP) and were rejected due to initial calibration relative retention factors below the acceptance limit of ≥ 0.05, which indicated poor instrument sensitivity for this analyte.

Results that are qualified as estimated are considered usable. The overall assessment is that over 99% of the results are usable. Qualifiers were applied in accordance with the definitions and notations previously used for this groundwater monitoring project.

3.5 DEVIATIONS FROM THE SAP

The Navy conducted the Q18 sampling event in accordance with procedures specified in the Draft SAP (TtEMI, 2003) with the following exceptions:

- Immiscible layers were not measured during Q18 at the request of the Navy. The Navy is currently working on a revised procedure/protocol for immiscible layers.
- Of the 415 monitoring wells designated for water level measurements, only 316 were accessible during the sampling event.
- Of the 35 monitoring wells sampled during Q18, 23 wells did not meet low-flow sampling criteria for discharge rate and/or drawdown as described in the Draft SAP (TtEMI, 2003). As a corrective action, the use of different pumps that can meet the low-flow sampling criteria is being investigated.
- Sampling was overlooked for Sentinel/VOC Wells IR10MW28A and IR25MW17A during the Q18 sampling event. Groundwater samples were later collected on August 2, 2004. As a corrective action, the sampling schedule has been revised for clarity and will be reviewed with the field crew.
- During Q18, groundwater from two Sentinel wells (IR07MW23A and IR07MW27A) was inadvertently sampled and submitted for laboratory analysis, and groundwater from Sentinel/VOC Well IR06MW45A was inadvertently analyzed for metals, hexavalent chromium, mercury, TPHe, and TPHg, in addition to the required VOC analysis. As a corrective action, the sampling schedule has been revised for clarity and will be reviewed with the field crew.
- Duplicates are required to be sampled at a rate of ten percent of field samples according to the Basewide Groundwater Monitoring Program SAP. Duplicates were collected at a rate of ten percent of the total number of samples collected basewide; however, only two duplicates were collected from the 35 Parcel B wells. As a corrective action, duplicates will be collected at a rate of ten percent per parcel.

Deviations from the Draft SAP (TtEMI, 2003) are documented as Records of Field Variance and included as Appendix G.

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4.0 CONCLUSIONS

The RAMP Q18 groundwater sampling event took place in June 2004. Groundwater trigger levels were exceeded in samples from the following RAMP wells:

- Well IR10MW12A – hexavalent chromium (170 µg/L);
- Well IR26MW47A – mercury (1.0 µg/L); and
- Well PA50MW01A – barium (600 µg/L).

Parcel B wells designated as Supplemental Characterization Wells are not considered part of the Parcel B RAMP and therefore, do not have associated trigger levels. However, analytes in these wells were also compared to RAMP trigger levels to document elevated concentrations. In Well IR10MW61A, the POC RAMP trigger levels for cis-1,2-DCE and vinyl chloride were exceeded at 150 and 120 µg/L, respectively. In Well IR10MW71A, the POC RAMP trigger level for TCE was exceeded at 570 µg/L.

The Navy will evaluate concentration trends in Parcel B groundwater in the annual report for Year 5.

Groundwater movement in Parcel B continues to flow north-northeast towards the shoreline and the San Francisco Bay, which is consistent with previous interpretations of groundwater movement beneath this parcel.

Groundwater elevations are generally consistent with previous interpretations; however, some changes have been noted in areas of water-line repair. Further assessment will occur throughout the year.

In general, Q18 VOC concentrations are consistent with Q17 concentrations. TCE, cis-1,2-DCE, trans-1,2-DCE, and/or vinyl chloride were detected in 15 Parcel B wells. The extent of the TCE plume during Q18 is shown in Figure 4.

Well IR10MW13A1 has been associated with the north side of the IR-10 plume boundary and demonstrated a slight increase in VOC concentrations during Q18. Since Q17, cis-1,2-DCE increased from 13 to 18 µg/L, trans-1,2-DCE increased from 1.1 to 1.5 µg/L, TCE increased from 7.6 to 8.2 µg/L, and vinyl chloride increased from non-detection (<0.5 µg/L) to 0.71 µg/L. Well IR10MW28A has been associated with the south side of the IR-10 plume boundary and in general, demonstrated a decrease in TCE during Q18 compared to previous quarters. From 1991

to 2003, detectable TCE concentrations at Well IR10MW28A have ranged between 6 and 54 μg/L, with an average concentration of 27.6 μg/L. During Q18, TCE was detected at 7.4 μg/L. Trans-1,2-DCE and vinyl chloride results at Well IR10MW28A are consistent with non-detections from previous quarters. Cis-1,2-DCE was detected below the reporting limit of 0.5 μg/L at 0.4 μg/L. This is also consistent with previous quarters, with detectable concentrations ranging from 0.4 to 0.6 μg/L.

During Q17 and Q18, cis-1,2-DCE has been detected at Well PA50MW01A below the reporting limit of 0.5 μg/L at 0.2 and 0.25 μg/L, respectively. Prior to Q17, cis-1,2-DCE, trans-1,2-DCE, TCE, vinyl chloride have not been detected at this well since its installation in 1993.

Wells IR10MW33A and IR10MW59A, with locations that previously coincided with the approximate plume center, have shown diminishing VOC concentrations. Maximum concentrations reported at these wells during Q18 include cis-1,2-DCE at 14 μg/L, trans-1,2-DCE at 11 μg/L, and TCE at 1.6 μg/L. Vinyl chloride was not detected at a reporting limit of 0.5 μg/L. Some of the highest VOC concentrations are now reported at IR10MW71A, with cis-1,2-DCE at 71 μg/L, trans-1,2-DCE at 1.5 μg/L, and TCE at 570 μg/L (no detections of vinyl chloride at a reporting limit of 0.5 μg/L), indicating that this well location is currently the approximate plume center.

5.0 REFERENCES

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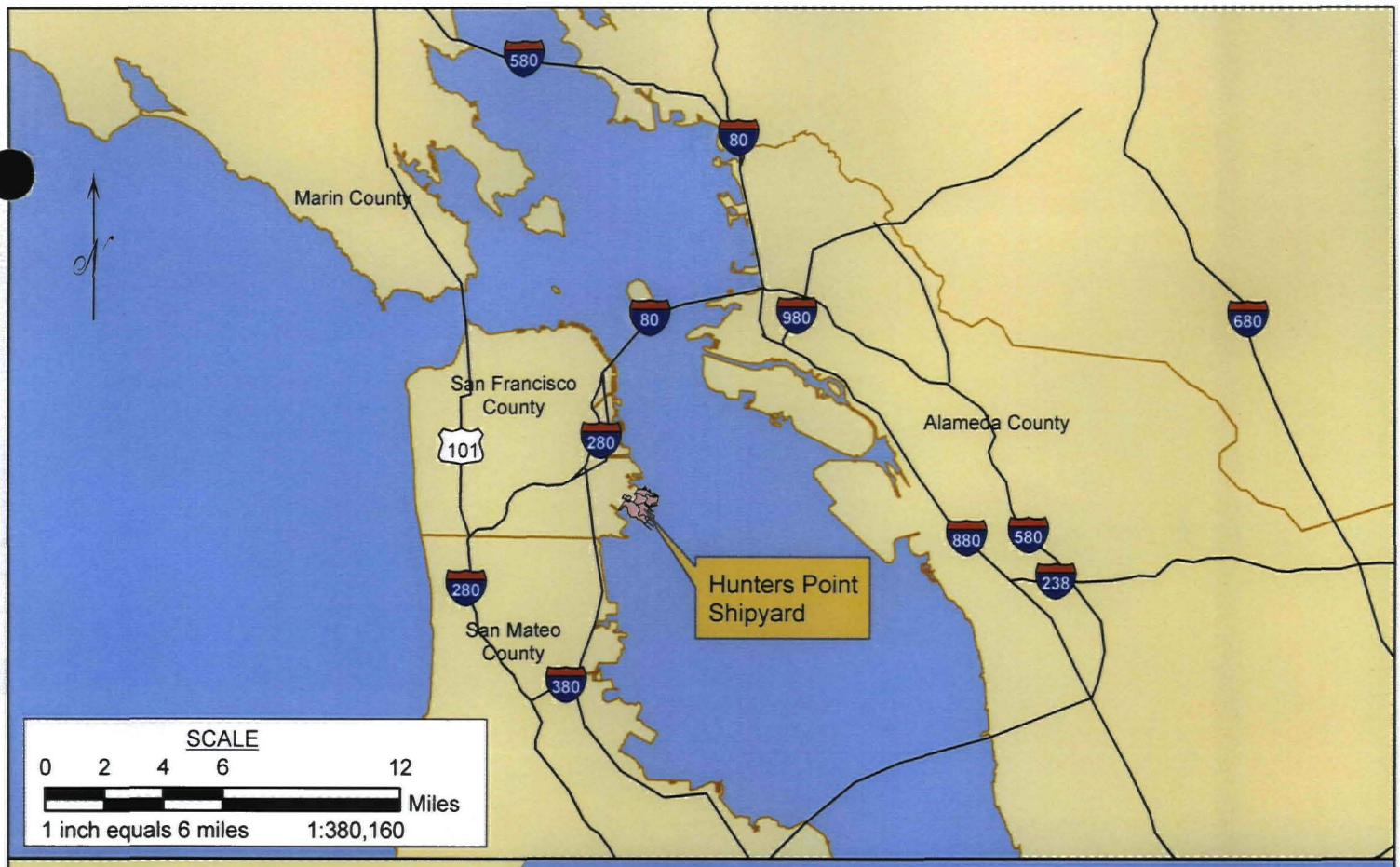
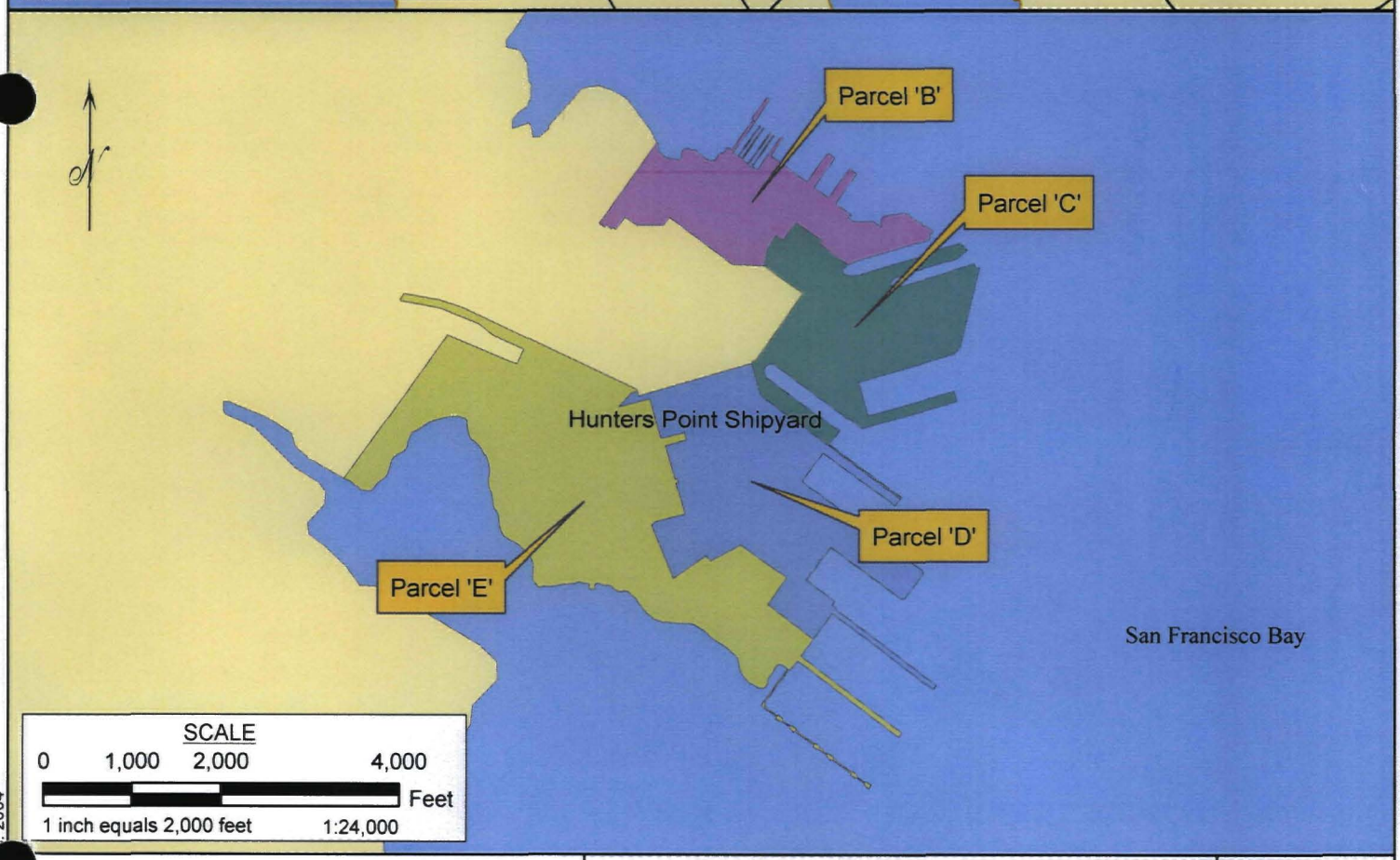
FIGURES





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SITE LOCATION MAP

HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

Figure
1

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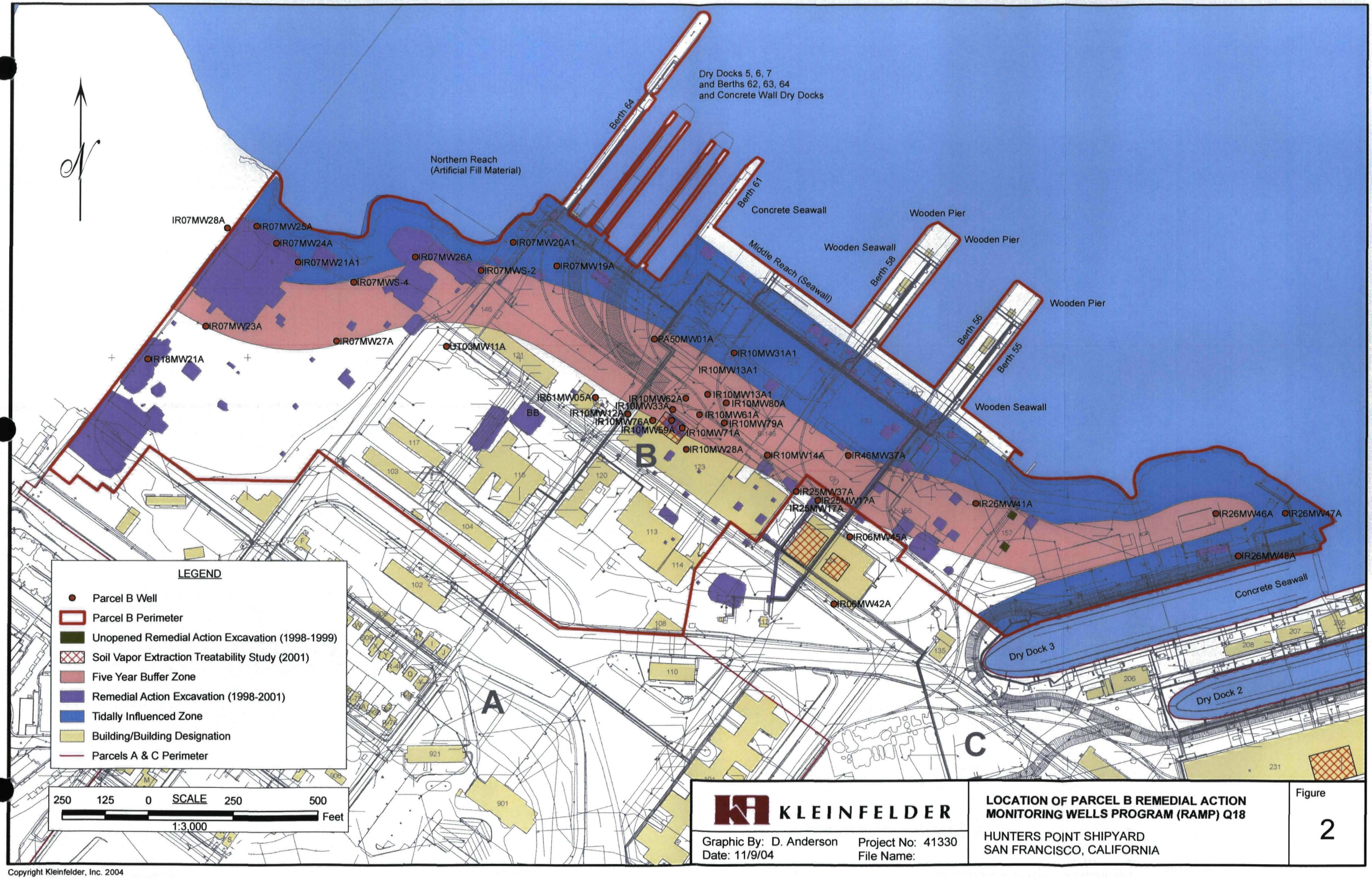

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LOCATION OF PARCEL B REMEDIAL ACTION MONITORING WELLS PROGRAM (RAMP) Q18

HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

Figure
2

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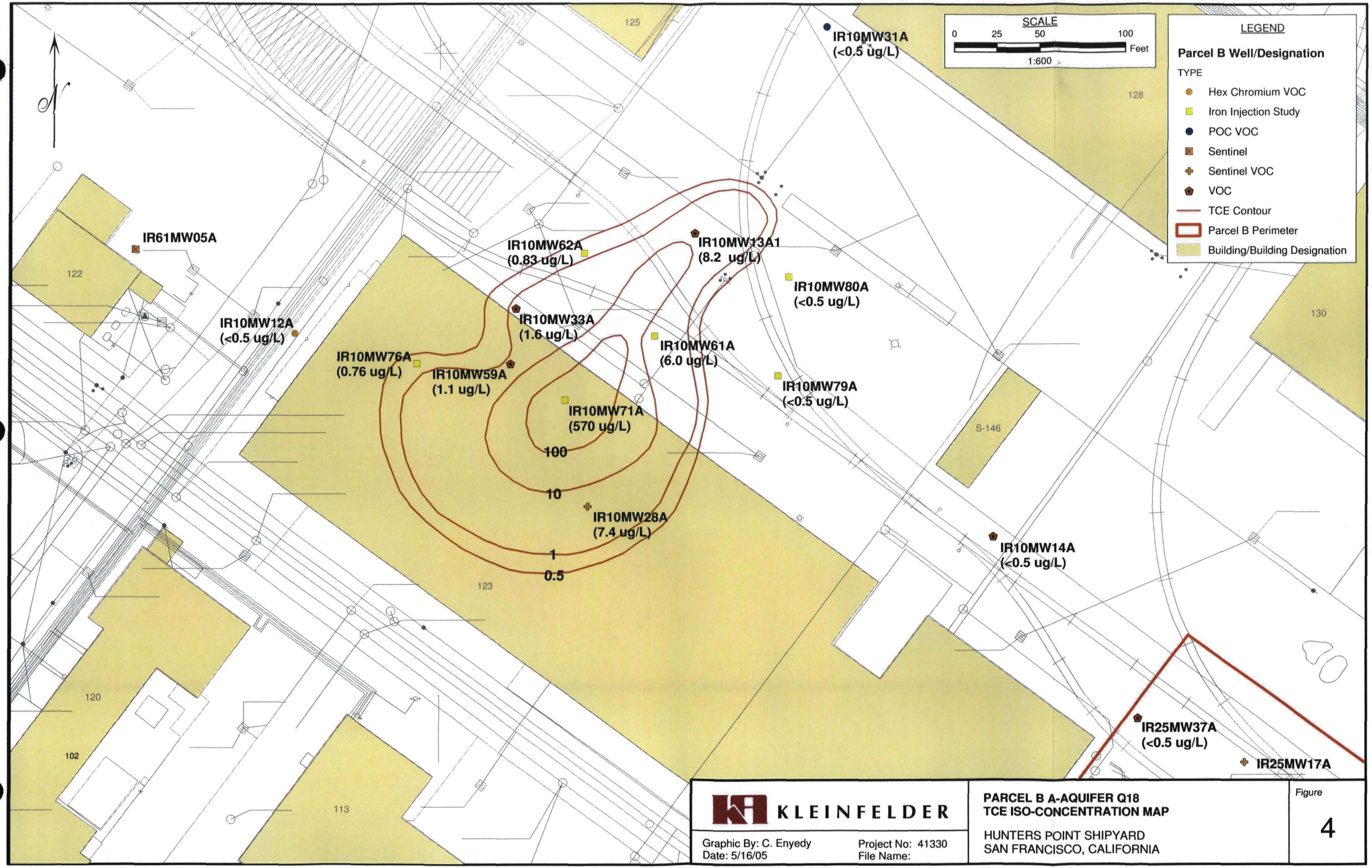

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PARCEL B A-AQUIFER Q18
TCE ISO-CONCENTRATION MAP

HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

Figure
4

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APPENDIX A

Summary of Eighteenth Quarterly Analytical Results and Trigger Levels, April to June 2004 Sampling Event

APPENDIX A
SUMMARY OF [illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW19A	POC	0423H009		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	ALUMINUM	7429-90-5	203	µg/L									200
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	BARIUM	7440-39-3	74.3	µg/L	J	J	504.2	5042		100000	504		200
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	CADMIUM	7440-43-9	0.60	µg/L	J	J	9.3	93		500	5.1	9.3	5
B	IR07MW19A	POC	0423H009		CLP METALS	DIL1	CALCIUM	7440-70-2	253000	µg/L	D								50000
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	CALCIUM	7440-70-2	196000	µg/L	E	J8							5000
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	COBALT	7440-48-4	50	µg/L	U		20.8	208		80000	20.8		50
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	IRON	7439-89-6	448	µg/L									100
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR07MW19A	POC	0423H009		CLP METALS	DIL1	MAGNESIUM	7439-95-4	732000	µg/L	D								50000
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	MAGNESIUM	7439-95-4	540000	µg/L	E	J8							5000
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	MANGANESE	7439-96-5	22.7	µg/L			8140	81400			8140		15
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	NICKEL	7440-02-0	20.2	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR07MW19A	POC	0423H009		CLP METALS	DIL1	POTASSIUM	7440-09-7	190000	µg/L	D								50000
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	POTASSIUM	7440-09-7	202000	µg/L	E	J8							5000
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR07MW19A	POC	0423H009		CLP METALS	DIL2	SODIUM	7440-23-5	5760000	µg/L	D								1000000
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	VANADIUM	7440-62-2	4.9	µg/L	J	J							50
B	IR07MW19A	POC	0423H009		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR07MW19A	POC	0423H009		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MW19A	POC	0423H009		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR07MW19A	POC	0423H009		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR07MW19A	POC	0423H009		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR07MW19A	POC	0423H009		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR07MW19A	POC	0423H009		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR07MWS-2	POC	0424T016		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	ALUMINUM	7429-90-5	200	µg/L	U	UJ3							200
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U	UJ3	36	360		4000	27.34	36	10
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	BARIUM	7440-39-3	57.6	µg/L	J	J43	504.2	5042		100000	504		200
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U	UJ3	1.4	14		750	1.4		5
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U	UJ3	9.3	93		500	5.1	9.3	5
B	IR07MWS-2	POC	0424T016		CLP METALS	DIL2	CALCIUM	7440-70-2	340000	µg/L	D								50000
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	CALCIUM	7440-70-2	263000	µg/L	E	J8							5000
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U	UJ3	15.66	156.6		5000	15.66	1030	10
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	COBALT	7440-48-4	3.5	µg/L	J	J3	20.8	208		80000	20.8		50
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	IRON	7439-89-6	100	µg/L	U	UJ3							100
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U	UJ3	14.44	144.4		1500	14.44	8.1	10
B	IR07MWS-2	POC	0424T016		CLP METALS	DIL2	MAGNESIUM	7439-95-4	972000	µg/L	D								50000
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	MAGNESIUM	7439-95-4	749000	µg/L	E	J8							5000
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	MANGANESE	7439-96-5	340	µg/L		J3	8140	81400			8140		15
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	NICKEL	7440-02-0	46.9	µg/L		J3	96.5	965		2000	96.5	8.2	40
B	IR07MWS-2	POC	0424T016		CLP METALS	DIL2	POTASSIUM	7440-09-7	281000	µg/L	D								50000
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	POTASSIUM	7440-09-7	335000	µg/L	E	J87							5000
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U	UJ3					14.5	71	35
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR07MWS-2	POC	0424T016		CLP METALS	DIL1	SODIUM	7440-23-5	8520000	µg/L	D								1000000
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U	UJ3	12.97	129.7		7000	12.97	213	25
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	VANADIUM	7440-62-2	3.6	µg/L	J	J3							50
B	IR07MWS-2	POC	0424T016		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U	UJ3	81	810		7000	75.68	81	60
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5

APPENDIX A
SUMMARY OF [illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR07MWS-2	POC	0424T016		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MWS-2	POC	0424T016		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR07MWS-2	POC	0424T016		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR07MWS-2	POC	0424T016		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR07MWS-2	POC	0424T016		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR07MWS-2	POC	0424T016		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR07MWS-4	POC	0424T015		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	ALUMINUM	7429-90-5	32.7	µg/L	J	J3							200
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U	UJ3	36	360		4000	27.34	36	10
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	BARIUM	7440-39-3	91.6	µg/L	J	J43	504.2	5042		100000	504		200
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U	UJ3	1.4	14		750	1.4		5
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U	UJ3	9.3	93		500	5.1	9.3	5
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	CALCIUM	7440-70-2	92700	µg/L									5000
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U	UJ3	15.66	156.6		5000	15.66	1030	10
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	COBALT	7440-48-4	5.8	µg/L	J	J3	20.8	208		80000	20.8		50
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	IRON	7439-89-6	552	µg/L		J3							100
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U	UJ3	14.44	144.4		1500	14.44	8.1	10
B	IR07MWS-4	POC	0424T015		CLP METALS	DIL1	MAGNESIUM	7439-95-4	167000	µg/L	D								25000
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	MAGNESIUM	7439-95-4	172000	µg/L	E	J83							5000
B	IR07MWS-4	POC	0424T015		CLP METALS	DIL1	MANGANESE	7439-96-5	3280	µg/L	D	J3	8140	81400			8140		75
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	MANGANESE	7439-96-5	3360	µg/L	E	J8	8140	81400			8140		15
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	NICKEL	7440-02-0	5.8	µg/L	J	J3	96.5	965		2000	96.5	8.2	40
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	POTASSIUM	7440-09-7	17700	µg/L									5000
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U	UJ3					14.5	71	35
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR07MWS-4	POC	0424T015		CLP METALS	DIL2	SODIUM	7440-23-5	945000	µg/L	D								130000
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	SODIUM	7440-23-5	902000	µg/L	E	J87							5000
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U	UJ3	12.97	129.7		7000	12.97	213	25
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	VANADIUM	7440-62-2	50	µg/L	U	UJ3							50
B	IR07MWS-4	POC	0424T015		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U	UJ3	81	810		7000	75.68	81	60
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR07MWS-4	POC	0424T015		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MWS-4	POC	0424T015		EPA 160.1	NORM	TOTAL DISSOLVED SOLIDS	10-33-3	3420000	µg/L									40000.00
B	IR07MWS-4	POC	0424T015		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR07MWS-4	POC	0424T015		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U	UJ7				5000		50	0.02
B	IR07MWS-4	POC	0424T015		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR07MWS-4	POC	0424T015		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR07MWS-4	POC	0424T015		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR07MWS-4	POC	0424T015		SM 2520B	NORM	SALINITY (FROM CHLORIDE)	10-40-2	3.2	S									2
B	IR26MW41A	POC	0424G018		CLP MERCURY	NORM	MERCURY	7439-97-6	0.17	µg/L	J	U1	0.6	6		50	0.6	0.94	0.2
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	ALUMINUM	7429-90-5	29.1	µg/L	J	J							200
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	BARIUM	7440-39-3	36.6	µg/L	J	J	504.2	5042		100000	504		200
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U		9.3	93		500	5.1	9.3	5
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	CALCIUM	7440-70-2	12500	µg/L									5000
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	COBALT	7440-48-4	50	µg/L	U		20.8	208		80000	20.8		50
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	IRON	7439-89-6	83.1	µg/L	J	J							100
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	MAGNESIUM	7439-95-4	43900	µg/L									5000
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	MANGANESE	7439-96-5	497	µg/L			8140	81400			8140		15
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	NICKEL	7440-02-0	39.0	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	POTASSIUM	7440-09-7	1290	µg/L	J	J							5000
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR26MW41A	POC	0424G018		CLP METALS	DIL1	SODIUM	7440-23-5	175000	µg/L	D								50000

APPENDIX A
SUMMARY OF [illegible]TICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunter[illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	SODIUM	7440-23-5	202000	µg/L	E	J87							5000
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	VANADIUM	7440-62-2	50	µg/L	U								50
B	IR26MW41A	POC	0424G018		CLP METALS	NORM	ZINC	7440-66-6	75.9	µg/L			81	810		7000	75.68	81	60
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	17	µg/L									0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	1.8	µg/L									0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.29	µg/L	J	J	85	850	85			22400	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	19	µg/L									0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	2.1	µg/L									0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR26MW41A	POC	0424G018		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR26MW41A	POC	0424G018		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR26MW41A	POC	0424G018		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR26MW41A	POC	0424G018		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR26MW41A	POC	0424G018		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR26MW41A	POC	0424G018		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR46MW37A	POC	0424C021		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	ALUMINUM	7429-90-5	428	µg/L									200
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	BARIUM	7440-39-3	54.5	µg/L	J	J	504.2	5042		100000	504		200
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U		9.3	93		500	5.1	9.3	5
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	CALCIUM	7440-70-2	24400	µg/L									5000
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	CHROMIUM	7440-47-3	11.7	µg/L			15.66	156.6		5000	15.66	1030	10
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	COBALT	7440-48-4	1.5	µg/L	J	J	20.8	208		80000	20.8		50
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	IRON	7439-89-6	941	µg/L									100
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR46MW37A	POC	0424C021		CLP METALS	DIL1	MAGNESIUM	7439-95-4	177000	µg/L	D								25000
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	MAGNESIUM	7439-95-4	201000	µg/L	E	J8							5000
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	MANGANESE	7439-96-5	49.6	µg/L			8140	81400			8140		15
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	NICKEL	7440-02-0	31.8	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	POTASSIUM	7440-09-7	4090	µg/L	J	J							5000
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR46MW37A	POC	0424C021		CLP METALS	DIL1	SODIUM	7440-23-5	167000	µg/L	D								25000
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	SODIUM	7440-23-5	193000	µg/L	E	J8							5000
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	VANADIUM	7440-62-2	1.0	µg/L	J	J							50
B	IR46MW37A	POC	0424C021		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5

APPENDIX A
SUMMARY OF A[illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible]ampling Report - Parcel B
Hunters [illegible]hipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR46MW37A	POC	0424C021		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR46MW37A	POC	0424C021		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	25	mg/L									10.000
B	IR46MW37A	POC	0424C021		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR46MW37A	POC	0424C021		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR46MW37A	POC	0424C021		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR46MW37A	POC	0424C021		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR10MW31A1	POC and VOC	0424H019		CLP MERCURY	NORM	MERCURY	7439-97-6	0.053	µg/L	J	U1	0.6	6		50	0.6	0.94	0.2
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	ALUMINUM	7429-90-5	200	µg/L	U	UJ3							200
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U	UJ3	36	360		4000	27.34	36	10
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	BARIUM	7440-39-3	61.4	µg/L	J	J43	504.2	5042		100000	504		200
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U	UJ3	1.4	14		750	1.4		5
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U	UJ3	9.3	93		500	5.1	9.3	5
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	DIL1	CALCIUM	7440-70-2	166000	µg/L	D								25000
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	CALCIUM	7440-70-2	156000	µg/L	E	J8							5000
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U	UJ3	15.66	156.6		5000	15.66	1030	10
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	COBALT	7440-48-4	50	µg/L	U	UJ3	20.8	208		80000	20.8		50
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	IRON	7439-89-6	100	µg/L	U	UJ3							100
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U	UJ3	14.44	144.4		1500	14.44	8.1	10
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	DIL1	MAGNESIUM	7439-95-4	359000	µg/L	D								25000
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	MAGNESIUM	7439-95-4	338000	µg/L	E	J8							5000
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	MANGANESE	7439-96-5	1910	µg/L		J3	8140	81400			8140		15
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	NICKEL	7440-02-0	20.7	µg/L	J	J3	96.5	965		2000	96.5	8.2	40
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	DIL1	POTASSIUM	7440-09-7	64200	µg/L	D								25000
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	POTASSIUM	7440-09-7	73700	µg/L	E	J8							5000
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U	UJ3					14.5	71	35
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	DIL2	SODIUM	7440-23-5	2480000	µg/L	D								1000000
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U	UJ3	12.97	129.7		7000	12.97	213	25
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	VANADIUM	7440-62-2	2.9	µg/L	J	J3							50
B	IR10MW31A1	POC and VOC	0424H019		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U	UJ3	81	810		7000	75.68	81	60
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	ACETONE	67-64-1	3.2	µg/L	J								5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	J	U4							5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5

APPENDIX A
SUMMARY OF A[illegible]CAL RESULTS
Eighteenth Quarterly Grou[illegible]ampling Report - Parcel B
Hunters [illegible]hipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR10MW31A1	POC and VOC	0424H019		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR10MW31A1	POC and VOC	0424H019		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR10MW31A1	POC and VOC	0424H019		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U	UJ5				5000		50	0.02
B	IR10MW31A1	POC and VOC	0424H019		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR10MW31A1	POC and VOC	0424H019		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR10MW31A1	POC and VOC	0424H019		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	PA50MW01A	POC and VOC	0424T020		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	ALUMINUM	7429-90-5	200	µg/L	U								200
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	**PA50MW01A**	**POC and VOC**	**0424T020**		**CLP METALS**	**NORM**	**BARIUM**	**7440-39-3**	**585**	µg/L			**504.2**	**5042**		**100000**	**504**		**200**
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U		9.3	93		500	5.1	9.3	5
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	DIL1	CALCIUM	7440-70-2	128000	µg/L	D								25000
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	CALCIUM	7440-70-2	138000	µg/L	E	J8							5000
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	COBALT	7440-48-4	1.9	µg/L	J	J	20.8	208		80000	20.8		50
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	IRON	7439-89-6	89.7	µg/L	J	J							100
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	DIL1	MAGNESIUM	7439-95-4	304000	µg/L	D								25000
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	MAGNESIUM	7439-95-4	326000	µg/L	E	J8							5000
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	MANGANESE	7439-96-5	704	µg/L			8140	81400			8140		15
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	NICKEL	7440-02-0	9.2	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	POTASSIUM	7440-09-7	21900	µg/L									5000
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	DIL2	SODIUM	7440-23-5	1080000	µg/L	D	J7							250000
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	SODIUM	7440-23-5	1140000	µg/L	E	J8							5000
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	VANADIUM	7440-62-2	50	µg/L	U								50
B	PA50MW01A	POC and VOC	0424T020		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.25	µg/L	J	J	85	850	85			22400	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	PA50MW01A	POC and VOC	0424T020		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	PA50MW01A	POC and VOC	0424T020		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	PA50MW01A	POC and VOC	0424T020		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	PA50MW01A	POC and VOC	0424T020		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	PA50MW01A	POC and VOC	0424T020		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	PA50MW01A	POC and VOC	0424T020		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR07MW23A	Sentinel	0423C006		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	ALUMINUM	7429-90-5	200	µg/L	U								200
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	BARIUM	7440-39-3	90.3	µg/L	J	J	504.2	5042		100000	504		200
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U		9.3	93		500	5.1	9.3	5
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	CALCIUM	7440-70-2	80200	µg/L									5000
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	CHROMIUM	7440-47-3	9.2	µg/L	J	J	15.66	156.6		5000	15.66	1030	10
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	COBALT	7440-48-4	5.1	µg/L	J	J	20.8	208		80000	20.8		50
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	IRON	7439-89-6	737	µg/L									100
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	MAGNESIUM	7439-95-4	99200	µg/L									5000
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	MANGANESE	7439-96-5	1970	µg/L			8140	81400			8140		15
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	NICKEL	7440-02-0	32.4	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	POTASSIUM	7440-09-7	9890	µg/L									5000
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR07MW23A	Sentinel	0423C006		CLP METALS	DIL1	SODIUM	7440-23-5	98500	µg/L	D								25000

APPENDIX A
SUMMARY OF [illegible]TICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2,3] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	SODIUM	7440-23-5	100000	µg/L	E	J8							5000
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	VANADIUM	7440-62-2	50	µg/L	U								50
B	IR07MW23A	Sentinel	0423C006		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.53	µg/L			85	850	85			22400	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR07MW23A	Sentinel	0423C006		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MW23A	Sentinel	0423C006		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR07MW23A	Sentinel	0423C006		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U	UJ5				5000		50	0.02
B	IR07MW23A	Sentinel	0423C006		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR07MW23A	Sentinel	0423C006		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR07MW23A	Sentinel	0423C006		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR07MW27A	Sentinel	0423S007		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	ALUMINUM	7429-90-5	31.6	µg/L	J	J							200
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	ARSENIC	7440-38-2	7.9	µg/L	J	U1	36	360		4000	27.34	36	10
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	BARIUM	7440-39-3	55.2	µg/L	J	J	504.2	5042		100000	504		200
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U		9.3	93		500	5.1	9.3	5
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	CALCIUM	7440-70-2	45200	µg/L									5000
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	COBALT	7440-48-4	0.96	µg/L	J	J	20.8	208		80000	20.8		50
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	IRON	7439-89-6	545	µg/L									100
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	MAGNESIUM	7439-95-4	49100	µg/L									5000
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	MANGANESE	7439-96-5	1080	µg/L			8140	81400			8140		15
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	NICKEL	7440-02-0	11.7	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	POTASSIUM	7440-09-7	7280	µg/L									5000
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR07MW27A	Sentinel	0423S007		CLP METALS	DIL1	SODIUM	7440-23-5	281000	µg/L	D								50000
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	SODIUM	7440-23-5	269000	µg/L	E	J8							5000
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	VANADIUM	7440-62-2	11.1	µg/L	J	J							50
B	IR07MW27A	Sentinel	0423S007		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	4,4'-DDD	72-54-8	0.02	µg/L	U								0.02
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	4,4'-DDE	72-55-9	0.02	µg/L	U								0.02
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	4,4'-DDT	50-29-3	0.02	µg/L	U							0.001	0.02
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	ALDRIN	309-00-2	0.01	µg/L	U								0.01
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	alpha-BHC	319-84-6	0.01	µg/L	U								0.01
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	alpha-CHLORDANE	5103-71-9	0.01	µg/L	U							0.004	0.01
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	AROCLOR-1016	12674-11-2	0.2	µg/L	U								0.2
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	AROCLOR-1221	11104-28-2	0.4	µg/L	U								0.4
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	AROCLOR-1232	11141-16-5	0.2	µg/L	U								0.2
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	AROCLOR-1242	53469-21-9	0.2	µg/L	U								0.2
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	AROCLOR-1248	12672-29-6	0.2	µg/L	U					5000		0.03	0.2
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	AROCLOR-1254	11097-69-1	0.2	µg/L	U					5000		0.03	0.2
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	AROCLOR-1260	11096-82-5	0.2	µg/L	U					5000		0.03	0.2
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	beta-BHC	319-85-7	0.01	µg/L	U								0.01
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	delta-BHC	319-86-8	0.01	µg/L	U								0.01
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	DIELDRIN	60-57-1	0.02	µg/L	U							0.0019	0.02
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	ENDOSULFAN I	959-98-8	0.01	µg/L	U								0.01
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	ENDOSULFAN II	33213-65-9	0.02	µg/L	U							0.0087	0.02
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	ENDOSULFAN SULFATE	1031-07-8	0.02	µg/L	U								0.02
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	ENDRIN	72-20-8	0.02	µg/L	U							0.0023	0.02
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	ENDRIN ALDEHYDE	7421-93-4	0.02	µg/L	U								0.02
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	ENDRIN KETONE	53494-70-5	0.02	µg/L	U								0.02
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	gamma-BHC (LINDANE)	58-89-9	0.01	µg/L	U								0.01
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	gamma-CHLORDANE	5103-74-2	0.01	µg/L	U							0.004	0.01
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	HEPTACHLOR	76-44-8	0.01	µg/L	U							0.0036	0.01
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	HEPTACHLOR EPOXIDE	1024-57-3	0.01	µg/L	U							0.0036	0.01
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	METHOXYCHLOR	72-43-5	0.1	µg/L	U								0.1
B	IR07MW27A	Sentinel	0423S007		CLP PESTICIDES	NORM	TOXAPHENE	8001-35-2	1	µg/L	U								1
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	1,1'-BIPHENYL	92-52-4	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2,4,5-TRICHLOROPHENOL	95-95-4	25	µg/L	U								25
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2,4,6-TRICHLOROPHENOL	88-06-2	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2,4-DICHLOROPHENOL	120-83-2	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2,4-DIMETHYLPHENOL	105-67-9	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2,4-DINITROPHENOL	51-28-5	25	µg/L	U								25
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2,4-DINITROTOLUENE	121-14-2	10	µg/L	U							59	10

APPENDIX A
SUMMARY OF [illegible]TICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunter[illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2,6-DINITROTOLUENE	606-20-2	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2-CHLORONAPHTHALENE	91-58-7	10	µg/L	U							0.75	10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2-CHLOROPHENOL	95-57-8	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2-METHYLNAPHTHALENE	91-57-6	10	µg/L	U							30	10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2-METHYLPHENOL	95-48-7	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2-NITROANILINE	88-74-4	25	µg/L	U								25
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	2-NITROPHENOL	88-75-5	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	3,3'-DICHLOROBENZIDINE	91-94-1	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	3-NITROANILINE	99-09-2	25	µg/L	U								25
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	4,6-DINITRO-2-METHYLPHENOL	534-52-1	25	µg/L	U								25
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	4-BROMOPHENYL PHENYL ETHER	101-55-3	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	4-CHLORO-3-METHYLPHENOL	59-50-7	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	4-CHLOROANILINE	106-47-8	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	4-METHYLPHENOL	106-44-5	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	4-NITROANILINE	100-01-6	25	µg/L	U								25
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	4-NITROPHENOL	100-02-7	25	µg/L	U								25
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	ACENAPHTHENE	83-32-9	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	ACENAPHTHYLENE	208-96-8	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	ACETOPHENONE	98-86-2	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	ANTHRACENE	120-12-7	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	ATRAZINE	1912-24-9	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	BENZ(a)ANTHRACENE	56-55-3	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	BENZALDEHYDE	100-52-7	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	BENZO(a)PYRENE	50-32-8	10	µg/L	U							30	10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	BENZO(b)FLUORANTHENE	205-99-2	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	BENZO(ghi)PERYLENE	191-24-2	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	BENZO(k)FLUORANTHENE	207-08-9	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	BIS(2-CHLOROETHOXY)METHANE	111-91-1	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	BIS(2-CHLOROETHYL)ETHER	111-44-4	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	BUTYL BENZYL PHTHALATE	85-68-7	10	µg/L	J	U4							10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	CAPROLACTAM	105-60-2	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	CARBAZOLE	86-74-8	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	CHRYSENE	218-01-9	10	µg/L	U							30	10

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	DIBENZ(a,h)ANTHRACENE	53-70-3	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	DIBENZOFURAN	132-64-9	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	DIETHYL PHTHALATE	84-66-2	10	µg/L	J	U4							10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	DIMETHYL PHTHALATE	131-11-3	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	DI-n-BUTYL PHTHALATE	84-74-2	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	DI-n-OCTYL PHTHALATE	117-84-0	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	FLUORANTHENE	206-44-0	10	µg/L	U							16	10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	FLUORENE	86-73-7	10	µg/L	U							30	10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	HEXACHLOROBENZENE	118-74-1	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	HEXACHLOROBUTADIENE	87-68-3	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	HEXACHLOROCYCLOPENTADIENE	77-47-4	10	µg/L	U	UJ7							10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	HEXACHLOROETHANE	67-72-1	10	µg/L	U							94	10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	INDENO(1,2,3-cd)PYRENE	193-39-5	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	ISOPHORONE	78-59-1	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	NAPHTHALENE	91-20-3	10	µg/L	U							235	10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	NITROBENZENE	98-95-3	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	N-NITROSODI-n-PROPYLAMINE	621-64-7	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	N-NITROSODIPHENYLAMINE	86-30-6	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	PENTACHLOROPHENOL	87-86-5	25	µg/L	U							7.9	25
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	PHENANTHRENE	85-01-8	10	µg/L	U							30	10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	PHENOL	108-95-2	10	µg/L	U							580	10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	PROPANE, 2,2'-OXYBIS[1-CHLORO-	108-60-1	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP SEMIVOLATILES	NORM	PYRENE	129-00-0	10	µg/L	U								10
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5

APPENDIX A
SUMMARY OF [illegible]TICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR07MW27A	Sentinel	0423S007		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MW27A	Sentinel	0423S007		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR07MW27A	Sentinel	0423S007		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR07MW27A	Sentinel	0423S007		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR07MW27A	Sentinel	0423S007		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR07MW27A	Sentinel	0423S007		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR06MW45A	Sentinel and VOC	0423T006		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	ALUMINUM	7429-90-5	51.1	µg/L	J	J							200
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	BARIUM	7440-39-3	134	µg/L	J	J	504.2	5042		100000	504		200
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U		9.3	93		500	5.1	9.3	5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	DIL1	CALCIUM	7440-70-2	307000	µg/L	D								50000
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	CALCIUM	7440-70-2	221000	µg/L	E	J8							5000
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	COBALT	7440-48-4	2.6	µg/L	J	J	20.8	208		80000	20.8		50
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	IRON	7439-89-6	326	µg/L									100
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	DIL1	MAGNESIUM	7439-95-4	903000	µg/L	D								50000
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	MAGNESIUM	7439-95-4	637000	µg/L	E	J8							5000
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	MANGANESE	7439-96-5	1290	µg/L			8140	81400			8140		15
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	NICKEL	7440-02-0	13.6	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	DIL1	POTASSIUM	7440-09-7	254000	µg/L	D								50000
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	POTASSIUM	7440-09-7	272000	µg/L	E	J8							5000
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	DIL2	SODIUM	7440-23-5	7600000	µg/L	D								1000000
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	VANADIUM	7440-62-2	3.9	µg/L	J	J							50
B	IR06MW45A	Sentinel and VOC	0423T006		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.37	µg/L	J	J3							0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR06MW45A	Sentinel and VOC	0423T006		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR06MW45A	Sentinel and VOC	0423T006		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR06MW45A	Sentinel and VOC	0423T006		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR06MW45A	Sentinel and VOC	0423T006		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR06MW45A	Sentinel and VOC	0423T006		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR06MW45A	Sentinel and VOC	0423T006		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U	R7							1
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	J	U4							5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5

APPENDIX A
SUMMARY OF [illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.73	µg/L									0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.40	µg/L	J	J	85	850	85			22400	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	7.4	µg/L			114	1140	114			200	0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR10MW28A	Sentinel and VOC	0432S062		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U	R7							1
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	2.5	µg/L								11300	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	J	U4							5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.24	µg/L	J	J							0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.17	µg/L	J	J	85	850	85			22400	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.58	µg/L									0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR25MW17A	Sentinel and VOC	0432S063		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	ALUMINUM	7429-90-5	200	µg/L	U								200
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	BARIUM	7440-39-3	40.0	µg/L	J	J	504.2	5042		100000	504		200
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	CADMIUM	7440-43-9	0.83	µg/L	J	J	9.3	93		500	5.1	9.3	5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	DIL1	CALCIUM	7440-70-2	286000	µg/L	D								50000
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	CALCIUM	7440-70-2	208000	µg/L	E	J8							5000
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	COBALT	7440-48-4	50	µg/L	U		20.8	208		80000	20.8		50
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	IRON	7439-89-6	100	µg/L	U								100
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	DIL1	MAGNESIUM	7439-95-4	857000	µg/L	D								50000
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	MAGNESIUM	7439-95-4	615000	µg/L	E	J8							5000
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	MANGANESE	7439-96-5	178	µg/L			8140	81400			8140		15
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	NICKEL	7440-02-0	24.4	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	DIL1	POTASSIUM	7440-09-7	253000	µg/L	D								50000
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	POTASSIUM	7440-09-7	265000	µg/L	E	J8							5000
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	DIL2	SODIUM	7440-23-5	7420000	µg/L	D								1000000
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	VANADIUM	7440-62-2	4.2	µg/L	J	J							50
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60

APPENDIX A
SUMMARY OF [illegible]TICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunter[illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MW20A1	Post-Remedial Action	0423G006		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR07MW20A1	Post-Remedial Action	0423G006		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.0096	mg/L	J	J				5000		50	0.02
B	IR07MW20A1	Post-Remedial Action	0423G006		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR07MW20A1	Post-Remedial Action	0423G006		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR07MW20A1	Post-Remedial Action	0423G006		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	ALUMINUM	7429-90-5	200	µg/L	U								200
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	BARIUM	7440-39-3	108	µg/L	J	J	504.2	5042		100000	504		200
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U		9.3	93		500	5.1	9.3	5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	DIL1	CALCIUM	7440-70-2	118000	µg/L	D								25000
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	CALCIUM	7440-70-2	113000	µg/L	E	J8							5000
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	COBALT	7440-48-4	3.0	µg/L	J	J	20.8	208		80000	20.8		50
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	IRON	7439-89-6	188	µg/L									100
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	MAGNESIUM	7439-95-4	92700	µg/L									5000

APPENDIX A
SUMMARY OF A[illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible]ampling Report - Parcel B
Hunters [illegible]hipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) [2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	MANGANESE	7439-96-5	917	µg/L			8140	81400			8140		15
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	NICKEL	7440-02-0	25.5	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	POTASSIUM	7440-09-7	12800	µg/L									5000
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	DIL1	SODIUM	7440-23-5	168000	µg/L	D								25000
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	SODIUM	7440-23-5	179000	µg/L	E	J8							5000
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	VANADIUM	7440-62-2	50	µg/L	U								50
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MW21A1	Post-Remedial Action	0423S006		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR07MW21A1	Post-Remedial Action	0423S006		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR07MW21A1	Post-Remedial Action	0423S006		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR07MW21A1	Post-Remedial Action	0423S006		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR07MW21A1	Post-Remedial Action	0423S006		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR07MW24A	Post-Remedial Action	0423T007		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	ALUMINUM	7429-90-5	200	µg/L	U								200
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	BARIUM	7440-39-3	112	µg/L	J	J	504.2	5042		100000	504		200
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U		9.3	93		500	5.1	9.3	5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	DIL1	CALCIUM	7440-70-2	106000	µg/L	D								25000
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	CALCIUM	7440-70-2	105000	µg/L	E	J8							5000
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10

APPENDIX A
SUMMARY OF [illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	COBALT	7440-48-4	5.4	µg/L	J	J	20.8	208		80000	20.8		50
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	IRON	7439-89-6	261	µg/L									100
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	MAGNESIUM	7439-95-4	92800	µg/L									5000
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	MANGANESE	7439-96-5	1780	µg/L			8140	81400			8140		15
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	NICKEL	7440-02-0	35.0	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	POTASSIUM	7440-09-7	13800	µg/L									5000
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	DIL1	SODIUM	7440-23-5	156000	µg/L	D								25000
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	SODIUM	7440-23-5	171000	µg/L	E	J8							5000
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	VANADIUM	7440-62-2	50	µg/L	U								50
B	IR07MW24A	Post-Remedial Action	0423T007		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.21	µg/L	J	J	85	850	85			22400	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.20	µg/L	J	J							0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR07MW24A	Post-Remedial Action	0423T007		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MW24A	Post-Remedial Action	0423T007		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Codes	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW24A	Post-Remedial Action	0423T007		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR07MW24A	Post-Remedial Action	0423T007		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR07MW24A	Post-Remedial Action	0423T007		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR07MW24A	Post-Remedial Action	0423T007		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR07MW25A	Post-Remedial Action	0423H008		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	ALUMINUM	7429-90-5	200	µg/L	U								200
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	BARIUM	7440-39-3	217	µg/L			504.2	5042		100000	504		200
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U		9.3	93		500	5.1	9.3	5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	DIL1	CALCIUM	7440-70-2	160000	µg/L	D								10000
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	CALCIUM	7440-70-2	153000	µg/L	E	J8							5000
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	COBALT	7440-48-4	3.6	µg/L	J	J	20.8	208		80000	20.8		50
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	IRON	7439-89-6	333	µg/L									100
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	MAGNESIUM	7439-95-4	95100	µg/L									5000
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	MANGANESE	7439-96-5	1460	µg/L			8140	81400			8140		15
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	NICKEL	7440-02-0	15.0	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	POTASSIUM	7440-09-7	19600	µg/L									5000
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	DIL2	SODIUM	7440-23-5	337000	µg/L	D								50000
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	SODIUM	7440-23-5	320000	µg/L	E	J8							5000
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	VANADIUM	7440-62-2	50	µg/L	U								50
B	IR07MW25A	Post-Remedial Action	0423H008		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.38	µg/L	J	J						43	0.5

APPENDIX A
SUMMARY OF [illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) [1] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR07MW25A	Post-Remedial Action	0423H008		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MW25A	Post-Remedial Action	0423H008		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR07MW25A	Post-Remedial Action	0423H008		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR07MW25A	Post-Remedial Action	0423H008		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR07MW25A	Post-Remedial Action	0423H008		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR07MW25A	Post-Remedial Action	0423H008		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR07MW26A	Post-Remedial Action	0423G007		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	ALUMINUM	7429-90-5	200	µg/L	U								200
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	BARIUM	7440-39-3	78.9	µg/L	J	J	504.2	5042		100000	504		200
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U		9.3	93		500	5.1	9.3	5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	DIL1	CALCIUM	7440-70-2	373000	µg/L	D								50000
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	CALCIUM	7440-70-2	260000	µg/L	E	J8							5000
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	COBALT	7440-48-4	0.66	µg/L	J	J	20.8	208		80000	20.8		50
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	IRON	7439-89-6	63.5	µg/L	J	J							100
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	DIL3	MAGNESIUM	7439-95-4	1020000	µg/L	D								100000
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	MAGNESIUM	7439-95-4	692000	µg/L	E	J8							5000
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	MANGANESE	7439-96-5	198	µg/L			8140	81400			8140		15
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	NICKEL	7440-02-0	6.0	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	DIL1	POTASSIUM	7440-09-7	293000	µg/L	D								50000
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	POTASSIUM	7440-09-7	316000	µg/L	E	J8							5000
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	DIL2	SODIUM	7440-23-5	8680000	µg/L	D								1000000
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	VANADIUM	7440-62-2	3.4	µg/L	J	J							50
B	IR07MW26A	Post-Remedial Action	0423G007		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR07MW26A	Post-Remedial Action	0423G007		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MW26A	Post-Remedial Action	0423G007		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR07MW26A	Post-Remedial Action	0423G007		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR07MW26A	Post-Remedial Action	0423G007		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR07MW26A	Post-Remedial Action	0423G007		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR07MW26A	Post-Remedial Action	0423G007		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5

APPENDIX A
SUMMARY OF [illegible]TICAL RESULTS
Eighteenth Quarterly Gro[illegible] Sampling Report - Parcel B
Hunters [illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR10MW12A	Hexavalent Chromium and VOC	0424H020		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	**IR10MW12A**	**Hexavalent Chromium and VOC**	**0424H020**		**EPA 7196A**	**NORM**	**HEXAVALENT CHROMIUM**	**18540-29-9**	**0.17**	mg/L						**5000**		**50**	**0.02**
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	ALUMINUM	7429-90-5	200	µg/L	U	UJ3							200
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U	UJ3	36	360		4000	27.34	36	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	BARIUM	7440-39-3	215	µg/L		J43	504.2	5042		100000	504		200
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U	UJ3	1.4	14		750	1.4		5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U	UJ3	9.3	93		500	5.1	9.3	5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	DIL1	CALCIUM	7440-70-2	151000	µg/L	D								25000
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	CALCIUM	7440-70-2	157000	µg/L	E	J8							5000
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U	UJ3	15.66	156.6		5000	15.66	1030	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	COBALT	7440-48-4	1.0	µg/L	J	J3	20.8	208		80000	20.8		50
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	IRON	7439-89-6	6830	µg/L		J3							100
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	LEAD	7439-92-1	5.3	µg/L	J	J3	14.44	144.4		1500	14.44	8.1	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	MAGNESIUM	7439-95-4	71300	µg/L									5000
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	MANGANESE	7439-96-5	1410	µg/L		J3	8140	81400			8140		15
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	NICKEL	7440-02-0	40	µg/L	U	UJ3	96.5	965		2000	96.5	8.2	40
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	POTASSIUM	7440-09-7	15100	µg/L									5000
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U	UJ3					14.5	71	35
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	DIL	SODIUM	7440-23-5	150000	µg/L	D								25000
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	DIL1	SODIUM	7440-23-5	150000	µg/L	D								25000
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	SODIUM	7440-23-5	161000	µg/L	E	J87							5000
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U	UJ3	12.97	129.7		7000	12.97	213	25
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	VANADIUM	7440-62-2	1.9	µg/L	J	J3							50
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U	UJ3	81	810		7000	75.68	81	60
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	4,4'-DDD	72-54-8	0.02	µg/L	U								0.02
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	4,4'-DDE	72-55-9	0.02	µg/L	U								0.02
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	4,4'-DDT	50-29-3	0.02	µg/L	U							0.001	0.02
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	ALDRIN	309-00-2	0.01	µg/L	U								0.01
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	alpha-BHC	319-84-6	0.01	µg/L	U								0.01
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	alpha-CHLORDANE	5103-71-9	0.01	µg/L	U							0.004	0.01
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	AROCLOR-1016	12674-11-2	0.2	µg/L	U								0.2
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	AROCLOR-1221	11104-28-2	0.4	µg/L	U								0.4
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	AROCLOR-1232	11141-16-5	0.2	µg/L	U								0.2
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	AROCLOR-1242	53469-21-9	0.2	µg/L	U								0.2
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	AROCLOR-1248	12672-29-6	0.2	µg/L	U					5000		0.03	0.2
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	AROCLOR-1254	11097-69-1	0.2	µg/L	U					5000		0.03	0.2
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	AROCLOR-1260	11096-82-5	0.2	µg/L	U					5000		0.03	0.2
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	beta-BHC	319-85-7	0.01	µg/L	U								0.01

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	delta-BHC	319-86-8	0.01	µg/L	U								0.01
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	DIELDRIN	60-57-1	0.02	µg/L	U							0.0019	0.02
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	ENDOSULFAN I	959-98-8	0.01	µg/L	U								0.01
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	ENDOSULFAN II	33213-65-9	0.02	µg/L	U							0.0087	0.02
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	ENDOSULFAN SULFATE	1031-07-8	0.02	µg/L	U								0.02
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	ENDRIN	72-20-8	0.02	µg/L	U	UJ7						0.0023	0.02
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	ENDRIN ALDEHYDE	7421-93-4	0.02	µg/L	U								0.02
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	ENDRIN KETONE	53494-70-5	0.02	µg/L	U								0.02
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	gamma-BHC (LINDANE)	58-89-9	0.01	µg/L	U								0.01
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	gamma-CHLORDANE	5103-74-2	0.01	µg/L	U							0.004	0.01
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	HEPTACHLOR	76-44-8	0.01	µg/L	U							0.0036	0.01
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	HEPTACHLOR EPOXIDE	1024-57-3	0.01	µg/L	U							0.0036	0.01
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	METHOXYCHLOR	72-43-5	0.1	µg/L	U								0.1
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP PESTICIDES	NORM	TOXAPHENE	8001-35-2	1	µg/L	U								1
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	1,1'-BIPHENYL	92-52-4	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2,4,5-TRICHLOROPHENOL	95-95-4	25	µg/L	U								25
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2,4,6-TRICHLOROPHENOL	88-06-2	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2,4-DICHLOROPHENOL	120-83-2	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2,4-DIMETHYLPHENOL	105-67-9	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2,4-DINITROPHENOL	51-28-5	25	µg/L	U	UJ7							25
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2,4-DINITROTOLUENE	121-14-2	10	µg/L	U							59	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2,6-DINITROTOLUENE	606-20-2	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2-CHLORONAPHTHALENE	91-58-7	10	µg/L	U							0.75	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2-CHLOROPHENOL	95-57-8	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2-METHYLNAPHTHALENE	91-57-6	10	µg/L	U							30	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2-METHYLPHENOL	95-48-7	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2-NITROANILINE	88-74-4	25	µg/L	U								25
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	2-NITROPHENOL	88-75-5	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	3,3'-DICHLOROBENZIDINE	91-94-1	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	3-NITROANILINE	99-09-2	25	µg/L	U	UJ7							25
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	4,6-DINITRO-2-METHYLPHENOL	534-52-1	25	µg/L	U	UJ7							25
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	4-BROMOPHENYL PHENYL ETHER	101-55-3	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	4-CHLORO-3-METHYLPHENOL	59-50-7	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	4-CHLOROANILINE	106-47-8	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	4-METHYLPHENOL	106-44-5	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	4-NITROANILINE	100-01-6	25	µg/L	U								25
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	4-NITROPHENOL	100-02-7	25	µg/L	U								25
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	ACENAPHTHENE	83-32-9	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	ACENAPHTHYLENE	208-96-8	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	ACETOPHENONE	98-86-2	10	µg/L	U								10

APPENDIX A
SUMMARY OF A[illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible]Sampling Report - Parcel B
Hunters [illegible]hipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	ANTHRACENE	120-12-7	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	ATRAZINE	1912-24-9	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	BENZ(a)ANTHRACENE	56-55-3	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	BENZALDEHYDE	100-52-7	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	BENZO(a)PYRENE	50-32-8	10	µg/L	U							30	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	BENZO(b)FLUORANTHENE	205-99-2	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	BENZO(ghi)PERYLENE	191-24-2	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	BENZO(k)FLUORANTHENE	207-08-9	10	µg/L	U	UJ7							10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	BIS(2-CHLOROETHOXY)METHANE	111-91-1	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	BIS(2-CHLOROETHYL)ETHER	111-44-4	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	BUTYL BENZYL PHTHALATE	85-68-7	3.0	µg/L	J								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	BUTYL BENZYL PHTHALATE	85-68-7	10	µg/L	J	UJ47							10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	CAPROLACTAM	105-60-2	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	CARBAZOLE	86-74-8	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	CHRYSENE	218-01-9	10	µg/L	U							30	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	DIBENZ(a,h)ANTHRACENE	53-70-3	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	DIBENZOFURAN	132-64-9	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	DIETHYL PHTHALATE	84-66-2	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	DIMETHYL PHTHALATE	131-11-3	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	DI-n-BUTYL PHTHALATE	84-74-2	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	DI-n-OCTYL PHTHALATE	117-84-0	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	FLUORANTHENE	206-44-0	10	µg/L	U							16	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	FLUORENE	86-73-7	10	µg/L	U							30	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	HEXACHLOROBENZENE	118-74-1	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	HEXACHLOROBUTADIENE	87-68-3	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	HEXACHLOROCYCLOPENTADIENE	77-47-4	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	HEXACHLOROETHANE	67-72-1	10	µg/L	U							94	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	INDENO(1,2,3-cd)PYRENE	193-39-5	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	ISOPHORONE	78-59-1	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	NAPHTHALENE	91-20-3	10	µg/L	U							235	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	NITROBENZENE	98-95-3	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	N-NITROSODI-n-PROPYLAMINE	621-64-7	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	N-NITROSODIPHENYLAMINE	86-30-6	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	PENTACHLOROPHENOL	87-86-5	25	µg/L	U							7.9	25

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	PHENANTHRENE	85-01-8	10	µg/L	U							30	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	PHENOL	108-95-2	10	µg/L	U							580	10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	PROPANE, 2,2'-OXYBIS[1-CHLORO-	108-60-1	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP SEMIVOLATILES	NORM	PYRENE	129-00-0	10	µg/L	U								10
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.20	µg/L	J	J	85	850	85			22400	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR07MW28A	On- and Offsite Mitigation	0424C015		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	21	mg/L									10.000
B	IR07MW28A	On- and Offsite Mitigation	0424C015		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U	UJ5				5000		50	0.02
B	IR07MW28A	On- and Offsite Mitigation	0424C015		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR07MW28A	On- and Offsite Mitigation	0424C015		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR07MW28A	On- and Offsite Mitigation	0424C015		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	ALUMINUM	7429-90-5	200	µg/L	U	UJ3							200

APPENDIX A
SUMMARY OF [illegible]TICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U	UJ3	36	360		4000	27.34	36	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	BARIUM	7440-39-3	198	µg/L	J	J43	504.2	5042		100000	504		200
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U	UJ3	1.4	14		750	1.4		5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U	UJ3	9.3	93		500	5.1	9.3	5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	DIL1	CALCIUM	7440-70-2	128000	µg/L	D								25000
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	CALCIUM	7440-70-2	139000	µg/L	E	J8							5000
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U	UJ3	15.66	156.6		5000	15.66	1030	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	COBALT	7440-48-4	50	µg/L	U	UJ3	20.8	208		80000	20.8		50
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	IRON	7439-89-6	346	µg/L		J3							100
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U	UJ3	14.44	144.4		1500	14.44	8.1	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	MAGNESIUM	7439-95-4	74800	µg/L									5000
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	MANGANESE	7439-96-5	1280	µg/L		J3	8140	81400			8140		15
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	NICKEL	7440-02-0	40	µg/L	U	UJ3	96.5	965		2000	96.5	8.2	40
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	POTASSIUM	7440-09-7	10800	µg/L									5000
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U	UJ3					14.5	71	35
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	DIL1	SODIUM	7440-23-5	99500	µg/L	D								25000
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	SODIUM	7440-23-5	112000	µg/L	E	J87							5000
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U	UJ3	12.97	129.7		7000	12.97	213	25
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	VANADIUM	7440-62-2	50	µg/L	U	UJ3							50
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U	UJ3	81	810		7000	75.68	81	60
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	4,4'-DDD	72-54-8	0.02	µg/L	U								0.02
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	4,4'-DDE	72-55-9	0.02	µg/L	U								0.02
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	4,4'-DDT	50-29-3	0.02	µg/L	U							0.001	0.02
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	ALDRIN	309-00-2	0.01	µg/L	U								0.01
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	alpha-BHC	319-84-6	0.01	µg/L	U								0.01
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	alpha-CHLORDANE	5103-71-9	0.01	µg/L	U							0.004	0.01
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	AROCLOR-1016	12674-11-2	0.2	µg/L	U								0.2
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	AROCLOR-1221	11104-28-2	0.4	µg/L	U								0.4
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	AROCLOR-1232	11141-16-5	0.2	µg/L	U								0.2
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	AROCLOR-1242	53469-21-9	0.2	µg/L	U								0.2
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	AROCLOR-1248	12672-29-6	0.2	µg/L	U					5000		0.03	0.2
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	AROCLOR-1254	11097-69-1	0.2	µg/L	U					5000		0.03	0.2
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	AROCLOR-1260	11096-82-5	0.2	µg/L	U					5000		0.03	0.2
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	beta-BHC	319-85-7	0.01	µg/L	U								0.01
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	delta-BHC	319-86-8	0.01	µg/L	U								0.01
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	DIELDRIN	60-57-1	0.02	µg/L	U							0.0019	0.02
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	ENDOSULFAN I	959-98-8	0.01	µg/L	U								0.01
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	ENDOSULFAN II	33213-65-9	0.02	µg/L	U							0.0087	0.02
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	ENDOSULFAN SULFATE	1031-07-8	0.02	µg/L	U								0.02
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	ENDRIN	72-20-8	0.02	µg/L	U	UJ7						0.0023	0.02
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	ENDRIN ALDEHYDE	7421-93-4	0.02	µg/L	U								0.02
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	ENDRIN KETONE	53494-70-5	0.02	µg/L	U								0.02
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	gamma-BHC (LINDANE)	58-89-9	0.01	µg/L	U								0.01
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	gamma-CHLORDANE	5103-74-2	0.01	µg/L	U							0.004	0.01
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	HEPTACHLOR	76-44-8	0.01	µg/L	U							0.0036	0.01
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	HEPTACHLOR EPOXIDE	1024-57-3	0.01	µg/L	U							0.0036	0.01
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	METHOXYCHLOR	72-43-5	0.1	µg/L	U								0.1
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP PESTICIDES	NORM	TOXAPHENE	8001-35-2	1	µg/L	U								1
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	1,1'-BIPHENYL	92-52-4	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2,4,5-TRICHLOROPHENOL	95-95-4	25	µg/L	U								25
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2,4,6-TRICHLOROPHENOL	88-06-2	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2,4-DICHLOROPHENOL	120-83-2	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2,4-DIMETHYLPHENOL	105-67-9	10	µg/L	U								10

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2,4-DINITROPHENOL	51-28-5	25	µg/L	U								25
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2,4-DINITROTOLUENE	121-14-2	10	µg/L	U							59	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2,6-DINITROTOLUENE	606-20-2	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2-CHLORONAPHTHALENE	91-58-7	10	µg/L	U							0.75	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2-CHLOROPHENOL	95-57-8	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2-METHYLNAPHTHALENE	91-57-6	10	µg/L	U							30	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2-METHYLPHENOL	95-48-7	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2-NITROANILINE	88-74-4	25	µg/L	U								25
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	2-NITROPHENOL	88-75-5	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	3,3'-DICHLOROBENZIDINE	91-94-1	10	µg/L	U	UJ7							10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	3-NITROANILINE	99-09-2	25	µg/L	U								25
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	4,6-DINITRO-2-METHYLPHENOL	534-52-1	25	µg/L	U								25
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	4-BROMOPHENYL PHENYL ETHER	101-55-3	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	4-CHLORO-3-METHYLPHENOL	59-50-7	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	4-CHLOROANILINE	106-47-8	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	4-METHYLPHENOL	106-44-5	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	4-NITROANILINE	100-01-6	25	µg/L	U								25
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	4-NITROPHENOL	100-02-7	25	µg/L	U	UJ7							25
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	ACENAPHTHENE	83-32-9	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	ACENAPHTHYLENE	208-96-8	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	ACETOPHENONE	98-86-2	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	ANTHRACENE	120-12-7	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	ATRAZINE	1912-24-9	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	BENZ(a)ANTHRACENE	56-55-3	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	BENZALDEHYDE	100-52-7	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	BENZO(a)PYRENE	50-32-8	10	µg/L	U							30	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	BENZO(b)FLUORANTHENE	205-99-2	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	BENZO(ghi)PERYLENE	191-24-2	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	BENZO(k)FLUORANTHENE	207-08-9	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	BIS(2-CHLOROETHOXY)METHANE	111-91-1	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	BIS(2-CHLOROETHYL)ETHER	111-44-4	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	BUTYL BENZYL PHTHALATE	85-68-7	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	CAPROLACTAM	105-60-2	10	µg/L	U								10

APPENDIX A
SUMMARY OF A[illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible]Sampling Report - Parcel B
Hunters [illegible]hipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	CARBAZOLE	86-74-8	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	CHRYSENE	218-01-9	10	µg/L	U							30	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	DIBENZ(a,h)ANTHRACENE	53-70-3	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	DIBENZOFURAN	132-64-9	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	DIETHYL PHTHALATE	84-66-2	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	DIMETHYL PHTHALATE	131-11-3	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	DI-n-BUTYL PHTHALATE	84-74-2	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	DI-n-OCTYL PHTHALATE	117-84-0	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	FLUORANTHENE	206-44-0	10	µg/L	U							16	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	FLUORENE	86-73-7	10	µg/L	U							30	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	HEXACHLOROBENZENE	118-74-1	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	HEXACHLOROBUTADIENE	87-68-3	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	HEXACHLOROCYCLOPENTADIENE	77-47-4	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	HEXACHLOROETHANE	67-72-1	10	µg/L	U							94	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	INDENO(1,2,3-cd)PYRENE	193-39-5	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	ISOPHORONE	78-59-1	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	NAPHTHALENE	91-20-3	10	µg/L	U							235	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	NITROBENZENE	98-95-3	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	N-NITROSODI-n-PROPYLAMINE	621-64-7	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	N-NITROSODIPHENYLAMINE	86-30-6	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	PENTACHLOROPHENOL	87-86-5	25	µg/L	U	UJ7						7.9	25
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	PHENANTHRENE	85-01-8	10	µg/L	U							30	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	PHENOL	108-95-2	10	µg/L	U							580	10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	PROPANE, 2,2'-OXYBIS[1-CHLORO-	108-60-1	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP SEMIVOLATILES	NORM	PYRENE	129-00-0	10	µg/L	U								10
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.41	µg/L	J	J						129	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	1.9	µg/L								129	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.34	µg/L	J	J	85	850	85			22400	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR18MW21A	On- and Offsite Mitigation	0424C016		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR18MW21A	On- and Offsite Mitigation	0424C016		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR18MW21A	On- and Offsite Mitigation	0424C016		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR18MW21A	On- and Offsite Mitigation	0424C016		EPA 8015-M	NORM	DIESEL	11-84-7	50	µg/L	U								50
B	IR18MW21A	On- and Offsite Mitigation	0424C016		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP MERCURY	NORM	MERCURY	7439-97-6	0.058	µg/L	J	U1	0.6	6		50	0.6	0.94	0.2
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP METALS	NORM	MANGANESE	7439-96-5	1750	µg/L		J3	8140	81400			8140		15
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP PESTICIDES	NORM	alpha-CHLORDANE	5103-71-9	0.01	µg/L	U							0.004	0.01
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP PESTICIDES	NORM	AROCLOR-1260	11096-82-5	0.2	µg/L	U					5000		0.03	0.2
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP PESTICIDES	NORM	gamma-CHLORDANE	5103-74-2	0.01	µg/L	U							0.004	0.01
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP SEMIVOLATILES	NORM	BENZ(a)ANTHRACENE	56-55-3	10	µg/L	U								10
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP SEMIVOLATILES	NORM	BENZO(a)PYRENE	50-32-8	10	µg/L	U							30	10
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP SEMIVOLATILES	NORM	BENZO(b)FLUORANTHENE	205-99-2	10	µg/L	U								10
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP SEMIVOLATILES	NORM	BENZO(k)FLUORANTHENE	207-08-9	10	µg/L	U	UJ7							10
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP SEMIVOLATILES	NORM	CHRYSENE	218-01-9	10	µg/L	U							30	10
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP SEMIVOLATILES	NORM	DIBENZ(a,h)ANTHRACENE	53-70-3	10	µg/L	U								10
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP SEMIVOLATILES	NORM	INDENO(1,2,3-cd)PYRENE	193-39-5	10	µg/L	U								10
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP SEMIVOLATILES	NORM	N-NITROSODI-n-PROPYLAMINE	621-64-7	10	µg/L	U								10
B	IR26MW46A	Supplemental	0424G015	0424G016	CLP SEMIVOLATILES	NORM	PYRENE	129-00-0	10	µg/L	U								10
B	IR26MW46A	Supplemental	0424G015	0424G016	EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000

APPENDIX A
SUMMARY OF A[illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible]hipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR26MW46A	Supplemental	0424G015	0424G016	EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U	UJ5				5000		50	0.02
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP MERCURY	NORM	MERCURY	7439-97-6	1.0	µg/L			0.6	6		50	0.6	0.94	0.2
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U	UJ3	36	360		4000	27.34	36	10
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U	UJ3	15.66	156.6		5000	15.66	1030	10
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U	UJ3	14.44	144.4		1500	14.44	8.1	10
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP METALS	NORM	MANGANESE	7439-96-5	15	µg/L	U	UJ3	8140	81400			8140		15
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U	UJ3	81	810		7000	75.68	81	60
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP PESTICIDES	NORM	alpha-CHLORDANE	5103-71-9	0.01	µg/L	U							0.004	0.01
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP PESTICIDES	NORM	AROCLOR-1260	11096-82-5	0.2	µg/L	U					5000		0.03	0.2
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP PESTICIDES	NORM	gamma-CHLORDANE	5103-74-2	0.01	µg/L	U							0.004	0.01
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP SEMIVOLATILES	NORM	BENZ(a)ANTHRACENE	56-55-3	10	µg/L	U								10
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP SEMIVOLATILES	NORM	BENZO(a)PYRENE	50-32-8	10	µg/L	U							30	10
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP SEMIVOLATILES	NORM	BENZO(b)FLUORANTHENE	205-99-2	10	µg/L	U								10
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP SEMIVOLATILES	NORM	BENZO(k)FLUORANTHENE	207-08-9	10	µg/L	U	UJ7							10
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP SEMIVOLATILES	NORM	CHRYSENE	218-01-9	10	µg/L	U							30	10
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP SEMIVOLATILES	NORM	DIBENZ(a,h)ANTHRACENE	53-70-3	10	µg/L	U								10
B	IR26MW47A	Supplemental	0424S016	0424S017	CLP SEMIVOLATILES	NORM	INDENO(1,2,3-cd)PYRENE	193-39-5	10	µg/L	U								10
B	IR26MW47A	Supplemental	0424S016	0424S017	EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR26MW47A	Supplemental	0424S016	0424S017	EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U					5000		50	0.02
B	IR26MW48A	Supplemental	0424S018		CLP MERCURY	NORM	MERCURY	7439-97-6	0.067	µg/L	J	U1	0.6	6		50	0.6	0.94	0.2
B	IR26MW48A	Supplemental	0424S018		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR26MW48A	Supplemental	0424S018		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	IR26MW48A	Supplemental	0424S018		CLP METALS	NORM	COPPER	7440-50-8	25	µg/L	U		28	280		4000	28	3.1	25
B	IR26MW48A	Supplemental	0424S018		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR26MW48A	Supplemental	0424S018		CLP METALS	DIL1	MANGANESE	7439-96-5	6700	µg/L	D		8140	81400			8140		150
B	IR26MW48A	Supplemental	0424S018		CLP METALS	NORM	MANGANESE	7439-96-5	5840	µg/L	E	J8	8140	81400			8140		15
B	IR26MW48A	Supplemental	0424S018		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60
B	IR26MW48A	Supplemental	0424S018		CLP PESTICIDES	NORM	alpha-CHLORDANE	5103-71-9	0.01	µg/L	U							0.004	0.01
B	IR26MW48A	Supplemental	0424S018		CLP PESTICIDES	NORM	AROCLOR-1260	11096-82-5	0.2	µg/L	U					5000		0.03	0.2
B	IR26MW48A	Supplemental	0424S018		CLP PESTICIDES	NORM	gamma-CHLORDANE	5103-74-2	0.01	µg/L	U							0.004	0.01
B	IR26MW48A	Supplemental	0424S018		CLP SEMIVOLATILES	NORM	BENZ(a)ANTHRACENE	56-55-3	10	µg/L	U								10
B	IR26MW48A	Supplemental	0424S018		CLP SEMIVOLATILES	NORM	BENZO(a)PYRENE	50-32-8	10	µg/L	U							30	10
B	IR26MW48A	Supplemental	0424S018		CLP SEMIVOLATILES	NORM	BENZO(b)FLUORANTHENE	205-99-2	10	µg/L	U								10
B	IR26MW48A	Supplemental	0424S018		CLP SEMIVOLATILES	NORM	BENZO(k)FLUORANTHENE	207-08-9	10	µg/L	U	UJ7							10
B	IR26MW48A	Supplemental	0424S018		CLP SEMIVOLATILES	NORM	CHRYSENE	218-01-9	10	µg/L	U							30	10
B	IR26MW48A	Supplemental	0424S018		CLP SEMIVOLATILES	NORM	DIBENZ(a,h)ANTHRACENE	53-70-3	10	µg/L	U								10
B	IR26MW48A	Supplemental	0424S018		CLP SEMIVOLATILES	NORM	INDENO(1,2,3-cd)PYRENE	193-39-5	10	µg/L	U								10
B	IR26MW48A	Supplemental	0424S018		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR26MW48A	Supplemental	0424S018		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.02	mg/L	U	UJ5				5000		50	0.02
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,1,1,2-TETRACHLOROETHANE	630-20-6	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,1-DICHLOROETHANE	75-34-3	1	µg/L	U								1
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,1-DICHLOROETHENE	75-35-4	0.67	µg/L		J3						22400	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,2,3-TRICHLOROPROPANE	96-18-4	1	µg/L	U								1
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	2	µg/L	U								2
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	BROMOBENZENE	108-86-1	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	BROMOMETHANE	74-83-9	1	µg/L	U								1
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	**IR10MW61A**	**Supplemental (ZVI)**	**0423T002**		**EPA 8260B**	**DIL**	**cis-1,2-DICHLOROETHENE**	**156-59-2**	**150**	**µg/L**	**D**		**85**	**850**	**85**			**22400**	**5**
B	**IR10MW61A**	**Supplemental (ZVI)**	**0423T002**		**EPA 8260B**	**NORM**	**cis-1,2-DICHLOROETHENE**	**156-59-2**	**170**	**µg/L**	**E**	**J38**	**85**	**850**	**85**			**22400**	**0.5**
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	DIBROMOMETHANE	74-95-3	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	DICHLORODIFLUOROMETHANE	75-71-8	1	µg/L	U								1
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	FREON 113	76-13-1	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	METHYLENE CHLORIDE	75-09-2	5	µg/L	U							6400	5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	trans-1,2-DICHLOROETHENE	156-60-5	6.5	µg/L		J3	85	850	85			22400	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	TRICHLOROETHENE	79-01-6	6.0	µg/L		J3	114	1140	114			200	0.5
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	**IR10MW61A**	**Supplemental (ZVI)**	**0423T002**		**EPA 8260B**	**DIL**	**VINYL CHLORIDE**	**75-01-4**	**120**	**µg/L**	**D**		**55**	**550**	**55**	**200**			**5**
B	**IR10MW61A**	**Supplemental (ZVI)**	**0423T002**		**EPA 8260B**	**NORM**	**VINYL CHLORIDE**	**75-01-4**	**120**	**µg/L**	**E**	**J38**	**55**	**550**	**55**	**200**			**0.5**
B	IR10MW61A	Supplemental (ZVI)	0423T002		EPA 8260B	NORM	XYLENES	1330-20-7	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,1,1,2-TETRACHLOROETHANE	630-20-6	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,1-DICHLOROETHANE	75-34-3	1	µg/L	U								1
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,2,3-TRICHLOROPROPANE	96-18-4	1	µg/L	U								1
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	2	µg/L	U								2
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	BROMOBENZENE	108-86-1	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	BROMOMETHANE	74-83-9	1	µg/L	U								1
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.82	µg/L			85	850	85			22400	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	DIBROMOMETHANE	74-95-3	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	DICHLORODIFLUOROMETHANE	75-71-8	1	µg/L	U								1
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	FREON 113	76-13-1	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	METHYLENE CHLORIDE	75-09-2	5	µg/L	U							6400	5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (μg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	μg/L	U		85	850	85			22400	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	μg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	TRICHLOROETHENE	79-01-6	0.83	μg/L			114	1140	114			200	0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	μg/L	U								0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	VINYL CHLORIDE	75-01-4	0.5	μg/L	U		55	550	55	200			0.5
B	IR10MW62A	Supplemental (ZVI)	0423C002		EPA 8260B	NORM	XYLENES	1330-20-7	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	DIL	1,1,1,2-TETRACHLOROETHANE	630-20-6	5	μg/L	U								5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,1,1,2-TETRACHLOROETHANE	630-20-6	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	DIL	1,1,1-TRICHLOROETHANE	71-55-6	5	μg/L	U							3120	5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	μg/L	U							3120	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	DIL	1,1,2,2-TETRACHLOROETHANE	79-34-5	5	μg/L	U							902	5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	μg/L	U							902	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	DIL	1,1,2-TRICHLOROETHANE	79-00-5	5	μg/L	U								5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	DIL	1,1-DICHLOROETHANE	75-34-3	10	μg/L	U								10
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,1-DICHLOROETHANE	75-34-3	0.19	μg/L	J	J							1
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	DIL	1,1-DICHLOROETHENE	75-35-4	5	μg/L	U							22400	5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,1-DICHLOROETHENE	75-35-4	0.90	μg/L								22400	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,2,3-TRICHLOROPROPANE	96-18-4	1	μg/L	U								1
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	μg/L	U							129	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	2	μg/L	U								2
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	μg/L	U							129	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	μg/L	U							11300	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	μg/L	U							3040	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	μg/L	U							129	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	μg/L	U							129	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	BENZENE	71-43-2	0.5	μg/L	U							510	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	BROMOBENZENE	108-86-1	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	BROMOFORM	75-25-2	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	BROMOMETHANE	74-83-9	1	μg/L	U								1
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	μg/L	U							6400	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	CHLOROBENZENE	108-90-7	0.5	μg/L	U							129	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	CHLOROETHANE	75-00-3	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	CHLOROFORM	67-66-3	0.5	μg/L	U							6400	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	CHLOROMETHANE	74-87-3	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	cis-1,2-DICHLOROETHENE	156-59-2	71	μg/L			85	850	85			22400	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	μg/L	U							79	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	DIBROMOMETHANE	74-95-3	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	DICHLORODIFLUOROMETHANE	75-71-8	1	μg/L	U								1
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	ETHYL BENZENE	100-41-4	0.5	μg/L	U							43	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	FREON 113	76-13-1	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	METHYLENE CHLORIDE	75-09-2	5	μg/L	U							6400	5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	TETRACHLOROETHENE	127-18-4	0.5	μg/L	U							450	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	TOLUENE	108-88-3	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	trans-1,2-DICHLOROETHENE	156-60-5	1.5	μg/L			85	850	85			22400	0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	μg/L	U								0.5
B	**IR10MW71A**	**Supplemental (ZVI)**	**0423G002**		**EPA 8260B**	**DIL**	**TRICHLOROETHENE**	**79-01-6**	**570**	**μg/L**	**D**		**114**	**1140**	**114**			**200**	**5**
B	**IR10MW71A**	**Supplemental (ZVI)**	**0423G002**		**EPA 8260B**	**NORM**	**TRICHLOROETHENE**	**79-01-6**	**570**	**μg/L**	**E**	**J8**	**114**	**1140**	**114**			**200**	**0.5**
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	μg/L	U								0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	VINYL CHLORIDE	75-01-4	0.5	μg/L	U		55	550	55	200			0.5
B	IR10MW71A	Supplemental (ZVI)	0423G002		EPA 8260B	NORM	XYLENES	1330-20-7	0.5	μg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,1,1,2-TETRACHLOROETHANE	630-20-6	0.5	μg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	μg/L	U							3120	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	μg/L	U							902	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	μg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,1-DICHLOROETHANE	75-34-3	1	μg/L	U								1
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	μg/L	U							22400	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,2,3-TRICHLOROPROPANE	96-18-4	1	μg/L	U								1
B	IR10MW76A	Supplemental (ZVI),	0423S002		EPA 8260B	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	μg/L	U							129	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	2	μg/L	U								2
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	μg/L	U							129	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	μg/L	U							11300	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	μg/L	U							3040	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	μg/L	U							129	0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	BROMOBENZENE	108-86-1	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	BROMOMETHANE	74-83-9	1	µg/L	U								1
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	CHLOROFORM	67-66-3	0.24	µg/L	J	J						6400	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.25	µg/L	J	J	85	850	85			22400	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	DIBROMOMETHANE	74-95-3	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	DICHLORODIFLUOROMETHANE	75-71-8	1	µg/L	U								1
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	FREON 113	76-13-1	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	METHYLENE CHLORIDE	75-09-2	5	µg/L	U							6400	5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	TRICHLOROETHENE	79-01-6	0.76	µg/L			114	1140	114			200	0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR10MW76A	Supplemental (ZVI)	0423S002		EPA 8260B	NORM	XYLENES	1330-20-7	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,1,1,2-TETRACHLOROETHANE	630-20-6	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,1-DICHLOROETHANE	75-34-3	1	µg/L	U								1
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,2,3-TRICHLOROPROPANE	96-18-4	1	µg/L	U								1
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	2	µg/L	U								2
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	BROMOBENZENE	108-86-1	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	BROMOMETHANE	74-83-9	1	µg/L	U								1
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	DIBROMOMETHANE	74-95-3	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	DICHLORODIFLUOROMETHANE	75-71-8	1	µg/L	U								1
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	FREON 113	76-13-1	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	METHYLENE CHLORIDE	75-09-2	5	µg/L	U							6400	5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	TOLUENE	108-88-3	0.27	µg/L	J	J3							0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5

APPENDIX A
SUMMARY OF A[illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible]ampling Report - Parcel B
Hunters [illegible]hipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L) POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR10MW79A	Supplemental (ZVI)	0423H002		EPA 8260B	NORM	XYLENES	1330-20-7	0.20	µg/L	J	J3							0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,1,1,2-TETRACHLOROETHANE	630-20-6	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,1-DICHLOROETHANE	75-34-3	1	µg/L	U								1
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,2,3-TRICHLOROPROPANE	96-18-4	1	µg/L	U								1
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	2	µg/L	U								2
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	BROMOBENZENE	108-86-1	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	BROMOMETHANE	74-83-9	1	µg/L	U								1
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	DIBROMOMETHANE	74-95-3	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	DICHLORODIFLUOROMETHANE	75-71-8	1	µg/L	U								1
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	FREON 113	76-13-1	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	METHYLENE CHLORIDE	75-09-2	5	µg/L	U							6400	5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR10MW80A	Supplemental (ZVI)	0423H003		EPA 8260B	NORM	XYLENES	1330-20-7	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP MERCURY	NORM	MERCURY	7439-97-6	0.2	µg/L	U		0.6	6		50	0.6	0.94	0.2
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	ALUMINUM	7429-90-5	68.1	µg/L	J	J							200
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	ANTIMONY	7440-36-0	60	µg/L	U		500	5000		15000	43.26		60
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	ARSENIC	7440-38-2	10	µg/L	U		36	360		4000	27.34	36	10
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	BARIUM	7440-39-3	159	µg/L	J	J	504.2	5042		100000	504		200
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	BERYLLIUM	7440-41-7	5	µg/L	U		1.4	14		750	1.4		5
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	CADMIUM	7440-43-9	5	µg/L	U		9.3	93		500	5.1	9.3	5
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	CALCIUM	7440-70-2	37700	µg/L									5000
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	CHROMIUM	7440-47-3	10	µg/L	U		15.66	156.6		5000	15.66	1030	10
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	COBALT	7440-48-4	50	µg/L	U		20.8	208		80000	20.8		50
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	COPPER	7440-50-8	1.2	µg/L	J	U1	28	280		4000	28	3.1	25
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	IRON	7439-89-6	1030	µg/L									100
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	LEAD	7439-92-1	10	µg/L	U		14.44	144.4		1500	14.44	8.1	10
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	MAGNESIUM	7439-95-4	39400	µg/L									5000
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	MANGANESE	7439-96-5	270	µg/L			8140	81400			8140		15
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	NICKEL	7440-02-0	4.5	µg/L	J	J	96.5	965		2000	96.5	8.2	40
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	POTASSIUM	7440-09-7	9900	µg/L									5000
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	SELENIUM	7782-49-2	35	µg/L	U						14.5	71	35
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	SILVER	7440-22-4	10	µg/L	U		7.43	74.3			7.43	0.19	10
B	IR06MW42A	Utility Line	0423C007		CLP METALS	DIL1	SODIUM	7440-23-5	92200	µg/L	D								25000
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	SODIUM	7440-23-5	93900	µg/L	E	J8							5000
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	THALLIUM	7440-28-0	25	µg/L	U		12.97	129.7		7000	12.97	213	25
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	VANADIUM	7440-62-2	3.5	µg/L	J	J							50
B	IR06MW42A	Utility Line	0423C007		CLP METALS	NORM	ZINC	7440-66-6	60	µg/L	U		81	810		7000	75.68	81	60

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL[3]
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	4,4'-DDD	72-54-8	0.02	µg/L	U								0.02
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	4,4'-DDE	72-55-9	0.02	µg/L	U								0.02
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	4,4'-DDT	50-29-3	0.02	µg/L	U							0.001	0.02
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	ALDRIN	309-00-2	0.01	µg/L	U								0.01
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	alpha-BHC	319-84-6	0.01	µg/L	U								0.01
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	alpha-CHLORDANE	5103-71-9	0.01	µg/L	U							0.004	0.01
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	AROCLOR-1016	12674-11-2	0.2	µg/L	U								0.2
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	AROCLOR-1221	11104-28-2	0.4	µg/L	U								0.4
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	AROCLOR-1232	11141-16-5	0.2	µg/L	U								0.2
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	AROCLOR-1242	53469-21-9	0.2	µg/L	U								0.2
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	AROCLOR-1248	12672-29-6	0.2	µg/L	U					5000		0.03	0.2
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	AROCLOR-1254	11097-69-1	0.2	µg/L	U					5000		0.03	0.2
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	AROCLOR-1260	11096-82-5	0.2	µg/L	U					5000		0.03	0.2
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	beta-BHC	319-85-7	0.0084	µg/L	J	J							0.01
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	delta-BHC	319-86-8	0.0097	µg/L	J	J							0.01
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	DIELDRIN	60-57-1	0.02	µg/L	U							0.0019	0.02
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	ENDOSULFAN I	959-98-8	0.01	µg/L	U								0.01
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	ENDOSULFAN II	33213-65-9	0.02	µg/L	U							0.0087	0.02
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	ENDOSULFAN SULFATE	1031-07-8	0.02	µg/L	U								0.02
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	ENDRIN	72-20-8	0.02	µg/L	U							0.0023	0.02
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	ENDRIN ALDEHYDE	7421-93-4	0.02	µg/L	U								0.02
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	ENDRIN KETONE	53494-70-5	0.02	µg/L	U								0.02
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	gamma-BHC (LINDANE)	58-89-9	0.01	µg/L	U								0.01
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	gamma-CHLORDANE	5103-74-2	0.01	µg/L	U							0.004	0.01
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	HEPTACHLOR	76-44-8	0.01	µg/L	U							0.0036	0.01
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	HEPTACHLOR EPOXIDE	1024-57-3	0.01	µg/L	U							0.0036	0.01
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	METHOXYCHLOR	72-43-5	0.1	µg/L	U								0.1
B	IR06MW42A	Utility Line	0423C007		CLP PESTICIDES	NORM	TOXAPHENE	8001-35-2	1	µg/L	U								1
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	1,1'-BIPHENYL	92-52-4	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2,4,5-TRICHLOROPHENOL	95-95-4	25	µg/L	U								25
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2,4,6-TRICHLOROPHENOL	88-06-2	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2,4-DICHLOROPHENOL	120-83-2	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2,4-DIMETHYLPHENOL	105-67-9	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2,4-DINITROPHENOL	51-28-5	25	µg/L	U								25
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2,4-DINITROTOLUENE	121-14-2	10	µg/L	U							59	10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2,6-DINITROTOLUENE	606-20-2	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2-CHLORONAPHTHALENE	91-58-7	10	µg/L	U							0.75	10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2-CHLOROPHENOL	95-57-8	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2-METHYLNAPHTHALENE	91-57-6	36	µg/L								30	10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2-METHYLPHENOL	95-48-7	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2-NITROANILINE	88-74-4	25	µg/L	U								25
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	2-NITROPHENOL	88-75-5	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	3,3'-DICHLOROBENZIDINE	91-94-1	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	3-NITROANILINE	99-09-2	25	µg/L	U								25

APPENDIX A
SUMMARY OF [illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	4,6-DINITRO-2-METHYLPHENOL	534-52-1	25	µg/L	U								25
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	4-BROMOPHENYL PHENYL ETHER	101-55-3	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	4-CHLORO-3-METHYLPHENOL	59-50-7	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	4-CHLOROANILINE	106-47-8	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	4-METHYLPHENOL	106-44-5	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	4-NITROANILINE	100-01-6	25	µg/L	U								25
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	4-NITROPHENOL	100-02-7	25	µg/L	U								25
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	ACENAPHTHENE	83-32-9	89	µg/L									10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	ACENAPHTHYLENE	208-96-8	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	ACETOPHENONE	98-86-2	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	ANTHRACENE	120-12-7	4.0	µg/L	J	J							10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	ATRAZINE	1912-24-9	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	BENZ(a)ANTHRACENE	56-55-3	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	BENZALDEHYDE	100-52-7	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	BENZO(a)PYRENE	50-32-8	10	µg/L	U							30	10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	BENZO(b)FLUORANTHENE	205-99-2	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	BENZO(ghi)PERYLENE	191-24-2	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	BENZO(k)FLUORANTHENE	207-08-9	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	BIS(2-CHLOROETHOXY)METHANE	111-91-1	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	BIS(2-CHLOROETHYL)ETHER	111-44-4	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	BUTYL BENZYL PHTHALATE	85-68-7	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	CAPROLACTAM	105-60-2	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	CARBAZOLE	86-74-8	4.2	µg/L	J	J							10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	CHRYSENE	218-01-9	10	µg/L	U							30	10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	DIBENZ(a,h)ANTHRACENE	53-70-3	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	DIBENZOFURAN	132-64-9	28	µg/L									10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	DIETHYL PHTHALATE	84-66-2	10	µg/L	J	U4							10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	DIMETHYL PHTHALATE	131-11-3	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	DI-n-BUTYL PHTHALATE	84-74-2	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	DI-n-OCTYL PHTHALATE	117-84-0	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	FLUORANTHENE	206-44-0	14	µg/L								16	10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	FLUORENE	86-73-7	25	µg/L								30	10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	HEXACHLOROBENZENE	118-74-1	10	µg/L	U								10

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	HEXACHLOROBUTADIENE	87-68-3	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	HEXACHLOROCYCLOPENTADIENE	77-47-4	10	µg/L	U	UJ7							10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	HEXACHLOROETHANE	67-72-1	10	µg/L	U							94	10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	INDENO(1,2,3-cd)PYRENE	193-39-5	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	ISOPHORONE	78-59-1	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	DIL	NAPHTHALENE	91-20-3	160	µg/L	D							235	40
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	NAPHTHALENE	91-20-3	160	µg/L	E	J8						235	10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	NITROBENZENE	98-95-3	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	N-NITROSODI-n-PROPYLAMINE	621-64-7	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	N-NITROSODIPHENYLAMINE	86-30-6	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	PENTACHLOROPHENOL	87-86-5	25	µg/L	U							7.9	25
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	PHENANTHRENE	85-01-8	10	µg/L								30	10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	PHENOL	108-95-2	10	µg/L	U							580	10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	PROPANE, 2,2'-OXYBIS[1-CHLORO-	108-60-1	10	µg/L	U								10
B	IR06MW42A	Utility Line	0423C007		CLP SEMIVOLATILES	NORM	PYRENE	129-00-0	7.9	µg/L	J	J							10
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	BENZENE	71-43-2	0.18	µg/L	J	J						510	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.25	µg/L	J	J							0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.73	µg/L								43	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.55	µg/L									0.5

APPENDIX A
SUMMARY OF [illegible]ICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible]hipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.21	µg/L	J	J							0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.26	µg/L	J	J							0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR06MW42A	Utility Line	0423C007		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	1.6	µg/L									0.5
B	IR06MW42A	Utility Line	0423C007		EPA 160.2	NORM	TOTAL SUSPENDED SOLIDS	10-32-2	10.000	mg/L	U								10.000
B	IR06MW42A	Utility Line	0423C007		EPA 7196A	NORM	HEXAVALENT CHROMIUM	18540-29-9	0.0071	mg/L	J	J				5000		50	0.02
B	IR06MW42A	Utility Line	0423C007		EPA 8015	NORM	GASOLINE	8006-61-9	20	µg/L	U								20
B	IR06MW42A	Utility Line	0423C007		EPA 8015-M	NORM	DIESEL	11-84-7	1300	µg/L	T1M								50
B	IR06MW42A	Utility Line	0423C007		EPA 8015-M	NORM	MOTOR OIL	68476-77-7	500	µg/L	U								500
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	18	µg/L			85	850	85			22400	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	1.5	µg/L			85	850	85			22400	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	8.2	µg/L			114	1140	114			200	0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.71	µg/L			55	550	55	200			0.5
B	IR10MW13A1	VOC	0423C009		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5

APPENDIX A
SUMMARY OF [illegible]TICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunter[illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR10MW14A	VOC	0423C008		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.74	µg/L									0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	14	µg/L			85	850	85			22400	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	11	µg/L			85	850	85			22400	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	1.6	µg/L			114	1140	114			200	0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR10MW33A	VOC	0423S001		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5
B	IR10MW33A	VOC	0423S001		EPA 8270C	NORM	1,4-DIOXANE	123-91-1	1.0	µg/L	U								1.0
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	ACETONE	67-64-1	5	µg/L	U								5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	1.9	µg/L									0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.5	µg/L	U							6400	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	1.1	µg/L			114	1140	114			200	0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR10MW59A	VOC	0423G001		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5

APPENDIX A
SUMMARY OF [illegible]TICAL RESULTS
Eighteenth Quarterly Grou[illegible] Sampling Report - Parcel B
Hunters [illegible] Shipyard
San Francisco, California

Parcel	Well ID	Well Type	Sample Number	Duplicate Sample Number	Analytical Method	Sample Type	Analyte	CAS	Result	Units	Laboratory Qualifier	Validation Code	Trigger Levels (µg/L)[1,2] POC	Sentinel	VOC	Utility Line	HGAL	NAWQC	Analytical PQL
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,1,1-TRICHLOROETHANE	71-55-6	0.5	µg/L	U							3120	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.5	µg/L	U							902	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,1,2-TRICHLOROETHANE	79-00-5	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,1-DICHLOROETHANE	75-34-3	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,1-DICHLOROETHENE	75-35-4	0.5	µg/L	U							22400	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,2,3-TRICHLOROBENZENE	87-61-6	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,2,4-TRICHLOROBENZENE	120-82-1	0.5	µg/L	U							129	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1	µg/L	U								1
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,2-DIBROMOETHANE	106-93-4	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,2-DICHLOROBENZENE	95-50-1	0.5	µg/L	U							129	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,2-DICHLOROETHANE	107-06-2	0.5	µg/L	U							11300	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,2-DICHLOROPROPANE	78-87-5	0.5	µg/L	U							3040	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,3-DICHLOROBENZENE	541-73-1	0.5	µg/L	U							129	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	1,4-DICHLOROBENZENE	106-46-7	0.5	µg/L	U							129	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	2-BUTANONE	78-93-3	5	µg/L	U								5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	2-HEXANONE	591-78-6	5	µg/L	U								5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	4-METHYL-2-PENTANONE	108-10-1	5	µg/L	U								5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	ACETONE	67-64-1	6.4	µg/L		U4							5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	BENZENE	71-43-2	0.5	µg/L	U							510	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	BROMOCHLOROMETHANE	74-97-5	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	BROMODICHLOROMETHANE	75-27-4	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	BROMOFORM	75-25-2	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	BROMOMETHANE	74-83-9	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	CARBON DISULFIDE	75-15-0	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	CARBON TETRACHLORIDE	56-23-5	0.5	µg/L	U							6400	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	CHLOROBENZENE	108-90-7	0.5	µg/L	U							129	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	CHLOROETHANE	75-00-3	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	CHLOROFORM	67-66-3	0.26	µg/L	J	U2						6400	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	CHLOROMETHANE	74-87-3	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	cis-1,2-DICHLOROETHENE	156-59-2	0.5	µg/L	U		85	850	85			22400	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	cis-1,3-DICHLOROPROPENE	10061-01-5	0.5	µg/L	U							79	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	CYCLOHEXANE	110-82-7	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	CYCLOHEXANE, METHYL-	108-87-2	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	DIBROMOCHLOROMETHANE	124-48-1	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	DICHLORODIFLUOROMETHANE	75-71-8	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	ETHYL BENZENE	100-41-4	0.5	µg/L	U							43	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	ISOPROPYLBENZENE	98-82-8	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	METHYL ACETATE	79-20-9	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	METHYL tert-BUTYL ETHER	1634-04-4	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	METHYLENE CHLORIDE	75-09-2	0.5	µg/L	U							6400	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	STYRENE	100-42-5	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	TETRACHLOROETHENE	127-18-4	0.5	µg/L	U							450	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	TOLUENE	108-88-3	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	trans-1,2-DICHLOROETHENE	156-60-5	0.5	µg/L	U		85	850	85			22400	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	trans-1,3-DICHLOROPROPENE	10061-02-6	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	TRICHLOROETHENE	79-01-6	0.5	µg/L	U		114	1140	114			200	0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	TRICHLOROFLUOROMETHANE	75-69-4	0.5	µg/L	U								0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	VINYL CHLORIDE	75-01-4	0.5	µg/L	U		55	550	55	200			0.5
B	IR25MW37A	VOC	0423H001		CLP VOLATILES	NORM	XYLENES (TOTAL)	1330-20-7	0.5	µg/L	U								0.5

Notes:

[1] Bold text indicates concentration exceeds trigger level associated with well type, including increase in vinyl chloride when appropriate (see Tables 5 through 7).

[2] A hexavalent chromium trigger level of 50 µg/L applies to Well IR10MW12A exclusively.

Acronyms/Abbreviations:

CLP Contract Laboratory Program
DIL Dilution
EPA Environmental Protection Agency
FIL Filtered
HGAL Hunters Point Groundwater Ambient Levels
ID Identification
MDL Method detection limit
µg/L Micrograms per liter
mg/L Milligrams per liter
NAWQL National Ambient Water Quality Criteria
NORM Normal
PQL Practical quantitation limit
TPH Total petroleum hydrocarbons

Lab Qualifiers/Validation Cod

C Analyte qualitatively confirmed
D Dilution
E Exceeds calibration range; estimated value
J Detected below the PQL but above the MDL; estimated value
TM1 Wide range of TPH; not strictly diesel
R Rejected
U Not detected
UJ Estimated non-detection

APPENDIX B

Monitoring Well Sampling Sheets, April to June 2004 Sampling Event

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR06MW42A

Sheet ___ of ___

Personnel: B. Caldwell & D. Forks

Day: Thursday

Date: 6/3/04

Casing Volume = 1.97 Gallons

Initial depth to water: 10.78 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: ____ ppm Background: ____ ppm

Groundwater Parameters

1015 Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1025	~3	~~15~~ 750	11.18	19.5	.899	-0.05	6.93	-93	9	0.0
1030	~6.75	750	12.65	19.7	.885	-0.09	6.96	Ur	13	0.0
1038	~~10.5~~ 16	~500	13.15	19.6	.887	-0.10	7.00	Ur	14	0.0
1043	~18	~500	13.25	20.3	.887	0.02	7.03	Ur	10	0.0

After sampling and, if accessible, depth to bottom: 13.80 ft. below TOC

Purged Dry? Yes

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	U-10	PID	Mini Rae	104488
Turbidimeter	"	"	Filter Apparatus	—	—
Water Level Meter	Solonist	17954	Other ORP	Oakton Test	#1
Pump	Typhoon	20123	Other —	—	—

Groundwater Samples Collected (check all that apply)

Analytes of Concern				Fate and Transport Data			
Off-Site Lab				Off-Site Lab		Field Test Kit Analyses	Unfiltered / Filtered
Metals	X			Chloride		Fe^{2+} (mg/L)	
PCBs	X			Alkalinity		Mn^{2+} (mg/L)	
Pesticides	X			Ethane		Filter where turbidity > 50 NTU	
SVOCs	X			Ethene		Downhole Dissolved Oxygen	
TPH-e	X			Hydrogen		Top (mg/L)	
TPH-p	X			TDS		Middle (mg/L)	
VOCs	X			TSS	X	Bottom (mg/L)	
Cr 6+	X						

Sample Number: ~~0623C007~~ 0423C007

Sample Date/Time: 6/3/04 1150

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time ____ Dup. Sample Number ____

Sample Depth (ft. below TOC): ~12.5 ft

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Reviewed by: Sarah Callahan

Date: 6/4/04

PR 7/12/04 ~~X~~ 5

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/2/04 **WELL ID:** 1R06MW42A **PARCEL:** C

Well Completion (Check one): Monument X or Flushmounted ____
If monument, height above ground or road surface: — inches

Size and number of bolts on vault cover: 2 3/4" bolts
Specific wrench required? YES/NO (describe): 3/4" socket
Difficulty opening? YES/NO (describe): ____
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: Masterlock
Condition of lock: good

External Well ID: 1R06MW42A Internal Well ID: 1R06MW42A

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: OK
Vault lid, rubber seal, and vault: OK
Protective casing and cover: OK
Well cap: OK
PVC/inner casing: OK
Odor or staining? (describe): None
Casing diameter in inches (Circle one): 0.75 2 4 6 Other ____
Casing type (Circle one): PVC SS Other ____ Type of well cap: expandable PVC Other ____
Distinct mark or notch on PVC casing? (describe/give orientation): 2 inch on east & N of Tee
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC — inches
Depth to bottom of well: 13.80 feet Obstructions?: ____
Immiscible phases present? YES/NO If yes, describe (including thickness) ____
Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: Well in good conditions.

Maintenance performed: —

Recommended repairs: —

Well Inspected by: Bryan Caldwell

GA

1R06MW42A

KLEINFELDER

Additional Field Notes

Start Time: 6/2/04
Finish Time:
Date of Calibration:

To:
From: B. Caldwell

Personnel on Site:
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks: Inconsistent flow. Water begins to purge when flow meter reaches 5.50, inconsistent flow, control box eventually reaches 11.00.

1045 - Water drops to 25% of total casing volume. Will wait for water to recharge 80% to sample. Will sample @ approx 11.35 feet bgs.

1100 - Well goes dry second time. Will wait again to recharge to 80% casing vol.

Reviewed by: [signature]
Date: 6/7/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

ell No.: IR06MW45A

Sheet 1 of 1

rsonnel: S. Titus M. Carrington

Day: Thursday

Date: 6-3-04

sing Volume = Gallons

Initial depth to water: 6.05 ft. below top of casing

asing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well)
r 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0.0 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)	Sal
1010	1	500	6.80	17	34	0.7	7.6	-98	82□	0.0	2.2
1012	2	500	6.85	17	35	0.5	7.6	-98	89□	0.0	2.2
1014	3	500	6.86	17	35	0.5	7.6	-99	88□	0.0	2.2
1016	4	500	7.01	17	35	0.4	7.6	-98	97□	0.0	2.2
1018	5	500	7.45	17	34	0.4	7.5	-99	58□	0.0	2.2
1020	6	500	7.80	17	34	0.6	7.5	-99	45□	0.0	2.2
1022	7	500	7.82	17	33	0.6	7.4	-99	43□	0.0	2.2
1024	8	500	7.90	17	33	0.6	7.4	-99	50□	0.0	2.2

fter sampling and, if accessible, epth to bottom: 13.20 ft. below TOC

Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba U10	301010	PID	MiniRae	104541
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	2938	Other ORP	Oakton	#2
Pump	Proactive	PR028112	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern

Off-Site Lab

Metals	X		
PCBs			
Pesticides			
SVOCs			
TPH-e	X		
TPH-p	X		
VOCs	X		
Cr 6+	X		

Fate and Transport Data

Off-Site Lab

Chloride	
Alkalinity	
Ethane	
Ethene	
Hydrogen	
TDS	
TSS	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: ~~0623T006~~ 0423T006

Sample Date/Time: 6-3-04 1030

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): 9.02

Reviewed by: Sarah Callahan

Date: 6/4/04

Method of Extraction:
[X] Submersible Pump
[ ] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[X] Submersible Pump
[ ] Peristaltic Pump
[ ] Disposable Bailer

~~4~~ 5

02/11/04

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 4-3-04 WELL ID: IR06MW45A PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted X

If monument, height above ground or road surface: NA inches

Size and number of bolts on vault cover: 2 3/4"

Specific wrench required? YES/NO (describe):

Difficulty opening? YES/NO (describe):

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: Master 0835

Condition of lock: Good

External Well ID: IR06MW45A Internal Well ID: IR06MW45A

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: Good

Vault lid, rubber seal, and vault: Seal stuck to lid - others good

Protective casing and cover: Mon box - corroded → No lid for mon box

Well cap: Good

PVC/inner casing: Good

Color or staining? (describe): None

Casing diameter in inches (Circle one): 0.75 2 4 6 Other____

Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____

Distinct mark or notch on PVC casing? (describe/give orientation): Yes - North

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC____ inches

Depth to bottom of well: 13.20 feet Obstructions?: None

Immiscible phases present? YES/NO If yes, describe (including thickness):

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: None

Maintenance performed: None

Recommended repairs: None

Well Inspected by: [illegible]

TOA 7

1R06MW45A

KLEINFELDER

Additional Field Notes

Start Time: 1000
Finish Time: 1100
Date of Calibration:

To:
From:

Personnel on Site: S. Titus, M. Carrington
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks: Pump hung @ 9.62' below TOC
100 ft - Started purging
Purge water smells like sulfur
Can't get pump to purge slower than 500 ml/min
through flow thru cell

Reviewed by: [signature]
Date: 6/4/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR07MW19A

Sheet 1 of ___

Personnel: P. Holland / D. Vgnyen

Day: Thursday

Date: 6/3/04

Casing Volume = Gallons

Initial depth to water: 9.37 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.0 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Approx Cumulative Volume Purged (L)	Approx Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Sol ~~PID/OVM~~ (ppm)
0945	3	1200	9.4	17	24	3.2	7.0	97	24	1.5
0949	8	1350	9.55	18	25	2.9	7.0	103	24	1.5
0952	12	1350	9.55	18	25	3.0	7.0	103	24	1.5
0955	15.5	1200	9.56	18	25	3.0	7.0	104	25	1.5

After sampling and, if accessible, depth to bottom: 15.60 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	#3	PID	Mini Rae	#3 (104517)
Turbidimeter			Filter Apparatus		
Water Level Meter			Other ORP	ORP	#3
Pump	Mega Typhoon	PRO 1022 (#3)	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals	X			Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e	X			Hydrogen		Top (mg/L)		
TPH-p	X			TDS		Middle (mg/L)		
VOCs	X			TSS	X	Bottom (mg/L)		
Hex Chrom	X							

Sample Number: ~~0623H009~~ 0423H009 Sample Date/Time: ~~7~~ 6/3/04 1015

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): Approx 12

Reviewed by: Sarah Callahan

Date: 6/7/04

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/3/04 WELL ID: IR07MW19A PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted X
If monument, height above ground or road surface: _____ inches

Size and number of bolts on vault cover: 2 - 1/2"
Specific wrench required? YES/NO (describe): _____
Difficulty opening? YES/NO (describe): _____
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: Master pro Series 6838
Condition of lock: poor - could not open

External Well ID: IR07MW19A Internal Well ID: IR07MW19A

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: ok
Vault lid, rubber seal, and vault: No rubber seal
Protective casing and cover: ok
Well cap: not tightened, lock rusted shut. pulled wellcap off w/ lock on.
PVC/inner casing: ok
Odor or staining? (describe): No
Casing diameter in inches (Circle one): 0.75 2 (4) 6 Other_____
Casing type (Circle one): PVC SS Other_____ Type of well cap: expandable (PVC) Other_____
Distinct mark or notch on PVC casing? (describe/give orientation): black mark TOC east
Air venting hole on PVC/inner casing? YES/(NO) If yes, distance from inner TOC_____ inches
Depth to bottom of well: 15 feet Obstructions?: _____
Immiscible phases present? YES/(NO) If yes, describe (including thickness) _____
Photograph taken: YES/(NO)

If necessary, note discrepancies with well location represented on map and location identified in field
Location sketch with North arrow:

Describe unusual conditions: _____

Maintenance performed: _____

Recommended repairs: Needs new lock, cristy box lid, bolts stripped!

Well Inspected by: [signature]

6A

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR07MW20A1

Sheet 1 of 1

Personnel: BRIAN GOBER, ANGEL PURANTE

Day: Thur.

Date: 6-3-04

[illegible]ing Volume = Gallons

Initial depth to water: 9.09 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	~~Dissolved (ppm)~~ Sal. ppt.
0845	0	400	9.09	15.7	27.2	3.55	6.48	129	0	1.67
0850	2	400	9.18	15.9	27.2	3.43	6.58	180	0	1.67
0855	4	400	9.15	16.0	27.2	3.67	6.59	185	0	1.67
0900	6	400	9.21	16.1	27.2	3.69	6.59	191	0	1.66

After sampling and, if accessible, depth to bottom: ~~9.09~~ 23.12 ft. below TOC

Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	HORIBA U10	305006	PID	MiniRae	104512
~~Turbidimeter~~ ORP	OAKTON		Filter Apparatus		
Water Level Meter	SOLINST 101	33855	Other		
Pump	PROACTIVE		Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals	X			Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e	X			Hydrogen		Top (mg/L)		
TPH-p	X			TDS		Middle (mg/L)		
VOCs	X			TSS	X	Bottom (mg/L)		
Cr 6+	X							

Sample Number: ~~0623G006~~ 0423G006

Sample Date/Time: 6-3-04/0900

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): ~~23.12~~ 16.0

Reviewed by: Sarah Callahan

Date: 6/7/04

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6-3-04 **WELL ID:** IR07MW20A1 **PARCEL:** B

Well Completion (Check one): Monument____ or Flushmounted ✓
If monument, height above ground or road surface: _____ inches

Size and number of bolts on vault cover: 3/4" · 2 BOLTS
Specific wrench required? YES/NO (describe): 3/4" SOCKET
Difficulty opening? YES/NO (describe): _____
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: MASTER 8835
Condition of lock: OK

External Well ID: NO Internal Well ID: YES

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: OK
Vault lid, rubber seal, and vault: OK
Protective casing and cover: OK
Well cap: OK
PVC/inner casing: OK
Odor or staining? (describe): NO
Casing diameter in inches (Circle one): 0.75 2 4 6 Other____
Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____
Distinct mark or notch on PVC casing? (describe/give orientation): MARK ON NORTH SIDE
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC____ inches
Depth to bottom of well: 23.12 feet Obstructions?: NO
Immiscible phases present? YES/NO If yes, describe (including thickness)_____
Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: _____

Maintenance performed: _____

Recommended repairs: _____

Well Inspected by: BRIAN GOBER

~~1R07MW~~ 1R07MW20A1

KLEINFELDER

Additional Field Notes

Start Time: 0845
Finish Time: 0900
Date of Calibration: 6-3-04

To:
From:

Personnel on Site: B. Gober, D. Durante
Subcontractors on Site: NA

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis
0900	6	VOA	40ml	HCl	
0900	2	POLY	500ml	—	
0900	2	AMBER	1L	—	
0900	1	POLY	500ml	HNO_3	

QA/QC Sample Numbers:
Unusual Events/Readings: WATER CHARACTER WAS SIGNIFICANTLY DIFFERENT THAN LAST QTR.
Any Other Problems:

Remarks:

Reviewed by: Sarah Callahan
Date: 6/4/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR07MW21A1

Sheet 1 of ___

Personnel: J. SALA, T. CHAMBLISS

Day: THUR.

Date: 6/3/04

Casing Volume = Gallons

Initial depth to water: 14.51 ft. below top of casing

Casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.0 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	SAL ~~PID/OVM~~ (ppm)
859	2.7	2700	14.55	16.7	1.39	7.41	7.46	100	-10	0.06
902	11.7 ~~5.7~~ gds	3000	14.55	16.6	1.40	7.23	7.55	65	-10	0.06
905	20.7	3000	14.55	16.6	1.41	6.52 ~~7.62~~ gds	7.62	-50	-10	0.06
Restart										
914	2.8	2850	14.55	16.7	1.41	0.6 ~~7.68~~ gds	7.68	-29	31	0.06
917	10.9 ~~5.5~~ gds	2700	14.55	16.7	1.41	0.4 ~~7.04~~ gds	7.69	-38	26	0.06
920	18.1	2400	14.55	16.7	1.42	0.4 ~~7.04~~ gds	7.69	-46	25	0.06

After sampling and, if accessible, depth to bottom: 20.14 ft. below TOC

Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	306007	PID	MINI RAE	104492
Turbidimeter	↓	↓	Filter Apparatus		
Water Level Meter	Solinst	11928	Other ORP	Oakton	#5
Pump	SS-Mega Typhoon	~~RPO~~ PRO 20111	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals	X			Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e	X			Hydrogen		Top (mg/L)		
TPH-p	X			TDS	X	Middle (mg/L)		
VOCs	X			TSS	X	Bottom (mg/L)		
Cr 6+	X			Salinity	X			

Sample Number: PR-TWM ~~06235006~~ 04235006

Sample Date/Time: 6/3/04 / 930

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time N/A Dup. Sample Number N/A

Sample Depth (ft. below TOC): 17.5

Reviewed by: [signature]

Date: 6/4/04

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 4/3/04 WELL ID: IR07MW21A PARCEL: B

Well Completion (Check one): Monument X or Flushmounted ____
If monument, height above ground or road surface: 3'-7½" inches

Size and number of bolts on vault cover: N/A
Specific wrench required? YES/NO (describe): N/A
Difficulty opening? YES/NO (describe): ____
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: DOLPHIN
Condition of lock: GOOD

External Well ID: NONE Internal Well ID: IR07MW21A

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: GOOD
Vault lid, rubber seal, and vault: N/A
Protective casing and cover: GOOD
Well cap: GOOD
PVC/inner casing: GOOD
Odor or staining? (describe): NONE
Casing diameter in inches (Circle one): 0.75 2 4 6 Other ____
Casing type (Circle one): PVC SS Other ____ Type of well cap: expandable PVC Other ____
Distinct mark or notch on PVC casing? (describe/give orientation): Black mark to North
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC N/A inches
Depth to bottom of well: 20.14 feet Obstructions?: ____
Immiscible phases present? YES/NO If yes, describe (including thickness): ____
Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field
Location sketch with North arrow:

Describe unusual conditions: ____

Maintenance performed: ____

Recommended repairs: ____

Well Inspected by: JEFF SALA

6A

1R07MW21A1

KLEINFELDER

Additional Field Notes

Start Time: 840
Finish Time: 940
Date of Calibration: 6/3/04

To:
From:

Personnel on Site: J. SALA, T. CHAMBLISS
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks:

Pumping well notice TURB. was odd cleaned glass restarted pumping TURB. fine.

Reviewed by: Sarah Callahan
Date: 6/4/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: 1R07MW23A

Sheet ___ of ___

Personnel: B. Caldwell & D. Forks

Day: Thursday

Date: 6/3/04

Casing Volume = 1.72 Gallons

Initial depth to water: 13.78 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.0 ppm Background: 0.0 ppm

Groundwater Parameters

Start 850 Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
855	1.67	333	13.88	17.8	1.10	-0.07	6.92	Ur	11	0.0
900	3.33	333	13.84	18.2	1.09	-0.07	6.98	Ur	19	0.0
905	5.00	333	13.88	18.2	1.10	-0.12	7.00	Ur	28	0.0
910	6.67	333	13.81	18.2	1.10	-0.09	7.01	Ur	35	0.0
915	8.33	333	13.87	18.3	1.11	-0.14	7.03	Ur	35	0.0
920	10.00	333	13.90	18.3	1.11	-0.16	7.07	Ur	35	0.0

After sampling and, if accessible, depth to bottom: 16.42 ft. below TOC

Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	U-10	PID	Mini	104488
Turbidimeter	" "	" "	Filter Apparatus	–	–
Water Level Meter	Solonist	17954	Other ORP	Dakton Test	#1
Pump	Typhoon	20123	Other –	–	–

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals	X			Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e	X			Hydrogen		Top (mg/L)		
TPH-p	X			TDS		Middle (mg/L)		
VOCs	X			TSS	X	Bottom (mg/L)		
Cr 6+	X							

Sample Number: ~~0623 C006~~ 0423C006 [illegible]

Sample Date/Time: 930 6/3/04

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Sample Time – Dup. Sample Number –

Sample Depth (ft. below TOC): ~15 ft.

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Reviewed by: Sarah Callahan

Date: 6/4/04

[illegible] 6/5/04 4

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/3/04 WELL ID: 1R07MW23A PARCEL: B

Well Completion (Check one): Monument ____ or Flushmounted X

If monument, height above ground or road surface: — inches

Size and number of bolts on vault cover: 2 3/4" bolts

Specific wrench required? YES/NO (describe): 3/4" Socket

Difficulty opening? YES/NO (describe):

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: Materlock - 6835

Condition of lock: good

External Well ID: 1R07MW23A Internal Well ID: 1R07MW23A

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: OK

Vault lid, rubber seal, and vault: OK

Protective casing and cover: OK

Well cap: OK

PVC/inner casing: OK

Odor or staining? (describe): No

Casing diameter in inches (Circle one): 0.75 2 4 6 Other ____

Casing type (Circle one): PVC SS Other ____ Type of well cap: expandable PVC Other ____

Distinct mark or notch on PVC casing? (describe/give orientation): Ink on North TOC

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC — inches

Depth to bottom of well: 16.42 feet Obstructions?: No

Immiscible phases present? YES/NO If yes, describe (including thickness):

Photograph taken: YES/NO

Describe unusual conditions: —

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Maintenance performed: —

Recommended repairs: —

Well Inspected by: Bryan Caldwell

6/8/04

GAS

KLEINFELDER

MONITORING WELL SAMPLING SHEET

IR07MW24A

S. Titus, M. Carrington

Sheet 1 of 1

Day: Thursday Date: 6-3-04

Gallons

Initial depth to water: 12.21 ft. below top of casing

[illegible] water column height (ft) x 0.03 gal/ft (0.75-inch well)
[illegible] (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: Ø ppm Background: Ø ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)	Sal.
1122	1	500	12.25	18	1.4	1.0	7.3	-94	16	Ø	0.1
1124	2	500	12.26	18	1.4	0.6	7.3	-86	43	Ø	0.1
1126	3	500	12.27	18	1.4	0.5	7.3	-84	57	Ø	0.1
1128	4	500	12.28	18	1.4	0.5	7.3	-74	66	Ø	0.1
1132	6	500	12.28	18	1.4	0.5	7.3	-66	18	Ø	0.1
1134	7	500	12.28	18	1.4	0.5	7.3	-47	18	Ø	0.1
1136	8	500	12.28	18	1.4	0.5	7.3	-44	49	Ø	0.1
1140	10	500	12.28	18	1.4	0.4	7.3	-44	32	Ø	0.1
1142	12	500	12.28	18	1.4	0.4	7.3	-42	28	Ø	0.1
1144	13	500	12.28	18	1.4	0.4	7.3	-44	27	Ø	0.1
1146	14	500	12.27	18	1.4	0.4	7.3	-37	29	Ø	0.1

[illegible] sampling and, if accessible, depth to bottom: 18.03 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba U	0301010	PID	Minirae	104541
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	2938	Other ORP	Oakton	#2
Pump	Proactive	PR020112	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)			Fate and Transport Data (Off-Site Lab)	
Metals	X		Chloride	
PCBs			Alkalinity	
Pesticides			Ethane	
SVOCs			Ethene	
TPH-e	X		Hydrogen	
TPH-p	X		TDS	X
VOCs	X		TSS	X
Cr 6+	X		Salinity	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: ~~0623T007~~ 0423T007 Sample Date/Time: 6-3-04 1148

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

[illegible] Depth (ft. below TOC): 15.12

Reviewed by: Sarah Collins

Date: 6/4/04

Method of Extraction: [X] Submersible Pump [ ] Peristaltic Pump [ ] Disposable Bailer

Method of Sampling: [X] Submersible Pump [ ] Peristaltic Pump [ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6-3-04 **WELL ID:** IR07MW24A **PARCEL:** B

Well Completion (Check one): Monument X or Flushmounted ____

If monument, height above ground or road surface: 3.15 inches feet

Size and number of bolts on vault cover: None

Specific wrench required? YES/NO (describe): ____

Difficulty opening? YES/NO (describe): ____

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: No Name

Condition of lock: good

External Well ID: None Internal Well ID: IR07MW24A

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: good

Vault lid, rubber seal, and vault: good

Protective casing and cover: good

Well cap: good

PVC/inner casing: good

Odor or staining? (describe): None

Casing diameter in inches (Circle one): 0.75 2 4 6 Other ____

Casing type (Circle one): PVC SS Other ____ Type of well cap: expandable PVC Other ____

Distinct mark or notch on PVC casing? (describe/give orientation): Yes - North

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC ____ inches

Depth to bottom of well: 18.03 feet Obstructions?: None

Immiscible phases present? YES/NO If yes, describe (including thickness) ____

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: None

Maintenance performed: None

Recommended repairs: ____

Well Inspected by: Sune Titus

6A

1R07MW24A

KLEINFELDER

Additional Field Notes

Start Time: 1100
Finish Time: 1215
Date of Calibration:

To:
From:

Personnel on Site: S. Titus, M. Carrington
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks: pump hung at 15.12' below TOC

Reviewed by: [signature]
Date: 6/4/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No. IR07MW26A

Personnel: BRIAN GOBER / ANGEL DURANTE

Day: THUR. Date: 6-3-04

Sheet 1 of 1

Purging Volume = Gallons

Initial depth to water: 11.73 ft. below top of casing

Purging volume = water column height (ft) x 0.03 gal/ft (0.75-inch well)
[0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Sal. ppt. ~~PID/OVM (ppm)~~
2:10	0	500	11.73	17.6	31.7	3.60	6.69	-88	0	1.98
2:15	2.5	500	11.77	17.7	31.8	4.61	6.71	-80	0	1.99
2:20	5.0	500	11.80	17.7	31.8	4.24	6.72	-89	0	1.99
2:25	7.5	500	11.79	17.8	31.8	4.17	6.73	-81	0	1.99

Depth to sampling and, if accessible, to bottom: 18.10 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	HORIBA U10	305006	PID	MiniRae	104512
Redox Meter ORP	OAKTON		Filter Apparatus		
Water Level Meter	SOLINST 101	33855	Other		
	PROAFTIVE		Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab
VOCs	X			Chloride	
SVOCs				Alkalinity	
Pesticides				Ethane	
PCBs				Ethene	
Metals	X			Hydrogen	
TPH	X			TDS	X
PCP	X			TSS	X
Cr6+	X			Salinity	X

Field Test Kit Analyses	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen	
Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: ~~IR07MW26A-0623-0007~~ 04230007 Sample Date/Time: 6-3-04 / 1025

QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): 14.9

Reviewed by: Sarah Callahan

Date: 6/4/04

Method of Extraction:
[X] Submersible Pump
[ ] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[X] Submersible Pump
[ ] Peristaltic Pump
[ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

6.3.04 **WELL ID:** IR07MW26A **PARCEL:** B

Completion (Check one): Monument ✓ or Flushmounted ____

Monument height above ground or road surface: 3'5½" inches

Total number of bolts on vault cover: NA

Special wrench required? YES/NO (describe): ____

Easy opening? YES/NO (describe): ____

Locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: NO NAME OR NUMBER ON LOCK

Condition of lock: OK

External Well ID: NO Internal Well ID: YES

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: OK

Vault lid, rubber seal, and vault: ~~OK~~ 6-3-04 NA

Protective casing and cover: OK

Well cap: OK

PVC inner casing: OK

Rust or staining? (describe): NONE

Casing diameter in inches (Circle one): 0.75 2 4 6 Other ____

Casing type (Circle one): PVC SS Other ____ Type of well cap: expandable PVC Other ____

Distinct mark or notch on PVC casing? (describe/give orientation): MARK ON NORTH SIDE

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC ____ inches

Depth to bottom of well: 6-3-04 ~~18.38~~ 18.10 feet Obstructions?: NO

Immiscible phases present? YES/NO If yes, describe (including thickness): ____

Photograph taken: YES/NO

Describe unusual conditions: ____

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Maintenance performed: ____

Recommended repairs: CRASH POSTS NEED TO BE INSTALLED AROUND MONUMENT (MATERIALS ARE ALREAD ONSITE NEXT TO WELL)

Well Inspected by: BRIAN GOBER

1R07MW26A

KLEINFELDER

Additional Field Notes

Start Time: 1010
Finish Time: 1025
Date of Calibration: 6-3-04

To:
From:

Personnel on Site: B. Gober, A. Durante
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis
1025	6	VOA	40 ml	HCl	
1025	2	AMBER	1L		
1025	2	POLY	500 ml		
1025	1	POLY	500 ml	HNO_3	

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks:

Reviewed by: Jared Callahan
Date: 6/4/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR07 MW 27 A

Sheet ___ of ___

Personnel: J. Sala, T. Chambliss

Day: THUR.

Date: 6/3/04

Casing Volume = Gallons

Initial depth to water: 13.13 ft. below top of casing

(casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well))

Organic Vapor Concentrations

Top of Casing: 0.3 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	SAL ~~PID/OVM~~ (ppm)
1037	7.5	2550	14.10	18.5	1.28	0.35	7.31	-50	70	0.05
1040	12.9	1800	14.53	18.6	1.23	0.18	7.31	-25	67	0.05
1043	15.3	800	14.60	18.7	1.24	0.09	7.39	-10	67	0.05
1046	18.3	1000	14.75	18.7	1.33	-0.05	7.46	-53	66	0.06
1049	19.8	500	14.85	18.8	1.36	-0.05	7.49	-60	67	0.06

After sampling and, if accessible, depth to bottom: 21.20 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	306067	PID	MiniRAE	104492
Turbidimeter	↓	↓	Filter Apparatus		
Water Level Meter	Solinst	11928	Other ORP	Oakton	#5
Pump	SS Mega Typhoon	PRO 20111	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)				Fate and Transport Data (Off-Site Lab)	
Metals	X			Chloride	
PCBs	X			Alkalinity	
Pesticides	X			Ethane	
SVOCs	X			Ethene	
TPH-e	X			Hydrogen	
TPH-p	X			TDS	
VOCs	X			TSS	X
Cr 6+	X				

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: ~~04235007~~ 04235007

Sample Date/Time: 6/3/04 / 1105

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time N/A Dup. Sample Number N/A

Sample Depth (ft. below TOC): 17.25

Reviewed by: Sarah Collier

Date: 6/4/04

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

[illegible]/04 **WELL ID:** IR07MW27A **PARCEL:** B

[illegible]pletion (Check one): Monument____ or Flushmounted ✓

[illegible] height above ground or road surface: N/A inches

[illegible] number of bolts on vault cover: 15/16" - 2 BOLTS

[illegible] wrench required? YES/NO (describe): Socket

[illegible] opening? YES/NO (describe): N/A

[illegible]ed upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

[illegible] and name and lock number: MASTER 6835

[illegible]on of lock: GOOD

[illegible] Well ID: IR07MW27A Internal Well ID: NONE

[illegible]be condition of (as applicable) the following:

[illegible]rete pad and surrounding area: cracks in Concrete around well Vault

[illegible] rubber seal, and vault: GOOD

[illegible]ective casing and cover: GOOD

[illegible] cap: GOOD

[illegible]/inner casing: GOOD

[illegible] or staining? (describe): NONE

[illegible]ing diameter in inches (Circle one): 0.75 2 4 6 Other____

[illegible]ing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____

[illegible]inct mark or notch on PVC casing? (describe/give orientation): Black Notch Mark to the North

[illegible]venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC N/A inches

[illegible]pth to bottom of well: 21.20 feet Obstructions?: NONO

[illegible]miscible phases present? YES/NO If yes, describe (including thickness)____

[illegible]otograph taken: YES/NO

Describe unusual conditions:

[illegible]necessary, note discrepancies with well location [illegible]presented on map and location identified in field

[illegible]cation sketch with North arrow:

Maintenance performed:

Recommended repairs:

[illegible]ell Inspected by: JEFF SALA

6A

1RO7MW27A

KLEINFELDER

Additional Field Notes

Start Time: 1025
Finish Time: 1129
Date of Calibration: 6/3/04

To:
From:

Personnel on Site: J SALA, T CHAMBLISS
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks:

WELL WAS DRAWING DOWN purging at a slower rate at END 6.60 on control BOX. Water Level went Down about 1 foot.

Reviewed by: Sarah Allshe
Date: 6/4/04

KLEINFELDER Pump

MONITORING WELL SAMPLING SHEET

Well: IR07MW25A

Sheet 1 of ___

Sampler: P. Holland / D Nguyen

Day: Thursday

Date: 6/3/04

Purge Volume = Gallons

Initial depth to water: 10.70 ft. below top of casing

Purge volume = water column height (ft) x 0.03 gal/ft (0.75-inch well)
[x 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0.0 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Approx Cumulative Volume Purged (L)	Approx Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Sal ~~PID/OVM~~ (ppm)
0850	2	1500	10.70	17	2.2	0.3	7.3	-65	22	0.1
0854	8	1500	10.70	17	2.2	0.2	7.4	-57	23	0.1
0857	12	1350	10.70	17	2.2	0.1	7.4	-55	23	0.1
0900	16.5	1650	10.70	17	2.2	0.1	7.4	-53	23	0.1

After sampling and, if accessible, depth to bottom: 21.66 ft. below TOC Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	#3	PID	MiniRae	104517 (#3)
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	29741	Other ORP	ORP	#3
Pump	Mega Typhon	PRG 26117 (#3)	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals	X			Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene				
TPH-e	X			Hydrogen		Downhole Dissolved Oxygen		
TPH-p	X			TDS	X	Top (mg/L)		
VOCs	X			TSS	X	Middle (mg/L)		
Cr 6+	X			Salinity	X	Bottom (mg/L)		

Sample Number: ~~0623H008~~ 0423H008 Sample Date/Time: 6/3/04 6/3/04

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time: ___ Dup. Sample Number: ___

Sample Depth (ft. below TOC): about 15

Reviewed by: [signature]

Date: 6/4/04

Method of Extraction: [X] Submersible Pump [ ] Peristaltic Pump [ ] Disposable Bailer

Method of Sampling: [X] Submersible Pump [ ] Peristaltic Pump [ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/3/04 WELL ID: IR07MW25A PARCEL: B

Well Completion (Check one): Monument X or Flushmounted ____

If monument, height above ground or road surface: Approx 3 inches

Size and number of bolts on vault cover: none

Specific wrench required? YES/NO (describe): ____

Difficulty opening? YES/NO (describe): ____

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: dolphin

Condition of lock: good

External Well ID: None Internal Well ID: IR07MW25A

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: good

Vault lid, rubber seal, and vault: good

Protective casing and cover: good

Well cap: good

PVC/inner casing: good

Rust or staining? (describe): ____

Casing diameter in inches (Circle one): 0.75 2 4 6 Other ____

Casing type (Circle one): PVC SS Other ____ Type of well cap: expandable PVC Other ____

Distinct mark or notch on PVC casing? (describe/give orientation): black mark / east

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC ____ inches

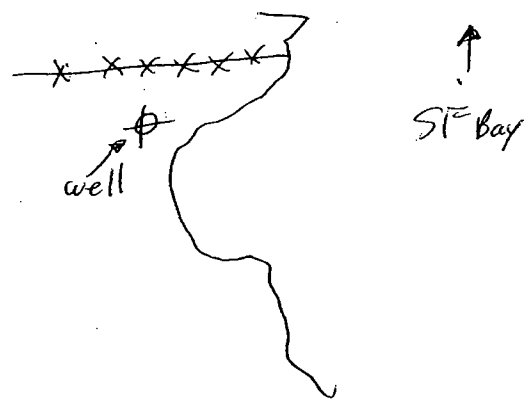
Depth to bottom of well: 21.66 feet Obstructions?: ____

Immiscible phases present? YES/NO If yes, describe (including thickness) ____

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:



Describe unusual conditions: ____

Maintenance performed: ____

Recommended repairs: Need external ID, external lock

Well Inspected by: [signature]

6A

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: 1R07MW28A

Sheet ___ of ___

Personnel: B. Caldwell & D. Forks

Day: Monday

Date: 6/7/04

Casing Volume = 5.27 Gallons

8.08 x .652

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Initial depth to water: 9.72 ft. below top of casing

Organic Vapor Concentrations

Top of Casing: 0.1 ppm Background: 0.1 ppm

Groundwater Parameters

908 Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
911	1.5	500	9.85	17.0	1.89	-0.05	7.27	Ur	0	0.0
914	2.5	~333	9.84	16.9	1.92	-0.12	7.29	Ur	0	0.0
917	4.0	500	9.83	17.1	1.94	-0.16	7.31	Ur	1	0.0
920	5.5	500	9.75	17.1	1.97	-0.18	7.32	Ur	1	0.1
923	7.0	500	9.83	17.1	1.99	-0.18	7.32	Ur	1	0.1

After sampling and, if accessible, depth to bottom: 17.80 ft. below TOC Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	U-10	PID	Mini Rae	104488
Turbidimeter	"	" "	Filter Apparatus	–	–
Water Level Meter	Solomist	19754	Other ORP	Dakton Tester	#1
Pump	Typhoon	20123	Other –	–	–

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	
Metals CLP	X			Chloride		
PCBs CLP	X			Alkalinity		
Pesticides CLP	X			Ethane		
SVOCs CLP	X			Ethene		
TPH-e	X			Hydrogen		
TPH-p	X			TDS		
VOCs CLP	X			TSS	X	
Cr 6+	X					

Field Test Kit Analyses	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		
Filter where turbidity > 50 NTU		
Downhole Dissolved Oxygen		
Top (mg/L)		
Middle (mg/L)		
Bottom (mg/L)		

Sample Number: ~~0624C015~~ 0424C015 Sample Date/Time: 6/7/04 930

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): ~14.00

Reviewed by: Sarah Callahan

Date: 6/8/04

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/7/04 WELL ID: 1R07MW28A PARCEL: B

Well Completion (Check one): Monument X or Flushmounted ____

If monument, height above ground or road surface: ~2.5 ft. inches

Size and number of bolts on vault cover: None

Specific wrench required? YES/NO (describe): ____

Difficulty opening? YES/NO (describe): ____

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: Master lock Pro Series 6385

Condition of lock: Good

External Well ID: 1R07MW28A Internal Well ID: 1R07MW28A

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: OK

Vault lid, rubber seal, and vault: —

Protective casing and cover: OK

Well cap: OK

PVC/inner casing: OK

Odor or staining? (describe): None

Casing diameter in inches (Circle one): 0.75 2 4 6 Other —

Casing type (Circle one): PVC SS Other ____ Type of well cap: expandable PVC Other ____

Distinct mark or notch on PVC casing? (describe/give orientation): Notch at N of TOC

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC — inches

Depth to bottom of well: ~18.5 feet Obstructions?: ~

Immiscible phases present? YES/NO If yes, describe (including thickness) ____

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: Well off property on small road b/w fence & berm

Maintenance performed: None

Recommended repairs: —

Well Inspected by: Bryan Caldwell

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KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR07MWS-2

Sheet 1 of 1

Personnel: S. Titus, M. Carrington

Day: Monday

Date: 6-7-04

Casing Volume = Gallons

Initial depth to water: 9.76 ft. below top of casing

casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.1 ppm Background: 0.1 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Sal ~~PID/OVM~~ (ppm)
1016	.25	250	9.78	18	49	0.4	7.6	-99	20	3.2
1020	1	250	9.78	18	49	0.4	7.6	-99	18	3.2
1022	1.5	250	9.78	18	49	0.4	7.6	-99	15	3.2
1024	2	250	9.78	18	49	0.5	7.6	-99	12	3.2
1028	3	250	9.78	18	49	0.8	7.5	-94	10	3.2
1030	3.5	250	9.78	18	49	1.0	7.5	-85	9	3.2
1032	4	250	9.79	18	49	1.5	7.4	-63	9	3.2
1036	5	250	9.79	18	49	1.6	7.4	-36	8	3.2
1038	5.5	250	9.80	18	49	1.7	7.4	-30	7	3.2

After sampling and, if accessible, depth to bottom: 17.61 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba U10	301010	PID	MiniRae	104541
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	2938	Other ORP	Oakton	35650-02
Pump	ProActive	PRO 20112	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals	X			Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e	X			Hydrogen		Top (mg/L)		
TPH-p	X			TDS		Middle (mg/L)		
VOCs	X			TSS	X	Bottom (mg/L)		
Cr Gt	X							

Sample Number: ~~0624T015~~ 0424T015 Sample Date/Time: 6-7-04 @ 1045

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): 13-68

Reviewed by: Sarah Callahan

Date: 6/8/04

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6-7-04 WELL ID: IR07MWS-2 PARCEL: B

Well Completion (Check one): Monument X or Flushmounted ____

If monument, height above ground or road surface: ____ ~~inches~~ feet

Size and number of bolts on vault cover: None

Specific wrench required? YES/NO (describe): ____

Difficulty opening? YES/NO (describe): ____

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: Master 6835

Condition of lock: Good

External Well ID: IR07MWS-2 Internal Well ID: IR07MWS-2

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: Good

Vault lid, rubber seal, and vault: Good

Protective casing and cover: None

Well cap: Good

PVC/inner casing: Good

Odor or staining? (describe): None

Casing diameter in inches (Circle one): 0.75 2 4 6 Other ____

Casing type (Circle one): PVC SS Other ____ Type of well cap: expandable PVC Other ____

Distinct mark or notch on PVC casing? (describe/give orientation): Yes ~~North~~ 1 W

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC ____ inches

Depth to bottom of well: 17.61 feet Obstructions?: None

Immiscible phases present? YES/NO If yes, describe (including thickness) ____

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions:

~~2 black marks - one North & one W~~ 8-6-7-04

None

Maintenance performed:

None

Recommended repairs:

None

~~2 marks~~, ~~all~~ ~~marks~~ ~~made~~ ~~off of~~ ~~N mark~~ 8-6-7-04 disregard 2nd mark on N. side was accum. dirt/sludge

Well Inspected by: [illegible]

6A

IR07MWS-2

KLEINFELDER

Additional Field Notes

Start Time: 1000
Finish Time: 1110
Date of Calibration:

To:
From:

Personnel on Site: S. Titus, M. Carrington
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings: Rotten-egg odor to purgewater
Any Other Problems:

Remarks:
removed old tubing fr. well
Pump hung @ 13.68 below TOC → water @ 9.26
Well TD @ 17.61
Started pumping 1010
Strong rotten-egg smell to purge water @ ~1020
Samples collected @ 1025

Reviewed by: Sarah Callahan
Date: 6/8/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: FR07MWS-4

Sheet 1 of 1

Personnel: S. Titus, M. Carrington

Day: Monday

Date: 6-7-04

Purging Volume = Gallons

Initial depth to water: 14.71 ft. below top of casing

Casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.1 ppm Background: 0.1 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Sal ~~PID/OVM (ppm)~~
0858	1	300	14.71	18	6.5	0.5	7.1	-99	35	0.3
0900	~~1.3~~ 1.6	300	14.72	18	6.3	0.5	7.1	-94	38	0.3
0902	~~1.6~~ 1.8	300	14.71	18	6.2	0.5	7.1	-88	39	0.3
0904	~~1.9~~ 2.0	300	14.71	18	6.1	0.5	7.1	-73	38	0.3
0908	~~2.5~~ 2.8	300	14.71	18	6.1	0.5	7.1	-83	36	0.3
0910	4.0	300	14.71	18	5.9	0.5	7.1	-81	35	0.3

Depth after sampling and, if accessible, depth to bottom: 19.7 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Hydrolab	301010	PID	MiniRae	104541
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	2938	Other ORP	Oakton	#2
Pump	Proactive	PRO 20112	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)			Fate and Transport Data (Off-Site Lab)		Field Test Kit Analyses	Unfiltered	Filtered
Metals	X		Chloride		Fe^{2+} (mg/L)		
PCBs			Alkalinity		Mn^{2+} (mg/L)		
Pesticides			Ethane		Filter where turbidity > 50 NTU		
SVOCs			Ethene		Downhole Dissolved Oxygen		
TPH-e	X		Hydrogen		Top (mg/L)		
TPH-p	X		TDS	X	Middle (mg/L)		
VOCs	X		TSS	X	Bottom (mg/L)		
Cr 6+	X		Salinity	X			

Sample Number: ~~0624T016~~ 04247016 Sample Date/Time: 6-7-04 @ 0911

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): 17.2

Reviewed by: Sarah Collins

Date: 6/8/04

Method of Extraction: [X] Submersible Pump [ ] Peristaltic Pump [ ] Disposable Bailer

Method of Sampling: [X] Submersible Pump [ ] Peristaltic Pump [ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 10-7-04 WELL ID: IR07MWS-4 PARCEL: B

Well Completion (Check one): Monument X or Flushmounted ___

If monument, height above ground or road surface: 3.3 feet ~~inches~~

Size and number of bolts on vault cover: None

Specific wrench required? YES/NO (describe): ___

Difficulty opening? YES/NO (describe): ___

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: No name / #

Condition of lock: good

External Well ID: None Internal Well ID: IR07MWS-4

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: good

Vault lid, rubber seal, and vault: good (man. box)

Protective casing and cover: N/A

Well cap: good

PVC/inner casing: good

Odor or staining? (describe): None

Casing diameter in inches (Circle one): 0.75 2 4 6 Other ___

Casing type (Circle one): PVC SS Other ___ Type of well cap: expandable PVC Other ___

Distinct mark or notch on PVC casing? (describe/give orientation): YES-NORTH

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC ___ inches

Depth to bottom of well: 19.7 feet. Obstructions?: None

Immiscible phases present? YES/NO If yes, describe (including thickness) ___

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: None

Maintenance performed: None

Recommended repairs: None

Well Inspected by: Susie Titus

1R07MW05-4

KLEINFELDER

Additional Field Notes

Start Time: 0815
Finish Time: 0950
Date of Calibration:

To:
From:

Personnel on Site: S. Titus, M. Carrington
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings: Rotten Egg smell to purgewater
Any Other Problems:

Remarks:
removed old braided tubing
Water @ 14.71 TD 19.7 ∴ pump intake @ 17.2' below TOC
started pumping @ 0850
rotten egg smell to purge water.
samples collected @ 0910.

Reviewed by: Sarah Callahan
Date: 6/8/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR10 MW 12H

Sheet 1 of ___

Personnel: Pete H Dave N.

Day: Monday

Date: 6/7/04

Casing Volume = Gallons

Initial depth to water: 5.89 ft. below top of casing

casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.3 ppm Background: 1.3 ppm

Groundwater Parameters

Time	Approx Cumulative Volume Purged (L)	Approx Discharge Rate (mL/min)	Approx Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Sol ~~PID/OVM~~ (ppm)
0955	2	750	6.2	17	5.0	0.4	7.5	UR	14	0.3
1000	5	750	6.19	17	4.2	0.2	7.6	UR	14	0.2
1003	7	600	6.19	17	4.1	0.2	7.6	UR	14	0.2
1006	8.5	450	6.17	17	4.0	0.2	7.6	UR	14	0.2
1010	10.5	450	6.17	17	4.0	0.1	7.6	UR	14	0.2

After sampling and, if accessible, depth to bottom: 17.9 ft. below TOC Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	305005	PID	MiniRae	#3
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	29741	Other ORP	ORP	#3
Pump	Megalyn	#3	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)				Fate and Transport Data (Off-Site Lab)	
Metals				Chloride	
PCBs				Alkalinity	
Pesticides				Ethane	
SVOCs				Ethene	
TPH-e				Hydrogen	
TPH-p				TDS	
VOCs CLP Low	X			TSS	X
Cr 6+	X				

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: ~~0624H020~~ 0424H020

Sample Date/Time: 6/7/04 1020

QA/QC Sample(s)? ☐ None ☐ Field Dup ☒ MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): N 12'

Reviewed by: [signature]

Date: 7/8/04

Method of Extraction:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

Method of Sampling:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

E: 6/7/04 **WELL ID:** IR10MW12A **PARCEL:** B

Well Completion (Check one): Monument____ or Flushmounted X
If monument, height above ground or road surface: _____ inches

Size and number of bolts on vault cover: 2 - 1/2" (one bolt missing
Specific wrench required? YES/NO (describe): _____
Difficulty opening? YES/NO (describe): _____
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: _____
Condition of lock: _____

External Well ID: IR10MW12A - (on asphalt) Internal Well ID: IRMW12A (on well cap)

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: ok
Vault lid, rubber seal, and vault: No rubber seal
Protective casing and cover: ok
Well cap: ok
PVC/inner casing: good
Odor or staining? (describe): NO
ing diameter in inches (Circle one): 0.75 2 (4) 6 Other____
ing type (Circle one): (PVC) SS Other____ Type of well cap: expandable (PVC) Other____
Distinct mark or notch on PVC casing? (describe/give orientation): black mark North
Air venting hole on PVC/inner casing? YES/(NO) If yes, distance from inner TOC____ inches
Depth to bottom of well: 17.7 feet Obstructions?: No
Immiscible phases present? YES/(NO) If yes, describe (including thickness)____
Photograph taken: YES/(NO)

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: _____

Maintenance performed: _____

Recommended repairs: New crusty box cover or new bolt

Well Inspected by: [illegible]

6A

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR10MW13A1

Sheet ___ of ___

Personnel: B. Caldwell & D. Forks

Day: Thursday

Date: 6/3/04

Casing Volume = 8.17 Gallons

12.54 x .652

casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Initial depth to water: 7.11 ft. below top of casing

Organic Vapor Concentrations

Top of Casing: 0.0 ppm Background: 0.0 ppm

Start

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1445										
1448	1.5	500	7.20	19.2	4.10	-0.09	7.57	Ur	8	0.0
1451	3.0	500	7.23	19.1	3.72	-0.15	7.59	Ur	-2	0.0
1454	4.5	500	7.20	19.3	3.39	-0.14	7.62	Ur	-6	0.0
1457	6.0	500	7.25	19.1	3.25	-0.17	7.63	Ur	-9	0.0
1500	7.5	500	7.24	19.3	2.95	-0.18	7.63	Ur	-10	0.0
1503	9.0	500	7.25	19.3	2.81	-0.18	7.65	Ur	-10	0.0

After sampling and, if accessible, depth to bottom: 19.65 ft. below TOC Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	U-10	PID	Mini Rae	104488
Turbidimeter	" "	" "	Filter Apparatus	—	—
Water Level Meter	Solonist	17954	Other ORP	Oakton Tester	#1
Pump	Typhoon	20123	Other	—	—

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	
Metals				Chloride		
PCBs				Alkalinity		
Pesticides				Ethane		
SVOCs				Ethene		
TPH-e				Hydrogen		
TPH-p				TDS		
VOCs	X			TSS		

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: ~~0623C009~~ 0423C009 Sample Date/Time: 1505 6/3/04

QA/QC Sample(s)? ☐ None ☒ Field Dup ☐ MS/MSD

Dup. Sample Time 1530 Dup. Sample Number IR10EB026

Sample Depth (ft. below TOC): ~14.00 ft.

Reviewed by: [signature]

Date: 6/7/04

Method of Extraction:

☒ Submersible Pump

☐ Peristaltic Pump

☐ Disposable Bailer

Method of Sampling:

☒ Submersible Pump

☐ Peristaltic Pump

☐ Disposable Bailer

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/3/04 **WELL ID:** 1R10MW13A1 **PARCEL:** B

Well Completion (Check one): Monument X or Flushmounted_____
If monument, height above ground or road surface: – inches

Size and number of bolts on vault cover: 1/2" bolt, 1 bolt missing, 1 bolt stripped can't tighten
Specific wrench required? YES/NO (describe):
Difficulty opening? YES/NO (describe):
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: Masterlock Pro Series 6835
Condition of lock: Cannot open locks

External Well ID: 1R10MW13A1 Internal Well ID: 1R10MW13A1

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: No concrete pad in asphalt
Vault lid, rubber seal, and vault: OK
Protective casing and cover: OK
Well cap: OK
PVC/inner casing: OK
Odor or staining? (describe): None
Casing diameter in inches (Circle one): 0.75 2 4 6 Other_____
Casing type (Circle one): PVC SS Other_____ Type of well cap: expandable PVC Other_____
Distinct mark or notch on PVC casing? (describe/give orientation): Black ink on TOC east
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC – inches
Depth to bottom of well: 14.65 feet Obstructions?: –
Immiscible phases present? YES/NO If yes, describe (including thickness)
Photograph taken: YES/NO

Describe unusual conditions:

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Maintenance performed:

Recommended repairs: New bolts for casing lid

Well inspected by: Bryan Caldwell

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR10MW44A

Sheet ___ of ___

Personnel: B. Caldwell & D. Forks

Day: Thursday

Date: 6/3/04

Casing Volume = Gallons

Initial depth to water: 7.81 ft. below top of casing

Casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.0 ppm Background: 0.0 ppm

Start 1327

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1332	2.5	500	7.96	18.3	2.19	-0.11	7.93	Ur	10	0.0
1337	~6.25	~750	8.06	18.1	2.20	-0.13	7.95	Ur	-1	0.0
1342	10	750	8.10	18.1	2.19	-0.16	7.94	Ur	-2	0.0
1347	12.5	~500	8.14	18.3	2.18	-0.16	7.93	Ur	-8	0.0
1350	14.75	~750	8.40	18.1	2.17	-0.16	7.91	Ur	-10	0.0
1353	17.25	500	8.23	18.2	2.16	-0.17	7.93	Ur	-10	0.0

After sampling and, if accessible, depth to bottom: 19.28 ft. below TOC Purged Dry? N

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	U-10	PID	MiniRae	104488
Turbidimeter	" "	" "	Filter Apparatus	—	—
Water Level Meter	Solomst	17954	Other ORP	Oakton Test	#1
Pump	Typhoon	20123	Other	—	—

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)				Fate and Transport Data (Off-Site Lab)		Field Test Kit Analyses	Unfiltered	Filtered
Metals				Chloride		Fe^{2+} (mg/L)		
VOCs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
VOCs				Ethene		Downhole Dissolved Oxygen		
PH-e				Hydrogen		Top (mg/L)		
PH-p				TDS		Middle (mg/L)		
OCs	X			TSS		Bottom (mg/L)		

Sample Number: ~~0623C008~~ 0423C008 Sample Date/Time: 1400 6/3/04

MS/QC Sample(s)? ☐ None ☐ Field Dup ☒ MS/MSD

Dup. Sample Time 1400 Dup. Sample Number ___

Sample Depth (ft. below TOC): ~14.00 ft.

Reviewed by: Sarah Callahan

Date: 6/7/04

Method of Extraction: ☒ Submersible Pump — Peristaltic Pump — Disposable Bailer

Method of Sampling: ☒ Submersible Pump — Peristaltic Pump — Disposable Bailer

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

TE: 6/3/04 WELL ID: ~~MW10~~ 1R10MW14A BC PARCEL: ~~Q~~ BC B

Well Completion (Check one): Monument____ or Flushmounted X
If monument, height above ground or road surface: — inches

Size and number of bolts on vault cover: ~~1R10MW14A~~ BC 2 - 3/4" bolts
Specific wrench required? YES/NO (describe): 3/4" socket
Difficulty opening? YES/NO (describe):
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: ~~Master to~~ No lock on well casing
Condition of lock: No lock

External Well ID: 1R10MW14A Internal Well ID: 1R10MW14A

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: Good
Vault lid, rubber seal, and vault: ok
Protective casing and cover: ok
Well cap: ok
PVC/inner casing: ok
Odor or staining? (describe): None
Casing diameter in inches (Circle one): 0.75 2 4 6 Other____
Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____
Distinct mark or notch on PVC casing? (describe/give orientation): ink on east side of TOC
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC — inches
Depth to bottom of well: 19.28 feet Obstructions?: —
Immiscible phases present? YES/NO If yes, describe (including thickness)
Photograph taken: YES/NO

Describe unusual conditions: —

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Maintenance performed: —

Recommended repairs: Needs lock on casing lid.

Well Inspected by: Bryan Caldwell

6A

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: 1R10MW28A

Sheet 1 of ___

Personnel: Jeff Sala & Tricia Renton

Day: Monday

Date: 8-2-04

Casing Volume = Gallons

Initial depth to water: 10.85 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0 ppm Background: 0 ppm

1007

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Salinity ~~PID/OVM~~ (ppm)
1012	150 mL	150	water level at top of [illegible]	16.3	3.29	.25	7.38	UR	192	.16
1018	2.0	600	13.1	16.7	3.26	.51	7.38	UR	225	.16
1023	4.0	400	15.5	16.7	3.49	.36	7.39	UR	271	.17

After sampling and, if accessible, depth to bottom: 17.4 ft. below TOC

Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	305005	PID	Mini Rae	104541
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinist ~~H9~~ [illegible]	11928	Other ORP	ORP Tester Oaklan	3
Pump	SS-Mega-Typhoon	PRO20117	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals				Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e				Hydrogen		Top (mg/L)		
TPH-p				TDS		Middle (mg/L)		
VOCs	X			TSS		Bottom (mg/L)		

Sample Number: 04325062

Sample Date/Time: 8/2/04 1031

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time N/A Dup. Sample Number N/A

Sample Depth (ft. below TOC): 14.12

Reviewed by: Sarah Callahan

Date: 8/3/04

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [ ] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 8/2/04 WELL ID: 1R10MW28A PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted ✓
If monument, height above ground or road surface: N/A inches

Size and number of bolts on vault cover: 2 bolts 3/4"
Specific wrench required? YES/NO (describe): No
Difficulty opening? YES/NO (describe): NO
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: Master 635 G
Condition of lock: dirty - corroded - broken

External Well ID: 1R10MW28A Internal Well ID: no internal marking

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: ~~red in good condition~~ cracked & chipped
Vault lid, rubber seal, and vault: cap on loose
Protective casing and cover: good
Well cap: good
PVC/inner casing: good
Odor or staining? (describe): old tubing has brown staining
Casing diameter in inches (Circle one): 0.75 2 4 6 Other____
Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other N/A
Distinct mark or notch on PVC casing? (describe/give orientation): Yes - North
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC N/A inches
Depth to bottom of well: ~~10.85~~ 17.8 feet Obstructions?: N/A
Immiscible phases present? YES/NO If yes, describe (including thickness): N/A
Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions:

Maintenance performed:

Recommended repairs:

Well Inspected by: Patricia Renta

1R10MW28A

KLEINFELDER

Additional Field Notes

Start Time: 8-2-2004 ~~100~~ 945
Finish Time: 1046
Date of Calibration: 8-2-04

To:
From:

Personnel on Site: Tricia Renton, J.S., S.C.
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis
1031	3	VOAs		HCl	VOCs

QA/QC Sample Numbers: none
Unusual Events/Readings:
Any Other Problems:

Remarks: sulfide smell, black color of water
well was going dry
sampled before well went dry ~ sampled at ~25% volume remaining

Reviewed by: [signature]
Date: 8/3/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR10MW31A1

Sheet 1 of

Personnel: Pete H, Dave N

Day: Monday

Date: 6/7/04

Casing Volume = Gallons

Initial depth to water: 9.47 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.1 ppm Background: 0.1 ppm

Groundwater Parameters

Time	Approx Cumulative Volume Purged (L)	Approx Discharge Rate (mL/min)	Approx Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Sol. ~~PID/OVM~~ (ppm)
0847	2	750	9.90	18	15	3.4	7.3	UR	14	0.9
0851	5	750	9.98	19	15	3.1	7.4	UR	13	0.9
0853	6.5	750	9.98	19	15	3.2	7.5	UR	13	0.9
0856	8	600	9.99	19	15	3.1	7.5	UR	13	0.9
0900	10	450	9.95	19	15	3.0	7.5	UR	13	0.9

After sampling and, if accessible, depth to bottom: 17.08 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	#3	PID	MiniRae	#3
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	27941	Other ORP	Oakton	#3
Pump	Mega/Typhoon	PR020117	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals CLP	X			Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e	X			Hydrogen		Top (mg/L)		
TPH-p	X			TDS		Middle (mg/L)		
VOCs CLP 20V	X			TSS	X	Bottom (mg/L)		
Cr 6+	X							

Sample Number: ~~06244H019~~ 04244H019 Sample Date/Time: 6/7/04 0915

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): ~14

Method of Extraction: [X] Submersible Pump [ ] Peristaltic Pump [ ] Disposable Bailer

Method of Sampling: [X] Submersible Pump [ ] Peristaltic Pump [ ] Disposable Bailer

Reviewed by: Sarah Callahan

Date: 6/8/04

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 8/7/04 WELL ID: IR10MW31AI PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted X
If monument, height above ground or road surface: — inches

Size and number of bolts on vault cover: 2 15/16"
Specific wrench required? YES/NO (describe):
Difficulty opening? YES/NO (describe):
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: Master Prosenes 6835
Condition of lock: ok

External Well ID: IR10 MW31AI Internal Well ID: IR10 MW31AI

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: ok
Vault lid, rubber seal, and vault: No rubber seal
Protective casing and cover: ok
Well cap: ok
PVC/inner casing: ok
Odor or staining? (describe): No
Casing diameter in inches (Circle one): 0.75 2 4 6 Other____
Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____
Distinct mark or notch on PVC casing? (describe/give orientation): Black mark TOC East
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC____ inches
Depth to bottom of well: 17 feet Obstructions?: No
Immiscible phases present? YES/NO If yes, describe (including thickness)
Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field
Location sketch with North arrow:

Describe unusual conditions:

Maintenance performed:

Recommended repairs:

Well Inspected by: [signature]

QA

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Sheet 1 of ___

IR-10MW33A

J. SALA, T. CHAMBLISS

Day: TUESDAY

Date: 6/1/04

Volume = Gallons

Initial depth to water: 7.25 ft. below top of casing

Casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) [or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.0 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Salinity ~~PID/OVM~~ (ppm)
1530	2.0	1000	7.34	17.3	4.20	.02	8.10	-67/ur	20	.21
1535	6.0	800	7.38	17.0	3.86	.00	8.14	-99/ur	20	.20
1540	10.5	900	7.38	17.0	3.31	-.01	8.21	-99/ur	20	.16
1545	15.0 ~~14.5~~	1000	7.29	18.0	3.28	.01	8.18	-99/ur	20	.16

After sampling and, if accessible, depth to bottom: 14.8 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	~~3006~~ 306007	PID	MINI RAE	104492
Turbidimeter	↓	↓	Filter Apparatus		
Water Level Meter	Solinst	~~PRO20111~~ p220	Other ORP	OAKTON	35650-02
Pump	SS-Mega Typhoon	PRO20111	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals				Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs	X			Ethene		Downhole Dissolved Oxygen		
TPH-e				Hydrogen		Top (mg/L)		
TPH-p				TDS		Middle (mg/L)		
VOCs	X			TSS		Bottom (mg/L)		

Sample Number: ~~0623EB015~~ ~~0623S001~~ 0423S001 Sample Date/Time: 6/1/04 1555

QA/QC Sample(s)? ☐ None ☒ ~~Field Dup~~ RINSATE ☐ MS/MSD

Dup. Sample Time _____ Dup. Sample Number ~~0623EB015~~ IR10EB015

Sample Depth (ft. below TOC): 11

Reviewed by: [signature]

Date: 6/1/04

Method of Extraction:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

Method of Sampling:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

ATE: 6/1/04 WELL ID: IR10MW33A PARCEL: B

ell Completion (Check one): Monument____ or Flushmounted X
nonument, height above ground or road surface: N/A inches

ze and number of bolts on vault cover: 2@ 3/4"
ecific wrench required? YES/NO (describe): wratchet
fficulty opening? YES/NO (describe): lock stuck
ell locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
ck brand name and lock number: MASTER 6835
ondition of lock: lock frozen, needs replacement

ternal Well ID: IR10MW33A Internal Well ID: IR10MW33A

escribe condition of (as applicable) the following:
oncrete pad and surrounding area: GOOD
ault lid, rubber seal, and vault: seal, vault and Lid slightly corroded
rotective casing and cover: No out side casing or cover
ell cap: good
VC/inner casing: good
dor or staining? (describe): Some staining in upper 1.5' of PVC casing
asing diameter in inches (Circle one): 0.75 2 4 6 Other____
asing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____
istinct mark or notch on PVC casing? (describe/give orientation): Black mark on MW well ~roughly N
ir venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC____ inches
epth to bottom of well: 14.8 feet Obstructions?: no
nmiscible phases present? YES/NO If yes, describe (including thickness) Not Detectible
hotograph taken: YES/NO

Describe unusual conditions: NONE

necessary, note discrepancies with well location
epresented on map and location identified in field
ocation sketch with North arrow:

Maintenance performed: NONE

Recommended repairs: NONE

Well Inspected by: JEFFREY D. SALA

1R10MW33A

KLEINFELDER

Additional Field Notes

Start Time: 1515
Finish Time: 1555
Date of Calibration: 6/1/04

To:
From:

Personnel on Site: J. SALA/T. CHAMBLISS
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks:

Control Box Fuse Blown
had to wait for PETE's Control Box To purge
well 1R10MW33A.
After PETE purged well we used Control Box
To Decon Pump and take rinsate sample

Reviewed by: [signature]
Date: 6/1/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR10MW59A

Sheet 1 of 1

Personnel: BRIAN GOBER / ANGEL DURANTE Day: TUESDAY Date: 6-1-04

Casing Volume = Gallons

Initial depth to water: 10.77 ft. below top of casing

Casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	PROBE NOT WORKING pH	~~PROBE NOT WORKING~~ ORP (mv)	Turbidity (NTU)	Sal. ~~PID/OVM (ppm)~~	Sal. RG
1500	0	250	11.00	17.7	2.88	1.74	7.48	~~NR*~~ UR	NR*	0.14	~~0.14~~
1505	SHUTDOWN PUMP, HORIBA IS MISSING PLUG										
1510	1.25	250	11.73	16.7	2.87	1.99	7.52	UR	148	0.14	RESUME PURGE FOUND PLUG
1515	2.50	250	12.11	16.5	2.88	0.99	7.51	UR	199	0.14	
1520	3.75	250	12.60	16.4	2.89	0.68	7.51	UR	179	0.14	
1525	5.00	250	13.02	16.4	2.89	0.29	7.50	UR	179	0.14	
1530	6.25	250	13.44	16.3	2.89	0.14	7.49	UR	179	0.14	
1535	7.50	250	13.72	16.3	2.90	0.13	7.53	UR	179	0.14	
1540	8.75	250	13.79	16.3	2.90	0.12	7.55	UR	179	0.14	

After sampling and, if accessible, depth to bottom: 36.93 ft. below TOC Purged Dry? NO

* NOT RECORDED OUT OF RANGE

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	HORIBA	U-10, #305006	PID	MiniRae	104512
~~Turbidimeter~~ ORP	OAKTON	NA	Filter Apparatus		
Water Level Meter	SOLINST	Model 101, #30840	Other		
Pump			Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals				Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e				Hydrogen		Top (mg/L)		
TPH-p				TDS		Middle (mg/L)		
VOCs	X			TSS		Bottom (mg/L)		

Sample Number: ~~0623G001~~ 0423G001 Sample Date/Time: 6-1-04, 1540

QA/QC Sample(s)? ☐ None ☐ Field Dup ☒ RINSATE ☐ MS/MSD

Dup. Sample Time _____ Dup. Sample Number IR10EB014

Sample Depth (ft. below TOC): ~23 ft. below TOC

Reviewed by: [signature]

Date: 6/1/04

Method of Extraction:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

Method of Sampling:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6-1-04 WELL ID: IR10MW59A PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted ✓
If monument, height above ground or road surface: NA inches

Size and number of bolts on vault cover: 3/4" - 2 bolts
Specific wrench required? YES/NO (describe): yes 3/4" socket
Difficulty opening? YES/NO (describe): NO
Well locked upon arrival? (YES)/NO Standing water in vault? YES/(NO) If yes, pumped out? YES/NO
Lock brand name and lock number: DOLPHIN, NA
Condition of lock: GOOD

External Well ID: NONE Internal Well ID: NONE

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: OK
Vault lid, rubber seal, and vault: OK
Protective casing and cover: OK
Well cap: OK
PVC/inner casing: OK
Odor or staining? (describe): NO
Casing diameter in inches (Circle one): 0.75 2 (4) 6 Other____
Casing type (Circle one): (PVC) SS Other____ Type of well cap: (expandable PVC) Other____
Distinct mark or notch on PVC casing? (describe/give orientation): BLACK MARK ON NORTH SIDE
Air venting hole on PVC/inner casing? YES/(NO) If yes, distance from inner TOC____ inches
Depth to bottom of well: 36.93 feet Obstructions?: NO
Immiscible phases present? YES/NO If yes, describe (including thickness) NO
Photograph taken: YES/(NO)

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: WELL WAS NOT LABELED

Maintenance performed:

Recommended repairs: LABEL WELL!!

Well Inspected by: B. Gobe

1R10MW59A

KLEINFELDER

Additional Field Notes

Start Time: 1500
Finish Time: 1540
Date of Calibration: 6-2-04

To:
From:

Personnel on Site: B. Gober, A. Durante
Subcontractors on Site: NA

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis
1540	3	40 ml VOA	40 ml	HCl	
1630	3	VOA	40 ml	HCl	Rinseate

QA/QC Sample Numbers: 1R10EB015
Unusual Events/Readings: pump rate was fluctuating, ORP under range, Turb. readings suspect
Any Other Problems: Well was not labeled

Remarks: H_2S odor in purge water

Reviewed by: [signature]
Date: 6/1/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR10MW61

Sheet 1 of 1

Personnel: S. Titus, M. Carrington

Day: Wednesday

Date: 6-2-04

Volume = Gallons

Initial depth to water: 7.17 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.1 ppm Background: 0.1 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)	Sal
0910	1	500	7.20	18	1.9	0.6	7.6	-99	10	0.1	0.1
0914	3	500	7.20	18	1.9	0.5	7.6	-97	10	0.1	0.1
0918	5	500	7.20	18	1.9	0.5	7.6	-98	10	0.1	0.1
0921	6.5	500	7.25	18	1.9	0.5	7.6	-98	10	0.1	0.1

After sampling and, if accessible, depth to bottom: 20.26 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba U10	301010	PID	MiniRae	104541
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	2138	Other ORP	ORP Tester	#2
Pump	Proactive	PRO20102	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)				Fate and Transport Data (Off-Site Lab)		Field Test Kit Analyses	Unfiltered	Filtered
Metals				Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e				Hydrogen		Top (mg/L)		
TPH-p				TDS		Middle (mg/L)		
VOCs	X			TSS		Bottom (mg/L)		

Sample Number: ~~IR10MW6-2-04 0423T002~~ 0423T002 Sample Date/Time: 6-2-04 0933

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): 13.71

Reviewed by: Paul Callahan

Date: 6/2/04

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6-2-04 WELL ID: IR10MW61 PARCEL: B

Well Completion (Check one): Monument ____ or Flushmounted X
If monument, height above ground or road surface: NA inches

Size and number of bolts on vault cover: 2 3/4"
Specific wrench required? YES/NO (describe):
Difficulty opening? YES/NO (describe):
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number:
Condition of lock: good - a little rusty / Dolphin

External Well ID: None Internal Well ID: IR10MW61

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: good
Vault lid, rubber seal, and vault: lid - good, seal - dry & stuck to lid, vault good
Protective casing and cover: good
Well cap: good - cap tight
PVC/inner casing: good
Odor or staining? (describe): staining on inside of PVC
Casing diameter in inches (Circle one): 0.75 2 (4) 6 Other ____
Casing type (Circle one): PVC SS Other ____ Type of well cap: expandable PVC Other ____
Distinct mark or notch on PVC casing? (describe/give orientation): YES - North
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC ____ inches
Depth to bottom of well: 20.26 feet Obstructions?:
Immiscible phases present? YES/NO If yes, describe (including thickness): NO
Photograph taken: YES/NO

Describe unusual conditions: None

If necessary, note discrepancies with well location represented on map and location identified in field.
Location sketch with North arrow:

Maintenance performed:

Recommended repairs:

Well Inspected by: Susie Titus

1R10MW61A MV

KLEINFELDER

Additional Field Notes

Start Time: 0820
Finish Time: 1000
Date of Calibration:

To:
From:

Personnel on Site: Susie Titus, Michelle Carrington
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks:
Pump hung at 13.71' bgs (below top of casing)
Silt found on bottom of water level indicator.
ORP Meter maxed out @ -99 & flashed "UR" message
Horiba turbidity showed 10
After purging ~2 liters, water had a sulfur-like smell

Reviewed by: Sarah Callahan
Date: 6/2/04

13.71

KLEINFELDER

MONITORING WELL SAMPLING SHEET

ll No.: IR10MW62A

Sheet ___ of ___

rsonnel: B. Caldwell & D. Forks

Day: 6/2 Wed.

Date: 6/2/04

sing Volume = 8.95 Gallons 8.95

Initial depth to water: 6.70 ft. below top of casing

sing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well)
0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0.0 ppm Background: 0.0 ppm

tart purging 910

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	SAL ~~PID/OVM~~ (ppm)
12	1	500 mL/m	6.89	18.9	6.37	-0.12	7.51	~~NA~~ Ur	161	0.0
17	5	~500	6.91	19.0	7.34	-0.10	7.47	Ur	163	0.0
25	9	~500	6.85	19.0	7.66	-0.19	7.46	Ur	162	0.0
30	11.5	~500	7.00	18.7	8.63	-0.19	7.41	Ur	163	0.0
35	14.0	~500	6.94	18.9	9.46	-0.20	7.35	Ur	162	0.0

r sampling and, if accessible, th to bottom: 20.42 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

ipment	Model	Serial Number	Equipment	Model	Serial Number
er Quality Meter	Horiba	U-10	PID	Mini Rae	104488
oldimeter	Horiba	U-10	Filter Apparatus	—	—
er Level Meter	Solonist	-17954	Other ORP	Oakton Testr	#1 —
p	Typhoon	~~HH~~ 20123	Other	—	—

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab		Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
tals			Chloride		Fe^{2+} (mg/L)		
Bs			Alkalinity		Mn^{2+} (mg/L)		
iticides			Ethane		Filter where turbidity > 50 NTU		
OCs			Ethene		Downhole Dissolved Oxygen		
H-e			Hydrogen		Top (mg/L)		
H-p			TDS		Middle (mg/L)		
Cs	X		TSS		Bottom (mg/L)		

ple Number: ~~0602C003~~ ~~0623C002~~ 0423C002 Sample Date/Time: 938 6/2/04

QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Sample Time — Dup. Sample Number —

ple Depth (ft. below TOC): 6.94

iewed by: Sarah Callahan

Date: 6/2/04

Method of Extraction:
[X] Submersible Pump
[ ] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[X] Submersible Pump
[ ] Peristaltic Pump
[ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/2/04 WELL ID: 1R10MW62A PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted X

If monument, height above ground or road surface: NA inches

Size and number of bolts on vault cover: 2 bolts - 15/16"

Specific wrench required? YES/NO (describe): 15/16 Socket

Difficulty opening? YES/NO (describe): —

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: Dolphin

Condition of lock: OK

External Well ID: None (inside lid) Internal Well ID: 1R10MW62 (on casing cap)

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: good

Vault lid, rubber seal, and vault: No rubber seal

Protective casing and cover: OK

Well cap: ok

PVC/inner casing: OK

[illegible] or staining? (describe): None

Casing diameter in inches (Circle one): 0.75 2 4 6 Other____

Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____

Distinct mark or notch on PVC casing? (describe/give orientation): Black mark TOC.

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC — inches

Depth to bottom of well: ____ feet Obstructions?: None

Immiscible phases present? YES/NO If yes, describe (including thickness)

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: N/A, spider web in well.

Maintenance performed: None, but need to mark exterior of well

Recommended repairs: —

Well Inspected by: Bryan Caldwell

6A

1R10MW62A

KLEINFELDER

Additional Field Notes

Start Time: 6/2/04
Finish Time:
Date of Calibration:

To:
From:

Personnel on Site: B. Caldwell & D. Forks
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks: ORP indicator apparently working improperly reads "0r" on digital readout. "Ur"

Left yellow string in tubing in well.

Pulled tubing from well upon arrival. Put in garbage sack. Took water level before removing tubing

Reviewed by: [signature]
Date: 6/2/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR10MW71A

Sheet 1 of 1

Personnel: B. Gober, A. DURANTE

Day: WED

Date: 6-2-04

Casing Volume = Gallons

Initial depth to water: 10.99 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 1.6 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	SAL ppt. ~~PID/OVM (ppm)~~ BG 6.2.04
0900	0	1500	10.99	16.1	1.81	1.05	7.23	UR*	12	0.08
0905	7.5	1500	11.32	15.8	1.80	0.00	7.29	UR	10	0.08
0910	15	1500	11.35	15.8	1.81	0.00	7.30	UR	6	0.08
0915	22.5	1500	11.20	15.8	1.81	0.00	7.30	UR	7	0.08

After sampling and, if accessible, depth to bottom: 23.49 ft. below TOC

Purged Dry? NO

* under range

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	HORIBA U10	305006	PID	MINI RAE	104512
~~Turbidimeter~~ ORP	OAKTON	#4	Filter Apparatus		
Water Level Meter	SOLINST	29741	Other		
Pump	PROACTIVE	20126	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals				Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e				Hydrogen		Top (mg/L)		
TPH-p				TDS		Middle (mg/L)		
VOCs	X			TSS		Bottom (mg/L)		

Sample Number: ~~063600~~ SEC 6/2/04 ~~06236002~~ 0423G002 Sample Date/Time: 6.2.04 / 0915

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): 17.24

Reviewed by: Sarah Allaher

Date: 6/2/04

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Sample Number: 0423G002

KLEINFELDER

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

ATE: 6/2/04 WELL ID: IR10MW76A PARCEL: B

ell Completion (Check one): Monument ____ or Flushmounted ✓
monument, height above ground or road surface: N/A inches

ze and number of bolts on vault cover: 15/16" 2 BOLTS
pecific wrench required? YES/NO (describe): 15/16" SOCKET
ifficulty opening? YES/NO (describe):
/ell locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
ock brand name and lock number: DOLPHIN, NA
ondition of lock: good

xternal Well ID: NO Internal Well ID: yes

escribe condition of (as applicable) the following:
oncrete pad and surrounding area: OK
ault lid, rubber seal, and vault: OK
rotective casing and cover: NA
Vell cap: OK
VC/inner casing: OK
dor or staining? (describe): NO
asing diameter in inches (Circle one): 0.75 2 4 6 Other ____
asing type (Circle one): PVC SS Other ____ Type of well cap: expandable PVC Other ____
istinct mark or notch on PVC casing? (describe/give orientation): MARK ON NORTH SIDE
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC ____ inches
Depth to bottom of well: 23.49 feet Obstructions?: NO
Immiscible phases present? YES/NO If yes, describe (including thickness)
Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions:

Maintenance performed: Labeled outside of well

Recommended repairs:

Well Inspected by: BRIAN GOBER

FR10MW71A

KLEINFELDER

Additional Field Notes

Start Time: 0900
Finish Time: 0915
Date of Calibration: 6.2.04

To:
From:

Personnel on Site: BRIAN GOBER, ANGEL DURANTE
Subcontractors on Site: NA

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis
0915	3	VOA	40ml	HCl	

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems: Flowrate very erratic on FR10MW71A

Remarks:

Reviewed by: Sarah Calhoun
Date: 6/2/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

ll No.: IR10MW76A

Sheet 1 of ___

rsonnel: J. SALA, T. CHAMBLISS

Day: WED.

Date: 6/2/04

sing Volume = Gallons

Initial depth to water: 10.63 ft. below top of casing

sing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well)
0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0.0 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	SAL ~~PID/OVM~~ (ppm)
46	1.0	500	11.30	15.9	1.82	~~0.25~~ 0.01	8.77	-99	27	.08
49	4.6	1200	11.40	15.9	1.81	0.03	8.77	-99	29	.08
52	6.8	750	11.37	16.0	1.81	0.05	8.77	-99	34	.08
55	8.4	550	11.40	16.0	1.81	0.03	8.75	-99	29	.08
58	14.4	2000	11.52	16.1	1.80	0.02	8.71	-99	31	.08

ter sampling and, if accessible, pth to bottom: 19.78 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

uipment	Model	Serial Number	Equipment	Model	Serial Number
ater Quality Meter	Horiba	306007	PID	MINIRAE	104492
rbidimeter			Filter Apparatus		
ater Level Meter	Solinst	33855	Other ORP	ORP Tester	#5
mp	SS-Mega Typhoon	PR020111	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
etals				Chloride		Fe^{2+} (mg/L)		
CBs				Alkalinity		Mn^{2+} (mg/L)		
esticides				Ethane		Filter where turbidity > 50 NTU		
VOCs				Ethene		Downhole Dissolved Oxygen		
PH-e				Hydrogen		Top (mg/L)		
PH-p				TDS		Middle (mg/L)		
OCs	X			TSS		Bottom (mg/L)		

ample Number: ~~0623S002~~ 0423S002 Sample Date/Time: 6/2/04 / 1005

A/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

up. Sample Time N/A Dup. Sample Number N/A

ample Depth (ft. below TOC): 15.00

eviewed by: Sarah Callahan

Date: 6/2/04

Method of Extraction:
[X] Submersible Pump
[ ] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[X] Submersible Pump
[ ] Peristaltic Pump
[ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/2/04 WELL ID: IR10MW76A PARCEL: B

Well Completion (Check one): Monument ____ or Flushmounted ✓

If monument, height above ground or road surface: N/A inches

Size and number of bolts on vault cover: 3/4" - 2

Specific wrench required? YES/NO (describe): Socket

Difficulty opening? YES/NO (describe): ____

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: Dolphin

Condition of lock: GOOD

External Well ID: NONE Internal Well ID: IR10MW76A

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: OK

Vault lid, rubber seal, and vault: OK

Protective casing and cover: OK

Well cap: OK

PVC/inner casing: OK

[illegible] or staining? (describe): NONE

Casing diameter in inches (Circle one): 0.75 2 4 6 Other ____

Casing type (Circle one): PVC SS Other ____ Type of well cap: expandable PVC Other ____

Distinct mark or notch on PVC casing? (describe/give orientation): Black Marker on Top of PVC to the North

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC ____ inches

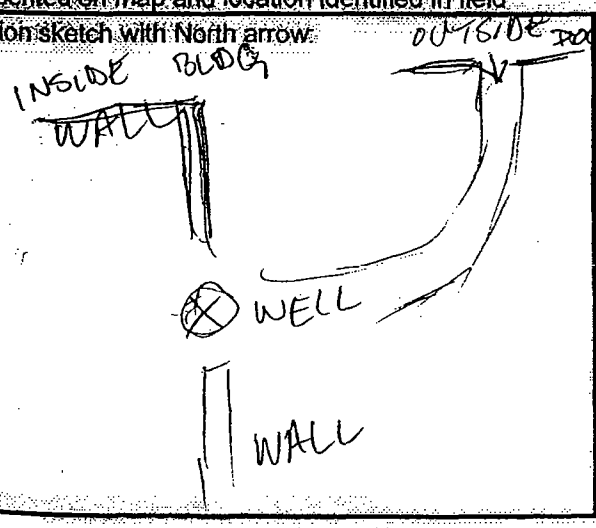
Depth to bottom of well: 19.78 feet Obstructions?: NONE

Immiscible phases present? YES/NO If yes, describe (including thickness) ____

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:



Describe unusual conditions: ____

Maintenance performed: ____

Recommended repairs: ____

Well Inspected by: JEFF SALA

1R10MW076A

KLEINFELDER

Additional Field Notes

Start Time: 940
Finish Time: 1015
Date of Calibration: 6/2/04

To:
From:

Personnel on Site: Jeff Sala, Terry Chambliss
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks: No markings on concrete, put outside ID on concrete
Pump running about 7.50 on Control Box

Reviewed by: Sarah Callahan
Date: 6/2/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: 1R10MW79A

Sheet 1 of 1

Personnel: Pete H. Dave N.

Day: Tuesday

Date: 6/1/04

Casing Volume = Gallons

Initial depth to water: 7.13 ft. below top of casing

(casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)) TD = 20.8

Organic Vapor Concentrations

Top of Casing: 0.1 ppm Background: 0.1 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Approx Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Sal PID/OVM (ppm)
1550 ~~1500~~	2	750ml	8.7	20	.70	0.3	7.3	-90UR	26	0.0
1556	6	750	9.0	20	.70	0.1	7.4	-94UR	26	0.0
1400	8	450	9.08	20	.70	0.1	7.4	-94UR	26	0.0
1405	11	450	9.2	20	.70	0.1	7.4	-90UR	25	0.0

After sampling and, if accessible, depth to bottom: 20.8 ft. below TOC Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	#3	PID	MiniRae	#3
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	33855	Other ORP		#3
Pump	Submersible	#3	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	
Metals				Chloride		
PCBs				Alkalinity		
Pesticides				Ethane		
SVOCs				Ethene		
TPH-e				Hydrogen		
TPH-p				TDS		
VOCs	X			TSS		

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: ~~0623H002~~ 0423H002 Sample Date/Time: 6/1/04 1610

QA/QC Sample(s)? ☐ None ☐ Field Dup ☒ MS/MSD

Sample Time 1610 Dup. Sample Number

Sample Depth (ft. below TOC): ~15

Reviewed by: Sarah Collier

Date: 6/1/04

Method of Extraction: ☒ Submersible Pump ☐ Peristaltic Pump ☐ Disposable Bailer

Method of Sampling: ☒ Submersible Pump ☐ Peristaltic Pump ☐ Disposable Bailer

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

TE: 6/1/04 WELL ID: 1R 10 MW 79A PARCEL: B

ll Completion (Check one): Monument____ or Flushmounted X
onument, height above ground or road surface: — inches

e and number of bolts on vault cover: 2 - 3/4"
ecific wrench required? YES/NO (describe): Socket 3/4"
iculty opening? YES/NO (describe):
ll locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
k brand name and lock number: Master Pro Series 6835
ndition of lock: poor

ernal Well ID: No (I marked "79A") Internal Well ID: No

scribe condition of (as applicable) the following:
ncrete pad and surrounding area: ok
ult lid, rubber seal, and vault: ok
tective casing and cover: ok
ll cap: ok
C/inner casing: ok
or or staining? (describe): No
sing diameter in inches (Circle one): 0.75 2 4 6 Other____
sing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____
tinct mark or notch on PVC casing? (describe/give orientation): Yes - black - North
venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC____ inches
pth to bottom of well: 20.8 feet Obstructions?:
niscible phases present? YES/NO If yes, describe (including thickness)
otograph taken: YES/NO

necessary, note discrepancies with well location
resented on map and location identified in field
cation sketch with North arrow:

Describe unusual conditions: Rotten egg smell to well water

Maintenance performed: marked "79A" w/ white spray paint on ground

Recommended repairs:

ell Inspected by: [signature]

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No: IR10MW80A

Sheet 1 of ___

Personnel: Pete Holland, Dave Nguyen

Day: Wednesday

Date: 6/2/04

Volume = Gallons

Initial depth to water: 6.58 ft. below top of casing

Casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.8 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Approx Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Sal ~~PID/OVM~~ (ppm)
0915	1	1200	7.2	20	.57	0.9	7.8	-70 UR	25	0.0
0918	4	1050	7.45	19	.56	0.3	7.9	UR	27	0.0
0921	7	1050	7.90	19	.55	0.2	7.9	UR	27	0.0
0924	10	1050	8.10	19	.54	0.1	7.9	UR	27	0.0
0927	13	1050	8.20	19	.54	0.1	7.9	UR	27	0.0

After sampling and, if accessible, depth to bottom: 19.90 ft. below TOC

Purged Dry? N

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	#3	PID	MiniRae	#3
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	#1T 30840	Other	DRR	#3
Pump		#3	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals				Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e				Hydrogen		Top (mg/L)		
TPH-p				TDS		Middle (mg/L)		
VOCs	X			TSS		Bottom (mg/L)		

Sample Number: ~~0623H003~~ 0423H003

Sample Date/Time: 6/2/04 0930

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time ___ Dup. Sample Number ___

Sample Depth (ft. below TOC): Approx 13

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Reviewed by: Sarah Allahn

Date: 6/2/04

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/2/14 WELL ID: JR10 MW 80A PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted X

If monument, height above ground or road surface: ____ inches

Size and number of bolts on vault cover: 2- 3/4"

Specific wrench required? YES/NO (describe): ____

Difficulty opening? YES/NO (describe): ____

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: Dolphin

Condition of lock: ok

External Well ID: None Internal Well ID: None

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: ok

Vault lid, rubber seal, and vault: ok

Protective casing and cover: ok

Well cap: ok

PVC/inner casing: ok

Odor or staining? (describe): No

Casing diameter in inches (Circle one): 0.75 2 4 6 Other____

Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____

Distinct mark or notch on PVC casing? (describe/give orientation): ____

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC ____ inches

Depth to bottom of well: ~20 feet Obstructions?: N

Immiscible phases present? YES/NO If yes, describe (including thickness): ____

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: ____

Maintenance performed: Spray painted "80A" on asphalt next to cristy box

Recommended repairs: ____

Well inspected by: [signature]

6A

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: 18 mv IR0TMW21A

Sheet ___ of ___

Personnel: B. Caldwell & D. Forks

Day: Monday

Date: 6/7/04

Casing Volume = 2.46 Gallons

Initial depth to water: 15.07 ft. below top of casing

[casing volume = 3.78 water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.1 ppm Background: 0.1 ppm

Groundwater Parameters

Start 1023 Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1026	1.5	500	15.36	17.1	1.59	-0.04	7.14	Ur	89	0.1
1029	3.0	500	15.35	17.5	1.59	-0.12	7.15	Ur	88	0.1
1032	4.5	500	15.31	17.6	1.61	-0.15	7.17	Ur	81	0.1
1035	6.0	500	15.19	17.8	1.61	-0.16	7.17	Ur	74	0.1
1038	7.5	500	15.20	17.8	1.62	-0.16	7.18	Ur	72	0.1
1041	9.0	500	15.21	17.8	1.62	-0.17	7.18	Ur	72	0.1

Water sampling and, if accessible, depth to bottom: 18.85 ft. below TOC

Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	U-10	PID	Mini Rae	104488
Turbidimeter	" "	" "	Filter Apparatus	—	—
Water Level Meter	Solonist	17954	Other ORP	Oakton Testr	#1
Pump	Typhoon	20123	Other —	—	—

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	
Metals	X			Chloride		
PCBs	X			Alkalinity		
Pesticides	X			Ethane		
SVOCs	X			Ethene		
TPH-e	X			Hydrogen		
TPH-p	X			~~TDS~~	~~X~~	PR 7/14/04
VOCs	X			TSS	X	
Cr 6+	X			~~Salinity~~	~~X~~	

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: ~~0624C016~~ 0424C016

Sample Date/Time: 6/7/04 1045

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): ~17.00 ft.

Reviewed by: Sarah Callahan

Date: 6/8/04

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/7/04 **WELL ID:** IR18MW21A **PARCEL:** B

Well Completion (Check one): Monument____ or Flushmounted X
If monument, height above ground or road surface: — inches

Size and number of bolts on vault cover: 2 - 9/16" bolts
Specific wrench required? YES/NO (describe): 9/16" socket
Difficulty opening? YES/NO (describe):
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: Masterlock Pro Series 6835
Condition of lock: good

External Well ID: IR18MW21A Internal Well ID: IR18MW21A

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: ok
Vault lid, rubber seal, and vault: no rubber
Protective casing and cover: ok
Well cap: ok
PVC/inner casing: ok
Odor or staining? (describe): None
Casing diameter in inches (Circle one): 0.75 2 4 6 Other____
Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____
Distinct mark or notch on PVC casing? (describe/give orientation): large notch on N of TOC
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC — inches
Depth to bottom of well: 18.85 feet Obstructions?: —
Immiscible phases present? YES/NO If yes, describe (including thickness)
Photograph taken: YES/NO

Describe unusual conditions: —

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Maintenance performed: —

Recommended repairs: —

Well Inspected by: Bryan Aldwell

6A

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR25MW17A

Sheet 1 of 1

Personnel: PR, JS

Day: Monday

Date: 8-2-04

Casing Volume = Gallons

Initial depth to water: 8.25 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Salinity ~~PID/OVM~~ (ppm)
1119	1.6	800		18.9	5.87	.25	7.09	UR	202	.31
1121	3.6	1000	9.03	19.0	6.00	.05	7.08	UR	198	.31
1123	5.2	800	9.35	19.2	5.95	.01	7.08	UR	195	.31
1124	6.0	800	9.55	19.2	5.93	.03	7.09	UR	200	.31
1126	8.4	1200	9.65	19.2	5.91	.07	7.09	UR	193	.31
1128	9.4	700	10.0	19.4	5.79	.02	7.10	UR	194	.30

After sampling and, if accessible, depth to bottom: 20.1 ft. below TOC

Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	305005	PID	MiniRae	104541
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	11928	Other ORP	ORP Tester Oakton	3
Pump	SS-Mega-Typhoon PRO		Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals				Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e				Hydrogen		Top (mg/L)		
TPH-p				TDS		Middle (mg/L)		
VOCs	X			TSS		Bottom (mg/L)		

Sample Number: 0432S063

Sample Date/Time: 1132 / 8/2/04

QA/QC Sample(s)? ☐ None ☒ ~~Field~~ Rinsate Dup ☐ MS/MSD

~~Dup.~~ Sample Time 1159 ~~Dup.~~ Sample Number IR25EB077

Sample Depth (ft. below TOC): 14.17

Reviewed by: Sarah Callahan

Date: 8/3/04

Method of Extraction:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

Method of Sampling:
- ☐ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 8/2/09 **WELL ID:** 1R25MW17A **PARCEL:** B

Well Completion (Check one): Monument ✓ or Flushmounted ____
If monument, height above ground or road surface: N/A inches

Size and number of bolts on vault cover: 2 bolts 3/4"
Specific wrench required? YES/NO (describe): no
Difficulty opening? YES/NO (describe): no
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: Masters 6835
Condition of lock: Good

External Well ID: 1R25MW17A Internal Well ID: 1R25MW17A (faint)

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: good
Vault lid, rubber seal, and vault: good
Protective casing and cover: good
Well cap: good
PVC/inner casing: rust staining
Odor or staining? (describe): flaky orange
Casing diameter in inches (Circle one): 0.75 2 4 6 Other N/A
Casing type (Circle one): PVC SS Other N/A Type of well cap: expandable PVC Other ____
Distinct mark or notch on PVC casing? (describe/give orientation): Y North
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC N/A inches
Depth to bottom of well: 20.1 feet Obstructions?: N/A
Immiscible phases present? YES/NO If yes, describe (including thickness) No
Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: ____

Maintenance performed: ____

Recommended repairs: ____

Well Inspected by: Patricia Rendon

6A

1R25MW017A

KLEINFELDER

Additional Field Notes

Start Time: 1058
Finish Time: 1204
Date of Calibration: 8/2/04

To:
From:

Personnel on Site: DS. PR, SC
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis
1132	3	VOAs		HCl	VOCs

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks:

Reviewed by: [signature]
Date: 8/3/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: JR25 MW37A

Sheet 1 of ___

Personnel: Dave Nguyen Pete Holland

Day: Tuesday

Date: 6/1/04

Casing Volume = Gallons

Initial depth to water: 6.85 ft. below top of casing

casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.0 ppm Background: 0.0 ppm

Groundwater Parameters

408 Time	Approx Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Sal ~~PID/OVM~~ (ppm)
~~350~~ pm	~ 0	1300	7.77	19	0.9	0.2	7.4	-97/UR	27	0.0
417	~ 4	1200	7.90	19	0.72	0.1	7.5	-99/UR	27	0.0
420	~ 8	"	8.00	19	.71	-0.0	7.5	-80/UR	26	0.0
1423	~11	"		19	.71	-0.0	7.5	-93/UR	26	0.0

After sampling and, if accessible, depth to bottom: 15.8 ft. below TOC Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	305905	PID	MiniRae	104517
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	33855	Other ORP		#3
Pump	Submersible	#3	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	
Metals				Chloride		
PCBs				Alkalinity		
Pesticides				Ethane		
SVOCs				Ethene		
TPH-e				Hydrogen		
TPH-p				TDS		
VOCs	X			TSS		

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: ~~0423 H001~~ 0423H001 IR10EB01b

Sample Date/Time: 6/1/04 - 1430

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time 1445 Dup. Sample Number ___

Sample Depth (ft. below TOC): ~11'

Reviewed by: [signature]

Date: 6/1/04

Method of Extraction: [X] Submersible Pump [ ] Peristaltic Pump [ ] Disposable Bailer

Method of Sampling: [X] Submersible Pump [ ] Peristaltic Pump [ ] Disposable Bailer

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/1/04 WELL ID: IR 25 MW 37A PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted X
If monument, height above ground or road surface: 0 inches

Size and number of bolts on vault cover: No bolts – all missing
Specific wrench required? YES/NO (describe): ?
Difficulty opening? YES/NO (describe): No
Well locked upon arrival? YES/NO (circled NO) Standing water in vault? YES/NO (circled NO) If yes, pumped out? YES/NO
Lock brand name and lock number: NA
Condition of lock: None present

External Well ID: None Internal Well ID: on casing lid: IR25 MW37A

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: damaged
Vault lid, rubber seal, and vault: No good / damaged / needs replacing
Protective casing and cover: Not good
Well cap: good
PVC/inner casing: good
Odor or staining? (describe): None
Casing diameter in inches (Circle one): 0.75 2 (4) 6 Other____
Casing type (Circle one): (PVC) SS Other____ Type of well cap: expandable (PVC) Other____
Distinct mark or notch on PVC casing? (describe/give orientation):
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC____ inches
Depth to bottom of well: ____ feet Obstructions?:
Immiscible phases present? YES/NO If yes, describe (including thickness)
Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field
Location sketch with North arrow:

Describe unusual conditions: This well crisy box was damaged in March by another contractor. At the time, we saw it happen. Since then no mitigation has occurred.

Maintenance performed:

Recommended repairs:

Well Inspected by: [signature]

6A

1R25MW37A

KLEINFELDER

Additional Field Notes

Start Time:_____ To:_____
Finish Time:_____ From:_____
Date of Calibration:_____

Personnel on Site: B. Metcalfe/ P. Hollard
Subcontractors on Site:_____

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:_____
Unusual Events/Readings:_____
Any Other Problems:_____

Remarks:_____

Reviewed by: _____
Date:_____

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR26MW41A

Sheet 1 of 1

Personnel: B. Gober, P. Durante

Day: MON

Date: 6-7-04

Volume = Gallons

Initial depth to water: 7.12 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 3.4 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	~~PID/OVM (ppm)~~ Sal ppt.
1115	0	500	7.39	19.7	1.38	0.06	6.84	UR	13	0.06
1120	2.5	500	7.64	19.1	1.55	0.00	6.83	UR	19	0.07
1125	5.0	500	7.65	19.3	1.45	0.02	6.85	UR	15	0.06

After sampling and, if accessible, depth to bottom: 20.7 ft. below TOC

Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	HORIBA U10	305006	PID	MINIRAE	104512
~~Turbidimeter~~ ORP	OAKTON		Filter Apparatus		
Water Level Meter	SOLINST101	33855	Other		
Pump	PROACTIVE		Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals CLP	X			Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e	X			Hydrogen		Top (mg/L)		
TPH-p	X			TDS		Middle (mg/L)		
VOCs CLP	X			TSS	X	Bottom (mg/L)		
Cr 6+	X							

Sample Number: PR7-16-04 ~~06246018~~ 04246018

Sample Date/Time: 6-7-04 / 1125

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): 13.9

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Reviewed by: Sarah Callahan

Date: 6/8/04

KLEINFELDER

MONITORING WELL INSPECTION FORM
Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6-7-04 WELL ID: IR28MW41A PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted ✓
If monument, height above ground or road surface: ____ inches

Size and number of bolts on vault cover: 9/16" - 2 BOLTS
Specific wrench required? YES/NO (describe): 9/16" SOCKET
Difficulty opening? YES/NO (describe):
Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO
Lock brand name and lock number: MASTER 6835
Condition of lock: OK

External Well ID: Yes Internal Well ID: Yes

Describe condition of (as applicable) the following:
Concrete pad and surrounding area: OK
Vault lid, rubber seal, and vault: OK
Protective casing and cover: OK
Well cap: OK
PVC/inner casing: OK
Odor or staining? (describe): NONE
Casing diameter in inches (Circle one): 0.75 2 4 6 Other____
Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____
Distinct mark or notch on PVC casing? (describe/give orientation): MARK ON NORTH SIDE
Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC____ inches
Depth to bottom of well: 20.7 feet Obstructions?: NO
Immiscible phases present? YES/NO If yes, describe (including thickness)
Photograph taken: YES/NO

Describe unusual conditions:

If necessary, note discrepancies with well location represented on map and location identified in field
Location sketch with North arrow:

Maintenance performed:

Recommended repairs:

Well Inspected by: BRIAN GOBER

CA

1R26MW41A

KLEINFELDER

Additional Field Notes

Start Time: 1115
Finish Time: 1125
Date of Calibration: 6-7-04

To:
From:

Personnel on Site: B. Gober, A. Durante
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis
1125	6	VOA	40ml	HCl	
1125	2	AMBER	1L	—	
1125	2	POLY	500ml	—	
1125	1	POLY	500ml	HNO_3	

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks:

Reviewed by: Sarah Callahan
Date: 6/8/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

IR26MW46A

~~ERAMW~~

B. Gober, A. Durante

Sheet 1 of 1

Day: Mon. Date: 6-7-04

Volume = Gallons

Initial depth to water: 6.68 ft. below top of casing

Volume = water column height (ft) x 0.03 gal/ft (0.75-inch well)

gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
[illegible]	0	500	6.68	18.5	3.67	9.77	6.74	UR	0	0.43
[illegible]	2.5	500	7.70	18.2	7.73	0.02	6.78	UR	0	0.41
[illegible]	5	500	8.10	18.2	7.60	0.02	6.75	UR	0	0.42
[illegible]	7.5	500	8.49	18.3	7.59	0.02	6.75	UR	0	0.41

Water sampling and, if accessible, depth to bottom: 18.8 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba U16	305006	PID	MiniRae	104512
~~Turbidimeter~~ ORP	Oakton		Filter Apparatus		
Water Level Meter	Solinst 101	33855	Other		
Pump	Proactive		Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals CLP	X As, Cr, Cu,	Pb, Mn, Hg, Zn		Chloride		Fe^{2+} (mg/L)		
PCBs	Aroclor 1260			Alkalinity		Mn^{2+} (mg/L)		
Pesticides	Chlordane			Ethane		Filter where turbidity > 50 NTU		
SVOCs	X BaA, BaP,	BbF, BkF, chrysene,	DahA, IP	Ethene		Downhole Dissolved Oxygen		
TPH-e				Hydrogen		Top (mg/L)		
TPH-p				TDS		Middle (mg/L)		
VOCs				TSS	X	Bottom (mg/L)		
Cr 6+	X							

Sample Number: 12-7-1609 ~~0624G015~~ 0424G015 Sample Date/Time: 6/7/04/0905

QA/QC Sample(s)? ☐ None ☒ Field Dup. 12-7-1609 ☐ MS/MSD

Dup. Sample Time _____ Dup. Sample Number ~~0624G016~~ 0424G016

Sample Depth (ft. below TOC): 13.7 / 0910

Method of Extraction: ☒ Submersible Pump ☐ Peristaltic Pump ☐ Disposable Bailer

Method of Sampling: ☒ Submersible Pump ☐ Peristaltic Pump ☐ Disposable Bailer

Reviewed by: Sarah Callahan

Date: 6/8/04

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/7/03 WELL ID: IR26MW46A PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted ✓

If monument, height above ground or road surface: ____ inches

Size and number of bolts on vault cover: 3/4" - 2 BOLTS

Specific wrench required? YES/NO (describe): 3/4" SOCKET

Difficulty opening? YES/NO (describe): ~~MASTER 6835~~ 6703

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: MASTER 6835

Condition of lock: OK

External Well ID: Yes Internal Well ID: Yes

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: OK

Vault lid, rubber seal, and vault: OK

Protective casing and cover: NA

Well cap: OK

PVC/inner casing: OK

Odor or staining? (describe): SOME ODOR

Casing diameter in inches (Circle one): 0.75 2 4 6 Other____

Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____

Distinct mark or notch on PVC casing? (describe/give orientation): MARK ON NORTH SIDE

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC____ inches

Depth to bottom of well: 18.8 feet Obstructions? NO

Immiscible phases present? YES/NO If yes, describe (including thickness):

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions:

Maintenance performed:

Recommended repairs:

Well Inspected by: BRIAN GOOPER

6A

1R26MW46A

KLEINFELDER

Additional Field Notes

Start Time: 0850
Finish Time: 0905
Date of Calibration: 6-7-04

To:
From:

Personnel on Site: B. Gober, A. Durante
Subcontractors on Site: N/A

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis
0905	4	AMBER	1L	—	
0905	2	poly	500ml	—	
0905	1	poly	500ml	HNO_3	
0910	4	AMBER	1L	—	DUP
0910	2	poly	500ml	—	↓
0910	1	poly	500ml	HNO_3	↓

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks:

Reviewed by: [signature]
Date: 6/8/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR26MW47A

Sheet 1 of ___

Personnel: J. SALA / T. CHAMBLISS

Day: Monday

Date: 6/7/04

[illegible]ing Volume = Gallons

Initial depth to water: 8.1 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.1 ppm Background: 0.1 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	SAL ~~PID/OVM~~ (ppm)
1010	4.8	1850	8.25	17.1	17.7	3.03	7.54	80	212	1.04
1012	9.2	2250	8.26	17.1	17.7	3.04	7.55	84	212	1.04
1015	14.0	1650	8.24	17.0	17.7	2.94	7.55	80	212	1.04
1018	16.2	700	8.10	17.3	17.7	2.80	7.54	97	212	1.04

After sampling and, if accessible, depth to bottom: 15.52 ft. below TOC

Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	306007	PID	Mini RAE	104492
Turbidimeter	↓	↓	Filter Apparatus		
Water Level Meter	SoLinst	11928	Other ORP	Oakton	#5
Pump	SS-Mega ~~Proz~~ Typhoon	Pro20111	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern

Off-Site Lab

Metals CLP	X As, Cr, Cu, Pb, Mn, Hg, Zn		
PCBs CLP	Arochlor 1260		
Pesticides CLP	Chlordane		
SVOCs CLP	X BaA, BaP, BbF, BkF, chrysene, DahA, IP		
TPH-e			
TPH-p			
VOCs			
~~Cr 6+~~	X PR 7/8/04		

Fate and Transport Data

Off-Site Lab

Chloride	
Alkalinity	
Ethane	
Ethene	
Hydrogen	
TDS	
TSS	X
Hex Cr	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: PR 7-16-04 ~~0624S016~~ 0424S016

Sample Date/Time: 6/7/04 / 1030

QA/QC Sample(s)? [ ] None [X] Field Dup ~~0624S017~~ PR 7/16/04 [ ] MS/MSD

Dup. Sample Time 1040 Dup. Sample Number ~~0624S017~~ PR 7/16/04 0424S017

[illegible]ple Depth (ft. below TOC): 11.8

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Reviewed by: Sarah Callahan

Date: 6/8/04

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/2/04 WELL ID: IR26MW47A PARCEL: B

Well Completion (Check one): Monument ____ or Flushmounted 7

If monument, height above ground or road surface: N/A inches

Size and number of bolts on vault cover: 3/4" - 2 Bolts

Specific wrench required? YES/NO (describe): Sockets

Difficulty opening? YES/NO (describe): N/A

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: Master Lock 6873

Condition of lock: Good

External Well ID: IR26MW47A Internal Well ID: IR26MW47A

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: Good

Vault lid, rubber seal, and vault: Good

Protective casing and cover: Good

Well cap: Good

PVC/inner casing: Good

Odor or staining? (describe): None

Casing diameter in inches (Circle one): 0.75 2 4 6 Other N/A

Casing type (Circle one): PVC SS Other N/A Type of well cap: expandable PVC Other

Distinct mark or notch on PVC casing? (describe/give orientation): Black mark and Notch to the North

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC N/A inches

Depth to bottom of well: 15.52 feet Obstructions?: N/A

Immiscible phases present? YES/NO If yes, describe (including thickness): N/A

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions:

Maintenance performed:

Recommended repairs:

Well Inspected by: Jeff Sala

6A

1R26MW47A

KLEINFELDER

Additional Field Notes

Start Time: 1000
Finish Time: 1057
Date of Calibration: 6/7/04

To:
From:

Personnel on Site: J. SALA / T. CHAMBLISS
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks:

Reviewed by: [signature]
Date: 6/8/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: TR26MW48A

Sheet 1 of ___

Personnel: J. SALA / T. CHAMBLISS

Day: MONDAY

Date: 6/7/04

Casing Volume = Gallons

Initial depth to water: 6.35 ft. below top of casing

Casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.2 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	SAL ~~PID/OVM~~ (ppm)
911	4.8	1650	8.10	18.0	18.1	0.06	6.75	-99	211	1.06
913	7.2	1200	8.75	18.2	18.0	0.03	7.66	-99	211	1.06
916	10.3	1000	9.14	18.3	17.9	0.02	7.65	-99	211	1.06
919	14.2	1300	9.30	18.4	18.0	0.00	7.63	-99	212	1.06

After sampling and, if accessible, depth to bottom: 19.62 ft. below TOC

Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	306007	PID	Mini RAE	104492
Turbidimeter	↓	↓	Filter Apparatus		
Water Level Meter	Solinst	11928	Other ORP	Oakton	#5
Pump	SS-Mega Typhoon	Pro 20111	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern

Off-Site Lab

Metals CLP	X As, Cr, Cu,	Pb, Mn, Hg, Zn	
PCBs	Arochlor 1260		
Pesticides	Chlordane		
SVOCs	X BaA, BaP,	BbF, BkF, chrysene,	DahA, IP
TPH-e			
TPH-p			
VOCs			
~~Cr 6+~~	~~X~~		

Fate and Transport Data

Off-Site Lab

Chloride	
Alkalinity	
Ethane	
Ethene	
Hydrogen	
TDS	
TSS	X
HexCr	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: ~~0624S018~~ 0424S018

Sample Date/Time: 6/7/04 / 932

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time N/A Dup. Sample Number N/A

Sample Depth (ft. below TOC): 13.0

Reviewed by: Sarah Callahan

Date: 6/8/04

Method of Extraction:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [X] Submersible Pump
- [ ] Peristaltic Pump
- [ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/7/04 WELL ID: IR26MW48A PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted X

If monument, height above ground or road surface: N/A inches

Size and number of bolts on vault cover: 3/4" - 2 Bolts

Specific wrench required? YES/NO (describe): Socket

Difficulty opening? YES/NO (describe): N/A

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: Master Lock 6835

Condition of lock: GOOD

External Well ID: IR26MW48A Internal Well ID: NONE

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: good

Vault lid, rubber seal, and vault: GOOD

Protective casing and cover: GOOD

Well cap: GOOD

Pi[illegible]inner casing: GOOD

C[illegible]or staining? (describe): NONE

Casing diameter in inches (Circle one): 0.75 2 4 6 Other____

Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____

Distinct mark or notch on PVC casing? (describe/give orientation): NONE Back Hook and Notch to Porch

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC N/A inches

Depth to bottom of well: 19.62 feet Obstructions?: N/A

Immiscible phases present? YES/NO If yes, describe (including thickness): N/A

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions:

Maintenance performed:

Recommended repairs:

Well Inspected by: Jeff Sala

6A

1R26MW048A

KLEINFELDER

Additional Field Notes

Start Time: 900
Finish Time: 950
Date of Calibration: 6/7/04

To:
From:

Personnel on Site: J. SALA / T. CHAMBLESS
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks:

Could not run pump at low out put because it would stop pumping

Reviewed by: Sarah Callahan
Date: 6/8/04

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: IR46MW37A

Sheet ___ of ___

Personnel: B. Caldwell & D. Forks

Day: Tuesday

Date: 6/8/04

Casing Volume = 8.93 Gallons

13.70 x 0.652

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Initial depth to water: 7.20 ft. below top of casing

Organic Vapor Concentrations

Top of Casing: 0.1 ppm Background: 0.1 ppm

Groundwater Parameters

Start 1012

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1015	1.5	500	7.50	18.6	2.37	-0.07	8.56	Ur	199	0.1
1018	3.0	500	7.71	18.5	2.37	-0.11	8.57	Ur	198	0.1
1021	4.5	500	7.72	18.6	2.37	-0.15	8.57	Ur	191	0.1
1024	6.0	500	7.75	18.6	2.35	-0.14	8.58	Ur	189	0.1
1027	7.5	500	7.76	18.6	2.32	-0.15	8.58	Ur	196	0.1

After sampling and, if accessible, depth to bottom: 20.90 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba	U-10	PID	Mini Rae	104488
Turbidimeter	Horiba	U-10	Filter Apparatus	—	—
Water Level Meter	Solonist	19754	Other ORP	Calcon Tstr	#1
Pump	Typhoon	20123	Other	—	—

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab			Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Metals cup	X			Chloride		Fe^{2+} (mg/L)		
PCBs				Alkalinity		Mn^{2+} (mg/L)		
Pesticides				Ethane		Filter where turbidity > 50 NTU		
SVOCs				Ethene		Downhole Dissolved Oxygen		
TPH-e	X			Hydrogen		Top (mg/L)		
TPH-p	X			TDS		Middle (mg/L)		
VOCs cup	X			TSS	X	Bottom (mg/L)		
Cr 6+	X							

Sample Number: ~~0624C021~~ 0424C021 Sample Date/Time: 6/8/04 1030

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): ~14.00

Reviewed by: [signature]

Date: 6/8/04

Method of Extraction:

[X] Submersible Pump

[ ] Peristaltic Pump

[ ] Disposable Bailer

Method of Sampling:

[X] Submersible Pump

[ ] Peristaltic Pump

[ ] Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6/8/04 WELL ID: IR46MW37A PARCEL: B

Well Completion (Check one): Monument ____ or Flushmounted X

If monument, height above ground or road surface: — inches

Size and number of bolts on vault cover: 2 - 3/4" bolts

Specific wrench required? YES/NO (describe): 3/4" bolts

Difficulty opening? YES/NO (describe):

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO

Lock brand name and lock number: Masterlock Pro Series 6385

Condition of lock: Good

External Well ID: IR46MW37A Internal Well ID: IR46MW37A

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: OK

Vault lid, rubber seal, and vault: OK

Protective casing and cover: OK

Well cap: OK

PVC/inner casing: OK

Odor or staining? (describe): None

Casing diameter in inches (Circle one): 0.75 2 4 6 Other ____

Casing type (Circle one): PVC SS Other ____ Type of well cap: expandable ~~PVC~~ Other ____

Distinct mark or notch on PVC casing? (describe/give orientation): N TOC ink

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC — inches

Depth to bottom of well: 20.86 feet Obstructions? —

Immiscible phases present? YES/NO If yes, describe (including thickness):

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: —

Maintenance performed: —

Recommended repairs: —

Well Inspected by: Bryan Caldwell

6A

KLEINFELDER

MONITORING WELL SAMPLING SHEET

Well No.: PA50MW01A

Sheet 1 of 1

Personnel: S. Titus, M. Carrington

Day: Tuesday

Date: 6-8-04

Casing Volume = Gallons

Initial depth to water: 7.62 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations

Top of Casing: 0.1 ppm Background: 0.1 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Sal ~~PID/OVM (ppm)~~
1108	1	250	7.62	19	11	0.4	7.4	-88	7	0.6
1112	2	250	7.62	19	10	0.5	7.4	-82	3	0.6
1114	2.5	250	7.62	19	10	0.5	7.4	-80	3	0.5
1120	4	250	7.61	19	9	0.4	7.4	-58	1	0.5
1122	4.5	250	7.61	19	10	0.4	7.4	-58	1	0.5
1124	5	250	6.55	19	10	0.4	7.4	-54	1	0.5

After sampling and, if accessible, depth to bottom: 15.84 ft. below TOC

Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	Horiba U10	301010	PID	MiniRae	104541
Turbidimeter			Filter Apparatus		
Water Level Meter	Solinst	2938	Other ORP	Oakton	35650-02
Pump	ProActive	PRO 20112	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern

Off-Site Lab

Metals cup	X		
PCBs			
Pesticides			
SVOCs			
TPH-e	X		
TPH-p	X		
VOCs cup	X		
Cr 6+	X		

Fate and Transport Data

Off-Site Lab

Chloride	
Alkalinity	
Ethane	
Ethene	
Hydrogen	
TDS	
TSS	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: ~~0624T020~~ 0424T020

Sample Date/Time: 6-8-04 @ 1128

QA/QC Sample(s)? ☐ None ☒ Rinsate ~~Field Dup~~ PA50EB039 ☐ MS/MSD

Sample Time _____ Dup. Sample Number _____

Sample Depth (ft. below TOC): 11.73

Reviewed by: Sarah Callahan

Date: 6/8/04

Method of Extraction:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

Method of Sampling:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

KLEINFELDER

MONITORING WELL INSPECTION FORM

Groundwater Monitoring Plan, Hunters Point Shipyard, San Francisco, California

DATE: 6-8-04 WELL ID: PA50MW01A PARCEL: B

Well Completion (Check one): Monument____ or Flushmounted Y

If monument, height above ground or road surface: ____ inches

Size and number of bolts on vault cover: 2 3/4"

Specific wrench required? YES/NO (describe): 3/4" socket

Difficulty opening? YES/NO (describe):

Well locked upon arrival? YES/NO Standing water in vault? YES/NO If yes, pumped out? YES/NO - well below TOC

Lock brand name and lock number: Master 6835

Condition of lock: Rusted

External Well ID: PA50MW01A Internal Well ID: PA50MW01A

Describe condition of (as applicable) the following:

Concrete pad and surrounding area: Pad cracked - well box a bit recessed

Vault lid, rubber seal, and vault: good - seal stuck to lid

Protective casing and cover:

Well cap: good but not secured on casing

PVC/inner casing: good

Odor or staining? (describe): None

Casing diameter in inches (Circle one): 0.75 2 4 6 Other____

Casing type (Circle one): PVC SS Other____ Type of well cap: expandable PVC Other____

Distinct mark or notch on PVC casing? (describe/give orientation): yes - North

Air venting hole on PVC/inner casing? YES/NO If yes, distance from inner TOC ____ inches

Depth to bottom of well: 15.84 feet Obstructions?: None

Immiscible phases present? YES/NO If yes, describe (including thickness):

Photograph taken: YES/NO

If necessary, note discrepancies with well location represented on map and location identified in field

Location sketch with North arrow:

Describe unusual conditions: None

Maintenance performed: None

Recommended repairs: None

Well Inspected by: Suni Titus

PA50MW01A

KLEINFELDER

Additional Field Notes

Start Time: ~~0825~~ 6/8/04 1025
Finish Time: 1200
Date of Calibration:

To:
From:

Personnel on Site: STitus, M. Cunnington
Subcontractors on Site:

Sample Description:

Time	Container #	Cont. Type	Volume	Preservative	Type of Analysis

QA/QC Sample Numbers:
Unusual Events/Readings:
Any Other Problems:

Remarks:
Pump hung at 11.73' below TOC.
Started pumping (w/ engineer) at 1100.
Samples collected @ 1128
Duplicate samples collected @ 1145

Reviewed by: Joseph Callahan
Date: 6/8/04

APPENDIX C

Chain-of-Custody Records for Samples, April to June 2004 Sampling Event

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15681

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: HuntersPoint / 41330
Purchase Order Number: 41330
Sampler (Print): Patricia Renton
Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Analysis Requested/Method Number: VOC-8260B

6/3/04

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOC-8260B										Comments
0623G004	1R28MW173B	6/2/04	1335	L	3	X										
1R28EB021	1R28MW173B	6/2/04	1400		3	X										
0623G005	1R28MW309B		1535		3	X										
0623T004	1R28MW268A		1331		3	X										
1R28EB020	1R28MW268A		1347		3	X										
0623T005	1R28MW270A		1511		3	X										
0623H005	1R28MW349B		1340		3	X										
0623H006	1R28MW353B		1510		3	X										
0623H007	1R28MW353B		1510		3	X										duplicate
0623C005	1R28MW308A		1353		3	X										

6/3/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
- [x] Standard (2-3 week)
- [ ] One week
- [ ] 24-48 hour

Sample Disposal:
- [ ] Return to client
- [ ] Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/3/04	1445					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15689

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals-CLP	Hex Chrom 7196A	TPHE 8015B	TSS 160.2							
0623T006	1R06MW45A	6/3/04	1030	L	5	X	X	X	X							
0623T007	1R07MW24A	↓	1146	↓	5	X	X	X	X							

6/3/04

PR 6/3/04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/3/04	1445					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15688

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hunter's Point / 41330	Patricia Renton		Carrier:
Purchase Order Number: 41330	Sampler (Signature): Patricia Renton		Waybill No.:
			Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs-CLP	TPHp 8015B									
0623T006	1R06MW45A	6/3/04	1030	L	6	X	X									CLP
0623T007	1R07MW24A	↓	1148	↓	6	X	X									

6/3/04 [illegible]

TPR 6/3/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/3/04	1445					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15686

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped
Hunters Point/41330	Patricia Renton	Carrier:
Purchase Order Number	Sampler (Signature)	Waybill No.:
41330	Patricia Renton	Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals-Cup 6010/3846 6/7/04	Hex Chrom 7196A	TPH e 8015B	TSS 160.2							
0623G007	1R07MW26A	6/3/04	1025	L	5	X	X	X	X							

6/3/04

PR 6/3/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/3/04	1445					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. Nº 15687

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415.822.2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunter's Point/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals-CLP 6/10/04	Hex Chrom 7196A	TPHe 8015B	TSS 160.2	SVOCs 8270C	Pest-CLP 6/7/04	PCBs-CLP 6/7/04					Date Shipped:
0623C006	1R07MW23A	6/3/04	0930	L	5	X	X	X	X								Carrier:
0623C007	1R06MW42A	6/3/04	1150	L	8	X	X	X	X	X	X	X					Waybill No.:
																	Comments:

PR 6/3/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/3/04	1445					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

COC No. 15683

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415-822-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: Metal CLP 6010 SW 6/7/04; Hex Chrom 7196A; TPHe 8015B; TSS 160.2

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metal CLP 6010 SW 6/7/04	Hex Chrom 7196A	TPHe 8015B	TSS 160.2								
0623G006	1R07MW20A1	6/3/04	0900	L	5	X	X	X	X								
0623H008	1R07MW25A	↓	0915	↓	5	X	X	X	X								
0623H009	1R07MW19A	↓	1015	↓	5	X	X	X	X								

6/3/04

PR 6/3/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/3/04	1445					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15685

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 877 7253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped
Hunters Point/41330	Patricia Renton	Carrier:
Purchase Order Number: 41330	Sampler (Signature): Patricia Renton	Waybill No.:
		Comments:

Analysis Requested/Method Number: 6/3/04

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs 6260B	TPHP 8015B	VOCs CLP								Comments
0623G007	1R07MW26A	6/3/04	1025	L	6	X	X	X								CLP
1R07TB012	1R07		—		3	X		X								CLP
1R07TB013	1R07		—		3		X									~~Do not analyze~~ STET 6/3/04
0623S006	1R07MW21A1		0930		6	X	X	X								CLP
0623S007	1R07MW27A		1105		6	X	X	X								CLP
0623H010	1R28MW190F		1140		3	X										
0623G008 8vl 6/4/04	1R28MW216F		1145		3	X										
1R28EB022	1R28MW216F		1200		3	X										
0623C006	1R07MW23A		0930		6	X	X	X								CLP
0623C007	1R06MW42A		1150		6	X	X	X								CLP

6/3/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
PR 6.3.04	[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour	[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/3/04	1445					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15682

Report to: (PLEASE PRINT)	Invoice to: (PLEASE PRINT)
Company Name: Kleinfelder	Company Name: Kleinfelder
Phone: 415 882 2253	Phone:
Address:	Address:
Fax:	Fax:
Attn:	Attn:

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped
Hunters Point/41330	Patricia Rewton		Carrier:
Purchase Order Number: 41330	Sampler (Signature): Patricia Rewton		Waybill No.:
			Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs-8260B	TPH-P 8015B	VOCs-CLP							
0623C004	1R28MW17B	6/2/04	1500	L	3	X									
1R28EB018	1R28MW17B		1525		3	X									
0623S004	1R28MW353A		1520		3	X									
1R28EB019	1R28MW255F		1417		3	X									
0623S005	1R28MW255F		1355		3	X									
1R28TB010	1R28		—		3	~~X~~		X							CLP
X 1R07TB011	1R07	6/3/04	—		3		X								
0623G006	1R07MW20A1		0900		6	~~X~~	X	X							CLP
0623H008	1R07MW25A		0915		6	~~X~~	X	X							CLP
0623H009	1R07MW19A		1015		6	~~X~~	X	X							CLP

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Rewton	6/3/04	1445					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15678

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415-822-2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point/41330
Sampler (Print): Patricia Renton
Purchase Order Number: 41330
Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Analysis Requested/Method Number: VOCs-CLP; VOCs-8260B; SVOCs; Hg-7470; Hg-7470*; 6/2/04

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs-CLP	VOCs-8260B	SVOCs	Hg-7470	Hg-7470*						Comments
06235001	IR10MW33A	6/1/04	1555	L	5	X		X								SVOC's for 1,4-Dioxane only
IR10EB015	IR10MW33A		1640	L	5	X		X								SVOC's for 1,4-Dioxane only
06236001	IR10MW59A		1540		3	X										
IR10EB014	IR10MW59A		1630		3	X										
06237001	IR28MW211F		1508		~~4~~ 3		X		*	X						* Hold on analyzing for Hg
IR28EB012	IR28MW211F		1553		~~4~~ 3		X		*	X						* Hold on analyzing for Hg
06238001	IR28MW311A		1600		3		X									
IR28EB013	IR28MW311A		1625		3		X									
06239001	IR25MW37A		1430		3	X										
IR25EB016	IR25MW37A		1445		3	X										IR25EB016

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour

Sample Disposal:
[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/2/04	1645					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15679

Report to (PLEASE PRINT)		Invoice to (PLEASE PRINT)	
Company Name: Kleinfelder	Phone: 415 882 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Reinton	41330	Patricia Reinton

Analysis Requested/Method Number: VOCs-CLP; VOCs-8260B

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs-CLP	VOCs-8260B	Comments
0623H002	IR10MW79A	6/1/04	~~4:10pm~~	L	12		X	time: 4:10pm MS/MSD
IR10TB008	IR10	6/1/04	—	L	3	X	X	VOCs-CLP only
0623H003	IR10MW80A	6/2/04	0930	L	3		X	time 0930
0623H004	IR28MW17A	6/2/04	1050	L	3		X	
IR28EB017	IR28MW17A	6/2/04	1100	L	3		X	

6/2/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
- [x] Standard (2-3 week)
- [ ] One week
- [ ] 24-48 hour

Sample Disposal:
- [ ] Return to client
- [ ] Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Reinton	6/2/04	1445					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175

Fax: (559) 275-4422

C.O.C. № 15680

Report to: PLEASE PRINT
Company Name: Kleinfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

Invoice to: PLEASE PRINT
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point / 41330
Purchase Order Number: 41330
Sampler (Print): Patricia Renton
Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Analysis Requested/Method Number: VOCs 8260B

6/2/09

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs 8260B								Comments
0623G002	1R10MW71A	6/2/09	0915	L	3	X								
0623G003	1R28MW140F		1105		3	X								
0623T002	1R10MW61A		0933		3	X								
0623T003	1R28MW159A		1118		3	X								
0623C002	1R10MW62A		0938		3	X								
0623C003	1R28MW122A		1115		3	X								
0623S002	1R10MW76A	6/2/09	1005		3	X								1R10MW76A Sal 6/2/09
0623S003	1R28MW150A		1145		3	X								1R10MW75A Sal 6/2/09
1R28TB009	1R28		—		3	X								

6/2/09

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour

Sample Disposal:
[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/2/09	1445					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15667

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415 882-2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point / 41330
Sampler (Print): Patricia Renton
Purchase Order Number: 41330
Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs - 8260B										Comments
0623S011	1R28MW396A	6/4/04	0820	L	3	X										
0623S012	1R28MW396A		0820		3	X										duplicate
0623S013	1R28MW396B		0905		3	X										
1R28EB027	1R28MW396B		0925		3	X										
0623S014	1R28MW315F		1040		~~3~~ 5	X										
0623G012	1R28MW398A		0810		3	X										
0623G013	1R28MW398B		0940		3	X										
1R28EB028	1R28MW398B		1115		3	X										
0623T011	1R28MW395F		0830		9	X										MS/MSD
0623T012	1R28MW397B		0950		3	X										

Analysis Requested/Method Number: 6/4/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☐ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/4/04	1500					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15671

PLEASE PRINT

Report to
Company Name: Kleinfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

Invoice to
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point 141330
Purchase Order Number: 141330
Sampler (Print): Patricia Renton
Sampler (Signature): Patricia Renton

Analysis Requested/Method Number: VOCs-8260B

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs-8260B
C623C013	IR28MW272A	6-4-04	1400	L	3	X

PR 6/4/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/4/04	1500					

Relinquished by:	Date	Time	Received by	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15664

Report to: (PLEASE PRINT)	Invoice to: (PLEASE PRINT)
Company Name: Kleinfelder	Company Name: Kleinfelder
Phone: 415-822-2253	Phone:
Address:	Address:
Fax:	Fax:
Attn:	Attn:

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunter's Point / 41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: SVOCs 8270C; Salinity; TRS; TSS 160.2

Date Shipped:
Carrier:
Waybill No.:
Comments:

6/4/04

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	SVOCs 8270C	Salinity	TRS	TSS 160.2	Comments
0623H011	1R28MW300F	6/3/04	1345	L	2	X				* only analyze for 1,4-Dioxane
0623S008	1R28MW221A	↓	1310		1		X	X		
1R28EB0~~0~~25 (6/1/04)	1R28MW221A	↓	1335		1		X	X		1R28EB025
0623S009	1R28MW221B	↓	1415		1		X	X		
0623S010	1R28MW221B	↓	1420		1		X	X		DUPLICATE
~~TR25~~ (6/4/04)										

6/4/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
Patricia Renton	6-4-04	1500					

White: Return to client with report. Yellow: Laboratory Copy. Pink: Sampler.

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

COC № 15666

Report to (PLEASE PRINT)		Invoice to (PLEASE PRINT)	
Company Name: Kleinfelder	Phone: 415-822-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped
Hunters Point/41330	Pamela Llewellyn		Carrier:
Purchase Order Number: 41330	Sampler (Signature): Pamela Llewellyn		Waybill No.:
			Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	TPHe 8015B									
0623T008	1R28MW172F	6-3-04	1430	L	2	X									
0623T009	1R28MW172E	6-3-04	1430	L	2	X									Duplicate

6/4/04 PJL

PJL 6/4/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
Pamela Llewellyn	6/4/04	1146					

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15663

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415-822-2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point/41330
Sampler (Print): Patricia Renton
Purchase Order Number:
Sampler (Signature): Patricia Renton

Analysis Requested/Method Number

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs 8260B	VOCs-CLP Low Level	TPH-8015							
0623H011	1R28MW300F	6-3-04	1345	L	3	X									
0623H012	1R28MW189F	6-3-04	1435		3	X									
1R28EB023	1R28MW189F		1450		3	X									
0623G009	1R28MW217A		1335		3	X									
0623G010	1R28MW217A		1340		3	X									duplicate
0623G011	1R28MW287A		1515		3	X									
0623T008	1R28MW172F		1430		6	X		X							
~~0623T009~~	~~1R28MW172F~~		~~1430~~		~~3~~	~~X~~									~~DUPLICATE~~
0623T010	PA28P04A		1605		3	X									PA28P04A
PA28EB024	PA28P04A		1617		3	X									

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
Patricia Renton	6-4-04	1500					

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

page 2 of 2

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15665

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs-8260B	VOCs-CLP Low Level	TPHp 8015									Comments
0623S008	1R28MW221A	6-3-04	1310	L	3	X											
1R28EB025	1R28MW221A		1335		3	X											
0623S009	1R28MW221B		1415		3	X											
0623S010	1R28MW221B		1420		2	X											DUPLICATE
0623C008	1R10MW14A		1400		9		X										MS/MSD
0623C009	1R10MW13A1		1505		3		X										
~~0~~ 1R10EB026	1R10MW13A1		1530		3		X										
1R10TB013	1R10	6-4-04	—		6 ~~3~~		X	X									

6/4/04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
Patricia Renton	6-4-04	1500					

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15668

PLEASE PRINT

Report to:
Company Name: Klunfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

Invoice to:
Company Name: Klunfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point / 41330
Sampler (Print): Patricia Renton
Purchase Order Number: 41330
Sampler (Signature): Patricia Renton

Analysis Requested/Method Number

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Salinity 2520B	TDS 160.1	SVOCs 8270C	TPH-e 8015							
0623S014	1R28MW3SF	6-4-04	1040	L	1	X	X									
0623H016	1R28MW315A		1015		1	X	X									
0623H017	1R28MW312F		1050		2			X								* analyze SVOCs for 1,4-dioxane (only)
0623G014	1R28MW315B		1305		1	X	X									
0623H018	1R06MW32A	↓	1320	↓	2				X							

PR 6/4/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/4/04	1500					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15670

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped
Hunters Point / 41330	Patricia Renton		Carrier
Purchase Order Number: 41330	Sampler (Signature): Patricia Renton		Waybill No.
			Comments

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs-8260B	TPH-D 8015	SVOC 625/8270								Comments
0623C010	IR28MW299B	6-4-03	0900	L	3	X										
0623C011	IR28MW299B		0900		3	X										duplicate
0623C012	IR28MW200A		1030		3	X										
IR28EB031	IR28MW200A		1050		3	X										
~~0623C013~~ 0623C014 PC 6-7-04	IR28MW406		1125		3	X										0623C014
IR28TB015	IR28		—		~~6~~ 3	X	X									
D623H017	IR28MW312F		1050		3	X										
0623G014	IR28MW315G		1305		3	X										
0623H018	IR06MW32A		1320		6	X	X									
0623S015	IR28MW352A		1350		3	X										

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
- [x] Standard (2-3 week)
- [ ] One week
- [ ] 24-48 hour

Sample Disposal:
- [ ] Return to client
- [ ] Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/4/04	1500					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15669

PLEASE PRINT

Report to:
Company Name: Klenfelder
Phone: 415-822-2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Klenfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point/41330
Purchase Order Number: 41330
Sampler (Print): Patricia Benton
Sampler (Signature): Patricia Benton

Analysis Requested/Method Number: VOCs 8260B

Date Shipped:
Carrier:
Waybill No:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs 8260B									Comments
1R28EB029	1R28MW397B	6-4-04	1015	L	3	X									
0623T013	1R28MW298A		1135		3	X									
0623H013	1R58MW26A		0820		3	X									
1R58EB030	1R58MW26A		0835		3	X									
0623H014	1R58MW32B		0905		3	X									
0623H015	1R58MW32B		0905		3	X									duplicate
0623H016	1R28MW31SA		1015		3	X									
1R28TB014	1R28	6-4-04	—	L	3	X									

PR 6/4/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour

Sample Disposal:
[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Benton	6/4/04	1500					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

Page 1 of 2 (page 2 COC# 15695)

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

COC № 15703

Report to: (PLEASE PRINT)		Invoice to: (PLEASE PRINT)	
Company Name: Kleinfelder	Phone: 415 882 7253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hamilton Point/41330	Patrick Porter		Carrier:
Purchase Order Number: 41330	Sampler (Signature): Patrick Porter		Waybill No.:
			Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs-CLP Low Level	TPH-P 8015	VOCs-8260B	VOCs-CLP Low Level							
0624H019	1R10MW31A1	6-7-04	0915	L	6	X	X									CLP well
1R10TB016	1R10		—		6	X	X									
0624G017	1R58MW31A		1025		3		X	X								
1R58EB032	1R58MW31A		1045		3		X	X								
0624C015	1R07MW28A		0930		6		X		X							CLP well
0624C016	1R18MW21A		1045		6		X		X							CLP well
0624T015	1R07MWS-4		0916		6		X		X							CLP well
0624T016	1R07MWS-2		1045		6		X		X							CLP well
0624H020	1R10MW12A		1020		9	X										CLP well MS/MSD
0624HD21	1R06MW35A		1120		3			X								

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patrick Porter	6-7-04	1499					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

Pr 6-7-04

Course #
5096

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15695

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder Phone: 415 822 2253	Company Name: Kleinfelder Phone:
Address: Fax:	Address: Fax:
Attn:	Attn:

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hunters Point / 41330	Patricia Renton		Carrier:
Purchase Order Number: 41330	Sampler (Signature): [signature]		Waybill No.:
			Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs 8260B	VOCs-CLP	TPHe 8015B								
1R06EB033	1R06MW35A	6/7/04	1130	2	3	X										
0624S019	1R28MW272F	↓	1215	↓	3	X										
1R28EB034	1R28MW272F	↓	1230	↓	3	X										
0624G018	1R26MW41A	↓	1125	↓	6		X	X								CLP well

PR 6-7-04

Cooler # 5096

P Renton 6-7-04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/7/04	1438					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15690

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Pest 8081	PCBs 8082	TPHe 8015								
06246017	1R58MW31A	6/7/04	1025	L	4	X	X	X								
1R58EB032	1R58MW31A	6-7-04	1045	L	4	X	X	X								

TR 6-7-04

okay PJ

cooler # 5097

TR 6-7-04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6-7-04	1300					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15705

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder	Company Name: Kleinfelder
Phone: 415 822 2253	Phone:
Address:	Address:
Fax:	Fax:
Attn:	Attn:

Project Name/Number	Sampler (Print)
Hunters Point / 41330	Patricia Renton
Purchase Order Number	**Sampler (Signature)**
41330	Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals-CLP	Hex Chrom 7196A	SVOCs	Pest	PCBs	TSS					
0624G015	1R26MW46A	6/7/04	0905	L	7	X	X	X	X	X	X					
0624G016	1R26MW46A	↓	0910	L	7	X	X	X	X	X	X	DUPLICATE				

PJP 6/7/04

Cooler # 5090

PJP 6/7/04

*For both samples:
1-only analyze metals for As, Cr, Cu, Pb, Mn, Hg, Zn
2-only analyze SVOCs for B(a)A, B(a)P, B(b)F, B(k)F, chrysene, Dah A, indeno(1,2,3-cd) pyrene
3-only analyze Pesticides for Chlordane
4-only analyze PCBs for Aroclor-1260

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by:	**Date:**	**Time:**	**Received by:**	**Relinquished by:**	**Date:**	**Time:**	**Received at lab by:**
Pamela Lewis	6/7/04	1153					

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15691

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415-822-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals - CLP	Hex Chrom 7196A	SVOCs 8270C	Pest	PCBs 8082	TSS 8ne 6/8/04					Comments
06245016	1R26MW47A	6/7/04	1030	L	7	X	X	X	X	X	X					CLP well
06245017	1R26MW47A	6/7/04	1040	L	7	X	X	X	X	X	X	DUPLICATE				For both samples:

PR 6/7/04

PR 6/7/04

Cooler # 48256

1- Only analyze As, Cr, Cu, Pb, Mn, Hg, Zn for metals
2- only analyze B(a)A, B(a)P, B(b)F, B(k)F, Chrysene, D(ah)A, I(1,2,3-cd)P for SVOCs
3- only analyze Chlordane for Pest.
4- only analyze Aroclor-1260 for PCBs

Date Shipped:
Carrier:
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/7/04	1200					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15693

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point 141330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals-CLP	Hex Chrom 7196A	SVOCs-8270C	Pest 8081	PCBs 8082	TSS 160.2	Metals 6010B	TPH 8015				Comments
0624C016	1R18MW21A	6/7/04	1045	L	8	X	X	X	X	X	X		X				CLP well
0624I1020	1R10MW12A	6/7/04	1020	L	6		X				X						CLP well, MS/MSD

Date Shipped:
Carrier:
Waybill No.:
Comments:

TR 6/7/04

Cooler # 50108

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour	[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6-7-04	1344					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15692

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals-CLP	Hex Chrom 7196A	SVOCs 8270C	Pest 8081	PCBs 8082	TPHe 8015	TSS 160.2	Salinity 2520B	TDS 160.1			Date Shipped:
0624C015	1R07MW28A	6/7/04	0930	L	8	X	X	X	X	X	X	X					Carrier:
0624S019	1R28MW272F	↓	1215	↓	1								X	X			Waybill No.:
1R28EB034	1R28MW272F	↓	1230	↓	1								X	X			Comments:
																	CLP well

PE 6/7/04

Cooler # 5089

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/7/04	1453					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15704

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals CLP	~~Metals~~ Pre 6/7/04 6010B	Hexchrom 7196A	TPHe 8015	TSS 160.2	SVOCs 8270	Pest 8081	PCBs 8082				Date Shipped: / Carrier: / Waybill No.: / Comments:
0624H019	1R10MW31A1	6.7.04	0915	L	5	X		X	X	X							CLP well
0624S018	1R26MW48A	6.7.04	0932	L	7	X		X		X	X	X	X				CLP well

PR 6/7/04

cooler # 5026

ok PJ

For 0624S018:
1-only analyze metals for As, Cr, Cu, Pb, Mn, Hg, Zn
2-only analyze SVOCs for B(a)A, B(a)P, B(b)F, B(k)F, Chrysene, D(ah)A, I(1,2,3-cd)P
3-only analyze Chlordane for Pest.
4-only analyze Aroclor-1260 for PCBs

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/7/04	1453					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15694

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41530	Patricia Benton	41330	Patricia Benton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals CLP	Hex Chrom	TPHc	TSS	Salinity	TDS						Comments
0624T015	1R07MWS-4	6.7.04	0916	L	5	X	X	X	X	X	X						CLP well
0624T016	1R07MWS-2	6.7.04	1045	L	5	X	X	X	X								CLP well
0624G018	1R26MW41A	6.7.04	1125	L	5	X	X	X	X								CLP well

TK 6.7.04

Cooler #3

PR 6.7.04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Benton	6/7/04	1500					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15697

Report to: PLEASE PRINT
Company Name: Kleinfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

Invoice to: PLEASE PRINT
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunter's Point / 41330
Purchase Order Number: 41330
Sampler (Print): Patricia Renton
Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	SVOCs	Metals	TSS	Salinity	TDS	Hex Chrom	TPH-c	RR 6-8-04				
0624G020	1R06MW59A11	5/7/04	1435	L	2	X											X 1,4-dioxane analyze for
0624C018	1R06MW53E	↓	1439	↓	2		X	X									Cd & Mo
0624C019	1R25MW41A	↓	1532	↓	2	X											*only analyze metals for
0624MW001	1R25MW61A	6/8/04	0950	L	3	X			X	X							
0624C021	1R46MW37A	↓	1030	↓	5		X	X			X	X					

RR 6-8-04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/8/04 ~~11:30~~	1430					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15672

Report to: PLEASE PRINT
Company Name: Kleinfelder
Address:
Phone:
Fax:
Attn:

Invoice to: PLEASE PRINT
Company Name: Kleinfelder
Address:
Phone:
Fax:
Attn:

Project Name/Number: Hunters Point
Purchase Order Number: 413330
Sampler (Print): Stacie Wissler
Sampler (Signature): [signature]

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals-CUP	Hex Chrom	TPHc	TSS	SVOCs 8270	PCBs 8082	Salinity	TDS	[signature] 6/8/04		Comments
PASOEB039 [signature] 6/8/04	PASOMW01A	6/8/04	1145	L	5	X	X	X	X							CUP
0624C022 [signature] 6/8/04	1R25MW60A1	↓	1225	L	8 [signature] 6/8/04					X	X	X	X			0624C022
0624C023	1R25MW60A1	↓	1225	↓	4					X	X	X	X			Duplicate

[signature] 6/8/04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
[signature]	6/8/04	1445					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15699

Report to: PLEASE PRINT
Company Name: Kleinfelder
Address:
Attn:
Phone:
Fax:

Invoice to: PLEASE PRINT
Company Name: Kleinfelder
Address:
Attn:
Phone:
Fax:

Project Name/Number: Hunters Point
Purchase Order Number: 411330
Sampler (Print): Shane Wissler
Sampler (Signature):

Date Shipped:
Carrier:
Waybill No.:
Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	SVOCs 8270d	TPH 8015	Metals - Cr only	Hex Chrom	Pesticides	TSS	Metals 6010					
0624S021	1R29MW56F	6/8/04	0925	L	3	X	X										
0624S022	1R06MW54F	↓	1120	↓	5			X	X	X	X						
0624T020	1A50MW01A	↓	1128	↓	5		X		X		X	X					0624T020 - CLP

Shane 6/8/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☐ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Shane	6/8/04	1445					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15701

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point
Purchase Order Number: 41330
Sampler (Print): Stacie Wissler
Sampler (Signature): [signature]

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	TPHe	Metals	Hex Chrom	TSS							Comments
0624G021	1R28MW188F	6/8/04	0910	L	2	X										
0624G022	1R58MW25F	↓	1015	↓	3		X	X	X							*only analyze metals for Chromium
1R58EB038	1R58MW25F	↓	1040	↓	3		X	X	X							*only analyze metals for Chromium
0624M002	1R28MW25A	↓	1125	↓	3		X	X	X							*only analyze metals for Chromium
0624G023	1R28MW394A	↓	1335	↓	2	X										1R28MW394A

[signature] 6/8/04

[signature] 6/8/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☐ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
[signature]	6/8/04	1445					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15696

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: PR 6.8.04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp										Comments
0624G019	1R06MW59A2	6.7.04	1320	2	9	X											MS/MSD
1R06TB017	1R06		—		6	X	X										CLP
0624C017	1R06MW52F		1307		3	X											
1R06EB035	1R06MW52F		1330		3	X											
0624H022	1R06MW40A		1320		3	X											
0624H023	1R06MW47F		1405		3	X											
0624G020	1R06MW59A1		1435		3	X											
0624S020	1R28MW35SF		1430		3	X											
0624T017	1R06MW55F		1535		2	X											
1R06EB036	1R06MW55F		1543		3												

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/8/04	1500					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

page 2 of 2

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15698

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs ~~PR 6-8-04~~	TPHp									
0624C018	1R06MW53F	6/7/04	1439	L	3	X										
0624C019	1R25MW41A	6/7/04	1532	L	3	X										
0624M001	1R25MW61A1	6-8-04	0950	L	3	X										
0624C020	1R25MW40A		0905		3	X										
~~1R25MW40~~ 1R25EB037	1R25MW40A		0935		3	X										1R25EB037
~~1R~~ 0624C021	1R46MW37A		1030		6	X	X									*CLP well
0624S021	1R29MW56F		0925		6	X	X									PR 6-8-04
0624S022	1R06MW54F		1120		3											1R06MW54F

PR 6-8-04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour

Sample Disposal:
[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/8/04	1500					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15700

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renlon	41330	[signature]

Analysis Requested/Method Number: VOCs, TPHp — PR 6-8-04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp										Comments
0624G021	1R28MW188F	6/8/04	0910	L	6	X	X										
1R28TB018	1R28		—		6	X	X										CLP Low Level
0624G022	1R58MW25F		1015		3	X											
1R58EB038	1R58MW25F		1040		3	X											
0624M002	1R28MW125A		1125		3	X											
0624G023	1R28MW394A	6/8/04	1335		6	X	X										1R28MW394A
0624T018	1R28MW201F		0939		3	X											
0624T019	1R28MW201F		0939		3	X											duplicate
0624C022	1R25MW60A1		1225		3	X											
0624C023	1R25MW60A1		1225		3	X											duplicate

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
[signature]	6/8/04	1515					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

COC № 15673

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415 822 1229
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point / 41330
Sampler (Print): Patrick Reuter
Purchase Order Number: 41330
Sampler (Signature): [signature]

Date Shipped:
Carrier:
Waybill No:
Comments:

Analysis Requested/Method Number: VOCs, TPH, PR 6-8-04

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPH								
0624G024	IR28MW294A	6-8-04	1140	L	3	X									
0624G025	IR28MW294A		1145		3	X									duplicate
PA50MW01A ⟷	0624T020		1128		6	X	X								CLP Low Level
PA50EB039	PA50MW01A		1145		6	X	X								CLP ~~CLP~~ PR 6-8-04 Low Level
0624C022	IR25MW60A1		1225		3	X									
0624C023	IR25MW60A1		1225		3	X									duplicate

PR 6-8-04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patrick Reuter	6/8/04	1515					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

page 1 of 2

C.O.C. № 15674

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: VOCs 8260B, TPHg

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs 8260B	TPHg										Comments
0624T021	1R29MW85F	6/8/04	1450	L	3	X											COOLERID:48198
0624T022	1R25MW61A2		1344		3	X	~~X~~	6/8/04									VOC only
0624S023	1R29MW58F		1337		6	~~X~~	X										
0624S024	1R29MW59F		1455		9	~~X~~											MS/MSD
1R29EB040	1R29MW59F		1510		3	X											
0624C024	PA50MW03A		1405		3	X											
0624M003	1R25MW52A		1345		3	X											
1R25EB041	1R25MW52A		1355		3	X											
0624M004	1R25MW16A		1500		3	X											
1R25TB019	1R25		1445		6	X	X										

JML 6/8/04

JML 6/8/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6-9-04	1300					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 2 of 2

C.O.C. № 15708

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point	Patricia Kenton	41330	[signature]

Analysis Requested/Method Number: VOCs, TPHp

PR 6.9.04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp									Comments
0624C025	1R25MW60A2	6/8/04	1530	L	3	X										COOLER ID: 48198
0624G026	1R28MW394B	6/9/04	0940	L	6	X	X									
0624S025	1R44MW08A		0915		3	X										CORRECT WELL ID #
0624S026	1R44MW08A*		0915		3	X							duplicate			1R44MW08A [initials] 6/9/04
0624M005	1R71M03A*		0900		3	X										1R71MW03A
0624M006	1R09MW51F		1045		3	X										
0624T023	1R64MW05A		1215		9	X										

PR 6/9/04

MS/MSD

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour

Sample Disposal:
[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Kenton	6/9/04	1300					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15711

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415 822 7253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point/41330
Purchase Order Number: 41330
Sampler (Print): Patricia Renton
Sampler (Signature): Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals (Cr)	Hexchrom	TSS	Cyanide							
0624M007	1R29MW72E	6.9.04	1155	C	3	X	X	X								
0624C026	1R09MW35A	↓	1010	↓	4	X	X	X	X							
0624C027	1R09MW37A	↓	1258	↓	3	X	X	X								
0624G028	1R09MW39A	↓	1315	↓	3	X	X	X								

PR 6.9.04

PR 6.9.04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested - MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6.9.04	1532					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15709

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415-822-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number: HuntersPoint / 41330
Sampler (Print): Patricia Renton
Purchase Order Number: 41330
Sampler (Signature): Patricia Renton

Analysis Requested/Method Number: SVOCs, PCBs, Salinity, TDS, Metals (Cd), Hex Chrom, TSS, PR 6.9.04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	SVOCs	PCBs	Salinity	TDS	Metals (Cd)	Hex Chrom	TSS					COOLER ID:
0624M004	1R25MW16A	6.8.04	1500	L	3	X	X										48284
0624C025	1R25MW60A2	6.8.04	1530	↓	4	X	X	X	X								
0624M006	1R09MW51F	6.9.04	1045	↓	3					X	X	X					

PR 6.9.04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour

Sample Disposal:
[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/9/04	1330					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

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Fax: (559) 275-4422

C.O.C. № 15710

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	[signature]

Analysis Requested/Method Number: TPH-e, 1,4-Dioxane, Metals (Cr), Hex Chrom, TSS

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	TPH-e	1,4-Dioxane	Metals (Cr)	Hex Chrom	TSS							Comments
0624G026	1R28MW394B	6/9/04	0940	L	2	X											Cooler ID:
0624M005	1R71MW03A		0900		2		X										S096
1R09EB042	1R09MW38A		1130		3			X	X	X							
0624G027	1R09MW38A		1105		3			X	X	X							
0624S028	1R09MW54B		1130		3			X	X	X							

PR 6.9.04

PR 6.9.04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour

Sample Disposal:
[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/9/04	1340					
Relinquished by	**Date**	**Time**	**Received by**	**Relinquished by**	**Date**	**Time**	**Received at lab by**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722
Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15707

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point / 41330
Purchase Order Number: 41330
Sampler (Print): Patricia Renton
Sampler (Signature): Patricia Renton

Analysis Requested/Method Number: SVOCs, PCBs, Metals (CC), Hex Chrom, TSS, PR 6.9.04

Date Shipped:
Carrier:
Waybill No.:
Comments: COOLER ID: 50108

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	SVOCs	PCBs	Metals (CC)	Hex Chrom	TSS	PR 6.9.04					
0624M003	IR25MW52A	6.8.04	1345	L	3	X	X									
IR25EB04	IR25MW52A	↓	1355	↓	3	X	X									
0624S027	IR09MW45F	6.9.04	1025	L	3			X	X	X						

IR25EB41 - correct ID SW 6/9/04

PR 6.9.04

Shuttle Temperature:

Turnaround Requested - MUST CHECK ONE: X Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal: ☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6.9.04	1523					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15706

Report to: (PLEASE PRINT)		Invoice to: (PLEASE PRINT)	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped:
Hunters Point/41330	Patricia Renton	Carrier:
Purchase Order Number	Sampler (Signature)	Waybill No.:
41330	Patricia Renton	Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	Dest.	SVOCs	Salinity	TDS	TPHe	Cyanide					
0624T021	1R29MW85F	6.8.04	1450	L	3	X	X										* only analyze Mo metals for
0624T022	1R25MW61A2	↓	1344	↓	3			X	X	X							
0624S023	1R29MW58F	↓	1337	↓	3		X				X						Cooler ID:
0624C024	PA50MW03A	↓	1405	↓	1							X					5097

PR 6.9.04

PR 6.9.04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☐ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/9/04	1340					
Relinquished by	**Date**	**Time**	**Received by**	**Relinquished by**	**Date**	**Time**	**Received at lab by**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECO

C.O.C. № 15714

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder Phone: 415 822 2253	Company Name: Kleinfelder Phone:
Address: Fax:	Address: Fax:
Attn:	Attn:

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point #41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: Total Metals

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Total Metals
Pump 6	Pump	6.9.04	1559	L	1	X

PR 6.9.04

PR 6.9.04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☐ Standard (2-3 week) ☐ One week ☐ 24-48 hour ☒ RUSH (ASAP)

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6.9.04	1600					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15712

Report to: (PLEASE PRINT)		Invoice to: (PLEASE PRINT)	
Company Name: Kleinfelder	Phone: 415·822·2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped
Hunters Point/41330	Patricia Renton		Carrier
Purchase Order Number: 41330	Sampler (Signature): Patricia Renton		Waybill No.
			Comments

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Pest	PCBs	Salinity	TDS	Metals	Metals (Pb)	Metals (Pb-Zn)	TSS	Metals (Cr)	Hex Chrom	5/1	
0623H004	1R28MW17A	6·9·04	1420	L	3	X	X										
0624M008	1R71MW04A		1455		1			X	X								
1R71EB043	1R71MW04A		1510		1			X	X								
0624C028	PA50MW07A		1448		1					X							
PA50EB045	PA50MW07A		1509		1					X							
1R22EB046	1R22MW16A		1436		2						X		X				
0624T024	1R22MW16A		1422		2						X		X				
0624T025	1R22MW20A		1535		2							X	X				
0624T026	1R06MW50F	6·10·04	1033	L	3								X	X	X		
0624T027	1R06MW50F	6·10·04	1036	L	3								X	X	X		duplicate

Shuttle Temperature: °F

Turnaround Requested: MUST CHECK ONE
- [x] Standard (2-3 week)
- [ ] One week
- [ ] 24-48 hour

Sample Disposal:
- [x] Return to client
- [ ] Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/10/04	1437					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15726

PLEASE PRINT

Report to:
Company Name: Klemfelder
Phone: 415-822-2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Klemfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point / 41330
Sampler (Print): Patricia Rocha
Purchase Order Number: 41330
Sampler (Signature): Patricia Rocha

Analysis Requested/Method Number

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	Metals	SVOCs	TPH-D	TPH-G	TSS				
0624M014	1R02MW126A	6-10-04	1540	L	12	X	X	X	X	X	X				
1R02TB021	1R02	6-10-04	1610	L	6	X			X						

PR 6-10-04

P.R. 6/10/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day-retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Rocha	6/10/04	1410					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15722

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone:	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped:
Hunters Point	Stacie Wissler	Carrier:
Purchase Order Number: 41330	Sampler (Signature): [signature]	Waybill No.:
		Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	SVOCs	Pest	TPHe	Cyanide	Metals	TSS					
0624M013	1R12MW17A	6/10/04	1425	L	5	X	X	X	X							
0624S033	1R01MW62A	↓	1400	↓	5	X			X	X	X					
0624S034	1R01MW63A	↓	1510	↓	3				X	X	X					

PR 6/10/04

PR 6/10/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour	[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Stacie Wissler	6/10/04	1540					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

~~This original was misplaced (copy made)~~ SEC/6/10/04

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15721

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: Metals (Cr), Hex Chrom, TSS, SVOCs, ~~PCBs~~ 8.5.10.04, TPHe

Date Shipped:
Carrier:
Waybill No.:
Comments: COOLER ID: 5017

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals (Cr)	Hex Chrom	TSS	SVOCs	~~PCBs~~ 8.5.10.04	TPHe						Comments
0624T028	PA50MW12A	6.10.04	1150	L	9	X	X	X									MS/MSD
0624G030	1R01MW58A	6.10.04	1430	L	4				X	X	X						

PK 6.10.04

PK 6.10.04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/10/04	1529					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15716

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: 1,4-Dioxane, SVOCs, Salinity, TDS

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	1,4-Dioxane	SVOCs	Salinity	TDS								Comments
0623T012	1R28MW397B	6/10/04	0913	L	2	X											
0623C004	1R28MW171B	↓	0915	↓	3		X	X	X								
0623H006	1R28MW353B	↓	0855	↓	3		X	X	X								
0623H007	1R28MW353B	↓	0855	↓	3		X	X	X								duplicate

PR 6.9.04

PR 6.9.04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/10/04	1453					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

COC № 15717

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point / 41330
Sampler (Print): Patricia Ronton
Purchase Order Number: 41330
Sampler (Signature): Patricia Ronton

Date Shipped:
Carrier:
Waybill No:
Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Pest	Metals (CT)	Hex Chrom	Salinity	PBS	PSS					
0623H014	IR58MW32B	6-10-04	0905	L	2	X										COOLER ID: 825
0623H015	IR58MW32B		0905		2	X										duplicate
0624S031	IR09MW63A		1010		3		X	X	X	X	X					
IR09EB047	IR09MW63A		1025		3		X	X	X	X	X					
0624G029	IR09MW62A		1030		3		X	X	X	X	X					
IR09EB048	IR09MW62A		1050		3		X	X	X	X	X					
IR06EB049	IR06MW50F	6-10-04	1055	L	3		X	X			X					

Signature 6/10/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Ronton	6/10/04	1420					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15719

Report to: PLEASE PRINT
Company Name: Kleinfelder
Phone: 415 882 2253
Address:
Fax:
Attn:

Invoice to: PLEASE PRINT
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point/41330
Sampler (Print): Patricia Renton
Purchase Order Number: 41330
Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	Hex Chrom	TSS	Metals (Cr)	Sulfide	FOG	Tuffe	Gal 6/10/04
0624S032	1R02MW3-2	6/10/04	1145	L	3	X	X	X					
0624C029	1R09MW61A		1030		3		X	X	X	X	X		
1R09EB050	1R09MW61A		1055		3		X	X	X	X	X		
0624C030	1R33MW61A		1155		5 ~~6~~	X	X	X			X		
0624M011	1R02MW149A		1200		3	X	X	X					
0624M012	1R02MW149A		1200		3	X	X	X					duplicate
1R02EB051	1R02MW149A		1220		3	X	X	X					

6/10/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☑ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/10/04	1411					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

Page 1 of 3

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

COC № 15713

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415-822-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped
Hunters Point/41330	Patricia Renton		Carrier:
Purchase Order Number: 41330	Sampler (Signature): Patricia Renton		Waybill No:
			Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOC3									
0624M008	1R71MW04A	6/9/04	1455	L	3	X									Cooler ID 50109
1R71EB043	1R71MW04A		1510		3	X									
0624S029	1R70MW04A		1330		3	X									
1R70EB044	1R70MW04A		1340		3	X									
0624S030	1R70MW07A		1425		3	X									
0624C028	PA50MW07A		1448		3	X									
PA50EB045	PA50MW07A		1509		3	X									
0624S031	1R09MW63A	6/10/04	1010		3	X									
1R09EB047	1R09MW63A		1025		3	X									
0624G029	1R09MW62A		1030		3	X									

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
- [x] Standard (2-3 week)
- [ ] One week
- [ ] 24-48 hour

Sample Disposal:
- [ ] Return to client
- [ ] Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/10/04	1530					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15718

Report to (PLEASE PRINT)
Company Name: Kleinfelder
Phone: 415 892 2253
Address:
Fax:
Attn:

Invoice to (PLEASE PRINT)
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point/41330
Purchase Order Number: 41330
Sampler (Print): Patricia Rankin
Sampler (Signature): Patricia Rankin

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOC3	TPH-P									
1R09EB048	1R09MW62A	6-10-04	1050	L	3	X										Cooler ID:
0624C029	1K09MW61A		1030		3	X										50109
1R09EB050	1R09MW61A		1055		3	X										
0624C030	1R33MW61A		11[55]		6	X	X									
0624M009	1R71MW12B		0915		3	X										
0624M010	1R71MW12B		0915		3	X										duplicate
1R71TB020	1R 71		1334		6	X	X									
0624G030	1R01MW58A		1430		6	X	X									
0624S033	1R01MW62A		1400		3	X										
0624S034	1R01MW63A	↓	1510	↓	3	X										

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☒ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Rankin	6/10/04	1541					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15723

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp										Date Shipped:
0624M013	1R12MW17A	6/10/04	1425	L	6	X	X										Carrier:
																	Waybill No.:
																	Comments:

PK 6/10/04

PK 6/10/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Denise	6/10/04	1541					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

page 1 of 2

C.O.C. № 15738

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)
Hunters Point/41330	Patricia Renton
Purchase Order Number	**Sampler (Signature)**
41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OCL Pest	PCBs	TPHe	Extractable Oil + Grease	OP Compounds	Cyanide	Anions	Sulfide	TSS
06255035	1R01MW42A	6/15/04	0925	L	10	X	X	X	X	X	X	X	X	X	X	X

Date Shipped:
Carrier:
Waybill No.:
Comments:

Color ID: 5096

6/15/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/15/04	1948					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

Page 2 of 2

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

page 2 of 2

C.O.C. № 15739

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Ammonia Nitrogen	TKN
06255035	1K011MW42A	6/15/04	0925	L	1 ~~2~~ 6/15/04	X	X

Date Shipped:
Carrier:
Waybill No.:
Comments:

Cooler ID: 5096

6/15/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/15/04	1948					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15728

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder	Company Name: Kleinfelder
Phone: 415 822 2253	Phone:
Address:	Address:
Fax:	Fax:
Attn:	Attn:

Project Name/Number	Sampler (Print)	Date Shipped
Hunters Point / 41330	Patricia Renton	Carrier:
Purchase Order Number	Sampler (Signature)	Waybill No:
41330	[signature]	Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	Oil Pest	PCBs	TPHe	Extractable Oil+Grease	OP Compounds	Cyanide	Anions	Sulfide	TSS	
0625H024	1K01MW10A	6-15-04	0940	L	10	X	X	X	X	X	X	X	X	X	X	X	Title 27 Metals
1R02EB052	1R02MW147A	6-15-04	1055	L	2	X										X	

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour

Sample Disposal:
[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/15/04	1438					
Relinquished by	**Date**	**Time**	**Received by**	**Relinquished by**	**Date**	**Time**	**Received at lab by**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

page 2 of 2

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

C.O.C. № 15731

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: Ammonia Nitrogen, TKN

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Ammonia Nitrogen	TKN									Comments
0625H024	1R01MW10A	6-15-04	0940	L	1	X	X									Tit 6 27
~~1R02EB052~~	~~1R02MW147A~~	~~6-15-04~~	~~1055~~	~~L~~	~~0~~											

Sml 6/15/04

Sml 6/15/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/15/04	1438					
Relinquished by	**Date**	**Time**	**Received by**	**Relinquished by**	**Date**	**Time**	**Received at lab by**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15733

Report to: PLEASE PRINT
Company Name: Kleinfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

Invoice to: PLEASE PRINT
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point / 41330
Purchase Order Number: 41330
Sampler (Print): Patricia Renton
Sampler (Signature): [signature]

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OCPest	PCBs	TPHe	Extractable Oil & Grease	OP compounds	Cyanide	Anions	Sulfide	TSS	
0625G032	IRONMW43A	6/15/04	1105	L	10	X	X	X	X	X	X	X	X	X	X	X	THE 27-Metals
																	Cooler ID: 5097

6/15/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/15/04	1430					
Relinquished by:	**Date:**	**Time:**	**Received by:**	**Relinquished by:**	**Date:**	**Time:**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15734

PLEASE PRINT		PLEASE PRINT	
Report to:		Invoice to:	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hunters Point 1491330	Patricia Rexton		Carrier:
Purchase Order Number: 1491330	Sampler (Signature): Patricia Rexton		Waybill No.
			Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Ammonia Nitrogen	TPH		
0625G032	HP01MW43A	6/5/04	1105	L	1	X	X		Title 27
									Cooler ID: 5097

6/15/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☑ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Rexton	6/15/04	1430					
Relinquished by	**Date**	**Time**	**Received by**	**Relinquished by**	**Date**	**Time**	**Received at lab by**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15736

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point / 41330
Purchase Order Number: 41330
Sampler (Print): Patricia Renton
Sampler (Signature): Patricia R.

Analysis Requested/Method Number

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OCL Pest	PCBs	TPHe	Extractable Oil + Grease	OP Compounds	Cyanide	Anions	Sulfide	TSS
06250031	IR01MW03A	6/15/04	1145	L	10	X	X	X	X	X	X	X	X	X	X	X
06250036	IR02MW14A	6/15/04	1040	L	2	X										X

6/15/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/15/04	1145					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

COC № 15737

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415.877.7253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point/41330
Purchase Order Number: 41330
Sampler (Print): Patricia Renton
Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Nitrogen Ammonia	TKN								
0625C031	PROIMW03A	6/15/04	1145	L	1	X	X								

Analysis Requested/Method Number

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/15/04	1145					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report; Yellow: Laboratory Copy; Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL Inc
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

COC № 15740

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point 41330
Sampler (Print): Patricia Renton
Purchase Order Number: 41330
Sampler (Signature): Patricia Renton

Analysis Requested/Method Number: Hex Chrom

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Hex Chrom
062SH025	1R031MW2RA2	6/15/04	1130	L	1	X

RR 6/15/04

RR 6/15/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/15/04	1510					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15732

PLEASE PRINT

Report to:
Company Name: Klonfeldor
Phone: 415 822 2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Klonfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Humboldt Park / 41330
Sampler (Print): Patricia Renton
Purchase Order Number: 41330
Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	SVOCs	Pest	PCBs	Metals	TSS					
0625G031	HKOZMW12T3	6/15/04	0925	L	4	X	X	X							
0625X001	HKOZMW1-7	6/15/04	1154	L	4	X	X		X	X					

Analysis Requested/Method Number

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/15/04	1442					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15747

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone:	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped:
Hunters Point	Stacie Winsler	Carrier:
Purchase Order Number: 41330	Sampler (Signature): [signature]	Waybill No.:
		Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	Hex Chrom	SVOCs	Pest	TSS	O&G	Cyanide	TSS	Anions	PCBs		
0625S039	1R03MW342A	6/16/04	1205	L	6	X	X	X	X	X							
0625G034	1R01MW09B	↓	1150	↓	7	X		X	X		X	X	X	X	X		T.16 27
	[signature]	6/16/04															

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☑ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/16/04	1424					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

COC № 15743

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point / 41330
Purchase Order Number: 41330
Sampler (Print): Patricia Renfro
Sampler (Signature): Patricia Renfro

Analysis Requested/Method Number: Metals, TSS, SVOCs, Pest, PCBs, TPHe, PR 6-16-04

Date Shipped:
Carrier:
Waybill No:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	TSS	SVOCs	Pest	PCBs	TPHe					
06258037	1R03MW373B	6/15/04	1435	L	7	X	X	X	X	X	X					
06258005	1R56MW39A	6/16/04	1201	L	3			X			X					

PR 6-16-04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renfro PR 6-16-04	6/16/04	1428	1428				

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15735

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped:
Hunters Point / 41330	Patricia Renton	Carrier:
Purchase Order Number: 41330	Sampler (Signature): Patricia Renton	Waybill No.:
		Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	Hex Cr	SVOCs	1,4-Dioxane	TPHe	TSS	PCBs	Ammonia N	TKN	Sulfide	OP Amphos	
0625H025	1R03MW218A2	6/15/04	1130	L	~~76~~ 6/15/04	X	~~X~~	X	X	X	X	X					no hex chrom for 0625H025 hex chrom sent 6/15/04
0625G034	1R01MW09B	6/16/04	1150	↓	4					X			X	X	X	X	
0625C035	1R01MW366A	6/15/04	1045	↓	4	X		X		X		X	X	X			

[signature] 6/16/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/16/04	1423					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15741

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder Phone: 415 822 2253	Company Name: Kleinfelder Phone:
Address: Fax:	Address: Fax:
Attn:	Attn:

Project Name/Number	Sampler (Print)	Date Shipped:
Hunters Point 141330	Patricia Renton	Carrier:
Purchase Order Number: 41330	Sampler (Signature): [signature]	Waybill No:
		Comments:

Analysis Requested/Method Number: Hg, SVOCs, TSS, Pect, TPHe, [signature] 6/16/04

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Hg	SVOCs	TSS	Pect	TPHe							
0625H026	1R05MW85A	6/15/04	1440	L	4	X	X	X									
1R05EB054	1R05MW85A	↓	1450	↓	4	X	X	X									
0625C036	1R39MW21A	6/16/04	1230	↓	3		X		X	X							0625C036

[signature] 6/16/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/16/04	1421					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15745

Report to: (PLEASE PRINT)		Invoice to: (PLEASE PRINT)	
Company Name: Kleinfelder	Phone: 415 822 2853	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hinkers Point/41330	Patrick Renton	41330	[signature]

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	8260B	8260B	TPH-D	Acetone							Date Shipped:
0625C032	1R03MW224A	6.15.04	1430	W	2	X										Carrier:
1R03EB056	1R03MW224A	↓	1150		2	X										Waybill No.
0625C033	1R36MW12A	↓	1605		3		X	X								Comments:
0625X004	PA36MW01A	6.16.04	0922		2				X							
PA36EB060	PA36MW01A	6.16.04	0938	↓	2				X							

PR 6.16.04

PR 6.16.04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patrick Renton	6/16/04	1412					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

Page 1 of 2

C.O.C. № 15748

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	[signature]

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OCl Pest	PCBs	TPHC	Lactate Citrate	OP Compounds	Cyanide	Anions	Sulfide	TSS	
06255038	1K01MW48A	6-16-04	1005	L	10	X	X	X	X	X	X	X	X	X	X	X	* before analyzing for TSS, talk to Stacie *

Date Shipped:
Carrier:
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/16/04	1430					
Relinquished by	**Date**	**Time**	**Received by**	**Relinquished by**	**Date**	**Time**	**Received at lab by**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

page 2 of 2

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15749

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 882 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hunters Point / 41330	Patricia Renton		Carrier:
Purchase Order Number	Sampler (Signature)		Waybill No:
41330	P. Renton		Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Ammonia Nitrogen	TKN
0625S038	IR01MW484	6/16/04	1005	L	1	X	X

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour

Sample Disposal
[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/16/04	1430					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 1 of 2

C.O.C. № 15750

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	[signature]

Analysis Requested/Method Number: VOCs, TPHp, Sml 6/16/04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp
0625C034	1R36MW120B	6/16/04	0900	L	3	X	
1R36EB059	1R36MW120B		0925		3	X	
0625S038	1R01MW48A		1005		6	X	X
0625G034	1R01MW09B		1150		6	X	X
PA36EB060	PA36MW01A		0938		3	X	
0625X004	PA36MW01A		0922		3	X	
0625S039	1R03MW342A		1205		3	X	
0625X005	1R56MW39A		1201		6	X	X
0625C036	1R37MW21A		1230		6	X	X
0625G035	1R36MW129B		1410		3	X	

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/16/04	1550					
Relinquished by	**Date**	**Time**	**Received by**	**Relinquished by**	**Date**	**Time**	**Received at lab by**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

C.O.C. № 15727

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415.822.2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hunters Point 141330	Patricia Renton		Carrier:
Purchase Order Number	Sampler (Signature)		Waybill No.:
41330	[signature]		Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPH-P										Comments
0624H024	1R01MW10A	6-15-04	0940	L	6	X	X										
1R01TB022	1R01		1500 ~~0945~~		6	X	X										
0625G031	1R02MW127B	6-15-04	0925		3	X											
0625G032	1R01MW43A		1105		6	X	X										Title 27
0625H025	1R03MW218A2		1130		6	X	X										
0625C031	1R01MW03A		1145		3 ~~6~~	X	X										
0625S035	1R01MW42A		0925		6	X	X										Title 27
0625S036	1R02MW147A		1040		3	X											
1R02EB052	1R02MW147A		1055		3	X											
0625X001	1R01MWI-7		1154		3	X											

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date 6/16/04	Time 0800	Received at lab by: [signature]

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 1 of 2

C.O.C. № 15742

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder Phone: 415 822 2253	Company Name: Kleinfelder Phone:
Address: Fax:	Address: Fax:
Attn:	Attn:

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: VOCs, TPHp

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp										Comments
06256033	1R04MW37A	6-15-04	1505	L	3	X											
1R04EB053	1R04MW37A	6-15-04	1520	L	3	X											
0625H026	1R05MW85A		1440		3	X											
1R05EB054	1R05MW85A		1450		3	X											
0625H027	1R36MW11A		1540		9	X											MS/MSD
0625X002	1R03MW228B		1450		3	X											
0625X003	1R03MW228B		1453		3	X											duplicate
1R03EB055	1R03MW228B		1510		3	X											
0625S037	1R03MW373B		1435		6	X	X										0625S037 [initials] 6/17/04
1R03TB023	1R03	6/16/04	1500		6	X	X										

PR 6/16/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/16/04	1926					
Relinquished by	**Date**	**Time**	**Received by**	**Relinquished by**	**Date**	**Time**	**Received at lab by**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

page 2 of 2

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15744

Report to: (PLEASE PRINT)	Invoice to: (PLEASE PRINT)
Company Name: Kleinfelder	Company Name: Kleinfelder
Phone: 415-822-2253	Phone:
Address:	Address:
Fax:	Fax:
Attn:	Attn:

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point 141230	Patricia Renton	41320	Patricia Renton

Analysis Requested/Method Number: 1,2,3 DCA; 4 PHE; 5 Gas; 6 TPH

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	1,2,3 DCA	4 PHE	5 Gas	6 TPH	Comments
06256032	IR03MW22A	6/16/04	1430	L	3	X				
IR03EB056	IR03MW22A	6/16/04	1450		3	X				
06256033	IR36MW12A	6/16/04	1605		6	X	X			
~~06256033~~ QC 1120	IR36MW12A	6/16/04	0900		3	X				sample ID 0625G045
IR36EB057	IR36MW12A		0915		3	X				
06254028	IR74MW01A		1025		3	X				
IR74EB058	IR74MW01A		1040		3	X				

PR 6/16/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
- [x] Standard (2-3 week)
- [ ] One week
- [ ] 24-48 hour

Sample Disposal:
- [ ] Return to client
- [ ] Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	6/16/04	1326					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

2 of 2

C.O.C. KA001

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Klenfelder	Phone:	Company Name: Klenfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hunters Point	Patricia Renton		Carrier:
Purchase Order Number: 41330	Sampler (Signature): [signature]		Waybill No.:
			Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHg	TPHe								SVOCs	
0625X006	1R36MW122A	6/16/04	1452	L	3	X											
0625H029	PA36MW08A		1420		35	X		X								X	Ambers for SVOCs
PA36TB024	PA36		1520		6	X	X	X									[signature] 6/17/04
0625G036	1R36MW128A		1450		~~5~~ 3	X		X									3 containers
0625S040	1R36MW123B		1405		3	X											
0625S041	1R02MW141A		1530		3	X											
1R36EB061	1R36MW123B		1420		3	X											

[signature] 6/16/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☑ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (no-day-return)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
Patricia Renton	6/16/04	1550					

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

C.O.C. KA0023

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415·872·2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hunters Point/41330	Patricia Renton		Carrier:
Purchase Order Number: 41330	Sampler (Signature): Patricia Renton		Waybill No.:
			Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	TSS	SVOCs	Cyanide									Comments
0625G037	1R02MW209A	6/17/04	0935	L	2	X	X											
0625G038	1R39MW23A	↓	1045	↓	2			X										
0625G039	1R39MW23A	↓	1045	↓	2			X										duplicate
~~1R39MW~~ 1R39EB064	1R39MW23A	↓	1110	↓	2			X										Sample ID = 1R39EB064
0625R002	1R09MW36A	↓	1225	↓	3	X	X		X									* only analyze 0625R002 metals for Vanadium *

6/17/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day minimum)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/17/04	1453					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

c.o.c. KA002

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415.822.2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: Metals, TSS, SVOCs, TPH^e, Rest, PR 6/17/04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	TSS	SVOCs	TPH^e	Rest							Comments
0625R001	1R02MW179A	6/17/04	0928	L	2	X	X										
1R02EB063	1R02MW179A	↓	0944	↓	2	X	X										
1R02EB062	1R02MW300A	↓	0840	↓	4	X		X	X								
~~1R02MW~~ 0625H030	1R02MW300A	6/16/04	1530	↓	5	X	X	X		X							SAMPLE ID = 0625H030

PR 6/17/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/17/04	1450					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 1 of 2

C.O.C. KA004

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415-822-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped:
Hunters Point/41330	Patricia Renta	Carrier:
Purchase Order Number: 41330	Sampler (Signature): [signature]	Waybill No.:
		Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OCl Pest	PCBs	TPHe	OP Compounds	Cyanide	Anions	Sulfide	TSS	~~Ammonia~~ Nitrogen	
0625S043	1RO1MW44A	6/17/04	1005	L	8	X	X	X	X	X	X	X	X	X	X		

[signature] 6/17/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☐ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renta	6/17/04	1458					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 2 of 2

C.O.C. KA 006

Report to: (PLEASE PRINT)		Invoice to: (PLEASE PRINT)	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hunters Point	Patricia Renton		Carrier:
Purchase Order Number	Sampler (Signature)		Waybill No.:
413130	Patricia Renton		Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Extractable Oil+Grease	Ammonia Nitrogen	TKN									
06255043	1R01MW44A	6/16/04	1005	L	3	X	X	X									

6/17/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☐ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/17/04	1458					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

C.O.C. KA007

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415-877-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped:
Hunters Point/41330	Patricia Renton	Carrier:
Purchase Order Number: 41330	Sampler (Signature): Patricia Renton	Waybill No.:
		Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	Oil Rest	PCBs	TPHe	OP Compounds	Cyanide	Anions	Extractable Oil & Grease	Sulfide	TSS
0625H031	1B01MW02B	6/17/04	0935	L	10	X	X	X	X	X	X	X	X	X	X	X
0625H032	1B02MW17SA	6/17/04	1140	L	2	X										X

PR 6/17/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/17/04	1509					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 2 of 2

C.O.C. KA008

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415-822-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hunters Point/41330	Patricia Renton		Carrier:
Purchase Order Number	Sampler (Signature)		Waybill No.:
41330	[signature]		Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Ammonia Nitrogen	TKN
06254031	IR01MW02B	6/17/04	0935	L	1	X	X

PR 6-17-04

PR 6-17-04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/17/04	1509					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 1 of 2

C.O.C. 14A009

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415-822-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped:
Hunters Point / 41330	Patricia Rentar	Carrier:
Purchase Order Number	Sampler (Signature)	Waybill No.:
41330	Patricia Rentar	Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OCl Pest	PCBs	TPHe	Extractable Oil + Grease	OP Compounds	Cyanide	Anions	Sulfide	TSS
06255044	IR04MW36A	6/17/04	1150	L	10	X	X	X	X	X	X	X	X	X	X	X
06255045	IR02MWB-3	↓	1405	↓	2	X										X

6/17/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Rentar	6/17/04	1517					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

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4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 2 of 2

C.O.C. KA005

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Klemfelder	Phone:	Company Name: Klemfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Huntington Point			Carrier:
Purchase Order Number: 41330	Sampler (Signature)		Waybill No.:
			Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	TKN	Ammonia Nitrogen									
06255043	IR01MW44A	6/17/04	1005	L	1	X	X									
06255044	IR04MW36A	6/17/04	1150	L	1	X	X									
~~06255045~~	~~IR02MW3-3~~	~~↓~~	~~1405~~	~~L~~	~~1~~											

6/17/04

6/17/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☑ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
[signature]	6/17/04	1517					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 1 of 2

C.O.C. KA010

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415·822·2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
HuntersPoint / 41330	Patricia Renton	41330	[signature]

Analysis Requested/Method Number: VOCs, TPHp, 6/17/04 [signature]

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp										Comments
0625G041	1R15MW06A	6/17/04	1340	L	3	X											
0625G040	1R15MW10F	↓	1155	L	3	X											
0625X007	1R76MW13A	↓	1140	↓	9	X											MS/MSD
0625H032	1R02MW175A	↓	1140	↓	3	X											
0625C037	1R36MW126A	6/16/04	1430	↓	3	X											
0625C038	1R36MW127A	6/16/04	1535	↓	3	X											
0625S043	1R01MW44A	6/17/04	1005	↓	6	X	X										
0625S044	1R04MW36A	↓	1150	↓	6	X	X										
0625H031	1R01MW02B	↓	0935	↓	PR 6/17/04 36	X	X										
0625S042	PA36MW07A	↓	0855	↓	3	X											

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
[signature]	6/17/04	1520					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

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CHAIN OF CUSTODY RECORD

page 2 of 2

c.o.c. KA011

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415-822-2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point 41330
Purchase Order Number: 41330
Sampler (Print): Patricia Rector
Sampler (Signature):

Date Shipped:
Carrier:
Waybill No.:
Comments:

PR 6-17-04

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp									
PA36EB065	PA36MW07A	6/17/04	0905	L	3	X										
PA36TB025	PA36	6/17/04	1500	L	36	X	X									
~~1R02MW209A~~ 06255037	1R02MW209A		0935		3	X										
1R02EB062	1R02MW300A		0840		6	X	X									
06255045	1R02MW13-3	6/17/04	1405	L	6	X	X									
~~1R39MW36A~~ 55066	1R39MW36A	6/17/04	1500	L	3	X										
06254033	1R39MW36A	6/17/04	1445	L	3	X										

PR 6/17/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Rector	6/17/04	1520					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

page 1 of 2

APPL, Inc.
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Fresno, CA 93722

Phone: (559) 275-2175
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C.O.C. № 15887

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point/91330
Purchase Order/Number: 41330
Sampler (Print): Patrick Reinton
Sampler (Signature): Patrick Reinton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	Pest OC	PCBs	TPHe	OP Pest	Oil/Grease	Cyanide	Anions	Sulfide	TSS
06254037	IR75MW05B	6/18/07	1420	L	10	X	X	X	X	X	X	X	X	X	X	X

Date Shipped:
Carrier:
Waybill No.:
Comments:

PR 6/18/07

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patrick Reinton	6/18/07	1530					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

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Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 2 of 2

C.O.C. № 15888

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone:	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: TKN, NH_3-N

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	TKN	NH_3-N
0625H037	1R75MW05A	6/18/04	1420	L	1	X	X

PR 6/18/04

PR 6/18/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☐ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/18/04	1530					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175

Fax: (559) 275-4422

C.O.C. № 15889

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder	Company Name: Kleinfelder
Phone:	Phone:
Address:	Address:
Fax:	Fax:
Attn:	Attn:

Project Name/Number: Huntus Pond

Sampler (Print): Stacie Wissler

Purchase Order Number: 41330

Sampler (Signature): [signature]

Date Shipped:

Carrier:

Waybill No.:

Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OC Pest	PCBs	TPHe	Oil/Grease	OP Compds	Anions/TSS	Sulfide	Cyanide	NH_3-N/TKN	
0625S048	1R01MW403A	6/18/04	1430	L	10	X	X	X	X	X	X	X	X	X	X	X	T27
0625R006	1R36MW17A	↓	1346	↓	2			X			duplicate						0625R006

[signature] 6/18/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE

☐ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:

☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
[signature]	6/18/04	1600					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
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Fresno, CA 93722

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C.O.C. № 15886

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone:	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals (Ba only)	Metals	SVOCs	OC Pest	PCBs	TPHe	Oil/Grease	OP Cmpds	Anions/TSS	Sulfide	NH_3-N/TKN	
0625G044	1R39MW33A	6/18/04	1425	L	1	X											
1R39EB070	1R39MW33A		1445		1	X											
0625H036	1R75MW05B		1415		~~10~~ 11		X	X	X	X	X	X	X	X	X	X	T27
~~0625H037~~			~~1420~~		Sue 6/18/04												

Date Shipped:
Carrier:
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
[signature]	6/18/04	1510					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
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CHAIN OF CUSTODY RECORD

Page 1 of 2

COC № 15877

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point
Purchase Order Number: 41330
Sampler (Print): Stace Wissler
Sampler (Signature): [signature]

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	Pest OC	PCBs	TPHe	OP Pest	Oil & Grease	Cyanide	Ammonia	Sulfide	TSS	
0625S046	IR01MW31A	6/18/04	1040	L	10	X	X	X	X	X	X	X	X	X	X	X	T27

Stace 6/18/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
X Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/18/04	1251					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

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CHAIN OF CUSTODY RECORD

page 2 of 2

C.O.C. № 15879

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Huntington Park
Sampler (Print): Stacie Wissel
Purchase Order Number: 41330
Sampler (Signature): [signature]

Date Shipped:
Carrier:
Waybill No.:
Comments:

Analysis Requested/Method Number: NH3-N, TKN, [signature] 6/18/04

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers
06255046	IR01MW31A	6/18/04	1040	L	1

[signature] 6/18/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☑ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Berdan	6/18/04	1351					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15890

Report to: (PLEASE PRINT)		Invoice to: (PLEASE PRINT)	
Company Name: Kleinfelder	Phone:	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped:
Huntus Pond	Stacie Wissler	Carrier:
Purchase Order Number: 41330	Sampler (Signature): [signature]	Waybill No.:
		Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Pest	PCBs	SVOCs	Metals	TPHple	VOCs	Oil/Grease	OP Cmpd	Sulfide	Cyanide		
1R36EB072	1R36MW17A	6/18/04	1406	L	2	X											
SW-061804	Fire Ath Source	↓	1515	L	14	X	X	X	X	X	X	X	X	X	X		CLP
SWTB026	SW-TB	↓	—	L	6					X	X						CLP

[signature] 6/18/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour	[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
[signature]	6/18/04	1600					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return [illegible]nt with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

Page 1 of 2

C.O.C. № 15882

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)
Hunters Point / 41330	Patricia Renton
Purchase Order Number	**Sampler (Signature)**
41330	[signature]

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	Pest OC	PCBs	TPHe	OP Pest	Oil/Grease	Cyanide	Anions	Sulfide	TSS
06251035	1R01MW26B	6/18/09	1225	L	9	X	X	X	X	X	X	X	X	X	X	X
06256042	1R01MW47B	6/18/09	1150	L	~~3~~ 80 4 6/15/09		X			X		X				

PR 6/18/09

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/18/09	1438					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

page 2 of 2

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175

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C.O.C. № 15881

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone:	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: TKN, NH_3-N

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	TKN	NH_3-N
0625H035	KCMW26B	6/18/04	1225	L	1	X	X

PR 6/18/04

PR 6/18/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/18/04	1438					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 1 of 2

C.O.C. № 15885

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder	Company Name: Kleinfelder
Phone:	Phone:
Address:	Address:
Fax:	Fax:
Attn:	Attn:

Project Name/Number: Hunters Point/41330

Sampler (Print): Patricia Renton

Purchase Order Number: 41330

Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	Pest OC	PCBs	OP Pest	Cyanide	Anions	Sulfide	TSS	NH_3-N	TKN	SVOCs	
0625G042	1R01MW47B	6/18/04	1150	L	7	X	X	X	X	X	X	X	X	X	X		
0625G043	1R01MW47B	6/18/04	1150	L	~~7~~ 8	X	X	X	X	X	X	X	X			X	8 Containers duplicate

[illegible] 6/18/04

TR 6/18/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
[signature]	6/18/04	1510					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

Page 1 of 2

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15884

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder	Company Name: Kleinfelder
Phone:	Phone:
Address:	Address:
Fax:	Fax:
Attn:	Attn:

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hunters Point/41330	Patricia Renton		Carrier:
Purchase Order Number: 41330	Sampler (Signature): Patricia Renton		Waybill No.:
			Comments:

PR 6/18/04

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	TPHe									Comments
0625G043	1R01MW47B	6/18/04	1150	L	1	X									duplicate

PR 6/18/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☑ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
	6/18/04	1510					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
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CHAIN OF CUSTODY RECORD

COC № 15878

Report to: (PLEASE PRINT)
Company Name: Kleinfelder
Phone: 415-822-2253
Address:
Fax:
Attn:

Invoice to: (PLEASE PRINT)
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point/41330
Sampler (Print): Patricia Renteria
Purchase Order Number: 41330
Sampler (Signature): [signature]

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	Pest OC	PCBs	TPHe	OP Pest	Oil/Grease	Cyanide	Anions	Sulfide	TSS
1R01EB069	1R01MW31A	6/16/04	1100	L	9	X	X	X	X	X	X	X	X	X	X	X
06258045	1R02MWB-3	6/17/04	1405	L	4		X	X		X						

K 6/18/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renteria	6/18/04	1347	1347				

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

page 2 of 2

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C.O.C. № 15880

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renta	41330	[signature]

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	TKN	Ammonia Nitrogen									
1K01EB064	1K01MW31A	6/18/04	1100	L	1	X	X									

PR 6/18/04

PR 6/18/04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renta	6/18/04	1347					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

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Fresno, CA 93722

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CHAIN OF CUSTODY RECORD

page 1 of 2

C.O.C. № 16346

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone:	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped:
Huntus Point		Carrier:
Purchase Order Number: 41330	Sampler (Signature):	Waybill No.:
		Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OPPest	PCBs	TPHe	Extractable Oil + Grease	OP Compounds	Cyanide	Anions	Sulfide	TSS
0625X008	1R01MW38A	6/18/04	1050	L	~~10~~ 9	X	X	X	X	X	X	X	X	X	X	X
0625R005	1R36MW17A	6/18/04	1345	L	2			X								

6/18/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patrick [illegible]	6/18/04 ~~1340~~ 1504						
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
	6/18/04						

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

page 2 of 2

APPL, Inc.
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Fresno, CA 93722

Phone: (559) 275-2175
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C.O.C. № 15876

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point

Purchase Order Number: 41330

Sampler (Print):

Sampler (Signature):

Date Shipped:
Carrier:
Waybill No:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	TKN	Ammonia Nitrogen								
0625X008	R01MW3SA	6/18/04	1050	L	1	X	X								

Analysis Requested/Method Number

Sue 6/18/04

Sue 6/18/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Ponce	6/18/04	1504					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

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4203 W. Swift
Fresno, CA 93722

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Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 1 of 2

C.O.C. № 16347

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder	Company Name: Kleinfelder
Phone:	Phone:
Address:	Address:
Fax:	Fax:
Attn:	Attn:

Project Name/Number: Hunters Point

Sampler (Print):

Purchase Order Number: 41330

Sampler (Signature):

Date Shipped:

Carrier:

Waybill No.:

Comments:

Analysis Requested/Method Number: VOCs, TPHp

Smil 6/18/04

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp										Comments
0625R003	1R12MW13A	6/17/04	1533	L	3	X											
0625R004	1R12MW13A	6/17/04	1535		3	X											duplicate
1R76EB067	1R76MW13A	6/18/04	0920		3	X											
0625H034	1R36MW16A		1120		3	X											
1R36EB068	1R36MW16A		1135		3	X											
0625X008	1R01MW38A		~~1102~~ 1050		6	X	X										sample time = 1050
0625S047	1R12MW14A		1200		3	X											
1R01EB069	1R01MW31A		1100		6	X	X										
0625S046	1R01MW31A		1040		6	X	X										
0625H035	1R01MW26B		1225		6	X	X										

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patrick Pinch	6/18/04	1608					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

Page 2 of 2

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C.O.C. № 15883

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone:	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number	Date Shipped:
Hunters Point/111330	Patricia Reuter		Carrier:
Purchase Order Number	Sampler (Signature)	PR 6/18/04	Waybill No.:
111330	Patricia Reuter		Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPH-D									Comments
0625G042	1R01MW47B	6/18/04	1150	L	6	X	X									
0625G043	1R01MW47B		1150	L	6	X	X									duplicate
0625H037	1R75MW05B		1420		6	X	X									duplicate
0625H036	1R75MW05B		1415		6	X	X									
1R01TB025	1R01		1530		6	X	X									
0625S048	1R01MW40A		1430		6	X	X									
0625X009	1R58MW33B		1430		3	X										well ID=1R58MW33B
1R58G1071	1R58MW33B		1445		3	X										
0625R007 PR 6/18/04	1R58MW31F		1457		9	X										MS/MSD

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Reuter	6/18/04	1608					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

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CHAIN OF CUSTODY RECORD

C.O.C. № 15893

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415-822-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)
Hunters Point/41330	Patricia Renton
Purchase Order Number	**Sampler (Signature)**
41330	Patricia Renton

Analysis Requested/Method Number

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Hex Chrom	metals	SVOCs	TPHe	anions	OP Compounds	OCl Pest	PCBs	Oil/Grease	Cyanide	TSS	NH3 TKN
SW-062804	Source Water	6/28/04	1130	L	1	X											
06275051	IR01MW366A	↓	1150	L	5		X	X	X	X	X	X					
06275052	IR04MW13A	↓	1400	L	10		X	X	X	X	X	X	X	X	X	X	X

SEC 6/28/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/28/04	1240	Sarah Callahan	Sarah Callahan	6/28/04	1515	
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

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C.O.C. № 15892

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Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hamilton Point / 41330
Purchase Order Number: 41330
Sampler (Print): Patricia Renton
Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	total Fe	dissolved Fe	alkalinity	TPH-D							
06275049	IR11MW27A	6/28/04	0855	L	3	X											
06275050	IR28MW03OF		1005		6	X	X	X	X								
IR28EB073	IR28MW03OF		1015		6	X	X	X	X								
IR28TB026	IR28		1500		6	X				X							
~~06275052~~ 06275051 IR 6/28/04	IR04MW36A		1150		6	X				X							Sample ID = 06275051
06275052	IR04MW13A		1400		6	X				X							
				SAC	6/29/04												

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	6/28/04	1240	[signature]	[signature]	6/28/04	1515	
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
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Fresno, CA 93722

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CHAIN OF CUSTODY RECORD

C.O.C. № 16000

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Report to:
Company Name: Kleinfelder
Address:
Attn:
Phone: 415-822-2253
Fax:

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Invoice to
Company Name: Kleinfelder
Address:
Attn:
Phone:
Fax:

Project Name/Number: Hunters Point/41330
Purchase Order Number: 41330
Sampler (Print): Sarah Callahan
Sampler (Signature): Sarah Callahan

Date Shipped:
Carrier:
Waybill No:
Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	SVOCs	OCl Pest	PCBs	TPHe	Carrier oil & Grease							
0627S053	IR01MW53B	6/29/04	1000	L	5	X	X	X	X	X							
IR01EB074	IR01MW53B	↓	1020	↓	5	X	X	X	X	X							

See 6/29/04

See Grab

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Sarah Callahan	6/29/04	1500					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

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C.O.C. № 15894

Report to: PLEASE PRINT
Company Name: Kleinfelder
Phone: 415-822-2253
Address:
Fax:
Attn:

Invoice to: PLEASE PRINT
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point / 41330
Sampler (Print): Sarah Callahan
Purchase Order Number: 41330
Sampler (Signature): Sarah Callahan

Date Shipped:
Carrier:
Waybill No.:
Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp	Cyanide	Metals	Anions	NH_3/TKN	Sulfide	TSS			
0627S053	IR01MW53B	6/29/04	1000	L	11	X	X	X	X	X	X	X	X			
IR01EB074	IR01MW53B		1020		11	X	X	X	X	X	X	X	X			
IR01TB027	IR01		1500		6	X	X									
0627S054	IR09P040A		1245		1			X								
SEC 6/29/04																

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Sarah Callahan	6/29/04	1500					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

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C.O.C. № 16413

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point / 41330	Patricia Renton	41330	[signature]

Analysis Requested/Method Number

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp	Chlm O demand	Flashpoint	pH	TSS						
0729S055	1R01MW366B	7/8/04	0920	L	6	X	X										
0729S056	1R01MW366B		0936		6	X	X										duplicate
0729S057	1R01MW403B		1120		6	X	X										
1R01EB075	1R01MW403B		1200		6	X	X										
1DW070804-P	1DW-H2O-Poly		1300		6	X	X										
1DW070804-Drill	1DW-H2O-Drilling		1330		6	X	X										
1R017B028	1R01		1520		6	X	X										
1DW070804-Drill ~~1DW-H2O-Drill~~	1DW-H2O-Drill		1330		4			X	X	X	X						Sample ID: 1DW070804-Drill
1DW070804-P	1DW-H2O-Poly		1300		1			X									

PR 7/8/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
[signature]	7/8/04	1527					
Relinquished by	**Date**	**Time**	**Received by**	**Relinquished by**	**Date**	**Time**	**Received at lab by**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
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Fax: (559) 275-4422

C.O.C. № 15896

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Date Shipped:
Hunters Point/41330	Patricia Renton	Carrier:
Purchase Order Number: 41330	Sampler (Signature): Patricia Renton	Waybill No.:
		Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	Pest	PCBs	TPHe	TSS	Sulfide	Flashpoint	pH	Hex Cr	Cyanide
1DW070804-P	1DW-H2O-Poly	7/8/04	1300	L	10	X	X	X	X	X	X	X	X	X	X	X
1DW070804-Drill	1DW-H2O-Drilling	07/8/04	1330	L	7	X	X	X	X	X		X			X	X

DK 7/8/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	7/8/04	1519					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722
Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15895

PLEASE PRINT

Report to
Company Name: Kleinfelder
Phone: 415 882-2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point/41330
Sampler (Print): Patricia Pontes
Purchase Order Number: 41330
Sampler (Signature): Patricia Pontes

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OC Pest	PCBs	TPHe	Oil/Grease	OP Compounds	Anions/TSS	Sulfide	Cyanide	NH3-N/TKN
0729S057	IKOMW403B	7/8/04	1120	C	11	X	X	X	X	X	X	X	X	X	X	X
IKOIE3075	IKOMW403B	7/8/04	1200	C	4						X		X			X

PE 7/8/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☑ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by Sampler	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Pontes	7/8/04	1449					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
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Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 16411

Report to: (PLEASE PRINT)		Invoice to: (PLEASE PRINT)	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax: Cooler ID: 4899
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OC Pest	PCBs	TPHe	OP Cmpds	Sulfide	Cyanide	NH_3-N/TKN	PR 7/8/04		Date Shipped: / Carrier: / Waybill No.: / Comments:
07295056	1R01MW366B	7/8/04	0936	L	8	X	X	X	X	X	X	X	X	X			duplicate
1R01EB075	1R01MW403B	7/8/04	1200	L	7	X	X	X	X	X	X	X	X				

PR 7/8/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☑ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	7/8/04	1438					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

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CHAIN OF CUSTODY RECORD

Cooler ID 48298

C.O.C. № 16412

PLEASE PRINT

Report to
Company Name: Kleinfelder Phone: 415-822-2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to
Company Name: Kleinfelder Phone:
Address:
Fax:
Attn:

Project Name/Number: Hunters Point 141330
Purchase Order Number: 141330
Sampler (Print): Patricia Renton
Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OC Pest	PCBs	TPHc	Oil/Grease	OP Cmpds	Anions/TSS	Sulfide	Cyanide	NH_3-N/TKN	
0729S055	1R01MW36GB	7/8/04	0920	L	~~1~~ 11	X	X	X	X	X	X	X	X	X	X	X	11 containers
0729S056	1R01MW36GB	7/8/04	0936	L	3						X		X				

PR 7/8/04

Shuttle Temperature:

Turnaround Requested - MUST CHECK ONE
[X] Standard (2-3 week) [ ] One week [ ] 24-48 hour

Sample Disposal:
[ ] Return to client [ ] Disposal by Lab (30-day retention)

Relinquished by sampler	Date	Time	Received by	Relinquished by	Date	Time	Received by
Patricia Renton	7/8/04	1424					

Relinquished by	Date	Time	Received by	Relinquished by	Date	Time	Received at lab by

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15898

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder	Company Name: Kleinfelder
Phone: 415 822 2253	Phone:
Address:	Address:
Fax:	Fax:
Attn:	Attn:

Cooler ID: 5090

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
HunterSPoint/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number: VOCs, TPHp, Oil/Grease, SVOCs, OC Pest, TPHe, OP Compounds, ~~Pest~~ PCBs

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPHp	Oil/Grease	SVOCs	OC Pest	TPHe	OP Compounds	~~Pest~~ PCBs			
0729S058	1R01MWLF2A	7/8/04	1558	L	6	X	X									
1R01TB029	1R01	7/9/04	1500	L	6	X	X									
0729S059	1R01MWLF4B	7/9/04	0840	L	6	X	X									
1R01EB076	1R01MWLF4B		0855		6	X	X									
0729S060	1R01MWLF1A		0956		6	X	X									
0729S061	1R01MWLF4A		1135		6	X	X									
0729S060	1R01MWLF1A		0956		6			X	X	X	X	X	X			

PR 7/9/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	7/9/04	1515					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15902

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415.822.2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax:
Attn:		Attn:	Cooler ID: 48256

Project Name/Number	Sampler (Print)	Date Shipped:
Huntlers Point/41330	Patricia Renton	Carrier:
Purchase Order Number: 41330	Sampler (Signature): Patricia Renton	Waybill No.:
		Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OC Pest	TPHe	PCBs	OPCmpds	Sulfide	Anions/TSS	Cyanide	NH_3-N/TKN		
0729S059	1R01MWLF4B	7/9/04	0840	L	9	X	X	X	X	X	X	X	X	X	X		date collected: 07/09/04
1R01EB076	1R01MWLF4B	7/9/04	0855	L	4		X	X	X	X	X						

PR 7/9/04

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
1	☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	7/9/04	1450					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275 2175
Fax: (559) 275-4422

C.O.C. № 15901

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415-822-2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax: Cooler ID: 5413
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
HuntersPoint/41330	Patricia Renton	41330	Patricia Renton

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Oil/Grease	Metals	SVOCs	OC Test	TPHe	OP Compounds	Sulfide	Anions/TSS	Cyanide	NH_3-N/TKN	PCBs
1R01EB076	1R01MWLF4B	7/8/04	0855	L	2	X										
0729S061	1R01MWLF4A	7/8/04	1135	L	11	X	X	X	X	X	X	X	X	X	X	X

PR 7/9/04

Date Shipped:
Carrier:
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	7/9/04	1490					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15899

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 415 822 2253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax: cooler ID: 48284
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point/4330	Patricia Renton	41330	Patricia Renton

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	SVOCs	OC Pest	TPHe	OP Carbon	Oil/Grease	PCBs	Anions/TSS	Sulfide	Cyanide	NH3-N/TKN
07295058	IROMWLF2A	7/8/04	1558	L	11	X	X	X	X	X	X	X	X	X	X	X
07295059	IROMWLF4B	7/8/04	0840	L	2						X					

Analysis Requested/Method Number

Date Shipped:
Carrier:
Waybill No.:
Comments:

PR 7/9/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	7/9/04	1430					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report. Yellow: Laboratory Copy. Pink: Sampler

CHAIN OF CUSTODY RECORD

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. № 15999

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Kleinfelder	Phone: 4150722253	Company Name: Kleinfelder	Phone:
Address:	Fax:	Address:	Fax: Cooler ID: 50105
Attn:		Attn:	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
Hunters Point	Susie Titus	41330	[signature]

Analysis Requested/Method Number

Date Shipped:
Carrier:
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	ASTM D-5084	API-RP40	ASTM D-422									Comments
0426T001	366B	6-24-04	0940	S	1	X											37-37.5'
0426T002	366B	6-24-04	1410	S	1		X										46.5-47'
0426T003	LF 4B	6-25-04	1151	S	1	X											35-35.5'
0426T004	LF 4B	6-25-04	1220	S	1		X										44.5-45'
0427T005	LF 4A	6-28-04	0750	S	1			X									24.5-25'
0427T006	LF 2A	6-28-04	1420	S	1			X									13.5-14'
0427T007	403B	6-29-04	1510	S	1		X										23-23.5'
0427T008	LF 1A	6-30-04	1437	S	1			X									14-14.5'

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☐ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
[signature]	7-1-04	1520	Patricia Penter	Patricia Penter	7/9/04	1500	
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. № 15900

PLEASE PRINT

Report to:
Company Name: Kleinfelder
Phone: 415 822 2253
Address:
Fax:
Attn:

PLEASE PRINT

Invoice to:
Company Name: Kleinfelder
Phone:
Address:
Fax:
Attn:

Cooler ID: 50105

Project Name/Number: Hunters Point/41330
Sampler (Print): Patricia Pentz
Purchase Order Number: 41330
Sampler (Signature): Patricia Pentz

Date Shipped:
Carrier:
Waybill No.:
Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	TPHg 5030/8015 mod	BTEX 5030/8020	Lead TTLC-Pb	TPHd/mo 3550/8015 mod	VOCs 8260 (or 8010+8020)	Semi Volatiles 8270	Oil/Grease 5520 E&F (or 1664)	Metals TTLC-Cd, Cr, Pb, Ni, Zn, Cu, Cr6+			
IDW-Soil-070904	IDW Soil	07/09/04	805	S	4	X	X	X	X	X	X	X	X			4-point composite sample

PE 7/9/04

*analyze metals for Cd, Cr, Pb, Ni, Zn, Cu, and Cr6+ specific

PE 7/9/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Pentz	7/9/04	1500					

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPL, Inc.
4203 W. Swift
Fresno, CA 93722

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

page 3 of 3

C.O.C. № 15903

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Kleinfelder Phone: 415 822 2253	Company Name: Kleinfelder Phone:
Address: Fax:	Address: Fax: cooler ID: 50105
Attn:	Attn:

Project Name/Number: Hunters Point/41330
Sampler (Print): Patricia Renton
Purchase Order Number: 41330
Sampler (Signature): Patricia Renton

Date Shipped:
Carrier:
Waybill No.:
Comments:

Analysis Requested/Method Number

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	Metals	NH3-N/TKN	Anions/TSS	Cyanide	Sulfide						
1R01EB076	1R01MWLF4B	7/9/04	0855	L	5	X	X	X	X	X						
07295060	1R01MWLF1A	7/9/04	0956	L	5	X	X	X	X	X						

PR 7/9/04

PR 7/9/04

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

Sample Disposal:
☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Patricia Renton	7/9/04	1500					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

APPENDIX D

Data Validation Reports, April to June 2004 Sampling Event

UNSCANNABLE MEDIA

To use the unscannable media document # 2226521
contact the Region IX Superfund Records Center

APPENDIX E

Field Duplicate Pair Results, April to June 2004 Sampling Event

APPENDIX E
FIELD DUPLICATE RESULTS
Eighteeth Quarterly Groundwater Sampling Report - Parcel B
Hunters Point Shipyard
San Francisco, California

Well ID	Sample Number	Sample Duplicate Number	Sample Date	Analytical Method	Analyte	Sample Type	Units	Original Sample Result	Lab Qualifier	Duplicate Result	Lab Qualifier	RPD (%) [1,2]
IR26MW46A	0424G016	0424G015	6/7/04	CLP MERCURY	MERCURY	NORM	µg/L	0.058	J	0.2	U	110
IR26MW46A	0424G016	0424G015	6/7/04	CLP METALS	ARSENIC	NORM	µg/L	10	U	10	U	0
IR26MW46A	0424G016	0424G015	6/7/04	CLP METALS	CHROMIUM	NORM	µg/L	10	U	10	U	0
IR26MW46A	0424G016	0424G015	6/7/04	CLP METALS	COPPER	NORM	µg/L	25	U	25	U	0
IR26MW46A	0424G016	0424G015	6/7/04	CLP METALS	LEAD	NORM	µg/L	10	U	10	U	0
IR26MW46A	0424G016	0424G015	6/7/04	CLP METALS	MANGANESE	NORM	µg/L	1750		1800		3
IR26MW46A	0424G016	0424G015	6/7/04	CLP METALS	ZINC	NORM	µg/L	60	U	60	U	0
IR26MW46A	0424G016	0424G015	6/7/04	CLP PESTICIDES	alpha-CHLORDANE	NORM	µg/L	0.01	U	0.01	U	0
IR26MW46A	0424G016	0424G015	6/7/04	CLP PESTICIDES	AROCLOR-1260	NORM	µg/L	0.2	U	0.2	U	0
IR26MW46A	0424G016	0424G015	6/7/04	CLP SEMIVOLATILES	BENZO(a)PYRENE	NORM	µg/L	10	U	10	U	0
IR26MW46A	0424G016	0424G015	6/7/04	CLP SEMIVOLATILES	CHRYSENE	NORM	µg/L	10	U	10	U	0
IR26MW46A	0424G016	0424G015	6/7/04	EPA 160.2	TOTAL SUSPENDED SOLIDS	NORM	mg/L	10.000	U	10.000	U	0
IR26MW46A	0424G016	0424G015	6/7/04	EPA 7196A	HEXAVALENT CHROMIUM	NORM	µg/L	20	U	20	U	0
IR26MW47A	0424S016	0424S017	6/7/04	CLP MERCURY	MERCURY	NORM	µg/L	1.0		1.1		10
IR26MW47A	0424S016	0424S017	6/7/04	CLP METALS	ARSENIC	NORM	µg/L	10	U	10	U	0
IR26MW47A	0424S016	0424S017	6/7/04	CLP METALS	CHROMIUM	NORM	µg/L	10	U	10	U	0
IR26MW47A	0424S016	0424S017	6/7/04	CLP METALS	COPPER	NORM	µg/L	25	U	25	U	0
IR26MW47A	0424S016	0424S017	6/7/04	CLP METALS	LEAD	NORM	µg/L	10	U	10	U	0
IR26MW47A	0424S016	0424S017	6/7/04	CLP METALS	MANGANESE	NORM	µg/L	15	U	15	U	0
IR26MW47A	0424S016	0424S017	6/7/04	CLP METALS	ZINC	NORM	µg/L	60	U	60	U	0
IR26MW47A	0424S016	0424S017	6/7/04	CLP PESTICIDES	alpha-CHLORDANE	NORM	µg/L	0.01	U	0.01	U	0
IR26MW47A	0424S016	0424S017	6/7/04	CLP PESTICIDES	AROCLOR-1260	NORM	µg/L	0.2	U	0.2	U	0
IR26MW47A	0424S016	0424S017	6/7/04	CLP SEMIVOLATILES	BENZO(a)PYRENE	NORM	µg/L	10	U	10	U	0
IR26MW47A	0424S016	0424S017	6/7/04	CLP SEMIVOLATILES	CHRYSENE	NORM	µg/L	10	U	10	U	0
IR26MW47A	0424S016	0424S017	6/7/04	EPA 160.2	TOTAL SUSPENDED SOLIDS	NORM	mg/L	10.000	U	10.000	U	0
IR26MW47A	0424S016	0424S017	6/7/04	EPA 7196A	HEXAVALENT CHROMIUM	NORM	µg/L	20	U	20	U	0
Sample with Relative Percent Difference (RPD) 30% or Greater [1]												
IR26MW46A	0424G016	0424G015	6/7/04	CLP MERCURY	MERCURY	NORM	µg/L	0.058	J	0.2	U	110

Notes:

[1] Because the SAP does not establish a maximum acceptable RPD for field duplicate pairs, a generally accepted conservative standard of 30 RPD was considered.

[2] For non-detects, PQL values were used to calculate RPDs. This is likely to misrepresent the actual RPD to some degree since the actual non-detected concentration is below PQL.

Acronyms/Abbreviations:

CLP	Contract Laboratory Program
DIL	Dilution
EPA	Environmental Protection Agency
FIL	Filtered
ID	Identification
MDL	Method detection limit
µg/L	Micrograms per liter
mg/L	Milligrams per liter
NORM	Normal
PQL	Practical quantitation limit
RPD	Relative percent difference

Lab Qualifiers:

D	Dilution
E	Exceeds calibration range; estimated value
J	Detected below the PQL but above the MDL; estimated value
U	Not detected

APPENDIX F

San Francisco Public Utilities Commission
Batch Discharge Permit

SAN FRANCISCO PUBLIC UTILITIES COMMISSION
BERM - 3801 Third Street, Suite 600, San Francisco, CA 94124 • Tel. (415) 695-7310 • Fax (415) 695-7388

WATER
HETCH HETCHY
WATER & POWER
CLEAN WATER

GAVIN NEWSOM
MAYOR

E. DENNIS NORMANDY
PRESIDENT

ROBERT J. COSTELLO
VICE PRESIDENT

ANN MOLLER CAEN
ADAM WERBACH
RYAN L. BROOKS

CHERYL K. DAVIS
ACTING GEN MANAGER

August 11, 2004

Ms. Sarah Callahan
Kleinfelder, Inc.
7133 Koll Center Parkway, Suite 100
Pleasanton, CA 94566

Re: Single Batch Discharge Permit
Sample ID: IDW070804-P
Discharge point – Hunters Point Shipyard

Dear Ms. Callahan:

In reply to your request of August 10, 2004 and pursuant to Chapter X (Public Works Code) of Part II of the San Francisco Municipal Code, Article 4.1, permission, revocable by the General Manager of the Public Utilities Commission, is granted to Kleinfelder, Inc. (Permittee) to properly discharge approximately 2000 gallons of well installation and development wastewater into the sanitary sewerage system at the above referenced site.

The Permittee shall:

1.) Be in compliance with:

A. The requirements of Article 4.1, Chapter X, Part II, San Francisco Municipal Code, and amendments thereto;

B. Any additional discharge standards subsequently adopted by the City;

C. The United States Environmental Protection Agency's regulations contained in 40 CFR Parts 403, and

D. Any other applicable provisions of Federal or State laws or regulations.

The Permittee, by acceptance of this permit, agrees to indemnify and hold harmless City and County of San Francisco (City) from any and all costs, claims, damages, fines, remediation costs, losses and other expenses arising from the discharge into the sewerage system.

SAN FRANCISCO PUBLIC UTILITIES COMMISSION
BERM - 3801 Third Street, Suite 600, San Francisco, CA 94124 - Tel. (415) 695-7310 • Fax (415) 695-7388

WATER
HETCH HETCHY
WATER & POWER
CLEAN WATER

GAVIN NEWSOM
MAYOR

E. DENNIS NORMANDY
PRESIDENT

ROBERT J. COSTELLO
VICE PRESIDENT

ANN MOLLER CAEN
ADAM WERBACH
RYAN L. BROOKS

CHERYL K. DAVIS
ACTING GEN MANAGER

The Permittee by acceptance of this permit agrees to compensate the City in full for all damage to City or public property under its jurisdiction from operation under this permit, regardless of the negligence of the City.

This permit shall expire 30 days from the above date of issuance.

Should you have any questions, please contact Gary Ong at (415) 695-7365.

Very truly yours,

Tommy Lee, Division Engineer
Bureau of Environmental Regulation
and Management

SFPUC

SAN FRANCISCO PUBLIC UTILITIES COMMISSION
BERM - 3801 Third Street, Suite 600, San Francisco, CA 94124 • Tel. (415) 695-7310 • Fax (415) 695-7388

WATER
HETCH HETCHY
WATER & POWER
CLEAN WATER

GAVIN NEWSOM
MAYOR

E. DENNIS NORMANDY
PRESIDENT

ROBERT J. COSTELLO
VICE PRESIDENT

ANN MOLLER CAEN
ADAM WERBACH
RYAN L. BROOKS

CHERYL K. DAVIS
ACTING GEN MANAGER

August 11, 2004

Ms. Sarah Callahan
Kleinfelder, Inc.
7133 Koll Center Parkway, Suite 100
Pleasanton, CA 94566

Re: Single Batch Discharge Permit
Sample ID: IDW070804-DRILL
Discharge point – Hunters Point Shipyard

Dear Ms. Callahan:

In reply to your request of August 10, 2004 and pursuant to Chapter X (Public Works Code) of Part II of the San Francisco Municipal Code, Article 4.1, permission, revocable by the General Manager of the Public Utilities Commission, is granted to Kleinfelder, Inc. (Permittee) to properly discharge approximately 2000 gallons of well installation and development wastewater into the sanitary sewerage system at the above referenced site.

The Permittee shall:

1.) Be in compliance with:

A. The requirements of Article 4.1, Chapter X, Part II, San Francisco Municipal Code, and amendments thereto;

B. Any additional discharge standards subsequently adopted by the City;

C. The United States Environmental Protection Agency's regulations contained in 40 CFR Parts 403, and

D. Any other applicable provisions of Federal or State laws or regulations.

The Permittee, by acceptance of this permit, agrees to indemnify and hold harmless City and County of San Francisco (City) from any and all costs, claims, damages, fines, remediation costs, losses and other expenses arising from the discharge into the sewerage system.

SAN FRANCISCO PUBLIC UTILITIES COMMISSION
BERM - 3801 Third Street, Suite 600, San Francisco, CA 94124 • Tel. (415) 695-7310 • Fax (415) 695-7388

WATER
HETCH HETCHY WATER & POWER
CLEAN WATER

GAVIN NEWSOM
MAYOR

E. DENNIS NORMANDY
PRESIDENT

ROBERT J. COSTELLO
VICE PRESIDENT

ANN MOLLER CAEN
ADAM WERBACH
RYAN L. BROOKS

CHERYL K. DAVIS
ACTING GEN MANAGER

The Permittee by acceptance of this permit agrees to compensate the City in full for all damage to City or public property under its jurisdiction from operation under this permit, regardless of the negligence of the City.

This permit shall expire 30 days from the above date of issuance.

Should you have any questions, please contact Gary Ong at (415) 695-7365.

Very truly yours,

Tommy Lee, Division Engineer
Bureau of Environmental Regulation
and Management

APPENDIX G

Records of Field Variance

KLEINFELDER
An employee owned company

RECORD OF FIELD VARIANCE/TECHNICAL CHANGE

Technical Change Number 43310-V00 **Page 1 of 1**

Navy Contract Number: N68711-00-D-0004; DO-0074 **KA Project Number:** 43310

Project Name: Hunters Point Shipyard Basewide Groundwater Monitoring

Task: 2.07

The following Technical changes are requested by: (Note – All requested changes must provide adequate justification.)

(Name)	(Title)	(Date)
[signature]	Field Manager	19 July 2005

Variance:
The following wells did not meet low-flow sampling criteria for discharge rate and/or drawdown as outlined in the Draft SAP (TtEMI, 2003) in Parcel B during Quarter 18.

Parcel	Well ID
B	IR07MW10A
B	IR46MW37A
B	IR10MW31A1
B	IR07MW27A
B	IR06MW45A
B	IR25MW17A
B	IR07MW21A1
B	IR07MW25A
B	IR10MW14A
B	IR10MW33A
B	IR10MW59A
B	IR25MW37A
B	IR07MW28A
B	IR06MW42A
B	IR10MW71A
B	IR10MW76A
B	IR10MW79A
B	IR10MW80A
B	IR26MW46A
B	IR26MW46A
B	IR26MW47A
B	IR26MW47A
B	IR26MW48A

Reference SAP Section(s):
8.3.4.1

KLEINFELDER
An employee owned company

Justification:
Flow rates and draw down were difficult to control based upon the equipment specified for the work. The equipment specifications indicated that a low flow rate was achievable, however, field implementation proved otherwise. Kleinfelder is investigating alternate pumps that can achieve the desired low flow rates.

Approved by: Gary Goodemote **date:** 19 July 2005
KA Field QA PM

Matt Bloc **date:** 7/19/05
CDM Federal PM

date: 7/21/05
SWDIV PM

KLEINFELDER
An employee owned company

RECORD OF FIELD VARIANCE/TECHNICAL CHANGE

Technical Change Number 41330-V02-Q18-B-F

Navy Contract Number: N68711-00-D-0004; DO-0074

KA Project Number: 41330

Project Name: Hunters Point Shipyard Basewide Groundwater Monitoring

Task: 2.07

The following Technical changes are requested by: (Note – All requested changes must provide adequate justification.)

(Name)	(Title)	(Date)
Fred Callahan	Field Manager	11/08/05

Variance:
The following wells were not measured during Quarter 18.

Parcel	Well ID	Reason why it was not measured
A	PA18MW08A	well not located
B	IR10MW59A	well not located
B	IR10MW61A	well not located
B	IR25EW01A	well not located

Reference SAP Section(s):

8.3.3

Justification:

These wells were unable to be located.

Approved by: Gary Goodemote date: 11/9/05
KA Field QA PM

Darlene M. McCray date: 11/21/05
CDM Federal PM

date: 11/23/05
SWDIV PM

APPENDIX H

Response to Comments on the Draft Report

DRAFT RESPONSE TO DTSC COMMENTS
SECOND QUARTER 2004
PARCELS C, D, & E HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

Dated July 11, 2005

Comments From: Thomas Lanphar - DTSC	Dated: March 15, 2005	Navy Responses:	Dated: July 11, 2005
REFERENCE DOCUMENTS			
SECTION /PAGE #	**COMMENTS**	**RESPONSES**	
GENERAL COMMENTS			
Comment #1: Previous comments. Comments provided by DTSC on previous documents still apply--for example, comments regarding data gaps and sampling protocols. Previous documents include: Sampling and Analysis Plan (Field Sampling Plan and Quality Assurance Project Plan) Basewide Groundwater Monitoring Program, Hunters Point Shipyard, San Francisco, California, Draft (dated December 18, 2003: comments provided February and March 2004) and January to December 2003, 16th Quarterly/4th Annual Groundwater Sampling Report, Parcel B, Hunters Point Shipyard, San Francisco, California, Draft (Q18R) (dated February 20, 2004: comments provided June 2004). For the sake of brevity, previous comments are not repeated in this memorandum.		**Response**: Comment noted. The Navy has addressed these comments in previous response to comments.	
Comment #2: Data gaps which were identified by the Navy and by agencies but which were not addressed in the current program should be evaluated and changes to the BGMP proposed for the second year of sampling. In particular, because of heightened concerns with respect to the indoor air pathway, data gaps associated with volatile organic compounds (VOCs) should be evaluated—especially where VOCs were measured on or adjacent to current or future occupied properties. VOC data is critical for several feasibility studies (FSs) under development. DTSC is interested in the Hunters Point Shipyard team discussing the evolution of the BGMP prior to receiving revised work plans for next year monitoring program.		**Response**: The annual groundwater monitoring reports will be prepared at the conclusion of four consecutive quarters of monitoring. Recommendations for future monitoring will be included in the annual reports, which will be submitted and reviewed by DTSC prior to receiving additional work plans for the monitoring program.	

Comment #3: Screening levels. The agencies and the Navy have not reached agreement with respect to groundwater screening levels for protection of human health and the environment at non-Parcel B RAMP wells. Resolving issues regarding screening levels would greatly facilitate review of groundwater data, since the use of screening levels results in a smaller volume of data to be reviewed and posted on figures. And more to the point, resources will be better utilized and reviews will be focused on areas of higher priority.	**Response**: The Navy compares supplemental characterization well results to point of compliance trigger levels specified in the Parcel B Record of Decision (ROD). Alternate screening levels will be proposed in the Technical Memorandum to support the Parcel B ROD Amendment.
Comment #4: Data presentations. Below are some suggestions for data presentations that would facilitate review. a) Data are not posted on figures in CDEQ2. It is extremely difficult to evaluate results for hundreds of wells (13,431 chemical analytical results) without graphic presentations. For that reason, only a very cursory review of selected CDEQ2 results was conducted. Additional comments on CDEQ2 results may be provided later, when appropriate graphic presentations are provided. b) Significant problems with groundwater contours were observed. c) Please provide a figure showing the extent of free product. d) Detailed comments and examples of data presentation problems are provided elsewhere in this memorandum. e) Please include VOC plumes for IR25 and IR-06 on Parcel B figures.	**Response**: The Navy and regulatory agencies have agreed that the first three quarterly reports would contain all chemical data, but it would present graphically the chemical data for the entire year in the Annual Report. Groundwater contours are generated using contouring software, and the Navy recognizes the inherent problems with contouring software. While individual data points may not be correctly located between contours, the overall potentiometric surface is adequate with the exception of how the program interprets the boundary conditions at the Bay margin. The Navy is evaluating how to improve the potentiometric surface map accuracy and realize the time-saving benefit of the software. Refer to the Data Gaps Summary Report for the extent of free product. The Navy will consider adding Parcel C plumes to Parcel B figures in the Annual Report.

Comment #5: Deviations from workplan (Q18 and Q2, Section 3.5) a) Greater detail and completeness in this section and perhaps the addition of tables will allow a better understanding of Workplan deviations and of the quality of data. Please include the following: i) wells not measured for groundwater levels or floating product, ii) all wells not sampled (and reasons for not sampling), iii) deviations from analytical programs, iv) detection limits (DLs) exceeding criteria, v) non-compliance with sampling or analytical protocols. For example, several landfill wells were not sampled because of obstructions (e.g., IR01MW367A, IR01MWI-3). IR01MWI-3 is also a shoreline well (South Basin): and three other South Basin shoreline wells were not sampled (i.e., IR01MWI-7, IR01MWI-8 and IR01MW48A). IR02 shoreline wells were also not sampled (e.g., IR02MWB-1, IR02MWB-5, and IR02MW206A2 which was "open to the elements"). vi) discuss all instances of non-compliance with RAMP requirements. vii) discuss the consequences of using SW-846 methodology in lieu of CLP methodology, and other changes to the analytical program. In this regard, please identify specific analytical methods used.	**Response**: Record of Field Variance Forms will be prepared and included in future reports to address wells not measured or sampled during each groundwater monitoring event, deviations from the SAP, and/or non-compliance with the RAMP. The SAP states that CLP methods are required for groundwater samples collected during the Parcel B RAMP. In general CLP is a prescriptive standard that is mandated, whereas SW-846 is considered more of a guidance. Analytical results should be consistent using either method.
Comment #6: Data quality (Section 3.4). Please discuss corrective actions taken to address data quality issues--for example, low-biased and false non-detects for arsenic and selenium (Q17R).	**Response**: The analytical laboratory (APPL) initiated protocols to be followed; if a matrix spike (MS) below 30% is encountered, then the analysis is repeated. In addition, if the laboratory control sample passes and the matrix spike/matrix spike duplicate (MS/MSD) fails, then only the MS/MSD is repeated. Q17 report will not be revised.

Comment #7: Indoor-air pathway. As discussed in previous comments, DTSC has identified the indoor-air pathway as a particular concern. Multiple large areas of groundwater contamination by volatile organic compounds (VOCs) are being monitored by the Navy in the BGMP. However, other small areas have not been included in the BGMP. DTSC has expressed concern about smaller areas, especially areas in or adjacent to current or future occupied property. For example, trichloroethene (TCE) has been measured at concentrations near the drinking water maximum contaminant level (MCL: 5 ug/L) at IR74MW01A (3.7 ug/L). This well is located in an occupied area which is proposed for residential development: it is on Parcel E, north of the landfill, on Crisp Avenue. The extent and characteristics of VOC contamination in this area have not been fully determined. The OVM reading at nearby well IR56MW39A was 410 ppm (above the action level of 5 ppm), but this well was not analyzed for VOCs. Another nearby well IR04MW37A had TCE at 3.8 ug/l. IR72MW32A is shown as sampled on CDE2Q Figure 2E, but no data was provided. As discussed below, semi-VOCs (SVOCs) may also be of concern for the indoor-air pathway. It is necessary to gather VOC and SVOC data now so that FS decision-making can be appropriately informed and protective measures can be evaluated. a) Please continue to monitor IR74MW01A for VOCs. Add SVOCs, as well. Propose additional wells for VOC and SVOC monitoring in this area. b) Please add other areas to the BGMP. Include areas (previously identified by DTSC): where VOCs are at lower concentrations, where hits are intermittent, or where data sets are small. For example, benzene at IR30. DTSC is interested in the developing team's process for making modifications to the BGMP.	**Response**: Comment Noted. Well IR56MW39A was measured with the OVM and the level recorded is 410 ppm. Groundwater from this well was analyzed for TPHe, TPHp, VOCs, and SVOCs. Figure 2E is a well location map and is not intended to show which wells were sampled. The SAP does not define sampling for well IR72MW32A. The annual reports will address recommendations for additional well installations and any additional analytes and/or wells to be included in the monitoring program

Comment #8: Trigger levels. Clarity is needed in regards to the use of Trigger Levels for Parcel B wells. DTSC anticipates that the Technical Memorandum in Support of a ROD Amendment (TMSRA) will evaluate current Trigger levels are perhaps propose new levels. Because of the addition of supplemental wells and replacement wells clear terminology is needed. Please propose a different term than "Other Well Trigger Level". a) When proposing 'Trigger Levels' in the TMSRA, please consider updated toxicological parameters (e.g., for volatile organic compounds (VOCs), beryllium), new analytes (e.g., organotins), and ecological screening levels of the RWQCB (discussed below) when developing proposals for new Trigger Levels. b) Pre-ROD Amendment use of "Other Well Trigger Levels" may be appropriate for understanding data in supplemental wells; however, please ensure that the 'levels' are identical for wells with a similar purpose. Currently there are inconsistent trigger levels across Parcel B for wells which are of similar purposes. i) For example, Trigger levels are attached to several wells as shown in Appendix A (i.e., IR26MW46A, IR26MW47A, IR26MW48A, and IR10MW12A). The "other well trigger level" proposed for total chromium is 1,030 ug/L. However, for POC wells, the trigger level for total chromium is 15.7 ug/L. POC triggers would be more appropriate for IR26 wells which are located at the Bay margin. In fact, well IR26MW28A is essentially a replacement for removed POC well IR26MW25A. ii) A trigger level is proposed as an "other well trigger level" for alpha-chlordane (81 ug/L). There are no ROD trigger levels for alpha-chlordane. Trigger levels for new analytes require more evaluation. For example, ecological screening levels of the RWQCB should be considered.	**Response**: The Navy will evaluate screening levels in the TMSRA.

Comment #8 (continued):

c) The ROD trigger level is for trivalent chromium (CrIII), not for total chromium. Please revise Table 7 and Appendix A accordingly.

Response: Table 7 will be revised. The ROD trigger level does not apply to Appendix A.

d) Please propose indoor-air Trigger Levels for VOCs and SVOCs in the TMSRA. All wells which are sampled for VOCs should be compared to indoor-air trigger levels of VOC wells, since distance to the Bay is not a relevant parameter for the indoor air pathway (also, see note on naphthalene, below).

It is not clear why DTSC chooses to make recommendations for the TMSRA in a groundwater monitoring report. The Navy requests that DTSC limit document review comments to the document being reviewed. If DTSC has other concerns, the concerns should be communicated to the Navy under a separate cover letter.

e) Although approved in the Parcel B ROD, POTW discharge requirements are not appropriate groundwater trigger levels, since they greatly exceed (by orders of magnitude) human health and ecological risk-based screening levels.

   i) Please reevaluate IR06MW42A in the TMSRA with regard to more stringent trigger levels. In particular, evaluate compounds relevant to the indoor-air pathway—volatile organic compounds (VOCS) and semi-VOCs (SVOCs), like naphthalene.

f) All compounds which have trigger levels in the ROD should be evaluated for exceedences. Please include all trigger levels on Table 10 of the Record of Decision (ROD) on Table 7. Include: benzene; chloroform; 2,6-dinitrotoluene; heptachlor epoxide; hexachloroethane; naphthalene; pentachlorophenol; phenanthrene; 1,1,2,2-tetrachloroethane; and 1,1,1-trichlorethane. Evaluate results for exceedences of these compounds. Revise text and Appendix A accordingly.

Comment #9: Groundwater potentiometric surfaces. a) DTSC is concerned about the large number of wells proposed for but not included in groundwater measurement. A total of 415 wells were proposed for groundwater level measurements; however, only 308 wells were measured in Q17R and 316 in Q18R and CDEQ2R (pages 2-1). This is a difference of about 25%--a significant deviation from the workplans. The text provides some explanation for the missed wells; however, DTSC request more information in order to track the causes (for not sampling a well), corrective actions, and future inclusion of the well into the sampling regime. DTSC request that the Navy develop a specific plan to improve the percentage of proposed versus sampled wells and address the following: v) Please provide a table containing 415 proposed wells. Indicate wells which were measured and provide dates. For wells not measured, provide an explanation for each well.	**Response**: The Navy will document more thoroughly all deviations from the SAP, for the second quarter 2004 sampling event, by including Record of Field Variance Forms and a summary table listing all deviations from the Draft SAP in an additional appendix in the report.
vi) Measurement of groundwater elevation levels in all RAMP wells is required: non-measurement constitutes non-compliance (e.g., IR07MW27A, IR07MW28A, IR06MW45A, and IR26MW41A). Please identify all RAMP wells which were not measured. Please explain why RAMP wells were not measured and why IR06MW45A and IR26MW41A were not measured for 2 consecutive quarters.	With the exception of IR26MW41A, which was located beneath a stockpile of soil for the past several quarters, each of the wells listed at left were measured.
vii) Please explain what actions have been taken to locate missing wells, repair damaged wells, and gain access to wells. Explain what damages were observed and what is meant by "natural" objects covering wells.	A GPS reconnaissance was conducted to locate missing wells. Natural objects include vegetation that obscures the location of the well.

Comment #9 (continued): viii) The number of wells not sampled as shown on Figures 3 (with green and purple dots) is less than the total of number of wells not sampled as indicated in the text. Please resolve this discrepancy.	**Response**: The Navy will provide contour maps at a scale that can implement the requested changes in the annual report. The Q17 contour maps will be revised for the annual report..
ix) Provide new figures with all wells and with all inconsistencies corrected. x) Provide an updated well information spreadsheet on a CD and in hardcopy. Current status and corrective actions on wells should be added to the Comments column.	The well information spreadsheet is scheduled to be updated for the summer 2005.
b) Landfill barrier wall area. In the vicinity of IR01MW12A (Parcel E), groundwater levels are depicted at 14.21 feet mean sea level (fmsl) on March 26, 2004 (Q17R Figure 3) and at 2.5 fmsl on June 4, 2004 (based on contours in Q18R Figure 3). This change of almost 12 feet of hydraulic head in less than 3 months is larger than any previous variation at this well. CDE2QR says: "the pronounced mound generally centered at IR01MW12A is gone" and "The largest mound in the parcel, centered on IR01MW12A has been removed, as it is considered a questionable data point...." CDE2QR provides no other explanation for the removal of this well from quarterly sampling and no elevation value is provided in Q18R Table 2. From a review of Table 2 (Q18) it appears that elevations in nearby wells (IR01MW10A, IR01MW11A, IR72MW33a, IR72P33AA, and IR72P33AB) were not measured. Apparently, contours for June 4, 2004 were constructed without data from IR01MW12A, or other nearby wells; however, figure 3 indicates that two wells in the vicinity were measured. Similarly, IR01MW02B measured at 13.13 fmsl during Q17 sampling although figure 3 of the Q17 report did not reflect this data point. DTSC questions the removal of the IR01MW12A from the groundwater measurement program	The water level recorded at well IR01MW12A was anomalous and was not included when the potentiometric surface map was prepared. It was the judgement of the project hydrogeologist to omit this data point and the Navy Lead Remedial Project Manager concurred. Both individuals are California Registered Geologists and stand by the decision to omit the data point. Please note that the groundwater level was measured, but it was not used to prepare the potentiometric surface map.

Comment #9 (continued): b) IR01MW12A is located on Parcel E, on the landfill side of the Gund™ Wall, which was installed to control gas migrations from the landfill. These data may indicate that a groundwater mound had developed on the landfill side of the barrier wall.	**Response**: The Navy will provide an evaluation of the groundwater in the area of the landfill in the annual report.
Please address the following comments regarding water elevations in this area: i) Instead of removing IR01MW12A, DTSC request additional work in this area to delineate and monitor the groundwater mound and to determine if contaminants have migrated from the landfill.	Comment Noted. Recommendation for additional work will be included in the annual report.
ii) Please provide an explanation for the apparent groundwater mound on the landfill side of the Gund™ Wall. Discuss site activities that may be relevant (e.g., irrigation, drainage, repairs).	The Navy's explanation is clearly stated in the quarterly report; the data point is anomalous. This will continue to be monitored.
iii) Evaluate the adequacy of the landfill cap drainage system in the vicinity of IR01MW12A. Propose changes as needed. For example, the mound is located proximate to Discharge Points 1 and 2 as shown on Figure 6 of: Storm Water Discharge Management Plan, Industrial Landfill, Parcel E-2, Hunters Point shipyard, San Francisco, California (dated February 1, 2005).	Landfill cap drainage is addressed in the Annual Landfill Stormwater Monitoring Report, and no problems were noted with regard to drainage near IR01MW12A.
iv) Please evaluate whether there is any correlation between groundwater levels and soil gas results for methane, non-methane organic compounds (NMOCs), and volatile organic compounds (VOCs).	The Navy's monthly Landfill Gas Monitoring Reports include data for VOCs, NMOC, methane, and groundwater levels. No correlation between groundwater levels and soil gas results has been previously noted.
v) Two wells are identified as IR01MW12A on Q17R Figure 3. Please correct the figure.	Recommendations for future work will be included in the Annual Groundwater Monitoring Report.
vi) Please include an analysis of the groundwater in the area of IR01MW02B.	Two wells identified as IR01MW12A has been corrected on subsequent reports.

Comment #9 (continued):	**Response**: The Navy is currently evaluating the contouring software.
c) Pump Station A. Because of issues with groundwater contouring (discussed elsewhere in this memorandum), it is not clear whether flow directions in the area of Pump Station A are accurate—or, are artifacts of the contouring program—since there are no wells in the Building 813 area. That is, flow directions to the southwest are not supported.	
ii) To clarify this issue, please evaluate the contouring program.	
iii) Also, please include upgradient Parcel A wells in the groundwater measurement program and consider installing additional wells northwest of Pump Station A.	There are no monitoring wells on the former Parcel A. Much of the area to the northwest of Pump Station A is private property and wells will not installed in this area.
d) Utility repairs. Multiple "water line and sewer line upgrades, closures and repairs" have occurred at Hunters Point. Changes to the infrastructure may result in changes to the groundwater flow regime—and may effect the migration of contaminants and the size and shape of groundwater plumes. Groundwater monitoring locations and analytes may need to change accordingly. The information presented in the reports is not sufficient for evaluating these effects, as acknowledged by the Navy (Q17R and Q18R pages 2-2). More groundwater elevation data is needed. Additional information on upgrades and repairs is also needed.	The entire sewer system will be taken out of service during the radiological survey scheduled for 2006. The Navy does not believe a thorough investigation of the sewer systems effect on groundwater flow is warranted based on the limited future use of that system.
i) The text says (pages 2-2): "Q17 was the first quarter for which groundwater elevations were measured following water and sewer line work." This statement is not correct. Repairs were noted on figures in previous reports—for example, Figure 6 of: Revised Information Package for the Phase I Groundwater Data Gaps Investigation, Hunters Point Shipyard, San Francisco (dated January 8, 2001). Please correct this sentence.	This sentence will be revised as appropriate.

Comment #9 (continued): ii) To evaluate effects of repairs, dates of repairs must be correlated to dates of groundwater elevation measurements. Please provide a table listing "water line and sewer line upgrades, closures and repairs" (Q17R and Q18R pages 2-2). Provide dates when the work was conducted and an explanation of the work done. Include repairs cited in the information package and more recent repairs. Number work locations on figures and tables. Include dates of repair on figures. Please update figures and tables each quarter.	**Response**: The Navy does not believe that additional time and expense is warranted to investigate the effect of the sanitary sewer on groundwater flow given the limited time that the sewer system will remain in service. The Navy anticipates limiting water supply lines to those needed for fire fighting.
e) <u>Vertical gradients</u> are critical for evaluating the migration of contaminants to lower drinking water aquifers. Significant downward gradients exist at source areas on Parcel C: such downward gradients are a cause for concern. For example, on the Parcel B/C boundary north of Building 134, a significant downward gradient was measured between IR25MW37A (4.71 fmsl) and IR25MW37B (2.5 fmsl). Downward gradient is also shown in Parcel C Building 272 area between IR28MW315A (3.42 fmsl) and IR28MW315B (2.20 fmsl) and in Parcel C Building 231 between PA28MW51A (2.05 fmsl) and IR28MW401B (1.45 fmsl). i) Please discuss vertical gradients with respect to current work and historic data. ii) Please evaluate whether downward gradients are associated with removal actions, demonstration projects, or treatability studies (TSs)—for example, soil vapor extraction (SVE), zero valent ion injections (ZVI), and sequential aerobic/anaerobic studies with nutrient and carrier media injections.	The Navy will evaluate vertical gradients in the Annual Report.

Comment #9 (continued): iii) Please provide figures with groundwater contours for aquifers other than the A aquifer.	**Response**: There are insufficient data to provide meaningful potentiometric maps for aquifers other than the A-Aquifer.
iv) Please provide a figure showing all groundwater pairs (including pairs not included in the groundwater measurement program): include head differences between pairs. Include all wells that are not A aquifer wells on this figure.	
v) Several deeper wells are shown as not measured. Given that there are not many deeper wells, the fact that deeper wells were not measured is significant. As previously noted, the groundwater level measurement program for deeper aquifers is not sufficient. Please evaluate the measurement program with respect to deeper aquifers and propose additional measurements.	Recommendations with regard to adding additional deep wells to the monitoring program will be made in the annual report.
vi) Vertical gradients were not evaluated in this memorandum for Q18R and CDEQ2R because of limited resources and because data presentation did not facilitate review (as discussed below in Specific Comments on Q18R Figure 3 and CEQ2 Figure 3).	
f) <u>Data presentation</u>. Because of inconsistencies across the site with respect to aquifer designations, well names are not always accurate with regard to the aquifer screened (as discussed in previous comments). Moreover, shallow wells in bedrock ("F" wells) are sometimes designated as A aquifer wells.	The Navy will consider using another presentation method to designate A-Aquifer wells.
i) In order to facilitate review of groundwater contour maps, please distinguish A aquifer wells from other aquifer wells on figures. For example, deeper wells can be grayed out.	The effect of rainfall on water levels in a shallow aquifer can be deduced without providing rainfall hydrographs in all reports.
g) Please include rainfall hydrographs with all reports.	
h) Significant problems with groundwater contouring maps are discussed in Specific Comments for Figure 3, below.	

Comment #10: Well designations. Wells designations of the Remedial Action Monitoring Plan (RAMP) should be retained. For example, Parcel B well IR07MWS-4 is labeled as "No Designation" on Q17R Figure 4. However, IR07MWS-4 is a RAMP "Point of Compliance (POC)" well (RAMP Figure 2), as is IR26MW25A. Another example: Parcel B well IR10MW28A is not shown on Q17R Figure 4 but IR10MW28A is a RAMP "Sentinel" well—as are IR25MW17A and IR06MW45A. IR10MW33A is the only "VOC Monitoring Well for IR10" in the RAMP. For the sake of clarity, all wells added post-RAMP should be designated as "Supplemental". For example, designate IR10MW12A as "Supplemental VOC and CrVI": and other IR10 wells as "Supplemental VOC monitoring Wells". i) Please revise figures, tables, appendices, and text, accordingly. ii) Include RAMP POC well IR26MW25A on figures and tables. iii) Please check that figures, tables, and field forms are consistent. For example, the field form for IR09MW62F notes inconsistent labeling between map and well.	**Response:** i) The Navy refers to new RAMP wells as supplemental characterization wells. ii) RAMP well IR26MW25A has been removed and will be labeled accordingly on subsequent figures. iii) Field forms, figures and tables will be checked for consistency.

Comment #11: Parcel B replacement wells. Replacement wells for Record of Decision (ROD) post-remedial action wells are of especial concern since data from these wells has not been collected for several years (although required by the ROD). Five replacement wells (e.g., IR07MW21A1, IR07MW24A, IR07MW25A, IR07MW26A, and IR07MWS-4) were recently installed in excavation backfill, above a break in slope (about 15 fmsl), adjacent to the San Francisco Bay. a) Multiple sampling events must be conducted before evaluation of results is possible—with respect to determining effectiveness of remediation and any remaining impacts to the San Francisco Bay. Moreover, sampling events required by the ROD must be completed prior to evaluation. b) Six of the original RAMP wells were decommissioned and five were replaced (Q17R page 1-1). Removed well IR25MW25A is not discussed: please discuss the removed POC well IR26MW25A. Include IR26MW25A on figures and tables. c) The purpose of the post-remedial action wells is to evaluate the effectiveness of remediation (i.e., excavation). The original post-remedial action well IR07MW26A was located downgradient of nickel sources at Remediation Areas 7-3 and 7-4 (RA7-3 and RA7-4)--at the downgradient edge of the nickel plume at the Bay margin. However, replacement well IR07MW26A is located about 125 feet upgradient of the original well. The new location is upgradient of RA7-4 and upgradient of the nickel plume (as presented in the ROD). Therefore, the new well does not fully satisfy ROD objectives. Ni results from the replacement well (46.3 ug/L in Q17R; 40U and 6.0 ug/L in Q18R) did not exceed the POC trigger level (96.5 u/L).	**Response:** a) Comments noted. b) Removed well IR26MW25A will be discussed in the annual report. c) Replacement wells and the supposed nickel plume will be discussed in the annual report.

Comment #11 (Continued):	Response:
d) Please distinguish replacement wells from original wells—for example, by adding "R" to the well name. Use of identical names causes confusion. As an example, replacement well IR07MW26A is located 125 feet distant from the original well IR07MW26A: results from both wells are not directly comparable.	d) The Navy will consider distinguishing replacement wells in future reports by adding an "R" next to the well name.
e) Appropriate decommissioning ensures that former wells do not serve as conduits for contamination and that physical hazards are not left in place. Decommissioning requirements are substantive requirements of the State Water Code. It is incumbent on the Navy to demonstrate that wells are appropriately decommissioned. i) Please include decommissioning logs for all wells removed (for all parcels).	e) Wells are decommissioned in accordance with State law such that they do not provide a conduit for groundwater contamination. Including decommissioning logs for all wells removed is not currently being considered.
f) Include all removed wells on figures (for all parcels): indicate removed wells by a distinguishing symbol or color (e.g., grayed-out).	f) Plotting removed wells is not currently being considered.
g) Thank you for including well completion records, as requested.	g) Comment noted.
h) Please revise well logs and well completion records to include the contact between excavation backfill and other artificial fill. If this contact was not discerned in the field, identify the depth of the contact from final excavation topology and cite the appropriate report. Facts not discerned in the field should be presented as footnotes on logs and records.	h) Well logs represent a visual classification of the geologic material encountered in the borehole. If a feature is not seen, it is not recorded on the log.
i) Groundwater samples may not fully represent contaminated soils on Parcel B since: wells are located in or adjacent to recently backfilled areas; screened intervals are located (at least in part) within backfill; excavations generally did not extend below 10 fbgs; and groundwater may not be fully equilibrated. Shallow groundwater samples may be appropriate for evaluating current soil gas-to-indoor air impacts. However, shallow groundwater samples may not fully represent potential impacts on the Bay.	i) Groundwater samples are not intended to "fully represent contaminated soil on Parcel B." Groundwater sampling is conducted in accordance with the objectives outlined in the Parcel B ROD and RAMP.

Comment #11 (Continued):	Response:
i) Please evaluate the need for deeper wells (in artificial fill).	i) The need for deeper wells in Parcel B will be evaluated in the annual report. The Navy does not currently anticipate the need for deeper wells based on adequate characterization of very limited shallow groundwater contamination.
ii) Soil samples were not collected from screened intervals of new wells. Moreover, chemical analytical data has not been presented for backfilled excavations. Therefore, chemical characteristics of soils adjacent to wells are not known. Please provide soil samples from screened intervals of new wells, as requested.	ii) Additional soil sampling is not currently being considered.
j) Trigger levels. Appendix A does not list trigger levels for replacement wells: IR07MW21A1, IR07MW24A, IR07MW25A, IR07MW26A, and IR07MWS-4. Point of compliance (POC) trigger levels apply for post-remedial action wells (Table 6). Exceedences of POC trigger levels were measured (Q17R) at IR07MW26A (results > POC trigger levels, in ug/L): arsenic (As: 50U > 36), beryllium (Be: 1.7 > 1.4), chromium (Cr: 50 > 15.7), copper (Cu: 130U > 28), lead (Pb: 50U > 14.4), silver (Ag: 50U > 7.43), thallium (Tl: 163 > 13), zinc (Zn: 300U > 81).	j) Comment noted.
k) Elevated detection limits (DLs) are noted in the previous comment (indicated by the "U" qualifier with the result). Compliance with ROD goals cannot be demonstrated for wells with high DLs—e.g., at IR07MW26A, IR07MWS-2 and elsewhere. Elevated detection limits are further discussed in a subsequent comment.	k) Comment noted.
l) Please provide graphs of concentration versus time and of water level elevation versus time for all replacement wells. Include historic data from original wells (use a different symbol for original wells).	l) Water levels and concentration versus time graphs will be prepared for selected wells and contaminants in the annual report. Many of these graphs have been presented in recent BCT meetings.

Comment #12: Detection Limits (DLs) are higher than human and ecological health-based screening levels for many results. On Parcel B, in several instances, DLs are higher than well-specific trigger levels of the ROD. For example, IR06MW45A has trigger levels which are ten times point-of-compliance levels since it is designated as a "sentinel" well. Nonetheless, DLs exceeded trigger levels for several metals (Q17R), including (DL > trigger, in ug/L): beryllium (Be: 50 > 14), cobalt (Co: 500 > 208), silver (Ag: 100 > 74.3). And, thallium (Tl: 164J) exceeded its trigger level (130) in the same sample. Similarly, at IR07MW19A, a POC well, DLs exceeded trigger levels (Q17R) for: Cadmium (Cd: 10 > 9), Co (100 > 20.8), copper (Cu: 50 > 28), Ag (20 > 7.43), and zinc (Zn: 120 > 81). And, Be (3.3 J) and Tl (183) exceeded trigger levels (1.4 and 13). a) Please evaluate results and propose field and laboratory methods which can achieve lower DLs. b) Please include a discussion of DLs in the text of the report. Include DLs which exceed trigger levels in Conclusions sections of reports. c) Please provide figures which show all exceedences of health-based screening levels and trigger levels. Include all DLs that exceed health-based screening levels and trigger levels: use a distinguishing symbol or color for DLs that exceed screening levels and trigger levels. d) Figure formats used in remedial investigation (RI) reports are requested—i.e., spider maps with all exceedences (including DLs) posted and with symbols distinguishing various criteria. e) For Parcel B, on figures, exceedences of ROD criteria should be distinguished from exceedences of risk-based screening levels f) On tables, please bold all exceedences of health-based screening levels and trigger levels—including all DLs that exceed screening levels and trigger levels.	**Response:** A discussion of detection limits will be included in the Annual Report. Data presentation was discussed during a specifically convened BCT meeting. Graphical presentation of the data will be improved although not all of the suggestions noted in c) through g) will be incorporated.

Comment #12 (Continued): g) Please post and bold exceedences of total petroleum hydrocarbon (TPH) and fuel oxygenates (e.g., MTBE) criteria (from the Corrective Action Plan (CAP)). b) DLs were not evaluated in this memorandum for Q18R and CDEQ2R: examples are provided for Q17R only.	**Response:** See comment above.

Comment #13: Sampling protocols (Section 3.0). Multiple problems with sampling protocols were evident from review of well sampling sheets and a field audit may be warranted. Detailed comments and examples are provided in Specific Comments on Appendix B. Summary points are provided below.

a) Field instrument malfunctions were suggested by many readings.
   i) Instruct field crews to change instruments when equipment readings indicate malfunction.
   ii) Have available backup instruments for immediate change-out during all field sampling events.
   iii) Low -flow sampling. Low-flow sampling was not achieved on many wells (e.g., with respect to flow rate during sampling, allowable drawdown, stabilization criteria, etc.) and was not demonstrated on others (because all necessary information was not provided on well sampling sheets). For example, for VOC sampling, a sampling rate of 100 ml/min is recommended by DTSC. High flow rates may cause agitation and volatilization of the VOCs, resulting in low-biased results. Higher discharge rates (500 ml/min or greater) were generally used for these events. Lower rates were rare—e.g., 150 ml/min at IR28MW395F. Please delete text that suggests that low-flow sampling was routinely conducted. With respect to allowable drawdown, Puls and Barcelona recommend .33 foot (when achievable) and ASTM D6771 says that drawdown should never exceed 1.25 feet for a ten foot well-screen (a common screen length at Hunters Point): however, higher drawdowns were measured. Stabilization was not achieved or was not demonstrated for many wells and purging volumes were less than one casing volume for many wells (see Specific Comments on Appendix B, below).

Response:
Comment noted.

a) Field instruments were purchased new during Q17, minor malfunctions did occur in Q18.
   i) Field crews are instructed to bring instruments back for repair if they malfunction.
   ii) Probe repairs and replacements are performed when problems occur. Field crews are instructed to identify problems with equipment and return immediately for assessment and repair.
   iii) Submersible pump equipment used during Q18 was difficult to maintain low-flow rates in many wells. The SAP specifies that samples should be collected using low-flow sampling methods, where feasible (Section 8.1.2). Low-flow sampling procedures are outlined in Section 8.3.4.2 and specify the use of a peristaltic pump. However, prior to Q17, the Navy was informed that the use peristaltic pumps was not approved. Section 8.3.4.2 also states that if drawdown of more than 0.33 feet occurs at a discharge rate of 0.15 L/min, a modified low-flow purge protocol will be attempted. If these steps do not yield sufficient water for the sample required, low-flow rate purging will be considered technically unfeasible and the well will be purged by the alternative technique outlined in Section 8.3.4.3.

Comment #13 (Continued):	Response:
iv) Page 3-1 says: "However, on many wells, low-flow purging is not always achievable due to limitations of the flow-through cell used in conjunction with the water quality meters." 1) Please provide more discussion on this issue. Describe the problem in more detail. Field notes indicate that field crews attempted to get lower rates but were not successful. Please discuss corrective actions that failed. 2) Also, please indicate whether this problem was discussed with experts on low-flow sampling—for example, indicate whether the problem discussed with equipment manufacturers or with USEPA. 3) Indicate whether alternative instrumentation would resolve the problem.	iv) 1) Due to the design of the flow through cells, added back pressure limited the ability to obtain low-flow rates with the pumps used. 2) Technical support was called as needed. 3) It is possible that alternative instrumentation may resolve the problem, and new pumps were purchased.
v) Discuss failure to meet stabilization criteria.	v) Failure to meet stabilization criteria will be documented on the Well Sampling Summary Sheets.
vi) Qualify VOC results as "low-biased" for samples where low-flow sampling was not achieved.	vi) This is not a requirement of the SAP.
vii) Similarly, when wells are purged dry before sampling, qualify VOC results as "low-biased".	vii) This is not a requirement of the SAP.
viii) When effervescence is observed (e.g., IR01MW366A), qualify VOC results as "low-biased" and specify no preservative during sampling.	viii) This is not a requirement of the SAP.
ix) The use of passive diffusion bags for VOC sampling may resolve issues resulting from problems with low-flow sampling. DTSC suggest a pilot program be developed to test the feasibility of their use. Please review recent guidance: User's Guide for Polyethylene-Based Passive Diffusion Bag Samplers to Obtain Volatile Organic Compound Concentrations in Wells (U.S. Geolgocial Survey Water-Resources Investigations Report 01-4060, dated 2001).	ix) A pilot study has already been completed to test the diffusion bag for VOC sampling. Results were comparable to standard purging and sampling methods. This sampling method has been discussed at previous BCT meetings and is considered suitable for wells tested only for VOCs.

Comment #13 (Continued):	Response:
x) Please provide a list of all individual wells which met all low-flow sampling criteria.	x) Wells that met low-flow sampling criteria will be detailed in the report.
b) Filtering	
i) The Remedial Action Monitoring Plan (RAMP) for Parcel B (Section 2.2.2.3) requires filtering for dissolved metals analysis. Q17R metals analysis did not include filtering and so Q17R does not meet RAMP requirements for metals.	i) Filtering for dissolved metals was not specified in the Draft SAP and did not occur in Q17 and Q18. However, the Final SAP does specify filtering for dissolved metals, and subsequent sampling events are consistent with the requirements of the Final SAP.
ii) Q18R and CDEQ2R say (page 3-8): "Initially groundwater samples were analyzed for total metals, and later, reanalyzed for dissolved metals after the remaining sample volume was filtered…" 1) Please compare filtered to unfiltered sampling results for each metal. 2) Please clarify what preservation methods were used and comment on the effect of preservation for both filtered and unfiltered samples. For example, was acid added in the field or in the laboratory? If so, when was acid added? 3) Please comment on DLs for filtered and unfiltered samples. 4) Discuss the relationship between sample turbidity, DLs, and concentrations.	ii) The samples analyzed for metals were collected in accordance with the Draft SAP dated November 2003. Kleinfelder has discussed this comment with APPL (project laboratory). APPL indicated that the samples were not analyzed shortly after arrival, and although the concentration reported is likely to be representative of actual dissolved concentrations, it would be better to classify the results as total metals. Since the Navy already has data for total metals, the results for dissolved metals were rejected and are not included in the Q18 report.
iii) Evaluation of multiple rounds of sampling is complicated when some samples were filtered and some were not. Please indicate on tables and figures whether samples were filtered or not for each analysis.	Please review the sampling sheets and laboratory results to evaluate any relationship. The Navy does not believe such an analysis is warranted in the quarterly report.

Comment #13 (Continued): c) Purge volume. Page 3-1 says: "At a minimum, 8 liters of groundwater were purged before groundwater samples were collected. However, in some instances, where recharge rates were insufficient, a minimum of 2 liters of groundwater were purged before groundwater samples were taken." The minimal required purging volume is 3 casing volumes—especially if stabilization of water quality parameters was not demonstrated, which is the case for many wells. For a nominal 4-inch diameter well with a ten-foot water column, one casing volume is 25 liters (i.e., 10 feet x .652 gallons/foot x 3.79 liters/gallon = 24.7 liters).	**Response:** Wells were purged in accordance with the Draft SAP, or a record of field variance was prepared and included in the report to document locations where the SAP was not followed.
i) Please explain how a minimal volume of 8 liters (or 2 liters for slow recharging wells) was determined.	i) In order to collect the volume of groundwater required for the specific analyses required in an efficient manner, the Navy made decision to purge a minimum of 8 liters or 2 liters for slow recharging wells.
ii) 3,000 gallons of purged water were discharged for the Q17R event (page 3-2) —which included Parcel B wells only. 2,000 gallons were discharged for the combined Q18R and CDEQ2R events which included wells for Parcels B, C, D and E (page 3-2). These facts clearly demonstrate that consistent purging protocols have not been used.	ii) DTSC should refrain from making conclusions such as those stated in (ii)(2) at left. Additional water was discharged in Q17 due to the addition of well drilling decontamination water and well development purge water.
d) Immiscible layers. The text notes that were not measured during all events (Q17, Q18, and CDEQ2) because of an "oversight during field activities".	d) Immiscible layers have not been measured at the request of the Navy until a revised procedure for measuring immiscible layers can be developed. The Navy is currently working on providing a revised procedure/protocol to Kleinfelder.
i) Please ensure measurement of immiscible layers at future groundwater level measurement events.	
ii) Field notes for Q18R and CDE2QR indicate whether immiscible layers were present. Please clarify whether any measurements were taken during these events (or if the field notes are visual observations only).	

Comment #14: Organotins. Identify all wells in areas where sandblast grit was used (e.g., Sub-Base and painting areas), stored (e.g., IR06), or disposed (e.g., IR07, IR1/21, IR02). Analyze such wells for organotins, as previously requested.	**Response:** The Navy incorrectly referenced the Final SAP for sampling conducted in Q18. Organotins were not in the Draft SAP list of required analyses and were therefore not analyzed during Q18.
Comment #15: Hexavalent chromium (CrVI). Elevated concentrations have been consistently measured on Parcel B at IR10MW12A (550 ug/L in Q17R). The extent of CrVI has not been fully determined, as noted in previous comments. Nearby wells at IR10 were not sampled for CrVI in Q17R and Q18R. CrVI was not detected in the downgradient well (PA50MW01A)—but this well is 250 feet distant from IR10MW12A. a) Although CrVI was included for many wells on Parcel B, wells near IR10MW12A (with the exception of IR61MW05A) were not analyzed for CrVI. Please include additional wells for CrVI monitoring near IR10MW12A. b) Evaluate the need for additional downgradient wells to track the CrVI plume near IR10MW12A on Parcel B. c) On Parcel D, IR09PPY1 was not sampled because (as noted on the field form) the well appeared to be silted up. This well is in a critical location for monitoring the plume (CrVI and other metals) at IR09, the former Pickling and Plating Yard. Please develop or replace IR09PPY1.	**Response:** (a,b) The Navy will provide an evaluation of hexavalent chromium including recommendations in the Annual Report. (c) It is likely that this well will need to be replaced. The Navy will attempt to develop the well and consider replacing the well if unsuccessful.

Comment #16: Manganese (Mn). Large areas on Parcel B have high concentrations of Mn (e.g., on IR26 and near Buildings 156 and 134). Concentrations greatly exceeding human-health criterion (i.e., IRIS drinking water level of 300 ug/L) and TI ecological screening criterion (100 ug/L) are not uncommon. Historic results for Mn are displayed as Figure 4-14 of: Technical Memorandum Parcel B Groundwater Evaluation, Hunters Point Shipyard, San Francisco, California, Draft (TM: dated November 30, 2001). The highest concentration, 18,200 ug/L, was measured in IR20MW06A on January 1994, about 200 feet from the shoreline. Other historic elevated metal results in the same area (as shown on other figures in the TM) include: Hg (2 ug/L), Ni (122 ug/L), Tl (59.7 ug/L), and Zn (2800 ug/L). The Mn plume is not specifically monitored. POC wells are side-gradient to plumes of Mn and other elevated metals. Please propose wells for monitoring metals contamination in this area.	**Response:** The issue has been discussed at several BCT meetings. The Navy does not consider Mn an anthropogenic contaminant and does not believe monitoring the dissolution of Mn from native serpentinite to be a prudent use of tax payer money. Further, the A-Aquifer is not considered a potable drinking water source. The drinking water screening level cited by DTSC is inappropriate. Recommendations for additional monitoring will be made in the annual report.

Comment #17: Iron (Fe). Iron was measured at high concentrations exceeding the residential PRG of 23,000 ug/L. For example, on Parcel B, iron was measured in IR10MW28A at 71,600 and 81,800 ug/L (Q17R). In this sentinel well, other metals exceeded sentinel well trigger levels, as follows (concentration > trigger): chromium (435 ug/L > 157 ug/L) and Pb (246 ug/L > 144 ug/L). Other metals were also elevated (e.g., Ni at 689 ug/L). a) Identify all wells with elevated iron. Prepare a table of historic results. Include wells in ZVI injection areas. Identify ZVI area wells on tables and figures. b) Propose a maintenance program for wells with elevated iron (and other metals) to monitor and remediate biofouling. c) IR10MW28A comments: i) Field Notes for IR10MW28A (Q18R) remark: "sulfide smell", "black color of water". "Old tubing" with "brown staining" was observed. No field notes were provided for Q17R. Please comment on the purpose of the "old tubing": was the tubing removed? ii) Metals data for Q17R is summarized above. No metals data was provided for Q18R. Please discuss causes of the increase in metals at IR10MW28A. iii) Casing volumes were not provided. The casing volume could not be calculated for Q17R because information on height of the water column was not provided. The reviewer calculated the casing volume (Q18R) as about 4 liters (for a 2 inch diameter well and a water column of six feet). iv) Purging volumes were 0 liters for Q17R and 4 liters for Q18R. Purging volumes do not meet the minimal purging requirements of 3 casing volumes.	**Response:** a) Wells with analytes exceeding RAMP criteria are discussed in the text of the report and will be summarized and tabulated to be included in the annual report. b) Maintenance is performed on an "as needed" basis. c) i) The observation of the field crew was provided to inform the field manager of the condition of the well. The tubing is dedicated to the well and has not been replaced. ii) Data evaluation for the entire year will be included in the annual report, as agreed by the BCT. iii) Comment noted. iv) Comment noted; purging of three casing volumes is not consistent with low-flow sampling procedures and has been addressed in previous comments/responses. This well purges dry and typically requires multiple sampling days to recover enough volume of groundwater required for the requested analyses.

Comment #17 (Continued):	Response:
v) Stabilization criteria were not met—for example, turbidity was 271 NTUs in Q18R and only 2 readings were taken in Q17R. 1) Evaluate historic results with respect to well condition, sampling protocols, and stabilization criteria. 2) Propose corrective action and evaluate the need for additional monitoring at and near IR10MW28A.	v) Elevated turbidity is expected in the ZVI pilot test area. 1) Further data evaluation will be provided in the annual report, as appropriate. If analytical results are anomalous and well conditions, sampling protocols, or stabilization criteria are considered to have had an effect, it will be noted. 2) Corrective action is not required at IR10MW28A, and monitoring is ongoing.

Comment #18: Naphthalene. With respect to naphthalene, the Office of Environmental Health Hazard Assessment's (OEHHA's) target indoor air concentrations are lower (more stringent) than USEPA PRGs (for ambient air), due to differences in toxicity criteria and other factors. OEHHA's screening numbers are called California Human Health Screening Levels (CHHSLs). Guidance on the use of CHHSLs (released by CalEPA in January 2005) has been previously forwarded to the Navy. The CHHSL for naphthalene is .072 ug/L (Table B-10: for residential soils without engineered fill). USEPA's PRG is 3.1 ug/L. This is a difference of more than 2 orders of magnitude.	**Response:** Evaluation and comparison of current indoor air criteria to groundwater contaminants will be conducted in the Parcel B TMSRA and FS reports for other parcels. Please note that the difference between 0.072 and 3.1 is more than one order of magnitude but less than the two orders of magnitude as stated by DTSC.
a) Please evaluate whether groundwater concentrations of naphthalene are a concern with regard to the indoor air pathway--for example, 270 ug/L in IR06MW42A in Q17R and 160 ug/L in Q18R. This value exceeds the ROD trigger level (235 ug/L) for naphthalene. However, since trigger levels for IR06MW42A relate only to requirements of the POTW, the result was not identified as an exceedence. At this well, with the exception of vinyl chloride at 200 ug/L, no VOCs or semi-VOCs have trigger levels, despite the fact that it is downgradient of a tank farm where VOCs are compounds of concern.	a) Naphthalene will be evaluated, and the Navy will provide recommendations in the TMSRA and feasibility studies.
b) Identify other exceedences of the ROD trigger level (235 ug/L) for naphthalene.	b) This trigger level only applies to IR06MW42A.

Comment #19: All geologic and engineering reports must be signed and stamped by a California Registered Geologist or Professional Engineer licensed in California, as required by state law (i.e., Business and Professions Code, Chapters 7 and 12.5 and the California Code of Regulations, Title 16, Chapters 5 and 29). This requirement applies to all contractors and consultants of the Navy. a) Please confirm that all persons with responsible charge for these reports have the required qualifications. b) Please resubmit signed and stamped title pages for these reports. c) Please confirm that all well installations were conducted by or under the supervision of a California Registered Geologist, as required by state law.	**Response:** The authors of the reports are licensed in California to conduct the work required. The Navy requests equivalent professional review from DTSC.

SPECIFIC COMMENTS	
Comment #1: Q17R and Q18R Table 1 a) Please include all original RAMP wells on this table—in bold. Include all removed wells and all replacement wells on the table. For example, include RAMP POC well IR26MW25A. Please distinguish replacement wells from original wells by adding "R" to the well name. Include dates of removal. b) The last column is titled "Screened Interval or Well Depth". These are not identical measurements. Well depths cited are those "recorded in Appendix A of 16th Quarter Well Sampling Sheets". Well depths measured during sampling may vary due to silt accumulation at the bottom of the well and silt removal during purging and development. Moreover, multiple errors on well sampling sheets have been noted. Please include screened intervals only.	**Response:** a) Well IR26MW25A was replaced by three monitoring wells in the vicinity of IR-26. The Navy will consider the request to distinguish replacement wells by adding an "R" to the well name and recommendations will be provided in the Annual Report. b) "Well Depths" will be removed from the column heading in Table 1.

Comment #2: Q18R Table 2. Please revise the table to be in order of well name	**Response:** Table 2 has been revised.
Comment #3: Q17R Page 3-2. Include the exact location of discharge of purge water to the POTW. Show the location on a figure.	**Response:** The location of discharged purge water will be shown on future reports. The Q17 report will not be revised.
Comment #4: Q17R Page 3-12. Section 3.3.3. Error. Change the trigger level for CrIII in POC wells from 157 ug/L to 15.7 ug/L.	**Response:** The trigger level for CrIII will be corrected for the Q18 report.
Comment #5: CDE2QR. Please provide a table with well construction details similar to Q17R and Q18R Table 3. Include all wells sampled and all wells used in water elevation measurements. Also, please provide an updated CD with all well information (as requested elsewhere in this memorandum).	**Response:** Table 3 as reported in Q17 and Q18 reports does not include well construction details. An updated CD is planned for 2006.
Comment #6: Q17R and Q18R Table 3. Please indicate all departures from the workplan on this table, including wells and analytes added or subtracted. Provide a similar table for CDEQ2.	**Response:** A summary table and additional appendix will be provided for deviations from the SAP.
Comment #7: Q17R, Q18R, and CDE2QR Figures 1, 2C, 2D, 2E a) Extend the site boundary for IR52 to Yosemite Creek. b) Revise parcel boundaries. For example, Buildings 500, 505 and 606 are not included in Parcel E. And, a portion of the Parcel A boundary area was removed from Parcel A so that radiological investigations would not impede transfer. c) Check that all wells sampled and wells measured for groundwater elevations are on the figures. For example, IR01MW03A is not on Figure 2E. Distinguish between wells in the sampling program, and wells in the groundwater elevation measurement program, and wells not included in either program. d) Some well names were truncated. Please correct.	**Response:** (a,b) Parcel and site boundaries will be modified, as appropriate in later reports. c) The Navy concurs with this request and will revise the figure as appropriate. d) Truncated well names will be corrected.

Comment #8: CDE2QR Figures 2C, 2D, and 2E. Data are not posted on these figures: well locations only are shown. It is impossible to evaluate results for hundreds of wells without graphic presentations. c) The figures are so crowded that well locations cannot be ascertained. Provide new figures at appropriate scales. d) New wells are not included or are not correctly labeled. Also, it appears that well names may be truncated. IR28MW315 is shown at three locations. Please revise to include or correct for: IR25MW60A1, IR25MW60A2, IR25MW61A1, IR25MW61A2, IR28MW272F, IR28MW315A, IR28MW315B, IR28MW315F, IR28272F, IR28MW221A, IR28MW221B, and IR28MW171B. Include all site wells on the figures. e) Because of insufficient data presentation, only a very cursory review of selected CDEQ2 results was conducted. Additional comments on CDEQ2 results will be provided later. f) Please post analytical results. g) Multiple figures will be required to accommodate all the pertinent data. Figures in the Parcel D remedial investigation (RI) report and in Technical Memorandum Parcel B Groundwater Evaluation, Hunters Point Shipyard, San Francisco, California, Draft (TM: dated November 30, 2001) may serve as models. Please provide example figures for agency review. h) At the minimum, post exceedences of human health and ecological screening levels. i) So that data adequacy and contaminant trends can be assessed, post historical data for each well. j) General comments provided for Q17R Figure 3 and Q18R Figure 3 apply to CDE2QR figures.	**Response:** Figures 2C, 2D, and 2E are intended to be well location maps only. An evaluation will be provided in the Annual Report with appropriate graphical presentations, as agreed upon in the data presentation meeting.

Comment #9: Q17R Figure 3: A Aquifer Groundwater Contour Map, Seventeenth Quarter, March 26, 2004 and Q18R and CDEQ2R Figure 3: A-Aquifer Groundwater Contour Map Second Quarter 2004 June 14, 2004 General Comment. Several fundamental errors in interpretation on these figures are discussed below. Such errors could have been caught and corrected if the figures were subjected to standard QA/QC. For example, contour maps should be reviewed by a geologist who is familiar with site history and with site topology, with particular attention to boundary conditions and extrapolated (as opposed to interpolated) data. As an illustration of this point, please compare Figures 3 to historic contour maps (i.e., Figures 2 through 6 of Technical Memorandum, Revised Information Package for Phase 1 Groundwater Data Gaps Investigation, dated January 8, 2001). Please revise and resubmit Figures 3. a) March 26, 2004 i) General comments on construction of contour lines which are provided below for the June 14, 2004 event also apply to the March 26, 2004 event. ii) On Parcel B, in the vicinity of Buildings 134 and 156, several features are not contoured on Figure 3. A groundwater sink (IR25MW17A, IW26MW17A, and IR26MW60A1, and IR25MW61A2), a trough along Lockwood Street (IR06MW41A and IR06MW42A) and mounds (IR20MW17A and IR46MW41A) are not depicted. Please provide another figure at a scale appropriate to show these features. iii) The text (page 2-3) attributes flattening of a mound in the vicinity of Building 411 on Parcel D to "sewer line and water line repairs in this general area". However, no repairs are shown on Figure 3 in the Building 411 area. Please correct text and/or figure.	**Response:** i) The Navy is evaluating the contouring software used to create the potentiometric surface map, and acknowledges that problems exists, especially in regards to boundary conditions. ii) The Q17 groundwater contour map will not be revised, but subsequent contour maps will show these features if they exist. iii) Please note that these features are shown on Figure 3 and are included in the explanation as "Sanitary Sewer Plug" and "Fresh Water Line Repair". The statement regarding the "sewer line and water line repairs in this general area" does not attribute the flattening of the mound in the vicinity of Bldg 411, it is meant to suggest that these repairs may have an effect on groundwater conditions in that area. Plugging and repairing these features may contribute to leaks in other locations within the vicinity based on the age and condition of these features.

Comment #9 "Continued":	Response:
iv) Pump Station A should be discussed (Q17R, Q18R and CDE2QR pages 2-3) with regard to the large groundwater trough which controls groundwater flow over most of Parcels D and E.	iv) Leaking sewer lines in the vicinity of Pump Station A have been assessed, and the Navy intends to deactivate these lines. As such, any effect will be removed, and groundwater elevations will be monitored accordingly.
v) On Parcel E southwest of the landfill, the sink at IR12MW12A (-2 fmsl) is a new feature—and it is controlled by a single point. Please evaluate the cause of this anomaly. Propose additional monitoring.	v) Groundwater elevation in this area will continue to be monitored.
vi) On Parcel E near Building 411, the high elevation (3.07 fmsl at IR36MW126A) is not shown at the center of the mound on the figure. Please revise the figure. Also, a 3-foot contour line should be added. Evaluate whether this mound is seasonal or is related to site activities.	vi) The figure is adequate as drawn.
vii) Parcel B 1) The 1-foot contour is drawn on the wrong side of IR07MW26A. Please revise. 2) IR10MW33A and IR06MW59A1 are shown as an orange dot but groundwater levels are provided. Please change to red dots. 3) 1R1033A (3.28 fmsl) and IR1014A (6.03 fmsl) are mounds. Please revise contours.	vii) The Q18 groundwater contour map will be revised.
viii) Parcel C 1) Provide maps at appropriate scales of source areas. 2) Revise contours so that IR58MW24F (9.39 fmsl) is between the 9- and 10- foot contours. 3) Revise contours so that PA28MW51A (2.05 fmsl) is between the 2- and 3-foot contours. 4) Revise contours so that IR30MW03F (6.33 fmsl) is between the 6- and 7-foot contours.	viii) Groundwater contour maps drawn at an appropriate scale will be provided in the annual report.

Comment #9 (Continued):	Response:
b) June 14, 2004 i) Please post all water elevations on the figure. ii) It appears that the shoreline along Parcel B (IR07 area) and Parcel E (full extent) has been treated as an impermeable boundary (i.e., contour lines are perpendicular to the shoreline), which is not appropriate. Although it may be pragmatic to assume that some engineered seawalls (but not wooden seawalls) are impermeable boundaries, beaches can not be treated as impermeable boundaries. Please revise the figure so that contour lines along the undeveloped beach approach sea level (i.e., the 0-foot contour line). iii) Contour lines for Parcel A West are not supported by data, since no wells exist in Parcel A West. Moreover, Parcel A West is a steeply sloping upgradient area. Groundwater levels are likely to be significantly greater than 5 feet above mean sea level (as in historic interpretations). And, groundwater flows radial downwards (not across the slope as shown on Figure 3). iv) Discuss the criteria used to determine an acceptable distance to extrapolate data. For example, the extrapolations to Parcel A West are not constrained and the extrapolations of the 3-5 foot through 6-foot contour lines to the boundary between Parcels A and B are not well constrained. Similar observations apply to the boundary between Parcels A and D. v) Explain how the mound at Building 156 in Parcel B was delineated if no wells were measured within the 2.5-foot and 3-foot contours.	b) i) The Q18 groundwater contour map will be revised. ii) Comment noted. iii) Comment noted. iv) Comment noted. v) Comment noted.

Comment #9 (Continued):	Response:
vi) Explain how the 1.5-foot contour at Building 134 in Parcel C was determined if no wells were measured within the 1.5-foot contour.	vi) Comment noted. The map has been revised.
vii) Explain how contours were extended onto piers if no wells were measured on the piers. For example, how was the wavy 0-foot contour on the Parcel D regunning pier determined? Similar comments apply to other piers (e.g., Piers B and C).	vii) Comment noted. The map has been revised.
viii) Contours adjacent to flooded dry docks should be dashed and queried. It is not appropriate to extend contour lines across open water. Alternatively, contours should not extend all the way to the dry docks (as in historic contour maps). Similarly, contours should not extend into areas where structures overlie open water (e.g., seaward of seawalls).	viii) Comment noted. The map has been revised.
ix) Delete the .5-foot contour which extends into the Bay in the Northern Reach (north of Parcel B).	ix) Comment noted. The map has been revised.
x) Data presentation 1) Water level measurements should be shown on the figure. Where data is dense, blow-ups should be provided with water level measurements included. 2) Please label Pump Station A. 3) Please extend figures to include the "panhandle" of Parcel E. 4) It is not possible to determine which wells were sampled in areas where well distribution is dense. That is, it is not possible to correlate well names with dots on the figure. Please provide blow-ups in areas where the well distribution is dense (e.g., Buildings 134 and 272).	x) 1) Future reports will include groundwater contour maps at an appropriate scale to include groundwater elevation data. 2) Pump Station A will be labeled. 3) Figure 3 will be extended to include the "panhandle" of Parcel E. 4) Future reports will include groundwater contour maps at an appropriate scale to correlate well names with dots in the explanation.

Comment #9 (Continued):	
5) Some well names are not associated with colored circles, including (this list is not complete): IR01MW09B, IR01MW11A, IR06MW34A, IR06MW56F, IR07MWS-2, IR07MWS-4, IR08MW40A, IR08MW44A, IR09MW31A, IR17MW11A, IR20MW17A, IR26MW41A, IR28MW271A, IR33MW63A, IR33MW116A, IR38MW03A, IR39MW22A, and IR46MW37A.	5) Comment noted.
6) Please indicate structures that overlie open water (e.g., some piers, berths, and shoreline areas) perhaps by a lighter blue color.	6) The Navy believes this delineation is not necessary.
7) Please distinguish utilities according to type (e.g., storm water, saltwater, steam, fuel lines, etc.). Please indicate submerged utilities by different symbol or color.	7) Please see the Data Gaps Reports for this information.
8) Please include sheet piles.	8) Future reports will include sheet piles detailed on the figures.
9) Please indicate all areas of gas and groundwater injection and extraction.	9) Treatability studies will be discussed in the annual reports
10) Please include the tidal influence zone.	10) TIZ will be included.
11) The figure would be easier to read if the names of wells not sampled and the background details were grayed out.	11) Comment noted.
12) Please identify source and date of base map.	12) The source and date of base map will be identified.

Comment #10: Figure 4: Parcel A Aquifer TCE Isoconcentration Map	Response:
a) Q17R i) Please include sampling results for each well on the figure.	i) Sample results will be added to the figure presented in the annual report. A thorough evaluation of VOCs will be presented in the annual report.
ii) The Remedial Action Monitoring Plan (RAMP) identifies IR10MW28A as a volatile organic compound (VOC) monitoring well and as a sentinel well. Please include this well on Figure 4. Similarly, please include IR10MW79A, and IR10MW80A.	ii) These wells have been included on revised Q17 TCE isoconcentration maps to be included in the annual report.
iii) Some well symbols have no well names associated with them, including several "iron study" wells and the "sentinel VOC" well. Also, it is not clear which well name is associated with each symbol. Please provide a figure specifically for the IR10 area.	iii) Q17 TCE isoconcentration map has been revised.
iv) Values are not provided for the highest contour line. Therefore, it is not possible to see at a glance the high concentrations at the source area (e.g., 650 ug/L at IR10MW71A).	iv) Comment noted.
v) Results from "Iron Study" wells are relevant to understanding the extent of VOCs. For example, at BCT meetings, recent data was presented that indicated the VOC plume at IR10 was larger than previously measured. However, contours presented in Figure 4 do not shown a significant enlargement of the plume. Please include iron study well results on Figure 4 Include summary tables and dates of sampling.	v) Please see response to (i) above.
vi) TCE contamination from Building 134 area (in Parcel C) impinges on Parcel B. Please include TCE contours for the Building 134 area.	vi) This request will be evaluated for the annual report after discussion with the BCT.

Comment #10 "Continued": vii) Please provide an explanation for the purple crosses. b) Q18R i) Please include sampling results for each well on the figure. ii) Contours are very crowded. Please provide a figure at an appropriate scale. iii) Explain the basis for extending contours to the south west where no data is presented. c) CDEQ2R. No VOC isoconcentration figures were provided. Please provide.	The purple crosses are not shown on revised figures. b) i) Please see response to (a)(i). ii) Please see response to (a)(iii). iii) The TCE isoconcentration map for Q18 has been revised. c) Figures will be provided in the annual report.

Comment #11: Appendix A: Summary of Analytical Results a) CDEQ2. To facilitate review, please revise the format of results tables and provide additional information as indicated below. i) As models for revised tables, please use the formats of the Parcel C and Parcel E RI report--e.g., Parcel C RI Table 4.3-15 for IR28 and Parcel E RI Table 4-2-14. 1) Provide example tables for agency review. 2) Include detection limits and data qualifiers. 3) Bold exceedences of human health and ecological screening levels. 4) So that data adequacy and contaminant trends can be assessed, include historical data. 1) In the annual report, provide statistical summary tables for each groundwater area. As model tables, please use: Parcel C Table 4.3-14 for IR28 and Parcel E Tables 4.2-13A and 13B for IR01/21. b) Please provide an explanation for the data qualifiers used in columns titled "Lab Qual" and "Valid Code" in Appendix A—e.g., C, D, E, G, J, M, T. c) Explain the difference between "Lab Qual" and "Valid Code". d) Q17R: POC values are not provided for Be and Tl: DLs exceed POC values for these two metals. e) Q18R: Revise the table with wells ordered alpha-numerically.	**Response:** (a)(i) Appendix A table format will not be revised. (a)(i)(1) Tables were discussed in Data Presentation Meeting with the BCT. (2) Data qualifiers are included. (3) Groundwater results that exceed agreed upon screening criteria will be discussed in the text and bolded in tables, as appropriate. (4) Quarterly reports will contain historical data, as appropriate. ii) The Navy will consider this request and discuss with the BCT. b) An explanation will be added to the end of Appendix A. c) Laboratory qualifiers are codes assigned by the laboratory that indicate conditions during sample analysis (e.g., sample concentration exceeds instrument calibration range). Data validation codes are assigned by a third party data validator and take into account quality control measures recorded by the laboratory (e.g., matrix spike recoveries) as well as the field sampling team (e.g., collection of field duplicates and equipment rinsates). The third party data validators compare field sample results to quality control results to identify potential discrepancies in the reported analytical data. Both laboratory qualifiers and data validation codes provide additional information about a sample's analytical results in the form of standardized codes. d) Please note that the screening level for Be and Ti are set at the HGAL. e) The order of the table is adequate and will not be revised.

Comment #12: CDEQ2R: Appendix B: Monitoring Well Sampling Sheets. Please provide sampling sheets in alpha-numeric order.	**Response:** Sampling sheets will be separated by Parcel rather than in alpha-numeric order.
Comment #13 : Appendix B: Monitoring Well Sampling Sheets General Comment. Sampling sheets for CDE2QR are improved over Q17R and Q18R. Fewer detailed comments are provided for CDE2QR. In general, readings are less anomalous and more stable: which suggests fewer equipment malfunctions. Drawdowns continue to be high, and discharge rates are high and purged volumes are low. a) Sampling sheets were not provided (but chain-of-custody records were provided) for Q17R: IR10MW75A. Q18R and CDEQ2 were not checked in this regard: but it was noted that well sampling sheets for IR02MW147A and IR02MW149A were missing. Please check that all well sampling sheets, inspection forms, and additional field notes were included.	**Response:** Missing well sampling sheets will be provided in the Q18 report.

Comment #13 (Continued):

b) Sampling depths and pump intake depths. VOC concentrations have been observed to vary between events at some wells. A question was raised concerning correlation between sampling and pump intake depths and VOC concentrations. To answer the question, sampling at consistent depths was utilized in the BGMP--at about one-half of the water column. Sampling sheets indicate that this goal was generally accomplished. Similarly, pump intakes were hung at about one-half the water column. For the sake of consistency, this practice should be continued for shallow wells with a ten-foot screen. However, deeper wells and wells with longer screens require more evaluation. For example, for deeper wells, pumps hung at one-half the water column may not be located within the screened interval: in which case, well water (not formation water) may have been sampled. This is not acceptable—especially when stabilization is not demonstrated and 3 casing volumes have not been purged (as discussed elsewhere in this memorandum). An example: at IR71MW12B, a deep well (TD at about 104 fbgs), the pump was hung (and sample was collected) at 50 to 55 fbgs. 13.8 liters was purged which is less than one casing volume (235 liters, assuming a 4" well). Stabilization criteria were met because the long column of well water was equilibrated prior to purging and the small volume of water purged did not change readings. But: formation water was not sampled in this well: results will not be usable for site characterization. Other examples: new landfill wells IR01MW366B (total depth of 55 fbgs) and IR01MWLF4B (total depth 56.3 fbgs) were sampled at 35 and 33.5 fbgs, and IR03MW228B which monitors the northern effects of the oil waste ponds (total depth 72.4 fbgs) was sampled at 39.8 fbgs.

Response:

b)

i) Deeper wells that can not be appropriately sampled by setting the pump at the midway point of the water column will be evaluated to ensure the pump is set within the screened zone. A permeable zone will be targeted if present.
ii) This interval was chosen such that the pump was within the screened interval.
iii) The Navy has provided pump depth and well construction details.
iv) In this review comment, DTSC states that "stabilization criteria were met because the long column of well water was equilibrated prior to purging and the small volume of water purged did not change readings." The Navy does not intend to further evaluate stabilization criteria.
v) Wells that contain LNAPL or DNAPL are measured. The Navy is working on a protocol to address wells with potential LNAPL and DNAPL.

Comment #13 (Continued):	Response:
i) Please evaluate each well with respect to screened interval, site stratigraphy, and variation of height of water column. Specify sampling depths for each well (i.e. depth of pump intake) in a table. ii) For some deep wells, pumps were sometimes hung about 10 feet above the total depth (TD) of the well (e.g., IR28MW395F). Please explain how this criterion was selected. iii) Please identify all wells for which samples were collected outside of the screened interval of the well. iv) Please evaluate whether failures to meet stabilization criteria or high turbidity or high dissolved oxygen are associated with pump intakes outside screened intervals. v) If the purpose of sampling is to determine whether light or dense non-aqueous phase liquids (LNAPLS or DNAPLs) exist at the well location, depths of sampling should be adjusted accordingly. Please identify such wells.	
c) The pump used was often listed on sampling sheets as a "Mega-Typhoon". Product information for the Mega-Typhoon says that a "low-flow controller" is available for use with the Mega-Typhoon to allow the field technician to control the flow of water so as to meet USEPA standards for low flow sampling. Was a "low-flow controller" utilized? Similar questions apply to the "Proactive" pump.	c) The field crew used the Mega-Typhoon low-flow controller consistent with manufacturer instructions.
d) Additional field sheets for some deep wells indicate that there was difficulty sustaining pumping (e.g. "no water was coming out" at IR28MW355F). Please discuss the cause of this difficulty and corrective actions taken.	d) Due to the design and functionality of the pumps used, it was necessary to increase the pump flow to draw water from the well. The field crews have attempted using different pumps at the challenging well locations to achieve low flow sampling.

Comment #13 (Continued):	Response:
e) Sampling rate. DTSC recommends sampling at 100 ml/min for VOCs. Sampling rates greater than 100 mL/min may result in low-biased results due to agitation and volatization. Sampling rates exceeded 100 mL/min at the following locations (sampling rates in mL/min).	(e)(i) Comment noted. The SAP states that rates between 500 ml/min and 50 ml/min are acceptable for low-flow sampling.
i) Q17R: IR06MW42A (200), IR07MWMW19A (1550), IR07MW20A (2000), IR07MW23A (300), IR07MW24A (1000), IR07MW25A (1850), IR07MW26A (500), IR07MW28A (875), IR07MWS-2 (1675), IR07MWS-4 (1000), IR10MW12A (2437), IR10MW13A1 (3102), IR10MW31A1 (300), IR10MW33A (1000), IR10MW61A (2350), IR10MW62A (700), IR10MW76A (250), IR10MW79A (1000), IR10MW80A (500), IR25MW17A (500), IR25MW37A (700), IR26MW41A (700), IR26MW46A (350), IR26MW47A (500), IR46MW37A (500), IR61MW05A (350), PA50MW01A (500), UTO03MW11A (333).	
ii) Q18R: similar to Q17R. In general, rates were about (or exceeded) 500 mL/min.	ii) Comment noted, see response above.
iii) CDEQ2: similar to Q17R. In general, rates were about (or exceeded) 500 mL/min.	iii) Comment noted, see response above.
f) Field notes. No comments on field conditions (odor, color, condition of cap, etc.) were provided for Q17R.	f) Comment noted.
g) Please provide field notes and well inspection forms for Q17R. Casing volumes. Casing volumes are required to calculate purging volumes.	g) The Q17 report will not be revised. However, the Navy can provide the forms per your request.
i) Casing volumes should be calculated in liters (instead of gallons) for easy comparison to purged volumes which are given in liters.	i) Purged casing volumes have been calculated in subsequent reports in units of liters rather than gallons.

Comment #13 (Continued):	Response:
ii) Casing volumes are not provided for the following locations. 1) Q17R: IR06MW42A, IR06MW45A, IR07MW23A, IR07MW24A, IR07MW26A, IR07MWS-4, IR10MW14A, IR10MW28A, IR10MW31A1, IR10MW33A, IR10MW59A, IR10MW62A, IR10MW71A, IR10MW79A, IR10MW80A, IR25MW17A, IR26MW46A, IR26MW47A, IR26MW48A, IR46MW37A, UTO03MW11A. 2) Q18R: for most wells, casing volumes were not provided. 3) CDEQ2: for most wells, casing volumes were not provided. iii) High casing volumes were recorded in Q17R: 649 gallons at IR25MW37A, 962 gallons at IR26MW14A. h) Temperature increases during purging may result in low-biased VOCs. Temperature values improved for Q18R and CDE2QR. i) Temperature increases were recorded at the following locations in Q17R: IR07MW23A (3 °C), IR10MW28A (3 °C), IR10MW33A (4.3 °C), IR10MW76A (3 °C), IR26MW46A (3 °C), IR26MW48A (4 °C), IR46MW37A (3 °C), IR61MW05A (3.3 °C). ii) Q18R: No large temperature increases were recorded. iii) CDEQ2R: No large temperature increases were reported. A large decrease was recorded at IR28MW 315B (3.7 °C).	(ii) (1)(2)(3) Comment noted. iii) The DTSC has misread the well sampling sheet. The casing volumes are 6.49 and 9.62, respectively. h) DTSC is concerned that the many factors may cause "low-biased" VOC results. Historical trend analysis is one way to evaluate whether or not the concern over "low-biased" results significantly influence our understanding of groundwater at HPS. Trend analysis will be included in the annual report. (i) – (iii) Comment noted.

Comment #13 (Continued):	Response:
i) Dissolved oxygen (D.O.) i) VOC results are low-biased when D.O. is elevated. Elevated D.O. may indicate agitation of the water column. When low purge volumes are associated with high D.O., inadequate purging may be indicated (i.e., formation water has not replaced aerated shallow well water). Also, some locations may exhibit naturally higher D.O.—for example shallow bedrock wells. However, D.O. concentrations that approach saturation (10 mg/L) are suspect. In Q18R, elevated D.O. (greater than 3, in mg/L) was measured at: IR07MW19A (3.0), new well IR07MW20A1 (3.69), new well IR07MW26A (4.17), IR10MW31A1 (3.0). In CDEQ2R: IR28MW150A (6.95), IR28MW171A (4.79), IR28MW172F (6.2), IR28MW190F (7.7), IR28MW200A (4.24), IR28MW216F (3.77), IR28MW255F (7.78), IR28MW270A (5.3), IR28MW272A (4.92), IR28MW294A (4.16), IR28MW350F (3.04), IR28MW355F (4.49), IR28MW395F (3.3), IR28MW396B (4.90), IR29MW59F (6.46), PA50MW03A (7.11), IR09MW51F (7.1), IR09MW54B (5.45), new well IR09MW61A (6.2), new well IR09MW63A (3.27), IR22MW20A (3.5), IR01MW53B (5.4), IR15MW10F (3.91), and IR74MW01A (4.6). 1) Please identify an acceptable D.O. range. 2) Please investigate the cause of high D.O. (greater than 5 mg/L) at IR28MW150A, IR28MW172F, IR28MW190F, IR28MW255F, IR29MW59F, PA50MW03A, IR09MW51F, IR09MW54B, IR09MW61A. ii) D.O. less than zero mg/L may indicate equipment malfunction (or drift) at the following locations.	i) VOCs may or may not be low-biased when a dissolved oxygen concentration greater than 3.0 mg/L is recorded. The presence of chlorinated ethenes will not depress dissolved oxygen levels that are common with petroleum hydrocarbons. 1) The Navy does not currently have plans to identify a Hunters Point groundwater ambient level for dissolved oxygen. Wells that have D.O. values near the saturation level or at or near 1 mg/L are evaluated to determine potential causes, as appropriate. 2) See response to 1) above. ii) The Navy concurs with this evaluation. Crews will be instructed to recalibrate or replace equipment if D.O. levels are less than zero.

Comment #13 (Continued):	Response:
1) Q17R: IR07MW24A, IR07MW25A, IR07MWS-4, IR10MW76A, IR26MW48A. 2) Q18R: about 8 occurrences of negative D.O. (between 0 and -.20 mg/l). 3) CDEQ2: about 13 occurrences of negative D.O. (between 0 and -.20 mg/l). iii) For wells which are purged dry, please measure and record D.O. when the sample is collected.	iii) The Navy already records D.O. levels when collecting samples from wells that are purged dry.
j) Turbidity. High turbidity may influence sampling results--for example, metals results may be high-biased. High turbidity may indicate inadequate purging, development, or well construction--or failure to meet stabilization criteria (5 NTUs), or other factors. Some areas may have "natural" high turbidity.	j) Please note that groundwater samples are analyzed for total suspended solids (TSS). TSS results are reviewed if metals results are considered high.
i) Please instruct field crews to stop work and check (and replace, if warranted) instruments when high or negative turbidity is measured. Some anomalous measurements may be correctable in the field. For example, negative turbidity was corrected by the field crew at IR07MW21A1 (Q18R) and IR58MW33B (CDE2QR)--by cleaning the glass.	i) Work crews have been instructed to recalibrate or replace equipment that yield negative turbidity readings.
ii) Different wells have high turbidity in different quarters (Q17R and Q18R). This may indicate equipment malfunction since formation water would not be expected to vary much. An example: IR28MW353B was sampled on 6/2 and on 6/10 (CDE2QR). Turbidity "stabilized" at 26 NTUs on 6/2 and at 254 NTUs on 6/10. For both events, less than one casing volume (111 liters) was purged for this deep well (total depth of about 52 fbgs). 11 liters and 5 liters were purged, which means that the screened interval wasn't purged. And well water (not formation water) was sampled.	ii) There is no clear explanation for the discrepancy of turbidity readings for samples collected several days apart. The discrepancy is an order of magnitude different, and turbidity of groundwater from this well is typically 23-28 NTUs.

Comment #13 (Continued):

iii) High turbidity (over 100 NTUs) was measured at the following locations (in NTUs). Typically, three to six readings were taken and the well was sampled within about 20 minutes of starting purging. Please compare turbidity readings in past and future events to determine whether high values are spurious or real.

1) Q17R: new well IR07MW25A (224), IR07MWS-2 (255), IR10MW14A (252), IR10MW71A (256), IR26MW41A (248), IR61MW05A (176).

2) Q18R: IR06MW45A (500), IR10MW28A (271), IR10MW59A (179), IR10MW62A (162), IR25MW17A (194), IR26MW47A (212), IR26MW48A (212).

3) CDEQ2: IR25MW40A (221), new well IR25MW60A1 (224), new well IR25MW60A2 (179), IR28MW122A (183), new well IR28MW171B (190), IR28MW188F (101), IR28MW270A (230), new well IR28MW272F (185), IR28MW294A (138), IR28MW311A (172), IR28MW350F (196), IR28MW352A (181), IR28MW353A (131), new well IR28MW353B (254), IR28MW355F (189), IR28MW396B (216), IR29MW59F (210), PA50MW03A (178), IR58MW31F (231), IR58MW32B (141), IR09MW35A (198), IR09MW36A (168), IR09MW62F (253), PA50MW07A (250), IR70MW04A (103), IR70MW07A (107), IR01MW03A (166), IR01MW09B (155), IR01MW31A (184), IR01MW42A (166), IR01MW43A (206), IR01MW44A (137), IR01MW58A (258), IR01MW62A (245), IR01MW63A (211), IR01MW366A (236), new well IR01MW366B (245), new well IR01MW403A (173), IR02MW127B (171), IR02MW141A (199), IR02MW179A (199), IR02MWB-2 (204), IR02MWB-3 (177), IR03MW224A (201), IR03MW342A (199), IR04MW36A (140), IR04MW37A (201), IR11MW27A (223), IR12MW13A (236), IR12MW14A (125), IR15MW06A (241), IR36MW12A (24), IR36MW17A (232), IR36MW120B (238), IR36MW123B (200), IR36MW126A (239), IR36MW127A (230), and IR39MW21A (228).

Response:

iii) Since placement of sampling equipment in the well may cause an increase in turbidity. The Navy does not believe it is appropriate to perform an evaluation of sample turbidity versus time.

Comment #13 (Continued):	Response:
iv) Negative turbidity may indicate equipment malfunction for the following wells. 1) Q17R: IR07MW28A, IR10MW12A, IR10MW61A, IR10MW76A, IR25MW37A. 2) Q18R: IR10MW13A1 (-10 NTU), IR10MW14A (-10 NTU); and occasionally elsewhere between 0 and -.2 NTUs. 3) CDEQ2: Turbidity at about -10 NTUs was reported for IR28MW221B, IR28MW268A, IR09MW54B, IR09MW61A, IR44MW08A, PA36MW07A, and new well IR01MW403B; at about -5 NTUs for IR58MW26A and IR33MW61A; and occasionally elsewhere between 0 and -.2 NTUs.	iv) Comment noted.
v) For wells which are purged dry, measure and record turbidity when the sample is collected.	v) This process is already in place. The Navy has always instructed field teams to measure and record turbidity when the sample is collected from a well that has run dry. Obviously, if a well cannot be sampled because there is no water in the column and purging is unable to be accomplished, a turbidity reading is impossible to obtain.
k) Purged volume. To ensure that samples are collected from formation water, and not from stagnant water in wells, minimal purging volumes must be collected at wells where stabilization of criteria is not demonstrated. Stabilization was not demonstrated for many wells. And, for the great majority of wells, purged volumes were less than the minimum requirement of 3 casing volumes. Purge volumes were generally less than 8 liters, occasionally up to 16 liters. In many cases, less than one casing volume was purged. That is, 8 liters represents one casing volume for a 4" well with a water column only 3.3 feet high. For example, for new B aquifer well IR28MW171B (total depth of about 60 fbgs)--the casing volume is 133 liters and the purge volume was 7.5 liters. This means that the screened interval wasn't even purged. For other wells, purged volumes were not provided. Examples are provided below.	k) The Draft SAP requires that low-flow sampling be performed where technically feasible. The Draft SAP considers low-flow purging to be technically infeasible if the depth to water is greater than 25 feet below ground surface or if the well is unable to support a recharge rate of 0.1 Liter per minute (L/min). If the drawdown is less than 0.3 foot, the pumping rate can be increased to a maximum of 0.5 L/min (provided static water levels remain). Wells that cannot maintain low-flow purging rates will be sampled using standard three casing volume purges.

Comment #13 (Continued):	Response:
i) Q17R: Purged volume was not provided for IR10MW13A, IR10MW28A. ii) Q18R: Purge volume was provided for all wells. iii) CDEQ2R: Purge volume was provided for all wells.	i) Comment noted. ii) Comment noted. iii) Comment noted.
l) Stabilization of parameters was not demonstrated because of insufficient readings at Q17R: IR10MW28A (2 readings) and Q18R: IR26MW41A (3 readings, 5 liters purged). CDEQ2 was not checked.	l) Readings for the stabilization of parameters is limited by recharge of the wells in most instances.
m) Organic vapor monitor (OVM) readings are required for health and safety (H&S) purposes. OVM readings were not conducted at some wells--e.g., IR06MW42A (Q18R). OVM wells were elevated at other wells--e.g., 410 ppm at IR56MW39A, 61.1 ppm at IR28MW211F (CDE2QR), 4.7 ppm and 3.4 ppm at IR26MW41A (Q17R and Q18R).	m)
i) Please instruct field crew to measure and record OVM measurements each time a well is opened and subsequently, at regular intervals.	i) Field crews have been instructed to take initial readings with the PID and if elevated readings are encountered, move away from the well, allow vapors to dissipate to a safe level, and notify the Site Safety Manager.
ii) For H&S, well activities require OVM measurements when a well is first opened and subsequent measurements as purging and sampling proceed. Well sampling sheets have an entry for "Organic Vapor Concentrations" (top right corner) for well opening readings and a column for "PID/OVM" (right hand side) for subsequent readings. This column is inconsistently used. Sometimes, the column title is crossed out and "Sal" or "Salinity" is written in. Please revise sheets so that subsequent entries for OVM measurements as well as salinity measurements can be consistenty recorded.	ii) The Draft SAP only requires that the initial OVM reading is collected, therefore, the well sampling sheet will not be revised.
iii) Please discuss exceedences of H&S criteria in the text and include in that discussion any work stoppages.	iii) Exceedences of H&S criteria are addressed immediately. A discussion in the text of the report is not appropriate.

Comment #13 (Continued):	Response:
4) Please evaluate VOC results for wells with elevated OVM reading and propose additional sampling for VOCs, as appropriate. For example, the OVM readings for new landfill wells IR01MWLF1 and IR01MWLF4B were 50.4 and 56.7 ppm. Other example: new well landfill IR01MW403B had OVM field readings at 4.7 ppm during sampling and up to 20.3 ppm during well installation. This well is located on the western property margin adjacent to occupied property. Please evaluate whether additional soil gas monitoring for VOCs in this area is needed.	iv) Any additional groundwater work will be recommended in the Annual Report.
n) Inconsistencies regarding depth to bottom (in feet below top of casing) were observed on well sampling sheets. Examples are provided below. This list is not complete.	n) Comment noted.
i) Q17R 1) IR07MW24A1: The depth to bottom is given as 15 feet below top of casing (about 12 fbgs) but total depth on boring log is 15.5 fbgs. Please check if this well has silted up. 2) IR07MW26A: Depth to bottom not provided.	i) The sampling sheet for well IR07MW24A1 states that the depth to bottom, as measured in the field, is 15 feet bgs. Depth to bottom will be monitored and compared in subsequent sampling events. The sampling sheet for IR07MW26A reports a total depth of 18.37 feet bgs, this measurement is over the construction details record of 15.0 feet. Measurements for this well be re-evaluated in subsequent sampling events and if the well log is incorrect, it will be revised to reflect a more accurate representation of the actual depth to bottom.
ii) Q18R: depths presented on sampling sheets seemed reasonable (but were not checked against well logs).	ii) Comment noted.
iii) CDEQ2R: not checked.	iii) Comment noted.
o) In Q17R, some other entries on well sampling sheets are not filled in (e.g., depth to bottom, depth of sample) or are inaccurate (e.g., depth to groundwater is sometimes given in place of "depth to bottom"; depth to bottom of hole is sometimes provided as "depth of sampling"). For example, in CDEQ2R, IR06MW55F has many entries not filled in.	o) Comment noted. Field crews will be reminded regarding proper documentation of field notes during sampling.

Comment #13 (Continued):	Response:
p) In Q17R, circled numbers are provided on some sheets which suggest that additional field notes were made, perhaps on the backs of the sheets.	
i) Please provide field notes for all locations in Q17R—for example, IR10MW33A, IR18MW21A.	p) Q17 will not be revised.
ii) Similarly, please provide well inspection forms for Q17R.	
q) Problems were noted on well inspection forms in Q18R and CDEQR—for example, the following wells were not locked: IR07MW19A, IR10MW14A, IR25MW37A, IR64MW05A, IR01MWI-7, IR02MW206A, IR02MWB-1 and IR03MW228B.	q) Comment noted.
i) Summarize problems and recommended repairs for all wells. Describe corrective actions taken for wells. For example, an obstruction was noted in B aquifer landfill well IR01MW17B at 24 fbgs (total depth: 55.5 fbgs).	(i) Recommendations will be provided in the annual report. The Navy intends to make minor repairs as they are discovered.
ii) Problems with rusted or stuck locks or keys stuck in locks were mentioned. Please include a lock lubricant (e.g., a dry lubricant like graphite) in the field kit to help correct this problem. Review chemical contents of the lubricant prior to application to determine if appropriate.	ii) See response above.
iii) Please comment on the sulfur smell that was reported for many wells in Parcel B Q18R.	iii) The sulphur smell is likely due to bioactivity in a sulfate reducing environment created as part of the zero-valent iron injection treatability study.
iv) Problems with rubber seals or absent rubber seals were noted for many wells.	iv) See response to (i) above.
v) Tubing was pulled out of the following wells in Parcel B Q18R (e.g., IR07MWS-2, IR07MWS-4, IR10MW62A, and IR10MW28A). Tubing in wells was mentioned for IR28MW122A and IR09MW51F, in CDE2QR. Please explain the source of the tubing.	v) Each well has dedicated tubing. Wells were only sampled in Parcel B during Q17, and were sampled using Grundfos stainless steel submersible pumps. A specific tubing size is related to this pump. During Q18, every well in the SAP from Parcels B, C, D, and E were sampled. However, prior to the beginning of Q18, the Navy authorized the purchase of ProActive pumps that require a smaller diameter tubing size. Existing dedicated tubing in Parcel B wells was replaced with new tubing.
vi) Please explain the "network of PVC pipes (possible remediation system?)" on the landfill near IR01MW31A.	vi) The groundwater monitoring report will focus on groundwater conditions at the site.

RESPONSE TO EPA COMMENTS
EIGHTEENTH QUARTER
PARCEL B, HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

Dated July 6, 2005

Comments From: Michael Work - EPA — Dated: February 11, 2005	Navy Responses: — Dated: July 6, 2005
REFERENCE DOCUMENTS	
SECTION /PAGE # — **COMMENTS**	**RESPONSES**
SPECIFIC COMMENTS	
Comment #1: Section 1.0, Introduction, Page 1-1; The text regarding the program under which Parcel B wells are monitored is confusing. The text states that 35 Parcel B wells were sampled during Q18 and that the Navy currently monitors 31 Parcel B wells under the RAMP program. Since the text implies that the Parcel B groundwater monitoring program operates under the RAMP, it is confusing that the number of wells monitored under the RAMP is not equal to the number of wells sampled during Q18. The text on page 1-2 offers a partial solution by indicating that one hexavalent chromium and three supplemental characterization wells were sampled in addition to the RAMP wells listed, explaining the 35 wells sampled during Q18; however, it remains unclear whether the six supplemental characterization wells installed in August and September of 2003 are being counted in the 31 RAMP wells. Further, based on Tables 1 and 3, it appears that only 26 RAMP wells were sampled this quarter. Please resolve these discrepancies and revise the text to state the correct number of RAMP wells and the correct number of supplemental characterization wells that were sampled this quarter.	**Response**: The text will be revised to clarify the sampling of Parcel B wells. There are 37 wells that are sampled in Parcel B. These include 31 wells in the RAMP, and six additional supplemental characterization monitoring wells. Of the 31 wells included in the RAMP, four sentinel wells are sampled on a semi-annual basis. Two of the four wells were inadvertently sampled during Q18. All six additional supplemental characterization monitoring wells were sampled in Q18, and 29 of the 31 RAMP monitoring wells were sampled during Q18.

Comment #2: Section 2.1, Groundwater Level Measurement Procedures, Page 2-1; It is unclear how groundwater levels at 99 wells in Parcels B, C, D, and E will be obtained during future sampling events. The explanation in response to previous EPA comments requesting quarterly groundwater monitoring reports explain the lack of groundwater level measurements at 99 of the wells listed for Parcels B, C, D and E is acknowledged and appreciated. However, the text does not explain how these issues will be handled and whether field teams will attempt to collect groundwater levels at these wells in the future. For example, it is unclear if all damaged wells will be repaired and included in the water level survey during future quarterly monitoring events. Please clarify the procedures for future sampling events by explaining how the issues that preclude the field team's ability to collect groundwater levels in these wells will be addressed.	**Response**: Each quarter, the field crews attempt to sample each well identified in the SAP. The reasons that the wells are not sampled is cataloged and sent to the Navy. The reasons vary from the well being damaged to the well is not accessible. For wells that are damaged, this is noted and will be addressed in the recommendations in the Annual Report. Some wells cannot be found (despite repeated efforts to locate them). Finally, some are completely inaccessible (isolated due to excavations). Still, an effort is made to locate and collect data from each well every quarter. Field Variance forms will be completed for all wells that could not be measured or sampled and included in the report.
Comment #3: Table 2, Summary of Groundwater Level Measurements, Page 2-4 and Figure 3; It is unclear why there are two different top of casing (TOC) elevations for some wells (e.g., IR07MW21A1, IR07MWS04, IR07MW24A, and IR07MW26A). This results in two different groundwater elevations, which may be the partial explanation for the apparent depression in the groundwater contours neat the IR07 shoreline. There should only be one TOC elevation for each well. Please review the field data and survey data to determine the correct TOC elevation for all wells with multiple entries, delete the incorrect entry from Table 2, revise Figure 3 to incorporate the correct groundwater elevation, and revise the contours as necessary.	**Response:** These wells were replaced in March 2004 and the top of casing elevations reported are incorrect. In addition, an excel number format error exists within all of the reported casing elevations. Table 2 will be revised.

Comment #4: Section 3.1, Groundwater Sampling Procedures, Page 3-1; The specific issues that limited the use of low-flow sampling procedures at Parcel B wells are not explained. The text states that low-flow purging was not always achievable due to limitations of the flow-through cell used in conjunction with the water quality meter; however, the limitations associated with the flow-through cell are not elaborated upon. It is our experience that flow through cells can be used at any flow rate, however, if the flow rate is extremely slow the cell may have to be manually emptied. Please provide specific information to explain the limitations precluding the use of low-flow sampling procedures at Parcel B wells, list wells affected by this, and discuss the potential effects on sampling results (e.g., loss of volatiles, oxidation of metals, etc when water cascades down the well screen). Also, the text indicates that field personnel recorded which wells were sampled using other than low-flow techniques on the sampling sheets included in Appendix B; however, please note this information in Table 4.	**Response:** Field crews attempted low flow rates at each well. The pumps that were used during Quarters 18 and 19 were not designed for the additional back-pressure associated with a flow through cell. As a result, the flow rates were constantly being adjusted to maintain the low flow. However, this was not always achievable. After continual use of the pumps, the problem became more difficult to regulate. Once the pumps became too difficult to use, replacing the motor often temporarily fixed the situation. The pumps were replaced after Q19 with a different and more reliable type of pump. A footnote will be added to the bottom of Table 4 that identifies wells where low-flow purging was not achieved.
Comment #5: Section 3.5, Deviations from the Final SAP, Page 3-18; Previous EPA comments have requested an explanation for the consecutive failure to measure immiscible layers during quarterly sampling events, but no action has taken to correct this problem. The report states that this is due to oversight during field activities, but it is hard to understand how this can happen quarter after quarter. Further, it is unclear how the sentinel wells scheduling for sampling this quarter (IR10MW28A and IR25MW17A) were missed; this suggests that the Sampling and Analysis Plan is not being followed. It is very important to sample the sentinel wells during the correct quarters. Please explain in the response and in Section 3.5 of the report why immiscible layers are not measured and how this will be corrected in the future. Also, please explain the corrective action that will be taken to ensure that all wells scheduled for sampling during a quarter are sampled.	**Response:** The report incorrectly referenced the Final SAP rather than the Draft SAP. Floating product has not been measured at the request of the Navy until a revised procedure for measuring floating product is developed. The Navy is currently working on a revised procedure/protocol. The field crew misinterpreted the SAP regarding the frequency of sampling for sentinel/VOC wells during Q18. Subsequent sampling events were sampled in accordance with the SAP.

Comment #6: Section 4.0, Conclusions, Page 4-1; The conclusions do not promote a comprehensive understanding of groundwater and its contaminants at Parcel B. Only some of the wells containing contaminants at concentrations exceeding defined trigger levels are discussed. It is unclear why the trichloroethene (TCE) above trigger levels in IR10MW71A is not listed or discussed. Both IR10MW71A and IR26MW47A are supplemental characterization wells, but the exceedence in IR26MW47A is discussed, but the exceedence in IR10MW71A is not. Please be consistent and present all of the trigger levels that were exceeded.	**Response:** There is no exceedence of TCE in well IR26MW47A as VOCs were not analyzed in this well. TCE exceedence in well IR10MW71A is discussed in Section 3.3.8. A discussion will be added in the conclusions section regarding exceedences of supplemental wells (wells not included in the RAMP).

Comment #7: Section 4.0, Conclusions, Page 4-1; The conclusions about TCE are incomplete and inconsistent with the presentation in Section 3.3 and Table 8 and with the groundwater elevation map. The analytical results for VOCs in groundwater collected from IR10MW76A are discussed in the conclusion, but were not presented in Table 8 or discussed in Section 3.3; other detections of TCE were discussed in Section 3.3 and presented in Table8, but are not summarized in the conclusions. According to Appendix A, groundwater collected from monitoring well IR10MW76A was analyzed for VOCs and the concentration of cis-1,2-DCE was estimated as 0.25 J ug/L. Please explain why this information was excluded from Section 3.3 and Table 8. Please discuss all detections of VOCs in Section 3.3, include analytical results from all wells in IR10 analyzed for VOCs, and present this information on Figure 4. Please include a discussion on the concentration of TCE detected in groundwater collected from IR10MW71A and the VOCs detected at IR10MW13A1, IR10MW28A, IR10MW33A, IR10MW59A, IR10MW71A, and PA50MW01A in Section 4.0. Finally, it is unclear why there is a discussion about the potential that the TCE plume is spreading from IR-10 toward Parcel A and the relationship of this plume to Parcel A. IR-10 is 500 feet downgradient of Parcel A; groundwater flows from Parcel A toward IR-10 and toward the Bay. It is unlikely that this plume would spread toward Parcel A since this would require contaminant transport or dispersion in an upgradient direction. Please either provide a detailed explanation of the mechanism behind this conclusion or delete it.	**Response:** Section 3.3 compares results to trigger levels; TCE and cis-1,2-DCE at IR10MW76A did not exceed trigger levels, and therefore no discussion was included. However, results from this well are discussed in the conclusion due to its location with respect to the plume. Results from this well will be added to Table 8. All detections of VOCs will be discussed in Section 3.3. A discussion of the VOC concentrations detected in groundwater collected from IR10MW71A, IR10MW13A1, IR10MW28A, IR10MW33A, IR10MW59A, IR10MW71A, and PA50MW01A will be included in Section 4.0. The discussion in Section 4.0 regarding plume spreading will be revised based on revisions to the TCE contour map.

Comment #8: Figure 3, A-Aquifer Groundwater Contour Map, June 14, 2004; The presentation of groundwater elevation contours on this figure does not facilitate interpretation of hydrology at Parcel B because it is not at a suitable scale. As a result, detailed information in some areas near the Parcel B/C boundary cannot be easily understood. Also, it is unclear why groundwater elevation contours were developed and presented for Parcels C, D, and E in this report. The basewide groundwater contour map should be presented in the basewide groundwater monitoring report. Please include a map presenting only groundwater elevation data for Parcel B and adjacent parts of Parcel C in this report. Also, please post the groundwater elevation data for each well.	**Response:** The A-Aquifer groundwater contour map has been revised for the Quarter 18 report. Additional revisions to the A-Aquifer groundwater contour map will be initiated for the annual report.
Comment #9: Figure 4, Parcel B A-Aquifer Q18 TCE Iso-Concentration Map; The scale of this figure is not suitable because the detail cannot be seen or understood. It appears that this map was produced using a contouring software package and that there are spurious contours southwest of building 123 that are not supported by data. Please revise Figure 4 by enlarging the area overlying the plume and excluding the unnecessary portions of Parcel B. Please also post the TCE concentration data for wells and verify that the contours are correct.	**Response:** Figure 4 will be revised to include the TCE concentration data.
Comment #10: Appendix B, Monitoring Well Sampling Sheets, April to June 2004 Sampling Event; The sampling sheets are much cleaner than last quarter, but there are still some scribbled out numbers (e.g., Time for IR25MW37A) and overwritten numbers (e.g., Cumulative Volume purged for IR25MW17A and dissolved oxygen for IR26MW41A, IR26MW47A, and IR46MW37A). Please continue to work with the field team to eliminate scribbled out and overwritten numbers on sampling sheets.	**Response:** The field teams have been retrained and reminded of field documentation protocols.

MINOR COMMENTS	
Comment #1: Figure 3, A-Aquifer Groundwater Contour Map, June 14, 2004; There is no symbol for IR70MWS-4. Please include a symbol for each monitoring well.	**Response:** Comment noted. A symbol will be added to the appropriate figure.

DRAFT RESPONSE TO RWQCB COMMENTS
EIGHTEENTH QUARTER
PARCEL B HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

Dated July 6, 2005

Comments From: Dated: Not provided James D. Ponton, R.G. 6106 - RWQCB	Navy Responses: Dated: July 6, 2005
REFERENCE DOCUMENTS	
SECTION /PAGE # COMMENTS	**RESPONSES**
GENERAL COMMENTS	
Comment #1: Data Presentation: The legibility of Figures 2 and 3 of the subject report could benefit from an adjustment in scale and by removal of those site features (roads, buildings, etc. contained in Parcel A) that are irrelevant to the purpose of the plot. As Staff has noted on previous reports, hi-lighting those wells in which "trigger concentrations" have been exceeded would facilitate document review and add as a valuable cross check in insuring that all the quarterly exceedances are appropriately captured in the text (body), tables, and on figures.	**Response**: Comment noted. Figures 2 and 3 have been revised for the Quarter 18 report. Additional revisions to the A-Aquifer groundwater contour map and TCE contour map will be initiated during the annual report.

Comment #2: Deviations from the SAP: Staff is concerned with the numerous deviations from the approved SAP that apparently occurred during the Eighteenth Quarterly sampling event. As noted by EPA, oversight/failure to measure immiscible phase has occurred in the past. In an effort to prevent future deviations, Staff recommends that the Sampling Report include: a) A discussion on the assessment and response actions that were taken, or are planned to be taken, by the sampling contractor/Navy to insure that documented laboratory or field activity errors and omissions receive appropriate corrective so that these problems are resolved and not repeated. b) A table (that will be provided to the field crew) that clearly tracks and shows the status of those wells that were either not located in the field, our found to be damaged, covered, obstructed, etc. Such a table should prove useful in planning, coordinating, and successfully completing future field events.	**Response**: The Final SAP was incorrectly referenced in the report. Floating product has not been measured at the request of the Navy until a revised procedure for measuring floating product is developed. The Navy is currently working on a revised procedure/protocol. The text of the report will be revised to document deviations from the SAP and subsequent actions taken to resolve errors and omissions. A table will be included in the report to summarize deviations from the SAP and reference the record of field variance forms for each deviation.
MINOR COMMENTS	
Comment #1: Figure 2: Sentinel well label IR25MW17A is missing from the plot. Please correct.	**Response:** The label for IR25MW17A has been added to Figure 2.

Response to EPA Comments Dated October 27, 2005 Regarding the Draft April to June 2004 Eighteenth Quarterly Groundwater Sampling Report, Parcel B and the Final April to June 2004 Eighteenth Quarterly Groundwater Sampling Report, Parcel B, Hunters Point Shipyard, San Francisco, California, July 2005

Comments From: James Ricks – EPA Dated: email from Navy October 27, 2005	Navy Responses: Dated: November 30, 2005
Final 18th Quarterly Groundwater Monitoring Report for Parcel B. Most of EPA's comments were addressed; the attached comments include the exceptions Also, as we discussed, the revised groundwater contour map has numerous errors; we prepared comments about some of the most significant errors. We also noted that one of the responses to DTSC's comments (DTSC Comment 4) states that "the potentiometric surface is adequate with exception of how the program interprets boundary conditions at the Bay margin," but the measured groundwater elevations would result in a very different map, if contoured correctly. Please note that EPA does not believe that this figure is adequate and further believe that DTSC and the RWQCB would concur with EPA.	Comment acknowledged. These responses were prepared and transmitted as part of an inclusive package intended to resolve significant issues associated with historic groundwater reports, as appropriate. Please note that revised potentiometric surface maps are included in this package.
SECTION /PAGE # COMMENTS	**RESPONSES**
NEW GENERAL COMMENTS	
Comment #1: There are still errors on the A-Aquifer Groundwater Contour Map (Figure 3). These errors include, but are not limited to:	**Response**:
a- Many wells are on the wrong side of contour lines, including IR06MW46A, IR07MW24A, IR07MW25A, IR07MW26A, IR07MW93A, IR07MW94A, IR07MWS-2, IR10MW14A, IR10MW32A, IR24MW06A, IR25MW61A1, IR26MW41A, IR46MW37A, IR46MW41A, and PA24MW02A.	a- Figure 3 has been revised by recontouring the groundwater elevation data. The contour lines are now drawn correctly in relation to the wells. Additional QA/QC was conducted after contouring was completed.
b- The interpreted depression in the vicinity of IR07MW21A is not supported by the groundwater elevations measured this quarter; this feature is actually a mound	b- In Figure 3, the contours in the vicinity of IR07MW21A have been revised and the depression has been removed. Data was incorrect due to Top of Casing (TOC) error, TOC information was updated contours adjusted, and Table 2 was revised.
c- The wrong color is used for some well symbols, including IR06MW46A, IR07MW95A, IR07MWS-2, IR07MWS-4,	c- The symbol colors have been revised to accurately describe each well.

IR26MW41A, and IR46MW37A.	
d- It appears that some wells are missing, including IR07MW27A, IR07MW28A, IR10MW33A, IR18MW200A, and IR62MW07A.	d- Figure 3 has been revised to included missing wells.
e- Groundwater elevations are still not posted.	e- Groundwater elevations will be posted adjacent to well designators beginning with the Quarter 20 Annual Report for Parcel B, as discussed at a previous BCT meeting, similar to the maps presented in the draft 4th Quarter CDE report. Although the Navy agreed posting groundwater elevations beginning with the Quarter 20 Annual Report, the Navy has also posted groundwater elevations in the Quarter 19 and Quarter 3 Reports.
f- The mean sea level (MSL) contour should not coincide with the shoreline unless groundwater was observed seeping from the shoreline. Further, the acute angles in the vicinity of IR46MW47A and IR24MW06A (e.g., along the seawall in the vicinity of Piers B and C) do not exist in nature. These errors and omissions need to be corrected. Many of the inaccuracies appear to be due to use of a contouring program; because of the complexity of Hunters Point Groundwater, a contouring program should not be used unless all of the data is checked, spurious features are removed, highs and lows are honored, and contours are corrected. It is recommended that contours be drawn by hand and digitized. In addition, the 0 foot contour does not accurately interpret the hydraulic gradient along the shoreline, since groundwater contours should not be drawn with straight lines and angles. Please correct the errors and omissions on this figure. Also, please specify procedures that will be implemented to avoid future inaccuracies.	f- The mean sea level contour issue has been address by removing the zero contour from along the shorelines in Figure 3. The "acute angles, etc., have been corrected. Considerable additional measures have been implemented to address concerns raised. The contouring program is used to generate primary contours, and these are then hand-smoothed and checked against well position and data values. Contouring program settings have been adjusted in later quarters to improve contour line quality. Ultimately, all contours are hand-checked and adjusted as appropriate.
Comment #2: It is not clear why the groundwater monitoring design for measuring groundwater is not being followed as prescribed in theFinal Sampling and Analysis Plan, Field Sampling Plan and Quality	**Response**: The Navy interpreted the SAP such that measurements were planned to occur coinciding with the apogian neep tide. However, upon further review, and in discussion with the regulatory

Assurance Project Plan, Basewide Groundwater Monitoring Program, Hunters Point Shipyard, dated August 2004 (the SAP). Deviations from the SAP that were not identified in the Report include: - Low and high tides occurred at 4:30 A.M. at 11:30 A.M., respectively, the day groundwater level measurements were taken according to The National Oceanic and Atmospheric Administration (NOAA) < http://unr.edu/homepage/edc/tides/2004/sfgg_fr04.html>. Therefore, according to Table 2, most of the tidally influenced zone was gauged after sea level had already risen 2-3 feet. - Wells in IR26, a tidally influenced zone, were gauged at high tide. The resulting interpretation was a hydraulic gradient flowing inland rather than to the bay. - Wells outside of the tidally influenced zone that were gauged before wells in the tidally influenced zone include: IR07MW23A, IR07MW27A, IR07MW94A, IR07MW95A, IR07MWS-2, IR07MWS-4, wells in IR18, IR20MW17A, IR26MW41A, UT03MW11A, UT03MW12A. All wells in Parcel B should be measured around low tide, and the 22 tidally influenced wells should be measured first, as specified in the SAP. Please specify procedures that will ensure that this does not occur in the future.	community, we will be scheduling water level measurements to occur as follows, which we believe is in compliance with the current SAP: • Two low tides occur daily at the site. The tidal information will be based on published tide tables for the gauging station at or nearest to the Hunters Point Shipyard. • Of the two daily low tides, there is one that is "higher" than the other. The SAP directs that water leveling measuring begin two (2) hours before, lasting approximately 3 hours after this "highest low tide". • Water level measurements days, therefore, will be schedule to begin two (2) hours before, lasting approximately 3 hours after this "highest low tide".

Response to EPA Comments Dated October 27, 2005 Regarding the Draft April to June 2004 Eighteenth Quarterly Groundwater Sampling Report, Parcel B and the Final April to June 2004 Eighteenth Quarterly Groundwater Sampling Report, Parcel B, Hunters Point Shipyard, San Francisco, California, July 2005

SPECIFIC COMMENTS TO RESPONSES TO COMMENTS	
Comment #1: Response to EPA Specific Comment #4: The response does not explain how using more reliable pumps will prevent draw down in wells and the subsequent loss of volatiles due to water cascading down the well screen. For example, the field sample sheet for IR10MW59A indicates that although a slow steady pumping rate (250 mL/min) was achieved, this did not prevent significant draw down in the well (2.79 ft) and high turbidity readings (179 NTU). Please explain.	**Response:** Some of these wells experience considerable drawdown as a function of the low-permeability materials in which they are completed, while other wells experience similar excessive drawdown as a function of well condition and may be in need of rehabilitation or replacement. New pumps are often capable of maintaining a more stable flow rate, or demonstrate less "drift", than older pumps. This is especially true of small diameter pumps in wells with non-uniform yields such as we experience in certain situations at Hunters Point. More reliable pumps are less prone to fluctuating discharge rates, which often forces field teams to "chase" the discharge rates appropriate with low-flow sampling. This can often lead to situations where the discharge rates are fluctuating as much as 500 ml/min, such that the drawdown is exacerbated. Newer, more reliable pumps should dampen these oscillations, and reduce the induced drawdown. In the case of IR10MW59A, this well has historically presented issues with excessive drawdown. In this case, the aquifer yield is most likely a function of lithology and well condition.
Comment #2: Response to EPA Specific Comment #5: It is unclear why a new procedure is needed to measure floating product, since floating product is normally measured with an oil-water interface probe and there are standard formulas to correct for the elevation of the water column. Please explain why a new procedure/protocol is necesary.	**Response:** Currently, the SAP requires the measurement of free product at all wells measured for water level. In order to perform all the measurements in a timely fashion, a method similar to using hydrocarbon paste needs to be employed to eliminate the level of effort associated with decon and reuse of the interface probe. Given the very limited availability of hydrocarbon paste, or other similar method, a smaller subset of appropriate wells is being developed for measurement via the use of an interface probe.

Response to EPA Comments Dated December 22, 2005 Regarding the Final Revised April to June 2004 Eighteenth Quarterly Groundwater Sampling Report, Parcel B Hunters Point Shipyard, San Francisco, California, December 2005

Comments From: James Ricks – EPA	Dated: 22 December 2005	Navy Responses:	Dated: 31 March 2006
SECTION /PAGE #	**COMMENTS**	**RESPONSES**	
NEW GENERAL COMMENTS			
Comment #1: EPA's review had determined that, in general, responses to comments addressed the Agency's comments and the potentiometric contour map (Figure 3, A-Aquifer Groundwater Contour Map, Eighteenth Quarter) was redone. However, there are still some outstanding contouring errors. For example, the response to New General Comment 1b indicates that contours in the vicinity of IR07MW21A were revised because the calculated groundwater elevation was incorrect. The new calculated elevation is -0.96 feet above mean sea level (ft msl). However, the contours on either side of this well are the 1.0 ft msl and the 1.5 ft msl contours, respectively. Similarly, the elevation in nearby well IR0-7MW24A is 3.82 ft msl, but it is also between the 1.0 and 1.5 ft msl contours. The contours in the vicinity of IR18MW200A and IR46MW41A are also incorrect.		**Response:** The first question was about reported groundwater elevations at monitoring wells IR07MW21A1 and IR07MW24A. The questions were raised about the actual groundwater levels reported in the tables and the contoured values on the map. These two data points were considered anomalous when initially contoured, having suspicious measured values. It was later discovered by Kleinfelder personnel that the collar elevations for these two wells were switched in the SAP, resulting in erroneous water-level measurements. The collar elevations in the database were corrected and the groundwater map was re-contoured with the updated corrections. This correction did not make it into all of the report tables. Table 2 was updated and distributed. IR18MW200A is approximately 50 feet outside of the property boundary of the map in Parcel B. The 3.0-foot contour line does not go to this well and appears to curve to the wrong side if projected. The closest monitoring well, IR18MW21A, is 100 feet to the east. Monitoring well IR18MW21A pulls the 3.0-foot contour line towards the well to the south where it terminates before the property boundary. The continuation of the 3.0-foot contour line would wrap above the well IR18MW200A if it were to be continued outside of the property boundary. IR46MW41A is located approximately 50 feet from the Bay near Pier C in Parcel B. This point has had a mean sea level of about 2.2	

	to 2.6 feet throughout the sampling periods. The contours at this point on the Q18 map are quite similar to contours presented in other sampling events.
Comment #2: EPA also notes that the replacement pages for Table 2 should have included text page 2-3. Since the original and replacement table begin on page 2-4, which is the back of page 2-3, it is necessary to draw a line through the first page of the original table so that the text is intact. In the future, EPA recommends that replacement pages for double-sided documents begin with an even-numbered page (i.e., on the back of a page), and that the first page should include the previous odd-numbered page on the front side of the page.	**Response:** EPA recommendations for page replacement procedures will be addressed as applicable in future revisions.