Final Report

Data Quality and Usability Assessment

AMCO Chemical Superfund Site

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Executive Summary

This Data Quality and Usability Assessment (DQUA) presents the results of quality control (QC) and quality assurance (QA) activities employed to ensure that the conclusions and recommendations presented in the AMCO Remedial Investigation (RI) report are supported by chemical data of known, acceptable, and documented quality. These QC and QA activities include preparation and analysis of field QC samples including field blanks, equipment rinsate blanks, and field duplicates; evaluation of precision and accuracy including split samples and performance evaluation (PE) samples; and data review and validation. Included in the DQUA are summaries of the relevant QC and QA activities including the results of the analysis of field QC samples; and presentation and evaluation of the findings of data review and validation.

Based on the evaluation of the available QC and QA information, the 90 percent completeness goal was achieved for all analyses based on ratio of the number of usable data (data not rejected due to serious deficiencies) and the total number of planned samples. The volatile organic compound (VOC) results from the second quarter groundwater event in 2005 were not consistent with previous or subsequent concentration trends. The VOC data from this event were not used for the delineation of nature and extent of contamination or for Risk Assessment (see Appendix B). There were no other major issues associated with sample collection or the results of the analysis of field QC samples that would negatively impact data usability. Although a small number of samples were rejected representing 1 percent of the total number of results, the overall findings of the data review and validation indicate that the data are of sufficient quality to support the goals of the remedial investigation.

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Acronyms and Abbreviations

µg	microgram
CCV	continuing calibration verification
CLP	Contract Laboratory Program
COCs	chain of custody records
CRQL	Contract Required Quantitation Limit
D	difference
DMC	deuterated monitoring compound
DQUA	Data Quality and Usability Assessment
DQO	data quality objective
EPA	U.S. Environmental Protection Agency
GC/MS	gas chromatograph/mass spectrometer
HSP	health and safety plan
ICP	inductively coupled plasma
ICP/MS	inductively coupled plasma/mass spectrometer
IPC	instrument performance check
KAP	KAP Technologies, Inc.
L	liter
LCS	laboratory control sample
LCL	lower control limit
LNAPL	light non-aqueous-phase liquid
m^3	cubic meter
MCL	maximum contaminant level
MDL	method detection limit
MS	matrix spike
MSD	matrix spike duplicate
NAPL	non-aqueous-phase liquid
PARCC	precision, accuracy, representativeness, comparability, completeness

PCB	polychlorinated biphenyl
PE	performance evaluation
PRG	preliminary remediation goal
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
REC	recovery
RRF	relative response factor
RI	remedial investigation
RL	reporting limit
RPD	relative percent difference
RSD	relative standard deviation
R9	EPA Region 9 laboratory
SDG	Sample Delivery Group
SOW	scope of work
SIM	select ion monitoring
SVOC	semivolatile organic compound
UCL	upper control limit
VOA	volatile organic analysis
VOC	volatile organic compound
WAM	Work Assignment Manager

1.0 Introduction

The objective of this Data Quality and Usability Assessment (DQUA) is to ensure that the conclusions and recommendations presented in the AMCO Remedial Investigation (RI) Report are supported by chemical data of known, acceptable, and documented quality. The DQUA presents a discussion of the data quality control (QC) and quality assurance (QA) activities including data review and evaluation associated with data collected by CH2M HILL on behalf of the U.S. Environmental Protection Agency (EPA). A full description of the Tier 3 data validation and review findings for all target analytes is contained in Appendix A. This data assessment includes a discussion of the data review and validation finding for results obtained during the field events listed in Table 1-1.

2.0 Data Quality Objectives and Data Quality Indicators

The data quality objectives (DQOs) and QC requirements for environmental data acquisition are documented in the *Remedial Investigation Sampling and Analysis Plan* (SAP) (CH2M HILL, 2004). These DQOs include the following components:

- DQO Component 1: Identify specific contaminants of concern
- DQO Component 2: Characterize nature and extent of light non-aqueous-phase liquid (LNAPL)
- DQO Component 3: Determine distribution and concentration of contaminants of concern
- DQO Component 4: Determine if VOCs are present at levels of concern in soil gas, crawl space air, and ambient air
- DQO Component 5: Evaluate the fate and transport pathways of contaminants
- DQO Component 6: Collect sufficient data for use in a baseline human health risk evaluation and for a preliminary evaluation of potential remediation alternatives in a feasibility study

The assessment of data is supported by both qualitative and quantitative quality indicators in terms of precision, accuracy, representativeness, comparability, and completeness (collectively, the PARCC parameters). Table 2-1 presents these terms and the evaluation criteria that will be used as the basis for the primary data quality assessment.

The following subsections of this report summarize the findings of the DQUA in terms of the PARCC parameters.

2.1 Evaluation of Representativeness and Comparability

The following sections present a brief discussion of the sampling activities and analysis program. The evaluation of representativeness is generally not based on measurement data, but rather based on the suitability of the quality systems employed during sample collection and analysis. An exception to this is the analysis of field QC samples discussed in Section 3.0, which provides quantitative data to assess the representativeness of field sample results. A detailed discussion of the field activities is presented in the Remedial Investigation (RI) Report for the AMCO Superfund Site (CH2M HILL, in preparation).

2.1.1 Sampling Design and Implementation

A brief review of the groundwater, soil, soil vapor, crawl space air, and ambient air sample collection design and implementation is presented in this section. The purpose of this review is to describe the sampling procedures in the context of reviewing the field QC

procedures. A detailed review discussed in terms of the DQOs developed for each of the project objectives can be found in the RI Report (CH2M HILL, in preparation).

The AMCO field and analytical activities reviewed as part of this DQUA include the samples from the sampling events listed in Table 1-1.

2.1.2 Analytical Program

The number of samples is listed by the corresponding analytical fraction, laboratory, and event in Table 2-2. The following describes the analytical program for each phase of work.

2.1.2.1 Residential

September 2004 Residential Ambient and Crawlspace Air

The September 2004 ambient air and crawl space air samples were collected on September 21, 2004 using certified clean 4-liter (L) Summa canisters. Air Toxics used EPA Method TO-15 using both full scan and select ion monitoring (SIM) techniques. Method QC requirements were consistent with EPA TO-15 and TO-15 SIM methodology and the project Quality Assurance Project Plan (QAPP). For ambient and crawl space air, the selected screening levels are the EPA Region 9 ambient air preliminary remediation goals (PRGs).

September 2004 Residential Soil Gas

Samples were collected September 21 and 30, 2004 at six residences and in Prescott Park. Certified clean 4-L Summa canisters were used to collect samples for TO-15 and TO-15 SIM analyses. Air Toxics performed the EPA TO-15 and TO-15 SIM analysis on all samples from this event. The appropriate methodology and method QC requirements were followed.

For soil gas in general, there are no widely accepted and directly applicable regulatory screening levels that have been developed by EPA. To identify the appropriate analytical method and detection levels for soil gas data, screening levels for soil gas were determined by applying a conservative attenuation factor of 10 to the screening levels for ambient air. The attenuation factor was based on the soil gas–to-indoor air attenuation factor presented by EPA in the draft indoor air guidance. For this study of VOCs sampled over time, the selected screening levels are 10 times the EPA Region 9 ambient air PRGs (EPA, 2004a).

May 2005 Residential Ambient and Crawlspace Air

Certified clean 4-L Summa canisters were used to collect ambient air and crawl space samples from five residences, from locations in Prescott Park, and A.M. and P.M. background samples on September 12, 2005. All samples were analyzed by Air Toxics for TO-15 SIM, and a subset of samples was analyzed for naphthalene by TO-13. For ambient and crawl space air, the selected screening levels are the EPA Region 9 ambient air PRGs.

May 2005 Residential Soil Gas

Certified clean 4-L Summa canisters were used to collect soil gas samples from three residences and from locations in Prescott Park on September 12 and 13, 2005. All samples were analyzed by Air Toxics for TO-15 full scan, TO-15 SIM, and for naphthalene by TO-13. For the soil gas probes, the selected screening levels are 10 times the EPA Region 9 ambient air PRGs.

November 2006 Residential Produce Sample Collection

Produce samples were collected on October 19, 2006 and analyzed for VOCs and selected ICP/MS metals by Columbia Analytical Services, Inc.

November 2006 Residential Soil Gas

Samples were collected November 7, 2006 from soil gas probes at five residences. Certified clean 4-L Summa canisters were used to collect samples for TO-15 and TO-15 SIM analyses. Air Toxics performed the EPA TO-15 and TO-15 SIM analysis on all samples from this event. The appropriate methodology and method QC requirements were followed. For the residential soil gas probes, the selected screening levels are 10 times the EPA Region 9 ambient air PRGs.

November 2006 Residential Ambient and Crawlspace Air

Certified clean 4-L Summa canisters were used to collect ambient air and crawl space samples from five residences, from locations in Prescott Park, and A.M. and P.M. background samples on November 7, 2006. All samples were analyzed by Air Toxics for TO-15 SIM and a subset of samples was analyzed for naphthalene by TO-13. For ambient and crawl space air, the selected screening levels are the EPA Region 9 ambient air PRGs.

2.1.2.2 Phase I Sampling of Soil Gas, Groundwater, and Soil

September – October, 2004 Temporary Soil Gas Probes

The soil gas survey analyses were performed by TEG-Sacramento's mobile laboratory using EPA Method 8260B. Samples were collected from September 13 through October 8, 2004. The mobile laboratory (designated as "Erie") was California certified. The reporting limit (RL) achieved by the lab was 50 micrograms per cubic meter ($\mu g/m^3$) for benzene, vinyl chloride and trichloroethene. The remaining VOCs were reported at 100 $\mu g/m^3$.

October, 2004 Soil Gas Probe

Morning and evening samples were collected from twelve permanent soil probes over four-hour intervals on October 13, 2004. Certified clean 4-L Summa canisters were used to collect samples for TO-15 and TO-15 SIM analyses. Air Toxics performed EPA TO-15 on all samples and TO-15 SIM analysis was performed on 14 samples. The appropriate methodology and method QC requirements were followed. For samples collected from the soil gas probes, the selected screening levels are 10 times the EPA Region 9 ambient air PRGs.

September – December, 2004 Grab Groundwater

Grab groundwater samples collected from September 13 through November 2, 2004 were analyzed for VOCs by the EPA Region 9 Laboratory (R9) in Richmond, California. Grab groundwater samples were collected using two different techniques, depending on the depth of the well and the formation of the surrounding soil. Most samples were collected using a Waterloo Profiler which was used in wells at depths greater than about 25 feet. The HydroPunch tool was used at shallow depths or when there was low yield in the well. For groundwater, the selected screening levels are based on federal and state maximum contaminant levels (MCLs) and EPA Region 9 tap water PRGs.

September – October, 2004 Soil

Soil samples were collected in acetate or brass sleeves and analyzed by the EPA Contract Laboratory Program (CLP). VOCs, SVOCs, metals, polychlorinated biphenyls (PCBs), and

pesticides were analyzed by Compuchem. Dioxins and furans in soils were analyzed by Pace Analytical. The screening levels for soil are the EPA Region 9 PRGs for residential soil.

2.1.2.3 Phase II Soil Gas Probe Sampling (May 2005)

Morning and evening samples were collected from nine permanent soil gas probes over a four hour interval on May 13, 2005. Certified clean 4-L Summa canisters were used to collect samples for TO-15, TO-15 SIM, and naphthalene by TO-13 analyses. Air Toxics performed all analyses. The appropriate methodology and method QC requirements were followed. The selected screening levels are 10 times the EPA Region 9 ambient air PRGs.

2.1.2.4 Groundwater Monitoring

First Quarter 2005

Groundwater was collected March 14 through 23, 2005 and was analyzed for:

- VOCs, SVOCs and SVOC SIM for selected compounds by Envirosystems, Inc.
- Pesticides and PCBs by Data Chem Laboratories, Inc.
- Metals and cyanides by Ceimic Corporation
- Dissolved gases by R9

For groundwater, the selected screening levels are based on federal and state MCLs and EPA Region 9 tap water PRGs. EPA CLP special analytical services were used to include additional analytes and lower detection limits as needed.

One sample of the LNAPL in MW-14 was collected on March 14, 2005 to characterize the free product. This sample was analyzed for metals and mercury, flashpoint, dioxins and furans, SVOCs, VOCs, and pesticides and PCBs. No QC samples were associated with this sample and it was only analyzed to provide a reference point for future recommendations.

Second Quarter 2005

Groundwater was collected from June 20, 2005 through June 29, 2005 and was analyzed for:

- VOCs and SVOCs (1,4-Dioxin) by A4 Scientific, Inc.
- Pesticides and PCBs by A4 Scientific, Inc.
- Dissolved gases and anions by R9.

The second quarter 2005 VOC groundwater data were not consistent with the previous or later datasets. Based on the recommendation from EPA, these data will not be included in the RI and are not included in this quality assessment. See the Second Quarter 2005 Data Review Memo (EPA, 2006) presented as Appendix B.

Third Quarter 2005

Groundwater was collected from September 28, 2005 through October 12, 2005 and was analyzed for:

- VOCs, SVOCs, and SVOC SIM for selected compounds by A4 Scientific, Inc.
- Pesticides and PCBs by A4 Scientific, Inc.
- Inductively coupled plasma (ICP)/mass spectrometer (MS) metals by Sentinel, Inc.
- ICP metals by Bonner Analytical Testing Company
- Dissolved gases and anions by R9.

EPA CLP special analytical services were used to include additional analytes and lower detection limits as needed. For groundwater, the selected screening levels are based on federal and state MCLs and EPA Region 9 tap water PRGs.

Fourth Quarter 2005

Groundwater was collected from January 10 through 23, 2006 and analyzed for:

- VOCs, SVOCs, SVOC SIM for selected compounds by A4 Scientific, Inc.
- Pesticides and PCBs by A4 Scientific, Inc.
- ICP metals and ICP/MS metals and mercury by Sentinel, Inc.
- Dioxins and furans by Paradigm Analytical Laboratories
- Dissolved gases and anions by R9.

EPA CLP special analytical services were used to include additional analytes and lower detection limits as needed. For groundwater, the selected screening levels are based on federal and state MCLs and EPA Region 9 tap water PRGs.

First Quarter 2006

Groundwater was collected from March 29 to April 6, 2006 and analyzed for:

- VOCs, VOC SIM for selected compounds, and SVOC SIM for selected compounds by KAP Technologies, Inc. (KAP)
- Pesticides and PCBs by Liberty Analytical Corp.
- Anions, as well as split samples from the VOC sampling, by R9.

EPA CLP special analytical services were used to include additional analytes and lower detection limits as needed. For groundwater, the selected screening levels are based on federal and state MCLs and EPA Region 9 tap water PRGs.

Second Quarter 2006

Groundwater was collected on June 19 through 22, 2006 and analyzed for VOCs by R9. For groundwater, the selected screening levels are based on federal and state MCLs and EPA Region 9 tap water PRGs.

Third Quarter 2006

Groundwater was collected on September 18 through 28, 2006 and analyzed for:

- VOCs, SVOCs, SVOC SIM, pesticides and PCBs by Shealy Environmental Services, Inc.
- ICP total and dissolved metals and ICP/MS metals and mercury by Sentinel, Inc.
- Dioxins and furans by Frontier Analytical Laboratory

For groundwater, the selected screening levels are based on federal and state MCLs and EPA Region 9 tap water PRGs.

2.1.2.5 October 2006 Residential Soil and Produce Sampling

Soil Sample Collection

Soil samples were collected on October 18 and November 7, 2006 and analyzed for:

- VOCs by R9
- SVOCs, SVOC SIM for 1,4-Dioxane, and pesticides and PCBs by Shealy Environmental Services, Inc.
- ICP metals and ICP total metals and mercury by Sentinel, Inc.

EPA CLP special analytical services were used to include additional analytes and lower detection limits as needed. The screening levels for soil are the EPA Region 9 preliminary remediation goals (PRGs) for residential and industrial soil.

Produce Sample Collection

Produce samples were collected on October 28, 2006 and analyzed for:

- Selected ICP metals (arsenic, chromium, and lead) by Columbia Analytical Services, Inc.
- VOCs by Columbia Analytical Services, Inc.

2.1.2.6 Phase III Soil Gas Probe Sampling (November 2006)

Soil gas samples were collected from twelve permanent soil probes over four-hour intervals on November 8, 2006. Certified clean 4-L Summa canisters were used to collect samples for TO-15 and TO-15 SIM analyses. Air Toxics performed EPA TO-15 on all samples, and TO-15 SIM analysis was performed on 14 samples. The appropriate methodology and method QC requirements were followed.

3.0 Field Quality Control Samples

Field QC samples included trip blanks, equipment rinsate blanks, and field duplicates. This section presents the evaluation of the field QC samples and the potential effects on data usability.

As discussed in the following sections, the small number of qualifications applied based on equipment blank or trip blank contamination indicates that decontamination procedures were adequate and no contamination was introduced during sample shipment and storage. The number of qualified results is small with respect to the total number of project results (234 results flagged for equipment blank contamination and 105 results flagged for trip blank contamination out of a total of approximately 97,000 results). One chloromethane sample (RMW-02-13) was flagged as "J", based on the laboratory case narrative. This sample is associated with the known chloromethane contamination of the surrogate mixture. The majority of the qualified results were qualified "U" at the RL and there is no anticipated effect on the usability of these data.

3.1 Equipment Rinsate Blanks

Equipment rinsate blanks are aliquots of reagent water poured over reusable sampling equipment following decontamination to ensure that the decontamination process is sufficient to prevent carryover contamination. The results of the equipment blanks and associated field samples are presented in Table 3-1.

The results presented below are qualified as nondetected and estimated due to equipment blank contamination. No positive results are reported unless the concentration of the compound in the sample exceeds 10 times the amount in any associated blank for common laboratory contaminants or 5 times the amount for other compounds. If the sample result is greater than the RL, the RL is raised to the sample result and reported as not detected. If the sample result is less than the RL, the result is reported as not detected at the RL.

3.1.1 VOCs in Groundwater

Acetone

Third Quarter 2005: BMW-01, RMW-04-15, BMW-03, RMW-05-15, RMW-09-35, RMW-07-35, BMW-07, RMW-03-15, BMW-06, BPZ-01, and RMW-11-35

Fourth Quarter 2005: BMW-03, BMW-08, BPZ-01, RMW-14-50, RMW-10-15duplicate, RMW-05-15, RMW-10-15, RMW-09-35, RMW-05-35duplicate, RMW-01-35, RMW-08-35, RMW-12-51duplicate, RMW-03-15, RMW-12-32, RMW-12-51, RMW-02-13, and RMW-02-50

Second Quarter 2006: RMW-03-15, BPZ-01, BMW-03, RMW-09-15, RWM-10-15, RMW-10-35, RMW-08-15duplicate, and RMW-12-32

Chloromethane

Third Quarter 2005: RMW-10-15, BMW-07, RMW-14-50, BMW-06, BPZ-01, RMW-13-35-, RMW-11-35, RMW-08-15, and RMW-08-35

Methylene chloride

First Quarter 2006: BMW-07, RMW-05-15RMW-13-35, RMW-14-50, BMW-08, BPZ-01, and RMW-06-15

Third Quarter 2005: RMW-06-15and RMW-01-17

Fourth Quarter 2005: BMW-06, RMW-11-35, RMW-06-15, RMW-07-15, RMW-07-35, BMW-01, RMW-04-15, RMW-13-35, BMW-03, RMW-10-15duplicate, RMW-05-15, RMW-09-15, RMW-09-35, RMW-10-15, RMW-10-35, RMW-08-35 duplicate, RMW-01-17, RMW-01-35, RMW-08-35, BPZ-01, BMW-07, RMW-12-51duplicate, RMW-03-15, RMW-12-32, RMW-12-51, MW-12, RMW-02-13, RMW-02-32, RMW-02-50, BMW-08, and RMW-14-50

Ethyl tert-butyl alcohol

Third Quarter 2005: RMW-11-35

Toluene

Third Quarter 2005: MW-10-15duplicate and RMW-11-35

Fourth Quarter 2005: BPZ-01, MW-08-35duplicate, RMW-08-15, and RMW-08-35

Second Quarter 2006: RMW-12-51and RMW-12-51duplicate

Third Quarter 2006: RMW-08-35and RMW-12-51

cis-1,2-Dichloroethene

Second Quarter 2006: RMW-12-51and RMW-12-51duplicate

Trichloroethene

Fourth Quarter 2005: MW-12, RMW-02-13, RMW-02-32, and RMW-02-50

3.1.2 SVOCs in Groundwater

Acetophenone

Fourth Quarter 2005: RMW-12-32

Benzo(a)anthracene

First Quarter 2005: RMW-04-15, RMW-05-15, RMW-09-35, and RMW-10-35

bis (2-ethylhexyl)phthalate

First Quarter 2005: RMW-10-15 duplicate, RMW-04-15, RMW-05-15, RMW-09-15, RMW-09-35, RMW-10-15, RMW-10-35, RMW-01-17, RMW-01-35, BPZ-01, RMW-08-15 duplicate, RMW-02-50, RMW-08-15, RMW-08-35, RMW-02-13, and RMW-02-32

Third Quarter 2005: BMW-01, BMW-03, RMW-10-15 duplicate, RMW-10-15, RMW-10-35, RMW-09-15 duplicate, RMW-09-15, RMW-09-35, and BMW-06

Fourth Quarter 2005: BMW-03, RMW-10-15 duplicate, RMW-06-15, RMW-07-15, BMW-01, RMW-04-15, RMW-13-35, BMW-07, BMW-08, BPZ-01, RMW-14-50, BMW-06, RMW-11-35, RMW-05-15, RMW-10-15, RMW-09-15, RMW-09-35, RMW-08-35 duplicate, RMW-01-17, RMW-01-35, RMW-08-15, and RMW-08-35

bis(2-Chloroethyl) ether

First Quarter 2005: RMW-10-15 duplicate, RMW-04-15, RMW-05-15, RMW-09-15, RMW-09-35, RMW-10-15, RMW-10-35, RMW-01-17, RMW-01-35, BPZ-01, RMW-08-15 duplicate, RMW-02-50, RMW-08-15, RMW-08-35

Carbazole

Fourth Quarter 2005: BMW-06, RMW-11-35, RMW-06-15, RMW-07-15, BMW-01, RMW-04-15, and RMW-13-35

di-n-Butylphthalate

Third Quarter 2006: BPZ-01, RMW-08-35, and RMW-12-51

Naphthalene

Third Quarter 2006: BPZ-01

3.1.3 SIM SVOCs in Groundwater

1,4-Dioxane

First Quarter 2005: RMW-02-50, RMW-08-15, RMW-08-15 duplicate, and RMW-01-17

Third Quarter 2005: RMW-08-35

3.1.4 Metals in Groundwater

Iron

Third Quarter 2005: RMW-08-35and RMW-12-32

Cadmium

First Quarter 2005: RMW-01-17

Chromium

First Quarter 2005: BMW-06and RMW-01-35

Third Quarter 2005: BPZ-01, BMW-08, RMW-01-35, RMW-02-32, RMW-08-15, RMW-08-35, RMW-11-35, RMW-12-32, RMW-12-51, RMW-12-51 duplicate, RMW-13-35, and RMW-14-50

Third Quarter 2006: RMW-08-35

Copper

First Quarter 2005: RMW-02-50, RMW-08-15, and RMW-08-15 duplicate

Lead

Third Quarter 2005: BMW-07, RMW-14-50, BMW-06, BMW-08, RMW-13-35, RMW-12-51 duplicate, RMW-08-15, RMW-08-35, RMW-12-32, RMW-12-51, RMW-02-32, and RMW-02-50

Fourth Quarter 2005: RMW-08-35 duplicate, RMW-01-35, and RMW-08-15

Third Quarter 2006: RMW-08-35 and RMW-12-51

Potassium

First Quarter 2005: RMW-01-35

Fourth Quarter 2005: RMW-07-35 and RMW-04-15

Third Quarter 2006: RMW-08-35 and RMW-12-51

Nickel

Third Quarter 2005: BMW-07, BMW-06, BMW-08, BPZ-01, RMW-13-35, RMW-08-15, RMW-08-35, and RMW-12-32

Zinc

Third Quarter 2005: BMW-07, RMW-14-50, BMW-06, BMW-08, BPZ-01, RMW-13-35, RMW-01-35, RMW-11-35, RMW-12-51 duplicate, RMW-08-15, RMW-08-35, RMW-12-32, RMW-12-51, RMW-02-32, and RMW-02-50

Fourth Quarter 2005: RMW-12-51 duplicate and RMW-12-51

Magnesium

Third Quarter 2006: RMW-12-32

Manganese

Third Quarter 2005: RMW-12-32

Selenium

Third Quarter 2005: RMW-09-15duplicate, RMW-09-15, RMW-09-35, and RMW-06-15

3.1.5 Pesticides and PCBs in Groundwater

Aldrin

First Quarter 2005: RMW-01-35

4,4′-DDT

First Quarter 2005: RMW-01-17, RMW-08-15 duplicate, and RMW-08-15

4,4′-DDD

Third Quarter 2006: RMW-08-35

Gamma-BHC

First Quarter 2006: RMW-01-17 duplicate

3.1.6 Pesticides and PCBs in Soil

Dieldrin

2006 Residential Soil: 1428SSa-1, 326SSb-3, and 356SSb-3

4,4'-DDE

2006 Residential Soil: 326SSb-3 and 356SSb-3

3.2 Trip Blanks

The purpose of trip blanks is to verify that volatile contamination is not introduced to samples during transportation, through transportation materials, or during storage. Trip blanks are prepared by the laboratory and are analyzed for VOCs only. The dates of collection and results of the trip blanks are presented in Table 3-2.

The results presented below are qualified as nondetected and estimated due to trip blank contamination. No positive results are reported unless the concentration of the compound in the sample exceeds 10 times the amount in any associated blank for common laboratory contaminants or 5 times the amount for other compounds. If the sample result is greater than the RL, the result is qualified as not detected at the reported concentration. If the sample result is less than the RL, the result is reported as nondetected at the RL.

3.2.1 VOCs in Groundwater

Acetone

Third Quarter 2005: BMW-01, BMW-03, RMW-04-15, RMW-05-15, RMW-06-15, RMW-07-15, RMW-07-35, and RMW-08-15

Fourth Quarter 2005: BMW-08, BPZ-01, RMW-14-50, RMW-12-51 duplicate, RMW-03-15, RMW-12-32, and RMW-02-51

Third Quarter 2006: BMW-03, RMW-07-35, RMW-05-15, RMW-08-35, and RMW-02-51

Carbon disulfide

First Quarter 2005: BPZ-01

Fourth Quarter 2005: BMW-08, RMW-12-32, and MW-12

First Quarter 2006: BPZ-01

Second Quarter 2006: BPZ-01

Third Quarter 2006: BMW-01, BMW-03, BMW-07, RMW-14-50, RMW-13-35, RMW-02-13, RMW-03-15, RMW-08-15

Methylene chloride

Third Quarter 2005: BPZ-01, RMW-13-35, and RMW-12-51 duplicate

Fourth Quarter 2005: BMW-06, RMW-06-15, RMW-07-15, RMW-07-35, RMW-11-35, BMW-01, RMW-04-15, RMW-13-35, RMW-07, RMW-08, BPZ-01, RMW-14-50, RMW-03-15, RMW-12-32, RMW-12-51, MW-12, RMW-12-51 duplicate, RMW-02-13, RWM-02-32, and RMW-02-50

First Quarter 2006: BMW-08, BPZ-01, and RMW-06-15

Chloromethane

Third Quarter 2005: RMW-06-15, RMW-07-35, RMW-10-35, BMW-06, BMW-07, RMW-14-50, BPZ-01, RMW-13-35, RMW-01-17, RMW-01-35, RMW-08-15, RMW-08-35, RMW-12-32, and RMW-12-51

Fourth Quarter 2005: RMW-01-17, RMW-01-35, RMW-12-51 duplicate, RMW-12-32, and RWM-12-51

Third Quarter 2006: BMW-01, RMW-07-15, BMW-07, BMW-08, RMW-01-17, RMW-01-35, and RWM-01-35 duplicate, RMW-02-32, and RMW-02-50

Xylenes

Fourth Quarter 2005: RMW-12-51

Third Quarter 2006: RMW-03-15

Benzene

Third Quarter 2006: BMW-01, BMW-07, RMW-02-50, RMW-03-15, RMW-08-15, and RMW-14-50

Toluene

Third Quarter 2006: RMW-01-17, RMW-02-50, and RMW-08-15

Ethylbenzene

Fourth Quarter 2005: RMW-12-51

cis-1,2-Dichloroethene

Third Quarter 2006: RMW-02-32, RMW-03-15, and RMW-08-15

3.3 Field Duplicates

Field duplicates are collected to evaluate the overall sampling and analysis precision. The project goal for frequency of field duplicate collection is 10 percent of the number of field samples. Table 3-3 contains a summary of field duplicates vs. total samples collected. There were 208 field duplicates collected from a total of 2,034 samples for the project. The following field duplicate percentages by matrix were achieved:

- 11.7 percent for vapor phase samples (ambient and crawlspace air and soil gas)
- 10.4 percent for groundwater samples
- 9.4 percent for soil samples
- 13.3 percent for plant samples

Overall, the 10 percent project goal was met for the project, although the soil field duplicate percentage was slightly below the 10 percent goal.

Table 3-4 summarizes the criteria used to compare and report field duplicate results for Risk Assessment purposes.

A summary of analytical results for field duplicate pairs associated with the Phase I, Phase II, Phase III, residential, and groundwater monitoring events is presented in Table 3-5. All of the field duplicate pairs relative percent differences (RPDs) were <50 percent for soil samples or <30 percent for water and air samples, with the exception of the outliers listed in Table 3-5. There were 208 pairs of field duplicates collected encompassing 1,619 compounds, with both pairs having results above the RL and a total of 156 evaluations that did not meet the criteria. When both results are below the RL or when one of the pair is detected between the RL and the method detection limit (MDL), or just above the RL, they are considered to be in agreement. Overall, 90 percent of the field duplicate results meet the precision criteria indicating acceptable overall sampling and analysis precision.

Water and air matrices are relatively homogenous as compared to soil, which is inherently heterogeneous. This is apparent when the precision of the soil samples is compared to the precision of the water and air samples. A total of 490 soil results were reported with both pairs of duplicate results above the RL. Of these, 91 results did not meet the criteria, for an 81 percent acceptance rate. A total of 65 water and air results did not meet the criteria out of a total of 1,129 positive results for an acceptance rate of 93 percent.

3.3.1 TO-15 SIM Scan VOCs in Air

Phase I

- Trichloroethene, RPD 38 percent; tetrachloroethene, RPD 59 percent; m,p-xylene, RPD 44 percent; o-xylene, RPD 38 percent; 1,3-dichlorobenzene, RPD 70 percent; and 1,4-dichlorobenzene, RPD 66 percent between field duplicate results from location 1432CA, collected on 9/21/04

Phase II

- Benzene, RPD 35 percent and o-xylene, RPD 37 percent between field duplicate results from location 1432CA, collected on 5/12/05

3.3.2 VOCs by Gas Chromatograph/Mass Spectrometer (GC/MS) in Soil Gas

Phase I

- cis-1,2-Dichloroethene, RPD 34 percent, between field duplicate results from location RSG-03A, collected on 10/08/04

- Freon-11, RPD 39 percent between field duplicate results from location RSG-13A , collected on 10/8/04

3.3.3 VOCs in Groundwater

Phase I

- cis-1,2-dichlorobenzene, RPD 42 percent; o-xylene, RPD 30 percent; and naphthalene, RPD 49 percent between field duplicate results from location RGW-12-24, collected on 10/20/04

First Quarter 2005

- Trichloroethene, RPD 74 percent between field duplicate results from location RMW-10-15, collected on 3/16/05

Second Quarter 2005

- Benzene, RPD 33 percent between field duplicate results from location RMW-10-35, collected on 6/23/05

Third Quarter 2005

- 1,1-Dichloroethene, RPD 39 percent; benzene, RPD 33 percent; and vinyl chloride, RPD 38 percent between field duplicate results from location RMW-10-15, collected on 9/29/05

3.3.4 SVOCs in Groundwater

First Quarter 2006

- 1,4-Dioxane, RPD 67 percent between the field duplicate pair collected from location RMW-08-15, collected on 4/04/06

Third Quarter 2006

- 2-methylnaphthalene, RPD 35 percent between the field duplicate pair collected from location RMW-12-32, collected on 9/27/06

3.3.5 Metals in Groundwater

First Quarter 2005

- Iron, RPD 37 percent between field duplicate pair from location RMW-10-15, collected on 3/16/05

Fourth Quarter 2005

- Iron, RPD 40 percent between the field duplicate pair collected from location RMW-08-35, collected on 1/19/06
- Lead (dissolved), RPD 54 percent between the field duplicate pair collected from location RMW-12-51, collected on 1/20/06

3.3.6 VOCs in Soil

Phase 1

- Trichloroethene, RPD 68 percent, in field duplicate pair from location RSB-06-01, collected on 9/30/04

3.3.7 SVOCs in Soil

Third Quarter 2006

- Benzo(a)pyrene, RPD 72 percent and naphthalene, RPD 50 percent, in field duplicate pair from location 1428SSb-1-1006, collected on 10/18/06
- Benzo(a)pyrene, RPD 56 percent and naphthalene, RPD 90 percent, in field duplicate pair from location 1432SSb-1-1006, collected on 10/18/06

3.3.8 Pesticides in Soil

Third Quarter 2006

- 4,4'-DDT, RPD 74 percent and dieldrin, RPD 97 percent, in field duplicate pair from location 1428SSb-1-1006, collected on 10/18/06
- 4,4'-DDT, RPD 67 percent, in field duplicate pair from location 1432SSb-1-1006, collected on 10/18/06
- 4,4'-DDT, RPD 99 percent and dieldrin, RPD 75 percent, in field duplicate pair from location 326SSc-1-1006, collected on 10/18/06

3.3.9 Metals in Soil

Phase I

- Antimony, RPD 88 percent and lead, RPD 71 percent between field duplicate pair collected from location RSB-04-01, collected on 9/24/04

3.3.10 Chlorinated Dioxins/Furans in Soil

One issue was noted regarding Phase I dioxin results. Phase I samples RSB-18-01 (R97) and RSB-18-03 (R98) are listed as field duplicates in the database. As can be seen in Table 3-4, the concentrations of analytes in the two samples are not comparable, the results from RSB-18-03 being 10 to 40 times less than RSB-13-01. Thirteen of the fifteen positive results fail the duplicate criteria, with RPDs ranging from 79 to 95 percent.

There were 208 pairs of field duplicates collected encompassing 1,619 compounds, with both pairs having results above the RL and a total of 156 evaluations that did not meet the criteria. When both results are below the RL or when one of the pair is detected between the RL and the MDL, or just above the RL, they are considered to be in agreement. Overall, 90 percent of the field duplicate results meet the precision criteria indicating acceptable overall sampling and analysis precision.

4.0 Surveillances and Inspections

No onsite field audits or inspections were performed during the sampling periods discussed in this report. Daily health and safety meetings were conducted as required by the Health and Safety Plan (HSP). Glen Bruck, hydrogeologist with the EPA, was an onsite observer during the drilling, well construction and installation of the vapor probe portion of the Remedial Investigation on a monthly or bi-monthly schedule. Brunilda Davila (EPA Work Assignment Manager [WAM]), Viola Cooper (Community Involvement Coordinator) and Sophia Serda, Ph.D. (EPA Toxicologist) were onsite observers during the Phase I soil vapor and air collections. Brunilda Davila and Viola Cooper were onsite observers during the May 2005 residential and soil gas probe sampling events.

5.0 Analytical Data: Evaluation of Precision and Accuracy

The precision and accuracy of the data are estimated using the results of performance evaluation samples and the findings of the Tier 1, Tier 2, and Tier 3 validation.

5.1 Performance Evaluation Samples

Performance Evaluation (PE) sample results were utilized to determine one laboratory's ability to analyze field samples. PE samples were submitted on 9/26/2006 to Shealy Laboratory. Four sets of duplicate volatile organic analyses (VOAs) containing four different PE sample concentrations were shipped to the field site and were labeled by normal protocol with fictional well locations. The VOAs were then shipped to the laboratory as blind samples. The detected analytes along with their EPA scoring can be found in Table 5-1.

The results were sent to EPA and scored. Shealy Laboratory reported 95 percent of the analytes within the passing criteria. The 5 percent of results that did not pass the EPA criteria are as follows:

- PE Sample Sigma 354: Bromoform low (32 percent below the action limit) in one of the duplicates
- PE Sample Sigma 122: Dibromochloromethane low (23 percent and 8 percent below the action limit) in both duplicates
- PE Sample Sigma 654: trans-1,2-Dichloroethene high (2 percent above the action limit) in one of the duplicates and dibromochloromethane high (2 percent above the action limit) in both duplicates
- PE Sample Sigma 659: Styrene high (1 percent above the action limit) in both duplicates

Considering the small number of outliers, and the fact that the outliers with the greatest deviation from the reported values are gases, which typically show variable recoveries, it can be concluded that Shealy competently analyzed the designated samples. The lab has been notified of the failures by the EPA Technical Project Officer.

5.2 Split Sample Evaluation

One set of split samples was collected during the March 2006 groundwater monitoring event. The twelve split samples were analyzed by R9 and by a CLP laboratory.

5.2.1 Introduction

At the request of EPA, CH2M HILL collected split samples for VOCs during the First Quarter 2006 groundwater sampling event at the AMCO Superfund Site in Oakland, CA.

EPA requested the split sampling analysis as an additional internal QC measure of the contracted laboratory facilities utilized for this event.

5.2.2 Review of Analytical Results

Twelve split samples collected by CH2M HILL field staff were submitted to R9 for VOC analysis using Method 524.2 and the EPA CLP laboratory, KAP, using the CLP scope of work (SOW) SOM01.1.

5.2.3 Detected Analytes

Analytical results for split samples with outlying RPD values can be found in Table 5-2. Analytes that had multiple instances of outlying RPDs include acetone, cis-1,2-dichloroethene, and methylene chloride.

5.2.4 Level of Agreement Observed

VOC split sample results from R9 and the Contract Laboratory Program (CLP) laboratory (KAP) were initially compared to assess to the level of agreement based on the guidelines presented in Table 5-3. Based on these guidelines the results observed for the groundwater samples collected by both CH2M HILL and KAP were in general agreement.

5.2.5 Relative Percent Difference

The RPD was calculated between the VOC split sample results. The formula for the RPD calculation is shown in a footnote in Table 5-2.

The RPD was only calculated for the individual sample if the results observed from each reporting laboratory were above the RL for that analyte. The remaining sample results were evaluated using the criteria defined in Table 5-3, and no RPD was calculated.

5.2.6 Results of Evaluation

Based on the comparison of the split sample results, all of the results compared meet the agreement criteria with the following exceptions where the RPD exceeded the <30 percent criteria:

- MW-12: Acetone (40 percent)
- RMW-01-17: 1,1-Dichloroethane (90 percent) and cis-1,2-dichloroethene (100 percent)
- RMW-01-35: Chloroethane (35 percent)
- RMW-02-13: 1,2,3-Trichlorobenzene (37 percent), 1,2-dichloroethane (50 percent), acetone (50 percent), cis-1,2-dichloroethene (30 percent), methyl ethyl ketone (38 percent), methylene chloride (48 percent), and trans-1,2-dichloroethene (30 percent)
- RMW-06-15: cis-1,2-Dichloroethene (35 percent)
- RMW-09-15: Acetone (37 percent)
- RMW-10-35: Acetone (49 percent)

5.2.7 Conclusions

Overall, the results from the twelve split samples were in agreement. Seven samples had compounds with RPD disagreements that ranged from 35 percent to 100 percent. Acetone was the only compound in disagreement in 3 of the 7 samples. Considering that this is a common laboratory contaminant, there is higher variability when evaluating these result concentrations. cis-1,2-dichloroethene disagreed in 3 of the 4 samples. Sample RMW-02-13-0306 had seven compounds in which the split samples disagreed. This sample is from a highly contaminated well, and the results are all reported from dilutions, which introduces some uncertainty. The remaining results that were in disagreement were from random compounds and did not show any systematic source of error.

6.0 Data Review and Validation Summary

The project goal was for all data for all parameters to undergo two levels of review and validation. Ninety percent of the samples were reviewed for all the analytical parameters, at Tier 2 level, as defined by the *Region 9 Superfund Data Evaluation/Validation Guidance* (EPA, 2001). Ten percent of the analytical batches were to be selected for Tier 3 review for all parameters. Reviews were conducted according to the *Functional Guidelines for Inorganic Review* (EPA, 2004b) and the *Functional Guidelines for Organic Review* (EPA, 1999). The levels of data review and validation were consistent with the requirements of the QAPP.

Both data review (Tier 2) and validation (Tier 3) includes evaluation of the following QC elements:

- Holding times
- Method blanks
- Laboratory control samples
- Continuing calibration standards
- Matrix spike
- Sample duplicates and spike duplicate
- Volatile system monitoring compounds
- Internal standards
- Surrogates

Tier 3 validation includes inspection of raw data and verification of reported results by independent calculations. The project goal is to perform a Tier°3 full validation on a minimum of 10 percent of the data. Table 6-1 presents a summary of the data validation percentages by fraction for both the Tier 2 and Tier 3 qualified results.

The project goal was met in all cases.

6.1 Tier°2 Review Summary

Table 6-2 presents a summary of the Tier 2 qualified results by event and matrix.

6.2 Tier°3 Validation Summary

Appendix A presents a summary of the findings of the Tier 3 validation and summary tables of the Tier 2 and Tier 3 qualified sample results. Table 6-3 presents a summary of the Tier 3 validated data. The validation reports are presented in Appendix C.

7.0 Completeness

Completeness is the ratio of usable results to unusable results in terms of percentage. Unusable results are defined as results rejected because of serious QC deficiencies.

The determination of completeness excludes the results of equipment rinsate blanks. Consequently, the value obtained for project completeness represents the attainment of specific project goals for data used for decision making. The evaluation of equipment rinsate blanks verifies that field sample results are representative of field conditions and are not impacted by artifacts introduced during sample collection or shipping.

Table 7-1 presents the rejected data. A total of 990 results were rejected due to serious QC deficiencies out of a total of 96,700. The rejected results represent a very small fraction (1 percent) of the total number of results. The data set met the 90 percent completeness goal as a whole. Sufficient, acceptable data support the decision and conclusions of the RI.

8.0 Sensitivity

Sensitivity is a measure of method performance in terms of the ability to detect chemicals of concern at low enough concentrations to eliminate potential false negatives and to ensure the project goals in terms of actionable concentrations are met. Target detection limits are based on available standard methods applicable to soil, water, and air and are below most applicable regulatory criteria.

The reporting limits discussed below were greater than the limits listed in the SOW.

8.1 Phase I

The soil gas results from the mobile laboratory used during Phase I are not included. Although the method reporting limits exceeded the soil gas screening levels, they were sufficient to meet the project objectives. For the analytes listed below, the screening levels were below the best available technologies or are elevated due to high concentrations of other target analytes in the samples.

For vapor phase samples analyzed by TO-15, the laboratory's RLs for the analytes shown below are greater than the applicable screening levels.

Ambient Air and Soil Gas Results for which Reporting Limits Exceeded Screening Levels—Phase I

Analyte	Reporting Limit, µg/m^3	Screening Level for Air, µg/m^3	Screening Level Reference
TO-15 SIM for VOCs in Air			
SDG 0409415B			
Benzene	0.32	0.25	R9 AA PRG
1,2-Dibromoethane	0.16	0.0034	R9 AA PRG
1,2-Dichloroethane	0.082	0.074	R9 AA PRG
Hexachlorobutadiene	1.1	0.086	R9 AA PRG
1,1,2,2-Tetrachloroethane	0.14	0.033	R9 AA PRG
SDG 0409415C			
1,2-Dibromoethane	0.16	0.0034	R9 AA PRG
Hexachlorobutadiene	1.1	0.086	R9 AA PRG
SDG 0410027B			
1,2-Dibromoethane [a]	0.16	0.0034	R9 AA PRG
Hexachlorobutadiene [a]	1.1	0.086	R9 AA PRG
SDG 0410304C and D			
1,2-Dibromoethane	0.15	0.0034	R9 AA PRG
Hexachlorobutadiene	1.1	0.086	R9 AA PRG
TO-15 Full Scan for VOCs in Air			
SDG 0410304B			
Carbon tetrachloride	3.1	1.3	10 X R9 AA PRG
1,2-Dibromoethane	3.8	0.034	10 X R9 AA PRG
1,2-Dichloroethane	2.0	0.74	10 X R9 AA PRG
1,2-Dichloropropane	2.3	0.99	10 X R9 AA PRG
Hexachlorobutadiene	21	0.86	10 X R9 AA PRG
1,1,2,2-Tetrachloroethane	3.4	0.33	10 X R9 AA PRG
1,1,2-Trichloroethane	2.7	1.2	10 X R9 AA PRG
Trichloroethene	2.7	0.17	10 X R9 AA PRG
Vinyl chloride	1.3	1.1	10 X R9 AA PRG

Note:
[a] Sample PP-NW-SG-0904 was received with significant vacuum remaining in the canister (20.5” Hg), which resulted in elevated reporting limits.

8.2 2005 Soil Gas Probes (Phase II)

For 2005 (Phase II) permanent soil gas probe sampling event, the laboratory's RLs for the analytes shown below are greater than the soil gas screening levels.

Ambient Air Results for which Reporting Limits Exceeded Screening Levels—Phase II

Analyte	Reporting Limit, µg/m^3	Screening Level for Air, µg/m^3	Screening Level Reference
TO-15, SIM VOCs in Air			
SDGs 0505295R1			
1,2-Dibromoethane	0.15	0.0034	R9 AA PRG
1,2-Dichloroethane	0.081	0.074	R9 AA PRG
Hexachlorobutadiene	1.1	0.086	R9 AA PRG
1,1,2,2-Tetrachloroethane	0.14	0.033	R9 AA PRG

8.3 May 2005 Residential

For May 2005 residential sampling event (excluding the South Prescott Park data), the laboratory's RLs for the analytes shown below are greater than the soil gas screening levels.

Soil Gas and Ambient Air Results for which Reporting Limits Exceeded Screening Levels—Phase IIR

Analyte	Reporting Limit, µg/m^3	Screening Level for Air, µg/m^3	Screening Level Reference
TO-15 SIM Naphthalene only in Air			
SDG 0505294BR1			
Naphthalene [a]	2.6	0.56	10 X R9 AA PRG Cal modified PRG
TO-15 SIM VOCs in Air			
SDG 0505294CR1			
1,2-Dibromoethane [a]	0.15	0.034	R9 AA PRG
Hexachlorobutadiene [a]	1.1	0.86	R9 AA PRG

Note:
[a] The laboratory indicated sample 356SG-02-0505 was received with significant vacuum remaining in the canister (19.5" Hg). The residual canister vacuum resulted in elevated reporting limits for this sample.

8.4 May 2005 Residential – South Prescott Park

For the South Prescott Park data collected during the May 2005 residential sampling event, the laboratory's RLs for the analytes shown below are greater than the soil gas screening levels.

Soil Gas Results for which Reporting Limits Exceeded Screening Levels—Phase IIP

Analyte	Reporting Limit, µg/m^3	Screening Level for Air, µg/m^3	Screening Level Reference
TO-15 SIM for Naphthalene only in Air			
SDG 0505338ER1			
Naphthalene [a]	2.6	0.56	10 X R9 AA PRG Cal modified PRG
TO-15 VOCs for Naphthalene only in Air			
SDG 0505338BR1			
Naphthalene	2.6	0.56	10 X R9 AA PRG Cal modified PRG
TO-15 SIM VOCs in Air			
SDG 0505338CR1			
1,2-Dibromoethane	1.5	0.0034	R9 AA PRG
1,2-Dichloroethane	0.081	0.074	R9 AA PRG
Hexachlorobutadiene	1.1	0.086	R9 AA PRG
Trichloroethene	0.11	0.017	R9 AA PRG
1,1,2,2-Tetrachloroethane	0.14	0.033	R9 AA PRG
TO-15 SIM VOCs in Air			
SDG 0505338fR1			
1,2-Dibromoethane [a]	0.15	0.0034	R9 AA PRG
1,2-Dichloroethane [a]	0.081	0.074	R9 AA PRG
Hexachlorobutadiene [a]	1.1	0.086	R9 AA PRG
1,1,2,2-Tetrachloroethane [a]	0.14	0.033	R9 AA PRG
Trichloroethene [a]	0.11	0.017	R9 AA PRG

Note:
[a] The laboratory indicated sample PP-SW-SG-0505 was received with significant vacuum remaining in the canister (16.5" Hg). The residual canister vacuum resulted in elevated reporting limits.

9.0 References

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Tables

TABLE 1-1
Sampling Event Dates
AMCO Chemical Superfund Site, Oakland, California

Event	Sample Matrix	Sample Method	Sampling Dates
GRAB GROUNDWATER, SOIL, AND SOIL GAS			
Grab Groundwater (Phase I)	Groundwater	Waterloo Profiler HydroPunch	September-December 2004
Soil (Phase I)	Soil	Grab	September-October 2004
Temporary Soil Gas (Phase I)	Soil Gas	50cc syringe	September-October 2004
Permanent Soil Gas Probe (Phase I)	Soil Gas	Summa Can	October 2004
2005 Soil Gas Probe (Phase II)	Soil Gas	Summa Can	May 2005
2006 Soil Gas Probe (Phase III)	Soil Gas	Summa Can	November 2006
GROUNDWATER MONITORING			
First Quarter 2005	Groundwater, NAPL	Grab	March 2005
Second Quarter 2005	Groundwater	Grab	June 2005
Third Quarter 2005	Groundwater	Grab	September-October 2005
Fourth Quarter 2005	Groundwater	Grab	January 2006
First Quarter 2006	Groundwater	Grab	March-April 2006
Second Quarter 2006	Groundwater	Grab	July 2006
Third Quarter 2006	Groundwater	Grab	September 2006
RESIDENTIAL			
2004 Residential	Soil Gas	Summa Can	September 2004
2004 Residential	Ambient Air and Crawl Space Air	Summa Can	September 2004
2005 Residential	Soil Gas	Summa Can	May 2005
2005 Residential	Ambient Air and Crawl Space Air	Summa Can	May 2005
2006 Residential	Ambient Air and Crawl Space Air	Summa Can	November 2006
2006 Residential	Soil Gas	Summa Can	November 2006
2006 Residential Produce	Biota	Grab	October-November 2006
2006 Residential Soil	Soil	Grab	October 2006

Note:
NAPL: non-aqueous phase liquid

TABLE 2-1
Quality Indicators

Type	PARCC Parameter	Evaluation Criteria	Quality Control Indicator
Qualitative	Comparability	Do the quality systems employed during sample collection and analysis comply with the requirements of the approved QAPP and the currently accepted standards and procedures?	Field records of sample collection and laboratory documentation of sample analysis.
	Representativeness	Was the approved sample collection and analysis strategy implemented and was the sampling design sufficient to produce results that represent site conditions?	Sampling design, including field modifications (if any), and analytical results.
Quantitative	Precision	Are the results of replicate analyses within the quantitative project acceptance criteria?	Laboratory and field duplicates.
	Accuracy	Are the recoveries of target analytes from samples containing known concentrations (analytical spikes) within project acceptance criteria?	Laboratory Control samples (blank spikes), Matrix Spike Samples, and Matrix Spike Duplicate Samples.
	Completeness	Are sufficient usable data available to support the project objectives?	Data flags applied during data review and validation.

TABLE 2-2
Number of Collected Samples Listed by the Corresponding Analytical Fraction, Laboratory, and Event
AMCO Chemical Superfund Site, Oakland, California

Sample Matrix	Laboratory Name	Analytical Method	Number of Primary and Field Duplicate Samples
GRAB GROUNDWATER, SOIL, AND SOIL GAS			
Phase 1 (September - December 2004)			
Groundwater			
	EPA Region 9	Volatile Organics/1,4-Dioxane, EPA Method 524.2	77
Soil			
	Liberty	Volatile Organics/1,4-Dioxane, CLP-SOW	68
	Liberty	Semivolatile Organics, CLP-SOW	69
	Liberty	Organochlorine Pesticides/PCBs, CLP-SOW	68
	Pace	Dioxins and Furans, EPA Method SW8290	8
	Liberty	Inorganics, CLP-SOW	69
Soil Gas			
	TEG	Volatile Organics, EPA Method 8260B	49
Phase 1 Soil Gas Probe (October 2004)			
Soil Gas			
	Air Toxics	Volatile Organics, EPA Method TO-15	26
	Air Toxics	Volatile Organics, EPA Method TO-15 (SIM)	14
Phase 2 Soil Gas Probe (May 2005)			
Soil Gas			
	Air Toxics	Volatile Organics, EPA Method TO-15	20
	Air Toxics	Volatile Organics, EPA Method TO-15 (SIM)	20
Phase 3 Soil Gas Probe (November 2006)			
Soil Gas			
	Air Toxics	Volatile Organics, EPA Method TO-15	14
GROUNDWATER MONITORING			
Groundwater, First Quarter 2005 (March)			
Groundwater			
	Envirosystems	Volatile Organics, CLP-SOW	24
	Envirosystems	Semivolatile Organics, CLP-SOW	24
	Envirosystems	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	24
	Data Chem	Organochlorine Pesticides/PCBs, CLP-SOW	10
	DAT	Dioxins and Furans, EPA Method SW8290	2
	EPA Region 9	Dissolved Gases, EPA Method RSK-175	25
	EPA Region 9	Anions, EPA Method 300.0	25
	EPA Region 9	Hexavalent Chromium, EPA Method 218.6	10
	Ceimic	Inorganics, CLP-SOW	24
	EPA Region 9	Total Dissolved Solids, EPA Method 160.1	5
	EPA Region 9	Total Organic Carbon, EPA Method 415.1	5
	EPA Region 9	Volatile Organics, EPA Method 524.2	1 *
	EPA Region 9	Semivolatile Organics/1,4-Dioxane, EPA Method 8270C	1 *
	EPA Region 9	Organochlorine Pesticides/PCBs, EPA Method 8081A	1 *
	EPA Region 9	Mercury, Method N6000	1 *
	EPA Region 9	Metals, EPA Method 200.7	1 *
	EPA Region 9	Metals, EPA Method 200.8	1 *

TABLE 2-2
Number of Collected Samples Listed by the Corresponding Analytical Fraction, Laboratory, and Event
AMCO Chemical Superfund Site, Oakland, California

Sample Matrix	Laboratory Name	Analytical Method	Number of Primary and Field Duplicate Samples
GROUNDWATER MONITORING			
Groundwater, Second Quarter 2005 (June)			
Groundwater			
	A4 Scientific	Volatile Organics, CLP-SOW	25
	EPA Region 9	1,4-Dioxane, EPA Method 8270C	25
	A4 Scientific	Organochlorine Pesticides/PCBs, CLP-SOW	25
	EPA Region 9	Dissolved Gases, EPA Method RSK-175	25
	EPA Region 9	Anions, EPA Method 300.0	25
Groundwater, Third Quarter 2005 (September)			
Groundwater			
	A4 Scientific	Volatile Organics, CLP-SOW	32
	A4 Scientific	Semivolatile Organics, CLP-SOW	32
	A4 Scientific	1,4-Dioxane (SIM), CLP-SOW	32
	A4 Scientific	Organochlorine Pesticides/PCBs, CLP-SOW	32
	APPL	Organophosphorus Pesticides, EPA Method 8141A	32
	EPA Region 9	Dissolved Gases, EPA Method RSK-175	32
	EPA Region 9	Anions, EPA Method 300.0	32
	Bonner	Inorganics, CLP-SOW	32
	Sentinel	Inorganics, CLP-SOW	32
Groundwater, Fourth Quarter 2005 (January)			
Groundwater			
	A4 Scientific	Volatile Organics, CLP-SOW	32
	A4 Scientific	Semivolatile Organics, CLP-SOW	32
	A4 Scientific	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	32
	A4 Scientific	Organochlorine Pesticides/PCBs, CLP-SOW	32
	Paradigm	Chlorinated Furans/Dioxins Low Method	11
	EPA Region 9	Dissolved Gases, EPA Method RSK-175	32
	EPA Region 9	Anions, EPA Method 300.0	32
	Sentinel	Inorganics, CLP-SOW	32
	EPA Region 9	Total Dissolved Solids, EPA Method 160.1	17
Groundwater, First Quarter 2006 (March)			
Groundwater			
	EPA Region 9	Volatile Organics, EPA Method 524.2	19
	KAP Technologies	Volatile Organics/1,4-Dioxane, CLP-SOW	33
	KAP Technologies	Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW	33
	Liberty	Organochlorine Pesticides/PCBs, CLP-SOW	4
	EPA Region 9	Dissolved Gases, EPA Method RSK-175	33
	EPA Region 9	Anions, EPA Method 300.0	33
Groundwater, Second Quarter 2006 (June)			
Groundwater			
	EPA Region 9	Volatile Organics, EPA Method 524.2	33
	EPA Region 9	Dissolved Gases, EPA Method RSK-175	33
	EPA Region 9	Anions, EPA Method 300.0	33

TABLE 2-2
Number of Collected Samples Listed by the Corresponding Analytical Fraction, Laboratory, and Event
AMCO Chemical Superfund Site, Oakland, California

Sample Matrix	Laboratory Name	Analytical Method	Number of Primary and Field Duplicate Samples
GROUNDWATER MONITORING			
Groundwater, Third Quarter 2006 (September)			
Groundwater			
	Shealy	Volatile Organics/1,4-Dioxane, CLP-SOW	33
	Shealy	Semivolatile Organics, CLP-SOW	33
	Shealy	Semivolatile Organics (SIM), CLP-SOW	33
	Shealy	1,4-Dioxane, CLP-SOW	33
	Frontier	Chlorinated Furans/Dioxins Low Method	31
	Shealy	Organochlorine Pesticides/PCBs, CLP-SOW	32 (2)
	EPA Region 9	Dissolved Gases, EPA Method RSK-175	32 (2)
	EPA Region 9	Anions, EPA Method 300.0	32 (2)
	Sentinel	Inorganics, CLP-SOW	32 (2)
RESIDENTIAL			
2004 Residential Air (September 2004)			
Ambient Air			
	Air Toxics	Volatile Organics, EPA Method TO-15 (SIM)	8
Crawl Space Air			
	Air Toxics	Volatile Organics, EPA Method TO-15 (SIM)	5
2004 Residential Soil Gas (September 2004)			
Soil Gas			
	Air Toxics	Volatile Organics, EPA Method TO-15	13
	Air Toxics	Volatile Organics, EPA Method TO-15 (SIM)	13
2005 Residential Air (May 2005)			
Ambient Air			
	Air Toxics	Volatile Organics, EPA Method TO-15 (SIM)	9
	Air Toxics	Naphthalene, EPA Method TO-13A	8
Crawl Space Air			
	Air Toxics	Volatile Organics, EPA Method TO-15 (SIM)	5
2005 Residential Soil Gas (May 2005)			
Soil Gas			
	Air Toxics	Volatile Organics, EPA Method TO-15	8
	Air Toxics	Volatile Organics, EPA Method TO-15 (SIM)	8
2006 Residential Soil (October)			
Soil			
	EPA Region 9	Volatile Organics, EPA Method 8260B	44
	Shealy	Semivolatile Organics, CLP-SOW	44
	Shealy	1,4-Dioxane (SIM), CLP-SOW	42
	Shealy	Organochlorine Pesticides/PCBs, CLP-SOW	44
	Sentinel	Inorganics, CLP-SOW	44

TABLE 2-2
Number of Collected Samples Listed by the Corresponding Analytical Fraction, Laboratory, and Event
AMCO Chemical Superfund Site, Oakland, California

Sample Matrix	Laboratory Name	Analytical Method	Number of Primary and Field Duplicate Samples
RESIDENTIAL			
2006 Residential Produce (October)			
Plant Tissue			
	Columbia	Volatile Organics, EPA Method 8260B	17
	Columbia	Metals, EPA Method 6020	17
2006 Residential Air (November 2006)			
Ambient Air			
	Air Toxics	Volatile Organics, EPA Method TO-15	8
	Air Toxics	Volatile Organics, EPA Method TO-15 (SIM)	8
Crawl Space Air			
	Air Toxics	Volatile Organics, EPA Method TO-15	6
	Air Toxics	Volatile Organics, EPA Method TO-15 (SIM)	6
2006 Residential Soil Gas (November 2006)			
Soil Gas			
	Air Toxics	Volatile Organics, EPA Method TO-15	11

Notes:

APPL Agricultural Priority Pollutant Lab
DAT Data/Analysis Technologies
CLP-SOW Contract Laboratory Program Statement of Work
* Analyses collected for MW-12 at the end of the sampling event
SIM Selected Ion Monitoring
(1) Results for RSB-21-5 not received
(2) Results for Field Duplicate of RMW-12-32 not received
(3) Results for 1432SSc-1 and 1432SSc-3 not received

TABLE 3-1
Equipment Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
					Groundwater, First Quarter 2005 (March)				
Y1RY5	**MW-EB-02-0305**	**EB**	**3/16/2005**	**SVOCS-DX+**	**Benzo(a)anthracene**	**0.04**	**0.04**	**µg/L**	
Y1RY5	RMW-04-15-0305	N	3/16/2005	SVOCS-DX+	Benzo(a)anthracene	0.04U	0.04	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-05-15-0305	N	3/16/2005	SVOCS-DX+	Benzo(a)anthracene	0.04U	0.04	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-09-35-0305	N	3/16/2005	SVOCS-DX+	Benzo(a)anthracene	0.04U	0.04	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-10-35-0305	N	3/16/2005	SVOCS-DX+	Benzo(a)anthracene	0.04U	0.04	µg/L	EB<>RL, LB<>RL
Y1RY5	**MW-EB-02-0305**	**EB**	**3/16/2005**	**SVOCS-DX+**	**bis(2-Chloroethyl)ether**	**0.1**	**0.1**	**µg/L**	
Y1RY5	RMW-04-15-0305	N	3/16/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-05-15-0305	N	3/16/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-09-15-0305	N	3/16/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-09-35-0305	N	3/16/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-10-15-0305	N	3/16/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1RY5	MW-92-0305	FD	3/16/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-10-35-0305	N	3/16/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.3U	0.1	µg/L	EB<>RL, LB<>RL
Y1RY5	**MW-EB-02-0305**	**EB**	**3/16/2005**	**SVOCS-DX+**	**bis(2-Ethylhexyl)phthalate**	**0.4**	**5**	**µg/L**	
Y1RY5	RMW-04-15-0305	N	3/16/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-05-15-0305	N	3/16/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-09-15-0305	N	3/16/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-09-35-0305	N	3/16/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-10-15-0305	N	3/16/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL, LB<>RL
Y1RY5	MW-92-0305	FD	3/16/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL, LB<>RL
Y1RY5	RMW-10-35-0305	N	3/16/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL, LB<>RL
MY1RY5	**MW-EB-03-0305**	**EB**	**3/17/2005**	**CLPI**	**Chromium**	**0.48 J**	**2**	**µg/L**	
MY1RY5	BMW-06-0305	N	3/17/2005	CLPI	Chromium	2UJ	2	µg/L	CRQL>UCL, EB<>RL, LB<>RL
Y1S17	**MW-EB-05-0305**	**EB**	**3/22/2005**	**SVOCS-DX+**	**1,4-Dioxane (p-dioxane)**	**7**	**5**	**µg/L**	
Y1S17	RMW-01-17-0305	N	3/22/2005	SVOCS-DX+	1,4-Dioxane (p-dioxane)	5U	0.2	µg/L	EB<>RL
Y1RZ2	**MW-EB-05-0305**	**EB**	**3/22/2005**	**CLPP**	**4,4'-DDT**	**0.00029**	**0.02**	**µg/L**	
Y1RZ2	RMW-01-17-0305	N	3/22/2005	CLPP	4,4'-DDT	0.02UJ	0.02	µg/L	CF>RPD, EB<>RL, Sur<LCL
Y1RZ2	**MW-EB-05-0305**	**EB**	**3/22/2005**	**CLPP**	**Aldrin**	**0.0017**	**0.01**	**µg/L**	
Y1RZ2	RMW-01-35-0305	N	3/22/2005	CLPP	Aldrin	0.01UJ	0.01	µg/L	CF>RPD, EB<>RL
Y1S17	**MW-EB-05-0305**	**EB**	**3/22/2005**	**SVOCS-DX+**	**bis(2-Chloroethyl)ether**	**0.1**	**0.1**	**µg/L**	
Y1S17	RMW-01-17-0305	N	3/22/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1S17	RMW-01-35-0305	N	3/22/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1S17	**MW-EB-05-0305**	**EB**	**3/22/2005**	**SVOCS-DX+**	**bis(2-Ethylhexyl)phthalate**	**0.5**	**4.8**	**µg/L**	
Y1S17	RMW-01-17-0305	N	3/22/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	4.8U	4.8	µg/L	EB<>RL, LB<>RL
Y1S17	RMW-01-35-0305	N	3/22/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	4.8U	4.8	µg/L	EB<>RL, LB<>RL
MY1RZ2	**MW-EB-05-0305**	**EB**	**3/22/2005**	**CLPI**	**Cadmium**	**0.03 J**	**1**	**µg/L**	
MY1RZ2	RMW-01-17-0305	N	3/22/2005	CLPI	Cadmium	1U	1	µg/L	EB<>RL
MY1RZ2	**MW-EB-05-0305**	**EB**	**3/22/2005**	**CLPI**	**Chromium**	**0.6 J**	**2**	**µg/L**	
MY1RZ2	RMW-01-35-0305	N	3/22/2005	CLPI	Chromium	2UJ	2	µg/L	CCB<RL, EB<>RL
MY1RY7	**MW-EB-05-0305**	**EB**	**3/22/2005**	**CLPI**	**Potassium**	**295 J**	**5**	**µg/L**	
MY1RY7	RMW-01-35-0305	N	3/22/2005	CLPI	Potassium	5000U	5	µg/L	EB<>RL

TABLE 3-1
Equipment Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, First Quarter 2005 (March)									
Y1S17	**MW-EB-06-0305**	**EB**	**3/23/2005**	**SVOCS-DX+**	**1,4-Dioxane (p-dioxane)**	**0.2**	**5**	**µg/L**	
Y1S17	RMW-02-50-0305	N	3/23/2005	SVOCS-DX+	1,4-Dioxane (p-dioxane)	5U	0.7	µg/L	EB<>RL
Y1S17	RMW-08-15-0305	N	3/23/2005	SVOCS-DX+	1,4-Dioxane (p-dioxane)	5U	5	µg/L	EB<>RL
Y1S17	MW-91-0305	FD	3/23/2005	SVOCS-DX+	1,4-Dioxane (p-dioxane)	5U	5	µg/L	EB<>RL
Y1RZ2	**MW-EB-06-0305**	**EB**	**3/23/2005**	**CLPP**	**4,4'-DDT**	**0.00043**	**0.02**	**µg/L**	
Y1RZ2	RMW-08-15-0305	N	3/23/2005	CLPP	4,4'-DDT	0.02UJ	0.02	µg/L	CF>RPD, EB<>RL, Sur<LCL
Y1RZ2	MW-91-0305	FD	3/23/2005	CLPP	4,4'-DDT	0.02UJ	0.02	µg/L	CF>RPD, EB<>RL, Sur<LCL
Y1S17	**MW-EB-06-0305**	**EB**	**3/23/2005**	**SVOCS-DX+**	**bis(2-Chloroethyl)ether**	**0.08**	**0.1**	**µg/L**	
Y1S17	BPZ-01-0305	N	3/23/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1UJ	0.1	µg/L	EB<>RL, LB<>RL, Sur<LCL
Y1S17	RMW-02-50-0305	N	3/23/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1S17	RMW-08-15-0305	N	3/23/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1S17	MW-91-0305	FD	3/23/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1S17	RMW-08-35-0305	N	3/23/2005	SVOCS-DX+	bis(2-Chloroethyl)ether	0.1U	0.1	µg/L	EB<>RL, LB<>RL
Y1S17	**MW-EB-06-0305**	**EB**	**3/23/2005**	**SVOCS-DX+**	**bis(2-Ethylhexyl)phthalate**	**1**	**4.8**	**µg/L**	
Y1S17	BPZ-01-0305	N	3/23/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	4.8UJ	4.8	µg/L	EB<>RL, LB<>RL, Sur<LCL
Y1S17	RMW-02-13-0305	N	3/23/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	48U	48	µg/L	EB<>RL, LB<>RL
Y1S17	RMW-02-32-0305	N	3/23/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	4.8U	4.8	µg/L	EB<>RL, LB<>RL
Y1S17	RMW-02-50-0305	N	3/23/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	4.8U	4.8	µg/L	EB<>RL, LB<>RL
Y1S17	RMW-08-15-0305	N	3/23/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	4.8U	4.8	µg/L	EB<>RL, LB<>RL
Y1S17	MW-91-0305	FD	3/23/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	4.8U	4.8	µg/L	EB<>RL, LB<>RL
Y1S17	RMW-08-35-0305	N	3/23/2005	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	4.8U	4.8	µg/L	EB<>RL, LB<>RL
MY1RZ2	**MW-EB-06-0305**	**EB**	**3/23/2005**	**CLPI**	**Copper**	**0.24 J**	**2**	**µg/L**	
MY1RZ2	RMW-02-50-0305	N	3/23/2005	CLPI	Copper	2U	2	µg/L	EB<>RL
MY1RZ2	RMW-08-15-0305	N	3/23/2005	CLPI	Copper	2U	2	µg/L	EB<>RL
MY1RZ2	MW-91-0305	FD	3/23/2005	CLPI	Copper	2U	2	µg/L	EB<>RL
Groundwater, Third Quarter 2005 (September)									
Y23M1	**MW-EB-01-0905**	**EB**	**9/28/2005**	**CLPV**	**Acetone**	**5.3**	**5**	**µg/L**	
Y23M1	BMW-01-0905	N	9/28/2005	CLPV	Acetone	5U	5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23M1	RMW-04-15-0905	N	9/28/2005	CLPV	Acetone	5U	5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23M1	**MW-EB-01-0905**	**EB**	**9/28/2005**	**CLPS**	**bis(2-Ethylhexyl)phthalate**	**3.4**	**5**	**µg/L**	
Y23M1	BMW-01-0905	N	9/28/2005	CLPS	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL
Y23M1	**MW-EB-02-0905**	**EB**	**9/29/2005**	**CLPV**	**Acetone**	**5**	**5**	**µg/L**	
Y23M1	BMW-03-0905	N	9/29/2005	CLPV	Acetone	5U	5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23M1	RMW-05-15-0905	N	9/29/2005	CLPV	Acetone	5U	5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23M1	**MW-EB-02-0905**	**EB**	**9/29/2005**	**CLPS**	**bis(2-Ethylhexyl)phthalate**	**1.7**	**5**	**µg/L**	
Y23M1	BMW-03-0905	N	9/29/2005	CLPS	bis(2-Ethylhexyl)phthalate	5.6U	5	µg/L	EB<>RL
Y23M1	RMW-10-15-0905	N	9/29/2005	CLPS	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL
Y23M1	MW-90-15-0905	FD	9/29/2005	CLPS	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL
Y23M1	RMW-10-35-0905	N	9/29/2005	CLPS	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL
Y23M1	**MW-EB-02-0905**	**EB**	**9/29/2005**	**CLPV**	**Chloromethane**	**1.1**	**0.5**	**µg/L**	
Y23M1	RMW-10-35-0905	N	9/29/2005	CLPV	Chloromethane	0.5U	0.5	µg/L	EB<>RL, TB<>RL

TABLE 3-1
Equipment Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Third Quarter 2005 (September)									
Y23M1	**MW-EB-02-0905**	**EB**	**9/29/2005**	**CLPV**	**Toluene**	**0.28**	**0.5**	**µg/L**	
Y23M1	MW-90-15-0905	FD	9/29/2005	CLPV	Toluene	0.5U	0.5	µg/L	EB<>RL
Y23M1	**MW-EB-03-0905**	**EB**	**9/30/2005**	**CLPV**	**Acetone**	**2.5**	**5**	**µg/L**	
Y23M1	RMW-09-35-0905	N	9/30/2005	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y23M1	**MW-EB-03-0905**	**EB**	**9/30/2005**	**CLPS**	**bis(2-Ethylhexyl)phthalate**	**88**	**10**	**µg/L**	
Y23M1	RMW-09-15-0905	N	9/30/2005	CLPS	bis(2-Ethylhexyl)phthalate	5.3U	5	µg/L	EB<>RL
Y23M1	MW-91-0905	FD	9/30/2005	CLPS	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL
Y23M1	RMW-09-35-0905	N	9/30/2005	CLPS	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL
MY23M1	**MW-EB-03-0905**	**EB**	**9/30/2005**	**CLPI**	**Selenium**	**0.53 J**	**5**	**µg/L**	
MY23M1	RMW-09-15-0905	N	9/30/2005	CLPI	Selenium	5U	5	µg/L	EB<>RL
MY23M1	MW-91-0905	FD	9/30/2005	CLPI	Selenium	5U	5	µg/L	EB<>RL
MY23M1	RMW-09-35-0905	N	9/30/2005	CLPI	Selenium	5U	5	µg/L	EB<>RL
Y23N7	**MW-EB-04-0905**	**EB**	**10/3/2005**	**CLPV**	**Acetone**	**2.3**	**5**	**µg/L**	
Y23N7	RMW-07-35-0905	N	10/3/2005	CLPV	Acetone	5U	5	µg/L	EB<>RL, TB<>RL
Y23N7	**MW-EB-04-0905**	**EB**	**10/3/2005**	**CLPV**	**Methylene chloride**	**0.5**	**0.5**	**µg/L**	
Y23N7	RMW-06-15-0905	N	10/3/2005	CLPV	Methylene chloride	0.5U	0.5	µg/L	EB<>RL
MY23M1	**MW-EB-04-0905**	**EB**	**10/3/2005**	**CLPI**	**Selenium**	**1.4 J**	**5**	**µg/L**	
MY23M1	RMW-06-15-0905	N	10/3/2005	CLPI	Selenium	5U	5	µg/L	EB<>RL
Y23N7	**MW-EB-05-0905**	**EB**	**10/4/2005**	**CLPV**	**Acetone**	**3.5**	**5**	**µg/L**	
Y23N7	BMW-07-0905	N	10/4/2005	CLPV	Acetone	5UJ	5	µg/L	EB<>RL, Sur>UCL
Y23N7	RMW-03-15-0905	N	10/4/2005	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y23N7	**MW-EB-05-0905**	**EB**	**10/4/2005**	**CLPV**	**Chloromethane**	**1.5**	**0.5**	**µg/L**	
Y23N7	BMW-07-0905	N	10/4/2005	CLPV	Chloromethane	1.2U	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23N7	RMW-14-50-0905	N	10/4/2005	CLPV	Chloromethane	1.4UJ	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL, Sur<LCL
MY23R4	**MW-EB-05-0905**	**EB**	**10/4/2005**	**CLPI**	**Chromium**	**0.2 J**	**2**	**µg/L**	
MY23R4	RMW-14-50-0905	N	10/4/2005	CLPI	Chromium	6.7J+	2	µg/L	EB<>RL
MY23R4	**MW-EB-05-0905**	**EB**	**10/4/2005**	**CLPI**	**Lead**	**0.14 J**	**1**	**µg/L**	
MY23R4	BMW-07-0905	N	10/4/2005	CLPI	Lead	1.6J+	1	µg/L	EB<>RL
MY23R4	RMW-14-50-0905	N	10/4/2005	CLPI	Lead	1.7J+	1	µg/L	EB<>RL
MY23R4	**MW-EB-05-0905**	**EB**	**10/4/2005**	**CLPI**	**Nickel**	**0.13 J**	**1**	**µg/L**	
MY23R4	BMW-07-0905	N	10/4/2005	CLPI	Nickel	14.5J+	1	µg/L	EB<>RL
MY23R4	**MW-EB-05-0905**	**EB**	**10/4/2005**	**CLPI**	**Zinc**	**1.2 J**	**2**	**µg/L**	
MY23R4	BMW-07-0905	N	10/4/2005	CLPI	Zinc	6.4J+	2	µg/L	EB<>RL
MY23R4	RMW-14-50-0905	N	10/4/2005	CLPI	Zinc	38.7J+	2	µg/L	EB<>RL
Y23N7	**MW-EB-06-0905**	**EB**	**10/5/2005**	**CLPV**	**Acetone**	**1.9**	**5**	**µg/L**	
Y23N7	BMW-06-0905	N	10/5/2005	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y23N7	BPZ-01-0905	N	10/5/2005	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y23N7	**MW-EB-06-0905**	**EB**	**10/5/2005**	**CLPS**	**bis(2-Ethylhexyl)phthalate**	**3.1**	**5**	**µg/L**	
Y23N7	BMW-06-0905	N	10/5/2005	CLPS	bis(2-Ethylhexyl)phthalate	5U	5	µg/L	EB<>RL

TABLE 3-1
Equipment Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Third Quarter 2005 (September)									
Y23N7	**MW-EB-06-0905**	**EB**	**10/5/2005**	**CLPV**	**Chloromethane**	**1.2**	**0.5**	**µg/L**	
Y23N7	BMW-06-0905	N	10/5/2005	CLPV	Chloromethane	1.3U	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23N7	BPZ-01-0905	N	10/5/2005	CLPV	Chloromethane	1U	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23N7	RMW-13-35-0905	N	10/5/2005	CLPV	Chloromethane	1U	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL
MY23R4	**MW-EB-06-0905**	**EB**	**10/5/2005**	**CLPI**	**Chromium**	**0.22 J**	**2**	**µg/L**	
MY23R4	BMW-08-0905	N	10/5/2005	CLPI	Chromium	17.2J+	4	µg/L	EB<>RL
MY23R4	BPZ-01-0905	N	10/5/2005	CLPI	Chromium	24.2J+	2	µg/L	EB<>RL
MY23R4	RMW-13-35-0905	N	10/5/2005	CLPI	Chromium	12.9J+	2	µg/L	EB<>RL
MY23R4	**MW-EB-06-0905**	**EB**	**10/5/2005**	**CLPI**	**Lead**	**0.04 J**	**1**	**µg/L**	
MY23R4	BMW-06-0905	N	10/5/2005	CLPI	Lead	1.6J+	1	µg/L	EB<>RL
MY23R4	BMW-08-0905	N	10/5/2005	CLPI	Lead	2.5J+	1	µg/L	EB<>RL
MY23R4	RMW-13-35-0905	N	10/5/2005	CLPI	Lead	3J+	1	µg/L	EB<>RL
MY23R4	**MW-EB-06-0905**	**EB**	**10/5/2005**	**CLPI**	**Nickel**	**0.12 J**	**1**	**µg/L**	
MY23R4	BMW-06-0905	N	10/5/2005	CLPI	Nickel	4.3J+	1	µg/L	EB<>RL
MY23R4	BMW-08-0905	N	10/5/2005	CLPI	Nickel	12.5J+	2	µg/L	EB<>RL
MY23R4	BPZ-01-0905	N	10/5/2005	CLPI	Nickel	23J+	1	µg/L	EB<>RL
MY23R4	RMW-13-35-0905	N	10/5/2005	CLPI	Nickel	24.6J+	1	µg/L	EB<>RL
MY23R4	**MW-EB-06-0905**	**EB**	**10/5/2005**	**CLPI**	**Zinc**	**0.47 J**	**2**	**µg/L**	
MY23R4	BMW-06-0905	N	10/5/2005	CLPI	Zinc	12.5J+	2	µg/L	EB<>RL
MY23R4	BMW-08-0905	N	10/5/2005	CLPI	Zinc	12.2J+	4	µg/L	EB<>RL
MY23R4	BPZ-01-0905	N	10/5/2005	CLPI	Zinc	30.6J+	2	µg/L	EB<>RL
MY23R4	RMW-13-35-0905	N	10/5/2005	CLPI	Zinc	13.1J+	2	µg/L	EB<>RL
Y23N7	**MW-EB-07-0905**	**EB**	**10/6/2005**	**CLPV**	**Acetone**	**2.4**	**5**	**µg/L**	
Y23N7	RMW-11-35-0905	N	10/6/2005	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y23N7	**MW-EB-07-0905**	**EB**	**10/6/2005**	**CLPV**	**Chloromethane**	**1.1**	**0.5**	**µg/L**	
Y23N7	RMW-11-35-0905	N	10/6/2005	CLPV	Chloromethane	1.2U	0.5	µg/L	EB<>RL, LB<>RL
MY23R4	**MW-EB-07-0905**	**EB**	**10/6/2005**	**CLPI**	**Chromium**	**0.34 J**	**2**	**µg/L**	
MY23R4	RMW-01-35-0905	N	10/6/2005	CLPI	Chromium	2.1J+	2	µg/L	EB<>RL
MY23R4	RMW-11-35-0905	N	10/6/2005	CLPI	Chromium	4.6J+	2	µg/L	EB<>RL
Y23N7	**MW-EB-07-0905**	**EB**	**10/6/2005**	**CLPV**	**Ethyl tert-butyl ether**	**0.5**	**0.5**	**µg/L**	
Y23N7	RMW-11-35-0905	N	10/6/2005	CLPV	Ethyl tert-butyl ether	0.5U	0.5	µg/L	EB<>RL, LB<>RL
Y23N7	**MW-EB-07-0905**	**EB**	**10/6/2005**	**CLPV**	**Methylene chloride**	**2.1**	**0.5**	**µg/L**	
Y23R4	RMW-01-17-0905	N	10/6/2005	CLPV	Methylene chloride	0.5UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD
Y23N7	**MW-EB-07-0905**	**EB**	**10/6/2005**	**CLPV**	**Toluene**	**0.31**	**0.5**	**µg/L**	
Y23N7	RMW-11-35-0905	N	10/6/2005	CLPV	Toluene	0.5U	0.5	µg/L	EB<>RL
MY23R4	**MW-EB-07-0905**	**EB**	**10/6/2005**	**CLPI**	**Zinc**	**1.5 J**	**2**	**µg/L**	
MY23R4	RMW-01-35-0905	N	10/6/2005	CLPI	Zinc	16.4J+	2	µg/L	EB<>RL
MY23R4	RMW-11-35-0905	N	10/6/2005	CLPI	Zinc	16J+	2	µg/L	EB<>RL
Y23R7	**MW-EB-08-0905**	**EB**	**10/10/2005**	**SVOCS-DX**	**1,4-Dioxane (p-dioxane)**	**1.8**	**1**	**µg/L**	
Y23R7	RMW-08-35-0905	N	10/10/2005	SVOCS-DX	1,4-Dioxane (p-dioxane)	1.1U	1	µg/L	EB<>RL

TABLE 3-1
Equipment Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Third Quarter 2005 (September)									
Y23R4	**MW-EB-08-0905**	**EB**	**10/10/2005**	**CLPV**	**Chloromethane**	**1.1**	**0.5**	**µg/L**	
Y23R4	RMW-08-15-0905	N	10/10/2005	CLPV	Chloromethane	1.1UJ	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL, Sur>UCL
Y23R4	RMW-08-35-0905	N	10/10/2005	CLPV	Chloromethane	1.1U	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL
MY23R4	**MW-EB-08-0905**	**EB**	**10/10/2005**	**CLPI**	**Chromium**	**9.2**	**2**	**µg/L**	
MY23R4	RMW-08-15-0905	N	10/10/2005	CLPI	Chromium	6.4J+	2	µg/L	EB<>RL
MY23R4	RMW-08-35-0905	N	10/10/2005	CLPI	Chromium	4.9J+	2	µg/L	EB<>RL
MY23R4	RMW-12-32-0905	N	10/10/2005	CLPI	Chromium	24.4J+	2	µg/L	EB<>RL
MY23R4	RMW-12-51-0905	N	10/10/2005	CLPI	Chromium	3.3J+	2	µg/L	EB<>RL
MY23R4	MW-88-51-0905	FD	10/10/2005	CLPI	Chromium	3.5J+	2	µg/L	EB<>RL
MY23R4	**MW-EB-08-0905**	**EB**	**10/10/2005**	**CLPI**	**Lead**	**2**	**1**	**µg/L**	
MY23R4	RMW-08-15-0905	N	10/10/2005	CLPI	Lead	3.2J+	1	µg/L	EB<>RL
MY23R4	RMW-08-35-0905	N	10/10/2005	CLPI	Lead	1.3J+	1	µg/L	EB<>RL
MY23R4	RMW-12-32-0905	N	10/10/2005	CLPI	Lead	2.7J+	1	µg/L	EB<>RL
MY23R4	RMW-12-51-0905	N	10/10/2005	CLPI	Lead	1UJ	1	µg/L	CCB<RL, EB<>RL
MY23R4	MW-88-51-0905	FD	10/10/2005	CLPI	Lead	1UJ	1	µg/L	CCB<RL, EB<>RL
MY23R4	**MW-EB-08-0905**	**EB**	**10/10/2005**	**CLPI**	**Manganese**	**2.6**	**1**	**µg/L**	
MY23R4	RMW-12-32-0905	N	10/10/2005	CLPI	Manganese	4.7J+	1	µg/L	EB<>RL
MY23R4	**MW-EB-08-0905**	**EB**	**10/10/2005**	**CLPI**	**Nickel**	**4.5**	**1**	**µg/L**	
MY23R4	RMW-08-15-0905	N	10/10/2005	CLPI	Nickel	10.3J+	1	µg/L	EB<>RL
MY23R4	RMW-08-35-0905	N	10/10/2005	CLPI	Nickel	24.5J+	1	µg/L	EB<>RL
MY23R4	RMW-12-32-0905	N	10/10/2005	CLPI	Nickel	29.4J+	1	µg/L	EB<>RL
MY23R4	**MW-EB-08-0905**	**EB**	**10/10/2005**	**CLPI**	**Zinc**	**5.2**	**2**	**µg/L**	
MY23R4	RMW-08-15-0905	N	10/10/2005	CLPI	Zinc	6.3J+	2	µg/L	EB<>RL
MY23R4	RMW-08-35-0905	N	10/10/2005	CLPI	Zinc	27J+	2	µg/L	EB<>RL
MY23R4	RMW-12-32-0905	N	10/10/2005	CLPI	Zinc	17.2J+	2	µg/L	EB<>RL
MY23R4	RMW-12-51-0905	N	10/10/2005	CLPI	Zinc	8J+	2	µg/L	EB<>RL
MY23R4	MW-88-51-0905	FD	10/10/2005	CLPI	Zinc	8.4J+	2	µg/L	EB<>RL
MY23T5	**MW-EB-09-0905**	**EB**	**10/11/2005**	**CLPI**	**Chromium**	**0.15 J**	**2**	**µg/L**	
MY23R4	RMW-02-32-0905	N	10/11/2005	CLPI	Chromium	2.9J+	2	µg/L	EB<>RL
MY23T5	**MW-EB-09-0905**	**EB**	**10/11/2005**	**CLPI**	**Lead**	**0.07 J**	**1**	**µg/L**	
MY23R4	RMW-02-32-0905	N	10/11/2005	CLPI	Lead	1UJ	1	µg/L	CCB<RL, EB<>RL
MY23R4	RMW-02-50-0905	N	10/11/2005	CLPI	Lead	1UJ	1	µg/L	CCB<RL, EB<>RL
MY23T5	**MW-EB-09-0905**	**EB**	**10/11/2005**	**CLPI**	**Zinc**	**0.33 J**	**2**	**µg/L**	
MY23R4	RMW-02-32-0905	N	10/11/2005	CLPI	Zinc	7.3J+	2	µg/L	EB<>RL
MY23R4	RMW-02-50-0905	N	10/11/2005	CLPI	Zinc	13.9J+	2	µg/L	EB<>RL
Groundwater, Fourth Quarter 2005 (January)									
Y2BJ6	**MW-EB-01-0106**	**EB**	**1/10/2006**	**SVOCS-DX+**	**bis(2-Ethylhexyl)phthalate**	**0.42**	**0.42**	**µg/L**	
Y2BJ6	BMW-06-0106	N	1/10/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.39UJ	0.39	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BJ6	RMW-11-35-0106	N	1/10/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.29UJ	0.29	µg/L	EB<>RL, IC%RSD, LB<>RL

TABLE 3-1
Equipment Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Fourth Quarter 2005 (January)									
Y2BJ6	**MW-EB-01-0106**	**EB**	**1/10/2006**	**SVOCS-DX+**	**Carbazole**	**0.13**	**0.13**	**µg/L**	
Y2BJ6	BMW-06-0106	N	1/10/2006	SVOCS-DX+	Carbazole	0.12U	0.12	µg/L	EB<>RL
Y2BJ6	RMW-11-35-0106	N	1/10/2006	SVOCS-DX+	Carbazole	0.12U	0.12	µg/L	EB<>RL
Y2BJ4	**MW-EB-01-0106**	**EB**	**1/10/2006**	**CLPV**	**Methylene chloride**	**2.4**	**0.5**	**µg/L**	
Y2BJ4	BMW-06-0106	N	1/10/2006	CLPV	Methylene chloride	2.3UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-11-35-0106	N	1/10/2006	CLPV	Methylene chloride	2UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ6	**MW-EB-02-0106**	**EB**	**1/11/2006**	**SVOCS-DX+**	**bis(2-Ethylhexyl)phthalate**	**0.36**	**0.36**	**µg/L**	
Y2BJ6	RMW-06-15-0106	N	1/11/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.21UJ	0.21	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BJ6	RMW-07-15-0106	N	1/11/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.2UJ	0.2	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BJ6	**MW-EB-02-0106**	**EB**	**1/11/2006**	**SVOCS-DX+**	**Carbazole**	**0.12**	**0.12**	**µg/L**	
Y2BJ6	RMW-06-15-0106	N	1/11/2006	SVOCS-DX+	Carbazole	0.12U	0.12	µg/L	EB<>RL
Y2BJ6	RMW-07-15-0106	N	1/11/2006	SVOCS-DX+	Carbazole	0.11U	0.11	µg/L	EB<>RL
Y2BJ4	**MW-EB-02-0106**	**EB**	**1/11/2006**	**CLPV**	**Methylene chloride**	**1.9**	**0.5**	**µg/L**	
Y2BJ4	RMW-06-15-0106	N	1/11/2006	CLPV	Methylene chloride	1.9UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-07-15-0106	N	1/11/2006	CLPV	Methylene chloride	1.6UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-07-35-0106	N	1/11/2006	CLPV	Methylene chloride	1.6UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
MY2BJ6	**MW-EB-02-0106**	**EB**	**1/11/2006**	**CLPI**	**Potassium**	**134 J**	**5**	**µg/L**	
MY2BJ6	RMW-07-35-0106	N	1/11/2006	CLPI	Potassium	5000U	5	µg/L	EB<>RL
Y2BJ6	**MW-EB-03-0106**	**EB**	**1/12/2006**	**SVOCS-DX+**	**bis(2-Ethylhexyl)phthalate**	**0.48**	**0.48**	**µg/L**	
Y2BJ6	BMW-01-0106	N	1/12/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.4UJ	0.4	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BJ6	RMW-04-15-0106	N	1/12/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.43UJ	0.43	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BJ6	RMW-13-35-0106	N	1/12/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.26UJ	0.26	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BJ6	**MW-EB-03-0106**	**EB**	**1/12/2006**	**SVOCS-DX+**	**Carbazole**	**0.13**	**0.13**	**µg/L**	
Y2BJ6	BMW-01-0106	N	1/12/2006	SVOCS-DX+	Carbazole	0.14U	0.14	µg/L	EB<>RL
Y2BJ6	RMW-04-15-0106	N	1/12/2006	SVOCS-DX+	Carbazole	0.13U	0.13	µg/L	EB<>RL
Y2BJ6	RMW-13-35-0106	N	1/12/2006	SVOCS-DX+	Carbazole	0.12U	0.12	µg/L	EB<>RL
Y2BJ4	**MW-EB-03-0106**	**EB**	**1/12/2006**	**CLPV**	**Methylene chloride**	**1.3**	**0.5**	**µg/L**	
Y2BJ4	BMW-01-0106	N	1/12/2006	CLPV	Methylene chloride	0.89UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-04-15-0106	N	1/12/2006	CLPV	Methylene chloride	0.98UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-13-35-0106	N	1/12/2006	CLPV	Methylene chloride	1.3UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
MY2BJ6	**MW-EB-03-0106**	**EB**	**1/12/2006**	**CLPI**	**Potassium**	**128 J**	**5**	**µg/L**	
MY2BJ6	RMW-04-15-0106	N	1/12/2006	CLPI	Potassium	5000U	5	µg/L	EB<>RL
Y2BJ4	**MW-EB-04-0106**	**EB**	**1/13/2006**	**CLPV**	**Acetone**	**4.9 J**	**5**	**µg/L**	
Y2BJ4	BMW-08-0106	N	1/13/2006	CLPV	Acetone	7.2U	5	µg/L	EB<>RL, TB<>RL
Y2BJ4	BPZ-01-0106	N	1/13/2006	CLPV	Acetone	7.4U	5	µg/L	EB<>RL, TB<>RL
Y2BJ4	RMW-14-50-0106	N	1/13/2006	CLPV	Acetone	5U	5	µg/L	EB<>RL, TB<>RL

TABLE 3-1
Equipment Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Fourth Quarter 2005 (January)									
Y2BJ6	**MW-EB-04-0106**	**EB**	**1/13/2006**	**SVOCS-DX+**	**bis(2-Ethylhexyl)phthalate**	**0.36**	**0.36**	**µg/L**	
Y2BJ6	BMW-07-0106	N	1/13/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.27UJ	0.27	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BJ6	BMW-08-0106	N	1/13/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.24UJ	0.24	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BJ6	BPZ-01-0106	N	1/13/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.17UJ	0.17	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BJ6	RMW-14-50-0106	N	1/13/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.24UJ	0.24	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BJ4	**MW-EB-04-0106**	**EB**	**1/13/2006**	**CLPV**	**Methylene chloride**	**0.8**	**0.5**	**µg/L**	
Y2BJ4	BMW-07-0106	N	1/13/2006	CLPV	Methylene chloride	0.75UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	BMW-08-0106	N	1/13/2006	CLPV	Methylene chloride	0.94UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	BPZ-01-0106	N	1/13/2006	CLPV	Methylene chloride	1.1UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-14-50-0106	N	1/13/2006	CLPV	Methylene chloride	1.7UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	**MW-EB-04-0106**	**EB**	**1/13/2006**	**CLPV**	**Toluene**	**0.15 J**	**0.5**	**µg/L**	
Y2BJ4	BPZ-01-0106	N	1/13/2006	CLPV	Toluene	0.5U	0.5	µg/L	EB<>RL
Y2BM5	**MW-EB-05-0106**	**EB**	**1/17/2006**	**CLPV**	**Acetone**	**7.1**	**5**	**µg/L**	
Y2BM5	BMW-03-0106	N	1/17/2006	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y2BM5	RMW-05-15-0106	N	1/17/2006	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y2BM5	RMW-10-15-0106	N	1/17/2006	CLPV	Acetone	10U	5	µg/L	EB<>RL
Y2BM5	MW-90-0106	FD	1/17/2006	CLPV	Acetone	10U	5	µg/L	EB<>RL
Y2BM6	**MW-EB-05-0106**	**EB**	**1/17/2006**	**SVOCS-DX+**	**bis(2-Ethylhexyl)phthalate**	**0.13**	**0.13**	**µg/L**	
Y2BM6	BMW-03-0106	N	1/17/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.1UJ	0.09	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM6	RMW-05-15-0106	N	1/17/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.18UJ	0.18	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM6	RMW-10-15-0106	N	1/17/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.18UJ	0.18	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM6	MW-90-0106	FD	1/17/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.17UJ	0.17	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM5	**MW-EB-05-0106**	**EB**	**1/17/2006**	**CLPV**	**Methylene chloride**	**1.3**	**0.5**	**µg/L**	
Y2BM5	BMW-03-0106	N	1/17/2006	CLPV	Methylene chloride	1.3UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL
Y2BM5	RMW-05-15-0106	N	1/17/2006	CLPV	Methylene chloride	1.2UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL
Y2BM5	RMW-10-15-0106	N	1/17/2006	CLPV	Methylene chloride	1.8UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM5	MW-90-0106	FD	1/17/2006	CLPV	Methylene chloride	6.1UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL
Y2BM5	**MW-EB-06-0106**	**EB**	**1/18/2006**	**CLPV**	**Acetone**	**3.1 J**	**5**	**µg/L**	
Y2BM5	RMW-09-35-0106	N	1/18/2006	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y2BM6	**MW-EB-06-0106**	**EB**	**1/18/2006**	**SVOCS-DX+**	**bis(2-Ethylhexyl)phthalate**	**0.1**	**0.1**	**µg/L**	
Y2BM6	RMW-09-15-0106	N	1/18/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.2UJ	0.2	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM6	RMW-09-35-0106	N	1/18/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.13UJ	0.13	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM5	**MW-EB-06-0106**	**EB**	**1/18/2006**	**CLPV**	**Methylene chloride**	**2**	**0.5**	**µg/L**	
Y2BM5	RMW-09-15-0106	N	1/18/2006	CLPV	Methylene chloride	1.7UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL
Y2BM5	RMW-09-35-0106	N	1/18/2006	CLPV	Methylene chloride	1.6UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL
Y2BM5	RMW-10-35-0106	N	1/18/2006	CLPV	Methylene chloride	0.95UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL

TABLE 3-1
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AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Fourth Quarter 2005 (January)									
Y2BM5	**MW-EB-07-0106**	**EB**	**1/19/2006**	**CLPV**	**Acetone**	**4.6 J**	**5**	**µg/L**	
Y2BM5	RMW-01-35-0106	N	1/19/2006	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y2BM5	RMW-08-35-0106	N	1/19/2006	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y2BM5	MW-92-0106	FD	1/19/2006	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y2BM6	**MW-EB-07-0106**	**EB**	**1/19/2006**	**SVOCS-DX+**	**bis(2-Ethylhexyl)phthalate**	**0.2**	**0.2**	**µg/L**	
Y2BM6	RMW-01-17-0106	N	1/19/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.1UJ	0.07	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM6	RMW-01-35-0106	N	1/19/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.11UJ	0.11	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM6	RMW-08-15-0106	N	1/19/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.1UJ	0.07	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM6	RMW-08-35-0106	N	1/19/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.1UJ	0.1	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM6	MW-92-0106	FD	1/19/2006	SVOCS-DX+	bis(2-Ethylhexyl)phthalate	0.1UJ	0.07	µg/L	EB<>RL, IC%RSD, LB<>RL
MY2BN3	**MW-EB-07-0106**	**EB**	**1/19/2006**	**CLPI**	**Lead**	**0.19 J**	**1**	**µg/L**	
MY2BN3	RMW-01-35-0106	N	1/19/2006	CLPI	Lead	1U	1	µg/L	EB<>RL
MY2BN3	RMW-08-15-0106	N	1/19/2006	CLPI	Lead	1U	1	µg/L	EB<>RL
MY2BN3	MW-92-0106	FD	1/19/2006	CLPI	Lead	1U	1	µg/L	EB<>RL
Y2BM5	**MW-EB-07-0106**	**EB**	**1/19/2006**	**CLPV**	**Methylene chloride**	**1.1**	**0.5**	**µg/L**	
Y2BM5	RMW-01-17-0106	N	1/19/2006	CLPV	Methylene chloride	1.1UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL
Y2BM5	RMW-01-35-0106	N	1/19/2006	CLPV	Methylene chloride	3.3UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL
Y2BM5	RMW-08-35-0106	N	1/19/2006	CLPV	Methylene chloride	0.5UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL
Y2BM5	MW-92-0106	FD	1/19/2006	CLPV	Methylene chloride	1.2UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, Sur<LCL
Y2BM5	**MW-EB-07-0106**	**EB**	**1/19/2006**	**CLPV**	**Toluene**	**0.18 J**	**0.5**	**µg/L**	
Y2BM5	RMW-08-15-0106	N	1/19/2006	CLPV	Toluene	0.5UJ	0.5	µg/L	EB<>RL, Sur<LCL
Y2BM5	RMW-08-35-0106	N	1/19/2006	CLPV	Toluene	0.5UJ	0.5	µg/L	EB<>RL, Sur<LCL
Y2BM5	MW-92-0106	FD	1/19/2006	CLPV	Toluene	0.5U	0.5	µg/L	EB<>RL
Y2BQ4	**MW-EB-08-0106**	**EB**	**1/20/2006**	**CLPV**	**Acetone**	**4.4 J**	**5**	**µg/L**	
Y2BQ4	RMW-03-15-0106	N	1/20/2006	CLPV	Acetone	6.7U	5	µg/L	EB<>RL, TB<>RL
Y2BQ4	RMW-12-32-0106	N	1/20/2006	CLPV	Acetone	400U	400	µg/L	EB<>RL, TB<>RL
Y2BQ4	RMW-12-51-0106	N	1/20/2006	CLPV	Acetone	5UJ	5	µg/L	EB<>RL, TB<>RL, Sur>UCL
Y2BQ4	MW-88-0106	FD	1/20/2006	CLPV	Acetone	5U	5	µg/L	EB<>RL, TB<>RL
Y2BQ4	**MW-EB-08-0106**	**EB**	**1/20/2006**	**CLPS**	**Acetophenone**	**1 J**	**1**	**µg/L**	
Y2BQ4	RMW-12-32-0106	N	1/20/2006	CLPS	Acetophenone	1.1U	1.1	µg/L	EB<>RL
Y2BQ4	**MW-EB-08-0106**	**EB**	**1/20/2006**	**CLPV**	**Methylene chloride**	**5.3**	**0.5**	**µg/L**	
Y2BQ4	RMW-03-15-0106	N	1/20/2006	CLPV	Methylene chloride	2.5UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	RMW-12-32-0106	N	1/20/2006	CLPV	Methylene chloride	2.7UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	RMW-12-51-0106	N	1/20/2006	CLPV	Methylene chloride	1.5UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	MW-88-0106	FD	1/20/2006	CLPV	Methylene chloride	2UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL, TB<>RL

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AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Fourth Quarter 2005 (January)									
MY2BN3	**MW-EB-08-0106**	**EB**	**1/20/2006**	**CLPI**	**Zinc**	**2.2**	**2**	**µg/L**	
MY2BN3	RMW-12-51-0106	N	1/20/2006	CLPI	Zinc	21.6J+	2	µg/L	EB<>RL, FD>RPD, SerialDilution>UCL
MY2BN3	MW-88-0106	FD	1/20/2006	CLPI	Zinc	15.1J+	2	µg/L	EB<>RL, FD>RPD, SerialDilution>UCL
Y2BQ4	**MW-EB-09-0106**	**EB**	**1/23/2006**	**CLPV**	**Acetone**	**4.7 J**	**5**	**µg/L**	
Y2BQ4	RMW-02-13-0106	N	1/23/2006	CLPV	Acetone	5000U	5000	µg/L	EB<>RL
Y2BQ4	RMW-02-50-0106	N	1/23/2006	CLPV	Acetone	5U	5	µg/L	EB<>RL
Y2BQ4	**MW-EB-09-0106**	**EB**	**1/23/2006**	**CLPV**	**Methylene chloride**	**1**	**0.5**	**µg/L**	
Y2BQ4	MW-12-0106	N	1/23/2006	CLPV	Methylene chloride	13UJ	5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	RMW-02-13-0106	N	1/23/2006	CLPV	Methylene chloride	14U	10	µg/L	EB<>RL, LB<>RL, TB<>RL
Y2BQ4	RMW-02-32-0106	N	1/23/2006	CLPV	Methylene chloride	41UJ	5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	RMW-02-50-0106	N	1/23/2006	CLPV	Methylene chloride	1.1UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	**MW-EB-09-0106**	**EB**	**1/23/2006**	**CLPV**	**Trichloroethene**	**0.5 J**	**0.5**	**µg/L**	
Y2BQ4	RMW-02-13-0106	N	1/23/2006	CLPV	Trichloroethene	10U	10	µg/L	EB<>RL
Y2BQ4	RMW-02-32-0106	N	1/23/2006	CLPV	Trichloroethene	6.7U	5	µg/L	EB<>RL
Y2BQ4	RMW-02-50-0106	N	1/23/2006	CLPV	Trichloroethene	0.5U	0.5	µg/L	EB<>RL, LB<>RL
Groundwater, First Quarter 2006 (March)									
Y2FJ7	**MW-EB-02-0306**	**EB**	**3/30/2006**	**TVOL-DX+**	**Methylene chloride**	**0.44 J**	**0.5**	**µg/L**	
Y2FJ7	BMW-07-0306	N	3/30/2006	TVOL-DX+	Methylene chloride	0.5U	0.5	µg/L	EB<>RL
Y2FJ7	RMW-05-15-0306	N	3/30/2006	TVOL-DX+	Methylene chloride	0.5U	0.5	µg/L	EB<>RL
Y2FJ7	RMW-13-35-0306	N	3/30/2006	TVOL-DX+	Methylene chloride	0.52U	0.5	µg/L	EB<>RL
Y2FJ7	RMW-14-50-0306	N	3/30/2006	TVOL-DX+	Methylene chloride	0.5U	0.5	µg/L	EB<>RL
Y2FJ7	**MW-EB-03-0306**	**EB**	**3/31/2006**	**TVOL-DX+**	**Methylene chloride**	**0.85**	**0.5**	**µg/L**	
Y2FJ7	BMW-08-0306	N	3/31/2006	TVOL-DX+	Methylene chloride	0.66UJ	0.5	µg/L	EB<>RL, Sur>UCL, TB<>RL
Y2FJ7	BPZ-01-0306	N	3/31/2006	TVOL-DX+	Methylene chloride	0.6U	0.5	µg/L	EB<>RL, TB<>RL
Y2FJ7	RMW-06-15-0306	N	3/31/2006	TVOL-DX+	Methylene chloride	0.58U	0.5	µg/L	EB<>RL, TB<>RL
Y2FN0	**MW-EB-06-0306**	**EB**	**4/5/2006**	**CLPP**	**gamma-BHC**	**0.0089**	**0.01**	**µg/L**	
Y2FN0	RMW-99-17-0306	FD	4/5/2006	CLPP	gamma-BHC	0.01U	0.01	µg/L	EB<>RL
Groundwater, Second Quarter 2006 (June)									
06171A	**MW-EB-02-0606**	**EB**	**6/20/2006**	**5242**	**Acetone**	**7**	**4**	**µg/L**	
06171A	RMW-03-15-0606	N	6/20/2006	5242	Acetone	11U	4	µg/L	EB<>RL
06171A	**MW-EB-03-0606**	**EB**	**6/21/2006**	**5242**	**Acetone**	**7.4**	**4**	**µg/L**	
06171A	BPZ-01-0606	N	6/21/2006	5242	Acetone	8U	8	µg/L	EB<>RL
06171A	**MW-EB-04-0606**	**EB**	**6/22/2006**	**5242**	**Acetone**	**8**	**4**	**µg/L**	
06171A	BMW-03-0606	N	6/22/2006	5242	Acetone	4U	4	µg/L	EB<>RL
06171A	RMW-09-15-0606	N	6/22/2006	5242	Acetone	38U	4	µg/L	EB<>RL
06178A	**MW-EB-05-0606**	**EB**	**6/26/2006**	**5242**	**Acetone**	**16**	**4**	**µg/L**	
06178A	RMW-10-15-0606	N	6/26/2006	5242	Acetone	7U	4	µg/L	EB<>RL
06178A	RMW-10-35-0606	N	6/26/2006	5242	Acetone	47U	40	µg/L	EB<>RL

TABLE 3-1
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AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Second Quarter 2006 (June)									
06178A	**MW-EB-06-0606**	**EB**	**6/27/2006**	**5242**	**Acetone**	**13**	**4**	**µg/L**	
06178A	RMW-92-15-0606	FD	6/27/2006	5242	Acetone	11U	4	µg/L	EB<>RL
06178A	**MW-EB-07-0606**	**EB**	**6/28/2006**	**5242**	**Acetone**	**13**	**4**	**µg/L**	
06178A	RMW-12-32-0606	N	6/28/2006	5242	Acetone	53UJ	8	µg/L	CCV<>CL, EB<>RL
06178A	**MW-EB-07-0606**	**EB**	**6/28/2006**	**5242**	**cis-1,2-Dichloroethene**	**0.5**	**0.5**	**µg/L**	
06178A	RMW-12-51-0606	N	6/28/2006	5242	cis-1,2-Dichloroethene	0.5U	0.5	µg/L	EB<>RL
06178A	RMW-88-51-0606	FD	6/28/2006	5242	cis-1,2-Dichloroethene	0.5U	0.5	µg/L	EB<>RL
06178A	**MW-EB-07-0606**	**EB**	**6/28/2006**	**5242**	**Toluene**	**0.2**	**0.5**	**µg/L**	
06178A	RMW-12-51-0606	N	6/28/2006	5242	Toluene	0.5U	0.5	µg/L	EB<>RL
06178A	RMW-88-51-0606	FD	6/28/2006	5242	Toluene	0.5U	0.5	µg/L	EB<>RL
Groundwater, Third Quarter 2006 (September)									
Y2W62	**MW-EB-01-0906**	**EB**	**9/27/2006**	**CLPP**	**4,4'-DDD**	**0.008 J**	**0.1**	**µg/L**	
Y2W62	RMW-08-35-0906	N	9/27/2006	CLPP	4,4'-DDD	0.1UJ	0.1	µg/L	EB<>RL, LB<>RL, Sur<LCL
MY2W56	**MW-EB-01-0906**	**EB**	**9/27/2006**	**CLPI**	**Chromium**	**1.6**	**2**	**µg/L**	
MY2W56	RMW-08-35-0906	N	9/27/2006	CLPI	Chromium	2UJ	2	µg/L	CCB<RL, EB<>RL, LB<>RL
Y2W62	**MW-EB-01-0906**	**EB**	**9/27/2006**	**CLPS**	**Di-n-butyl phthalate**	**3.1**	**5**	**µg/L**	
Y2W62	BPZ-01-0906	N	9/27/2006	CLPS	Di-n-butyl phthalate	25U	25	µg/L	EB<>RL, LB<>RL
Y2W62	RMW-08-35-0906	N	9/27/2006	CLPS	Di-n-butyl phthalate	5U	5	µg/L	EB<>RL, LB<>RL
Y2W62	RMW-12-51-0906	N	9/27/2006	CLPS	Di-n-butyl phthalate	5U	5	µg/L	EB<>RL, LB<>RL
MY2Z54	**MW-EB-01-0906**	**EB**	**9/27/2006**	**CLPI**	**Iron**	**15.7**	**0.1**	**µg/L**	
MY2Z54	RMW-08-35-0906	N	9/27/2006	CLPI	Iron	100U	0.1	µg/L	EB<>RL
MY2Z54	RMW-12-32-0906	N	9/27/2006	CLPI	Iron	100U	0.1	µg/L	EB<>RL
MY2W56	**MW-EB-01-0906**	**EB**	**9/27/2006**	**CLPI**	**Lead**	**0.28**	**1**	**µg/L**	
MY2W56	RMW-08-35-0906	N	9/27/2006	CLPI	Lead	1U	1	µg/L	EB<>RL
MY2W56	RMW-12-51-0906	N	9/27/2006	CLPI	Lead	1U	1	µg/L	EB<>RL
MY2Z54	**MW-EB-01-0906**	**EB**	**9/27/2006**	**CLPI**	**Magnesium**	**448**	**5**	**µg/L**	
MY2Z54	RMW-12-32-0906	N	9/27/2006	CLPI	Magnesium	5000U	5	µg/L	EB<>RL
Y2W62	**MW-EB-01-0906**	**EB**	**9/27/2006**	**SVOCS**	**Naphthalene**	**0.089**	**0.1**	**µg/L**	
Y2W62	BPZ-01-0906	N	9/27/2006	SVOCS	Naphthalene	0.1UJ	0.1	µg/L	EB<>RL, IS<LCL, LB<>RL, Sur<LCL
MY2Z54	**MW-EB-01-0906**	**EB**	**9/27/2006**	**CLPI**	**Potassium**	**277**	**5**	**µg/L**	
MY2Z54	RMW-08-35-0906	N	9/27/2006	CLPI	Potassium	5000U	5	µg/L	EB<>RL
MY2Z54	RMW-12-51-0906	N	9/27/2006	CLPI	Potassium	5000U	5	µg/L	EB<>RL
Y2W62	**MW-EB-01-0906**	**EB**	**9/27/2006**	**TVOL-DX+**	**Toluene**	**0.26 J**	**0.5**	**µg/L**	
Y2W62	RMW-08-35-0906	N	9/27/2006	TVOL-DX+	Toluene	0.5U	0.5	µg/L	EB<>RL
Y2W62	RMW-12-51-0906	N	9/27/2006	TVOL-DX+	Toluene	0.5U	0.5	µg/L	EB<>RL, LB<>RL
2006 Residential Soil (October)									
Y2WD9	**SS-EB-01-1006**	**EB**	**10/18/2006**	**CLPP**	**4,4'-DDE**	**0.033 J**	**0.1**	**µg/L**	
Y2WD9	326SSb-3-1006	N	10/18/2006	CLPP	4,4'-DDE	3.3UJ	4.2	µg/kg	CF>%D, EB<>RL
Y2WD9	356SSb-3-1006	N	10/18/2006	CLPP	4,4'-DDE	3.3UJ	4.1	µg/kg	CF>%D, EB<>RL

TABLE 3-1
Equipment Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
2006 Residential Soil (October)									
Y2WD9	**SS-EB-01-1006**	**EB**	**10/18/2006**	**CLPP**	**Dieldrin**	**0.012 J**	**0.1**	**µg/L**	
Y2WD9	1428SSa-1-1006	N	10/18/2006	CLPP	Dieldrin	3.3UJ	3.6	µg/kg	CF>%D, EB<>RL, Sur>UCL
Y2WD9	326SSb-3-1006	N	10/18/2006	CLPP	Dieldrin	3.3UJ	4.2	µg/kg	CF>%D, EB<>RL
Y2WD9	356SSb-3-1006	N	10/18/2006	CLPP	Dieldrin	3.3UJ	4.1	µg/kg	CF>%D, EB<>RL

Notes:

Field Duplicate Samples are listed below their corresponding primary samples

EB	Equipment Blank
N	Regular Sample
FD	Field Duplicate
5242	Volatile Organics, EPA Method 524.2
CLPI	Inorganics, CLP-SOW
CLPP	Organochlorine Pesticides/PCBs, CLP-SOW
CLPS	Semivolatile Organics, CLP-SOW
CLPV	Volatile Organics, CLP-SOW
SVOCS	Semivolatile Organics (SIM), CLP-SOW
SVOCS-DX	1,4-Dioxane (SIM), CLP-SOW
SVOCS-DX+	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW
TVOL-DX+	Volatile Organics/1,4-Dioxane, CLP-SOW
J	estimated value
J+	estimated value, possible high bias
U	not detected at or above the reporting limit
UJ	not detected at or above the reporting limit. The reporting limit is an estimate.
µg/L	micrograms per liter
µg/kg	micrograms per kilogram
CCV<>CL	Continuing calibration verification is outside control limit
EB<>RL	Equipment blank concentration exceeds criteria
IC%RSD	Initial calibration relative standard deviation exceeded
IS<LCL	Internal standard response less than lower control limit
LB<>RL	Laboratory blank concentration exceeds criteria
MS<LCL	Matrix spike recovery less than lower limit
MSRPD	Matrix spike relative percent difference criteria exceedance
SB<>RL	Source blank concentration exceeds control limit
SD<LCL	Matrix spike duplicate recovery criteria less than lower limit
Sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB<>RL	Trip blank concentration exceeds control limit

TABLE 3-2
Trip Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, First Quarter 2005 (March)									
Y1S16	**MW-TB-05-0305**	**TB**	**3/15/2005**	**CLPV**	**Carbon disulfide**	**0.6**	**0.5**	**µg/L**	
Y1S16	BPZ-01-0305	N	3/23/2005	CLPV	Carbon disulfide	0.6 U	0.5	µg/L	TB<>RL
Groundwater, Third Quarter 2005 (September)									
Y23M1	**MW-TB-01-0905**	**TB**	**9/28/2005**	**CLPV**	**Acetone**	**5**	**5**	**µg/L**	
Y23M1	BMW-01-0905	N	9/28/2005	CLPV	Acetone	5 U	5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23M1	BMW-03-0905	N	9/29/2005	CLPV	Acetone	5 U	5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23M1	RMW-04-15-0905	N	9/28/2005	CLPV	Acetone	5 U	5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23M1	RMW-05-15-0905	N	9/29/2005	CLPV	Acetone	5 U	5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23M1	**MW-TB-02-0905**	**TB**	**9/29/2005**	**CLPV**	**Chloromethane**	**1.4**	**0.5**	**µg/L**	
Y23M1	RMW-10-35-0905	N	9/29/2005	CLPV	Chloromethane	0.5 U	0.5	µg/L	EB<>RL, TB<>RL
Y23N7	**MW-TB-03-0905**	**TB**	**10/3/2005**	**CLPV**	**Acetone**	**1.2**	**5**	**µg/L**	
Y23N7	RMW-06-15-0905	N	10/3/2005	CLPV	Acetone	5 U	5	µg/L	TB<>RL
Y23N7	RMW-07-15-0905	N	10/3/2005	CLPV	Acetone	5 U	5	µg/L	TB<>RL
Y23N7	RMW-07-35-0905	N	10/3/2005	CLPV	Acetone	5 U	5	µg/L	EB<>RL, TB<>RL
Y23N7	**MW-TB-03-0905**	**TB**	**10/3/2005**	**CLPV**	**Chloromethane**	**1.4**	**0.5**	**µg/L**	
Y23N7	RMW-06-15-0905	N	10/3/2005	CLPV	Chloromethane	1.3 UJ	0.5	µg/L	LB<>RL, Sur<LCL, TB<>RL
Y23N7	RMW-07-35-0905	N	10/3/2005	CLPV	Chloromethane	1.2 U	0.5	µg/L	LB<>RL, TB<>RL
Y23N7	**MW-TB-04-0905**	**TB**	**10/4/2005**	**CLPV**	**Chloromethane**	**1.2**	**0.5**	**µg/L**	
Y23N7	BMW-06-0905	N	10/5/2005	CLPV	Chloromethane	1.3 U	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23N7	BMW-07-0905	N	10/4/2005	CLPV	Chloromethane	1.2 U	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23N7	RMW-14-50-0905	N	10/4/2005	CLPV	Chloromethane	1.4 UJ	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL, Sur<LCL
Y23N7	**MW-TB-05-0905**	**TB**	**10/5/2005**	**CLPV**	**Chloromethane**	**1.2**	**0.5**	**µg/L**	
Y23N7	BPZ-01-0905	N	10/5/2005	CLPV	Chloromethane	1 U	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23N7	RMW-13-35-0905	N	10/5/2005	CLPV	Chloromethane	1 U	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23N7	**MW-TB-05-0905**	**TB**	**10/5/2005**	**CLPV**	**Methylene chloride**	**0.2**	**0.5**	**µg/L**	
Y23N7	BPZ-01-0905	N	10/5/2005	CLPV	Methylene chloride	0.5 U	0.5	µg/L	TB<>RL
Y23N7	RMW-13-35-0905	N	10/5/2005	CLPV	Methylene chloride	0.5 U	0.5	µg/L	TB<>RL
Y23R4	**MW-TB-07-0905**	**TB**	**10/6/2005**	**CLPV**	**Chloromethane**	**1.6**	**0.5**	**µg/L**	
Y23R4	RMW-01-17-0905	N	10/6/2005	CLPV	Chloromethane	1.6 U	0.5	µg/L	TB<>RL
Y23R4	RMW-01-35-0905	N	10/6/2005	CLPV	Chloromethane	1.6 UJ	0.5	µg/L	LB<>RL, Sur>UCL, TB<>RL
Y23R4	**MW-TB-08-0905**	**TB**	**10/10/2005**	**CLPV**	**Acetone**	**6.9**	**5**	**µg/L**	
Y23R4	RMW-08-15-0905	N	10/10/2005	CLPV	Acetone	5 U	5	µg/L	TB<>RL
Y23R4	**MW-TB-08-0905**	**TB**	**10/10/2005**	**CLPV**	**Chloromethane**	**1.4**	**0.5**	**µg/L**	
Y23R4	RMW-08-15-0905	N	10/10/2005	CLPV	Chloromethane	1.1 UJ	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL, Sur>UCL
Y23R4	RMW-08-35-0905	N	10/10/2005	CLPV	Chloromethane	1.1 U	0.5	µg/L	EB<>RL, LB<>RL, TB<>RL
Y23R4	RMW-12-32-0905	N	10/10/2005	CLPV	Chloromethane	1.6 U	0.5	µg/L	LB<>RL, TB<>RL
Y23R4	RMW-12-51-0905	N	10/10/2005	CLPV	Chloromethane	1.4 U	0.5	µg/L	TB<>RL
Y23R4	**MW-TB-08-0905**	**TB**	**10/10/2005**	**CLPV**	**Methylene chloride**	**2.4**	**0.5**	**µg/L**	
Y23R4	MW-88-51-0905	FD	10/10/2005	CLPV	Methylene chloride	2.1 UJ	0.5	µg/L	CCV<>CL, IC%RSD, TB<>RL

TABLE 3-2
Trip Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Fourth Quarter 2005 (January)									
Y2BJ4	**MW-TB-01-0106**	**TB**	**1/10/2006**	**CLPV**	**Methylene chloride**	**2.2**	**0.5**	**µg/L**	
Y2BJ4	BMW-06-0106	N	1/10/2006	CLPV	Methylene chloride	2.3 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-06-15-0106	N	1/11/2006	CLPV	Methylene chloride	1.9 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-07-15-0106	N	1/11/2006	CLPV	Methylene chloride	1.6 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-07-35-0106	N	1/11/2006	CLPV	Methylene chloride	1.6 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-11-35-0106	N	1/10/2006	CLPV	Methylene chloride	2 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	**MW-TB-02-0106**	**TB**	**1/12/2006**	**CLPV**	**Methylene chloride**	**1.1**	**0.5**	**µg/L**	
Y2BJ4	BMW-01-0106	N	1/12/2006	CLPV	Methylene chloride	0.89 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-04-15-0106	N	1/12/2006	CLPV	Methylene chloride	0.98 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-13-35-0106	N	1/12/2006	CLPV	Methylene chloride	1.3 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	**MW-TB-03-0106**	**TB**	**1/13/2006**	**CLPV**	**Acetone**	**3.1 J**	**5**	**µg/L**	
Y2BJ4	BMW-08-0106	N	1/13/2006	CLPV	Acetone	7.2 U	5	µg/L	EB<>RL, TB<>RL
Y2BJ4	BPZ-01-0106	N	1/13/2006	CLPV	Acetone	7.4 U	5	µg/L	EB<>RL, TB<>RL
Y2BJ4	RMW-14-50-0106	N	1/13/2006	CLPV	Acetone	5 U	5	µg/L	EB<>RL, TB<>RL
Y2BJ4	**MW-TB-03-0106**	**TB**	**1/13/2006**	**CLPV**	**Carbon disulfide**	**2.1**	**0.5**	**µg/L**	
Y2BJ4	BMW-08-0106	N	1/13/2006	CLPV	Carbon disulfide	0.5 U	0.5	µg/L	TB<>RL
Y2BJ4	**MW-TB-03-0106**	**TB**	**1/13/2006**	**CLPV**	**Methylene chloride**	**0.94**	**0.5**	**µg/L**	
Y2BJ4	BMW-07-0106	N	1/13/2006	CLPV	Methylene chloride	0.75 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	BMW-08-0106	N	1/13/2006	CLPV	Methylene chloride	0.94 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	BPZ-01-0106	N	1/13/2006	CLPV	Methylene chloride	1.1 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BJ4	RMW-14-50-0106	N	1/13/2006	CLPV	Methylene chloride	1.7 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BM5	**MW-TB-05-0106**	**TB**	**1/19/2006**	**CLPV**	**Chloromethane**	**0.57**	**0.5**	**µg/L**	
Y2BM5	RMW-01-17-0106	N	1/19/2006	CLPV	Chloromethane	0.5 U	0.5	µg/L	LB<>RL, TB<>RL
Y2BM5	RMW-01-35-0106	N	1/19/2006	CLPV	Chloromethane	0.5 U	0.5	µg/L	TB<>RL
Y2BQ4	**MW-TB-06-0106**	**TB**	**1/20/2006**	**CLPV**	**Acetone**	**4.7 J**	**5**	**µg/L**	
Y2BQ4	RMW-03-15-0106	N	1/20/2006	CLPV	Acetone	6.7 U	5	µg/L	EB<>RL, TB<>RL
Y2BQ4	RMW-12-32-0106	N	1/20/2006	CLPV	Acetone	400 U	400	µg/L	EB<>RL, TB<>RL
Y2BQ4	RMW-12-51-0106	N	1/20/2006	CLPV	Acetone	5 UJ	5	µg/L	EB<>RL, TB<>RL, Sur>UCL
Y2BQ4	MW-88-0106	FD	1/20/2006	CLPV	Acetone	5 U	5	µg/L	EB<>RL, TB<>RL
Y2BQ4	**MW-TB-06-0106**	**TB**	**1/20/2006**	**CLPV**	**Carbon disulfide**	**2.6**	**0.5**	**µg/L**	
Y2BQ4	RMW-12-32-0106	N	1/20/2006	CLPV	Carbon disulfide	0.9 U	0.5	µg/L	TB<>RL

TABLE 3-2
Trip Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Fourth Quarter 2005 (January)									
Y2BQ4	**MW-TB-06-0106**	**TB**	**1/20/2006**	**CLPV**	**Chloromethane**	**0.01 J**	**0.5**	**µg/L**	
Y2BQ4	RMW-12-32-0106	N	1/20/2006	CLPV	Chloromethane	0.58 U	0.5	µg/L	TB<>RL
Y2BQ4	RMW-12-51-0106	N	1/20/2006	CLPV	Chloromethane	0.68 U	0.5	µg/L	TB<>RL
Y2BQ4	MW-88-0106	FD	1/20/2006	CLPV	Chloromethane	0.61 U	0.5	µg/L	TB<>RL
Y2BQ4	**MW-TB-06-0106**	**TB**	**1/20/2006**	**CLPV**	**Ethylbenzene**	**0.09 J**	**0.5**	**µg/L**	
Y2BQ4	RMW-12-51-0106	N	1/20/2006	CLPV	Ethylbenzene	0.5 U	0.5	µg/L	TB<>RL
Y2BQ4	**MW-TB-06-0106**	**TB**	**1/20/2006**	**CLPV**	**Methylene chloride**	**1.2**	**0.5**	**µg/L**	
Y2BQ4	RMW-03-15-0106	N	1/20/2006	CLPV	Methylene chloride	2.5 UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	RMW-12-32-0106	N	1/20/2006	CLPV	Methylene chloride	2.7 UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	RMW-12-51-0106	N	1/20/2006	CLPV	Methylene chloride	1.5 UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	MW-88-0106	FD	1/20/2006	CLPV	Methylene chloride	2 UJ	0.5	µg/L	CCV<>CL, EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	**MW-TB-06-0106**	**TB**	**1/20/2006**	**CLPV**	**Xylenes, total**	**0.38 J**	**0.5**	**µg/L**	
Y2BQ4	RMW-12-51-0106	N	1/20/2006	CLPV	Xylenes, total	0.5 U	0.5	µg/L	TB<>RL
Y2BQ4	**MW-TB-07-0106**	**TB**	**1/23/2006**	**CLPV**	**Carbon disulfide**	**1.1**	**0.5**	**µg/L**	
Y2BQ4	MW-12-0106	N	1/23/2006	CLPV	Carbon disulfide	5 U	5	µg/L	TB<>RL
Y2BQ4	**MW-TB-07-0106**	**TB**	**1/23/2006**	**CLPV**	**Methylene chloride**	**1.3**	**0.5**	**µg/L**	
Y2BQ4	MW-12-0106	N	1/23/2006	CLPV	Methylene chloride	13 UJ	5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	RMW-02-13-0106	N	1/23/2006	CLPV	Methylene chloride	14 U	10	µg/L	EB<>RL, LB<>RL, TB<>RL
Y2BQ4	RMW-02-32-0106	N	1/23/2006	CLPV	Methylene chloride	41 UJ	5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Y2BQ4	RMW-02-50-0106	N	1/23/2006	CLPV	Methylene chloride	1.1 UJ	0.5	µg/L	EB<>RL, IC%RSD, LB<>RL, TB<>RL
Groundwater, First Quarter 2006 (March)									
Y2FJ7	**MW-TB-02-0306**	**TB**	**3/31/2006**	**TVOL-DX+**	**Carbon disulfide**	**1**	**0.5**	**µg/L**	
Y2FJ7	BPZ-01-0306	N	3/31/2006	TVOL-DX+	Carbon disulfide	1.2 U	0.5	µg/L	TB<>RL
Y2FJ7	**MW-TB-02-0306**	**TB**	**3/31/2006**	**TVOL-DX+**	**Methylene chloride**	**0.68**	**0.5**	**µg/L**	
Y2FJ7	BMW-08-0306	N	3/31/2006	TVOL-DX+	Methylene chloride	0.66 UJ	0.5	µg/L	EB<>RL, Sur>UCL, TB<>RL
Y2FJ7	BPZ-01-0306	N	3/31/2006	TVOL-DX+	Methylene chloride	0.6 U	0.5	µg/L	EB<>RL, TB<>RL
Y2FJ7	RMW-06-15-0306	N	3/31/2006	TVOL-DX+	Methylene chloride	0.58 U	0.5	µg/L	EB<>RL, TB<>RL
Groundwater, Second Quarter 2006 (June)									
06171A	**MW-TB-03-0606**	**TB**	**6/21/2006**	**5242**	**Carbon disulfide**	**2.7**	**0.5**	**µg/L**	
06171A	BPZ-01-0606	N	6/21/2006	5242	Carbon disulfide	1.5 U	1	µg/L	TB<>RL
Groundwater, Third Quarter 2006 (September)									
Y2W27	**MW-TB-02-0906**	**TB**	**9/22/2006**	**TVOL-DX+**	**Acetone**	**1.7**	**5**	**µg/L**	
Y2W27	RMW-07-35-0906	N	9/18/2006	TVOL-DX+	Acetone	5 U	5	µg/L	LB<>RL, SB<>RL, TB<>RL
Y2W27	**MW-TB-02-0906**	**TB**	**9/22/2006**	**TVOL-DX+**	**Chloromethane**	**0.33 J**	**0.5**	**µg/L**	
Y2W27	RMW-07-15-0906	N	9/18/2006	TVOL-DX+	Chloromethane	0.5 U	0.5	µg/L	SB<>RL, TB<>RL

TABLE 3-2
Trip Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Third Quarter 2006 (September)									
Y2W27	**MW-TB-03-0906**	**TB**	**9/22/2006**	**TVOL-DX+**	**Acetone**	**4.4**	**5**	**µg/L**	
Y2W27	BMW-03-0906	N	9/22/2006	TVOL-DX+	Acetone	5.9 U	5	µg/L	LB<>RL, SB<>RL, TB<>RL
Y2W27	RMW-05-15-0906	N	9/22/2006	TVOL-DX+	Acetone	5 UJ	5	µg/L	LB<>RL, SB<>RL, Sur<LCL, TB<>RL
Y2W27	**MW-TB-03-0906**	**TB**	**9/22/2006**	**TVOL-DX+**	**Benzene**	**0.046 J**	**0.5**	**µg/L**	
Y2W27	BMW-01-0906	N	9/22/2006	TVOL-DX+	Benzene	0.5 U	0.5	µg/L	SB<>RL, TB<>RL
Y2W27	**MW-TB-03-0906**	**TB**	**9/22/2006**	**TVOL-DX+**	**Carbon disulfide**	**0.32 J**	**0.5**	**µg/L**	
Y2W27	BMW-01-0906	N	9/22/2006	TVOL-DX+	Carbon disulfide	0.5 U	0.5	µg/L	SB<>RL, TB<>RL
Y2W27	BMW-03-0906	N	9/22/2006	TVOL-DX+	Carbon disulfide	0.5 U	0.5	µg/L	SB<>RL, TB<>RL
Y2W27	**MW-TB-03-0906**	**TB**	**9/22/2006**	**TVOL-DX+**	**Chloromethane**	**0.52**	**0.5**	**µg/L**	
Y2W27	BMW-01-0906	N	9/22/2006	TVOL-DX+	Chloromethane	0.5 U	0.5	µg/L	SB<>RL, TB<>RL
Y2W62	**MW-TB-05-0906**	**TB**	**9/26/2006**	**TVOL-DX+**	**Benzene**	**0.06**	**0.5**	**µg/L**	
Y2W62	BMW-07-0906	N	9/26/2006	TVOL-DX+	Benzene	0.5 U	0.5	µg/L	TB<>RL
Y2W62	RMW-14-50-0906	N	9/25/2006	TVOL-DX+	Benzene	0.5 U	0.5	µg/L	LB<>RL, TB<>RL
Y2W62	**MW-TB-05-0906**	**TB**	**9/26/2006**	**TVOL-DX+**	**Carbon disulfide**	**0.43**	**0.5**	**µg/L**	
Y2W62	BMW-07-0906	N	9/26/2006	TVOL-DX+	Carbon disulfide	0.5 U	0.5	µg/L	LB<>RL, TB<>RL
Y2W62	RMW-14-50-0906	N	9/25/2006	TVOL-DX+	Carbon disulfide	0.5 U	0.5	µg/L	LB<>RL, TB<>RL
Y2W62	**MW-TB-05-0906**	**TB**	**9/26/2006**	**TVOL-DX+**	**Chloromethane**	**0.35**	**0.5**	**µg/L**	
Y2W62	BMW-07-0906	N	9/26/2006	TVOL-DX+	Chloromethane	0.69 U	0.5	µg/L	LB<>RL, TB<>RL
Y2W62	BMW-08-0906	N	9/26/2006	TVOL-DX+	Chloromethane	0.5 UJ	0.5	µg/L	IS<LCL, LB<>RL, Sur<LCL, TB<>RL
Y2W62	**MW-TB-06-0906**	**TB**	**9/27/2006**	**TVOL-DX+**	**Acetone**	**2.6**	**5**	**µg/L**	
Y2W62	RMW-08-35-0906	N	9/27/2006	TVOL-DX+	Acetone	5 U	5	µg/L	LB<>RL, TB<>RL
Y2W62	RMW-12-51-0906	N	9/27/2006	TVOL-DX+	Acetone	5 U	5	µg/L	LB<>RL, TB<>RL
Y2W62	**MW-TB-06-0906**	**TB**	**9/27/2006**	**TVOL-DX+**	**Carbon disulfide**	**0.25 J**	**0.5**	**µg/L**	
Y2W62	RMW-13-35-0906	N	9/26/2006	TVOL-DX+	Carbon disulfide	0.63 U	0.5	µg/L	TB<>RL
Y2W87	**MW-TB-07-0906**	**TB**	**9/28/2006**	**TVOL-DX+**	**Chloromethane**	**0.22**	**0.5**	**µg/L**	
Y2W87	RMW-01-17-0906	N	9/28/2006	TVOL-DX+	Chloromethane	0.5 U	0.5	µg/L	LB<>RL, SB<>RL, TB<>RL
Y2W87	RMW-01-35-0906	N	9/28/2006	TVOL-DX+	Chloromethane	0.66 UJ	0.5	µg/L	LB<>RL, SB<>RL, Sur>UCL, TB<>RL
Y2W87	RMW-99-35-0906	FD	9/28/2006	TVOL-DX+	Chloromethane	0.69 UJ	0.5	µg/L	LB<>RL, SB<>RL, Sur>UCL, TB<>RL
Y2W87	**MW-TB-07-0906**	**TB**	**9/28/2006**	**TVOL-DX+**	**Toluene**	**0.076**	**0.5**	**µg/L**	
Y2W87	RMW-01-17-0906	N	9/28/2006	TVOL-DX+	Toluene	0.5 U	0.5	µg/L	TB<>RL
Y2W87	**MW-TB-08-0906**	**TB**	**9/29/2006**	**TVOL-DX+**	**Benzene**	**0.066 J**	**0.5**	**µg/L**	
Y2W87	RMW-02-50-0906	N	9/29/2006	TVOL-DX+	Benzene	0.5 U	0.5	µg/L	TB<>RL
Y2W87	RMW-03-15-0906	N	9/29/2006	TVOL-DX+	Benzene	0.5 UJ	0.5	µg/L	IS<LCL, TB<>RL
Y2W87	RMW-08-15-0906	N	9/29/2006	TVOL-DX+	Benzene	10 U	10	µg/L	TB<>RL
Y2W87	**MW-TB-08-0906**	**TB**	**9/29/2006**	**TVOL-DX+**	**Carbon disulfide**	**0.17 J**	**0.5**	**µg/L**	
Y2W87	RMW-02-13-0906	N	9/29/2006	TVOL-DX+	Carbon disulfide	0.98 U	0.5	µg/L	TB<>RL
Y2W87	RMW-03-15-0906	N	9/29/2006	TVOL-DX+	Carbon disulfide	0.5 UJ	0.5	µg/L	IS<LCL, Sur<LCL, TB<>RL
Y2W87	RMW-08-15-0906	N	9/29/2006	TVOL-DX+	Carbon disulfide	10 U	10	µg/L	LB<>RL, TB<>RL

TABLE 3-2
Trip Blanks and Associated Sample Results
AMCO Chemical Superfund Site, Oakland, California

SDG	Sample ID	Sample Type	Date	Method	Analyte	Result	RL	Units	Reason Code
Groundwater, Third Quarter 2006 (September)									
Y2W87	**MW-TB-08-0906**	**TB**	**9/29/2006**	**TVOL-DX+**	**Chloromethane**	**0.26**	**0.5**	**µg/L**	
Y2W87	RMW-02-50-0906	N	9/29/2006	TVOL-DX+	Chloromethane	0.5 U	0.5	µg/L	LB<>RL, SB<>RL, TB<>RL
Y2W87	**MW-TB-08-0906**	**TB**	**9/29/2006**	**TVOL-DX+**	**cis-1,2-Dichloroethene**	**0.43 J**	**0.5**	**µg/L**	
Y2W87	RMW-03-15-0906	N	9/29/2006	TVOL-DX+	cis-1,2-Dichloroethene	0.62 UJ	0.5	µg/L	IS<LCL, Sur>UCL, TB<>RL
Y2W87	RMW-08-15-0906	N	9/29/2006	TVOL-DX+	cis-1,2-Dichloroethene	10 U	10	µg/L	LB<>RL, TB<>RL
Y2W87	**MW-TB-08-0906**	**TB**	**9/29/2006**	**TVOL-DX+**	**Toluene**	**0.92**	**0.5**	**µg/L**	
Y2W87	RMW-02-50-0906	N	9/29/2006	TVOL-DX+	Toluene	7 J	0.5	µg/L	LB<>RL, MS<LCL, MSRPD, SD<LCL, TB<>RL
Y2W87	RMW-08-15-0906	N	9/29/2006	TVOL-DX+	Toluene	14 U	10	µg/L	LB<>RL, TB<>RL

Notes:

Field Duplicate Samples are listed below their corresponding primary samples

TB	Trip Blank
N	Regular Sample
FD	Field Duplicate
5242	Volatile Organics, EPA Method 524.2
CLPV	Volatile Organics, CLP-SOW
TVOL-DX+	Volatile Organics/1,4-Dioxane, CLP-SOW
J	estimated value
U	Not detected at or above the reporting limit
UJ	Not detected at or above the reporting limit. The reporting limit is an estimate.
µg/L	micrograms per liter
CCV<>CL	Continuing calibration verification is outside control limit
EB<RL	Equipment blank concentration less than the reporting limit
EB>RL	Equipment blank concentration greater than the reporting limit
IC%RSD	Initial calibration relative standard deviation exceeded
IS<LCL	Internal standard response less than lower control limit
LB<RL	Laboratory blank contamination less than the reporting limit
LB>RL	Laboratory blank contamination greater than the reporting limit
MS<LCL	Matrix spike recovery less than lower limit
MSRPD	Matrix spike relative percent difference criteria exceedance
SB<RL	Source blank concentration less than reporting limit
SB>RL	Source blank concentration greater than the reporting limit
SD<LCL	Matrix spike duplicate recovery criteria less than lower limit
Sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB<RL	Trip blank concentration less than reporting limit
TB>RL	Trip blank concentration greater than the reporting limit

TABLE 3-3
Summary of Field Duplicate Samples vs. Total Samples
AMCO Chemical Superfund Site, Oakland, California

Sample Matrix	Analytical Method	Number of Field Duplicates	Number of Primary and Field Duplicate Samples	%
GRAB GROUNDWATER, SOIL, AND SOIL GAS				
Phase 1 (September - December 2004)				
Groundwater				
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	8	77	10
Soil				
	Volatile Organics/1,4-Dioxane, CLP-SOW	6	68	9
	Semivolatile Organics, CLP-SOW	6	69	9
	Organochlorine Pesticides/PCBs, CLP-SOW	6	68	9
	Dioxins and Furans, EPA Method SW8290	1	8	13
	Inorganics, CLP-SOW	6	69	9
Soil Gas				
	Volatile Organics, EPA Method 8260B	4	49	8
Phase 1 Soil Gas Probe (October 2004)				
Soil Gas				
	Volatile Organics, EPA Method TO-15	2	26	8
	Volatile Organics, EPA Method TO-15 (SIM)	1	14	7
Phase 2 Soil Gas Probe (May 2005)				
Soil Gas				
	Volatile Organics, EPA Method TO-15	2	20	10
	Volatile Organics, EPA Method TO-15 (SIM)	2	20	10
Phase 3 Soil Gas Probe (November 2006)				
Soil Gas				
	Volatile Organics, EPA Method TO-15	2	14	14
GROUNDWATER MONITORING				
Groundwater, First Quarter 2005 (March)				
Groundwater				
	Volatile Organics, CLP-SOW	2	24	8
	Semivolatile Organics, CLP-SOW	2	24	8
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	2	24	8
	Organochlorine Pesticides/PCBs, CLP-SOW	1	10	10
	Dioxins and Furans, EPA Method SW8290		2	
	Dissolved Gases, EPA Method RSK-175	2	25	8
	Anions, EPA Method 300.0	2	25	8
	Hexavalent Chromium, EPA Method 218.6	1	10	10
	Inorganics, CLP-SOW	2	24	8
	Total Dissolved Solids, EPA Method 160.1	1	5	20
	Total Organic Carbon, EPA Method 415.1	1	5	20
	Volatile Organics, EPA Method 524.2		1 *	
	Semivolatile Organics/1,4-Dioxane, EPA Method 8270C		1 *	
	Organochlorine Pesticides/PCBs, EPA Method 8081A		1 *	
	Mercury, Method N6000		1 *	
	Metals, EPA Method 200.7		1 *	
	Metals, EPA Method 200.8		1 *	
Groundwater, Second Quarter 2005 (June)				
Groundwater				
	Volatile Organics, CLP-SOW	2	25	8

TABLE 3-3
Summary of Field Duplicate Samples vs. Total Samples
AMCO Chemical Superfund Site, Oakland, California

Sample Matrix	Analytical Method	Number of Field Duplicates	Number of Primary and Field Duplicate Samples	%
Groundwater, Second Quarter 2005 (June)				
	1,4-Dioxane, EPA Method 8270C	2	25	8
	Organochlorine Pesticides/PCBs, CLP-SOW	2	25	8
	Dissolved Gases, EPA Method RSK-175	2	25	8
	Anions, EPA Method 300.0	2	25	8
Groundwater, Third Quarter 2005 (September)				
Groundwater				
	Volatile Organics, CLP-SOW	3	32	9
	Semivolatile Organics, CLP-SOW	3	32	9
	1,4-Dioxane (SIM), CLP-SOW	3	32	9
	Organochlorine Pesticides/PCBs, CLP-SOW	3	32	9
	Organophosphorus Pesticides, EPA Method 8141A	3	32	9
	Dissolved Gases, EPA Method RSK-175	3	32	9
	Anions, EPA Method 300.0	3	32	9
	Inorganics, CLP-SOW	6	32	19
	Inorganics, CLP-SOW	6	32	19
Groundwater, Fourth Quarter 2005 (January)				
Groundwater				
	Volatile Organics, CLP-SOW	3	32	9
	Semivolatile Organics, CLP-SOW	3	32	9
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	3	32	9
	Organochlorine Pesticides/PCBs, CLP-SOW	3	32	9
	Chlorinated Furans/Dioxins Low Method	1	11	9
	Dissolved Gases, EPA Method RSK-175	3	32	9
	Anions, EPA Method 300.0	3	32	9
	Inorganics, CLP-SOW	3	32	9
	Total Dissolved Solids, EPA Method 160.1	2	17	12
Groundwater, First Quarter 2006 (March)				
Groundwater				
	Volatile Organics, EPA Method 524.2	1	19	5
	Volatile Organics/1,4-Dioxane, CLP-SOW	4	33	12
	Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW	4	33	12
	Organochlorine Pesticides/PCBs, CLP-SOW	1	4	25
	Dissolved Gases, EPA Method RSK-175	4	33	12
	Anions, EPA Method 300.0	4	33	12
Groundwater, Second Quarter 2006 (June)				
Groundwater				
	Volatile Organics, EPA Method 524.2	4	33	12
	Dissolved Gases, EPA Method RSK-175	4	33	12
	Anions, EPA Method 300.0	4	33	12
Groundwater, Third Quarter 2006 (September)				
Groundwater				
	Volatile Organics/1,4-Dioxane, CLP-SOW	4	33	12
	Semivolatile Organics, CLP-SOW	4	33	12
	Semivolatile Organics (SIM), CLP-SOW	4	33	12
	1,4-Dioxane, CLP-SOW	4	33	12
	Chlorinated Furans/Dioxins Low Method	2	31	6
	Organochlorine Pesticides/PCBs, CLP-SOW	3	32 (2)	9

TABLE 3-3
Summary of Field Duplicate Samples vs. Total Samples
AMCO Chemical Superfund Site, Oakland, California

Sample Matrix	Analytical Method	Number of Field Duplicates	Number of Primary and Field Duplicate Samples	%
Groundwater, Third Quarter 2006 (September)				
	Dissolved Gases, EPA Method RSK-175	4	32 (2)	13
	Anions, EPA Method 300.0	3	32 (2)	9
	Inorganics, CLP-SOW	3	32 (2)	9
RESIDENTIAL				
2004 Residential Air (September 2004)				
Ambient Air				
	Volatile Organics, EPA Method TO-15 (SIM)	1	8	13
Crawl Space Air				
	Volatile Organics, EPA Method TO-15 (SIM)	1	5	20
2004 Residential Soil Gas (September 2004)				
Soil Gas				
	Volatile Organics, EPA Method TO-15	1	13	8
	Volatile Organics, EPA Method TO-15 (SIM)	1	13	8
2005 Residential Air (May 2005)				
Ambient Air				
	Volatile Organics, EPA Method TO-15 (SIM)	1	9	11
	Naphthalene, EPA Method TO-13A	1	8	13
Crawl Space Air				
	Volatile Organics, EPA Method TO-15 (SIM)	1	5	20
2005 Residential Soil Gas (May 2005)				
Soil Gas				
	Volatile Organics, EPA Method TO-15	1	8	13
	Volatile Organics, EPA Method TO-15 (SIM)	1	8	13
2006 Residential Soil (October)				
Soil				
	Volatile Organics, EPA Method 8260B	4	44	9
	Semivolatile Organics, CLP-SOW	4	44	9
	1,4-Dioxane (SIM), CLP-SOW	4	42	10
	Organochlorine Pesticides/PCBs, CLP-SOW	4	44	9
	Inorganics, CLP-SOW	4	44	9
2006 Residential Produce (October)				
Plant Tissue				
	Volatile Organics, EPA Method 8260B	2	17	12
	Metals, EPA Method 6020	2	17	12
2006 Residential Air (November 2006)				
Ambient Air				
	Volatile Organics, EPA Method TO-15	1	8	13
	Volatile Organics, EPA Method TO-15 (SIM)	1	8	13
Crawl Space Air				
	Volatile Organics, EPA Method TO-15	1	6	17
	Volatile Organics, EPA Method TO-15 (SIM)	1	6	17

TABLE 3-3
Summary of Field Duplicate Samples vs. Total Samples
AMCO Chemical Superfund Site, Oakland, California

Sample Matrix	Analytical Method	Number of Field Duplicates	Number of Primary and Field Duplicate Samples	%
2006 Residential Soil Gas (November 2006)				
Soil Gas				
	Volatile Organics, EPA Method TO-15	1	11	9

Notes:

CLP-SOW Contract Laboratory Program Statement of Work

SIM Selected Ion Monitoring

* Analyses collected for MW-12 at the end of the sampling event

TABLE 3-4
Field Duplicate Comparison and Reporting Criteria

Analytical Results	Reporting Criteria
Both results not detected	Use lower of two reporting limits
One positive result, one non-detected	Use positive result
One positive result above the RL, one positive result between the MDL and RL	Use higher concentration
Both results above the RL, calculate RPD	Use higher concentration

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
GRAB GROUNDWATER, SOIL, AND SOIL GAS						
Phase 1 (September - December 2004)						
				RGW-12-14-0904	**RGW-92-14-0904**	
Volatile Organics/1,4-Dioxane, EPA Method 524.2 (µg/L)			SDG: 04293B			
RGW-12 (14')	10/20/04	1,1-Dichloroethane		24 J	13 J	59
RGW-12 (14')	10/20/04	1,2,3-Trichlorobenzene		20 J	14 J	35
RGW-12 (14')	10/20/04	1,3,5-Trimethylbenzene		160 J	110 J	37
RGW-12 (14')	10/20/04	cis-1,2-Dichloroethene		680 J	500 J	31
RGW-12 (14')	10/20/04	Ethylbenzene		21 J	11 J	63
RGW-12 (14')	10/20/04	Isopropylbenzene (cumene)		46 J	32 J	36
RGW-12 (14')	10/20/04	n-Propylbenzene		150 J	110 J	31
RGW-12 (14')	10/20/04	p-Cymene (p-isopropyltoluene)		4.2 J	12 J	96
RGW-12 (14')	10/20/04	Toluene		100 J	73 J	31
RGW-12 (14')	10/20/04	trans-1,2-Dichloroethene		15 J	6.8 J	75
RGW-12 (14')	10/20/04	Xylenes, total		131 J	92 J	35
				RGW-12-24-0904	**RGW-92-24-0904**	
Volatile Organics/1,4-Dioxane, EPA Method 524.2 (µg/L)			SDG: 04293B			
RGW-12 (24')	10/20/04	1,2,4-Trichlorobenzene		1.2 J	3.3 J	93
RGW-12 (24')	10/20/04	1,2-Dichlorobenzene		170 J	240 J	34
RGW-12 (24')	10/20/04	1,3-Dichlorobenzene		7.7 J	16 J	70
RGW-12 (24')	10/20/04	1,4-Dichlorobenzene		80 J	110 J	32
RGW-12 (24')	10/20/04	cis-1,2-Dichloroethene		3.5 J	8.6 J	84
RGW-12 (24')	10/20/04	Isopropylbenzene (cumene)		1.9 J	1.4 J	30
RGW-12 (24')	10/20/04	Naphthalene		2.2 J	6.4 J	98
RGW-12 (24')	10/20/04	n-Propylbenzene		6.7 J	3.3 J	68
RGW-12 (24')	10/20/04	Toluene		3.4 J	5.8 J	52
				RGW-12-44-0904	**RGW-92-44-0904**	
Volatile Organics/1,4-Dioxane, EPA Method 524.2 (µg/L)			SDG: 04293B			
RGW-12 (44')	10/20/04	1,2,4-Trimethylbenzene		0.2 J	0.3 J	40
				RGW-14-26-0904	**RGW-93-26-0904**	
Volatile Organics/1,4-Dioxane, EPA Method 524.2 (µg/L)			SDG: 04293B			
RGW-14 (26')	10/22/04	Vinyl chloride		0.2 J	0.3 J	40
				RSB-04-01-0904	**RSB-91-01-0904**	
Volatile Organics/1,4-Dioxane, CLP-SOW (µg/kg)			SDG: Y1G50			
RSB-04 (3.5')	09/24/04	Acetone		20	43 J	73
Organochlorine Pesticides/PCBs, CLP-SOW (µg/kg)			SDG: Y1G50			
RSB-04 (3.5')	09/24/04	4,4'-DDD		6.3 J	13 J	69
Inorganics, CLP-SOW (mg/kg)			SDG: MY1G50			
RSB-04 (3.5')	09/24/04	Antimony		49	3 J	177
RSB-04 (3.5')	09/24/04	Lead		776 J	134 J	141
RSB-04 (3.5')	09/24/04	Silver		1	0.43	80
				RSB-06-01-0904	**RSB-81-01-0904**	
Volatile Organics/1,4-Dioxane, CLP-SOW (µg/kg)			SDG: Y1G72			
RSB-06 (3')	09/30/04	Trichloroethene		4 J	21 J	136

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
GRAB GROUNDWATER, SOIL, AND SOIL GAS						
Phase 1 (September - December 2004)						
				RSB-06-01-0904	**RSB-81-01-0904**	
Organochlorine Pesticides/PCBs, CLP-SOW (µg/kg)			SDG: Y1G72			
RSB-06 (3')	09/30/04	beta-BHC		2.7 J	1.2 J	77
Inorganics, CLP-SOW (mg/kg)			SDG: MY1G72			
RSB-06 (3')	09/30/04	Calcium		3980	7140	57
RSB-06 (3')	09/30/04	Copper		18.2	49.7	93
RSB-06 (3')	09/30/04	Zinc		37.1	62.8	51
				RSB-18-01-0904	**RSB-18-03**	
Dioxins and Furans, EPA Method SW8290 (ng/kg)			SDG: Y1G50			
RSB-18 (4')	09/27/04	1,2,3,4,6,7,8-HpCDD		1100 J	51 J	182
RSB-18 (4')	09/27/04	1,2,3,4,6,7,8-HpCDF		178 J	10.4 J	178
RSB-18 (4')	09/27/04	1,2,3,4,7,8,9-HpCDF		8.51 J	0.982 J	159
RSB-18 (4')	09/27/04	1,2,3,4,7,8-HxCDD		16.4 J	0.623 J	185
RSB-18 (4')	09/27/04	1,2,3,6,7,8-HxCDD		73.5 J	2.8 J	185
RSB-18 (4')	09/27/04	1,2,3,6,7,8-HxCDF		16.8 J	0.575 J	187
RSB-18 (4')	09/27/04	1,2,3,7,8,9-HxCDD		41.4 J	1.53 J	186
RSB-18 (4')	09/27/04	1,2,3,7,8-PeCDD		15.3 J	0.702 J	182
RSB-18 (4')	09/27/04	2,3,4,6,7,8-HxCDF		16.9 J	1.01 J	177
RSB-18 (4')	09/27/04	2,3,4,7,8-PeCDF		42.4 J	1.09 J	190
RSB-18 (4')	09/27/04	OCDD		8420 J	479 J	178
RSB-18 (4')	09/27/04	OCDF		354 J	34.3 J	165
RSB-18 (4')	09/27/04	Total Dioxin Toxicity equivalent		72.8 J	2.87 J	185
				RSB-24-01-0904	**RSB-93-01-0904**	
Volatile Organics/1,4-Dioxane, CLP-SOW (µg/kg)			SDG: Y1G72			
RSB-24 (3')	09/29/04	1,1,1-Trichloroethane		43 J	81 J	61
RSB-24 (3')	09/29/04	1,1-Dichloroethene		240 J	140 J	53
RSB-24 (3')	09/29/04	1,2,4-Trichlorobenzene		30 J	14 J	73
RSB-24 (3')	09/29/04	Benzene		3500 J	1500 J	80
RSB-24 (3')	09/29/04	Cyclohexane		3300 J	1500 J	75
RSB-24 (3')	09/29/04	Isopropylbenzene (cumene)		9300 J	1300 J	151
RSB-24 (3')	09/29/04	Methyl ethyl ketone		570 J	290 J	65
RSB-24 (3')	09/29/04	Methylcyclohexane		20000 J	8500 J	81
RSB-24 (3')	09/29/04	Tetrachloroethene		64 J	110 J	53
RSB-24 (3')	09/29/04	Trichloroethene		920 J	490 J	61
Organochlorine Pesticides/PCBs, CLP-SOW (µg/kg)			SDG: Y1G72			
RSB-24 (3')	09/29/04	Aldrin		15 J	6.5 J	79
Inorganics, CLP-SOW (mg/kg)			SDG: MY1G72			
RSB-24 (3')	09/29/04	Sodium		733	1260	53
				RSB-37-05-0904	**RSB-80-05-0904**	
Organochlorine Pesticides/PCBs, CLP-SOW (µg/kg)			SDG: Y1G72			
RSB-37 (6')	09/29/04	4,4'-DDT		49 J	120 J	84

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
GRAB GROUNDWATER, SOIL, AND SOIL GAS						
Phase 1 (September - December 2004)						
				RSB-37-05-0904	**RSB-80-05-0904**	
Inorganics, CLP-SOW (mg/kg)			SDG: MY1G72			
RSB-37 (6')	09/29/04	Copper		46.9	18.2	88
RSB-37 (6')	09/29/04	Lead		107	40.5	90
RSB-37 (6')	09/29/04	Zinc		106	62.5	52
				RSG-03A	**RSG-03A_D1**	
Volatile Organics, EPA Method 8260B (µg/m3)			SDG: 40913D			
RSG-03A	10/08/04	cis-1,2-Dichloroethene		31 J	63 J	68
				RSG-11A	**RSG-11A_D2**	
Volatile Organics, EPA Method 8260B (µg/m3)			SDG: 40913D			
RSG-11A	10/08/04	1,1,1-Trichloroethane		49 J	27 J	58
RSG-11A	10/08/04	1,1-Dichloroethane		120	81 J	39
				RSG-13A	**RSG-13A_D3**	
Volatile Organics, EPA Method 8260B (µg/m3)			SDG: 40913D			
RSG-13A	10/08/04	Freon 11		62 J	27 J	79
RSG-13A	10/08/04	trans-1,2-Dichloroethene		890	640	33
				RSG-14A	**RSG-14A_D4**	
Volatile Organics, EPA Method 8260B (µg/m3)			SDG: 40913D			
RSG-14A	10/08/04	Tetrachloroethene		360	250	36
Phase 2 Soil Gas Probe (May 2005)						
				RSP-03-PM-0505	**RSP-91-PM-0505**	
Volatile Organics, EPA Method TO-15 (µg/m3)			SDG: 0505338DR1			
RSP-03 (4.5')	05/13/05	Tetrahydrofuran		0.89 J	1.6 J	57
				RSP-07-AM	**RSP-91-AM-0505**	
Volatile Organics, EPA Method TO-15 (µg/m3)			SDG: 0505338AR1			
RSP-07 (2')	05/13/05	Xylenes, total		72	150	70
Phase 3 Soil Gas Probe (November 2006)						
				RSP11-1106	**RSP89-1106**	
Volatile Organics, EPA Method TO-15 (µg/m3)			SDG: 0611257A			
RSP-11 (2')	11/08/06	Freon 134a		1.3 J	0.92 J	34
GROUNDWATER MONITORING						
Groundwater, First Quarter 2005 (March)						
				RMW-08-15-0305	**MW-91-0305**	
Volatile Organics, CLP-SOW (µg/L)			SDG: Y1S16			
RMW-08-15	03/23/05	Chlorobenzene		37 J	53 J	36
RMW-08-15	03/23/05	Methyl tert-butyl ether		4 J	0.9 J	127
RMW-08-15	03/23/05	trans-1,2-Dichloroethene		3 J	1 J	100
RMW-08-15	03/23/05	Vinyl chloride		10 J	6 J	50
Inorganics, CLP-SOW (µg/L)			SDG: MY1TG5			
RMW-08-15	03/23/05	Copper (Dissolved)		0.92 J	0.64 J	36
RMW-08-15	03/23/05	Lead		0.23 J	0.14 J	49
RMW-08-15	03/23/05	Selenium (Dissolved)		1.4 J	2.3 J	49
RMW-08-15	03/23/05	Zinc		5.6	4.1	31

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
GROUNDWATER MONITORING						
Groundwater, First Quarter 2005 (March)						
				RMW-10-15-0305	**MW-92-0305**	
Volatile Organics, CLP-SOW (µg/L)			SDG: Y1RY2			
RMW-10-15	03/16/05	tert-Butyl alcohol		50 R	250 R	133
RMW-10-15	03/16/05	Trichloroethene		5 J	34 J	149
Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW (µg/L)			SDG: Y1RY5			
RMW-10-15	03/16/05	Nitrobenzene		1	0.7	35
Dissolved Gases, EPA Method RSK-175 (µg/L)			SDG: 05075B			
RMW-10-15	03/16/05	Methane		50 J	79 J	45
Inorganics, CLP-SOW (µg/L)			SDG: MY1RY2			
RMW-10-15	03/16/05	Aluminum		625	254	84
RMW-10-15	03/16/05	Iron		921 J	422 J	74
RMW-10-15	03/16/05	Lead		7.4 J	4.3 J	53
RMW-10-15	03/16/05	Vanadium		2.8 J	1.7 J	49
Groundwater, Second Quarter 2005 (June)						
				RMW-08-15-0605	**MW-92-0605**	
Dissolved Gases, EPA Method RSK-175 (µg/L)			SDG: 05172A			
RMW-08-15	06/28/05	Ethene		1.1	1.8	48
Groundwater, Third Quarter 2005 (September)						
				RMW-09-15-0905	**MW-91-0905**	
Volatile Organics, CLP-SOW (µg/L)			SDG: Y23M1			
RMW-09-15	09/30/05	1,1-Dichloroethene		0.21 J	0.31	38
RMW-09-15	09/30/05	Acetone		17 J	11 J	43
RMW-09-15	09/30/05	Methyl ethyl ketone		2.3	1.3	56
RMW-09-15	09/30/05	Methylene chloride		2.1 J	7.2 J	110
RMW-09-15	09/30/05	tert-Butyl alcohol		120 J	62 J	64
RMW-09-15	09/30/05	Vinyl chloride		1.1	1.9	53
Inorganics, CLP-SOW (µg/L)			SDG: MY23M1			
RMW-09-15	09/30/05	Copper		53	35.6	39
				RMW-10-15-0905	**MW-90-15-0905**	
Volatile Organics, CLP-SOW (µg/L)			SDG: Y23M1			
RMW-10-15	09/29/05	1,1-Dichloroethane		0.89	1.6	57
RMW-10-15	09/29/05	1,1-Dichloroethene		0.75	1.7 J	78
RMW-10-15	09/29/05	Benzene		0.45	0.9	67
RMW-10-15	09/29/05	cis-1,3-Dichloropropene		0.32 J	0.74	79
RMW-10-15	09/29/05	trans-1,2-Dichloroethene		6.9 J	12 J	54
RMW-10-15	09/29/05	Trichloroethene		15	22	38
RMW-10-15	09/29/05	Vinyl chloride		0.49	1.1	77
Inorganics, CLP-SOW (µg/L)			SDG: MY23M1			
RMW-10-15	09/29/05	Iron		183	253	32

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
GROUNDWATER MONITORING						
Groundwater, Third Quarter 2005 (September)						
				RMW-12-51-0905	**MW-88-51-0905**	
Volatile Organics, CLP-SOW (µg/L)			SDG: Y23R4			
RMW-12-51	10/10/05	1,1,1-Trichloroethane		0.59	0.42	34
RMW-12-51	10/10/05	Chloroethane		2.2	1.6	32
RMW-12-51	10/10/05	Tetrachloroethene		1.5	1.1	31
Semivolatile Organics, CLP-SOW (µg/L)			SDG: Y23R4			
RMW-12-51	10/10/05	2-Methylnaphthalene		7.1 J	34 J	131
Inorganics, CLP-SOW (µg/L)			SDG: MY23R4			
RMW-12-51	10/10/05	Vanadium		1.6 J	3 J	61
Groundwater, Fourth Quarter 2005 (January)						
				RMW-08-35-0106	**MW-92-0106**	
Volatile Organics, CLP-SOW (µg/L)			SDG: Y2BM5			
RMW-08-35	01/19/06	Tetrachloroethene		5.4 J	7.8	36
RMW-08-35	01/19/06	trans-1,2-Dichloroethene		10	14	33
Inorganics, CLP-SOW (µg/L)			SDG: MY2BN5			
RMW-08-35	01/19/06	Aluminum		1090 J	292 J	115
RMW-08-35	01/19/06	Copper		14 J	7 J	67
RMW-08-35	01/19/06	Copper (Dissolved)		2.9	1.5 J	64
RMW-08-35	01/19/06	Iron		2340 J	992 J	81
RMW-08-35	01/19/06	Vanadium		2.9	1.2	83
RMW-08-35	01/19/06	Zinc		25.7 J	16.4 J	44
				RMW-10-15-0106	**MW-90-0106**	
Volatile Organics, CLP-SOW (µg/L)			SDG: Y2BM5			
RMW-10-15	01/17/06	tert-Butyl alcohol		18 J	26 J	36
Inorganics, CLP-SOW (µg/L)			SDG: MY2BN3			
RMW-10-15	01/17/06	Cadmium		2.6	4.4	51
RMW-10-15	01/17/06	Chromium (Dissolved)		3.3 J	2.3 J	36
RMW-10-15	01/17/06	Iron		228	386	51
RMW-10-15	01/17/06	Vanadium		3.3	1.9	54
				RMW-12-51-0106	**MW-88-0106**	
Organochlorine Pesticides/PCBs, CLP-SOW (µg/L)			SDG: Y2BQ4			
RMW-12-51	01/20/06	4,4'-DDE		0.01 J	0.004 J	86
Chlorinated Furans/Dioxins Low Method (pg/l)			SDG: MW-EB-07-01			
RMW-12-51	01/20/06	HPCDD (total)		3.97	6.6	50
Inorganics, CLP-SOW (µg/L)			SDG: MY2BP4			
RMW-12-51	01/20/06	Lead (Dissolved)		0.13 J	0.44 J	109
RMW-12-51	01/20/06	Zinc		21.6 J+	15.1 J+	35
Groundwater, First Quarter 2006 (March)						
				RMW-01-17-0306	**RMW-99-17-0306**	
Organochlorine Pesticides/PCBs, CLP-SOW (µg/L)			SDG: Y2FN0			
RMW-01-17	04/05/06	beta-BHC		0.072 J	0.05 J	36
Dissolved Gases, EPA Method RSK-175 (µg/L)			SDG: 06095A			
RMW-01-17	04/05/06	Methane		1900	960	66

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
GROUNDWATER MONITORING						
Groundwater, First Quarter 2006 (March)						
				RMW-01-17-0306	**RMW-99-17-0306**	
Anions, EPA Method 300.0 (mg/L)			SDG: 06095A			
RMW-01-17	04/05/06	Sulfate		1.3	0.78	50
				RMW-07-35-0306	**RMW-93-35-0306**	
Dissolved Gases, EPA Method RSK-175 (µg/L)			SDG: 06089E			
RMW-07-35	04/03/06	Methane		4.4	8.7	66
				RMW-08-15-0306	**RMW-92-15-0306**	
Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)			SDG: Y2FL4			
RMW-08-15	04/04/06	1,4-Dichlorobenzene		5.5	3.45	46
RMW-08-15	04/04/06	Benzene		1.8 J	1.25 J	36
RMW-08-15	04/04/06	cis-1,2-Dichloroethene		13.5	9.5	35
RMW-08-15	04/04/06	trans-1,2-Dichloroethene		3.75	2.4 J	44
Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW (µg/L)			SDG: Y2FL4			
RMW-08-15	04/04/06	1,4-Dioxane (p-dioxane)		10 R	2 R	133
				RMW-12-51-0306	**RMW-88-51-0306**	
Dissolved Gases, EPA Method RSK-175 (µg/L)			SDG: 06095A			
RMW-12-51	04/05/06	Methane		11	16	37
Groundwater, Second Quarter 2006 (June)						
				RMW-07-35-0606	**RMW-93-35-0606**	
Volatile Organics, EPA Method 524.2 (µg/L)			SDG: 06171A			
RMW-07-35	06/21/06	Chloroethane		0.3 J	0.2 J	40
				RMW-08-15-0606	**RMW-92-15-0606**	
Volatile Organics, EPA Method 524.2 (µg/L)			SDG: 06178A			
RMW-08-15	06/27/06	1,1-Dichloroethane		0.7 J	1 J	35
RMW-08-15	06/27/06	cis-1,2-Dichloroethene		8.1 J	11 J	30
RMW-08-15	06/27/06	Methyl tert-butyl ether		4.5 J	6.3 J	33
RMW-08-15	06/27/06	trans-1,2-Dichloroethene		3 J	4.4 J	38
RMW-08-15	06/27/06	Vinyl chloride		9.8 J	14 J	35
Dissolved Gases, EPA Method RSK-175 (µg/L)			SDG: 06178A			
RMW-08-15	06/27/06	Ethene		0.5 J	0.8 J	46
				RMW-10-15-0606	**RMW-90-15-0606**	
Volatile Organics, EPA Method 524.2 (µg/L)			SDG: 06178A			
RMW-10-15	06/26/06	trans-1,2-Dichloroethene		6.6 J	9.9 J	40
Groundwater, Third Quarter 2006 (September)						

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
GROUNDWATER MONITORING						
Groundwater, Third Quarter 2006 (September)						
				RMW-01-35-0906	**RMW-99-35-0906**	
Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)			SDG: Y2W87			
RMW-01-35	09/28/06	1,1-Dichloroethane		240 J	150 J	46
RMW-01-35	09/28/06	1,2-Dichlorobenzene		470 J	290 J	47
RMW-01-35	09/28/06	1,4-Dichlorobenzene		230 J	140 J	49
RMW-01-35	09/28/06	Carbon disulfide		1.4 J	1 J	33
RMW-01-35	09/28/06	Chlorobenzene		470 J	280 J	51
RMW-01-35	09/28/06	Chloroethane		330 J	200 J	49
RMW-01-35	09/28/06	cis-1,2-Dichloroethene		920 J	610 J	41
RMW-01-35	09/28/06	Tetrachloroethene		1.6 J	2.5 J	44
RMW-01-35	09/28/06	Vinyl chloride		170 J	110 J	43
Inorganics, CLP-SOW (µg/L)			SDG: MY2W56			
RMW-01-35	09/28/06	Copper		0.96	0.5	63
				RMW-09-15-0906	**RMW-91-15-0906**	
Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)			SDG: Y2W27			
RMW-09-15	09/25/06	tert-Butyl alcohol		43 J	82 J	62
RMW-09-15	09/25/06	Xylenes, total		0.22 J	0.39 J	56
Organochlorine Pesticides/PCBs, CLP-SOW (µg/L)			SDG: Y2W27			
RMW-09-15	09/25/06	4,4'-DDE		0.1 R	0.019 J	136
RMW-09-15	09/25/06	Aldrin		0.031 J	0.075 J	83
RMW-09-15	09/25/06	alpha-BHC		0.029 J	0.0065 J	127
RMW-09-15	09/25/06	alpha-Chlordane		0.009 J	0.036 J	120
RMW-09-15	09/25/06	delta-BHC		0.054 J	0.035 J	43
RMW-09-15	09/25/06	Dieldrin		0.033 J	0.058 J	55
RMW-09-15	09/25/06	Endosulfan I		0.0076 J	0.018 J	81
RMW-09-15	09/25/06	Endosulfan II		0.1 R	0.01 J	164
RMW-09-15	09/25/06	Endrin		0.026 J	0.017 J	42
RMW-09-15	09/25/06	gamma-BHC		0.086 J	0.06 J	36
RMW-09-15	09/25/06	Heptachlor epoxide		0.0074 J	0.056 J	153
Inorganics, CLP-SOW (µg/L)			SDG: MY2W56			
RMW-09-15	09/25/06	Cadmium		0.15	0.39	89
RMW-09-15	09/25/06	Lead		0.41	0.29	34
RMW-09-15	09/25/06	Lead (Dissolved)		0.36	0.53	38
				RMW-10-15-0906	**RMW-90-15-0906**	
Semivolatile Organics (SIM), CLP-SOW (µg/L)			SDG: Y2W27			
RMW-10-15	09/20/06	Benzo(g,h,i)perylene		0.03 J	0.054 J	57
RMW-10-15	09/20/06	Dibenz(a,h)anthracene		0.029 J	0.045 J	43
RMW-10-15	09/20/06	Indeno(1,2,3-c,d)pyrene		0.027 J	0.048 J	56
1,4-Dioxane, CLP-SOW (µg/L)			SDG: Y2W29			
RMW-10-15	09/20/06	1,4-Dioxane (p-dioxane)		34	24	34

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
GROUNDWATER MONITORING						
Groundwater, Third Quarter 2006 (September)						
				RMW-10-15-0906	**RMW-90-15-0906**	
Organochlorine Pesticides/PCBs, CLP-SOW (µg/L)			SDG: Y2W27			
RMW-10-15	09/20/06	4,4'-DDE		0.21 J	0.048 J	126
RMW-10-15	09/20/06	alpha-BHC		0.028 J	0.054 J	63
RMW-10-15	09/20/06	alpha-Chlordane		0.2 J	0.5 J	86
RMW-10-15	09/20/06	delta-BHC		0.1 J	0.16 J	46
RMW-10-15	09/20/06	Endosulfan I		0.047 J	0.15 J	105
RMW-10-15	09/20/06	Endosulfan II		0.043 J	0.064 J	39
RMW-10-15	09/20/06	Endosulfan sulfate		0.033 J	0.092 J	94
RMW-10-15	09/20/06	Endrin		0.14 J	0.22 J	44
RMW-10-15	09/20/06	gamma-BHC		0.061 J	0.17 J	94
RMW-10-15	09/20/06	Heptachlor epoxide		0.068 J	0.12 J	55
Inorganics, CLP-SOW (µg/L)			SDG: MY2W30			
RMW-10-15	09/20/06	Iron		334	498	39
RMW-10-15	09/20/06	Vanadium		2.2	3.1	34
RMW-10-15	09/20/06	Vanadium (Dissolved)		3.3	2.3	36
				RMW-12-32-0906	**RMW-88-32-0906**	
Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)			SDG: Y2W87			
RMW-12-32	09/27/06	Acetone		23 J	33 J	36
RMW-12-32	09/27/06	Carbon disulfide		5.3 J	9 J	52
RMW-12-32	09/27/06	tert-Butyl alcohol		240 J	340 J	34
Semivolatile Organics (SIM), CLP-SOW (µg/L)			SDG: Y2W87			
RMW-12-32	09/27/06	2-Methylnaphthalene		11 J	5.3 J	70
RMW-12-32	09/27/06	Naphthalene		5.5 J	3 J	59
1,4-Dioxane, CLP-SOW (µg/L)			SDG: Y2W78			
RMW-12-32	09/27/06	1,4-Dioxane (p-dioxane)		1100 J	720 J	42
Dissolved Gases, EPA Method RSK-175 (µg/L)			SDG: 06271A			
RMW-12-32	09/27/06	Ethane		530	380	33
RESIDENTIAL						
2004 Residential Air (September 2004)						
				1428AA-0904	**91AA-0904**	
Volatile Organics, EPA Method TO-15 (SIM) (µg/m3)			SDG: 0409415B			
1428AA	09/21/04	1,4-Dichlorobenzene		3.5 J	2.5 J	33
1428AA	09/21/04	Tetrachloroethene		2.2	1.2	59

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
RESIDENTIAL						
2004 Residential Air (September 2004)						
				1432CA-0904	**91CA-0904**	
Volatile Organics, EPA Method TO-15 (SIM) (µg/m3)			SDG: 0409415B			
1432CA	09/21/04	1,2,4-Trimethylbenzene		20	31	43
1432CA	09/21/04	1,3,5-Trimethylbenzene		6.2	11	56
1432CA	09/21/04	1,3-Dichlorobenzene		63	11	141
1432CA	09/21/04	1,4-Dichlorobenzene		4.8	1	131
1432CA	09/21/04	Benzene		11 J	16 J	37
1432CA	09/21/04	Chlorobenzene		0.4	0.16	86
1432CA	09/21/04	Ethylbenzene		13	20	42
1432CA	09/21/04	Styrene		7.8	11	34
1432CA	09/21/04	Tetrachloroethene		3.2	0.82	118
1432CA	09/21/04	Trichloroethene		0.36	0.16	77
1432CA	09/21/04	Xylenes, total		52	127	84
2005 Residential Air (May 2005)						
				1428AA-0505	**91AA-0505**	
Volatile Organics, EPA Method TO-15 (SIM) (µg/m3)			SDG: 0505295R1			
1428AA	05/12/05	Chloroethane		0.05 J	0.028 J	56
				1432CA-0505	**91CA-0505**	
Volatile Organics, EPA Method TO-15 (SIM) (µg/m3)			SDG: 0505295R1			
1432CA	05/12/05	1,2-Dichlorobenzene		0.11 J	0.16 J	37
1432CA	05/12/05	1,3-Dichlorobenzene		0.077 J	0.12 J	44
1432CA	05/12/05	Benzene		0.23 J	0.11 J	71
1432CA	05/12/05	Chloroethane		0.072 J	0.11 J	42
1432CA	05/12/05	Xylenes, total		0.107 J	0.159 J	39
2005 Residential Soil Gas (May 2005)						
				PP-E-SG-0505	**92SG-0505**	
Volatile Organics, EPA Method TO-15 (µg/m3)			SDG: 0505338DR1			
PP-E	05/13/05	1,3-Butadiene		1.7	1.2 J	34
PP-E	05/13/05	Carbon disulfide		4.1	2.2 J	60
PP-E	05/13/05	Isopropanol		1.2 J	2.2 J	59
PP-E	05/13/05	Methyl ethyl ketone		4.2	2.9	37
Volatile Organics, EPA Method TO-15 (SIM) (µg/m3)			SDG: 0505338fR1			
PP-E	05/13/05	Trichloroethene		0.32	0.47	38
2006 Residential Soil (October)						

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
RESIDENTIAL						
2006 Residential Soil (October)						
				1428SSb-1-1006	**8572SSb-1-1006**	
Semivolatile Organics, CLP-SOW (µg/kg)			SDG: Y2WD9			
1428SSb (1')	10/18/06	Acenaphthylene		2300 J	400 J	141
1428SSb (1')	10/18/06	Anthracene		3000 J	270 J	167
1428SSb (1')	10/18/06	Benzo(a)anthracene		8300 J	970 J	158
1428SSb (1')	10/18/06	Benzo(a)pyrene		9200 J	1500 J	144
1428SSb (1')	10/18/06	Benzo(b)fluoranthene		9800 J	1500 J	147
1428SSb (1')	10/18/06	Benzo(g,h,i)perylene		4400 J	810 J	138
1428SSb (1')	10/18/06	Benzo(k)fluoranthene		3600 J	720 J	133
1428SSb (1')	10/18/06	Chrysene		10000 J	1400 J	151
1428SSb (1')	10/18/06	Fluoranthene		19000 J	2600 J	152
1428SSb (1')	10/18/06	Fluorene		1600 J	110 J	174
1428SSb (1')	10/18/06	Indeno(1,2,3-c,d)pyrene		4600 J	970 J	130
1428SSb (1')	10/18/06	Naphthalene		1000 J	330 J	101
1428SSb (1')	10/18/06	Phenanthrene		20000 J	2200 J	160
1428SSb (1')	10/18/06	Pyrene		20000 J	2900 J	149
Organochlorine Pesticides/PCBs, CLP-SOW (µg/kg)			SDG: Y2WD9			
1428SSb (1')	10/18/06	4,4'-DDD		30 J	180 J	143
1428SSb (1')	10/18/06	4,4'-DDE		6.1 J	260 J	191
1428SSb (1')	10/18/06	4,4'-DDT		270 J	1800 J	148
1428SSb (1')	10/18/06	alpha-Chlordane		1.7 J	4.3	87
1428SSb (1')	10/18/06	delta-BHC		0.92 J	0.23 J	120
1428SSb (1')	10/18/06	Dieldrin		0.2 J	15 J	195
1428SSb (1')	10/18/06	Endosulfan II		0.31 J	0.83 J	91
1428SSb (1')	10/18/06	Endosulfan sulfate		0.58 J	2.7 J	129
1428SSb (1')	10/18/06	gamma-Chlordane		4.4 J	1.9 J	79
1428SSb (1')	10/18/06	Heptachlor		0.29 J	0.69 J	82
1428SSb (1')	10/18/06	Heptachlor epoxide		1.9 J	6.1 J	105
1428SSb (1')	10/18/06	Methoxychlor		1.1 J	17 J	176
				1432SSb-1-1006	**8568SSb-1-1006**	
Semivolatile Organics, CLP-SOW (µg/kg)			SDG: Y2WD9			
1432SSb (1')	10/18/06	Acenaphthylene		1200 J	180 J	148
1432SSb (1')	10/18/06	Anthracene		570 J	160	112
1432SSb (1')	10/18/06	Benzo(a)anthracene		1600 J	480 J	108
1432SSb (1')	10/18/06	Benzo(a)pyrene		2800 J	790 J	112
1432SSb (1')	10/18/06	Benzo(b)fluoranthene		3000 J	820 J	114
1432SSb (1')	10/18/06	Benzo(g,h,i)perylene		1400 J	390 J	113
1432SSb (1')	10/18/06	Benzo(k)fluoranthene		880 J	420	71
1432SSb (1')	10/18/06	Chrysene		2300 J	750 J	102
1432SSb (1')	10/18/06	Fluoranthene		5200 J	1500 J	110
1432SSb (1')	10/18/06	Indeno(1,2,3-c,d)pyrene		1800 J	490 J	114
1432SSb (1')	10/18/06	Naphthalene		2800 J	140 J	181
1432SSb (1')	10/18/06	Phenanthrene		6000	1200	133
1432SSb (1')	10/18/06	Pyrene		5800 J	1500 J	118

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
RESIDENTIAL						
2006 Residential Soil (October)						
				1432SSb-1-1006	**8568SSb-1-1006**	
Organochlorine Pesticides/PCBs, CLP-SOW (µg/kg)			SDG: Y2WD9			
1432SSb (1')	10/18/06	4,4'-DDE		220 J	870 J	119
1432SSb (1')	10/18/06	4,4'-DDT		610 J	3100 J	134
1432SSb (1')	10/18/06	alpha-BHC		10 J	1.5 J	148
1432SSb (1')	10/18/06	alpha-Chlordane		73 J	23 J	104
1432SSb (1')	10/18/06	beta-BHC		2.3 J	0.52 J	126
1432SSb (1')	10/18/06	delta-BHC		1.4 J	0.72 J	64
1432SSb (1')	10/18/06	Dieldrin		17 J	10 J	52
1432SSb (1')	10/18/06	Endosulfan I		0.44 J	0.21 J	71
1432SSb (1')	10/18/06	Endosulfan II		0.82 J	0.28 J	98
1432SSb (1')	10/18/06	Endosulfan sulfate		16 J	0.83 J	180
1432SSb (1')	10/18/06	Endrin		150 J	15 J	164
1432SSb (1')	10/18/06	gamma-BHC		0.51 J	0.28 J	58
1432SSb (1')	10/18/06	gamma-Chlordane		68 J	23	99
1432SSb (1')	10/18/06	Heptachlor		0.36 J	0.04 J	160
Inorganics, CLP-SOW (mg/kg)			SDG: MY2WE3			
1432SSb (1')	10/18/06	Aluminum		6870 J	3610 J	62
1432SSb (1')	10/18/06	Barium		1180 J	660 J	57
1432SSb (1')	10/18/06	Beryllium		0.26 J	0.13 J	67
1432SSb (1')	10/18/06	Cadmium		5.7 J	3.4 J	51
1432SSb (1')	10/18/06	Calcium		13500 J	5630 J	82
1432SSb (1')	10/18/06	Chromium		47.7 J	24.1 J	66
1432SSb (1')	10/18/06	Cobalt		9	4.1 J	75
1432SSb (1')	10/18/06	Copper		544 J	235 J	79
1432SSb (1')	10/18/06	Magnesium		2200 J	1050 J	71
1432SSb (1')	10/18/06	Manganese		436 J	237 J	59
1432SSb (1')	10/18/06	Nickel		43.6 J	20.8 J	71
1432SSb (1')	10/18/06	Potassium		1360 J	663 J	69
1432SSb (1')	10/18/06	Silver		7.1 J	3 J	81
1432SSb (1')	10/18/06	Vanadium		29.6 J	15 J	65
1432SSb (1')	10/18/06	Zinc		2290 J	973 J	81
				326SSc-1-1006	**674SSc-1-1006**	
Volatile Organics, EPA Method 8260B (µg/kg)			SDG: 06292C			
326SSc (1')	10/18/06	Freon 11		8.2	14	52
Semivolatile Organics, CLP-SOW (µg/kg)			SDG: Y2WB6			
326SSc (1')	10/18/06	Benzo(a)pyrene		100 J	56 J	56
326SSc (1')	10/18/06	Benzo(g,h,i)perylene		22 J	53 J	83
326SSc (1')	10/18/06	Fluoranthene		160 J	89 J	57

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
RESIDENTIAL						
2006 Residential Soil (October)						
				326SSc-1-1006	**674SSc-1-1006**	
Organochlorine Pesticides/PCBs, CLP-SOW (µg/kg)			SDG: Y2WB6			
326SSc (1')	10/18/06	4,4'-DDD		490 J	1000 J	68
326SSc (1')	10/18/06	4,4'-DDE		2100 J	11000 J	136
326SSc (1')	10/18/06	4,4'-DDT		9 J	3100 J	199
326SSc (1')	10/18/06	Dieldrin		160 J	23 J	150
326SSc (1')	10/18/06	Endosulfan II		5.9 J	32 J	138
326SSc (1')	10/18/06	Endrin aldehyde		0.75 J	24 J	188
326SSc (1')	10/18/06	gamma-Chlordane		4	110 J	186
326SSc (1')	10/18/06	Methoxychlor		12 J	82 J	149
Inorganics, CLP-SOW (mg/kg)			SDG: MY2WB3			
326SSc (1')	10/18/06	Aluminum		2460 J	4280 J	54
326SSc (1')	10/18/06	Barium		173 J	483 J	95
326SSc (1')	10/18/06	Beryllium		0.08 J	0.14 J	55
326SSc (1')	10/18/06	Cadmium		0.53 J	2.6	132
326SSc (1')	10/18/06	Calcium		1660 J	4250 J	88
326SSc (1')	10/18/06	Chromium		14.7 J	42.5 J	97
326SSc (1')	10/18/06	Cobalt		2.2 J	5.7 J	89
326SSc (1')	10/18/06	Copper		40.5 J	120 J	99
326SSc (1')	10/18/06	Iron		5270 J	17400 J	107
326SSc (1')	10/18/06	Lead		167 J+	389 J+	80
326SSc (1')	10/18/06	Magnesium		784 J	1660 J	72
326SSc (1')	10/18/06	Manganese		175 J	465 J	91
326SSc (1')	10/18/06	Mercury		0.55	1	58
326SSc (1')	10/18/06	Nickel		9.5 J	34.1 J	113
326SSc (1')	10/18/06	Silver		0.2 J	0.8 J	120
326SSc (1')	10/18/06	Thallium		0.7 J	1.3 J	60
326SSc (1')	10/18/06	Vanadium		8.5 J	16.9 J	66
326SSc (1')	10/18/06	Zinc		175 J	555 J	104
				356SSa-1-1006	**644SSa-1-1006**	
Semivolatile Organics, CLP-SOW (µg/kg)			SDG: Y2WB6			
356SSa (1')	10/18/06	Benzo(b)fluoranthene		520	310 J	51
356SSa (1')	10/18/06	bis(2-Ethylhexyl)phthalate		440	210 J	71
356SSa (1')	10/18/06	Fluoranthene		520	270 J	63
356SSa (1')	10/18/06	Phenanthrene		210 J	100 J	71
356SSa (1')	10/18/06	Pyrene		520	310 J	51

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name		Primary Sample	Field Duplicate	RPD
RESIDENTIAL						
2006 Residential Soil (October)						
				356SSa-1-1006	**644SSa-1-1006**	
Organochlorine Pesticides/PCBs, CLP-SOW (µg/kg)			SDG: Y2WB6			
356SSa (1')	10/18/06	4,4'-DDE		110 J	0.67 J	198
356SSa (1')	10/18/06	4,4'-DDT		480 J	210 J	78
356SSa (1')	10/18/06	alpha-Chlordane		370 J	2.5 J	197
356SSa (1')	10/18/06	Dieldrin		5.1 J	2.3 J	76
356SSa (1')	10/18/06	Endosulfan sulfate		0.3 J	0.71 J	81
356SSa (1')	10/18/06	Endrin		37 J	0.25 J	197
356SSa (1')	10/18/06	gamma-Chlordane		390	2.8 J	197
356SSa (1')	10/18/06	Heptachlor		3.4 J	1.4 J	83
356SSa (1')	10/18/06	Heptachlor epoxide		11 J	0.97 J	168
Inorganics, CLP-SOW (mg/kg)			SDG: MY2WC3			
356SSa (1')	10/18/06	Aluminum		2680 J	5670 J	72
356SSa (1')	10/18/06	Arsenic		4.3 J	7.8 J	58
356SSa (1')	10/18/06	Barium		174 J	360 J	70
356SSa (1')	10/18/06	Beryllium		0.09 J	0.19 J	71
356SSa (1')	10/18/06	Cadmium		0.9	2	76
356SSa (1')	10/18/06	Calcium		3190 J	5490 J	53
356SSa (1')	10/18/06	Chromium		10.3 J	30.6 J	99
356SSa (1')	10/18/06	Cobalt		2.3 J	5.7	85
356SSa (1')	10/18/06	Copper		28 J	80 J	96
356SSa (1')	10/18/06	Magnesium		879 J	2100 J	82
356SSa (1')	10/18/06	Manganese		99.7 J	271 J	92
356SSa (1')	10/18/06	Nickel		11.8 J	28.4 J	83
356SSa (1')	10/18/06	Potassium		624 J	1520 J	84
356SSa (1')	10/18/06	Silver		0.4 J	1.4	111
356SSa (1')	10/18/06	Vanadium		9 J	22.4 J	85
356SSa (1')	10/18/06	Zinc		254 J	724 J	96
2006 Residential Produce (October)						
				360PC-Cactus-1006	**PC-Cactus-Dup-1(**	
Volatile Organics, EPA Method 8260B (mg/kg)			SDG: K0609319			
360-Cactus	10/19/06	tert-Butyl alcohol		0.15 R	0.21 R	33
Metals, EPA Method 6020 (mg/kg)			SDG: K0609319			
360-Cactus	10/19/06	Lead		2.7 J	1.21 J	76
2006 Residential Air (November 2006)						
				1414CAa-1106	**8586CAA-1106**	
Volatile Organics, EPA Method TO-15 (SIM) (µg/m3)			SDG: 0611176B			
1414CAa	11/07/06	Chloroethane		0.2 J	0.3 J	40
1414CAa	11/07/06	Styrene		0.2 J	0.33 J	49
1414CAa	11/07/06	Vinyl chloride		1.3	1.8	32

TABLE 3-5
Summary of Field Duplicate Pair RPD outliers
AMCO Chemical Superfund Site, Oakland, California

Location ID	Sample Date	Analyte Name	Primary Sample	Field Duplicate	RPD
RESIDENTIAL					
2006 Residential Air (November 2006)					
			1436AA-1106	**8564AA-1106**	
Volatile Organics, EPA Method TO-15 (SIM) (µg/m3)		SDG: 0611176B			
1436AA	11/07/06	1,4-Dichlorobenzene	0.23	0.16 J	36
1436AA	11/07/06	Bromomethane	0.11 J	0.33	100
1436AA	11/07/06	Chloroethane	0.036 J	0.07 J	64
1436AA	11/07/06	Chloromethane	8 J	1.5 J	137
1436AA	11/07/06	Methylene chloride	1.3 J	4.5 J	110

Notes

RPD - Relative Percent Difference = { (Primary Sample - Field Duplicate) / (Primary Sample + Field Duplicate) / 2 } x 100
RPD is calculated and shown only when both the primary and Field Duplicate samples are detected above the Reporting Limit
Field duplicate RPD goal is 50% for soil and 30% for all other matrices.
NC - not calculated
µg/L - micrograms per liter
mg/L - milligrams per liter
U - Not detected at or above the reporting limit.
UJ - Not detected at or above the reporting limit. The reporting limit is an estimate.
J - Estimated value.

TABLE 5-1

Performance Evaluation Sample Results

	CAS No.	Analyte	Shealy Results, Units: µg/L (ppb)				PES Data		Acceptance Limits				
			Y2W65	Score	Y2W69	Score	Avg Lab Conc.	Spike Conc.	Low Action	Low Warn	High Warn	High Action	n
SAMPLE 1 - SIGMA 354 (PAV00073)													
1	75-01-4	Vinyl Chloride	63	PASS	65	PASS	56	60	23	32	80	89	17
2	75-00-3	Chloroethane	87	PASS	91	PASS	80	75	39	51	110	120	16
3	75-35-4	1,1-Dichloroethene	48	PASS	52	PASS	44	40	25	30	57	62	17
4	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	31	PASS	31	PASS	29	25	19	22	36	39	17
5	67-64-1	Acetone	44	PASS	76	PASS	54	75	N.L.	16	92	110	17
6	75-09-2	Methylene Chloride	33	PASS	41	PASS	51	50	35	40	63	67	16
7	75-34-3	1,1-Dichloroethane	78	PASS	89	PASS	74	75	47	54	93	100	17
8	156-59-2	cis-1,2-Dichloroethene	26	PASS	31	PASS	27	25	20	22	32	34	17
9	78-93-3	2-Butanone	33	PASS	5U	PASS	45	50	N.L.	19	72	82	17
10	74-97-5	Bromochloromethane	38	PASS	50	PASS	43	40	33	35	50	53	16
11	110-82-7	Cyclohexane	110	PASS	120	PASS	100	100	68	78	130	140	16
12	71-43-2	Benzene	17	PASS	18	PASS	17	15	12	13	20	22	17
13	79-01-6	Trichloroethene	21	PASS	24	PASS	21	20	14	16	25	27	17
14	78-87-5	1,2-Dichloropropane	27	PASS	32	PASS	27	25	19	21	33	35	17
15	75-27-4	Bromodichloromethane	37	PASS	55	PASS	45	40	32	36	53	57	15
16	108-88-3	Toluene	33	PASS	36	PASS	32	30	23	26	39	41	17
17	10061-02-6	trans-1,3-Dichloropropene	22	PASS	27	PASS	29	25	18	21	36	39	16
18	127-18-4	Tetrachloroethene	29	PASS	29	PASS	27	25	18	20	33	36	17
19	591-78-6	2-Hexanone	88	PASS	120	PASS	93	100	N.L.	28	160	180	16
20	108-90-7	Chlorobenzene	50	PASS	56	PASS	50	50	37	41	59	62	17
21	100-41-4	Ethylbenzene	33	PASS	35	PASS	31	30	22	25	38	40	17
22	75-25-2	Bromoform	11	LOW	30	PASS	26	25	16	19	33	36	16
23	98-82-8	Isopropylbenzene	45	PASS	48	PASS	42	40	31	34	51	54	17

TABLE 5-1

Performance Evaluation Sample Results

	CAS No.	Analyte	Shealy Results, Units: µg/L (ppb)				PES Data		Acceptance Limits				
			Y2W65	Score	Y2W69	Score	Avg Lab Conc.	Spike Conc.	Low Action	Low Warn	High Warn	High Action	n
24	541-73-1	1,3-Dichlorobenzene	50	PASS	56	PASS	51	50	17	26	76	85	17
25	96-12-8	1,2-Dibromo-3-chloropropane	16	PASS	23	PASS	18	20	9.6	12	23	26	16
26	120-82-1	1,2,4-Trichlorobenzene	44	PASS	45	PASS	40	40	30	32	47	50	16
27	123-91-1	1,4-Dioxane	110	PASS	20U	PASS	170	200	N.L.	N.L.	270	300	16
28	96-18-4	1,2,3-Trichloropropane	NA	NE	NA	NE	NA	50	TIC	TIC	TIC	TIC	0
29	79-20-9	Methyl acetate			5.3	NE	-	-	-	-	-	-	-
SAMPLE 2 - SIGMA 122 (V80800)													
1	75-01-4	Vinyl Chloride	140	PASS	140	PASS	130	120	58	75	180	190	49
2	75-00-3	Chloroethane	72	PASS	73	PASS	71	80	38	46	96	100	52
3	75-69-4	Trichlorofluoromethane	61	PASS	62	PASS	65	60	40	46	84	90	49
4	156-60-5	trans-1,2-Dichloroethene	63	PASS	63	PASS	61	60	46	50	73	77	52
5	1634-04-4	Methyl tert-Butyl Ether	87	PASS	85	PASS	96	100	72	78	110	120	47
6	156-59-2	cis-1,2-Dichloroethene	21	PASS	20	PASS	20	20	15	16	23	24	52
7	67-66-3	Chloroform	29	PASS	29	PASS	30	30	22	24	36	38	52
8	71-55-6	1,1,1-Trichloroethane	52	PASS	50	PASS	51	50	37	40	63	66	51
9	71-43-2	Benzene	75	PASS	71	PASS	72	70	53	58	86	90	52
10	107-06-2	1,2-Dichloroethane	38	PASS	37	PASS	42	40	31	34	51	54	52
11	79-01-6	Trichloroethene	97	PASS	94	PASS	92	90	66	73	110	120	51
12	78-87-5	1,2-Dichloropropane	54	PASS	52	PASS	50	50	37	40	60	64	52
13	108-88-3	Toluene	100	PASS	100	PASS	100	100	75	82	120	130	52
14	127-18-4	Tetrachloroethene	76	PASS	73	PASS	69	70	48	53	85	90	51
15	591-78-6	2-Hexanone	130	PASS	120	PASS	160	140	19	54	260	300	51
16	124-48-1	Dibromochloromethane	10	LOW	12	LOW	19	20	13	15	22	24	51

TABLE 5-1

Performance Evaluation Sample Results

	CAS No.	Analyte	Shealy Results, Units: µg/L (ppb)				PES Data		Acceptance Limits				
			Y2W65	Score	Y2W69	Score	Avg Lab Conc.	Spike Conc.	Low Action	Low Warn	High Warn	High Action	n
17	106-93-4	1,2-Dibromoethane	85	PASS	81	PASS	89	90	70	75	100	110	52
18	1330-20-7	Xylene (total)	43	PASS	42	PASS	39	40	28	31	47	50	46
19	98-82-8	Isopropylbenzene	73	PASS	71	PASS	68	80	53	57	80	84	50
20	541-73-1	1,3-Dichlorobenzene	31	PASS	31	PASS	31	30	12	16	45	49	51
21	120-82-1	1,2,4-Trichlorobenzene	44	PASS	42	PASS	38	40	24	27	49	53	52
22	74-96-4	Bromoethane	NA	NE	NA	NE	NA	100	TIC	TIC	TIC	TIC	48
23	124-18-5	Decane	NA	NE	NA	NE	NA	50	TIC	TIC	TIC	TIC	37
24	1190-22-3	1,3-Dichlorobutane	NA	NE	NA	NE	NA	50	TIC	TIC	TIC	TIC	45
25	108-86-1	Bromobenzene	NA	NE	NA	NE	NA	50	TIC	TIC	TIC	TIC	50
26	87-61-6	1,2,3-Trichlorobenzene			45	NE	-	-	-	-	-	-	-
SAMPLE 3 - SIGMA 654 (V02404)													
1	75-01-4	Vinyl Chloride	41	PASS	40	PASS	32	40	15	19	45	49	83
2	74-83-9	Bromomethane	9.1	PASS	8.9	PASS	13	20	N.L.	N.L.	21	24	86
3	75-09-2	Methylene Chloride	22	PASS	22	PASS	27	25	20	22	33	35	86
4	156-60-5	trans-1,2-Dichloroethene	52	HIGH	51	PASS	42	40	32	35	49	51	83
5	71-55-6	1,1,1-Trichloroethane	27	PASS	26	PASS	21	20	15	16	25	27	86
6	10061-01-5	cis-1,3-Dichloropropene	18	PASS	18	PASS	19	20	11	13	24	26	86
7	108-10-1	4-Methyl-2-pentanone	57	PASS	58	PASS	48	45	24	30	65	71	85
8	108-88-3	Toluene	26	PASS	25	PASS	21	20	16	17	25	26	87
9	10061-02-6	trans-1,3-Dichloropropene	18	PASS	18	PASS	17	20	12	13	22	23	85
10	127-18-4	Tetrachloroethene	60	PASS	58	PASS	51	50	36	39	63	66	87
11	124-48-1	Dibromochloromethane	40	HIGH	40	HIGH	30	30	22	24	37	39	86
12	108-90-7	Chlorobenzene	24	PASS	24	PASS	20	20	16	17	24	25	86

TABLE 5-1

Performance Evaluation Sample Results

	CAS No.	Analyte	Shealy Results, Units: µg/L (ppb)				PES Data		Acceptance Limits				
			Y2W65	Score	Y2W69	Score	Avg Lab Conc.	Spike Conc.	Low Action	Low Warn	High Warn	High Action	n
13	100-41-4	Ethylbenzene	34	PASS	34	PASS	28	25	21	22	33	35	87
14	103-65-1	N-Propylbenzene	NA	NE	NA	NE	NA	50	TIC	TIC	TIC	TIC	79
SAMPLE 4 - SIGMA 659 (V00230)													
1	75-01-4	Vinyl Chloride	17	PASS	19	PASS	16	20	N.L.	N.L.	26	30	56
2	75-00-3	Chloroethane	44	PASS	54	PASS	45	50	21	27	62	68	54
3	75-15-0	Carbon Disulfide	24	PASS	25	PASS	25	25	14	16	33	36	53
4	75-34-3	1,1-Dichloroethane	99	PASS	120	PASS	100	100	71	79	120	130	56
5	71-55-6	1,1,1-Trichloroethane	100	PASS	140	PASS	110	100	76	84	130	140	56
6	71-43-2	Benzene	22	PASS	25	PASS	21	20	15	17	25	26	56
7	79-01-6	Trichloroethene	22	PASS	26	PASS	21	20	15	17	25	27	56
8	108-88-3	Toluene	54	PASS	60	PASS	51	50	38	41	61	64	56
9	106-93-4	1,2-Dibromoethane	100	NE	130	NE	NA	100	N.E.	N.E.	N.E.	N.E.	55
10	100-42-5	Styrene	100	HIGH	100	HIGH	80	80	61	66	94	99	50
11	541-73-1	1,3-Dichlorobenzene	21	PASS	23	PASS	20	20	N.L.	10	29	32	37
12	96-12-8	1,2-Dibromo-3-chloropropane	90	NE	130	NE	NA	100	N.E.	N.E.	N.E.	N.E.	54

Notes:

Shaded analytes/results indicate that the sample results were not within the acceptance limits of the study.

µg/L = micrograms per liter
CAS = Chemical Abstract Service
n = number of reporting laboratories
NA = Not Available
NE = Not Evaluated
NL = No Limit defined
PES = Performance Evaluation Sample
ppb = parts per billion
TIC = Tentatively Identified Compound
U = analyte was analyzed for but not detected at the reporting limit.

TABLE 5-2
Split Samples Outliers from March 2006 Event
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP	RPD
BMW-03-0306	04/04/06	cis-1,2-Dichloroethene	96	56	53
		Vinyl chloride	17	10 J	52
MW-12-0306	04/06/06	1,1-Dichloroethane	2000	3200 J	46
		Acetone	820	1900 J	79
		Benzene	200	300 J	40
		Chloroethane	130	190 J	38
		cis-1,2-Dichloroethene	53000	90000 J	52
		Methyl ethyl ketone	800	1200 J	40
		Toluene	20000	28000 J	33
		trans-1,2-Dichloroethene	470	810 J	53
		Vinyl chloride	4500	6500 J	36
RMW-01-17-0306	04/05/06	1,1-Dichloroethane	1	19	180
		1,4-Dichlorobenzene	8.4	5.7	38
		Chlorobenzene	530	728	31
		cis-1,2-Dichloroethene	0.5	530 J	200
		Isopropylbenzene (cumene)	13	8.7	40
RMW-01-35-0306	04/05/06	1,1-Dichloroethane	9.5	13	31
		Chloroethane	61	126	70
		trans-1,2-Dichloroethene	2.5	3.4	31
RMW-02-13-0306	04/06/06	1,1-Dichloroethane	890	1300 J	37
		1,2,3-Trichlorobenzene	8.7	4 J	74
		1,2,4-Trichlorobenzene	24	17 J	34
		1,2-Dichlorobenzene	92	160 J	54
		1,2-Dichloroethane	24	8 J	100
		Acetone	1100	3300 J	100
		Benzene	420	630 J	40
		Chlorobenzene	21 J	32 J	42
		Chloroethane	59	88 J	39
		cis-1,2-Dichloroethene	4800	9000 J	61
		Methyl ethyl ketone	1700	3800 J	76
		Methyl isobutyl ketone	2700	4800 J	56
		Methyl tert-butyl ether	45	83 J	59
		Methylene chloride	4.9	14	96
		Toluene	12000	19000 J	45
		trans-1,2-Dichloroethene	45	84 J	60
		Vinyl chloride	2300	4100 J	56
RMW-03-15-0306	03/30/06	Acetone	6.5	11	51
RMW-06-15-0306	03/31/06	cis-1,2-Dichloroethene	2.5	1.2	70
RMW-07-35-0306	04/03/06	Vinyl chloride	1	0.63 J	45
RMW-08-15-0306	04/04/06	1,4-Dichlorobenzene	3.5	5.5	44
		Benzene	1.1	1.8 J	48
		cis-1,2-Dichloroethene	7.8	13.5	54
		trans-1,2-Dichloroethene	2.3	3.75	48
RMW-08-35-0306	04/04/06	cis-1,2-Dichloroethene	21	34	47
RMW-09-15-0306	04/03/06	Acetone	8.8	19	73

TABLE 5-2
Split Samples Outliers from March 2006 Event
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP	RPD
RMW-09-35-0306	04/03/06	1,1-Dichloroethane	61	89	37
		cis-1,2-Dichloroethene	98	180	59
		trans-1,2-Dichloroethene	19	26	31
RMW-10-35-0306	04/04/06	Acetone	10	29	97
		cis-1,2-Dichloroethene	230	320	33
RMW-93-35-0306	04/03/06	Trichloroethene	8.7	6	37
		Vinyl chloride	1.1	0.62 J	56

Notes

EPA R9 - EPA Region IX Lab
KAP - KAP Technologies, Inc.
RPD - Relative Percent Difference = { (EPA R9 - KAP) / (EPA R9 + KAP) / 2 } x 100
RPD is calculated and shown only when both EPA R9 and KAP results are detected above Practical Quantitation Limit
RPD goal is 30.
J - Estimated value.

TABLE 5-3
Comparison Guidelines for Level of Agreement

Analytical Results	Criteria	Conclusion
Both results not detected	Reporting Limits differ by more than ±25%	Disagreement
One positive result, one non-detected	>5X Difference >10X Difference	Disagreement Major Disagreement
One positive result above the RL, one positive result between the MDL and RL	>3X Difference >5X Difference	Disagreement Major Disagreement
Both Results above the RL, calculate Relative Percent Difference (RPD)	>30% >65%	Disagreement Major Disagreement

Source:
Grant et al., 1996 (*Comparison Criteria for Environmental Chemical Analyses of Split Samples Sent to Different Laboratories*, U.S. Army Corps of Engineers Cold Regions Research and Engineering Laboratory (CRREL) Special Report No. 96-9)

TABLE 6-1
Summary of Data Validation Percentages

Fraction	Percentage of Tier 2 Reviewed Samples	Percentage of Tier 3 Reviewed Samples
Volatile Organic Compounds	35	65
Metals	65	35
Semivolatile Organic Compounds	47	53
Pesticides	41	59
Vapor Phase Volatile Organic Compounds	0	100
Chlorinated Dioxins/Furans	67	33
Dissolved Gases	89	11

TABLE 6-2
Qualifier Reason Code and Description, Number of Results Qualified - Tier 2
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GRAB GROUNDWATER, SOIL, AND SOIL GAS		
Phase 1 (September - December 2004)		
Groundwater		
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	16
	LCS<LCL - LCS recovery less than lower control limit	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	2
	LCS>UCL - LCS recovery greater than upper control limit	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	2
	No ICAL - No initial calibration analyzed in the analytical batch	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	8
	Sur<LCL - Surrogate recovery less than lower limit	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	26
	Temp>6C - Temperature Blank>6°C	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	605
Soil		
	>ICLinearRange - Result greater than linear calibration range	
	Volatile Organics/1,4-Dioxane, CLP-SOW	18
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	43
	Semivolatile Organics, CLP-SOW	20
	CF>UCL - Confirmation precision exceeded upper control limit	
	Organochlorine Pesticides/PCBs, CLP-SOW	102
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Organochlorine Pesticides/PCBs, CLP-SOW	2
	FDRPD>UCL - Field duplicate relative percent difference exceeds upper control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	13
	HT>UCL - Holding time exceeded	
	Volatile Organics/1,4-Dioxane, CLP-SOW	25
	HT>UCL (dilution) - Holding time exceeded for dilution	
	Semivolatile Organics, CLP-SOW	7
	ICAL%RSD>UCL - Initial calibration percent relative standard deviation exceeds upper control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	59
	Semivolatile Organics, CLP-SOW	1
	IS<LCL - Internal standard response less than lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	54
	IS>UCL - Internal standard response greater than upper control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	92
	Lab Dup RPD - Laboratory duplicate exceeds relative percent difference criteria	
	Inorganics, CLP-SOW	1
	Lab Dup RPD>UCL - Laboratory duplicate exceeds relative percent difference upper control limit	
	Inorganics, CLP-SOW	5

TABLE 6-2
Qualifier Reason Code and Description, Number of Results Qualified - Tier 2
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GRAB GROUNDWATER, SOIL, AND SOIL GAS		
Phase 1 (September - December 2004)		
Soil		
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	17
	LB>RL - Laboratory blank contamination greater than the reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	3
	LCS<LCL - LCS recovery less than lower control limit	
	Inorganics, CLP-SOW	29
	MS<LCL - Matrix spike recovery less than lower limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	1
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	Inorganics, CLP-SOW	5
	MS>UCL - Matrix spike recovery greater than upper limit	
	Inorganics, CLP-SOW	1
	Ser Dil RPD>UCL - Serial dilution relative percent difference exceeds upper control limit	
	Inorganics, CLP-SOW	2
	Sur<LCL - Surrogate recovery less than lower limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	131
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	167
	Organochlorine Pesticides/PCBs, CLP-SOW	4
GROUNDWATER MONITORING		
Groundwater, First Quarter 2005 (March)		
Groundwater		
	CCB<RL - Continuing calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	66
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method 524.2	1
	Volatile Organics, CLP-SOW	36
	Semivolatile Organics/1,4-Dioxane, EPA Method 8270C	4
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	24
	Dissolved Gases, EPA Method RSK-175	1
	Inorganics, CLP-SOW	121
	CF>RPD - Confirmation precision exceeded relative percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	36
	Organochlorine Pesticides/PCBs, EPA Method 8081A	2
	CRQL>UCL - CRQL recovery greater than upper control limit	
	Inorganics, CLP-SOW	143
	EB<RL - Equipment blank concentration less than the reporting limit	
	Organochlorine Pesticides/PCBs, CLP-SOW	4
	Inorganics, CLP-SOW	8

TABLE 6-2
Qualifier Reason Code and Description, Number of Results Qualified - Tier 2
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, First Quarter 2005 (March)		
Groundwater		
	EB>RL - Equipment blank concentration greater than the reporting limit	
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	38
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Volatile Organics, CLP-SOW	4
	Dissolved Gases, EPA Method RSK-175	2
	Inorganics, CLP-SOW	16
	HT>UCL - Holding time exceeded	
	Dissolved Gases, EPA Method RSK-175	1
	Hexavalent Chromium, EPA Method 218.6	2
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, CLP-SOW	75
	ICB<RL - Initial calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	24
	ICVS<LCL - Second source verification std. recovery less than lower control limit	
	Total Organic Carbon, EPA Method 415.1	5
	IS<LCL - Internal standard response less than lower control limit	
	Volatile Organics, CLP-SOW	51
	Dioxins and Furans, EPA Method SW8290	37
	IS>UCL - Internal standard response greater than upper control limit	
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	1
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Inorganics, CLP-SOW	27
	LB>RL - Laboratory blank contamination greater than the reporting limit	
	Volatile Organics, CLP-SOW	5
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	55
	LCS<LCL - LCS recovery less than lower control limit	
	Semivolatile Organics/1,4-Dioxane, EPA Method 8270C	2
	MS<LCL - Matrix spike recovery less than lower limit	
	Semivolatile Organics/1,4-Dioxane, EPA Method 8270C	5
	Hexavalent Chromium, EPA Method 218.6	1
	Inorganics, CLP-SOW	3
	Metals, EPA Method 200.8	1
	MS>UCL - Matrix spike recovery greater than upper limit	
	Semivolatile Organics/1,4-Dioxane, EPA Method 8270C	1
	Metals, EPA Method 200.8	2
	MSRPD - Matrix spike RPD criteria exceedance	
	Semivolatile Organics/1,4-Dioxane, EPA Method 8270C	1
	NotPres - Sample not properly preserved in the field	
	Dissolved Gases, EPA Method RSK-175	6

TABLE 6-2
Qualifier Reason Code and Description, Number of Results Qualified - Tier 2
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, First Quarter 2005 (March)		
Groundwater		
	SD<LCL - Matrix spike duplicate recovery criteria less than lower limit	
	Semivolatile Organics/1,4-Dioxane, EPA Method 8270C	8
	Metals, EPA Method 200.8	1
	SD>UCL - Matrix spike duplicate recovery criteria greater than upper limit	
	Volatile Organics, CLP-SOW	3
	Semivolatile Organics/1,4-Dioxane, EPA Method 8270C	1
	Metals, EPA Method 200.8	2
	SerialDilution>UCL - Serial dilution percent difference exceeded criteria >10%	
	Inorganics, CLP-SOW	12
	Sur<LCL - Surrogate recovery less than lower limit	
	Semivolatile Organics/1,4-Dioxane, EPA Method 8270C	1
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	21
	Organochlorine Pesticides/PCBs, CLP-SOW	83
	Organochlorine Pesticides/PCBs, EPA Method 8081A	7
	Dissolved Gases, EPA Method RSK-175	2
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics, CLP-SOW	2
	Dissolved Gases, EPA Method RSK-175	5
Groundwater, Second Quarter 2005 (June)		
Groundwater		
	HT>UCL - Holding time exceeded	
	1,4-Dioxane, EPA Method 8270C	2
	Dissolved Gases, EPA Method RSK-175	3
	NotPres - Sample not properly preserved in the field	
	Dissolved Gases, EPA Method RSK-175	3
	Sur>UCL - Surrogate recovery greater than upper limit	
	Dissolved Gases, EPA Method RSK-175	6
Groundwater, Third Quarter 2005 (September)		
Groundwater		
	CCB<RL - Continuing calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	168
	CCV<>CL - Continuing calibration verification is outside control limit	
	Inorganics, CLP-SOW	2
	CRI>UCL - CRQL check standard greater than upper control limit	
	Inorganics, CLP-SOW	22
	EB<RL - Equipment blank concentration less than the reporting limit	
	Inorganics, CLP-SOW	6
	EB>RL - Equipment blank concentration greater than the reporting limit	
	Inorganics, CLP-SOW	51

TABLE 6-2
Qualifier Reason Code and Description, Number of Results Qualified - Tier 2
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, Third Quarter 2005 (September)		
Groundwater		
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Organophosphorus Pesticides, EPA Method 8141A	64
	HT>UCL - Holding time exceeded	
	Dissolved Gases, EPA Method RSK-175	3
	Anions, EPA Method 300.0	20
	ICB<RL - Initial calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	65
	IS<LCL - Internal standard response less than lower control limit	
	Inorganics, CLP-SOW	16
	Lab Dup RPD - Laboratory duplicate exceeds relative percent difference criteria	
	Inorganics, CLP-SOW	16
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Inorganics, CLP-SOW	90
	MS<LCL - Matrix spike recovery less than lower limit	
	Inorganics, CLP-SOW	17
	MS>UCL - Matrix spike recovery greater than upper limit	
	Inorganics, CLP-SOW	31
	NotPres - Sample not properly preserved in the field	
	Dissolved Gases, EPA Method RSK-175	3
	SerialDilution>UCL - Serial dilution percent difference exceeded criteria >10%	
	Inorganics, CLP-SOW	155
	Sur<LCL - Surrogate recovery less than lower limit	
	Dissolved Gases, EPA Method RSK-175	3
Groundwater, Fourth Quarter 2005 (January)		
Groundwater		
	CCB<RL - Continuing calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	53
	EB<RL - Equipment blank concentration less than the reporting limit	
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	3
	Inorganics, CLP-SOW	5
	EB>RL - Equipment blank concentration greater than the reporting limit	
	Inorganics, CLP-SOW	2
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Inorganics, CLP-SOW	10
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	3
	ICB<RL - Initial calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	37
	ICS>UCL - Interference check standard recovery greater than upper control limit	
	Inorganics, CLP-SOW	34

TABLE 6-2
Qualifier Reason Code and Description, Number of Results Qualified - Tier 2
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, Fourth Quarter 2005 (January)		
Groundwater		
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	3
	Inorganics, CLP-SOW	17
	MS<LCL - Matrix spike recovery less than lower limit	
	Inorganics, CLP-SOW	5
	MS>UCL - Matrix spike recovery greater than upper limit	
	Inorganics, CLP-SOW	1
	SerialDilution>UCL - Serial dilution percent difference exceeded criteria >10%	
	Inorganics, CLP-SOW	151
	Sur<LCL - Surrogate recovery less than lower limit	
	Dissolved Gases, EPA Method RSK-175	2
	Sur>UCL - Surrogate recovery greater than upper limit	
	Dissolved Gases, EPA Method RSK-175	5
Groundwater, First Quarter 2006 (March)		
Groundwater		
	>ICLinearRange - Result greater than linear calibration range	
	Volatile Organics/1,4-Dioxane, CLP-SOW	5
	CCV RRF - Continuing calibration relative response factor below lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	8
	Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW	7
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	19
	EB<RL - Equipment blank concentration less than the reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	4
	EB>RL - Equipment blank concentration greater than the reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	3
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Volatile Organics/1,4-Dioxane, CLP-SOW	8
	HT>UCL - Holding time exceeded	
	Volatile Organics/1,4-Dioxane, CLP-SOW	8
	IC RRF - Initial calibration relative response factor below lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	8
	Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW	7
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics/1,4-Dioxane, CLP-SOW	26
	IS<LCL - Internal standard response less than lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	1
	IS>UCL - Internal standard response greater than upper control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	7
	Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW	4

TABLE 6-2
Qualifier Reason Code and Description, Number of Results Qualified - Tier 2
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, First Quarter 2006 (March)		
Groundwater		
	MS<LCL - Matrix spike recovery less than lower limit	
	Volatile Organics, EPA Method 524.2	1
	Volatile Organics/1,4-Dioxane, CLP-SOW	2
	MS>UCL - Matrix spike recovery greater than upper limit	
	Volatile Organics, EPA Method 524.2	1
	MSRPD - Matrix spike RPD criteria exceedance	
	Volatile Organics/1,4-Dioxane, CLP-SOW	2
	SD<LCL - Matrix spike duplicate recovery criteria less than lower limit	
	Volatile Organics, EPA Method 524.2	3
	Volatile Organics/1,4-Dioxane, CLP-SOW	2
	SD>UCL - Matrix spike duplicate recovery criteria greater than upper limit	
	Volatile Organics, EPA Method 524.2	1
	Sur<LCL - Surrogate recovery less than lower limit	
	Volatile Organics, EPA Method 524.2	23
	Volatile Organics/1,4-Dioxane, CLP-SOW	30
	Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW	8
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	4
	Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW	1
	TB>RL - Trip blank concentration greater than the reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	4
Groundwater, Second Quarter 2006 (June)		
Groundwater		
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method 524.2	7
	EB<RL - Equipment blank concentration less than the reporting limit	
	Volatile Organics, EPA Method 524.2	4
	EB>RL - Equipment blank concentration greater than the reporting limit	
	Volatile Organics, EPA Method 524.2	8
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Volatile Organics, EPA Method 524.2	16
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, EPA Method 524.2	3
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Volatile Organics, EPA Method 524.2	1
	MS<LCL - Matrix spike recovery less than lower limit	
	Volatile Organics, EPA Method 524.2	1
	MS>UCL - Matrix spike recovery greater than upper limit	
	Volatile Organics, EPA Method 524.2	2

TABLE 6-2
Qualifier Reason Code and Description, Number of Results Qualified - Tier 2
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, Second Quarter 2006 (June)		
Groundwater		
	SD<LCL - Matrix spike duplicate recovery criteria less than lower limit	
	Volatile Organics, EPA Method 524.2	2
	SD>UCL - Matrix spike duplicate recovery criteria greater than upper limit	
	Volatile Organics, EPA Method 524.2	2
	Sur<LCL - Surrogate recovery less than lower limit	
	Volatile Organics, EPA Method 524.2	58
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics, EPA Method 524.2	22
Groundwater, Third Quarter 2006 (September)		
Groundwater		
	>ICLinearRange - Result greater than linear calibration range	
	Volatile Organics/1,4-Dioxane, CLP-SOW	28
	Semivolatile Organics (SIM), CLP-SOW	7
	1,4-Dioxane, CLP-SOW	1
	CCB<RL - Continuing calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	28
	CCV RRF - Continuing calibration relative response factor below lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	8
	CCV<LCL - Continuing calibration recovery less than lower control limit	
	Semivolatile Organics (SIM), CLP-SOW	76
	CCV>UCL - Continuing calibration recovery greater than upper control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	3
	Semivolatile Organics, CLP-SOW	20
	Semivolatile Organics (SIM), CLP-SOW	2
	Organochlorine Pesticides/PCBs, CLP-SOW	11
	CF>%D - Confirmation precision exceeded percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	163
	CVES - Calibration verification ending standard exceeded percent difference criteria	
	Volatile Organics/1,4-Dioxane, CLP-SOW	5
	EB<RL - Equipment blank concentration less than the reporting limit	
	Inorganics, CLP-SOW	8
	EMPC - Estimated Maximum Possible Concentration	
	Chlorinated Furans/Dioxins Low Method	1
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Volatile Organics/1,4-Dioxane, CLP-SOW	31
	Semivolatile Organics (SIM), CLP-SOW	4
	1,4-Dioxane, CLP-SOW	2
	Organochlorine Pesticides/PCBs, CLP-SOW	4
	IC RRF - Initial calibration relative response factor below lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	8

TABLE 6-2
Qualifier Reason Code and Description, Number of Results Qualified - Tier 2
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, Third Quarter 2006 (September)		
Groundwater		
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics/1,4-Dioxane, CLP-SOW	5
	Semivolatile Organics (SIM), CLP-SOW	4
	ICB<RL - Initial calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	44
	IS<LCL - Internal standard response less than lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	8
	Inorganics, CLP-SOW	92
	IS>UCL - Internal standard response greater than upper control limit	
	Semivolatile Organics (SIM), CLP-SOW	1
	Lab Dup RPD - Laboratory duplicate exceeds relative percent difference criteria	
	Inorganics, CLP-SOW	2
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	37
	Semivolatile Organics, CLP-SOW	12
	Semivolatile Organics (SIM), CLP-SOW	34
	Organochlorine Pesticides/PCBs, CLP-SOW	34
	Inorganics, CLP-SOW	61
	LB>RL - Laboratory blank contamination greater than the reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	4
	MS<LCL - Matrix spike recovery less than lower limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	3
	Semivolatile Organics, CLP-SOW	3
	MS>UCL - Matrix spike recovery greater than upper limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	1
	Inorganics, CLP-SOW	1
	MSRPD - Matrix spike RPD criteria exceedance	
	Volatile Organics/1,4-Dioxane, CLP-SOW	3
	NotPres - Sample not properly preserved in the field	
	Inorganics, CLP-SOW	37
	NoWDM - No window defining mix	
	Chlorinated Furans/Dioxins Low Method	232
	SB<RL - Source blank concentration less than reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	48
	SB>RL - Source blank concentration greater than the reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	5
	SD<LCL - Matrix spike duplicate recovery criteria less than lower limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	1
	SD>UCL - Matrix spike duplicate recovery criteria greater than upper limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	3

TABLE 6-2
Qualifier Reason Code and Description, Number of Results Qualified - Tier 2
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, Third Quarter 2006 (September)		
Groundwater		
	SerialDilution>UCL - Serial dilution percent difference exceeded criteria >10%	
	Inorganics, CLP-SOW	3
	Sur<LCL - Surrogate recovery less than lower limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	53
	Semivolatile Organics, CLP-SOW	28
	Semivolatile Organics (SIM), CLP-SOW	53
	1,4-Dioxane, CLP-SOW	8
	Organochlorine Pesticides/PCBs, CLP-SOW	469
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	36
	Organochlorine Pesticides/PCBs, CLP-SOW	32
	TB<RL - Trip blank concentration less than reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	29
	TB>RL - Trip blank concentration greater than the reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	2
RESIDENTIAL		
2006 Residential Soil (October)		
Soil		
	>ICLinearRange - Result greater than linear calibration range	
	Organochlorine Pesticides/PCBs, CLP-SOW	11
	CCV<LCL - Continuing calibration recovery less than lower control limit	
	Semivolatile Organics, CLP-SOW	2
	Organochlorine Pesticides/PCBs, CLP-SOW	4
	CCV>UCL - Continuing calibration recovery greater than upper control limit	
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	CF>%D - Confirmation precision exceeded percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	486
	CRI>UCL - CRQL check standard greater than upper control limit	
	Inorganics, CLP-SOW	10
	EB<RL - Equipment blank concentration less than the reporting limit	
	Organochlorine Pesticides/PCBs, CLP-SOW	5
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Semivolatile Organics, CLP-SOW	50
	Organochlorine Pesticides/PCBs, CLP-SOW	25
	Inorganics, CLP-SOW	54
	GPC<LCL - Gel permeation chromatography recovery less than lower limit	
	Organochlorine Pesticides/PCBs, CLP-SOW	106
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Organochlorine Pesticides/PCBs, CLP-SOW	2

TABLE 6-2
Qualifier Reason Code and Description, Number of Results Qualified - Tier 2
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
RESIDENTIAL		
2006 Residential Soil (October)		
Soil		
	Lab Dup RPD - Laboratory duplicate exceeds relative percent difference criteria	
	Inorganics, CLP-SOW	4
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Semivolatile Organics, CLP-SOW	12
	Organochlorine Pesticides/PCBs, CLP-SOW	48
	Inorganics, CLP-SOW	27
	LCS>UCL - LCS recovery greater than upper control limit	
	Inorganics, CLP-SOW	2
	MS<LCL - Matrix spike recovery less than lower limit	
	Semivolatile Organics, CLP-SOW	2
	Inorganics, CLP-SOW	18
	MS>UCL - Matrix spike recovery greater than upper limit	
	Inorganics, CLP-SOW	1
	MSRPD - Matrix spike RPD criteria exceedance	
	Semivolatile Organics, CLP-SOW	1
	SD<LCL - Matrix spike duplicate recovery criteria less than lower limit	
	Semivolatile Organics, CLP-SOW	2
	SerialDilution>UCL - Serial dilution percent difference exceeded criteria >10%	
	Inorganics, CLP-SOW	37
	Sur<LCL - Surrogate recovery less than lower limit	
	Semivolatile Organics, CLP-SOW	2
	1,4-Dioxane (SIM), CLP-SOW	19
	Organochlorine Pesticides/PCBs, CLP-SOW	51
	Sur>UCL - Surrogate recovery greater than upper limit	
	Semivolatile Organics, CLP-SOW	6
	Organochlorine Pesticides/PCBs, CLP-SOW	101

Notes:

CLP-SOW Contract Laboratory Program Statement of Work
SIM Selected Ion Monitoring

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GRAB GROUNDWATER, SOIL, AND SOIL GAS		
Phase 1 (September - December 2004)		
Groundwater		
	1PT - Using a 1 point curve instead of the required 5 point	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	63
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	22
	IPC - Instrument Performance Check ion abundance criteria not met	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	25
	LCS<LCL - LCS recovery less than lower control limit	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	1
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	19
	Temp>6C - Temperature Blank>6°C	
	Volatile Organics/1,4-Dioxane, EPA Method 524.2	4184
Soil		
	>ICLinearRange - Result greater than linear calibration range	
	Volatile Organics/1,4-Dioxane, CLP-SOW	2
	CCV%D - Continuing calibration percent difference exceeded criteria	
	Volatile Organics/1,4-Dioxane, CLP-SOW	2
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	28
	Semivolatile Organics, CLP-SOW	35
	CF>%D - Confirmation precision exceeded percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	26
	HT>UCL - Holding time exceeded	
	Volatile Organics/1,4-Dioxane, CLP-SOW	800
	Semivolatile Organics, CLP-SOW	1
	Dioxins and Furans, EPA Method SW8290	52
	IC RRF - Initial calibration relative response factor below lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	20
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics/1,4-Dioxane, CLP-SOW	17
	ICS>UCL - Interference check standard recovery greater than upper control limit	
	Inorganics, CLP-SOW	12
	IS<LCL - Internal standard response less than lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	16
	Dioxins and Furans, EPA Method SW8290	1
	LB>MDL - Laboratory blank contamination greater than the method detection limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	3
	Semivolatile Organics, CLP-SOW	1
	MS<LCL - Matrix spike recovery less than lower limit	
	Inorganics, CLP-SOW	20

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GRAB GROUNDWATER, SOIL, AND SOIL GAS		
Phase 1 (September - December 2004)		
Soil		
	P1 - spectral criteria not met	
	Semivolatile Organics, CLP-SOW	1
	P4 - If analyte concentration < 1/2 CRQL, result raised to CRQL and reported as nondetect	
	Organochlorine Pesticides/PCBs, CLP-SOW	14
	Ser Dil RPD>UCL - Serial dilution relative percent difference exceeds upper control limit	
	Inorganics, CLP-SOW	12
	SerialDilution>UCL - Serial dilution percent difference exceeded criteria >10%	
	Inorganics, CLP-SOW	72
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	3
	Organochlorine Pesticides/PCBs, CLP-SOW	11
Soil Gas		
	>ICLinearRange - Result greater than linear calibration range	
	Volatile Organics, EPA Method 8260B	7
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method 8260B	123
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Volatile Organics, EPA Method 8260B	1
	LB>RL - Laboratory blank contamination greater than the reporting limit	
	Volatile Organics, EPA Method 8260B	168
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics, EPA Method 8260B	19
Phase 1 Soil Gas Probe (October 2004)		
Soil Gas		
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method TO-15	20
	Volatile Organics, EPA Method TO-15 (SIM)	10
	LCS<>CL - LCS recovery is outside control limit	
	Volatile Organics, EPA Method TO-15	2
Phase 2 Soil Gas Probe (May 2005)		
Soil Gas		
	CCV%D - Continuing calibration percent difference exceeded criteria	
	Volatile Organics, EPA Method TO-15	5
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method TO-15	28
	Volatile Organics, EPA Method TO-15 (SIM)	6
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, EPA Method TO-15	20

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GRAB GROUNDWATER, SOIL, AND SOIL GAS		
Phase 2 Soil Gas Probe (May 2005)		
Soil Gas		
	LB>RL - Laboratory blank contamination greater than the reporting limit	
	Volatile Organics, EPA Method TO-15	10
	Volatile Organics, EPA Method TO-15 (SIM)	24
	LCS<LCL - LCS recovery less than lower control limit	
	Volatile Organics, EPA Method TO-15	23
	Volatile Organics, EPA Method TO-15 (SIM)	22
Phase 3 Soil Gas Probe (November 2006)		
Soil Gas		
	CCV>UCL - Continuing calibration recovery greater than upper control limit	
	Volatile Organics, EPA Method TO-15	21
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Volatile Organics, EPA Method TO-15	2
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, EPA Method TO-15	11
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Volatile Organics, EPA Method TO-15	20
	LCS<LCL - LCS recovery less than lower control limit	
	Volatile Organics, EPA Method TO-15	14
	Spectral ID - Spectral Identification inconsistent with reference spectrum	
	Volatile Organics, EPA Method TO-15	4
GROUNDWATER MONITORING		
Groundwater, First Quarter 2005 (March)		
Groundwater		
	CCB<RL - Continuing calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	1
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, CLP-SOW	37
	Semivolatile Organics, CLP-SOW	128
	CF>RPD - Confirmation precision exceeded relative percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	15
	EB<RL - Equipment blank concentration less than the reporting limit	
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	Inorganics, CLP-SOW	1
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Volatile Organics, CLP-SOW	9
	HT>UCL - Holding time exceeded	
	Volatile Organics, CLP-SOW	51

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, First Quarter 2005 (March)		
Groundwater		
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, CLP-SOW	36
	Semivolatile Organics, CLP-SOW	48
	ICVS>UCL - Second source verification std. recovery greater than upper control limit	
	Dissolved Gases, EPA Method RSK-175	6
	IS<LCL - Internal standard response less than lower control limit	
	Volatile Organics, CLP-SOW	49
	Lab Dup RPD - Laboratory duplicate exceeds relative percent difference criteria	
	Inorganics, CLP-SOW	1
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Dissolved Gases, EPA Method RSK-175	1
	MS<LCL - Matrix spike recovery less than lower limit	
	Semivolatile Organics, CLP-SOW	1
	NotPres - Sample not properly preserved in the field	
	Dissolved Gases, EPA Method RSK-175	3
	Sur<LCL - Surrogate recovery less than lower limit	
	Semivolatile Organics, CLP-SOW	577
	Sur>UCL - Surrogate recovery greater than upper limit	
	Dissolved Gases, EPA Method RSK-175	1
	TB>RL - Trip blank concentration greater than the reporting limit	
	Volatile Organics, CLP-SOW	1
Groundwater, Second Quarter 2005 (June)		
Groundwater		
	CF>RPD - Confirmation precision exceeded relative percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	9
	MethodPerf - Method performance issues	
	Organochlorine Pesticides/PCBs, CLP-SOW	49
	MS<LCL - Matrix spike recovery less than lower limit	
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	MSRPD - Matrix spike RPD criteria exceedance	
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	ReintegratedResult - Manual integration revision	
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	Sur>UCL - Surrogate recovery greater than upper limit	
	Organochlorine Pesticides/PCBs, CLP-SOW	1
Groundwater, Third Quarter 2005 (September)		
Groundwater		
	>ICLinearRange - Result greater than linear calibration range	
	Volatile Organics, CLP-SOW	14

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, Third Quarter 2005 (September)		
Groundwater		
	CCB<RL - Continuing calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	10
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, CLP-SOW	31
	Semivolatile Organics, CLP-SOW	8
	Inorganics, CLP-SOW	32
	CF>RPD - Confirmation precision exceeded relative percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	8
	CRI>UCL - CRQL check standard greater than upper control limit	
	Inorganics, CLP-SOW	2
	EB<RL - Equipment blank concentration less than the reporting limit	
	Volatile Organics, CLP-SOW	17
	Semivolatile Organics, CLP-SOW	6
	Inorganics, CLP-SOW	4
	EB>RL - Equipment blank concentration greater than the reporting limit	
	Volatile Organics, CLP-SOW	10
	Semivolatile Organics, CLP-SOW	3
	1,4-Dioxane (SIM), CLP-SOW	1
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Volatile Organics, CLP-SOW	11
	Semivolatile Organics, CLP-SOW	4
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, CLP-SOW	25
	Semivolatile Organics, CLP-SOW	3
	Organochlorine Pesticides/PCBs, CLP-SOW	4
	ICB<RL - Initial calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	21
	ICS>UCL - Interference check standard recovery greater than upper control limit	
	Inorganics, CLP-SOW	9
	IS>UCL - Internal standard response greater than upper control limit	
	Inorganics, CLP-SOW	9
	Lab Dup RPD - Laboratory duplicate exceeds relative percent difference criteria	
	Inorganics, CLP-SOW	1
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Volatile Organics, CLP-SOW	16
	Semivolatile Organics, CLP-SOW	2
	Inorganics, CLP-SOW	4
	LB>RL - Laboratory blank contamination greater than the reporting limit	
	Volatile Organics, CLP-SOW	16

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, Third Quarter 2005 (September)		
Groundwater		
	MethodPerf - Method performance issues	
	Organochlorine Pesticides/PCBs, CLP-SOW	42
	MS<LCL - Matrix spike recovery less than lower limit	
	Volatile Organics, CLP-SOW	2
	MSRPD - Matrix spike RPD criteria exceedance	
	Volatile Organics, CLP-SOW	8
	NotPres - Sample not properly preserved in the field	
	Volatile Organics, CLP-SOW	49
	Possible carryover - Possible carryover contamination of previous sample	
	1,4-Dioxane (SIM), CLP-SOW	1
	SD>UCL - Matrix spike duplicate recovery criteria greater than upper limit	
	Volatile Organics, CLP-SOW	1
	SerialDilution>UCL - Serial dilution percent difference exceeded criteria >10%	
	Inorganics, CLP-SOW	1
	Sur<LCL - Surrogate recovery less than lower limit	
	Volatile Organics, CLP-SOW	80
	Semivolatile Organics, CLP-SOW	94
	Organochlorine Pesticides/PCBs, CLP-SOW	2
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics, CLP-SOW	6
	Semivolatile Organics, CLP-SOW	2
	TB<RL - Trip blank concentration less than reporting limit	
	Volatile Organics, CLP-SOW	9
	TB>RL - Trip blank concentration greater than the reporting limit	
	Volatile Organics, CLP-SOW	16
Groundwater, Fourth Quarter 2005 (January)		
Groundwater		
	>ICLinearRange - Result greater than linear calibration range	
	Volatile Organics, CLP-SOW	10
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	6
	Organochlorine Pesticides/PCBs, CLP-SOW	4
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, CLP-SOW	18
	Semivolatile Organics, CLP-SOW	29
	CF>%D - Confirmation precision exceeded percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	CF>RPD - Confirmation precision exceeded relative percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	19

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, Fourth Quarter 2005 (January)		
Groundwater		
	EB<RL - Equipment blank concentration less than the reporting limit	
	Volatile Organics, CLP-SOW	43
	Semivolatile Organics, CLP-SOW	1
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	19
	EB>RL - Equipment blank concentration greater than the reporting limit	
	Volatile Organics, CLP-SOW	16
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	7
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, CLP-SOW	37
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	21
	ICB<RL - Initial calibration blank concentration less than reporting limit	
	Inorganics, CLP-SOW	3
	IS>UCL - Internal standard response greater than upper control limit	
	Volatile Organics, CLP-SOW	14
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	17
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Volatile Organics, CLP-SOW	33
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	27
	LB>RL - Laboratory blank contamination greater than the reporting limit	
	Volatile Organics, CLP-SOW	11
	MS<LCL - Matrix spike recovery less than lower limit	
	Organochlorine Pesticides/PCBs, CLP-SOW	9
	MSRPD - Matrix spike RPD criteria exceedance	
	Volatile Organics, CLP-SOW	2
	Semivolatile Organics, CLP-SOW	1
	Organochlorine Pesticides/PCBs, CLP-SOW	14
	ReintegratedResult - Manual integration revision	
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	SD<LCL - Matrix spike duplicate recovery criteria less than lower limit	
	Semivolatile Organics, CLP-SOW	1
	Organochlorine Pesticides/PCBs, CLP-SOW	13
	SerialDilution>UCL - Serial dilution percent difference exceeded criteria >10%	
	Inorganics, CLP-SOW	2
	Sur<LCL - Surrogate recovery less than lower limit	
	Volatile Organics, CLP-SOW	108
	Semivolatile Organics, CLP-SOW	158
	Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW	1
	Organochlorine Pesticides/PCBs, CLP-SOW	1

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, Fourth Quarter 2005 (January)		
Groundwater		
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics, CLP-SOW	5
	Semivolatile Organics, CLP-SOW	1
	Organochlorine Pesticides/PCBs, CLP-SOW	5
	TB<RL - Trip blank concentration less than reporting limit	
	Volatile Organics, CLP-SOW	33
	TB>RL - Trip blank concentration greater than the reporting limit	
	Volatile Organics, CLP-SOW	6
Groundwater, First Quarter 2006 (March)		
Groundwater		
	>ICLinearRange - Result greater than linear calibration range	
	Volatile Organics/1,4-Dioxane, CLP-SOW	3
	CCV RRF - Continuing calibration relative response factor below lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	1
	Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW	4
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	6
	CF>%D - Confirmation precision exceeded percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	17
	EB<RL - Equipment blank concentration less than the reporting limit	
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Organochlorine Pesticides/PCBs, CLP-SOW	2
	HT>UCL - Holding time exceeded	
	Volatile Organics/1,4-Dioxane, CLP-SOW	77
	Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW	4
	IC RRF - Initial calibration relative response factor below lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	1
	Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW	4
	IS>UCL - Internal standard response greater than upper control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	7
	Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW	1
	MS>UCL - Matrix spike recovery greater than upper limit	
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	MSRPD - Matrix spike RPD criteria exceedance	
	Organochlorine Pesticides/PCBs, CLP-SOW	3
	Sur<LCL - Surrogate recovery less than lower limit	
	Volatile Organics, EPA Method 524.2	6
	Volatile Organics/1,4-Dioxane, CLP-SOW	5
	Organochlorine Pesticides/PCBs, CLP-SOW	5

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, First Quarter 2006 (March)		
Groundwater		
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	9
	Organochlorine Pesticides/PCBs, CLP-SOW	6
Groundwater, Second Quarter 2006 (June)		
Groundwater		
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method 524.2	5
	EB>RL - Equipment blank concentration greater than the reporting limit	
	Volatile Organics, EPA Method 524.2	4
	MS<LCL - Matrix spike recovery less than lower limit	
	Volatile Organics, EPA Method 524.2	1
	SD<LCL - Matrix spike duplicate recovery criteria less than lower limit	
	Volatile Organics, EPA Method 524.2	8
	TB>RL - Trip blank concentration greater than the reporting limit	
	Volatile Organics, EPA Method 524.2	1
Groundwater, Third Quarter 2006 (September)		
Groundwater		
	CCV RRF - Continuing calibration relative response factor below lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	2
	CCV<LCL - Continuing calibration recovery less than lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	1
	CCV>UCL - Continuing calibration recovery greater than upper control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	8
	Semivolatile Organics (SIM), CLP-SOW	1
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	CF>%D - Confirmation precision exceeded percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	13
	DPE interference - Diphenyl ether interference	
	Chlorinated Furans/Dioxins Low Method	5
	EB<RL - Equipment blank concentration less than the reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	3
	Semivolatile Organics, CLP-SOW	3
	Semivolatile Organics (SIM), CLP-SOW	2
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	EMPC - Estimated Maximum Possible Concentration	
	Chlorinated Furans/Dioxins Low Method	1
	IC RRF - Initial calibration relative response factor below lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	2

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
GROUNDWATER MONITORING		
Groundwater, Third Quarter 2006 (September)		
Groundwater		
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics/1,4-Dioxane, CLP-SOW	1
	Semivolatile Organics (SIM), CLP-SOW	1
	IS<LCL - Internal standard response less than lower control limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	5
	Semivolatile Organics (SIM), CLP-SOW	14
	Lab Dup RPD - Laboratory duplicate exceeds relative percent difference criteria	
	Inorganics, CLP-SOW	1
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	18
	Semivolatile Organics, CLP-SOW	3
	Semivolatile Organics (SIM), CLP-SOW	3
	Organochlorine Pesticides/PCBs, CLP-SOW	6
	Inorganics, CLP-SOW	3
	NoWDM - No window defining mix	
	Chlorinated Furans/Dioxins Low Method	44
	SerialDilution>UCL - Serial dilution percent difference exceeded criteria >10%	
	Inorganics, CLP-SOW	4
	Sur<LCL - Surrogate recovery less than lower limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	5
	Semivolatile Organics, CLP-SOW	44
	Semivolatile Organics (SIM), CLP-SOW	4
	1,4-Dioxane, CLP-SOW	2
	Organochlorine Pesticides/PCBs, CLP-SOW	77
	Sur>UCL - Surrogate recovery greater than upper limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	2
	TB<RL - Trip blank concentration less than reporting limit	
	Volatile Organics/1,4-Dioxane, CLP-SOW	12
RESIDENTIAL		
2004 Residential Air (September 2004)		
Ambient Air		
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method TO-15 (SIM)	28
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, EPA Method TO-15 (SIM)	8
Crawl Space Air		
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method TO-15 (SIM)	14

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
RESIDENTIAL		
2004 Residential Air (September 2004)		
Crawl Space Air		
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, EPA Method TO-15 (SIM)	5
2004 Residential Soil Gas (September 2004)		
Soil Gas		
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method TO-15	2
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, EPA Method TO-15	10
2005 Residential Air (May 2005)		
Ambient Air		
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method TO-15 (SIM)	6
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, EPA Method TO-15 (SIM)	26
	LB>RL - Laboratory blank contamination greater than the reporting limit	
	Volatile Organics, EPA Method TO-15 (SIM)	41
	LCS<LCL - LCS recovery less than lower control limit	
	Volatile Organics, EPA Method TO-15 (SIM)	15
Crawl Space Air		
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method TO-15 (SIM)	4
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, EPA Method TO-15 (SIM)	15
	LB>RL - Laboratory blank contamination greater than the reporting limit	
	Volatile Organics, EPA Method TO-15 (SIM)	18
	LCS<LCL - LCS recovery less than lower control limit	
	Volatile Organics, EPA Method TO-15 (SIM)	7
2005 Residential Soil Gas (May 2005)		
Soil Gas		
	CCV<>CL - Continuing calibration verification is outside control limit	
	Volatile Organics, EPA Method TO-15	6
	Volatile Organics, EPA Method TO-15 (SIM)	1
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, EPA Method TO-15	8
	LB>RL - Laboratory blank contamination greater than the reporting limit	
	Volatile Organics, EPA Method TO-15	3
	Volatile Organics, EPA Method TO-15 (SIM)	2

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
RESIDENTIAL		
2005 Residential Soil Gas (May 2005)		
Soil Gas		
	LCS<LCL - LCS recovery less than lower control limit	
	Volatile Organics, EPA Method TO-15	5
	Volatile Organics, EPA Method TO-15 (SIM)	4
2006 Residential Soil (October)		
Soil		
	>ICLinearRange - Result greater than linear calibration range	
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	CCV<LCL - Continuing calibration recovery less than lower control limit	
	Volatile Organics, EPA Method 8260B	2
	Organochlorine Pesticides/PCBs, CLP-SOW	1
	CCV>UCL - Continuing calibration recovery greater than upper control limit	
	Volatile Organics, EPA Method 8260B	2
	Organochlorine Pesticides/PCBs, CLP-SOW	3
	Inorganics, CLP-SOW	10
	CF>%D - Confirmation precision exceeded percent difference	
	Organochlorine Pesticides/PCBs, CLP-SOW	54
	CRI>UCL - CRQL check standard greater than upper control limit	
	Inorganics, CLP-SOW	10
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Organochlorine Pesticides/PCBs, CLP-SOW	3
	Inorganics, CLP-SOW	24
	ICVS<LCL - Second source verification std. recovery less than lower control limit	
	Volatile Organics, EPA Method 8260B	2
	Lab Dup RPD - Laboratory duplicate exceeds relative percent difference criteria	
	Inorganics, CLP-SOW	13
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Semivolatile Organics, CLP-SOW	9
	Inorganics, CLP-SOW	9
	LCS<LCL - LCS recovery less than lower control limit	
	Volatile Organics, EPA Method 8260B	2
	MS<LCL - Matrix spike recovery less than lower limit	
	Inorganics, CLP-SOW	14
	Sur<LCL - Surrogate recovery less than lower limit	
	1,4-Dioxane (SIM), CLP-SOW	18
	Organochlorine Pesticides/PCBs, CLP-SOW	22
	Sur>UCL - Surrogate recovery greater than upper limit	
	Semivolatile Organics, CLP-SOW	1

TABLE 6-3
Qualifier Reason Code and Description, Number of Results Qualified - Tier 3
AMCO Chemical Superfund Site, Oakland, California

Matrix	Qualifier Reason Code and Description	Number of Results Qualified
RESIDENTIAL		
2006 Residential Produce (October)		
Plant Tissue		
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Metals, EPA Method 6020	2
	Sur<LCL - Surrogate recovery less than lower limit	
	Volatile Organics, EPA Method 8260B	52
2006 Residential Air (November 2006)		
Ambient Air		
	CCV<LCL - Continuing calibration recovery less than lower control limit	
	Volatile Organics, EPA Method TO-15 (SIM)	5
	FD>RPD - Field duplicate exceeds relative percent difference criteria	
	Volatile Organics, EPA Method TO-15 (SIM)	6
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Volatile Organics, EPA Method TO-15 (SIM)	8
Crawl Space Air		
	CCV<LCL - Continuing calibration recovery less than lower control limit	
	Volatile Organics, EPA Method TO-15 (SIM)	1
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Volatile Organics, EPA Method TO-15 (SIM)	7
	Spectral ID - Spectral Identification inconsistent with reference spectrum	
	Volatile Organics, EPA Method TO-15 (SIM)	1
2006 Residential Soil Gas (November 2006)		
Soil Gas		
	>ICLinearRange - Result greater than linear calibration range	
	Volatile Organics, EPA Method TO-15	7
	CCV>UCL - Continuing calibration recovery greater than upper control limit	
	Volatile Organics, EPA Method TO-15	3
	IC%RSD - Initial calibration relative standard deviation exceeded	
	Volatile Organics, EPA Method TO-15	10
	LB<RL - Laboratory blank contamination less than the reporting limit	
	Volatile Organics, EPA Method TO-15	12
	LCS<LCL - LCS recovery less than lower control limit	
	Volatile Organics, EPA Method TO-15	6
	Spectral ID - Spectral Identification inconsistent with reference spectrum	
	Volatile Organics, EPA Method TO-15	2

Notes:

CLP-SOW	Contract Laboratory Program Statement of Work
SIM	Selected Ion Monitoring
CRQL	Contract Required Quanitation Limit

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Phase 1 (September - December 2004)				
SDG: 04260D	**Volatile Organics/1,4-Dioxane, EPA Method 524.2 (µg/L)**			
RGW-08-30	09/17/04			
		Bromochloromethane	0.5 R	LCS<LCL, Temp>6C
		Chloromethane	0.5 R	LCS<LCL, Temp>6C
		Freon 12	0.5 R	LCS<LCL, Temp>6C
		Methylene chloride	0.5 R	LCS<LCL, Temp>6C
RGW-08-38	09/17/04			
		Bromochloromethane	0.5 R	LCS<LCL, Temp>6C
		Chloromethane	0.5 R	LCS<LCL, Temp>6C
		Freon 12	0.5 R	LCS<LCL, Temp>6C
		Methylene chloride	0.5 R	LCS<LCL, Temp>6C
RGW-08-44	09/17/04			
		Bromochloromethane	0.5 R	LCS<LCL, Temp>6C
		Chloromethane	0.5 R	LCS<LCL, Temp>6C
		Freon 12	0.5 R	LCS<LCL, Temp>6C
		Methylene chloride	0.5 R	LCS<LCL, Temp>6C
SDG: 04266B	**Volatile Organics/1,4-Dioxane, EPA Method 524.2 (µg/L)**			
RGW-10-32	09/24/04			
		Bromochloromethane	0.5 R	LCS<LCL, Temp>6C
		Chloromethane	0.5 R	LCS<LCL, Temp>6C
		Freon 12	0.5 R	LCS<LCL, Temp>6C
		Methylene chloride	0.5 R	LCS<LCL, Temp>6C
RGW-10-40	09/24/04			
		Chloromethane	0.5 R	LCS<LCL, Temp>6C
		Freon 12	0.5 R	LCS<LCL, Temp>6C
		Methylene chloride	0.5 R	LCS<LCL, Temp>6C
RGW-10-50	09/24/04			
		Bromochloromethane	0.5 R	LCS<LCL, Temp>6C
		Chloromethane	0.5 R	LCS<LCL, Temp>6C
		Freon 12	0.5 R	LCS<LCL, Temp>6C
		Methylene chloride	0.5 R	LCS<LCL, Temp>6C
RGW-11-10	09/22/04			
		Freon 12	0.5 R	LCS<LCL, Temp>6C
RGW-11-22	09/22/04			
		Freon 12	0.5 R	LCS<LCL, Temp>6C
RGW-11-40	09/22/04			
		Freon 12	0.5 R	LCS<LCL, Temp>6C
SDG: 04271A	**Volatile Organics/1,4-Dioxane, EPA Method 524.2 (µg/L)**			
RGW-09-15	09/28/04			
		Chloroform	10 R	LCS<LCL, Temp>6C
RGW-09-25	09/28/04			
		Chloroform	0.5 R	LCS<LCL, Temp>6C
RGW-09-35	09/28/04			
		Chloroform	0.5 R	LCS<LCL, Temp>6C

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Phase 1 (September - December 2004)				
SDG: 04271A	**Volatile Organics/1,4-Dioxane, EPA Method 524.2 (µg/L)**			
RGW-09-45	09/28/04			
		Chloroform	0.5 R	LCS<LCL, Temp>6C
RGW-09-55	09/28/04			
		Chloroform	0.5 R	LCS<LCL, Temp>6C
RGW-09-65	09/28/04			
		Freon 12	0.5 R	LCS<LCL, Temp>6C
SDG: 04273B	**Volatile Organics/1,4-Dioxane, EPA Method 524.2 (µg/L)**			
RGW-13-22	09/30/04			
		1,1-Dichloroethene	2.5 R	LCS<LCL, Temp>6C
RGW-13-42	09/30/04			
		1,1-Dichloroethene	0.5 R	LCS<LCL, Temp>6C
RGW-13-50	09/30/04			
		1,1-Dichloroethene	0.5 R	LCS<LCL, Temp>6C
RGW-13-58	09/30/04			
		1,1-Dichloroethene	0.5 R	LCS<LCL, Temp>6C

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Phase 1 (September - December 2004)				
SDG: 40913D	**Volatile Organics, EPA Method 8260B (µg/m3)**			
RSG-09	09/16/04			
		1,1,1-Trichloroethane	100 R	P3
		1,1,2,2-Tetrachloroethane	100 R	P3
		1,1,2-Trichloroethane	100 R	P3
		1,1-Dichloroethane	25 R	P3
		1,1-Dichloroethene	100 R	P3
		1,2,4-Trichlorobenzene	100 R	P3
		1,2,4-Trimethylbenzene	100 R	P3
		1,2-Dibromoethane	100 R	P3
		1,2-Dichlorobenzene	100 R	P3
		1,2-Dichloroethane	100 R	P3
		1,2-Dichloropropane	100 R	P3
		1,3,5-Trimethylbenzene	100 R	P3
		1,3-Dichlorobenzene	100 R	P3
		1,4-Dichlorobenzene	100 R	P3
		Benzene	50 R	P3
		Bromomethane	100 R	P3
		Carbon tetrachloride	100 R	P3
		Chlorobenzene	100 R	P3
		Chloroethane	100 R	P3
		Chloroform	100 R	P3
		Chloromethane	100 R	P3
		cis-1,2-Dichloroethene	100 R	P3
		cis-1,3-Dichloropropene	100 R	P3
		Ethylbenzene	100 R	P3
		Freon 11	100 R	P3
		Freon 113	100 R	P3
		Freon 12	100 R	P3
		Hexachlorobutadiene	100 R	P3
		Methyl tert-butyl ether	100 R	P3
		Methylene chloride	100 R	P3
		Styrene	100 R	P3
		Tetrachloroethene	100 R	P3
		Toluene	100 R	P3
		trans-1,2-Dichloroethene	100 R	P3
		trans-1,3-Dichloropropene	100 R	P3
		Trichloroethene	50 R	P3
		Vinyl chloride	50 R	P3
		Xylenes, m & p	100 R	P3
		Xylenes, o	100 R	P3
		Xylenes, total	100 R	P3

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Phase 1 (September - December 2004)				
SDG: 40913D	**Volatile Organics, EPA Method 8260B (µg/m3)**			
RSG-21_3	09/13/04			
		1,1,1-Trichloroethane	100 R	Leak
		1,1,2,2-Tetrachloroethane	100 R	Leak
		1,1,2-Trichloroethane	100 R	Leak
		1,1-Dichloroethane	8400 R	Leak
		1,1-Dichloroethene	100 R	Leak
		1,2,4-Trichlorobenzene	100 R	Leak
		1,2,4-Trimethylbenzene	100 R	Leak
		1,2-Dibromoethane	100 R	Leak
		1,2-Dichlorobenzene	100 R	Leak
		1,2-Dichloroethane	100 R	Leak
		1,2-Dichloropropane	100 R	Leak
		1,3,5-Trimethylbenzene	100 R	Leak
		1,3-Dichlorobenzene	100 R	Leak
		1,4-Dichlorobenzene	100 R	Leak
		Benzene	11000 R	Leak
		Bromomethane	100 R	Leak
		Carbon tetrachloride	100 R	Leak
		Chlorobenzene	100 R	Leak
		Chloroethane	120000 R	Leak
		Chloroform	100 R	Leak
		Chloromethane	100 R	Leak
		cis-1,2-Dichloroethene	790 R	Leak
		cis-1,3-Dichloropropene	100 R	Leak
		Ethylbenzene	120 R	Leak
		Freon 11	100 R	Leak
		Freon 113	100 R	Leak
		Freon 12	100 R	Leak
		Hexachlorobutadiene	100 R	Leak
		Methyl tert-butyl ether	100 R	Leak
		Methylene chloride	100 R	Leak
		Styrene	100 R	Leak
		Tetrachloroethene	100 R	Leak
		Toluene	270 R	Leak
		trans-1,2-Dichloroethene	280 R	Leak
		trans-1,3-Dichloropropene	100 R	Leak
		Trichloroethene	33 R	Leak
		Vinyl chloride	4700 R	Leak
		Xylenes, m & p	100 R	Leak
		Xylenes, o	100 R	Leak
		Xylenes, total	100 R	Leak

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2005 (March)				
SDG: 05112A	**Semivolatile Organics/1,4-Dioxane, EPA Method 8270C (µg/L)**			
MW-12-0305	04/21/05			
		3,3'-Dichlorobenzidine	5 R	MS<LCL, SD<LCL
		4-Chloroaniline	5 R	ICVS<LCL, MS<LCL, SD<LCL
SDG: Y1RY2	**Volatile Organics, CLP-SOW (µg/L)**			
BMW-01-0305	03/17/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
BMW-03-0305	03/18/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
BMW-06-0305	03/17/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
BMW-07-0305	03/17/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
BMW-08-0305	03/17/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
MW-92-0305	03/16/05			
		tert-Butyl alcohol	250 R	CCV<RFMod, IS<LCL
RMW-03-15-0305	03/15/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
RMW-04-15-0305	03/16/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
RMW-05-15-0305	03/16/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
RMW-06-15-0305	03/15/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
RMW-07-15-0305	03/15/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
RMW-09-15-0305	03/16/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
RMW-09-35-0305	03/16/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
RMW-10-15-0305	03/16/05			
		tert-Butyl alcohol	50 R	CCV<RFMod
RMW-10-35-0305	03/16/05			
		tert-Butyl alcohol	1800 R	CCV<RFMod
SDG: Y1S16	**Semivolatile Organics, CLP-SOW (µg/L)**			
BPZ-01-0305	03/23/05			
		2,4-Dinitrophenol	50 R	CCV<>CL, CCV RRF
RMW-01-17-0305	03/22/05			
		2,4-Dinitrophenol	25 R	CCV<>CL, CCV RRF, Sur<LCL
RMW-02-13-0305	03/23/05			
		2,4-Dinitrophenol	250 R	CCV<>CL, CCV RRF
RMW-02-32-0305	03/23/05			
		2,4-Dinitrophenol	25 R	CCV<>CL, CCV RRF, Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2005 (March)				
SDG: Y1S16	**Semivolatile Organics, CLP-SOW (µg/L)**			
RMW-02-50-0305	03/23/05			
		2,4-Dinitrophenol	25 R	CCV<>CL, CCV RRF, Sur<LCL
SDG: Y1S16	**Volatile Organics, CLP-SOW (µg/L)**			
BPZ-01-0305	03/23/05			
		1,2-Dibromo-3-chloropropane	0.5 R	CCV<>CL, IC%RSD, IC RRF, CCV RRF
		tert-Butyl alcohol	50 R	CCV RRF
MW-91-0305	03/23/05			
		1,2-Dibromo-3-chloropropane	0.5 R	CCV<>CL, IC%RSD, IC RRF, CCV RRF, IS<LCL
		tert-Butyl alcohol	50 R	CCV RRF, IS<LCL
RMW-01-17-0305	03/22/05			
		1,2-Dibromo-3-chloropropane	10 R	CCV RRF, HT>UCL, IC RRF, IC%RSD
		tert-Butyl alcohol	1000 R	CCV<>CL, CCV RRF, HT>UCL
RMW-01-35-0305	03/22/05			
		1,2-Dibromo-3-chloropropane	5 R	CCV RRF, IC%RSD, IC RRF
		tert-Butyl alcohol	50 R	CCV<>CL, CCV RRF
RMW-02-13-0305	03/23/05			
		1,2-Dibromo-3-chloropropane	100 R	CCV RRF, IC%RSD, IC RRF
		tert-Butyl alcohol	10000 R	CCV<>CL, CCV RRF
RMW-02-32-0305	03/23/05			
		1,2-Dibromo-3-chloropropane	100 R	CCV RRF, IC%RSD, IC RRF
		tert-Butyl alcohol	10000 R	CCV<>CL, CCV RRF
RMW-02-50-0305	03/23/05			
		1,2-Dibromo-3-chloropropane	0.5 R	CCV RRF, IC%RSD, IC RRF
		tert-Butyl alcohol	50 R	CCV<>CL, CCV RRF
RMW-08-15-0305	03/23/05			
		1,2-Dibromo-3-chloropropane	0.5 R	CCV<>CL, IC%RSD, IC RRF, CCV RRF
		tert-Butyl alcohol	50 R	CCV RRF
RMW-08-35-0305	03/23/05			
		1,2-Dibromo-3-chloropropane	0.5 R	CCV<>CL, IC%RSD, IC RRF, CCV RRF
		tert-Butyl alcohol	50 R	CCV RRF
Groundwater, Third Quarter 2005 (September)				
SDG: MY23M1	**Inorganics, CLP-SOW (µg/L)**			
RMW-05-15-0905	09/29/05			
		Zinc	47.9 R	EB>RL, ICS>UCL
RMW-06-15-0905	10/03/05			
		Zinc	33.8 R	EB>RL, ICS>UCL
RMW-07-15-0905	10/03/05			
		Zinc	7.5 R	EB>RL, ICS>UCL
RMW-07-35-0905	10/03/05			
		Zinc	28.1 R	EB>RL, ICS>UCL
RMW-09-35-0905	09/30/05			
		Zinc	7.1 R	EB>RL, ICS>UCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2005 (September)				
SDG: Y23N7	**Semivolatile Organics, CLP-SOW (µg/L)**			
BPZ-01-0905	10/05/05			
		3,3'-Dichlorobenzidine	5 R	Sur<LCL
		4-Chloroaniline	5 R	Sur<LCL
		Hexachlorocyclopentadiene	5 R	Sur<LCL
RMW-07-35-0905	10/03/05			
		3,3'-Dichlorobenzidine	5 R	Sur<LCL
		4-Chloroaniline	5 R	Sur<LCL
		Hexachlorocyclopentadiene	5 R	Sur<LCL
SDG: Y23R4	**Semivolatile Organics, CLP-SOW (µg/L)**			
RMW-02-50-0905	10/11/05			
		4,6-Dinitro-2-methylphenol	20 R	Sur<LCL
RMW-12-51-0905	10/10/05			
		3,3'-Dichlorobenzidine	5 R	Sur<LCL
		4-Chloroaniline	5 R	Sur<LCL
		Hexachlorocyclopentadiene	5 R	Sur<LCL
SDG: Y23T5	**Semivolatile Organics, CLP-SOW (µg/L)**			
MW-12-0905	10/11/05			
		3,3'-Dichlorobenzidine	50 R	Sur<LCL
		4,6-Dinitro-2-methylphenol	200 R	Sur<LCL
		4-Chloroaniline	50 R	Sur<LCL
		Hexachlorocyclopentadiene	50 R	Sur<LCL
SDG: Y23T5	**Volatile Organics, CLP-SOW (µg/L)**			
MW-12-0905	10/11/05			
		Methyl ethyl ketone	5 R	Sur<LCL
RMW-02-13-0905	10/12/05			
		2-Hexanone	5 R	NotPres
		Styrene	0.5 R	NotPres
Groundwater, Fourth Quarter 2005 (January)				
SDG: Y2BJ4	**Semivolatile Organics, CLP-SOW (µg/L)**			
RMW-07-35-0106	01/11/06			
		3,3'-Dichlorobenzidine	5 R	Sur<LCL
		4-Chloroaniline	5 R	Sur<LCL
		Benzo(a)pyrene	5 R	Sur<LCL
		Benzo(b)fluoranthene	5 R	Sur<LCL
		Benzo(g,h,i)perylene	5 R	Sur<LCL
		Benzo(k)fluoranthene	5 R	Sur<LCL
		Dibenz(a,h)anthracene	5 R	Sur<LCL
		Hexachlorocyclopentadiene	5 R	Sur<LCL
		Indeno(1,2,3-c,d)pyrene	5 R	Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Fourth Quarter 2005 (January)				
SDG: Y2BM5	**Semivolatile Organics, CLP-SOW (µg/L)**			
RMW-09-15-0106	01/18/06			
		3,3'-Dichlorobenzidine	5 R	Sur<LCL
		4-Chloroaniline	5 R	Sur<LCL
		Hexachlorocyclopentadiene	5 R	Sur<LCL
SDG: Y2BQ4	**Semivolatile Organics, CLP-SOW (µg/L)**			
MW-12-0106	01/23/06			
		1,1'-Biphenyl	5 R	Sur<LCL
		2,4-Dinitrophenol	20 R	Sur<LCL
		2-Chloronaphthalene	5 R	Sur<LCL
		2-Nitroaniline	20 R	Sur<LCL
		3-Nitroaniline	20 R	Sur<LCL
		4-Bromophenylphenyl ether	5 R	Sur<LCL
		4-Chlorophenylphenyl ether	5 R	Sur<LCL
		4-Nitroaniline	20 R	Sur<LCL
		4-Nitrophenol	20 R	Sur<LCL
		Acenaphthene	5 R	Sur<LCL
		Acenaphthylene	5 R	Sur<LCL
		Benzyl butyl phthalate	5 R	Sur<LCL
		bis(2-Ethylhexyl)phthalate	5 R	Sur<LCL
		Caprolactam	5 R	Sur<LCL
		Dibenzofuran	5 R	Sur<LCL
		Diethylphthalate	5 R	Sur<LCL
		Dimethylphthalate	5 R	Sur<LCL
		Di-n-butyl phthalate	5 R	Sur<LCL
		Di-n-octyl phthalate	5 R	Sur<LCL
		Fluorene	5 R	Sur<LCL
RMW-12-32-0106	01/20/06			
		3,3'-Dichlorobenzidine	5 R	Sur<LCL
		4-Chloroaniline	5 R	Sur<LCL
		Hexachlorocyclopentadiene	5 R	Sur<LCL
SDG: Y2BQ5	**Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW (µg/L)**			
RMW-02-50-0106	01/23/06			
		1,4-Dioxane (p-dioxane)	2 R	Sur<LCL
Groundwater, First Quarter 2006 (March)				
SDG: Y2FJ7	**Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW (µg/L)**			
BMW-01-0306	03/29/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF
BMW-06-0306	03/29/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF
BMW-07-0306	03/30/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FJ7	**Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW (µg/L)**			
BMW-08-0306	03/31/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF, IS<LCL, Sur<LCL
RMW-05-15-0306	03/30/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF, Sur<LCL
RMW-06-15-0306	03/31/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF
RMW-11-35-0306	03/29/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF
RMW-13-35-0306	03/30/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF
RMW-14-50-0306	03/30/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF, Sur<LCL
SDG: Y2FJ7	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
BMW-01-0306	03/29/06			
		1,2,3-Trichlorobenzene	0.5 R	IS<LCL
		1,2,4-Trichlorobenzene	0.5 R	IS<LCL
		1,2-Dibromo-3-chloropropane	0.5 R	IS<LCL
		1,2-Dichlorobenzene	0.5 R	IS<LCL
		1,3-Dichlorobenzene	0.5 R	IS<LCL
		1,4-Dichlorobenzene	0.5 R	IS<LCL
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
		Bromoform	0.5 R	IS<LCL
BMW-06-0306	03/29/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
BMW-07-0306	03/30/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
BMW-08-0306	03/31/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-04-15-0306	03/29/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-05-15-0306	03/30/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-06-15-0306	03/31/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-11-35-0306	03/29/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-13-35-0306	03/30/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-14-50-0306	03/30/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
SDG: Y2FL4	**Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW (µg/L)**			
RMW-01-17-0306	04/05/06			
		1,4-Dioxane (p-dioxane)	10 R	CCV RRF, IC RRF, Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FL4	**Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW (µg/L)**			
RMW-01-35-0306	04/05/06			
		1,4-Dioxane (p-dioxane)	10 R	CCV RRF, IC RRF, Sur<LCL
RMW-07-15-0306	04/03/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF
RMW-07-35-0306	04/03/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF
RMW-08-15-0306	04/04/06			
		1,4-Dioxane (p-dioxane)	10 R	CCV RRF, IC RRF, Sur<LCL
RMW-08-35-0306	04/04/06			
		1,4-Dioxane (p-dioxane)	10 R	CCV RRF, IC RRF, Sur<LCL
RMW-09-15-0306	04/03/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF, Sur<LCL
RMW-92-15-0306	04/04/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF, Sur<LCL
RMW-93-35-0306	04/03/06			
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, IC RRF, Sur<LCL
RMW-99-17-0306	04/05/06			
		1,4-Dioxane (p-dioxane)	10 R	CCV RRF, IC RRF, IS>UCL, Sur<LCL
SDG: Y2FL4	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
RMW-01-17-0306	04/05/06			
		1,4-Dioxane (p-dioxane)	200 R	CCV RRF, IC RRF
RMW-07-15-0306	04/03/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-07-35-0306	04/03/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF, Sur<LCL
RMW-08-15-0306	04/04/06			
		1,4-Dioxane (p-dioxane)	100 R	CCV RRF, IC RRF
RMW-08-35-0306	04/04/06			
		1,2,3-Trichlorobenzene	0.5 R	HT>UCL
		1,2,4-Trichlorobenzene	0.5 R	HT>UCL
		1,2-Dibromo-3-chloropropane	0.5 R	HT>UCL
		1,3-Dichlorobenzene	0.5 R	HT>UCL
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, HT>UCL, IC RRF
		Bromoform	0.5 R	HT>UCL
RMW-09-15-0306	04/03/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-92-15-0306	04/04/06			
		1,4-Dioxane (p-dioxane)	100 R	CCV RRF, IC RRF
RMW-93-35-0306	04/03/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-99-17-0306	04/05/06			
		1,4-Dioxane (p-dioxane)	200 R	CCV RRF, IC RRF

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FN0	**Organochlorine Pesticides/PCBs, CLP-SOW (µg/L)**			
MW-12-0306	04/06/06			
		4,4'-DDT	0.02 R	Sur<LCL
		alpha-Chlordane	0.01 R	Sur<LCL
		Aroclor-1016	0.2 R	Sur<LCL
		Aroclor-1221	0.4 R	Sur<LCL
		Aroclor-1232	0.2 R	Sur<LCL
		Aroclor-1242	0.2 R	Sur<LCL
		Aroclor-1248	0.2 R	Sur<LCL
		Aroclor-1254	0.2 R	Sur<LCL
		Aroclor-1260	0.2 R	Sur<LCL
		delta-BHC	0.01 R	Sur<LCL
		Dieldrin	0.02 R	Sur<LCL
		Endosulfan I	0.01 R	Sur<LCL
		Endosulfan II	0.02 R	Sur<LCL
		Endrin aldehyde	0.02 R	Sur<LCL
		Endrin ketone	0.02 R	Sur<LCL
		Heptachlor	0.01 R	Sur<LCL
		Toxaphene	1 R	Sur<LCL
SDG: Y2FN4	**Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW (µg/L)**			
MW-12-0306	04/06/06			
		1,2-Dibromo-3-chloropropane	0.5 R	HT>UCL
		1,2-Dibromoethane	0.5 R	HT>UCL
RMW-02-13-0306	04/06/06			
		1,2-Dibromo-3-chloropropane	0.5 R	HT>UCL
		1,2-Dibromoethane	0.5 R	HT>UCL, Sur<LCL
RMW-02-32-0306	04/06/06			
		1,2-Dibromo-3-chloropropane	0.5 R	HT>UCL, Sur<LCL
		1,2-Dibromoethane	0.5 R	HT>UCL, Sur<LCL
RMW-02-50-0306	04/06/06			
		1,2-Dibromo-3-chloropropane	0.05 R	HT>UCL
		1,2-Dibromoethane	0.05 R	HT>UCL
RMW-12-51-0306	04/05/06			
		1,2-Dibromo-3-chloropropane	0.05 R	HT>UCL
		1,2-Dibromoethane	0.05 R	HT>UCL
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, HT>UCL, IC RRF
RMW-88-51-0306	04/05/06			
		1,2-Dibromo-3-chloropropane	0.05 R	HT>UCL
		1,2-Dibromoethane	0.05 R	Sur<LCL
		1,4-Dioxane (p-dioxane)	2 R	CCV RRF, HT>UCL, IC RRF

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FN4	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
MW-12-0306	04/06/06			
		1,1,2,2-Tetrachloroethane	50 R	HT>UCL
		1,1,2-Trichloroethane	50 R	HT>UCL
		1,2,3-Trichlorobenzene	50 R	HT>UCL
		1,2,4-Trichlorobenzene	50 R	HT>UCL
		1,2-Dibromo-3-chloropropane	50 R	HT>UCL
		1,2-Dibromoethane	50 R	HT>UCL
		1,2-Dichlorobenzene	50 R	HT>UCL
		1,2-Dichloroethane	50 R	HT>UCL
		1,2-Dichloropropane	50 R	HT>UCL
		1,3-Dichlorobenzene	50 R	HT>UCL
		1,4-Dichlorobenzene	50 R	HT>UCL
		1,4-Dioxane (p-dioxane)	2000 R	CCV RRF, HT>UCL, IC RRF
		2-Hexanone	500 R	HT>UCL
		Bromochloromethane	50 R	HT>UCL
		Bromodichloromethane	50 R	HT>UCL
		Bromoform	50 R	HT>UCL
		Bromomethane	50 R	HT>UCL
		Carbon disulfide	50 R	HT>UCL
		Carbon tetrachloride	50 R	HT>UCL
		Chlorobenzene	50 R	HT>UCL
		Chloroform	50 R	HT>UCL
		Chloromethane	50 R	HT>UCL
		cis-1,3-Dichloropropene	50 R	HT>UCL
		Cyclohexane	50 R	HT>UCL
		Dibromochloromethane	50 R	HT>UCL
		Freon 11	50 R	HT>UCL
		Freon 113	50 R	HT>UCL
		Freon 12	50 R	HT>UCL
		Isopropylbenzene (cumene)	50 R	HT>UCL
		Methyl acetate	50 R	HT>UCL
		Methyl tert-butyl ether	50 R	HT>UCL
		Methylcyclohexane	50 R	HT>UCL
		Methylene chloride	50 R	HT>UCL
		Styrene	50 R	HT>UCL
		Tetrachloroethene	50 R	HT>UCL
		trans-1,3-Dichloropropene	50 R	HT>UCL
		Trichloroethene	50 R	HT>UCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FN4	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
RMW-02-13-0306	04/06/06			
		1,1,1-Trichloroethane	0.5 R	HT>UCL
		1,1,2,2-Tetrachloroethane	0.5 R	HT>UCL
		1,1,2-Trichloroethane	0.5 R	HT>UCL
		1,2-Dibromo-3-chloropropane	0.5 R	HT>UCL
		1,2-Dibromoethane	0.5 R	HT>UCL
		1,2-Dichloropropane	0.5 R	HT>UCL
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, HT>UCL, IC RRF
		Bromochloromethane	0.5 R	HT>UCL
		Bromodichloromethane	0.5 R	HT>UCL
		Bromoform	0.5 R	HT>UCL
		Bromomethane	0.5 R	HT>UCL, Sur<LCL
		Carbon disulfide	0.5 R	HT>UCL, Sur<LCL
		Carbon tetrachloride	0.5 R	HT>UCL
		Chloroform	0.5 R	HT>UCL
		Chloromethane	0.5 R	HT>UCL, Sur<LCL
		cis-1,3-Dichloropropene	0.5 R	HT>UCL
		Dibromochloromethane	0.5 R	HT>UCL
		Freon 11	0.5 R	HT>UCL
		Freon 113	0.5 R	HT>UCL
		Freon 12	0.5 R	HT>UCL, Sur<LCL
		Methyl acetate	0.5 R	HT>UCL
		Methylene chloride	0.5 R	HT>UCL
		Styrene	0.5 R	HT>UCL
		trans-1,3-Dichloropropene	0.5 R	HT>UCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FN4	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
RMW-02-32-0306	04/06/06			
		1,1,1-Trichloroethane	5 R	HT>UCL
		1,1,2,2-Tetrachloroethane	5 R	HT>UCL
		1,1,2-Trichloroethane	5 R	HT>UCL
		1,1-Dichloroethene	5 R	HT>UCL
		1,2,3-Trichlorobenzene	5 R	HT>UCL
		1,2-Dibromo-3-chloropropane	5 R	HT>UCL
		1,2-Dibromoethane	5 R	HT>UCL
		1,2-Dichloropropane	5 R	HT>UCL
		2-Hexanone	50 R	HT>UCL
		Bromochloromethane	5 R	HT>UCL
		Bromodichloromethane	5 R	HT>UCL
		Bromoform	5 R	HT>UCL
		Bromomethane	5 R	HT>UCL
		Carbon disulfide	5 R	HT>UCL
		Carbon tetrachloride	5 R	HT>UCL
		Chloroform	5 R	HT>UCL
		Chloromethane	5 R	HT>UCL
		cis-1,3-Dichloropropene	5 R	HT>UCL
		Cyclohexane	5 R	HT>UCL
		Dibromochloromethane	5 R	HT>UCL
		Freon 11	5 R	HT>UCL
		Freon 113	5 R	HT>UCL
		Freon 12	5 R	HT>UCL
		Methyl acetate	5 R	HT>UCL
		Methyl tert-butyl ether	5 R	HT>UCL
		Methylcyclohexane	5 R	HT>UCL
		Styrene	5 R	HT>UCL
		Tetrachloroethene	5 R	HT>UCL
		trans-1,3-Dichloropropene	5 R	HT>UCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FN4	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
RMW-02-50-0306	04/06/06			
		1,1,1-Trichloroethane	0.5 R	HT>UCL
		1,1,2,2-Tetrachloroethane	0.5 R	HT>UCL
		1,1,2-Trichloroethane	0.5 R	HT>UCL
		1,1-Dichloroethane	0.5 R	HT>UCL
		1,1-Dichloroethene	0.5 R	HT>UCL
		1,2,3-Trichlorobenzene	0.5 R	HT>UCL
		1,2,4-Trichlorobenzene	0.5 R	HT>UCL
		1,2-Dibromo-3-chloropropane	0.5 R	HT>UCL
		1,2-Dibromoethane	0.5 R	HT>UCL
		1,2-Dichlorobenzene	0.5 R	HT>UCL
		1,2-Dichloroethane	0.5 R	HT>UCL
		1,2-Dichloropropane	0.5 R	HT>UCL
		1,3-Dichlorobenzene	0.5 R	HT>UCL
		1,4-Dichlorobenzene	0.5 R	HT>UCL
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, HT>UCL, IC RRF
		2-Hexanone	5 R	HT>UCL
		Acetone	5 R	HT>UCL, Sur<LCL
		Benzene	0.5 R	HT>UCL
		Benzene, toluene, ethylbenzene, and xylenes	0.5 R	HT>UCL
		Bromochloromethane	0.5 R	HT>UCL
		Bromodichloromethane	0.5 R	HT>UCL
		Bromoform	0.5 R	HT>UCL
		Bromomethane	0.5 R	HT>UCL
		Carbon disulfide	0.5 R	HT>UCL
		Carbon tetrachloride	0.5 R	HT>UCL
		Chlorobenzene	0.5 R	HT>UCL
		Chloroethane	0.5 R	HT>UCL
		Chloroform	0.5 R	HT>UCL
		Chloromethane	0.5 R	HT>UCL
		cis-1,2-Dichloroethene	0.5 R	HT>UCL
		cis-1,3-Dichloropropene	0.5 R	HT>UCL
		Cyclohexane	0.5 R	HT>UCL
		Dibromochloromethane	0.5 R	HT>UCL
		Dichloroethenes	0.5 R	HT>UCL
		Ethylbenzene	0.5 R	HT>UCL
		Freon 11	0.5 R	HT>UCL
		Freon 113	0.5 R	HT>UCL
		Freon 12	0.5 R	HT>UCL
		Isopropylbenzene (cumene)	0.5 R	HT>UCL
		Methyl acetate	0.5 R	HT>UCL
		Methyl ethyl ketone	5 R	HT>UCL, Sur<LCL
		Methyl isobutyl ketone	5 R	HT>UCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FN4	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
		Methyl tert-butyl ether	0.5 R	HT>UCL
		Methylcyclohexane	0.5 R	HT>UCL
		Methylene chloride	0.5 R	HT>UCL
		Styrene	0.5 R	HT>UCL
		Tetrachloroethene	0.5 R	HT>UCL
		Toluene	0.5 R	HT>UCL
		trans-1,2-Dichloroethene	0.5 R	HT>UCL
		trans-1,3-Dichloropropene	0.5 R	HT>UCL
		Trichloroethene	0.5 R	HT>UCL
		Vinyl chloride	0.5 R	HT>UCL
		Xylenes, m & p	0.5 R	HT>UCL
		Xylenes, o	0.5 R	HT>UCL
		Xylenes, total	0.5 R	HT>UCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FN4	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
RMW-12-51-0306	04/05/06			
		1,1,1-Trichloroethane	0.5 R	HT>UCL
		1,1,2,2-Tetrachloroethane	0.5 R	HT>UCL
		1,1,2-Trichloroethane	0.5 R	HT>UCL
		1,1-Dichloroethane	0.5 R	HT>UCL
		1,1-Dichloroethene	0.5 R	HT>UCL
		1,2,3-Trichlorobenzene	0.5 R	HT>UCL
		1,2,4-Trichlorobenzene	0.5 R	HT>UCL
		1,2-Dibromo-3-chloropropane	0.5 R	HT>UCL
		1,2-Dibromoethane	0.5 R	HT>UCL
		1,2-Dichlorobenzene	0.5 R	HT>UCL
		1,2-Dichloroethane	0.5 R	HT>UCL
		1,2-Dichloropropane	0.5 R	HT>UCL
		1,3-Dichlorobenzene	0.5 R	HT>UCL
		1,4-Dichlorobenzene	0.5 R	HT>UCL
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, HT>UCL, IC RRF
		2-Hexanone	5 R	HT>UCL
		Acetone	5 R	HT>UCL, Sur<LCL
		Benzene	0.5 R	HT>UCL
		Bromochloromethane	0.5 R	HT>UCL
		Bromodichloromethane	0.5 R	HT>UCL
		Bromoform	0.5 R	HT>UCL
		Bromomethane	0.5 R	HT>UCL
		Carbon disulfide	0.5 R	HT>UCL
		Carbon tetrachloride	0.5 R	HT>UCL
		Chlorobenzene	0.5 R	HT>UCL
		Chloroethane	0.5 R	HT>UCL
		Chloroform	0.5 R	HT>UCL
		Chloromethane	0.5 R	HT>UCL
		cis-1,2-Dichloroethene	0.5 R	HT>UCL
		cis-1,3-Dichloropropene	0.5 R	HT>UCL
		Cyclohexane	0.5 R	HT>UCL
		Dibromochloromethane	0.5 R	HT>UCL
		Ethylbenzene	0.5 R	HT>UCL
		Freon 11	0.5 R	HT>UCL
		Freon 113	0.5 R	HT>UCL
		Freon 12	0.5 R	HT>UCL
		Isopropylbenzene (cumene)	0.5 R	HT>UCL
		Methyl acetate	0.5 R	HT>UCL
		Methyl ethyl ketone	5 R	HT>UCL, Sur<LCL
		Methyl isobutyl ketone	5 R	HT>UCL
		Methyl tert-butyl ether	0.5 R	HT>UCL
		Methylcyclohexane	0.5 R	HT>UCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FN4	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
		Methylene chloride	0.5 R	HT>UCL
		Styrene	0.5 R	HT>UCL
		Tetrachloroethene	0.5 R	HT>UCL
		Toluene	0.5 R	HT>UCL
		trans-1,2-Dichloroethene	0.5 R	HT>UCL
		trans-1,3-Dichloropropene	0.5 R	HT>UCL
		Vinyl chloride	0.5 R	HT>UCL
		Xylenes, m & p	0.5 R	HT>UCL
		Xylenes, o	0.5 R	HT>UCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FN4	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
RMW-88-51-0306	04/05/06			
		1,1,1-Trichloroethane	0.5 R	HT>UCL
		1,1,2,2-Tetrachloroethane	0.5 R	HT>UCL
		1,1,2-Trichloroethane	0.5 R	HT>UCL
		1,1-Dichloroethane	0.5 R	HT>UCL
		1,1-Dichloroethene	0.5 R	HT>UCL
		1,2,3-Trichlorobenzene	0.5 R	HT>UCL
		1,2,4-Trichlorobenzene	0.5 R	HT>UCL
		1,2-Dibromo-3-chloropropane	0.5 R	HT>UCL
		1,2-Dibromoethane	0.5 R	HT>UCL
		1,2-Dichlorobenzene	0.5 R	HT>UCL
		1,2-Dichloroethane	0.5 R	HT>UCL
		1,2-Dichloropropane	0.5 R	HT>UCL
		1,3-Dichlorobenzene	0.5 R	HT>UCL
		1,4-Dichlorobenzene	0.5 R	HT>UCL
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, HT>UCL, IC RRF
		2-Hexanone	5 R	HT>UCL
		Acetone	5 R	HT>UCL
		Benzene	0.5 R	HT>UCL
		Benzene, toluene, ethylbenzene, and xylenes	0.5 R	HT>UCL
		Bromochloromethane	0.5 R	HT>UCL
		Bromodichloromethane	0.5 R	HT>UCL
		Bromoform	0.5 R	HT>UCL
		Bromomethane	0.5 R	HT>UCL
		Carbon disulfide	0.5 R	HT>UCL
		Carbon tetrachloride	0.5 R	HT>UCL
		Chlorobenzene	0.5 R	HT>UCL
		Chloroethane	0.5 R	HT>UCL
		Chloroform	0.5 R	HT>UCL
		Chloromethane	0.5 R	HT>UCL
		cis-1,2-Dichloroethene	0.5 R	HT>UCL
		cis-1,3-Dichloropropene	0.5 R	HT>UCL
		Cyclohexane	0.5 R	HT>UCL
		Dibromochloromethane	0.5 R	HT>UCL
		Dichloroethenes	0.5 R	HT>UCL
		Ethylbenzene	0.5 R	HT>UCL
		Freon 11	0.5 R	HT>UCL
		Freon 113	0.5 R	HT>UCL
		Freon 12	0.5 R	HT>UCL
		Isopropylbenzene (cumene)	0.5 R	HT>UCL
		Methyl acetate	0.5 R	HT>UCL
		Methyl ethyl ketone	5 R	HT>UCL
		Methyl isobutyl ketone	5 R	HT>UCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, First Quarter 2006 (March)				
SDG: Y2FN4	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
		Methyl tert-butyl ether	0.5 R	HT>UCL
		Methylcyclohexane	0.5 R	HT>UCL
		Methylene chloride	0.5 R	HT>UCL
		Styrene	0.5 R	HT>UCL
		Tetrachloroethene	0.5 R	HT>UCL
		Toluene	0.5 R	HT>UCL
		trans-1,2-Dichloroethene	0.5 R	HT>UCL
		trans-1,3-Dichloropropene	0.5 R	HT>UCL
		Vinyl chloride	0.5 R	HT>UCL
		Xylenes, m & p	0.5 R	HT>UCL
		Xylenes, o	0.5 R	HT>UCL
		Xylenes, total	0.5 R	HT>UCL
Groundwater, Third Quarter 2006 (September)				
SDG: MY2W55	**Inorganics, CLP-SOW (µg/L)**			
BMW-08-0906	09/26/06			
		Beryllium (Dissolved)	2 R	IS<LCL, NotPres
		Cadmium (Dissolved)	2 R	IS<LCL, NotPres
		Mercury (Dissolved)	0.2 R	NotPres
		Selenium (Dissolved)	10 R	IS<LCL, NotPres
		Thallium (Dissolved)	2 R	IS<LCL, NotPres
SDG: MY2W56	**Inorganics, CLP-SOW (µg/L)**			
BMW-08-0906	09/26/06			
		Beryllium	1 R	IS<LCL, NotPres
		Cadmium	1 R	IS<LCL, NotPres
		Mercury	0.2 R	NotPres
		Thallium	1 R	IS<LCL, NotPres

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W27	**Organochlorine Pesticides/PCBs, CLP-SOW (µg/L)**			
RMW-09-15-0906	09/25/06			
		4,4'-DDD	0.1 R	Sur<LCL
		4,4'-DDE	0.1 R	Sur<LCL
		4,4'-DDT	0.1 R	Sur<LCL
		Aroclor-1016	1 R	Sur<LCL
		Aroclor-1221	1 R	Sur<LCL
		Aroclor-1232	1 R	Sur<LCL
		Aroclor-1242	1 R	Sur<LCL
		Aroclor-1248	1 R	Sur<LCL
		Aroclor-1254	1 R	Sur<LCL
		Aroclor-1260	1 R	Sur<LCL
		Endosulfan II	0.1 R	Sur<LCL
		Endosulfan sulfate	0.1 R	Sur<LCL
		Endrin aldehyde	0.1 R	Sur<LCL
		Endrin ketone	0.1 R	Sur<LCL
		Methoxychlor	0.5 R	Sur<LCL
		PCB-1262 (Aroclor 1262)	1 R	Sur<LCL
		PCB-1268 (Aroclor 1268)	1 R	Sur<LCL
		Toxaphene	5 R	Sur<LCL
RMW-90-15-0906	09/20/06			
		Toxaphene	5 R	Sur<LCL
RMW-91-15-0906	09/25/06			
		4,4'-DDD	0.1 R	Sur<LCL
		4,4'-DDT	0.1 R	Sur<LCL
		Aroclor-1016	1 R	Sur<LCL
		Aroclor-1221	1 R	Sur<LCL
		Aroclor-1232	1 R	Sur<LCL
		Aroclor-1242	1 R	Sur<LCL
		Aroclor-1248	1 R	Sur<LCL
		Aroclor-1254	1 R	Sur<LCL
		Aroclor-1260	1 R	Sur<LCL
		Endosulfan sulfate	0.1 R	Sur<LCL
		Endrin aldehyde	0.1 R	Sur<LCL
		Endrin ketone	0.1 R	Sur<LCL
		Methoxychlor	0.5 R	Sur<LCL
		PCB-1262 (Aroclor 1262)	1 R	Sur<LCL
		PCB-1268 (Aroclor 1268)	1 R	Sur<LCL
		Toxaphene	5 R	Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W27	**Semivolatile Organics, CLP-SOW (µg/L)**			
BMW-03-0906	09/22/06			
		2,4-Dinitrophenol	10 R	Sur<LCL
		2-Nitroaniline	10 R	Sur<LCL
		3-Nitroaniline	10 R	Sur<LCL
		4-Nitroaniline	10 R	Sur<LCL
		4-Nitrophenol	10 R	Sur<LCL
SDG: Y2W27	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
BMW-01-0906	09/22/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
BMW-06-0906	09/20/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-04-15-0906	09/22/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF, Sur<LCL
RMW-05-15-0906	09/22/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF, Sur<LCL
RMW-06-15-0906	09/19/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF, Sur<LCL
RMW-07-15-0906	09/18/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-07-35-0906	09/18/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-09-15-0906	09/25/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, FD>RPD, IC RRF, Sur<LCL
RMW-09-35-0906	09/25/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF, IC%RSD, Sur<LCL
RMW-10-15-0906	09/20/06			
		1,4-Dioxane (p-dioxane)	80 R	CCV RRF, IC RRF, Sur<LCL
RMW-10-35-0906	09/20/06			
		1,4-Dioxane (p-dioxane)	40 R	CCV RRF, IC RRF, Sur<LCL
RMW-11-35-0906	09/19/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF
RMW-90-15-0906	09/20/06			
		1,4-Dioxane (p-dioxane)	80 R	CCV RRF, IC RRF, Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W62	**Organochlorine Pesticides/PCBs, CLP-SOW (µg/L)**			
RMW-14-50-0906	09/25/06			
		4,4'-DDD	0.1 R	Sur<LCL
		4,4'-DDE	0.1 R	Sur<LCL
		4,4'-DDT	0.1 R	Sur<LCL
		alpha-BHC	0.05 R	Sur<LCL
		alpha-Chlordane	0.05 R	Sur<LCL
		Aroclor-1016	1 R	Sur<LCL
		Aroclor-1221	1 R	Sur<LCL
		Aroclor-1232	1 R	Sur<LCL
		Aroclor-1242	1 R	Sur<LCL
		Aroclor-1248	1 R	Sur<LCL
		Aroclor-1254	1 R	Sur<LCL
		Aroclor-1260	1 R	Sur<LCL
		delta-BHC	0.05 R	Sur<LCL
		Dieldrin	0.1 R	Sur<LCL
		Endosulfan I	0.05 R	Sur<LCL
		Endosulfan II	0.1 R	Sur<LCL
		Endosulfan sulfate	0.1 R	Sur<LCL
		Endrin	0.1 R	Sur<LCL
		Endrin aldehyde	0.1 R	Sur<LCL
		Endrin ketone	0.1 R	Sur<LCL
		gamma-BHC	0.05 R	Sur<LCL
		Heptachlor epoxide	0.05 R	Sur<LCL
		Methoxychlor	0.5 R	Sur<LCL
		PCB-1262 (Aroclor 1262)	1 R	Sur<LCL
		PCB-1268 (Aroclor 1268)	1 R	Sur<LCL
		Toxaphene	5 R	Sur<LCL
SDG: Y2W62	**Semivolatile Organics (SIM), CLP-SOW (µg/L)**			
BPZ-01-0906	09/27/06			
		2-Methylnaphthalene	0.1 R	IS<LCL, Sur<LCL
		Acenaphthene	0.1 R	IS<LCL, Sur<LCL
		Fluorene	0.1 R	IS<LCL, Sur<LCL
		Pentachlorophenol	0.2 R	IS<LCL, Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W62	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
BMW-08-0906	09/26/06			
		1,1,1-Trichloroethane	0.5 R	CCV>UCL, IS<LCL, Sur<LCL
		1,1,2,2-Tetrachloroethane	0.5 R	IS<LCL, Sur<LCL
		1,1,2-Trichloroethane	0.5 R	IS<LCL, Sur<LCL
		1,1-Dichloroethane	0.5 R	IS<LCL, Sur<LCL
		1,1-Dichloroethene	0.5 R	IS<LCL, Sur<LCL
		1,2,3-Trichlorobenzene	0.5 R	IS<LCL
		1,2,4-Trichlorobenzene	0.5 R	IS<LCL
		1,2,4-Trimethylbenzene	5 R	IS<LCL
		1,2-Dibromo-3-chloropropane	0.5 R	CCV>UCL, IS<LCL, Sur<LCL
		1,2-Dibromoethane	0.5 R	IS<LCL, Sur<LCL
		1,2-Dichlorobenzene	0.5 R	IS<LCL
		1,2-Dichloroethane	0.5 R	IS<LCL, Sur<LCL
		1,2-Dichloropropane	0.5 R	IS<LCL, Sur<LCL
		1,3,5-Trimethylbenzene	5 R	IS<LCL
		1,3-Dichlorobenzene	0.5 R	IS<LCL
		1,4-Dichlorobenzene	0.5 R	IS<LCL
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF, IS<LCL, Sur<LCL
		2-Hexanone	5 R	IS<LCL, Sur<LCL
		Acetone	5 R	CCV>UCL, IS<LCL, Sur<LCL
		Benzene	0.5 R	IS<LCL, Sur<LCL
		Benzene, toluene, ethylbenzene, and xylenes	0.5 R	IS<LCL, Sur<LCL
		Bromochloromethane	0.5 R	IS<LCL, Sur<LCL
		Bromodichloromethane	0.5 R	IS<LCL, Sur<LCL
		Bromoform	0.5 R	IS<LCL, Sur<LCL
		Bromomethane	0.5 R	IS<LCL, Sur<LCL
		Carbon disulfide	0.5 R	IS<LCL, Sur<LCL
		Carbon tetrachloride	0.5 R	CCV>UCL, IS<LCL, Sur<LCL
		Chlorobenzene	0.5 R	IS<LCL
		Chloroethane	0.5 R	IS<LCL, Sur<LCL
		Chloroform	0.5 R	IS<LCL, Sur<LCL
		cis-1,2-Dichloroethene	0.5 R	IS<LCL, Sur<LCL
		cis-1,3-Dichloropropene	0.5 R	IS<LCL, Sur<LCL
		Cyclohexane	0.5 R	IS<LCL, Sur<LCL
		Dibromochloromethane	0.5 R	IS<LCL, Sur<LCL
		Dichloroethenes	0.5 R	IS<LCL, Sur<LCL
		Ethyl tert-butyl ether	5 R	IS<LCL
		Ethylbenzene	0.5 R	IS<LCL, Sur<LCL
		Freon 11	0.5 R	CCV>UCL, IS<LCL, Sur<LCL
		Freon 113	0.5 R	IS<LCL, Sur<LCL
		Freon 12	0.5 R	IS<LCL, Sur<LCL
		Isopropylbenzene (cumene)	0.5 R	IS<LCL, Sur<LCL
		Methyl acetate	0.5 R	IS<LCL, Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W62	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
		Methyl ethyl ketone	5 R	CCV>UCL, IS<LCL, Sur<LCL
		Methyl isobutyl ketone	5 R	IS<LCL, Sur<LCL
		Methyl tert-butyl ether	0.5 R	IS<LCL, Sur<LCL
		Methylcyclohexane	0.5 R	IS<LCL, Sur<LCL
		Methylene chloride	0.5 R	IS<LCL, Sur<LCL
		Styrene	0.5 R	IS<LCL, Sur<LCL
		tert-Amyl methyl ether	5 R	IS<LCL
		tert-Butyl alcohol	10 R	CCV>UCL, IS<LCL
		Tetrachloroethene	0.5 R	IS<LCL, Sur<LCL
		Toluene	0.5 R	IS<LCL, Sur<LCL
		trans-1,2-Dichloroethene	0.5 R	IS<LCL, Sur<LCL
		trans-1,3-Dichloropropene	0.5 R	IS<LCL, Sur<LCL
		Trichloroethene	0.5 R	IS<LCL, Sur<LCL
		Vinyl chloride	0.5 R	IS<LCL, Sur<LCL
		Xylenes, m & p	0.5 R	IS<LCL, Sur<LCL
		Xylenes, o	0.5 R	IS<LCL, Sur<LCL
		Xylenes, total	0.5 R	IS<LCL, Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W62	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
BPZ-01-0906	09/27/06			
		1,1,1-Trichloroethane	0.5 R	IS<LCL, Sur<LCL
		1,1,2,2-Tetrachloroethane	0.5 R	IS<LCL
		1,1,2-Trichloroethane	0.5 R	IS<LCL, Sur<LCL
		1,1-Dichloroethane	0.5 R	IS<LCL, Sur<LCL
		1,1-Dichloroethene	0.5 R	IS<LCL, Sur<LCL
		1,2,3-Trichlorobenzene	0.5 R	IS<LCL
		1,2,4-Trichlorobenzene	0.5 R	IS<LCL
		1,2,4-Trimethylbenzene	5 R	IS<LCL
		1,2-Dibromo-3-chloropropane	0.5 R	IS<LCL
		1,2-Dibromoethane	0.5 R	IS<LCL, Sur<LCL
		1,2-Dichlorobenzene	0.5 R	IS<LCL
		1,2-Dichloroethane	0.5 R	IS<LCL, Sur<LCL
		1,2-Dichloropropane	0.5 R	IS<LCL
		1,3,5-Trimethylbenzene	5 R	IS<LCL
		1,3-Dichlorobenzene	0.5 R	IS<LCL
		1,4-Dichlorobenzene	0.5 R	IS<LCL
		2-Hexanone	5 R	IS<LCL
		Acetone	5 R	IS<LCL, Sur<LCL
		Benzene, toluene, ethylbenzene, and xylenes	0.5 R	IS<LCL, LB<RL
		Bromochloromethane	0.5 R	IS<LCL, Sur<LCL
		Bromodichloromethane	0.5 R	IS<LCL
		Bromoform	0.5 R	IS<LCL, Sur<LCL
		Bromomethane	0.5 R	IS<LCL, Sur<LCL
		Carbon tetrachloride	0.5 R	IS<LCL, Sur<LCL
		Chlorobenzene	0.5 R	IS<LCL
		Chloroethane	0.5 R	IS<LCL, Sur<LCL
		Chloroform	0.5 R	IS<LCL, Sur<LCL
		Chloromethane	0.5 R	IS<LCL, Sur<LCL
		cis-1,2-Dichloroethene	0.5 R	IS<LCL
		cis-1,3-Dichloropropene	0.5 R	IS<LCL, Sur<LCL
		Cyclohexane	0.5 R	IS<LCL
		Dibromochloromethane	0.5 R	IS<LCL, Sur<LCL
		Dichloroethenes	0.5 R	IS<LCL, Sur<LCL
		Ethyl tert-butyl ether	5 R	IS<LCL
		Ethylbenzene	0.5 R	IS<LCL
		Freon 11	0.5 R	IS<LCL, Sur<LCL
		Freon 113	0.5 R	IS<LCL, Sur<LCL
		Freon 12	0.5 R	IS<LCL, Sur<LCL
		Isopropylbenzene (cumene)	0.5 R	IS<LCL
		Methyl acetate	0.5 R	IS<LCL, Sur<LCL
		Methyl ethyl ketone	5 R	IS<LCL, Sur<LCL
		Methyl isobutyl ketone	5 R	IS<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W62	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
		Methyl tert-butyl ether	0.5 R	IS<LCL, Sur<LCL
		Methylcyclohexane	0.5 R	IS<LCL
		Methylene chloride	0.5 R	IS<LCL, Sur<LCL
		Styrene	0.5 R	IS<LCL
		tert-Amyl methyl ether	5 R	IS<LCL
		Tetrachloroethene	0.5 R	IS<LCL
		Toluene	0.5 R	IS<LCL
		trans-1,2-Dichloroethene	0.5 R	IS<LCL
		trans-1,3-Dichloropropene	0.5 R	IS<LCL, Sur<LCL
		Trichloroethene	0.5 R	IS<LCL
		Vinyl chloride	0.5 R	IS<LCL, Sur<LCL
		Xylenes, m & p	0.5 R	IS<LCL
		Xylenes, o	0.5 R	IS<LCL
		Xylenes, total	0.5 R	IS<LCL
RMW-08-35-0906	09/27/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF, Sur<LCL
RMW-12-51-0906	09/27/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, CCV>UCL, IC RRF
		tert-Butyl alcohol	10 R	CCV>UCL, IC RRF
RMW-13-35-0906	09/26/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF, Sur<LCL
RMW-14-50-0906	09/25/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF, Sur<LCL
SDG: Y2W87	**Organochlorine Pesticides/PCBs, CLP-SOW (µg/L)**			
RMW-02-13-0906	09/29/06			
		Aroclor-1016	1 R	Sur<LCL
		Aroclor-1221	1 R	Sur<LCL
		Aroclor-1232	1 R	Sur<LCL
		Aroclor-1242	1 R	Sur<LCL
		Aroclor-1248	1 R	Sur<LCL
		Aroclor-1254	1 R	Sur<LCL
		Aroclor-1260	1 R	Sur<LCL
		PCB-1262 (Aroclor 1262)	1 R	Sur<LCL
		PCB-1268 (Aroclor 1268)	1 R	Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W87	**Organochlorine Pesticides/PCBs, CLP-SOW (µg/L)**			
RMW-03-15-0906	09/29/06			
		4,4'-DDT	0.1 R	Sur<LCL
		Aldrin	0.05 R	Sur<LCL
		alpha-BHC	0.05 R	Sur<LCL
		alpha-Chlordane	0.05 R	Sur<LCL
		beta-BHC	0.05 R	Sur<LCL
		delta-BHC	0.05 R	Sur<LCL
		Dieldrin	0.1 R	Sur<LCL
		Endosulfan I	0.05 R	Sur<LCL
		Endosulfan II	0.1 R	Sur<LCL
		Endosulfan sulfate	0.1 R	Sur<LCL
		Endrin	0.1 R	Sur<LCL
		Endrin aldehyde	0.1 R	Sur<LCL
		Endrin ketone	0.1 R	Sur<LCL
		gamma-BHC	0.05 R	Sur<LCL
		gamma-Chlordane	0.05 R	Sur<LCL
		Heptachlor	0.05 R	Sur<LCL
		Heptachlor epoxide	0.05 R	Sur<LCL
		Methoxychlor	0.5 R	Sur<LCL
		Toxaphene	5 R	Sur<LCL
SDG: Y2W87	**Semivolatile Organics (SIM), CLP-SOW (µg/L)**			
RMW-08-15-0906	09/29/06			
		Benzo(a)anthracene	0.5 R	Sur<LCL
		Benzo(a)pyrene	0.5 R	Sur<LCL
		Benzo(b)fluoranthene	0.5 R	Sur<LCL
		Benzo(k)fluoranthene	0.5 R	Sur<LCL
		Chrysene	0.5 R	Sur<LCL
		Fluoranthene	0.5 R	Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W87	**Semivolatile Organics, CLP-SOW (µg/L)**			
MW-12-0906	09/28/06			
		1,1'-Biphenyl	5 R	Sur<LCL
		2,4-Dimethylphenol	5 R	Sur<LCL
		2,4-Dinitrophenol	10 R	CCV>UCL, Sur<LCL
		2,4-Dinitrotoluene	5 R	Sur<LCL
		2,6-Dinitrotoluene	5 R	Sur<LCL
		2-Methylphenol	5 R	Sur<LCL
		2-Nitroaniline	10 R	Sur<LCL
		3-Nitroaniline	10 R	Sur<LCL
		4,6-Dinitro-2-methylphenol	10 R	CCV>UCL, Sur<LCL
		4-Methylphenol	5 R	Sur<LCL
		4-Nitroaniline	10 R	Sur<LCL
		4-Nitrophenol	10 R	Sur<LCL
		Acetophenone	5 R	Sur<LCL
		Benzo(a)anthracene	5 R	Sur<LCL
		Benzo(a)pyrene	5 R	IS<LCL
		Benzo(b)fluoranthene	5 R	IS<LCL
		Benzo(g,h,i)perylene	5 R	IS<LCL
		Benzo(k)fluoranthene	5 R	IS<LCL
		Benzyl butyl phthalate	5 R	Sur<LCL
		bis(2-Ethylhexyl)phthalate	5 R	Sur<LCL
		Caprolactam	5 R	Sur<LCL
		Chrysene	5 R	Sur<LCL
		Dibenz(a,h)anthracene	5 R	IS<LCL
		Dimethylphthalate	5 R	Sur<LCL
		Di-n-butyl phthalate	5 R	Sur<LCL
		Di-n-octyl phthalate	5 R	IS<LCL, Sur<LCL
		Fluoranthene	5 R	Sur<LCL
		Hexachloroethane	5 R	Sur<LCL
		Indeno(1,2,3-c,d)pyrene	5 R	IS<LCL
		Nitrobenzene	5 R	Sur<LCL
		N-Nitrosodi-n-propylamine	5 R	Sur<LCL
		N-Nitrosodiphenylamine	5 R	Sur<LCL
		Pyrene	5 R	Sur<LCL
RMW-02-50-0906	09/29/06			
		3,3'-Dichlorobenzidine	5 R	Sur<LCL
		4-Chloroaniline	5 R	Sur<LCL
		Dibenz(a,h)anthracene	5 R	Sur<LCL
		Hexachlorocyclopentadiene	5 R	Sur<LCL
SDG: Y2W87	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
MW-12-0906	09/28/06			
		Methyl ethyl ketone	5 R	Sur<LCL
		Styrene	0.5 R	IC%RSD, Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W87	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
RMW-02-13-0906	09/29/06			
		tert-Butyl alcohol	10 R	CCV RRF
RMW-02-32-0906	09/29/06			
		1,4-Dioxane (p-dioxane)	400 R	CCV RRF, IC RRF
RMW-02-50-0906	09/29/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF, Sur<LCL
		tert-Butyl alcohol	10 R	CCV RRF

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W87	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
RMW-03-15-0906	09/29/06			
		1,1,1-Trichloroethane	0.5 R	IS<LCL, Sur<LCL
		1,1,2,2-Tetrachloroethane	0.5 R	IS<LCL
		1,1,2-Trichloroethane	0.5 R	IS<LCL, Sur<LCL
		1,1-Dichloroethane	0.5 R	IS<LCL, Sur<LCL
		1,1-Dichloroethene	0.5 R	IS<LCL, Sur<LCL
		1,2,3-Trichlorobenzene	0.5 R	IS<LCL
		1,2,4-Trichlorobenzene	0.5 R	IS<LCL
		1,2,4-Trimethylbenzene	5 R	IS<LCL
		1,2-Dibromo-3-chloropropane	0.5 R	IS<LCL
		1,2-Dibromoethane	0.5 R	IS<LCL, Sur<LCL
		1,2-Dichlorobenzene	0.5 R	IS<LCL
		1,2-Dichloroethane	0.5 R	IS<LCL, Sur<LCL
		1,2-Dichloropropane	0.5 R	IS<LCL
		1,3,5-Trimethylbenzene	5 R	IS<LCL
		1,3-Dichlorobenzene	0.5 R	IS<LCL
		1,4-Dichlorobenzene	0.5 R	IS<LCL
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, IC RRF, IS<LCL
		2-Hexanone	5 R	IS<LCL
		Bromochloromethane	0.5 R	IS<LCL, Sur<LCL
		Bromodichloromethane	0.5 R	IS<LCL
		Bromoform	0.5 R	IS<LCL, Sur<LCL
		Bromomethane	0.5 R	IS<LCL, Sur<LCL
		Carbon tetrachloride	0.5 R	IS<LCL, Sur<LCL
		Chlorobenzene	0.5 R	IS<LCL
		Chloroethane	0.5 R	IS<LCL, Sur<LCL
		Chloroform	0.5 R	IS<LCL, Sur<LCL
		Chloromethane	0.5 R	IS<LCL, Sur<LCL
		cis-1,3-Dichloropropene	0.5 R	IS<LCL, Sur<LCL
		Cyclohexane	0.5 R	IS<LCL
		Dibromochloromethane	0.5 R	IS<LCL, Sur<LCL
		Dichloroethenes	0.62 R	IS<LCL, Sur>UCL, TB<RL
		Ethyl tert-butyl ether	5 R	IS<LCL
		Ethylbenzene	0.5 R	IS<LCL
		Freon 11	0.5 R	IS<LCL, Sur<LCL
		Freon 113	0.5 R	IS<LCL, Sur<LCL
		Freon 12	0.5 R	IS<LCL, Sur<LCL
		Isopropylbenzene (cumene)	0.5 R	IS<LCL
		Methyl acetate	0.5 R	IS<LCL, Sur<LCL
		Methyl ethyl ketone	5 R	IS<LCL
		Methyl isobutyl ketone	5 R	IS<LCL
		Methylcyclohexane	0.5 R	IS<LCL
		Methylene chloride	0.5 R	IS<LCL, Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
Groundwater, Third Quarter 2006 (September)				
SDG: Y2W87	**Volatile Organics/1,4-Dioxane, CLP-SOW (µg/L)**			
		Styrene	0.5 R	IS<LCL
		tert-Amyl methyl ether	5 R	IS<LCL
		tert-Butyl alcohol	10 R	CCV RRF, IS<LCL
		Tetrachloroethene	0.5 R	IS<LCL
		trans-1,2-Dichloroethene	0.5 R	IS<LCL
		trans-1,3-Dichloropropene	0.5 R	IS<LCL, Sur<LCL
		Trichloroethene	0.5 R	IS<LCL
		Vinyl chloride	0.5 R	IS<LCL, Sur<LCL
		Xylenes, o	0.5 R	IS<LCL
		Xylenes, total	0.8 R	IS<LCL, TB<RL
RMW-08-15-0906	09/29/06			
		1,4-Dioxane (p-dioxane)	400 R	CCV RRF, CCV>UCL, IC RRF
		tert-Butyl alcohol	200 R	CCV RRF
RMW-12-32-0906	09/27/06			
		1,4-Dioxane (p-dioxane)	20 R	CCV RRF, FD>RPD, IC RRF
2006 Residential Soil (October)				
SDG: Y2WB3	**Organochlorine Pesticides/PCBs, CLP-SOW (µg/kg)**			
356SSc-3-1006	10/18/06			
		Methoxychlor	0.22 R	CF>%D, Sur<LCL
SDG: Y2WB4	**1,4-Dioxane (SIM), CLP-SOW (µg/kg)**			
1428SSd-1-1006	10/18/06			
		1,4-Dioxane (p-dioxane)	83 R	Sur<LCL
1428SSd-3-1006	10/18/06			
		1,4-Dioxane (p-dioxane)	410 R	Sur<LCL
SDG: Y2WB6	**Organochlorine Pesticides/PCBs, CLP-SOW (µg/kg)**			
326SSa-3-1006	10/18/06			
		Aldrin	2 R	GPC<LCL, Sur<LCL
		alpha-BHC	2 R	Sur<LCL
		alpha-Chlordane	2 R	Sur<LCL
		delta-BHC	2 R	Sur<LCL
		Dieldrin	4 R	Sur<LCL
		Endosulfan I	2 R	Sur<LCL
		Endosulfan II	4 R	Sur<LCL
		Endosulfan sulfate	4 R	Sur<LCL
		gamma-BHC	2 R	GPC<LCL, Sur<LCL
		Heptachlor	2 R	GPC<LCL, Sur<LCL
		Heptachlor epoxide	2 R	Sur<LCL
		Toxaphene	200 R	Sur<LCL
SDG: Y2WD3	**1,4-Dioxane (SIM), CLP-SOW (µg/kg)**			
1428SSc-3-1006	10/18/06			
		1,4-Dioxane (p-dioxane)	95 R	Sur<LCL

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
2006 Residential Soil (October)				
SDG: Y2WD3	**1,4-Dioxane (SIM), CLP-SOW (µg/kg)**			
1432SSa-1-1006	10/18/06			
		1,4-Dioxane (p-dioxane)	81 R	Sur<LCL
8572SSb-1-1006	10/18/06			
		1,4-Dioxane (p-dioxane)	75 R	Sur<LCL
SDG: Y2WD9	**Semivolatile Organics, CLP-SOW (µg/kg)**			
356SSb-3-1006	10/18/06			
		2,2'-Oxybis(1-Chloropropane)	210 R	Sur<LCL
		2,4-Dinitrotoluene	210 R	Sur<LCL
		2,6-Dinitrotoluene	210 R	Sur<LCL
		2-Chlorophenol	210 R	Sur<LCL
		2-Nitrophenol	210 R	Sur<LCL
		Acetophenone	210 R	Sur<LCL
		bis(2-Chloroethoxy)methane	210 R	Sur<LCL
		bis(2-Chloroethyl)ether	210 R	Sur<LCL
		Hexachloroethane	210 R	Sur<LCL
		Isophorone	210 R	Sur<LCL
		Nitrobenzene	210 R	Sur<LCL
		N-Nitrosodi-n-propylamine	210 R	Sur<LCL
		N-Nitrosodiphenylamine	210 R	Sur<LCL
2006 Residential Produce (October)				
SDG: K060931	**Volatile Organics, EPA Method 8260B (mg/kg)**			
1432PC-Fig-1006	10/19/06			
		tert-Butyl alcohol	0.19 R	CCV RRF, IC RRF
1432PC-Grape-1006	10/19/06			
		tert-Butyl alcohol	0.19 R	CCV RRF, IC RRF
1432PC-Pomengran-1006	10/19/06			
		tert-Butyl alcohol	0.19 R	CCV RRF, IC RRF
1432PC-Tomato-1006	10/19/06			
		tert-Butyl alcohol	0.21 R	CCV RRF, IC RRF
1436PC-Bell Pepper-1006	10/19/06			
		tert-Butyl alcohol	0.18 R	CCV RRF, IC RRF
1436PC-G Chili-1006	10/19/06			
		tert-Butyl alcohol	0.15 R	CCV RRF, IC RRF
1436PC-Lemon-1006	10/19/06			
		tert-Butyl alcohol	0.16 R	CCV RRF, IC RRF
1436PC-Lemon-Dup-1006	10/19/06			
		tert-Butyl alcohol	0.21 R	CCV RRF, IC RRF
1436PC-Mint-1006-1006	10/19/06			
		tert-Butyl alcohol	0.18 R	CCV RRF, IC RRF
1436PC-Red Chili-1006	10/19/06			
		tert-Butyl alcohol	0.17 R	CCV RRF, IC RRF

TABLE 7-1
Rejected Data Summary
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	Result	Reason Code
2006 Residential Produce (October)				
SDG: K060931 Volatile Organics, EPA Method 8260B (mg/kg)				
1436PC-Tomatillo-1006	10/19/06			
		tert-Butyl alcohol	0.18 R	CCV RRF, IC RRF
1436PC-Tomato-1006	10/19/06			
		tert-Butyl alcohol	0.17 R	CCV RRF, IC RRF
356PC-Apple-1006	10/19/06			
		tert-Butyl alcohol	0.16 R	CCV RRF, IC RRF, Sur<LCL
360PC-Apple-1006	10/19/06			
		tert-Butyl alcohol	0.16 R	CCV RRF, IC RRF
360PC-Blackberry-1006	10/19/06			
		tert-Butyl alcohol	0.16 R	CCV RRF, IC RRF
360PC-Cactus-1006	10/19/06			
		tert-Butyl alcohol	0.15 R	CCV RRF, IC RRF
360PC-Cactus-Dup-1006	10/19/06			
		tert-Butyl alcohol	0.21 R	CCV RRF, IC RRF

Notes:

CLP-SOW	Contract Laboratory Program Statement of Work
SIM	Selected Ion Monitoring
R	rejected for failure to meet quality control requirements
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
µg/m3	micrograms per cubic meter
mg/kg	milligrams per kilogram
CCV RRF	Continuing calibration relative response factor below lower control limit
CCV<>CL	Continuing calibration verification is outside control limit
CCV<RFMod	Analyte exceeds RF < 0.01 criteria
CCV>UCL	Continuing calibration recovery greater than upper control limit
CF>%D	Confirmation precision exceeded percent difference
EB>RL	Equipment blank concentration greater than the reporting limit
FD>RPD	Field duplicate exceeds relative percent difference criteria
GPC<LCL	Gel permeation chromatography recovery less than lower limit
HT>UCL	Holding time exceeded
IC RRF	Initial calibration relative response factor below lower control limit
IC%RSD	Initial calibration relative standard deviation exceeded
ICS>UCL	Interference check standard recovery greater than upper control limit
ICVS<LCL	Second source verification std. recovery less than lower control limit
IS<LCL	Internal standard response less than lower control limit
IS>UCL	Internal standard response greater than upper control limit
LCS<LCL	Laboratory Control Sample recovery less than lower control limit
Leak	leak in system, biased low
MS<LCL	Matrix spike recovery less than lower limit
NotPres	Sample not properly preserved in the field
P3	Sample collected below water table
SD<LCL	Matrix spike duplicate recovery criteria less than lower limit
Sur<LCL	Surrogate recovery less than lower limit
Temp>6C	Temperature Blank>6°C

Appendix A:
Discussion of Tier 3 Evaluations with Tables

Appendix A1
Phase 1 Grab Groundwater, Soil, and Soil Gas

APPENDIX A1

Phase 1 Grab Groundwater, Soil, and Soil Gas Sampling

A1.1 Summary

The following sections describe the samples collected during the Phase 1 sampling event which occurred from September to December, 2004.

Phase 1 Grab Groundwater: Grab groundwater samples collected from September 13 through November 2, 2004 were analyzed for VOCs. Grab groundwater samples were collected using two different techniques, depending on the depth of the well and the formation of the surrounding soil. Most samples were collected using a Waterloo Profiler which was used in wells at depths greater than approximately 25 feet. The HydroPunch tool was used at shallow depths or when there was low yield in the well. For groundwater, the selected screening levels are based on federal and state maximum contaminant levels (MCLs) and EPA Region 9 tap water PRGs.

Phase 1 Soil: Soil samples were collected in acetate or brass sleeves and analyzed for VOCs, SVOCs, metals, polychlorinated biphenyls (PCBs), pesticides, and dioxins and furans. The screening limits for soil are the EPA Region 9 PRGs for residential and industrial soil.

Phase 1 Soil Gas Probes: Morning and evening samples were collected from twelve permanent soil probes over four-hour intervals on October 13, 2004. Certified clean 4-L Summa canisters were used to collect samples for TO-15 and TO-15 SIM analyses. Method TO-15 was performed on all 26 samples and TO-15 SIM analysis was performed on a subset of 14 samples. The appropriate methodology and method QC requirements were followed. The selected screening levels for soil gas are 10 times the EPA Region 9 ambient air PRGs.

Phase 1 Soil Gas Survey: The soil gas survey analyses were performed in a mobile laboratory using EPA Method 8260B. Samples were collected from September 13 through October 8, 2004. The mobile laboratory was California certified. The reporting limit (RL) achieved by the lab was 50 micrograms per cubic meter (µg/m3) for benzene, vinyl chloride and trichloroethene. The remaining VOCs were reported at 100 µg/m3.

A1.2 Data Review and Validation Findings

Tables A1-1 through A1-4 present a list of sample delivery groups, sample identifications, and validation levels for the grab groundwater, soil, soil gas, and soil gas survey samples collected during this event. Tables A-1-5 through A-1-8 present both the Tier 3 and Tier 2 qualified results with accompanying reason codes identifying the type of QC outlier. Results that are unqualified are not shown. Rejected results are shown in boxes. Equipment blank and trip blank qualifications are discussed in section 3 of the main DQUA and are not

discussed further in this section, although the qualified results are presented on the attached tables. The following sections discuss the results qualified based on the Tier 3 validation.

The findings of the Tier 3 validation are considered representative of the quality of the entire data set. For this event, Tier 3 validation was performed on 67 of the 76 groundwater samples for VOCs, 20 of the 68 soil samples for VOCs and pesticides/PCBs, 20 of the 69 soil samples for SVOCs, 7 of the 8 soils samples for Dioxins and Furans, and 38 of the 69 soil samples for metals. All 49 soil vapor survey samples and 26 soil gas probe samples were validated at the Tier 3 level.

A1.2.1 Phase 1 Grab Groundwater - VOCs

The Tier 3 validation resulted in qualification of the Phase 1 grab groundwater results for the following QC metrics: sample preservation, instrument performance, initial and continuing calibration, laboratory control samples, and surrogates. A summary of both the Tier 2 and Tier 3 qualifiers are presented in Table A1-5.

A1.2.1.1 Sample Preservation (Reason Code TEMP)

Seventy-four water samples were received at the laboratory with elevated temperatures ranging from 8°Celsius (°C) to 15°C, which exceeds the temperature preservation validation criteria of 0°C to 6°C. The detected results and quantitation limits are qualified as estimated J/UJ. The positive results may be biased low and are the minimum values at which these compounds may be present in the samples. Where the results are not detected, false negatives may exist.

A1.2.1.2 Instrument Performance Check (Reason Code IPC)

The ion abundance criterion for Atomic Mass Unit (AMU) 50 was not met in the continuing calibration verification (CCV) standard associated with the samples in SDG 04266B. Detected results and quantitation limits for chloromethane, vinyl chloride, chloroethane, acetone, 1,1-dichloroethane, methyl ethyl ketone, 1,2-dichloroethane and 1,2-dichloropropane were qualified as estimated J/UJ in samples from locations RGW-11-10, RGW-11-22, and RGW-11-40.

A1.2.1.3 Initial Calibration (Reason Code 1PT)

A single point initial calibration was employed for 1,4-dioxane for all Phase 1 analyses. When the initial request for analysis was made, 1,4-dioxane was not included on the target analyte list. At the time of sampling, the laboratory agreed to add 1,4-dioxane to the VOC target analyte list using a single point calibration with an elevated reporting limit due to the high water solubility of this compound and poor performance by purge and trap preparation methods. The use of a single point calibration introduces some of bias into the results. Because of the poor method performance and the elevated reporting limits the 1,4-dioxane results for this event are of limited usefulness. All results and quantitation limits were qualified as estimated, J/UJ.

A1.2.1.4 Continuing Calibration (Reason Code C%D)

The continuing calibration percent differences (%D) were outside the ± 30 percent control limit. The following results and quantitation limits were qualified as estimated, J/UJ, in the following samples:

- 1,1-Dichloropropene and carbon tetrachloride in the sample from location RGW-12-14 duplicate
- Freon 113 in samples from locations RGW-03-17, RGW-03-37, and RGW-03-58
- Acetone and methyl ethyl ketone in the sample from location RGW-09-15
- Acetone, chloroform, and methyl ethyl ketone in the samples from location RGW-07-12, RGW-07-25, RGW-07-35, RGW-07-43, and RGW-07-55

A1.2.1.5 Laboratory Control Sample (Reason Code LCS)

The following analyte quantitation limits in the indicated samples were qualified as rejected R, due to LCS recoveries below the rejection criterion:

- Freon 12 in samples from locations RGW-08-30, RGW-08-38, RGW-08-44, RGW-09-65, RGW-10-32, RGW-10-40, RGW-10-50, RGW-11-10, RGW-11-22, and RGW-11-40
- Chloromethane in samples from locations RGW-08-30, RGW-08-38, RGW-08-44, RGW-10-32, RGW-10-40, and RGW-10-50
- Methylene chloride in samples from locations RGW-08-30, RGW-08-38, RGW-08-44, RGW-10-32, RGW-10-40, RGW-10-50,
- Bromochloromethane in samples from locations RGW-08-30, RGW-08-38, RGW-08-44, RGW-10-32, RGW-10-40, and RGW-10-50
- Chloroform in samples from locations RGW-09-15, RGW-09-25, RGW-09-35, RGW-09-45, and RGW-09-55
- 1,1-Dichloroethene in samples from locations RGW-13-22, RGW-13-42, RGW-13-50, and RGW-13-58

A1.2.1.6 Surrogates (Reason Code Sur)

Surrogate recoveries exceeded the 130% upper control limit for the following analytes in the indicated samples:

- trans-1,2-Dichloroethene, cis-1,2-dichloroethene, benzene, toluene, ethylbenzene, m&p-xylene, o-xylene, chloromethane, n-propylbenzene, 2-chlorotoluene, 1,3,5-trimethylbenzene, 1,2-dichlorobenzene, p-isopropyltoluene, 1,2,4-trichlorobenzene, naphthalene, and 1,2,3-trichlorobenzene in the duplicate sample from location RGW-12-14 (surrogate 1,2-dichlorobenzene-d4 recovery 133%)
- Chloroform in sample from location RGW-09-65 (surrogate 1,2-Dichloroethane-d4 recovery 147%)
- Toluene in sample from locations RGW-03-17 (surrogate Toluene-d8 recovery 131%)

Results for the listed compounds are qualified as estimated, J, and may be biased high.

A1.2.2 Phase 1 Soils - VOC, SVOC, Metals, Pesticides, and Dioxins/Furans

The following sections discuss the results qualified based on the Tier 3 validations. The Tier 2 and Tier 3 qualified results are presented in Table A1-6. The Phase 1 soil results were qualified for outliers associated with the following QC metrics: holding time, laboratory method blank, initial and continuing calibration, initial calibration linear range exceeded, surrogates, matrix spike and matrix spike duplicate, internal standard, ICP interference check sample, ICP serial dilution, second column confirmation, compound quantification, and target compound identification.

A1.2.2.1 Holding Time (Reason Code HT)

VOCs in Soil: Results for all analytes in the samples in Table A1-9 were qualified as estimated J/UJ, because the samples were prepared and analyzed past the technical holding time of 7 days for frozen soils. The samples and holding time exceedances are presented in Table A1-9.

Chlorinated Dioxins/Furans in Soil: The sample and sample duplicate from location RSB-18-01 exceeded the 30-day holding time for analysis of extracts. The samples were extracted on 11/12/04 and analyzed on 12/17/04, 35 days after extraction. Results and quantitation limits were qualified as estimated, J/UJ. Detected results for the samples may be biased low, although based on the stability of dioxins in the environment, this nonconformance is considered minor and does not negatively impact the usability of the data.

SVOCs in Soil: The medium level extraction of sample RSB-20 (2.5 feet bgs) exceeded the 14 day holding time for analysis of extracts. The sample was collected on 09/17/04 and analyzed on 10/11/04. The result for 2-methylnaphthalene in the sample was qualified J and may be biased low.

A1.2.2.2 Laboratory Method Blank (Reason Code LB)

VOCs in Soil: Methylene chloride was detected in method blanks. The following analyte results in the indicated samples were below the reporting limits (RLs) and were qualified as non-detected, U, at the RL:

- Methylene chloride in samples from locations RSB-02 (3 feet below ground surface [bgs]), RSB-13 (5 feet bgs), and RSB-31 (6 feet bgs)

SVOCs in Soil: Bis-(2-ethylhexyl)phthalate was detected in method blanks. The following analyte results in the indicated samples were below the reporting limits (RLs) and were qualified as non-detected, at U, at the RL:

- bis-(2-Ethylhexyl)phthalate in sample from location RSB-14-01 (2 feet bgs)

A1.2.2.3 Initial Calibration (Reason Code RSD)

VOCs in Soil: The results for acetone in all samples from SDG Y1G26 (see Table A1-2 for sample list) were estimated due to the initial calibration percent relative standard deviation (%RSD) exceeding the ± 30% quality control (QC) criteria.

A1.2.2.4 Initial Calibration (Reason Code RRF)

VOCs in Soil: Relative Response Factors (RRFs) for 1,4-dioxane were below the 0.05 validation criterion in the initial calibration and the continuing calibration verification for SDG Y1G26 (see Table A1-2 for sample list). The initial calibration RRF ranged from 0.01 to 0.014 in the four initial calibrations executed for this SDG. Detected results for the analyte were considered the minimum concentrations at which this analyte is present in the samples. Where results are nondetected, false negatives may exist. The 1,4-dioxane results were qualified as estimated, UJ.

A1.2.2.5 Initial Calibration Linear Range Exceeded (Reason Code >IC)

VOCs in Soil: The concentration of methyl ethyl ketone in sample from location RSB-12 (5 feet bgs) was 390 ug/Kg and vinyl chloride in sample from location RSB-20 (2.5 feet bgs) was 250 ug/Kg. These values exceed the 200 ug/Kg upper calibration standard. The laboratory reanalyzed the samples as a medium level sample, but the analytes were diluted out. There fore, the original, undiluted results are reported and flagged as estimated, J, due to the uncertainty encountered when analyte concentrations exceed the linear range.

A1.2.2.6 Continuing Calibration (Reason Code C%D)

VOCs in Soil: The results for the following analytes in the indicated samples were estimated due to the continuing calibration verification %D exceeding the ± 25% QC criteria:

- Chloromethane in samples from locations RSB-01 (3 and 6 feet bgs), RSB-02 (3 feet bgs), RSB-13 (2 feet bgs), RSB-13 (5 feet bgs), RSB-30 (3 feet bgs), and RSB-32 (3 feet bgs)
- Chloromethane and t-butyl alcohol in sample from locations RSB-01 (6 feet bgs), RSB-12 (2 feet bgs), RSB-12 (5 feet bgs), RSB-14 (2 feet bgs), RSB-14 (5 feet bgs), RSB-20 (2.5 feet bgs), RSB-31 (3 feet bgs), RSB-31 (6 feet bgs), RSB-32 (6 feet bgs), RSB-33 (6 feet bgs), and RSB-33 (5.5 feet bgs)
- 1,4-Dioxane in sample from location RSB-03 (2 and 5 feet bgs)

Results and/or quantitation limits were qualified, J/UJ.

SVOCs in Soil: The results for the following analytes in the indicated samples were estimated due to the continuing calibration verification %D exceeding the ± 25% QC criteria:

- 2,4-Dinitrophenol, 2,4-dichlorophenol, and 1,2,4,5-tetrachlorobenzene in samples from locations RSB-01 (3 feet bgs), RSB-01 (6 feet bgs), RSB-12 (2 feet bgs) RSB-13-05 (5 feet bgs), RSB-31-01 (3 feet bgs), RSB-31-05 (6 feet bgs), RSB-32-05 (6 feet bgs), RSB-33-01 (2.5 feet bgs), and RSB-33-05 (5.5 feet bgs)
- Hexachlorocyclopentadiene and 2,4-dinitrophenol in RSB-03-01 (2 feet bgs), RSB-03-05 (5 feet bgs), RSB-12-05 (5 feet bgs), and RSB-32-01 (3 feet bgs)

Results and/or quantitation limits are qualified as estimated, J/UJ.

A1.2.2.7 Surrogates (Reason Code Sur)

VOCs in Soil: The following samples had associated surrogate recoveries that exceeded the method specific control limits:

- Tetrachloroethene, 1,3-dichlorobenzene and 1,4-dichlorobenzene in sample from location RSB-20-01 (2.5 feet bgs)

Results were qualified J and a high bias may exist.

Organochlorine Pesticides and PCBs in Soil: Results were qualified as estimated due to high decachlorobiphenyl (DCB) surrogate recoveries for the following samples:

- 4,4'-DDE, endrin, 4,4'-DDD, 4,4'-DDT, methoxychlor, and endrin ketone in sample from location RSB-33-01 (2.5 feet bgs) (DCB recovery of 640% in first column and 733% in second column with control limits of 30-150%)
- 4,4'-DDT, 4,4'-DDE, 4,4'-DDD, endrin ketone, and dieldrin in sample from location RSB-33-05 (5.5 feet bgs) (DCB recovery of 188% in first column, 425% in second column, and 225% in dilution on second column with control limit of 30-150%)

High surrogate recoveries may be the result of co-extracted matrix materials that coelute with surrogates. Non detected results are considered unaffected, however results for the analytes listed above may be biased high.

A1.2.2.8 Matrix Spike Matrix Spike Duplicates (Reason Code MS)

Total Metals by ICP-AES in Soil: The matrix spike recoveries for antimony, arsenic, copper, manganese and thallium were below the 75% lower control limit. Results for all samples above the MDL are considered quantitatively uncertain. The results reported for the analytes may be biased low and where not detected, false negatives may exist. A post digestion spike was performed and the post digestion spike recoveries were acceptable for antimony, arsenic, copper, manganese, and thallium.

Low matrix spike recoveries may indicate sample non-homogeneity, poor laboratory technique, or matrix effects which may interfere with accurate analysis. Results for the following analytes in the samples from the indicated locations estimated UJ:

- Antimony in RSB-15-01 (2 feet bgs), RSB-04-05 (7 feet bgs) duplicate, and RSB-23-05 (6 feet bgs)
- Thallium in RSB-04-01 (3.5 feet bgs), RSB-04-01 (3.5 feet bgs) duplicate, RSB-04-05, RWB-04-05 duplicate, RSB-05-05 (7 feet bgs), RSB-15-01 (2 feet bgs), RSB-17-01 (2 feet bgs), RSB-18-01 (4 feet bgs), RSB-18-05, RSB-22-01 (3 feet bgs), RSB-22-05 (6 feet bgs), RSB-23-01 (2 feet bgs), RSB-23-05 (6 feet bgs), RSB-34-01 (3 feet bgs), RSB-35-01 (3 feet bgs), RSB-38-01 (3 feet bgs), and RSB-38-05 (6 feet bgs)

A1.2.2.9 Internal Standard (Reason Code IS)

VOCs in Soil: Internal standard responses were outside the 50% to 150% of the CCV standard response control limits for the analytes listed below by fraction. Results for these analytes in the indicated samples were qualified as estimated J/UJ.

- Methyl isobutyl ketone, toluene, tetrachloroethene, 2-hexanone, 1,2-dibromoethane, chlorobenzene, ethylbenzene, total xylenes, styrene, isopropylbenzene, 1,1,2,2,-tetrachloroethane, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,2-dibromo-3-chloropropane, and 1,2,4-trichlorobenzene in the sample from location RSB-

30-01 (3 feet bgs) (chlorobenzene-d5 area counts of 179,560 below the lower control limit 192002)

Chlorinated Dioxins/Furans in Soil: The internal standard used in the analysis of dioxins and furans is a recovery standard carried through the sample preparation step, similar to a surrogate. The recovery of the internal standard in the sample from location RSB-12-01 (2 feet bgs) was 16%, below the lower control criterion of 64%. The result for octachlorodizenzofuran was qualified as estimated, J, in this sample.

A1.2.2.10 ICP Interference Check Sample (Reason Code ICS)

Total Metals by ICP-AES in Soil: The following analyte results in samples from the indicated locations were estimated because of possible Inductively Coupled Plasma (ICP) interelement interference:

- Cadmium in RSB-05-01 (3 feet bgs), RSB-22-01 (3 feet bgs), RSB-23-01 (2 feet bgs), RSB-34-01 (3 feet bgs), RSB-35-01 (3 feet bgs), and RSB-38-01 (positive interference) (3 feet bgs)
- Selenium in RSB-05-01 (3 feet bgs), RSB-05-05 (7 feet bgs) RSB-15-01 (2 feet bgs), RSB-34-01 (3 feet bgs), and RSB-35-01 (3 feet bgs) (negative interference)
- Thallium in RSB-05-01 (3 feet bgs) (positive Interference)

Results for the analytes in the samples from locations listed above were reported from undiluted analyses that contained iron concentrations above the ICP interference check sample (ICS) criterion. Therefore, the applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for cadmium and thallium may be biased high and false positives may exist. The results for selenium may be biased low and false negatives may exist.

A1.2.2.11 ICP Serial Dilution (Reason Code SerDil)

Total Metals by ICP-AES in Soil: The ICP serial dilution results were outside the 90% to 110% method QC limits for the indicated analytes in the following samples. The results were estimated and may be biased low:

- Calcium, cobalt, lead and zinc in all samples from SDG MY1G50 (see Table A1-2 for sample list).
- Aluminum, barium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, vanadium, and zinc in sample from location RSB-03-05 (5 feet bgs)

A1.2.2.12 Second Column Confirmation (Reason Code CF)

Organochlorine Pesticides/PCBs in Soil: A number of results were presumptively identified since the %Ds between the primary column and the confirmation column exceeded the QC limit. This could be due to co-eluting interferences on one of the columns. The analyte results in the indicated samples are qualified as estimated, J, and were qualitatively and quantitatively uncertain:

- alpha-Chlordane in sample from location RSB-02-01 (3 feet bgs)
- alpha-Chlordane and gamma-chlordane in sample from RSB-13-01 (2 feet bgs)

- gamma-BHC, heptachlor, and endrin ketone in sample from RSB-13-05 (5 feet bgs)
- Dieldrin in samples from locations RSB-01-01, RSB-14-01, and RSB-14-05
- 4,4′-DDE, 4,4′-DDT, endrin ketone, and gamma-chlordane in sample from location RSB-32-01 (3 feet bgs)
- alpha-BHC in sample from location RSB-20-01 (2.5 feet bgs)
- 4,4′-DDE, endrin, 4,4′-DDT, and methoxyclor in sample from location RSB-33-01 (2.5 feet bgs)
- 4,4′-DDE, 4,4′-DDT, and endrin ketone in sample from location RSB-33-05 (5.5 feet bgs)
- Endrin ketone and gamma-BHC in sample from location RSB-12-01 (2 feet bgs)
- Heptachlor in sample from location RSB-12-05 (5 feet bgs)
- 4,4′-DDD in sample from location RSB-03-01 (2 feet bgs)
- Gamma-chlordane in sample from location RSB-03-05 (5 feet bgs)

A1.2.2.13 Compound Quantification (Reason Code P4)

Organochlorine Pesticides/PCBs in Soil: In the opinion of the reviewer the positive results reported by the laboratory for the analytes listed below are both qualitatively and quantitatively unacceptable. When the reported analyte concentration was less than one-half the CRQL, the result was raised to the CRQL and reported as non detected. Results in samples from the indicated locations were flagged as estimated, J.

- Dieldrin in RSB-02-01 (3 feet bgs), RMS-03-01 (2 feet bgs), and RSB-30-01 (3 feet bgs)
- alpha-BHC in RSB-01-01 (3 feet bgs) and RSB-13-05 (5 feet bgs)
- alpha-chlordane in RSB-12-01 (2 feet bgs) and RSB-20-01 (2.5 feet bgs)
- gamma-chlordane in RSB-30-01 (3 feet bgs)
- Endosulfan sulfate RSB-32-01 (3 feet bgs)
- Endrin in RSB-33-05 (5.5 feet bgs)
- 4,4′-DDD in RSB-12-05 (5 feet bgs)
- 4,4′-DDT in RSB-13-05 (5 feet bgs)
- Endosulfan I in RSB-03-05 (5 feet bgs)

A1.2.2.14 Target Compound Identification (Reason Code P1)

SVOCs in Soil: The mass spectrum of 2-chloronaphthalene in sample from location RSB-20-01 (2.5 feet bgs) did not meet the specified functional guideline ion abundance criteria. The result was raised to the quantitation limit and qualified UJ and is considered qualitatively uncertain.

A1.2.3 Phase 1 Soil Gas Survey - 8260B VOCs by GC/MS

The following sections discuss the results qualified based on the Tier 3 validations. All results were validated Tier 3 and the qualified results are presented in Table A1-8. The Phase 1 soil gas survey results were qualified for outliers associated with the following QC

metrics: sample preservation, laboratory method blank, initial calibration linear range exceeded, continuing calibration, and surrogates.

A1.2.3.1 Sample Preservation (Reason Code P3)

The results from the following samples were qualified as rejected due to serious sampling deficiencies:

- Sample from location RSG-09, collected during the onsite soil gas survey, was collected from a probe that was placed below the water table. The results for the thirty-nine analytes in this sample are deemed unusable and are rejected, R.
- The 3 purge volume sample collected at location RSG-21 during the onsite soil gas survey contained the leak check compound above the allowed limit. All results from this sample were considered unusable, and were rejected, R.

A1.2.3.2 Laboratory Method Blank (Reason Code LB)

Benzene, toluene, m,p-xylene, o-xylene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,2,4-trichlorobenzene and hexachlorobutadiene were detected in the method blanks. The following analyte results in the samples from the indicated locations were at concentrations below the reporting limits and were qualified as non-detected at the RL and flagged U:

- Benzene in RSG-03A, RSG-03Adup, RSG-07, RSG-08, RSG-11, RSG-11A, RSG-11A duplicate, RSG-12, RSG-13, RSG-13A, RSG-13A duplicate, and RSG-14
- Toluene in RSG-01, RSG-02, RSG-03A, RSG-03A duplicate, RSG-07, RSG08, RSG-11, RSG-11Adup, RSG-12, RSG-13, RSG-13A, RSG-13A duplicate, RSG-14, RSG-14A, RSG-14A duplicate, RSG-19, RSG-25, RSG-26, RSG-27, RSG-28, RSG-29, RSG-30, RSG-31, RSG-32, RSG-36, RSG-37, RSG-39, RG-40, and RSG-41
- m,p-Xylene in RSG-01, RSG-02, RSG-03A, RSG-03A duplicate, RSG-04, RSG-05, RSG-07, RSG-08, RSG-10, RSG-11, RSG-11A, RSG-11A duplicate, RSG-12, RSG-13, RSG-13A, RSG-13A duplicate, RSG-14, RSG-14A, RSG-14A duplicate, RSG-18, RSG-19, RSG-20, RSG-25, RSG-26, RSG-27, RSG-28, RSG-29, RSG-30, RSG-31, RSG-32, RSG-33, RSG-35, RSG-36, RSG-37, RSG-39, RSG-40, RSG-41, and RSG-42
- o-Xylene in RSG-02, RSG-07, and RSG-08
- 1,3,5-Trimethylbenzene in RSG-14A, RSG-18, and RSG-22, and RSG-42
- 1,2,4-Trimethylbenzene in RSG-01, RSG-02, RSG-03A, RSG-03Adup, RSG-07, RSG-08, RSG-11, RSG-11A, RSG-12, RSG-13, RSG-13A, RSG-13Adup, RSG-14A, RSG-14Adup, RSG-18, RSG-19, RSG-22, RSG-24, RSG-25, RSG-26, RSG-27, RSG-28, RSG-29, RSG-30, RSG-32, RSG-36, RSG-37, RSG-39, RSG-40, RSG-41, and RSG-42
- 1,4-Dichlorobenzene in RSG-11A, RSG-11Adup, RSG-13A, RSG-13Adup, and RSG-42
- 1,2,4-Trichlorobenzene in RSG-05, RSG-08, RSG-18, RSG-29, and RSG-37
- Hexachlorobutadiene in RSG-08, RSG-11, and RSG-18

A1.2.3.3 Initial Calibration Linear Range Exceeded (Reason Code >IC)

The following results were reported from analyses that were outside the calibration curve guidelines. Results for the following analyses in samples from the indicated locations were estimated and flagged, J.

- Vinyl chloride in RSG-22
- 1,1-Dichloroethane and cis-1,2-dichloroethene in RSG-18
- Chloroethane in RSG-17
- cis-1,2-Dichloroethene in RSG-23 and RSG-24

A1.2.3.4 Continuing Calibration (Reason Code C%D)

The results for the following analytes in samples from the indicated locations were estimated due to %Ds outside the ±20% control criteria in the continuing calibrations:

- Freon 12 , bromomethane, and chloroethane in RSG-10, RSG-19, RSG-25, RSG-26, RSG-27, RSG-28, and RSG-29
- Freon 11 and methyl-t-butyl ether in RSG-02, RSG-07, RSG-08, RSG-11, and RSG-30
- Chloroethane and Freon 11 in samples RSG-01, RSG-12, and RSG-32
- Bromomethane, chloroethane, and Freon 11 in samples RSG-03A, RSG-03Adup, RSG-11A, RSG-11Adup, RSG-13A, RSG-13Adup, RSG-14A, RSG-14Adup, RSG-18, RSG-20, RG-22, RSG-24, RSG-31, RSG-33 RSG-36, RSG-37, RSG-39, RSG-40, RSG-41, and RSG-42
- Bromomethane and Freon 11 in RSG-04 and RSG-05
- Bromomethane, 1,2-dibromoethane, and 1,1,2,2-tetrachloroethane in RSG-23, RSG-34, RSG-35, and RSG-38
- Bromomethane, chloroethane, Freon 11, and Freon 113 in RSG-06
- Chloroethane in RSG-13 and RG-14
- Freon 113 in RSG-03

A1.2.3.5 Surrogates (Reason Code Sur)

Surrogates exceeded the 125% upper control limit in the following samples. Results for the listed compounds in the samples from the indicated locations were estimated, J, and may be biased high:

- Benzene, trichloroethene, toluene, tetrachloroethene, ethylbenzene, m,p-xylene, o-xylene and 1,2,4-trimethylbenzene in RSG-17
- Benzene, trichloroethene and toluene in RSG-34
- Tetrachloroethene, chlorobenzene, ethylbenzene, m,p-xylene, o-xylene and 1,3,5-trimethylbenzene in RSG-24

Non detected results are considered unaffected.

A1.2.4 Phase 1 Soil Gas Probes - TO-15 Full Scan and SIM VOCs

The following sections discuss the results qualified based on the Tier 3 validations. All results were validated Tier 3 and the qualified results are presented in Table A1-7. The Phase 1 soil gas probe results were qualified for outliers associated with the following QC metrics: continuing calibration and Laboratory Control Sample.

A1.2.4.1 Continuing Calibration (Reason Code C%D)

The results for the following analytes in the samples from the indicated locations and times were estimated due to %Ds outside the ± 25%control criteria:

- 1,2-Dichlorobenzene in RSP-01-PM, RSP-02-PM, RSP-03-PM, RSP-04-AM duplicate, RSP-09-AM, RSP-10-AM, RSP-11-AM, and RSP-12-AM,
- Freon 114 in RSP-04-PM, RSP-05-PM, RSP-06-PM, RSP-07-PM, RSP-08-PM, RSP-09-PM, RSP-10-PM, RSP-11-PM, RSP-12-PM, and RSP-04-PM duplicate
- Chloromethane in RSP-12-PM and RSP-04-PM duplicate
- Hexachlorobutadiene in RSP-03-AM, RSP-08-AM, RSP-09-AM, RSP-10-AM, RSP-11-AM, and RSP-12-AM
- 1,1,2,2-Tetrachloroethane in RSP-08-AM, RSP-11-AM, RSP-12-AM, and RSP-04-PM duplicate

A1.2.4.2 Laboratory Control Sample (Reason Code LCS)

The quantitation limit results for the following analyte in samples from the indicated locations were estimated due to low LCS recovery (control limit 70-130% recovery):

- Bromomethane in RSP-12-PM and RSP-04-PM duplicate

TABLE A1-1

Sample Delivery Group Reference - Grab Groundwater, Phase 1 (September - December 2004)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
04260D (EPA Region 9)				
Volatile Organics/1,4-Dioxane, EPA Method 524.2				
	RGW-05	N	RGW-05-15	Tier 3
	RGW-05	N	RGW-05-25	Tier 3
	RGW-05	N	RGW-05-35	Tier 3
	RGW-06	N	RGW-06-12	Tier 3
	RGW-06	N	RGW-06-22	Tier 3
	RGW-06	N	RGW-06-29	Tier 3
	RGW-06	N	RGW-06-40	Tier 3
	RGW-08	N	RGW-08-30	Tier 3
	RGW-08	N	RGW-08-38	Tier 3
	RGW-08	N	RGW-08-44	Tier 3
04266B (EPA Region 9)				
Volatile Organics/1,4-Dioxane, EPA Method 524.2				
	RGW-07	N	RGW-07-12	Tier 3
	RGW-07	N	RGW-07-25	Tier 3
	RGW-07	N	RGW-07-35	Tier 3
	RGW-07	N	RGW-07-43	Tier 3
	RGW-07	N	RGW-07-55	Tier 3
	RGW-10	N	RGW-10-32	Tier 3
	RGW-10	N	RGW-10-40	Tier 3
	RGW-10	N	RGW-10-50	Tier 3
	RGW-11	N	RGW-11-10	Tier 3
	RGW-11	N	RGW-11-22	Tier 3
	RGW-11	N	RGW-11-40	Tier 3
04271A (EPA Region 9)				
Volatile Organics/1,4-Dioxane, EPA Method 524.2				
	RGW-01	N	RGW-01-17	Tier 3
	RGW-01	N	RGW-01-30	Tier 3
	RGW-01	N	RGW-01-40	Tier 3
	RGW-01	N	RGW-01-50	Tier 3
	RGW-01	N	RGW-01-60	Tier 3
	RGW-09	N	RGW-09-15	Tier 3
	RGW-09	N	RGW-09-25	Tier 3
	RGW-09	N	RGW-09-35	Tier 3
	RGW-09	N	RGW-09-45	Tier 3
	RGW-09	N	RGW-09-55	Tier 3
	RGW-09	N	RGW-09-65	Tier 3

TABLE A1-1

Sample Delivery Group Reference - Grab Groundwater, Phase 1 (September - December 2004)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
04273B (EPA Region 9)				
Volatile Organics/1,4-Dioxane, EPA Method 524.2				
	RGW-02	N	RGW-02-12	Tier 3
	RGW-02	N	RGW-02-20	Tier 3
	RGW-02	N	RGW-02-32	Tier 3
	RGW-02	N	RGW-02-42	Tier 3
	RGW-02	N	RGW-02-50	Tier 3
	RGW-02	N	RGW-02-58	Tier 3
	RGW-04	N	RGW-04-20	Tier 3
	RGW-04	N	RGW-04-30	Tier 3
	RGW-13	N	RGW-13-22	Tier 3
	RGW-13	N	RGW-13-32	Tier 3
	RGW-13	N	RGW-13-42	Tier 3
	RGW-13	N	RGW-13-50	Tier 3
	RGW-13	N	RGW-13-58	Tier 3
04278A (EPA Region 9)				
Volatile Organics/1,4-Dioxane, EPA Method 524.2				
	RGW-03	N	RGW-03-17	Tier 3
	RGW-03	N	RGW-03-37	Tier 3
	RGW-03	N	RGW-03-58	Tier 3
04293B (EPA Region 9)				
Volatile Organics/1,4-Dioxane, EPA Method 524.2				
	RGW-12	N	RGW-12-14-0904	Tier 3
	RGW-12	N	RGW-12-24-0904	Tier 3
	RGW-12	N	RGW-12-34-0904	Tier 3
	RGW-12	N	RGW-12-44-0904	Tier 3
	RGW-12	FD	RGW-92-14-0904	Tier 3
	RGW-12	FD	RGW-92-24-0904	Tier 3
	RGW-12	FD	RGW-92-34-0904	Tier 3
	RGW-12	FD	RGW-92-44-0904	Tier 3
	RGW-14	N	RGW-14-16-0904	Tier 3
	RGW-14	N	RGW-14-26-0904	Tier 3
	RGW-14	N	RGW-14-36-0904	Tier 3
	RGW-14	N	RGW-14-46-0904	Tier 3
	RGW-14	N	RGW-14-9-0904	Tier 3
	RGW-14	FD	RGW-93-16-0904	Tier 3
	RGW-14	FD	RGW-93-26-0904	Tier 3
	RGW-15	N	RGW-15-16-0904	Tier 3
04307B (EPA Region 9)				
Volatile Organics/1,4-Dioxane, EPA Method 524.2				
	RGW-15	N	RGW-15-29-0904	Tier 3
	RGW-15	N	RGW-15-36-0904	Tier 3
	RGW-15	N	RGW-15-43-0904	Tier 3
	RGW-15	FD	RGW-95-36-0904	Tier 3

TABLE A1-1

Sample Delivery Group Reference - Grab Groundwater, Phase 1 (September - December 2004)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
04335B (EPA Region 9)				
Volatile Organics/1,4-Dioxane, EPA Method 524.2				
	RGW-16	N	RGW-16-17-0904	Tier 2
	RGW-16	N	RGW-16-39-0904	Tier 2
	RGW-16	N	RGW-16-47-0904	Tier 2
	RGW-16	N	RGW-16-7-0904	Tier 2
	RGW-17	N	RGW-17-15-0904	Tier 2
	RGW-17	N	RGW-17-25-0904	Tier 2
	RGW-17	N	RGW-17-35-0904	Tier 2
	RGW-17	N	RGW-17-45-0904	Tier 2
	RGW-17	FD	RGW-70-35-0904	Tier 2

Notes:

N regular sample

FD field duplicate

TABLE A1-2
Sample Delivery Group Reference - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY1G09 (Pace)				
Inorganics, CLP-SOW				
	RSB-07	N	RSB-07-01-0904	Tier 2
	RSB-08	N	RSB-08-01-0904	Tier 2
	RSB-10	N	RSB-10-01-0904	Tier 2
	RSB-10	N	RSB-10-05-0904	Tier 2
	RSB-19	N	RSB-19-01-0904	Tier 2
	RSB-21	N	RSB-21-01-0904	Tier 2
	RSB-21	N	RSB-21-05-0904	Tier 2
	RSB-25	N	RSB-25-01-0904	Tier 2
	RSB-25	N	RSB-25-05-0904	Tier 2
	RSB-26	N	RSB-26-01-0904	Tier 2
	RSB-26	N	RSB-26-05-0904	Tier 2
	RSB-27	N	RSB-27-01-0904	Tier 2
	RSB-27	N	RSB-27-05-0904	Tier 2
	RSB-28	N	RSB-28-01-0904	Tier 2
	RSB-28	N	RSB-28-05-0904	Tier 2
	RSB-29	N	RSB-29-01-0904	Tier 2
	RSB-29	N	RSB-29-05-0904	Tier 2
MY1G26 (Pace)				
Inorganics, CLP-SOW				
	RSB-01	N	RSB-01-01-0904	Tier 3
	RSB-01	N	RSB-01-05-0904	Tier 3
	RSB-02	N	RSB-02-01-0904	Tier 3
	RSB-03	N	RSB-03-01-0904	Tier 3
	RSB-03	N	RSB-03-05-0904	Tier 3
	RSB-11	N	RSB-11-01-0904	Tier 3
	RSB-12	N	RSB-12-01-0904	Tier 3
	RSB-12	N	RSB-12-05-0904	Tier 3
	RSB-13	N	RSB-13-01-0904	Tier 3
	RSB-13	N	RSB-13-05-0904	Tier 3
	RSB-14	N	RSB-14-01-0904	Tier 3
	RSB-14	N	RSB-14-05-0904	Tier 3
	RSB-20	N	RSB-20-01-0904	Tier 3
	RSB-30	N	RSB-30-01-0904	Tier 3
	RSB-31	N	RSB-31-01-0904	Tier 3
	RSB-31	N	RSB-31-05-0904	Tier 3
	RSB-32	N	RSB-32-01-0904	Tier 3
	RSB-32	N	RSB-32-05-0904	Tier 3
	RSB-33	N	RSB-33-01-0904	Tier 3
	RSB-33	N	RSB-33-05-0904	Tier 3

TABLE A1-2
Sample Delivery Group Reference - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY1G50 (Pace)				
Inorganics, CLP-SOW				
	RSB-04	N	RSB-04-01-0904	Tier 3
	RSB-04	N	RSB-04-05-0904	Tier 3
	RSB-04	FD	RSB-91-01-0904	Tier 3
	RSB-04	FD	RSB-91-05-0904	Tier 3
	RSB-05	N	RSB-05-01-0904	Tier 3
	RSB-05	N	RSB-05-05-0904	Tier 3
	RSB-15	N	RSB-15-01-0904	Tier 3
	RSB-17	N	RSB-17-01-0904	Tier 3
	RSB-18	N	RSB-18-01-0904	Tier 3
	RSB-18	N	RSB-18-05-0904	Tier 3
	RSB-22	N	RSB-22-01-0904	Tier 3
	RSB-22	N	RSB-22-05-0904	Tier 3
	RSB-23	N	RSB-23-01-0904	Tier 3
	RSB-23	N	RSB-23-05-0904	Tier 3
	RSB-34	N	RSB-34-01-0904	Tier 3
	RSB-35	N	RSB-35-01-0904	Tier 3
	RSB-38	N	RSB-38-01-0904	Tier 3
	RSB-38	N	RSB-38-05-0904	Tier 3
MY1G72 (Pace)				
Inorganics, CLP-SOW				
	RSB-06	N	RSB-06-01-0904	Tier 2
	RSB-06	FD	RSB-81-01-0904	Tier 2
	RSB-24	N	RSB-24-01-0904	Tier 2
	RSB-24	FD	RSB-93-01-0904	Tier 2
	RSB-36	N	RSB-36-01-0904	Tier 2
	RSB-36	N	RSB-36-05-0904	Tier 2
	RSB-37	N	RSB-37-01-0904	Tier 2
	RSB-37	N	RSB-37-05-0904	Tier 2
	RSB-37	FD	RSB-80-01-0904	Tier 2
	RSB-37	FD	RSB-80-05-0904	Tier 2
	RSB-39	N	RSB-39-01-0904	Tier 2
	RSB-40	N	RSB-40-01-0904	Tier 2
	RSB-41	N	RSB-41-01-0904	Tier 2
MY1G87 (Pace)				
Inorganics, CLP-SOW				
	RSB-42	N	RSB-42-01-0904	Tier 2
Y1G09 (Pace)				
Dioxins and Furans, EPA Method SW8290				
	RSB-10	N	RSB-10-01-0904	Tier 2

TABLE A1-2
Sample Delivery Group Reference - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y1G09 (Pace)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	RSB-07	N	RSB-07-01-0904	Tier 2
	RSB-08	N	RSB-08-01-0904	Tier 2
	RSB-10	N	RSB-10-01-0904	Tier 2
	RSB-10	N	RSB-10-05-0904	Tier 2
	RSB-19	N	RSB-19-01-0904	Tier 2
	RSB-21	N	RSB-21-01-0904	Tier 2
	RSB-25	N	RSB-25-01-0904	Tier 2
	RSB-25	N	RSB-25-05-0904	Tier 2
	RSB-26	N	RSB-26-01-0904	Tier 2
	RSB-26	N	RSB-26-05-0904	Tier 2
	RSB-27	N	RSB-27-01-0904	Tier 2
	RSB-27	N	RSB-27-05-0904	Tier 2
	RSB-28	N	RSB-28-01-0904	Tier 2
	RSB-28	N	RSB-28-05-0904	Tier 2
	RSB-29	N	RSB-29-01-0904	Tier 2
	RSB-29	N	RSB-29-05-0904	Tier 2
Semivolatile Organics, CLP-SOW				
	RSB-07	N	RSB-07-01-0904	Tier 2
	RSB-08	N	RSB-08-01-0904	Tier 2
	RSB-10	N	RSB-10-01-0904	Tier 2
	RSB-10	N	RSB-10-05-0904	Tier 2
	RSB-19	N	RSB-19-01-0904	Tier 2
	RSB-21	N	RSB-21-01-0904	Tier 2
	RSB-21	N	RSB-21-05-0904	Tier 2
	RSB-25	N	RSB-25-01-0904	Tier 2
	RSB-25	N	RSB-25-05-0904	Tier 2
	RSB-26	N	RSB-26-01-0904	Tier 2
	RSB-26	N	RSB-26-05-0904	Tier 2
	RSB-27	N	RSB-27-01-0904	Tier 2
	RSB-27	N	RSB-27-05-0904	Tier 2
	RSB-28	N	RSB-28-01-0904	Tier 2
	RSB-28	N	RSB-28-05-0904	Tier 2
	RSB-29	N	RSB-29-01-0904	Tier 2
	RSB-29	N	RSB-29-05-0904	Tier 2

TABLE A1-2
Sample Delivery Group Reference - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y1G09 (Pace)				
Volatile Organics, CLP-SOW				
	RSB-07	N	RSB-07-01-0904	Tier 2
	RSB-08	N	RSB-08-01-0904	Tier 2
	RSB-10	N	RSB-10-01-0904	Tier 2
	RSB-10	N	RSB-10-05-0904	Tier 2
	RSB-19	N	RSB-19-01-0904	Tier 2
	RSB-21	N	RSB-21-01-0904	Tier 2
	RSB-25	N	RSB-25-01-0904	Tier 2
	RSB-25	N	RSB-25-05-0904	Tier 2
	RSB-26	N	RSB-26-01-0904	Tier 2
	RSB-26	N	RSB-26-05-0904	Tier 2
	RSB-27	N	RSB-27-01-0904	Tier 2
	RSB-27	N	RSB-27-05-0904	Tier 2
	RSB-28	N	RSB-28-01-0904	Tier 2
	RSB-28	N	RSB-28-05-0904	Tier 2
	RSB-29	N	RSB-29-01-0904	Tier 2
	RSB-29	N	RSB-29-05-0904	Tier 2
Y1G26 (Pace)				
Dioxins and Furans, EPA Method SW8290				
	RSB-11	N	RSB-11-01-0904	Tier 3
	RSB-12	N	RSB-12-01-0904	Tier 3
	RSB-31	N	RSB-31-01-0904	Tier 3
	RSB-32	N	RSB-32-01-0904	Tier 3
	RSB-33	N	RSB-33-01-0904	Tier 3
Organochlorine Pesticides/PCBs, CLP-SOW				
	RSB-01	N	RSB-01-01-0904	Tier 3
	RSB-01	N	RSB-01-05-0904	Tier 3
	RSB-02	N	RSB-02-01-0904	Tier 3
	RSB-03	N	RSB-03-01-0904	Tier 3
	RSB-03	N	RSB-03-05-0904	Tier 3
	RSB-11	N	RSB-11-01-0904	Tier 3
	RSB-12	N	RSB-12-01-0904	Tier 3
	RSB-12	N	RSB-12-05-0904	Tier 3
	RSB-13	N	RSB-13-01-0904	Tier 3
	RSB-13	N	RSB-13-05-0904	Tier 3
	RSB-14	N	RSB-14-01-0904	Tier 3
	RSB-14	N	RSB-14-05-0904	Tier 3
	RSB-20	N	RSB-20-01-0904	Tier 3
	RSB-30	N	RSB-30-01-0904	Tier 3
	RSB-31	N	RSB-31-01-0904	Tier 3
	RSB-31	N	RSB-31-05-0904	Tier 3
	RSB-32	N	RSB-32-01-0904	Tier 3
	RSB-32	N	RSB-32-05-0904	Tier 3
	RSB-33	N	RSB-33-01-0904	Tier 3
	RSB-33	N	RSB-33-05-0904	Tier 3

TABLE A1-2
Sample Delivery Group Reference - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y1G26 (Pace)				
Semivolatile Organics, CLP-SOW				
	RSB-01	N	RSB-01-01-0904	Tier 3
	RSB-01	N	RSB-01-05-0904	Tier 3
	RSB-02	N	RSB-02-01-0904	Tier 3
	RSB-03	N	RSB-03-01-0904	Tier 3
	RSB-03	N	RSB-03-05-0904	Tier 3
	RSB-11	N	RSB-11-01-0904	Tier 3
	RSB-12	N	RSB-12-01-0904	Tier 3
	RSB-12	N	RSB-12-05-0904	Tier 3
	RSB-13	N	RSB-13-01-0904	Tier 3
	RSB-13	N	RSB-13-05-0904	Tier 3
	RSB-14	N	RSB-14-01-0904	Tier 3
	RSB-14	N	RSB-14-05-0904	Tier 3
	RSB-20	N	RSB-20-01-0904	Tier 3
	RSB-30	N	RSB-30-01-0904	Tier 3
	RSB-31	N	RSB-31-01-0904	Tier 3
	RSB-31	N	RSB-31-05-0904	Tier 3
	RSB-32	N	RSB-32-01-0904	Tier 3
	RSB-32	N	RSB-32-05-0904	Tier 3
	RSB-33	N	RSB-33-01-0904	Tier 3
	RSB-33	N	RSB-33-05-0904	Tier 3
Volatile Organics/1,4-Dioxane, CLP-SOW				
	RSB-01	N	RSB-01-01-0904	Tier 3
	RSB-01	N	RSB-01-05-0904	Tier 3
	RSB-02	N	RSB-02-01-0904	Tier 3
	RSB-03	N	RSB-03-01-0904	Tier 3
	RSB-03	N	RSB-03-05-0904	Tier 3
	RSB-11	N	RSB-11-01-0904	Tier 3
	RSB-12	N	RSB-12-01-0904	Tier 3
	RSB-12	N	RSB-12-05-0904	Tier 3
	RSB-13	N	RSB-13-01-0904	Tier 3
	RSB-13	N	RSB-13-05-0904	Tier 3
	RSB-14	N	RSB-14-01-0904	Tier 3
	RSB-14	N	RSB-14-05-0904	Tier 3
	RSB-20	N	RSB-20-01-0904	Tier 3
	RSB-30	N	RSB-30-01-0904	Tier 3
	RSB-31	N	RSB-31-01-0904	Tier 3
	RSB-31	N	RSB-31-05-0904	Tier 3
	RSB-32	N	RSB-32-01-0904	Tier 3
	RSB-32	N	RSB-32-05-0904	Tier 3
	RSB-33	N	RSB-33-01-0904	Tier 3
	RSB-33	N	RSB-33-05-0904	Tier 3
Y1G50 (Pace)				
Dioxins and Furans, EPA Method SW8290				
	RSB-18	N	RSB-18-01-0904	Tier 3
	RSB-18	FD	RSB-18-03	Tier 3

TABLE A1-2
Sample Delivery Group Reference - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y1G50 (Pace)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	RSB-04	N	RSB-04-01-0904	Tier 2
	RSB-04	N	RSB-04-05-0904	Tier 2
	RSB-04	FD	RSB-91-01-0904	Tier 2
	RSB-04	FD	RSB-91-05-0904	Tier 2
	RSB-05	N	RSB-05-01-0904	Tier 2
	RSB-05	N	RSB-05-05-0904	Tier 2
	RSB-15	N	RSB-15-01-0904	Tier 2
	RSB-17	N	RSB-17-01-0904	Tier 2
	RSB-18	N	RSB-18-01-0904	Tier 2
	RSB-18	N	RSB-18-05-0904	Tier 2
	RSB-22	N	RSB-22-01-0904	Tier 2
	RSB-22	N	RSB-22-05-0904	Tier 2
	RSB-23	N	RSB-23-01-0904	Tier 2
	RSB-23	N	RSB-23-05-0904	Tier 2
	RSB-34	N	RSB-34-01-0904	Tier 2
	RSB-35	N	RSB-35-01-0904	Tier 2
	RSB-38	N	RSB-38-01-0904	Tier 2
	RSB-38	N	RSB-38-05-0904	Tier 2
Semivolatile Organics, CLP-SOW				
	RSB-04	N	RSB-04-01-0904	Tier 2
	RSB-04	N	RSB-04-05-0904	Tier 2
	RSB-04	FD	RSB-91-01-0904	Tier 2
	RSB-04	FD	RSB-91-05-0904	Tier 2
	RSB-05	N	RSB-05-01-0904	Tier 2
	RSB-05	N	RSB-05-05-0904	Tier 2
	RSB-15	N	RSB-15-01-0904	Tier 2
	RSB-17	N	RSB-17-01-0904	Tier 2
	RSB-18	N	RSB-18-01-0904	Tier 2
	RSB-18	N	RSB-18-05-0904	Tier 2
	RSB-22	N	RSB-22-01-0904	Tier 2
	RSB-22	N	RSB-22-05-0904	Tier 2
	RSB-23	N	RSB-23-01-0904	Tier 2
	RSB-23	N	RSB-23-05-0904	Tier 2
	RSB-34	N	RSB-34-01-0904	Tier 2
	RSB-35	N	RSB-35-01-0904	Tier 2
	RSB-38	N	RSB-38-01-0904	Tier 2
	RSB-38	N	RSB-38-05-0904	Tier 2

TABLE A1-2
Sample Delivery Group Reference - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y1G50 (Pace)				
Volatile Organics, CLP-SOW				
	RSB-04	N	RSB-04-01-0904	Tier 2
	RSB-04	N	RSB-04-05-0904	Tier 2
	RSB-04	FD	RSB-91-01-0904	Tier 2
	RSB-04	FD	RSB-91-05-0904	Tier 2
	RSB-05	N	RSB-05-01-0904	Tier 2
	RSB-05	N	RSB-05-05-0904	Tier 2
	RSB-15	N	RSB-15-01-0904	Tier 2
	RSB-17	N	RSB-17-01-0904	Tier 2
	RSB-18	N	RSB-18-01-0904	Tier 2
	RSB-18	N	RSB-18-05-0904	Tier 2
	RSB-22	N	RSB-22-01-0904	Tier 2
	RSB-22	N	RSB-22-05-0904	Tier 2
	RSB-23	N	RSB-23-01-0904	Tier 2
	RSB-23	N	RSB-23-05-0904	Tier 2
	RSB-34	N	RSB-34-01-0904	Tier 2
	RSB-35	N	RSB-35-01-0904	Tier 2
	RSB-38	N	RSB-38-01-0904	Tier 2
	RSB-38	N	RSB-38-05-0904	Tier 2
Y1G72 (Pace)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	RSB-06	N	RSB-06-01-0904	Tier 2
	RSB-06	FD	RSB-81-01-0904	Tier 2
	RSB-24	N	RSB-24-01-0904	Tier 2
	RSB-24	FD	RSB-93-01-0904	Tier 2
	RSB-36	N	RSB-36-01-0904	Tier 2
	RSB-36	N	RSB-36-05-0904	Tier 2
	RSB-37	N	RSB-37-01-0904	Tier 2
	RSB-37	N	RSB-37-05-0904	Tier 2
	RSB-37	FD	RSB-80-01-0904	Tier 2
	RSB-37	FD	RSB-80-05-0904	Tier 2
	RSB-39	N	RSB-39-01-0904	Tier 2
	RSB-40	N	RSB-40-01-0904	Tier 2
	RSB-41	N	RSB-41-01-0904	Tier 2
Semivolatile Organics, CLP-SOW				
	RSB-06	N	RSB-06-01-0904	Tier 2
	RSB-06	FD	RSB-81-01-0904	Tier 2
	RSB-24	N	RSB-24-01-0904	Tier 2
	RSB-24	FD	RSB-93-01-0904	Tier 2
	RSB-36	N	RSB-36-01-0904	Tier 2
	RSB-36	N	RSB-36-05-0904	Tier 2
	RSB-37	N	RSB-37-01-0904	Tier 2
	RSB-37	N	RSB-37-05-0904	Tier 2
	RSB-37	FD	RSB-80-01-0904	Tier 2
	RSB-37	FD	RSB-80-05-0904	Tier 2
	RSB-39	N	RSB-39-01-0904	Tier 2
	RSB-40	N	RSB-40-01-0904	Tier 2
	RSB-41	N	RSB-41-01-0904	Tier 2

TABLE A1-2
Sample Delivery Group Reference - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y1G72 (Pace)				
Volatile Organics, CLP-SOW				
	RSB-06	N	RSB-06-01-0904	Tier 2
	RSB-06	FD	RSB-81-01-0904	Tier 2
	RSB-24	N	RSB-24-01-0904	Tier 2
	RSB-24	FD	RSB-93-01-0904	Tier 2
	RSB-36	N	RSB-36-01-0904	Tier 2
	RSB-36	N	RSB-36-05-0904	Tier 2
	RSB-37	N	RSB-37-01-0904	Tier 2
	RSB-37	N	RSB-37-05-0904	Tier 2
	RSB-37	FD	RSB-80-01-0904	Tier 2
	RSB-37	FD	RSB-80-05-0904	Tier 2
	RSB-39	N	RSB-39-01-0904	Tier 2
	RSB-40	N	RSB-40-01-0904	Tier 2
	RSB-41	N	RSB-41-01-0904	Tier 2
Y1G87 (Pace)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	RSB-42	N	RSB-42-01-0904	Tier 2
Semivolatile Organics, CLP-SOW				
	RSB-42	N	RSB-42-01-0904	Tier 2
Volatile Organics, CLP-SOW				
	RSB-42	N	RSB-42-01-0904	Tier 2

Notes:
N regular sample
FD field duplicate

TABLE A1-3
Sample Delivery Group Reference - Soil Gas Probes, Phase 1 (October 2004)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
0410304A (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	RSP-01	N	RSP-01-AM-0904	Tier 3
	RSP-01	N	RSP-01-PM-0904	Tier 3
	RSP-02	N	RSP-02-AM-0904	Tier 3
	RSP-02	N	RSP-02-PM-0904	Tier 3
	RSP-03	N	RSP-03-AM-0904	Tier 3
	RSP-03	N	RSP-03-PM-0904	Tier 3
	RSP-04	N	RSP-04-AM-0904	Tier 3
	RSP-04	N	RSP-04-PM-0904	Tier 3
	RSP-04	FD	RSP-91-AM-0904	Tier 3
	RSP-05	N	RSP-05-AM-0904	Tier 3
	RSP-05	N	RSP-05-PM-0904	Tier 3
	RSP-06	N	RSP-06-AM-0904	Tier 3
	RSP-06	N	RSP-06-PM-0904	Tier 3
	RSP-07	N	RSP-07-AM-0904	Tier 3
	RSP-07	N	RSP-07-PM-0904	Tier 3
	RSP-08	N	RSP-08-AM-0904	Tier 3
	RSP-09	N	RSP-09-AM-0904	Tier 3
	RSP-10	N	RSP-10-AM-0904	Tier 3
	RSP-11	N	RSP-11-AM-0904	Tier 3
	RSP-12	N	RSP-12-AM-0904	Tier 3
0410304B (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	RSP-04	FD	RSP-91-PM-0904	Tier 3
	RSP-08	N	RSP-08-PM-0904	Tier 3
	RSP-09	N	RSP-09-PM-0904	Tier 3
	RSP-10	N	RSP-10-PM-0904	Tier 3
	RSP-11	N	RSP-11-PM-0904	Tier 3
	RSP-12	N	RSP-12-PM-0904	Tier 3
0410304C (Air Toxics)				
Volatile Organics, EPA Method TO-15 (SIM)				
	RSP-02	N	RSP-02-PM-0904	Tier 3
	RSP-03	N	RSP-03-AM-0904	Tier 3
	RSP-03	N	RSP-03-PM-0904	Tier 3
	RSP-08	N	RSP-08-AM-0904	Tier 3
	RSP-09	N	RSP-09-AM-0904	Tier 3
	RSP-10	N	RSP-10-AM-0904	Tier 3
	RSP-11	N	RSP-11-AM-0904	Tier 3
	RSP-12	N	RSP-12-AM-0904	Tier 3
0410304D (Air Toxics)				
Volatile Organics, EPA Method TO-15 (SIM)				
	RSP-04	FD	RSP-91-PM-0904	Tier 3
	RSP-08	N	RSP-08-PM-0904	Tier 3
	RSP-09	N	RSP-09-PM-0904	Tier 3
	RSP-10	N	RSP-10-PM-0904	Tier 3
	RSP-11	N	RSP-11-PM-0904	Tier 3
	RSP-12	N	RSP-12-PM-0904	Tier 3

TABLE A1-3

Sample Delivery Group Reference - Soil Gas Probes, Phase 1 (October 2004)

AMCO Chemical Superfund Site, Oakland, California

Notes:

N	regular sample
FD	field duplicate

TABLE A1-4
Sample Delivery Group Reference - Soil Gas Survey, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
40913D (TEG)				
Volatile Organics, EPA Method 8260B				
	RSG-01	N	RSG-01	Tier 3
	RSG-02	N	RSG-02	Tier 3
	RSG-03	N	RSG-03	Tier 3
	RSG-03A	N	RSG-03A	Tier 3
	RSG-03A	FD	RSG-03A_D1	Tier 3
	RSG-04	N	RSG-04	Tier 3
	RSG-05	N	RSG-05	Tier 3
	RSG-06	N	RSG-06	Tier 3
	RSG-07	N	RSG-07	Tier 3
	RSG-08	N	RSG-08	Tier 3
	RSG-09	N	RSG-09	Tier 3
	RSG-10	N	RSG-10	Tier 3
	RSG-11	N	RSG-11	Tier 3
	RSG-11A	N	RSG-11A	Tier 3
	RSG-11A	FD	RSG-11A_D2	Tier 3
	RSG-12	N	RSG-12	Tier 3
	RSG-13	N	RSG-13	Tier 3
	RSG-13A	N	RSG-13A	Tier 3
	RSG-13A	FD	RSG-13A_D3	Tier 3
	RSG-14	N	RSG-14	Tier 3
	RSG-14A	N	RSG-14A	Tier 3
	RSG-14A	FD	RSG-14A_D4	Tier 3
	RSG-15	N	RSG-15	Tier 3
	RSG-17	N	RSG-17	Tier 3
	RSG-18	N	RSG-18	Tier 3
	RSG-19	N	RSG-19	Tier 3
	RSG-20	N	RSG-20	Tier 3
	RSG-21	N	RSG-21_3	Tier 3
	RSG-22	N	RSG-22	Tier 3
	RSG-23	N	RSG-23	Tier 3
	RSG-24	N	RSG-24	Tier 3
	RSG-25	N	RSG-25	Tier 3
	RSG-26	N	RSG-26	Tier 3
	RSG-27	N	RSG-27	Tier 3
	RSG-28	N	RSG-28	Tier 3
	RSG-29	N	RSG-29	Tier 3
	RSG-30	N	RSG-30	Tier 3
	RSG-31	N	RSG-31	Tier 3
	RSG-32	N	RSG-32	Tier 3
	RSG-33	N	RSG-33	Tier 3
	RSG-34	N	RSG-34	Tier 3
	RSG-35	N	RSG-35	Tier 3
	RSG-36	N	RSG-36	Tier 3
	RSG-37	N	RSG-37	Tier 3
	RSG-38	N	RSG-38	Tier 3
	RSG-39	N	RSG-39	Tier 3
	RSG-40	N	RSG-40	Tier 3
	RSG-41	N	RSG-41	Tier 3
	RSG-42	N	RSG-42_D5	Tier 3

TABLE A1-4

Sample Delivery Group Reference - Soil Gas Survey, Phase 1 (September - October 2004)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
40913D (TEG)				

Notes:

N regular sample

FD field duplicate

TABLE A1-5
Result Qualification and Associated Reason Codes - Grab Groundwater, Phase 1 (September - December 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RGW-01	RGW-01	RGW-01	RGW-01	RGW-01	RGW-02	RGW-02	RGW-02	RGW-02	RGW-02	RGW-02	RGW-03	RGW-03	RGW-03	RGW-04	RGW-04	RGW-05
			17 ft bgs	30 ft bgs	40 ft bgs	50 ft bgs	60 ft bgs	12 ft bgs	20 ft bgs	32 ft bgs	42 ft bgs	50 ft bgs	58 ft bgs	17 ft bgs	37 ft bgs	58 ft bgs	20 ft bgs	30 ft bgs	15 ft bgs
		Sample Date	9/27/2004	9/27/2004	9/27/2004	9/27/2004	9/27/2004	10/1/2004	10/1/2004	10/1/2004	10/1/2004	10/1/2004	10/1/2004	10/4/2004	10/4/2004	10/4/2004	9/29/2004	9/29/2004	9/21/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1,2-Tetrachloroethane	0.43	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,1-Trichloroethane	200	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,2,2-Tetrachloroethane	1	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,2-Trichloroethane	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1-Dichloroethane	5	µg/L	1.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1.3 J Temp	0.6 J Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1-Dichloroethene	6	µg/L	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	3.9 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1-Dichloropropene	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,3-Trichlorobenzene	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,3-Trichloropropane	0.0056	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,4-Trichlorobenzene	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,4-Trimethylbenzene	12	µg/L	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 J Temp	0.5 UJ Temp	**83 J Temp**	2.7 J Temp	1.1 J Temp	0.5 UJ Temp	0.3 J Temp	0.2 J Temp	*	*	*	0.5 UJ Temp	0.2 J Temp	0.5 UJ Temp
1,2-Dibromo-3-chloropropane	0.2	µg/L	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	*	*	*	2 UJ Temp	2 UJ Temp	2 UJ Temp
1,2-Dibromoethane	0.05	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichlorobenzene	600	µg/L	49 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichloroethane	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichloropropane	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3,5-Trimethylbenzene	12	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**29 J Temp**	1.1 J Temp	0.4 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3-Dichlorobenzene	180	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3-Dichloropropane	120	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,4-Dichlorobenzene	5	µg/L	0.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,4-Dioxane (p-dioxane)	6.1	µg/L	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	10,000 UJ 1PT	1,000 UJ 1PT	1,000 UJ 1PT	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp
2,2-Dichloropropane	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
2-Chlorotoluene	120	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
4-Chlorotoluene	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Acetone	5,500	µg/L	2.2 J Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4.6 J Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	*	*	*	4 UJ Temp	4 UJ Temp	4 UJ Temp
Benzene	1	µg/L	0.4 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.7 J Temp	**1.2 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromobenzene	20	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromochloromethane	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromodichloromethane	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromoform	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromomethane	8.7	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Carbon tetrachloride	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chlorobenzene	70	µg/L	21 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	9 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloroethane	4.6	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloroform	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	2.7 J Temp	3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.8 J Temp	0.5 UJ Temp	0.9 J Temp	1.2 J Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloromethane	160	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
cis-1,2-Dichloroethene	6	µg/L	**39 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	2.2 J Temp	**360 J Temp**	0.4 J Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
cis-1,3-Dichloropropene	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Dibromochloromethane	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Dibromomethane	61	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Ethylbenzene	700	µg/L	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 11	150	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 113	1,200	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	5 UJ C%D	0.5 UJ C%D	0.5 UJ C%D	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 12	390	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Hexachlorobutadiene	0.86	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Isopropylbenzene (cumene)	660	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	3.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Methyl ethyl ketone	7,000	µg/L	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	2.3 J Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	*	*	*	4 UJ Temp	4 UJ Temp	4 UJ Temp
Methyl tert-butyl ether	13	µg/L	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**39 J Temp**	**45 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Methylene chloride	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Naphthalene	0.093	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**42 J Temp**	**2.4 J Temp**	**0.4 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp

TABLE A1-5

Result Qualification and Associated Reason Codes - Grab Groundwater, Phase 1 (September - December 2004)

AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RGW-01	RGW-01	RGW-01	RGW-01	RGW-01	RGW-02	RGW-02	RGW-02	RGW-02	RGW-02	RGW-02	RGW-03	RGW-03	RGW-03	RGW-04	RGW-04	RGW-05
			17 ft bgs	30 ft bgs	40 ft bgs	50 ft bgs	60 ft bgs	12 ft bgs	20 ft bgs	32 ft bgs	42 ft bgs	50 ft bgs	58 ft bgs	17 ft bgs	37 ft bgs	58 ft bgs	20 ft bgs	30 ft bgs	15 ft bgs
		Sample Date	9/27/2004	9/27/2004	9/27/2004	9/27/2004	9/27/2004	10/1/2004	10/1/2004	10/1/2004	10/1/2004	10/1/2004	10/1/2004	10/4/2004	10/4/2004	10/4/2004	9/29/2004	9/29/2004	9/21/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
n-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
n-Propylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	16 J Temp	0.5 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
p-Cymene (p-isopropyltoluene)	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.4 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
sec-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Styrene	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
tert-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Tetrachloroethene	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	2.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp
Toluene	150	µg/L	1.1 J Temp	0.3 J Temp	0.5 UJ Temp	0.4 J Temp	0.3 J Temp	0.3 J Temp	0.2 J Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp	6,500 J Sur	*	*	0.4 J Temp	0.3 J Temp	0.3 J Temp
trans-1,2-Dichloroethene	10	µg/L	3.8 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**44 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
trans-1,3-Dichloropropene	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Trichloroethene	5	µg/L	**5.1 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**57 J Temp**	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Vinyl chloride	0.5	µg/L	**1.2 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**0.8 J Temp**	**7.7 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Xylenes, total	1,750	µg/L	1.2 J Temp	0.2 J Temp	0.5 UJ Temp	0.6 J Temp	0.2 J Temp	4.8 J Temp	0.5 J Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	*	*	*	0.2 J Temp	0.4 J Temp	0.3 J Temp

TABLE A1-5
Result Qualification and Associated Reason Codes - Grab Groundwater, Phase 1 (September - December 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RGW-05	RGW-05	RGW-06	RGW-06	RGW-06	RGW-06	RGW-07	RGW-07	RGW-07	RGW-07	RGW-07	RGW-08	RGW-08	RGW-08	RGW-09	RGW-09	RGW-09
			25 ft bgs	35 ft bgs	12 ft bgs	22 ft bgs	29 ft bgs	40 ft bgs	12 ft bgs	25 ft bgs	35 ft bgs	43 ft bgs	55 ft bgs	30 ft bgs	38 ft bgs	44 ft bgs	15 ft bgs	25 ft bgs	35 ft bgs
		Sample Date	9/21/2004	9/21/2004	9/20/2004	9/20/2004	9/20/2004	9/20/2004	9/23/2004	9/23/2004	9/23/2004	9/23/2004	9/23/2004	9/17/2004	9/17/2004	9/17/2004	9/28/2004	9/28/2004	9/28/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1,2-Tetrachloroethane	0.43	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,1-Trichloroethane	200	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,2,2-Tetrachloroethane	1	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,2-Trichloroethane	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.7 J Temp	0.5 UJ Temp
1,1-Dichloroethane	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 J Temp	0.5 UJ Temp	0.5 UJ Temp	1.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**69 J Temp**	0.5 UJ Temp	0.5 UJ Temp	**10 J Temp**	**90 J Temp**	**46 J Temp**
1,1-Dichloroethene	6	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.4 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	2.1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	5.1 J Temp	2.6 J Temp	0.8 J Temp
1,1-Dichloropropene	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,3-Trichlorobenzene	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.6 J Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,3-Trichloropropane	0.0056	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,4-Trichlorobenzene	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,4-Trimethylbenzene	12	µg/L	0.3 J Temp	1.2 J Temp	2 J Temp	0.2 J Temp	1.2 J Temp	0.9 J Temp	0.2 J Temp	0.5 UJ Temp	2.6 J Temp	0.5 UJ Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	1.5 J Temp	0.9 J Temp
1,2-Dibromo-3-chloropropane	0.2	µg/L	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	40 UJ Temp	2 UJ Temp	2 UJ Temp
1,2-Dibromoethane	0.05	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichlorobenzene	600	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	49 J Temp	0.5 UJ Temp	1.6 J Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichloroethane	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.4 J Temp	0.5 UJ Temp	**2.8 J Temp**	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichloropropane	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3,5-Trimethylbenzene	12	µg/L	0.5 UJ Temp	0.2 J Temp	0.6 J Temp	0.5 UJ Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.2 J Temp
1,3-Dichlorobenzene	180	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3-Dichloropropane	120	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,4-Dichlorobenzene	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**5.7 J Temp**	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,4-Dioxane (p-dioxane)	6.1	µg/L	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	20,000 UJ 1PT, Temp	**840 J 1PT, Temp**	1,000 UJ 1PT, Temp
2,2-Dichloropropane	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
2-Chlorotoluene	120	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
4-Chlorotoluene	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Acetone	5,500	µg/L	4 UJ Temp	4 UJ Temp	4 UJ Temp	6.9 J Temp	4 UJ Temp	4 UJ Temp	4 UJ C%D, Temp	4 UJ C%D, Temp	4 UJ C%D, Temp	4 UJ C%D, Temp	4 UJ C%D, Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	80 J C%D, Temp	16 J Temp	28 J Temp
Benzene	1	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**2.1 J Temp**	0.5 UJ Temp	0.5 UJ Temp	**5.9 J Temp**	**2.2 J Temp**	0.6 J Temp
Bromobenzene	20	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromochloromethane	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromodichloromethane	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromoform	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromomethane	8.7	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Carbon tetrachloride	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chlorobenzene	70	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	5.5 J Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloroethane	4.6	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloroform	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.4 J Temp	0.5 UJ Temp	0.5 UJ C%D, Temp	0.5 UJ C%D, Temp	0.5 J C%D, Temp	4.8 J C%D, Temp	0.8 J C%D, Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp
Chloromethane	160	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
cis-1,2-Dichloroethene	6	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 J Temp	0.5 UJ Temp	0.5 UJ Temp	**11 J Temp**	5.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	**110 J Temp**	0.5 UJ Temp	0.5 UJ Temp	**2,500 J Temp**	**180 J Temp**	**66 J Temp**
cis-1,3-Dichloropropene	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Dibromochloromethane	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Dibromomethane	61	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Ethylbenzene	700	µg/L	0.5 UJ Temp	0.2 J Temp	1.4 J Temp	0.2 J Temp	0.4 J Temp	0.3 J Temp	0.2 J Temp	0.5 UJ Temp	0.9 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	11 J Temp	2 J Temp	0.4 J Temp
Freon 11	150	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 113	1,200	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 12	390	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Hexachlorobutadiene	0.86	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Isopropylbenzene (cumene)	660	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Methyl ethyl ketone	7,000	µg/L	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ C%D, Temp	4 UJ C%D, Temp	4 UJ C%D, Temp	4 UJ C%D, Temp	4 UJ C%D, Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	80 UJ C%D, Temp	2.2 J Temp	4.4 J Temp
Methyl tert-butyl ether	13	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp

TABLE A1-5

Result Qualification and Associated Reason Codes - Grab Groundwater, Phase 1 (September - December 2004)

AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RGW-05	RGW-05	RGW-06	RGW-06	RGW-06	RGW-06	RGW-07	RGW-07	RGW-07	RGW-07	RGW-07	RGW-08	RGW-08	RGW-08	RGW-09	RGW-09	RGW-09
			25 ft bgs	35 ft bgs	12 ft bgs	22 ft bgs	29 ft bgs	40 ft bgs	12 ft bgs	25 ft bgs	35 ft bgs	43 ft bgs	55 ft bgs	30 ft bgs	38 ft bgs	44 ft bgs	15 ft bgs	25 ft bgs	35 ft bgs
	Sample Date		9/21/2004	9/21/2004	9/20/2004	9/20/2004	9/20/2004	9/20/2004	9/23/2004	9/23/2004	9/23/2004	9/23/2004	9/23/2004	9/17/2004	9/17/2004	9/17/2004	9/28/2004	9/28/2004	9/28/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
Methylene chloride	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Naphthalene	0.093	µg/L	1 UJ Temp	**0.5 J Temp**	1 UJ Temp	1 UJ Temp	**0.5 J Temp**	**0.5 J Temp**	0.5 UJ Temp	0.5 UJ Temp	**0.4 J Temp**	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	1 UJ Temp	1 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
n-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
n-Propylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
p-Cymene (p-isopropyltoluene)	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
sec-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Styrene	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
tert-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Tetrachloroethene	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.9 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Toluene	150	µg/L	0.2 J Temp	0.3 J Temp	5.6 J Temp	1.2 J Temp	1.3 J Temp	1.1 J Temp	0.9 J Temp	0.3 J Temp	1.7 J Temp	0.7 J Temp	0.3 J Temp	0.5 J Temp	0.5 UJ Temp	0.2 J Temp	5.7 J Temp	3.5 J Temp	0.8 J Temp
trans-1,2-Dichloroethene	10	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	2.8 J Temp	3.6 J Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**15 J Temp**	1.5 J Temp	0.3 J Temp
trans-1,3-Dichloropropene	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Trichloroethene	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 J Temp	1.8 J Temp	0.5 UJ Temp	0.5 UJ Temp	**7.2 J Temp**	0.5 UJ Temp	0.5 UJ Temp	**880 J Temp**	**110 J Temp**	**25 J Temp**
Vinyl chloride	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**0.9 J Temp**	0.5 J Temp	0.5 UJ Temp	0.5 UJ Temp	**45 J Temp**	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	**22 J Temp**	**14 J Temp**
Xylenes, total	1,750	µg/L	0.7 J Temp	1.6 J Temp	9.9 J Temp	1 J Temp	3.1 J Temp	2.3 J Temp	0.9 J Temp	0.3 J Temp	5.5 J Temp	0.8 J Temp	0.6 J Temp	0.8 J Temp	0.5 UJ Temp	0.2 J Temp	24 J Temp	5.6 J Temp	1.7 J Temp

TABLE A1-5
Result Qualification and Associated Reason Codes - Grab Groundwater, Phase 1 (September - December 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RGW-09	RGW-09	RGW-09	RGW-10	RGW-10	RGW-10	RGW-11	RGW-11	RGW-11	RGW-12	RGW-12	RGW-12	RGW-12	RGW-12	RGW-12	RGW-12	RGW-12
			45 ft bgs	55 ft bgs	65 ft bgs	32 ft bgs	40 ft bgs	50 ft bgs	10 ft bgs	22 ft bgs	40 ft bgs	14 ft bgs	14 ft bgs (FD)	24 ft bgs	24 ft bgs (FD)	34 ft bgs	34 ft bgs (FD)	44 ft bgs	44 ft bgs (FD)
		Sample Date	9/28/2004	9/28/2004	9/28/2004	9/24/2004	9/24/2004	9/24/2004	9/22/2004	9/22/2004	9/22/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1,2-Tetrachloroethane	0.43	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,1-Trichloroethane	200	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1.4 J Temp	0.6 J Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,2,2-Tetrachloroethane	1	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,2-Trichloroethane	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1-Dichloroethane	5	µg/L	**9.5 J Temp**	1.3 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	3.4 J IPC, Temp	**180 J IPC, Temp**	0.2 J IPC, Temp	**24 J Temp**	**13 J Temp**	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1-Dichloroethene	6	µg/L	0.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**56 J Temp**	2.8 J Temp	1.5 J Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1-Dichloropropene	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ C%D, Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,3-Trichlorobenzene	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	20 J Temp	14 J Sur, Temp	0.2 J Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,3-Trichloropropane	0.0056	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,4-Trichlorobenzene	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**85 J Temp**	63 J Sur, Temp	1.2 J Temp	3.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,4-Trimethylbenzene	12	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp	0.2 J Temp	0.4 J Temp	**620 J Temp**	**610 J Temp**	**23 J Temp**	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp	0.3 J Temp
1,2-Dibromo-3-chloropropane	0.2	µg/L	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	1 UJ Temp	80 UJ Temp	1 UJ Temp	10 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp
1,2-Dibromoethane	0.05	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichlorobenzene	600	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	2.4 J Temp	0.5 UJ Temp	**7,800 J Temp**	7,300 J Sur, Temp	170 J Temp	240 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.3 J Temp
1,2-Dichloroethane	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 J Temp	0.5 UJ IPC, Temp	0.4 J IPC, Temp	0.5 UJ IPC, Temp	**0.7 J Temp**	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichloropropane	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ IPC, Temp	0.5 UJ IPC, Temp	0.5 UJ IPC, Temp	0.5 UJ Temp	12 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3,5-Trimethylbenzene	12	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**160 J Temp**	110 J Sur, Temp	7.3 J Temp	6.9 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3-Dichlorobenzene	180	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**360 J Temp**	**320 J Temp**	7.7 J Temp	16 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3-Dichloropropane	120	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,4-Dichlorobenzene	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp	0.5 UJ Temp	**3,500 J Temp**	**3,300 J Temp**	**80 J Temp**	**110 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp
1,4-Dioxane (p-dioxane)	6.1	µg/L	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	20,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	---	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp
2,2-Dichloropropane	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
2-Chlorotoluene	120	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	6.3 J Temp	7.4 J Sur, Temp	0.2 J Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
4-Chlorotoluene	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Acetone	5,500	µg/L	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	16 J IPC, Temp	4 UJ IPC, Temp	4 UJ IPC, Temp	8.9 J Temp	80 UJ Temp	3.7 J Temp	20 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp
Benzene	1	µg/L	0.5 UJ Temp	0.4 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.6 J Temp	0.3 J Temp	0.5 UJ Temp	**27 J Temp**	23 J Sur, Temp	0.3 J Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromobenzene	20	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromochloromethane	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 R LCS, Temp	0.5 UJ LCS, Temp	0.5 R LCS, Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromodichloromethane	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ IPC, Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromoform	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	20 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromomethane	8.7	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Carbon tetrachloride	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ C%D, Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chlorobenzene	70	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp	0.8 J Temp	0.5 UJ Temp	**6,700 J Temp**	**6,100 J Temp**	**140 J Temp**	**180 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloroethane	4.6	µg/L	1.5 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ IPC, Temp	0.5 UJ IPC, Temp	0.5 UJ IPC, Temp	2.4 J Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloroform	100	µg/L	0.5 R LCS, Temp	0.5 R LCS, Temp	0.4 J Sur, Temp	0.5 UJ Temp	0.5 UJ Temp	8.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	4.1 J Temp	4.4 J Temp	0.5 UJ Temp	0.5 UJ Temp	3.7 J Temp	3.1 J Temp
Chloromethane	160	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 UJ IPC, Temp	0.5 UJ IPC, Temp	0.5 UJ IPC, Temp	0.5 UJ Temp	10 UJ Sur, Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
cis-1,2-Dichloroethene	6	µg/L	6 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	3.2 J Temp	1.4 J Temp	0.5 UJ Temp	**680 J Temp**	500 J Sur, Temp	3.5 J Temp	**8.6 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
cis-1,3-Dichloropropene	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Dibromochloromethane	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Dibromomethane	61	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Ethylbenzene	700	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp	0.5 UJ Temp	0.2 J Temp	21 J Temp	11 J Sur, Temp	0.9 J Temp	1.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 11	150	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 113	1,200	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 12	390	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Hexachlorobutadiene	0.86	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Isopropylbenzene (cumene)	660	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	46 J Temp	32 J Temp	1.9 J Temp	1.4 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp

TABLE A1-5

Result Qualification and Associated Reason Codes - Grab Groundwater, Phase 1 (September - December 2004)

AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RGW-09	RGW-09	RGW-09	RGW-10	RGW-10	RGW-10	RGW-11	RGW-11	RGW-11	RGW-12	RGW-12	RGW-12	RGW-12	RGW-12	RGW-12	RGW-12	RGW-12
			45 ft bgs	55 ft bgs	65 ft bgs	32 ft bgs	40 ft bgs	50 ft bgs	10 ft bgs	22 ft bgs	40 ft bgs	14 ft bgs	14 ft bgs (FD)	24 ft bgs	24 ft bgs (FD)	34 ft bgs	34 ft bgs (FD)	44 ft bgs	44 ft bgs (FD)
		Sample Date	9/28/2004	9/28/2004	9/28/2004	9/24/2004	9/24/2004	9/24/2004	9/22/2004	9/22/2004	9/22/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
Methyl ethyl ketone	7,000	µg/L	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4.4 J IPC, Temp	4 UJ IPC, Temp	4 UJ IPC, Temp	4 UJ Temp	80 UJ Temp	4 UJ Temp	20 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp
Methyl tert-butyl ether	13	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.2 J Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Methylene chloride	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 J Temp	10 UJ Temp	0.5 UJ Temp	3.8 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Naphthalene	0.093	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**0.2 J Temp**	0.5 UJ Temp	0.5 UJ Temp	**160 J Temp**	130 J Sur, Temp	**2.2 J Temp**	**6.4 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
n-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.4 J Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
n-Propylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	150 J Temp	110 J Sur, Temp	6.7 J Temp	3.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
p-Cymene (p-isopropyltoluene)	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	4.2 J Temp	12 J Sur, Temp	1.1 J Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
sec-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	3.3 J Temp	10 UJ Temp	0.3 J Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Styrene	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
tert-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Tetrachloroethene	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**12 J Temp**	10 UJ Temp	0.3 J Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Toluene	150	µg/L	0.5 UJ Temp	0.3 J Temp	0.5 UJ Temp	0.4 J Temp	0.5 UJ Temp	0.6 J Temp	1.1 J Temp	0.6 J Temp	0.4 J Temp	100 J Temp	73 J Sur, Temp	3.4 J Temp	5.8 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.3 J Temp
trans-1,2-Dichloroethene	10	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**15 J Temp**	6.8 J Sur, Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
trans-1,3-Dichloropropene	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Trichloroethene	5	µg/L	1.1 J Temp	0.5 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 J Temp	0.5 UJ Temp	0.5 UJ Temp	1.4 J Temp	10 UJ Temp	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Vinyl chloride	0.5	µg/L	**2.7 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**5.8 J IPC, Temp**	**3.9 J IPC, Temp**	0.5 UJ IPC, Temp	**33 J Temp**	**27 J Temp**	0.5 UJ Temp	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Xylenes, total	1,750	µg/L	0.2 J Temp	0.2 J Temp	0.5 UJ Temp	0.2 J Temp	0.5 UJ Temp	0.3 J Temp	1.2 J Temp	0.9 J Temp	0.9 J Temp	131 J Temp	92 J Sur, Temp	6 J Temp	5.8 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.4 J Temp

TABLE A1-5
Result Qualification and Associated Reason Codes - Grab Groundwater, Phase 1 (September - December 2004)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RGW-13	RGW-13	RGW-13	RGW-13	RGW-13	RGW-14	RGW-14	RGW-14	RGW-14	RGW-14	RGW-14	RGW-14	RGW-15	RGW-15	RGW-15	RGW-15	RGW-15
			22 ft bgs	32 ft bgs	42 ft bgs	50 ft bgs	58 ft bgs	9 ft bgs	16 ft bgs	16 ft bgs (FD)	26 ft bgs	26 ft bgs (FD)	36 ft bgs	46 ft bgs	16 ft bgs	29 ft bgs	36 ft bgs	36 ft bgs (FD)	43 ft bgs
	Sample Date		9/30/2004	9/30/2004	9/30/2004	9/30/2004	9/30/2004	10/22/2004	10/22/2004	10/22/2004	10/22/2004	10/22/2004	10/22/2004	10/22/2004	10/26/2004	11/2/2004	11/2/2004	11/2/2004	11/2/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1,2-Tetrachloroethane	0.43	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,1-Trichloroethane	200	µg/L	1.7 J Temp	0.6 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,2,2-Tetrachloroethane	1	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,2-Trichloroethane	5	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	2.5 J Temp
1,1-Dichloroethane	5	µg/L	2.5 UJ Temp	77 UJ Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**12 J Temp**	**12 J Temp**	2.2 J Temp	2.3 J Temp	1.1 J Temp	0.4 J Temp	1 UJ Temp	**21 J Temp**	0.9 J Temp	1 J Temp	3 J Temp
1,1-Dichloroethene	6	µg/L	2.5 R LCS, Temp	0.9 J Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 R LCS, Temp	0.5 UJ Temp	1 J Temp	0.9 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.3 J Temp	4.5 J Temp
1,1-Dichloropropene	NE	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,3-Trichlorobenzene	NE	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,3-Trichloropropane	0.0056	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,4-Trichlorobenzene	5	µg/L	1.9 J Temp	0.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,4-Trimethylbenzene	12	µg/L	**300 J Temp**	2.8 J Temp	2.1 J Temp	3.8 J Temp	0.9 J Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp
1,2-Dibromo-3-chloropropane	0.2	µg/L	10 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	4 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp
1,2-Dibromoethane	0.05	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichlorobenzene	600	µg/L	390 J Temp	150 UJ Temp	3.4 J Temp	4.2 J Temp	1.4 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichloroethane	0.5	µg/L	2.5 UJ Temp	**4 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichloropropane	5	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3,5-Trimethylbenzene	12	µg/L	6.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.4 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3-Dichlorobenzene	180	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3-Dichloropropane	120	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,4-Dichlorobenzene	5	µg/L	**59 J Temp**	26 UJ Temp	0.6 J Temp	0.7 J Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,4-Dioxane (p-dioxane)	6.1	µg/L	5,000 UJ 1PT, Temp	**1,200 J 1PT, Temp**	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	---	---	---	---	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	2,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp	1,000 UJ 1PT, Temp
2,2-Dichloropropane	NE	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
2-Chlorotoluene	120	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
4-Chlorotoluene	NE	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Acetone	5,500	µg/L	22 J Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	11 J Temp	12 J Temp	15 J Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	11 J Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	13 J Temp
Benzene	1	µg/L	**210 J Temp**	**2.2 J Temp**	0.2 J Temp	0.2 J Temp	0.5 UJ Temp	0.2 J Temp	0.5 J Temp	0.5 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	**1.8 J Temp**
Bromobenzene	20	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromochloromethane	NE	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromodichloromethane	100	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromoform	100	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromomethane	8.7	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Carbon tetrachloride	0.5	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chlorobenzene	70	µg/L	13 J Temp	0.9 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloroethane	4.6	µg/L	**460 J Temp**	3.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloroform	100	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.4 J Temp	3.9 J Temp	1.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.9 J Temp	1 J Temp	0.6 J Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.8 J Temp
Chloromethane	160	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp
cis-1,2-Dichloroethene	6	µg/L	**38 J Temp**	61 UJ Temp	0.5 J Temp	0.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	**22 J Temp**	**21 J Temp**	0.2 J Temp	0.2 J Temp	1.5 J Temp	0.3 J Temp	1 UJ Temp	6 J Temp	2.2 J Temp	2.3 J Temp	**53 J Temp**
cis-1,3-Dichloropropene	0.5	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Dibromochloromethane	100	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Dibromomethane	61	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Ethylbenzene	700	µg/L	140 J Temp	1 J Temp	0.6 J Temp	1 J Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	2.4 J Temp
Freon 11	150	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 113	1,200	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 12	390	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Hexachlorobutadiene	0.86	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Isopropylbenzene (cumene)	660	µg/L	27 J Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Methyl ethyl ketone	7,000	µg/L	20 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	8 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp
Methyl tert-butyl ether	13	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Methylene chloride	5	µg/L	**8.5 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp

TABLE A1-5
Result Qualification and Associated Reason Codes - Grab Groundwater, Phase 1 (September - December 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RGW-13	RGW-13	RGW-13	RGW-13	RGW-13	RGW-14	RGW-14	RGW-14	RGW-14	RGW-14	RGW-14	RGW-14	RGW-15	RGW-15	RGW-15	RGW-15	RGW-15
			22 ft bgs	32 ft bgs	42 ft bgs	50 ft bgs	58 ft bgs	9 ft bgs	16 ft bgs	16 ft bgs (FD)	26 ft bgs	26 ft bgs (FD)	36 ft bgs	46 ft bgs	16 ft bgs	29 ft bgs	36 ft bgs	36 ft bgs (FD)	43 ft bgs
		Sample Date	9/30/2004	9/30/2004	9/30/2004	9/30/2004	9/30/2004	10/22/2004	10/22/2004	10/22/2004	10/22/2004	10/22/2004	10/22/2004	10/22/2004	10/26/2004	11/2/2004	11/2/2004	11/2/2004	11/2/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
Naphthalene	0.093	µg/L	**320 J Temp**	**1.1 J Temp**	**0.6 J Temp**	**1.4 J Temp**	**0.3 J Temp**	**0.2 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**0.2 J Temp**	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
n-Butylbenzene	240	µg/L	1.8 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
n-Propylbenzene	240	µg/L	58 J Temp	0.5 J Temp	0.4 J Temp	0.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
p-Cymene (p-isopropyltoluene)	NE	µg/L	63 J Temp	0.6 J Temp	0.5 J Temp	0.8 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.8 J Temp
sec-Butylbenzene	240	µg/L	2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Styrene	100	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
tert-Butylbenzene	240	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Tetrachloroethene	5	µg/L	1.5 J Temp	3.4 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	3.6 J Temp
Toluene	150	µg/L	110 UJ Temp	4.1 J Temp	1.4 J Temp	3.6 J Temp	0.4 J Temp	0.6 J Temp	0.2 J Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1.7 J Temp
trans-1,2-Dichloroethene	10	µg/L	2.5 UJ Temp	**11 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.3 J Temp	0.5 UJ Temp	1 UJ Temp	3.2 J Temp	0.5 UJ Temp	0.2 J Temp	2.3 J Temp
trans-1,3-Dichloropropene	0.5	µg/L	2.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp
Trichloroethene	5	µg/L	**9.7 J Temp**	**10 J Temp**	0.2 J Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	1 UJ Temp	2.7 J Temp	3.1 J Temp	3.2 J Temp	**670 J Temp**
Vinyl chloride	0.5	µg/L	**3.6 J Temp**	230 UJ Temp	**0.7 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	**4.7 J Temp**	**4.6 J Temp**	0.2 J Temp	0.3 J Temp	0.4 J Temp	0.4 J Temp	1 UJ Temp	**4.9 J Temp**	0.5 UJ Temp	0.5 UJ Temp	**0.7 J Temp**
Xylenes, total	1,750	µg/L	570 J Temp	4.4 J Temp	2.4 J Temp	4.7 J Temp	0.7 J Temp	0.7 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp	0.5 UJ Temp	1 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	5.4 J Temp

TABLE A1-5
Result Qualification and Associated Reason Codes - Grab Groundwater, Phase 1 (September - December 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RGW-16	RGW-16	RGW-16	RGW-16	RGW-17	RGW-17	RGW-17	RGW-17	RGW-17
			7 ft bgs	17 ft bgs	39 ft bgs	47 ft bgs	15 ft bgs	25 ft bgs	35 ft bgs	35 ft bgs (FD)	45 ft bgs
		Sample Date	11/30/2004	11/30/2004	12/2/2004	12/2/2004	11/30/2004	12/1/2004	12/1/2004	12/1/2004	12/1/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**								
Volatile Organic Compounds											
1,1,1,2-Tetrachloroethane	0.43	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,1-Trichloroethane	200	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,2,2-Tetrachloroethane	1	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1,2-Trichloroethane	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1-Dichloroethane	5	µg/L	**10 J Temp**	**20 J Temp**	0.5 UJ Temp	1 J Temp	0.2 J Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1-Dichloroethene	6	µg/L	0.5 UJ Temp	0.4 J Temp	0.5 UJ Temp	0.2 J Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,1-Dichloropropene	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,3-Trichlorobenzene	NE	µg/L	1 UJ Temp	5.1 J Temp	1 UJ Temp	1 UJ Temp	1 UJ Temp	50 UJ Temp	1 UJ Temp	1 UJ Temp	1 UJ Temp
1,2,3-Trichloropropane	0.0056	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2,4-Trichlorobenzene	5	µg/L	1 UJ Temp	0.5 UJ Temp	1 UJ Temp	1 UJ Temp	1 UJ Temp	50 UJ Temp	1 UJ Temp	1 UJ Temp	1 UJ Temp
1,2,4-Trimethylbenzene	12	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.7 J Temp	1.1 J Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dibromo-3-chloropropane	0.2	µg/L	2 UJ Temp	**2.4 J Temp**	2 UJ Temp	2 UJ Temp	2 UJ Temp	100 UJ Temp	2 UJ Temp	2 UJ Temp	2 UJ Temp
1,2-Dibromoethane	0.05	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichlorobenzene	600	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichloroethane	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,2-Dichloropropane	5	µg/L	0.2 J Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3,5-Trimethylbenzene	12	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.2 J Temp	0.2 J Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3-Dichlorobenzene	180	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,3-Dichloropropane	120	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,4-Dichlorobenzene	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
1,4-Dioxane (p-dioxane)	6.1	µg/L	*	1,000 UJ No ICAL, Temp	1,000 UJ No ICAL, Temp	1,000 UJ No ICAL, Temp	1,000 UJ No ICAL, Temp	50,000 UJ No ICAL, Temp	1,000 UJ No ICAL, Temp	1,000 UJ No ICAL, Temp	1,000 UJ No ICAL, Temp
2,2-Dichloropropane	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
2-Chlorotoluene	120	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
4-Chlorotoluene	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Acetone	5,500	µg/L	7.3 J C%D, Temp	25 J C%D, LCS, Temp	4 UJ LCS, Temp	4 UJ LCS, Temp	2.3 J C%D, Temp	200 UJ C%D, Temp	4 UJ C%D, Temp	4 UJ C%D, Temp	4 UJ C%D, Temp
Benzene	1	µg/L	**2.1 J C%D, Temp**	**2.7 J LCS, Temp**	0.5 UJ Temp	0.2 J Temp	0.5 UJ C%D, Temp	25 UJ C%D, Temp	0.5 UJ C%D, Temp	0.5 UJ C%D, Temp	0.5 UJ C%D, Temp
Bromobenzene	20	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromochloromethane	NE	µg/L	0.5 UJ Temp	0.5 UJ C%D, Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromodichloromethane	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Bromoform	100	µg/L	1 UJ Temp	0.5 UJ Temp	1 UJ Temp	1 UJ Temp	1 UJ Temp	50 UJ Temp	1 UJ Temp	1 UJ Temp	1 UJ Temp
Bromomethane	8.7	µg/L	0.5 UJ Temp	0.5 UJ C%D, Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Carbon tetrachloride	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chlorobenzene	70	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloroethane	4.6	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloroform	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Chloromethane	160	µg/L	0.5 UJ Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
cis-1,2-Dichloroethene	6	µg/L	0.9 J Temp	*	0.5 UJ Temp	0.7 J Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
cis-1,3-Dichloropropene	0.5	µg/L	0.5 UJ Temp	**4.2 J Temp**	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Dibromochloromethane	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Dibromomethane	61	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Ethylbenzene	700	µg/L	0.2 J Temp	0.5 UJ Temp	0.5 J Temp	0.4 J Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 11	150	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 113	1,200	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Freon 12	390	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Hexachlorobutadiene	0.86	µg/L	1 UJ Temp	0.5 UJ Temp	1 UJ Temp	1 UJ Temp	1 UJ Temp	50 UJ Temp	1 UJ Temp	1 UJ Temp	1 UJ Temp
Isopropylbenzene (cumene)	660	µg/L	0.2 J Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp

TABLE A1-5
Result Qualification and Associated Reason Codes - Grab Groundwater, Phase 1 (September - December 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RGW-16	RGW-16	RGW-16	RGW-16	RGW-17	RGW-17	RGW-17	RGW-17	RGW-17
			7 ft bgs	17 ft bgs	39 ft bgs	47 ft bgs	15 ft bgs	25 ft bgs	35 ft bgs	35 ft bgs (FD)	45 ft bgs
		Sample Date	11/30/2004	11/30/2004	12/2/2004	12/2/2004	11/30/2004	12/1/2004	12/1/2004	12/1/2004	12/1/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**								
Volatile Organic Compounds											
Methyl ethyl ketone	7,000	µg/L	2 J Temp	3.2 J C%D, Temp	4 UJ Temp	4 UJ Temp	4 UJ Sur, Temp	200 UJ Temp	4 UJ Temp	4 UJ Temp	4 UJ Temp
Methyl tert-butyl ether	13	µg/L	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Methylene chloride	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Naphthalene	0.093	µg/L	1 UJ Temp	0.5 UJ Temp	1 UJ Temp	1 UJ Temp	1 UJ Temp	50 UJ Temp	1 UJ Temp	1 UJ Temp	1 UJ Temp
n-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
n-Propylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
p-Cymene (p-isopropyltoluene)	NE	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
sec-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Styrene	100	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
tert-Butylbenzene	240	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Tetrachloroethene	5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Toluene	150	µg/L	0.5 J Temp	0.7 J Temp	2.4 J Temp	1.2 J Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
trans-1,2-Dichloroethene	10	µg/L	0.5 UJ Temp	0.3 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
trans-1,3-Dichloropropene	0.5	µg/L	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Trichloroethene	5	µg/L	0.2 J Temp	0.2 J Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Vinyl chloride	0.5	µg/L	**0.6 J Temp**	**7.2 J Temp**	0.5 UJ Temp	0.5 J Temp	0.5 UJ Sur, Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp
Xylenes, total	1,750	µg/L	0.5 UJ Temp	0.5 UJ Temp	3.1 J Temp	2.4 J Temp	0.5 UJ Temp	25 UJ Temp	0.5 UJ Temp	0.5 UJ Temp	0.5 UJ Temp

Notes:
Results greater than the screening level are bolded
Rejected Results are enclosed by boxes
See Groundwater Screening Level table for source of screening levels.

---	not analyzed
*	result not qualified for Quality Control outliers
FD	field duplicate
NE	not established
µg/L	micrograms per liter
J	estimated value
R	rejected for failure to meet quality control requirement.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
1PT	Using a 1 point curve instead of the required 5 point
C%D	Continuing calibration verification is outside control limit
IPC	Instrument Performance Check ion abundance criteria not met
LCS	Laboratory Control Sample recovery is outside control limit
NoICAL	No initial calibration analyzed in the analytical batch
Sur	Surrogate recovery outside control limits
Temp	Temperature Blank>6°C

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RSB-01	RSB-01	RSB-02	RSB-03	RSB-03	RSB-04	RSB-04	RSB-04	RSB-04	RSB-05	RSB-05	RSB-06	RSB-06	RSB-07	RSB-08	RSB-10	RSB-10
			3 ft bgs	6 ft bgs	3 ft bgs	2 ft bgs	5 ft bgs	3.5 ft bgs	3.5 ft bgs (FD)	7 ft bgs	7 ft bgs (FD)	3 ft bgs	7 ft bgs	3 ft bgs	3 ft bgs (FD)	4.5 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs
	Sample Date		9/16/2004	9/16/2004	9/15/2004	9/20/2004	9/20/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/30/2004	9/30/2004	9/15/2004	9/15/2004	9/14/2004	9/14/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	1,200,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	12 UJ Sur	*	*	*	*	*
1,1,2,2-Tetrachloroethane	410	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	730	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	2,800	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	120,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	13 UJ MS	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	62,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromo-3-chloropropane	30	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	32	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	600,000	µg/kg	13 J HT	2,200 J HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	280	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	340	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	530,000	µg/kg	11 UJ HT	2 J HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3,400	µg/kg	11 UJ HT	300 J HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	44,000	µg/kg	280 UJ HT, IRRF	310 UJ HT, IRRF	290 UJ HT, IRRF	300 UJ C%D, HT, IRRF	310 UJ C%D, HT, IRRF	*	*	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetone	14,000,000	µg/kg	53 J HT	75 J HT	11 UJ HT	12 UJ RSD	12 UJ RSD	*	43 J RSD	24 J RSD	32 J RSD	13 UJ RSD	12 UJ RSD	12 UJ RSD	12 UJ RSD	89 J RSD	31 J RSD	30 J RSD	120 J RSD
Benzene	640	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	820	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromoform	62,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromomethane	3,900	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon disulfide	360,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	250	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	150,000	µg/kg	49 J HT	4,700 J HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	3,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	940	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	47,000	µg/kg	11 UJ C%D, HT	12 UJ C%D, HT	11 UJ C%D	*	*	*	*	*	*	*	*	*	*	12 UJ C%D	*	*	*
cis-1,2-Dichloroethene	43,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	780	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cyclohexane	140,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibromochloromethane	1,100	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	400,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	390,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	5,600,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	94,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	570,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl acetate	22,000,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl ethyl ketone	22,000,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	5,300,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	32,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylcyclohexane	2,600,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	9,100	µg/kg	11 UJ HT	2 J HT	11 UJ HT, LB	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Styrene	1,700,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
tert-Butyl alcohol	13,000,000	µg/kg	110 UJ HT	120 UJ C%D, HT	110 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	480	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	520,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	12 UJ Sur	*	*	*	*	*
trans-1,2-Dichloroethene	69,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	780	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	53	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	4 J Sur	*	*	*	*	*
Vinyl chloride	79	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	270,000	µg/kg	11 UJ HT	12 UJ HT	11 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-01	RSB-01	RSB-02	RSB-03	RSB-03	RSB-04	RSB-04	RSB-04	RSB-04	RSB-05	RSB-05	RSB-06	RSB-06	RSB-07	RSB-08	RSB-10	RSB-10
			3 ft bgs	6 ft bgs	3 ft bgs	2 ft bgs	5 ft bgs	3.5 ft bgs	3.5 ft bgs (FD)	7 ft bgs	7 ft bgs (FD)	3 ft bgs	7 ft bgs	3 ft bgs	3 ft bgs (FD)	4.5 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs
		Sample Date	9/16/2004	9/16/2004	9/15/2004	9/20/2004	9/20/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/30/2004	9/30/2004	9/15/2004	9/15/2004	9/14/2004	9/14/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
1,1'-Biphenyl	3,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4,5-Tetrachlorobenzene	3,200	µg/kg	370 UJ C%D	420 UJ C%D	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,2'-Oxybis(1-Chloropropane)	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,5-Trichlorophenol	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,6-Trichlorophenol	6,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	180,000	µg/kg	370 UJ C%D	420 UJ C%D	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dimethylphenol	1,200,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrophenol	120,000	µg/kg	930 UJ C%D	1,100 UJ C%D	*	1,000 UJ C%D	1,000 UJ C%D	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrotoluene	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,6-Dinitrotoluene	61,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chloronaphthalene	4,900,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chlorophenol	63,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylnaphthalene	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylphenol	3,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitroaniline	180,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3,3'-Dichlorobenzidine	1,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3-Nitroaniline	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Bromophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloro-3-methylphenol	3,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloroaniline	240,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Methylphenol	310,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitroaniline	23,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitrophenol	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthene	3,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthylene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetophenone	100,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Anthracene	22,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Atrazine	2,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BAP Equivalents	900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzaldehyde	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)anthracene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)pyrene	62	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	380	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzyl butyl phthalate	12,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethoxy)methane	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	35,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Caprolactam	31,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbazole	24,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chrysene	3,800	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibenz(a,h)anthracene	62	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibenzofuran	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Diethylphthalate	49,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dimethylphthalate	100,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Di-n-butyl phthalate	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-01	RSB-01	RSB-02	RSB-03	RSB-03	RSB-04	RSB-04	RSB-04	RSB-04	RSB-05	RSB-05	RSB-06	RSB-06	RSB-07	RSB-08	RSB-10	RSB-10
			3 ft bgs	6 ft bgs	3 ft bgs	2 ft bgs	5 ft bgs	3.5 ft bgs	3.5 ft bgs (FD)	7 ft bgs	7 ft bgs (FD)	3 ft bgs	7 ft bgs	3 ft bgs	3 ft bgs (FD)	4.5 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs
		Sample Date	9/16/2004	9/16/2004	9/15/2004	9/20/2004	9/20/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/30/2004	9/30/2004	9/15/2004	9/15/2004	9/14/2004	9/14/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
Di-n-octyl phthalate	2,400,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluoranthene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluorene	2,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobenzene	300	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	6,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	370,000	µg/kg	*	*	*	400 UJ C%D	400 UJ C%D	*	*	*	*	*	*	*	*	*	*	*	*
Hexachloroethane	35,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isophorone	510,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	1,700	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrobenzene	20,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	69	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	99,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pentachlorophenol	3,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenanthrene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenol	18,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pyrene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Metals																			
Aluminum	76,000	mg/kg	*	*	*	*	6,360 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*
Antimony	31	mg/kg	*	*	*	*	*	*	*	*	12 UJ MS	*	*	*	*	*	1.1 J MS	*	*
Arsenic	22	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Barium	5,400	mg/kg	*	*	*	*	102 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*
Beryllium	150	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium	37	mg/kg	*	*	*	*	*	*	*	*	*	0.91 J ICS	*	*	*	*	*	*	*
Calcium	NE	mg/kg	*	*	*	*	4,570 J SerDil	9,780 J SerDil	11,300 J SerDil	2,300 J SerDil	2,180 J SerDil	33,300 J SerDil	2,450 J SerDil	*	*	*	12,800 J LD	*	*
Chromium	210	mg/kg	*	*	*	*	28.6 J SerDil	*	*	*	*	*	*	*	*	*	128 J LD	*	*
Cobalt	900	mg/kg	*	*	*	*	*	5.5 J SerDil	6.2 J SerDil	6.2 J SerDil	6.4 J SerDil	8.1 J SerDil	7.3 J SerDil	*	*	*	*	*	*
Copper	3,100	mg/kg	*	*	*	*	9.9 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*
Iron	23,000	mg/kg	*	*	*	*	9,670 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*
Lead	194	mg/kg	*	*	*	*	13.2 J SerDil	**776 J SerDil**	134 J SerDil	4.1 J SerDil	4.4 J SerDil	**486 J SerDil**	4.2 J SerDil	*	*	*	*	*	*
Magnesium	NE	mg/kg	*	*	*	*	1,510 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*
Manganese	1,800	mg/kg	*	*	*	*	186 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*
Nickel	1,600	mg/kg	*	*	*	*	18.8 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*
Potassium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	536 J LCS	541 J LCS	950 J LCS	668 J LCS, SerDil	1,160 J LCS	1,570 J LCS
Selenium	390	mg/kg	*	*	*	*	*	*	*	*	*	7 UJ ICS	7 UJ ICS	*	*	*	*	*	*
Silver	390	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sodium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thallium	5.2	mg/kg	*	*	*	*	*	5 UJ MS	5 UJ MS	5 UJ MS	5 UJ MS	0.95 J ICS	5 UJ MS	*	*	*	*	*	*
Vanadium	78	mg/kg	*	*	*	*	22.4 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*
Zinc	23,000	mg/kg	*	*	*	*	27.6 J SerDil	149 J SerDil	111 J SerDil	25.6 J SerDil	26.3 J SerDil	909 J SerDil	27.4 J SerDil	*	*	*	179 J MS	*	*
Organochlorine Pesticides/PCBs																			
4,4'-DDD	2,400	µg/kg	*	*	*	4.3 NJ CF	*	6.3 J FD	13 J FD	*	*	*	*	*	*	*	*	*	5.9 J CF
4,4'-DDE	1,700	µg/kg	*	*	*	*	*	*	*	*	*	10 J CF	*	*	*	*	25 J CF	*	*
4,4'-DDT	1,700	µg/kg	*	*	*	*	*	*	*	*	*	1.5 J CF	*	*	*	*	35 J CF	*	*
Aldrin	29	µg/kg	*	*	*	*	*	0.93 J CF	1.3 J CF	*	*	3.6 J CF	*	*	*	*	*	0.83 J CF	*
alpha-BHC	90	µg/kg	6 J P4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
alpha-Chlordane	1,600	µg/kg	*	*	8.2 NJ CF	*	*	*	*	*	*	*	*	*	*	*	0.4 J CF	18 J CF	*
Aroclor-1016	3,900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1221	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1232	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-01	RSB-01	RSB-02	RSB-03	RSB-03	RSB-04	RSB-04	RSB-04	RSB-04	RSB-05	RSB-05	RSB-06	RSB-06	RSB-07	RSB-08	RSB-10	RSB-10
			3 ft bgs	6 ft bgs	3 ft bgs	2 ft bgs	5 ft bgs	3.5 ft bgs	3.5 ft bgs (FD)	7 ft bgs	7 ft bgs (FD)	3 ft bgs	7 ft bgs	3 ft bgs	3 ft bgs (FD)	4.5 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs
		Sample Date	9/16/2004	9/16/2004	9/15/2004	9/20/2004	9/20/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/24/2004	9/30/2004	9/30/2004	9/15/2004	9/15/2004	9/14/2004	9/14/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Organochlorine Pesticides/PCBs																			
Aroclor-1242	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1248	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1254	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1260	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
beta-BHC	320	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	2.6 J CF	2.1 J CF	3.3 J CF	16 J CF
delta-BHC	90	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dieldrin	30	µg/kg	24 NJ CF	*	1.3 J P4	1.2 J P4	*	*	1.2 J CF	*	*	*	*	*	*	**46 J CF**	3.8 J CF	**34 J CF**	*
Endosulfan I	370,000	µg/kg	*	*	*	*	0.73 UJ P4	*	*	*	*	*	*	*	*	*	*	*	*
Endosulfan II	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endosulfan sulfate	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endrin	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	1.3 J CF	*	*	2.9 J CF
Endrin aldehyde	18,000	µg/kg	*	*	*	*	*	0.84 J CF	1.1 J CF	*	*	*	*	*	*	*	*	*	*
Endrin ketone	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
gamma-BHC	440	µg/kg	*	*	*	*	*	*	*	*	*	2.2 UJ MS	*	*	*	*	*	*	0.65 J CF
gamma-Chlordane	1,600	µg/kg	*	*	*	*	2.9 J CF	*	*	*	*	*	*	*	*	0.83 J CF	*	*	*
Heptachlor	110	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	2 UJ CF	*	*	*
Heptachlor epoxide	53	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methoxychlor	310,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toxaphene	440	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dioxins/Furans (1)																			
1,2,3,4,6,7,8-HpCDD	390	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
1,2,3,4,6,7,8-HpCDF	390	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
1,2,3,4,7,8,9-HpCDF	390	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
1,2,3,4,7,8-HxCDD	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
1,2,3,4,7,8-HxCDF	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
1,2,3,6,7,8-HxCDD	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
1,2,3,6,7,8-HxCDF	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
1,2,3,7,8,9-HxCDD	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
1,2,3,7,8,9-HxCDF	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
1,2,3,7,8-PeCDD	3.9	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
1,2,3,7,8-PeCDF	78	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
2,3,4,6,7,8-HxCDF	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
2,3,4,7,8-PeCDF	7.8	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
2,3,7,8-TCDD	3.9	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
2,3,7,8-TCDF	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
OCDD	39,000	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
OCDF	39,000	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RSB-11	RSB-12	RSB-12	RSB-13	RSB-13	RSB-14	RSB-14	RSB-15	RSB-17	RSB-18	RSB-18	RSB-18	RSB-19	RSB-20	RSB-21	RSB-21	RSB-22
			2 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	4 ft bgs	4 ft bgs (FD)	7 ft bgs	2 ft bgs	2.5 ft bgs	1.5 ft bgs	5 ft bgs	3 ft bgs
	Sample Date		9/15/2004	9/20/2004	9/20/2004	9/16/2004	9/16/2004	9/16/2004	9/16/2004	9/22/2004	9/22/2004	9/27/2004	9/27/2004	9/27/2004	9/13/2004	9/17/2004	9/13/2004	9/13/2004	9/27/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	1,200,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
1,1,2,2-Tetrachloroethane	410	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	11 UJ IS	---	*
1,1,2-Trichloroethane	730	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
1,1-Dichloroethane	2,800	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	62 J Sur	**14,000 J HT**	---	**5,000 J HT**	*	120 J HT	24 J Sur	---	*
1,1-Dichloroethene	120,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	49 J Sur	---	15 J Sur	*	12 UJ HT	*	---	*
1,2,4-Trichlorobenzene	62,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	7 J Sur	---	43 J Sur	*	2,000 J HT	2 J Sur	---	61 J Sur
1,2-Dibromo-3-chloropropane	30	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	11 UJ IS	---	*
1,2-Dibromoethane	32	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	11 UJ IS	---	*
1,2-Dichlorobenzene	600,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	110,000 J HT	---	32,000 J HT	94 J Sur	4,900 J HT	*	---	12,000 J HT
1,2-Dichloroethane	280	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	13 J Sur	*	12 UJ HT	*	---	*
1,2-Dichloropropane	340	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
1,3-Dichlorobenzene	530,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	77 J Sur	*	130 J HT, Sur	12 J Sur	---	10 J Sur
1,4-Dichlorobenzene	3,400	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	4,000 J Sur	**19,000 J HT**	---	*	4 J Sur	120 J HT, Sur	46 J Sur	---	130 J Sur
1,4-Dioxane (p-dioxane)	44,000	µg/kg	280 UJ HT, IRRF	270 UJ HT, IRRF	1,500 J HT, IRRF	250 UJ HT, IRRF	390 UJ HT, IRRF	250 UJ HT, IRRF	270 UJ HT, IRRF	*	*	*	---	*	*	300 UJ HT, IRRF	*	---	*
2-Hexanone	NE	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	14 UJ C%D	---	*	*	12 UJ HT	11 UJ IS	---	*
Acetone	14,000,000	µg/kg	40 J HT, RSD	140 J RSD	460 J RSD	10 UJ HT, RSD	280 J HT, RSD	10 UJ HT, RSD	54 J HT, RSD	58 J RSD	140 J Sur	*	---	420 J RSD	370 J Sur	220 J HT, RSD	80 J Sur	---	160 J RSD
Benzene	640	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	35 J Sur	*	---	150 J Sur	*	49 J HT	*	---	*
Bromodichloromethane	820	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Bromoform	62,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Bromomethane	3,900	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Carbon disulfide	360,000	µg/kg	11 UJ HT	*	*	10 UJ HT	3 J HT	10 UJ HT	11 UJ HT	*	*	*	---	*	3 J Sur	12 UJ HT	8 J Sur	---	5 J C%D, Sur
Carbon tetrachloride	250	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Chlorobenzene	150,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	82 J Sur	44 J Sur	12 UJ HT	48 J IS, Sur	---	83 J Sur
Chloroethane	3,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	14 J Sur	7 J Sur	---	15 J Sur	*	12 UJ HT	75 J Sur	---	7 J Sur
Chloroform	940	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Chloromethane	47,000	µg/kg	11 UJ HT	11 UJ C%D	17 UJ C%D	10 UJ C%D, HT	16 UJ C%D, HT	10 UJ C%D	11 UJ C%D	*	*	*	---	*	*	12 UJ C%D, HT	*	---	*
cis-1,2-Dichloroethene	43,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	5 J HT	11 UJ HT	*	120 J Sur	27,000 J HT	---	16,000 J HT	*	8,000 J HT	7 J Sur	---	7,200 J HT
cis-1,3-Dichloropropene	780	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Cyclohexane	140,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	170 J Sur	*	---	58 J Sur	7 J Sur	80 J HT	*	---	*
Dibromochloromethane	1,100	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Ethylbenzene	400,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	47,000 J HT	---	10,000 J HT	3 J Sur	11,000 J HT	*	---	50,000 J HT
Freon 11	390,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Freon 113	5,600,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Freon 12	94,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Isopropylbenzene (cumene)	570,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	14,000 J HT	---	4,400 J HT	31 J Sur	7,600 J HT	*	---	9,400 J HT
Methyl acetate	22,000,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Methyl ethyl ketone	22,000,000	µg/kg	11 UJ HT	*	390 J >IC	10 UJ HT	76 J HT	10 UJ HT	11 UJ HT	*	48 J Sur	*	---	*	140 J Sur	12 UJ HT	*	---	*
Methyl isobutyl ketone	5,300,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	3,900 J C%D, HT	*	12 UJ HT	11 UJ IS	---	*
Methyl tert-butyl ether	32,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	4 J C%D, Sur
Methylcyclohexane	2,600,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	12,000 J HT	---	450 J Sur	43 J Sur	3,100 J HT	*	---	29,000 J HT
Methylene chloride	9,100	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT, LB	10 UJ HT	11 UJ HT	*	*	14 J Sur	---	14 J Sur	*	14 J HT	9 J Sur	---	12 J Sur
Styrene	1,700,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	980 J HT	11 UJ IS	---	*
tert-Butyl alcohol	13,000,000	µg/kg	110 UJ HT	110 UJ C%D	170 UJ C%D	100 UJ HT	160 UJ HT	100 UJ C%D, HT	110 UJ C%D, HT	*	*	*	---	*	*	120 UJ C%D, HT	*	---	*
Tetrachloroethene	480	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	4 J HT	11 UJ HT	*	8 J Sur	100 J Sur	---	21 J Sur	*	13 J HT, Sur	11 UJ IS	---	6 J Sur
Toluene	520,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	380,000 J HT	---	92,000 J HT	*	65,000 J HT	25 J Sur	---	14,000 J HT
trans-1,2-Dichloroethene	69,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	3 J Sur	77 J Sur	---	65 J Sur	*	69 J HT	*	---	10 J Sur
trans-1,3-Dichloropropene	780	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	*	---	*	*	12 UJ HT	*	---	*
Trichloroethene	53	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	16 J HT	11 UJ HT	*	5 J Sur	280 J Sur	---	36 J Sur	*	**140 J HT**	*	---	*
Vinyl chloride	79	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	51 J Sur	---	43 J Sur	*	**250 J >IC, HT**	*	---	**2,200 J HT**
Xylenes, total	270,000	µg/kg	11 UJ HT	*	*	10 UJ HT	16 UJ HT	10 UJ HT	11 UJ HT	*	*	**320,000 J HT**	---	71,000 J HT	*	81,000 J HT	50 J IS, Sur	---	170,000 J HT

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RSB-11	RSB-12	RSB-12	RSB-13	RSB-13	RSB-14	RSB-14	RSB-15	RSB-17	RSB-18	RSB-18	RSB-18	RSB-19	RSB-20	RSB-21	RSB-21	RSB-22
			2 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	4 ft bgs	4 ft bgs (FD)	7 ft bgs	2 ft bgs	2.5 ft bgs	1.5 ft bgs	5 ft bgs	3 ft bgs
	Sample Date		9/15/2004	9/20/2004	9/20/2004	9/16/2004	9/16/2004	9/16/2004	9/16/2004	9/22/2004	9/22/2004	9/27/2004	9/27/2004	9/27/2004	9/13/2004	9/17/2004	9/13/2004	9/13/2004	9/27/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
1,1'-Biphenyl	3,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
1,2,4,5-Tetrachlorobenzene	3,200	µg/kg	*	720 UJ C%D	*	*	530 UJ C%D	*	*	1,400 UJ C%D	*	*	---	*	*	*	*	*	*
2,2'-Oxybis(1-Chloropropane)	220	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
2,4,5-Trichlorophenol	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
2,4,6-Trichlorophenol	6,100	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
2,4-Dichlorophenol	180,000	µg/kg	*	720 UJ C%D	*	*	530 UJ C%D	*	*	*	*	*	---	*	*	*	*	*	*
2,4-Dimethylphenol	1,200,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
2,4-Dinitrophenol	120,000	µg/kg	*	1,800 UJ C%D	1,400 UJ C%D	*	1,300 UJ C%D	*	*	*	*	*	---	*	*	*	*	*	*
2,4-Dinitrotoluene	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
2,6-Dinitrotoluene	61,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
2-Chloronaphthalene	4,900,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	3,700 UJ P1	*	*	*
2-Chlorophenol	63,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
2-Methylnaphthalene	150,000	µg/kg	*	*	*	*	*	*	*	*	**380,000 J HT**	130,000 J HT	---	**330,000 J HT**	*	**370,000 J HT**	*	*	**360,000 J HT**
2-Methylphenol	3,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
2-Nitroaniline	180,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
2-Nitrophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
3,3'-Dichlorobenzidine	1,100	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
3-Nitroaniline	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
4-Bromophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
4-Chloro-3-methylphenol	3,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
4-Chloroaniline	240,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
4-Methylphenol	310,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
4-Nitroaniline	23,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
4-Nitrophenol	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Acenaphthene	3,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Acenaphthylene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Acetophenone	100,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Anthracene	22,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Atrazine	2,200	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
BAP Equivalents	900	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Benzaldehyde	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Benzo(a)anthracene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Benzo(a)pyrene	62	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Benzo(b)fluoranthene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Benzo(g,h,i)perylene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Benzo(k)fluoranthene	380	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Benzyl butyl phthalate	12,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
bis(2-Chloroethoxy)methane	220	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
bis(2-Chloroethyl)ether	220	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	35,000	µg/kg	*	*	*	*	*	1,400 U LB	*	*	*	*	---	*	*	*	*	*	*
Caprolactam	31,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Carbazole	24,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Chrysene	3,800	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Dibenz(a,h)anthracene	62	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Dibenzofuran	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Diethylphthalate	49,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Dimethylphthalate	100,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Di-n-butyl phthalate	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-11	RSB-12	RSB-12	RSB-13	RSB-13	RSB-14	RSB-14	RSB-15	RSB-17	RSB-18	RSB-18	RSB-18	RSB-19	RSB-20	RSB-21	RSB-21	RSB-22
			2 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	4 ft bgs	4 ft bgs (FD)	7 ft bgs	2 ft bgs	2.5 ft bgs	1.5 ft bgs	5 ft bgs	3 ft bgs
		Sample Date	9/15/2004	9/20/2004	9/20/2004	9/16/2004	9/16/2004	9/16/2004	9/16/2004	9/22/2004	9/22/2004	9/27/2004	9/27/2004	9/27/2004	9/13/2004	9/17/2004	9/13/2004	9/13/2004	9/27/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
Di-n-octyl phthalate	2,400,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Fluoranthene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Fluorene	2,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Hexachlorobenzene	300	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Hexachlorobutadiene	6,200	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Hexachlorocyclopentadiene	370,000	µg/kg	*	*	550 UJ C%D	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Hexachloroethane	35,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Isophorone	510,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Naphthalene	1,700	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Nitrobenzene	20,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	69	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
N-Nitrosodiphenylamine	99,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Pentachlorophenol	3,000	µg/kg	*	*	*	*	*	*	*	*	29,000 UJ C%D	36,000 UJ C%D	---	36,000 UJ C%D	*	*	*	*	31,000 UJ C%D
Phenanthrene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Phenol	18,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Pyrene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Metals																			
Aluminum	76,000	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Antimony	31	mg/kg	*	*	*	*	*	*	*	12 UJ MS	*	*	---	*	*	*	*	*	*
Arsenic	22	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Barium	5,400	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Beryllium	150	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Cadmium	37	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	0.17 J ICS
Calcium	NE	mg/kg	*	*	*	*	*	*	*	5,920 J SerDil	3,870 J SerDil	18,900 J SerDil	---	6,220 J SerDil	*	*	*	*	38,900 J SerDil
Chromium	210	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Cobalt	900	mg/kg	*	*	*	*	*	*	*	6.9 J SerDil	4 J SerDil	4.9 J SerDil	---	5.9 J SerDil	*	*	*	*	8.7 J SerDil
Copper	3,100	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Iron	23,000	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Lead	194	mg/kg	*	*	*	*	*	*	*	8.2 J SerDil	**272 J SerDil**	**742 J SerDil**	---	152 J SerDil	*	*	*	*	**522 J SerDil**
Magnesium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Manganese	1,800	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Nickel	1,600	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Potassium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	1,080 J LCS	*	*	*	*
Selenium	390	mg/kg	*	*	*	*	*	*	*	7 UJ ICS	*	*	---	*	*	*	*	*	*
Silver	390	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Sodium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Thallium	5.2	mg/kg	*	*	*	*	*	*	*	5 UJ MS	5 UJ MS	5 UJ MS	---	5 UJ MS	*	*	*	*	5 UJ MS
Vanadium	78	mg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*
Zinc	23,000	mg/kg	*	*	*	*	*	*	*	129 J SerDil	73.4 J SerDil	590 J SerDil	---	184 J SerDil	*	*	*	*	392 J SerDil
Organochlorine Pesticides/PCBs																			
4,4'-DDD	2,400	µg/kg	*	*	1.9 UJ P4	*	*	*	*	1 J CF	*	*	---	*	*	*	*	---	*
4,4'-DDE	1,700	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
4,4'-DDT	1,700	µg/kg	*	*	*	*	2.2 J P4	*	*	1.6 J CF	*	*	---	*	*	*	*	---	*
Aldrin	29	µg/kg	*	*	*	*	*	*	*	*	*	8.9 J CF	---	8.9 J CF	*	*	*	---	*
alpha-BHC	90	µg/kg	*	*	*	*	1.2 UJ P4	*	*	*	*	*	---	*	*	26 NJ CF	*	---	4.7 J CF
alpha-Chlordane	1,600	µg/kg	*	0.54 UJ P4	*	0.86 NJ CF	*	*	5.1 J P4	*	49 J CF	30 J CF	---	23 J CF	8.6 J CF	8.5 UJ P4	*	---	10 J CF
Aroclor-1016	3,900	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Aroclor-1221	220	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Aroclor-1232	220	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-11	RSB-12	RSB-12	RSB-13	RSB-13	RSB-14	RSB-14	RSB-15	RSB-17	RSB-18	RSB-18	RSB-18	RSB-19	RSB-20	RSB-21	RSB-21	RSB-22
			2 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	2 ft bgs	5 ft bgs	4 ft bgs	4 ft bgs (FD)	7 ft bgs	2 ft bgs	2.5 ft bgs	1.5 ft bgs	5 ft bgs	3 ft bgs
		Sample Date	9/15/2004	9/20/2004	9/20/2004	9/16/2004	9/16/2004	9/16/2004	9/16/2004	9/22/2004	9/22/2004	9/27/2004	9/27/2004	9/27/2004	9/13/2004	9/17/2004	9/13/2004	9/13/2004	9/27/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Organochlorine Pesticides/PCBs																			
Aroclor-1242	220	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Aroclor-1248	220	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Aroclor-1254	220	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Aroclor-1260	220	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
beta-BHC	320	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	16 J CF	*	*	---	*
delta-BHC	90	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Dieldrin	30	µg/kg	*	*	*	*	*	**150 NJ CF**	**300 NJ CF**	*	**120 J CF**	*	---	*	**49 J CF**	*	**2,200 J CF**	---	*
Endosulfan I	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Endosulfan II	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Endosulfan sulfate	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	1.6 J CF	*	*	---	*
Endrin	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Endrin aldehyde	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Endrin ketone	18,000	µg/kg	*	1.8 NJ CF	*	*	6.5 NJ CF	*	*	*	*	*	---	*	*	*	*	---	*
gamma-BHC	440	µg/kg	*	1.8 UJ CF	*	*	2.5 NJ CF	*	*	*	*	*	---	*	*	*	*	---	*
gamma-Chlordane	1,600	µg/kg	*	*	*	1 NJ CF	*	*	*	*	*	43 J CF	---	21 J CF	10 J CF	*	*	---	23 J CF
Heptachlor	110	µg/kg	*	*	2.5 NJ CF	*	8.6 NJ CF	*	*	*	*	*	---	*	*	*	*	---	*
Heptachlor epoxide	53	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Methoxychlor	310,000	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Toxaphene	440	µg/kg	*	*	*	*	*	*	*	*	*	*	---	*	*	*	*	---	*
Dioxins/Furans (1)																			
1,2,3,4,6,7,8-HpCDD	390	ng/kg	*	*	---	---	---	---	---	---	---	**1,100 J HT**	51 J HT	---	---	---	---	---	---
1,2,3,4,6,7,8-HpCDF	390	ng/kg	*	*	---	---	---	---	---	---	---	178 J HT	10.4 J HT	---	---	---	---	---	---
1,2,3,4,7,8,9-HpCDF	390	ng/kg	*	*	---	---	---	---	---	---	---	8.51 J HT	0.982 J HT	---	---	---	---	---	---
1,2,3,4,7,8-HxCDD	39	ng/kg	*	*	---	---	---	---	---	---	---	16.4 J HT	0.623 J HT	---	---	---	---	---	---
1,2,3,4,7,8-HxCDF	39	ng/kg	*	*	---	---	---	---	---	---	---	19.1 UJ HT	2.28 UJ HT	---	---	---	---	---	---
1,2,3,6,7,8-HxCDD	39	ng/kg	*	*	---	---	---	---	---	---	---	**73.5 J HT**	2.8 J HT	---	---	---	---	---	---
1,2,3,6,7,8-HxCDF	39	ng/kg	*	*	---	---	---	---	---	---	---	16.8 J HT	0.575 J HT	---	---	---	---	---	---
1,2,3,7,8,9-HxCDD	39	ng/kg	*	*	---	---	---	---	---	---	---	**41.4 J HT**	1.53 J HT	---	---	---	---	---	---
1,2,3,7,8,9-HxCDF	39	ng/kg	*	*	---	---	---	---	---	---	---	8.75 J HT	0.312 UJ HT	---	---	---	---	---	---
1,2,3,7,8-PeCDD	3.9	ng/kg	*	*	---	---	---	---	---	---	---	**15.3 J HT**	0.702 J HT	---	---	---	---	---	---
1,2,3,7,8-PeCDF	78	ng/kg	*	*	---	---	---	---	---	---	---	69.8 UJ HT	0.315 UJ HT	---	---	---	---	---	---
2,3,4,6,7,8-HxCDF	39	ng/kg	*	*	---	---	---	---	---	---	---	16.9 J HT	1.01 J HT	---	---	---	---	---	---
2,3,4,7,8-PeCDF	7.8	ng/kg	*	*	---	---	---	---	---	---	---	**42.4 J HT**	1.09 J HT	---	---	---	---	---	---
2,3,7,8-TCDD	3.9	ng/kg	*	*	---	---	---	---	---	---	---	3.89 UJ HT	0.273 UJ HT	---	---	---	---	---	---
2,3,7,8-TCDF	39	ng/kg	*	*	---	---	---	---	---	---	---	5.36 J HT	0.326 UJ HT	---	---	---	---	---	---
OCDD	39,000	ng/kg	*	*	---	---	---	---	---	---	---	8,420 J HT	479 J HT	---	---	---	---	---	---
OCDF	39,000	ng/kg	*	157 J IS	---	---	---	---	---	---	---	354 J HT	34.3 J HT	---	---	---	---	---	---

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RSB-22	RSB-23	RSB-23	RSB-24	RSB-24	RSB-25	RSB-25	RSB-26	RSB-26	RSB-27	RSB-27	RSB-28	RSB-28	RSB-29	RSB-29	RSB-30	RSB-31
			6 ft bgs	2 ft bgs	6 ft bgs	3 ft bgs	3 ft bgs (FD)	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	3 ft bgs
	Sample Date		9/27/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/15/2004	9/17/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	1,200,000	µg/kg	12 UJ IS	12 UJ Sur	60 J IS, Sur	43 J Sur	81 J Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
1,1,2,2-Tetrachloroethane	410	µg/kg	12 UJ IS	12 UJ Sur	12 UJ Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
1,1,2-Trichloroethane	730	µg/kg	12 UJ IS	12 UJ Sur	12 UJ Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
1,1-Dichloroethane	2,800	µg/kg	320 J Sur	450 J Sur	2,400 J IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
1,1-Dichloroethene	120,000	µg/kg	12 UJ IS	6 J Sur	87 J IS, Sur	240 J >IC, FD	140 J FD, Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
1,2,4-Trichlorobenzene	62,000	µg/kg	12 UJ IS	12 UJ Sur	12 UJ Sur	30 J Sur	14 J Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
1,2-Dibromo-3-chloropropane	30	µg/kg	12 UJ IS	12 UJ Sur	12 UJ Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
1,2-Dibromoethane	32	µg/kg	12 UJ IS	12 UJ Sur	12 UJ Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
1,2-Dichlorobenzene	600,000	µg/kg	33,000 J Sur	24,000 J Sur	52 J Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
1,2-Dichloroethane	280	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	220 J Sur	140 J Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
1,2-Dichloropropane	340	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
1,3-Dichlorobenzene	530,000	µg/kg	15 J Sur	61 J Sur	6 J Sur	150 J Sur	160 J Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
1,4-Dichlorobenzene	3,400	µg/kg	290 J Sur	320 J Sur	45 J Sur	790 J >IC	840 J >IC, Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
1,4-Dioxane (p-dioxane)	44,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	300 UJ HT, IRRF	340 UJ HT, IRRF
2-Hexanone	NE	µg/kg	12 UJ IS	12 UJ Sur	12 UJ Sur	*	*	*	*	12 UJ RSD	12 UJ RSD	11 UJ RSD	12 UJ RSD	11 UJ RSD	13 UJ RSD	11 UJ RSD	12 UJ RSD	12 UJ HT	14 UJ HT
Acetone	14,000,000	µg/kg	46 U LB	200 J RSD, LB, Sur	130 U LB	860 J >IC, C%D	730 J C%D, RSD, Sur	73 J RSD	37 J RSD	12 UJ RSD	49 J RSD	11 UJ RSD	79 J RSD	11 UJ RSD	24 J RSD	11 UJ RSD	35 J RSD, Sur	12 UJ HT, RSD	14 UJ HT, RSD
Benzene	640	µg/kg	800 J Sur	200 J Sur	1,000 J Sur	**3,500 J >IC, FD**	1,500 J >IC, FD, Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Bromodichloromethane	820	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Bromoform	62,000	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Bromomethane	3,900	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	12 UJ C%D	12 UJ C%D	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Carbon disulfide	360,000	µg/kg	12 UJ IS	9 J C%D, Sur	3 J C%D, IS, Sur	4 J Sur	4 J >IC, Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Carbon tetrachloride	250	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Chlorobenzene	150,000	µg/kg	240 J Sur	930 J Sur	940 J Sur	*	2,500 J >IC, Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
Chloroethane	3,000	µg/kg	12 J IS	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Chloroform	940	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Chloromethane	47,000	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	*	*	*	11 UJ C%D	*	*	*	*	*	*	*	*	12 UJ C%D, HT	14 UJ C%D, HT
cis-1,2-Dichloroethene	43,000	µg/kg	3,200 J Sur	9,500 J Sur	190,000 J Sur	*	*	*	*	*	*	9 J Sur	*	*	*	*	*	12 UJ HT	14 UJ HT
cis-1,3-Dichloropropene	780	µg/kg	12 UJ Sur	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Cyclohexane	140,000	µg/kg	3,200 J Sur	470 J Sur	2,800 J IS, Sur	*	1,500 J >IC, FD, Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Dibromochloromethane	1,100	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Ethylbenzene	400,000	µg/kg	110,000 J Sur	45,000 J Sur	51,000 J Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
Freon 11	390,000	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Freon 113	5,600,000	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	12 UJ C%D	12 UJ C%D	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Freon 12	94,000	µg/kg	12 UJ Sur	12 UJ Sur	*	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Isopropylbenzene (cumene)	570,000	µg/kg	17,000 J Sur	1,400 J Sur	20,000 J Sur	9,300 J FD	1,300 J >IC, FD, Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
Methyl acetate	22,000,000	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Methyl ethyl ketone	22,000,000	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	*	290 J >IC, FD, Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
Methyl isobutyl ketone	5,300,000	µg/kg	*	*	12 UJ Sur	12 UJ >IC, FD	*	*	*	*	*	11 UJ RSD	*	11 UJ RSD	13 UJ RSD	11 UJ RSD	12 UJ RSD	12 UJ HT, IS	14 UJ HT
Methyl tert-butyl ether	32,000	µg/kg	*	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Methylcyclohexane	2,600,000	µg/kg	78,000 J Sur	8,300 J Sur	30,000 J Sur	20,000 J FD	8,500 J FD	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Methylene chloride	9,100	µg/kg	12 J Sur	12 J Sur	15 J IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	4 J HT
Styrene	1,700,000	µg/kg	12 UJ IS	12 UJ Sur	12 UJ Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
tert-Butyl alcohol	13,000,000	µg/kg	*	120 UJ Sur	120 UJ Sur	*	*	*	*	120 UJ RSD	120 UJ RSD	110 UJ RSD	120 UJ RSD	110 UJ RSD	130 UJ RSD	110 UJ RSD	120 UJ RSD	120 UJ HT	142 UJ C%D, HT
Tetrachloroethene	480	µg/kg	71 J Sur	63 J Sur	1,400 J Sur	*	110 J Sur	*	*	*	*	11 J Sur	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
Toluene	520,000	µg/kg	520,000 J Sur	490,000 J Sur	1,600,000 J Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
trans-1,2-Dichloroethene	69,000	µg/kg	20 J Sur	120 J Sur	790 J IS, Sur	1,200 J >IC	900 J >IC, Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RSB-22	RSB-23	RSB-23	RSB-24	RSB-24	RSB-25	RSB-25	RSB-26	RSB-26	RSB-27	RSB-27	RSB-28	RSB-28	RSB-29	RSB-29	RSB-30	RSB-31
			6 ft bgs	2 ft bgs	6 ft bgs	3 ft bgs	3 ft bgs (FD)	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	3 ft bgs
	Sample Date		9/27/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/15/2004	9/17/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
trans-1,3-Dichloropropene	780	µg/kg	12 UJ IS	12 UJ Sur	12 UJ IS, Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Trichloroethene	53	µg/kg	4 J Sur	130 J Sur	7,300 J IS, Sur	**920 J >IC, FD**	490 J >IC, FD, Sur	*	*	4 J RSD	*	3 J Sur	*	*	*	*	*	12 UJ HT	14 UJ HT
Vinyl chloride	79	µg/kg	130 J Sur	180 J Sur	330 J IS, Sur	**950 J >IC**	600 J >IC, Sur	*	*	*	*	*	*	*	*	*	*	12 UJ HT	14 UJ HT
Xylenes, total	270,000	µg/kg	540,000 J Sur	370,000 J Sur	350,000 J Sur	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ HT, IS	14 UJ HT
Semivolatile Organic Compounds																			
1,1'-Biphenyl	3,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4,5-Tetrachlorobenzene	3,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	450 UJ C%D
2,2'-Oxybis(1-Chloropropane)	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,5-Trichlorophenol	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,6-Trichlorophenol	6,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	180,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	450 UJ C%D
2,4-Dimethylphenol	1,200,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrophenol	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1,100 UJ C%D
2,4-Dinitrotoluene	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,6-Dinitrotoluene	61,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chloronaphthalene	4,900,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chlorophenol	63,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylnaphthalene	150,000	µg/kg	**550,000 J HT**	110,000 J HT	**550,000 J HT**	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylphenol	3,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitroaniline	180,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3,3'-Dichlorobenzidine	1,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3-Nitroaniline	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Bromophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloro-3-methylphenol	3,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloroaniline	240,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Methylphenol	310,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitroaniline	23,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitrophenol	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthene	3,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthylene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetophenone	100,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Anthracene	22,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Atrazine	2,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BAP Equivalents	900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzaldehyde	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)anthracene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)pyrene	62	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	380	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzyl butyl phthalate	12,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethoxy)methane	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	35,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Caprolactam	31,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbazole	24,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-22	RSB-23	RSB-23	RSB-24	RSB-24	RSB-25	RSB-25	RSB-26	RSB-26	RSB-27	RSB-27	RSB-28	RSB-28	RSB-29	RSB-29	RSB-30	RSB-31
			6 ft bgs	2 ft bgs	6 ft bgs	3 ft bgs	3 ft bgs (FD)	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	3 ft bgs
		Sample Date	9/27/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/15/2004	9/17/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
Chrysene	3,800	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibenz(a,h)anthracene	62	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibenzofuran	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Diethylphthalate	49,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dimethylphthalate	100,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Di-n-butyl phthalate	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Di-n-octyl phthalate	2,400,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluoranthene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluorene	2,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobenzene	300	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	6,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachloroethane	35,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isophorone	510,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	1,700	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrobenzene	20,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	69	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	99,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pentachlorophenol	3,000	µg/kg	29,000 UJ C%D	29,000 UJ C%D	**6,700 J C%D**	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenanthrene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenol	18,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pyrene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Metals																			
Aluminum	76,000	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Antimony	31	mg/kg	*	*	12 UJ MS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Arsenic	22	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Barium	5,400	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Beryllium	150	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium	37	mg/kg	*	0.3 J ICS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Calcium	NE	mg/kg	14,600 J SerDil	36,900 J SerDil	1,750 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chromium	210	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cobalt	900	mg/kg	5.7 J SerDil	9.6 J SerDil	4 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Copper	3,100	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Iron	23,000	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lead	194	mg/kg	156 J SerDil	174 J SerDil	3 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Magnesium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manganese	1,800	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nickel	1,600	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Potassium	NE	mg/kg	*	*	*	1,770 J LCS	1,860 J LCS	1,750 J LCS	1,050 J LCS	1,390 J LCS	1,060 J LCS	1,080 J LCS	973 J LCS	869 J LCS	717 J LCS	974 J LCS	1,050 J LCS	*	*
Selenium	390	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Silver	390	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sodium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thallium	5.2	mg/kg	5 UJ MS	5 UJ MS	5 UJ MS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vanadium	78	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Zinc	23,000	mg/kg	116 J SerDil	269 J SerDil	17.1 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Organochlorine Pesticides/PCBs																			
4,4'-DDD	2,400	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	2.6 J CF	*	*	*	*
4,4'-DDE	1,700	µg/kg	**2,400 J CF**	*	*	*	*	1.3 J CF	1.9 J CF	*	*	*	*	*	8.2 J CF	*	*	*	*
4,4'-DDT	1,700	µg/kg	*	150 J CF	*	*	*	5.4 J CF	12 J CF	*	*	*	*	*	*	*	*	*	*

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-22	RSB-23	RSB-23	RSB-24	RSB-24	RSB-25	RSB-25	RSB-26	RSB-26	RSB-27	RSB-27	RSB-28	RSB-28	RSB-29	RSB-29	RSB-30	RSB-31
			6 ft bgs	2 ft bgs	6 ft bgs	3 ft bgs	3 ft bgs (FD)	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	6 ft bgs	3 ft bgs	3 ft bgs
		Sample Date	9/27/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/14/2004	9/15/2004	9/17/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Organochlorine Pesticides/PCBs																			
Aldrin	29	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
alpha-BHC	90	µg/kg	5.5 J CF	2.4 J CF	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
alpha-Chlordane	1,600	µg/kg	15 J CF	5.2 J CF	45 J CF	*	*	*	2.4 J CF	81 J CF	2.5 J CF	*	*	*	*	*	*	*	*
Aroclor-1016	3,900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1221	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1232	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1242	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1248	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1254	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1260	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
beta-BHC	320	µg/kg	*	*	*	*	*	24 J CF	5.8 J CF	5.1 J CF	*	*	1.9 J CF	*	*	2.6 J CF	1.5 J CF	*	*
delta-BHC	90	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dieldrin	30	µg/kg	*	**1,800 J CF**	*	*	*	*	*	19 J CF	2.6 J CF	*	1.7 J CF	8.5 J CF	*	*	*	1.5 UJ P4	*
Endosulfan I	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	0.74 J CF	*	*	*	*
Endosulfan II	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endosulfan sulfate	370,000	µg/kg	*	*	*	*	*	4.4 J CF	*	*	*	*	*	*	*	*	*	*	*
Endrin	18,000	µg/kg	*	4.6 J CF	*	*	*	*	1.2 J CF	*	*	*	3.5 J CF	14 J CF	*	1.1 J CF	*	*	*
Endrin aldehyde	18,000	µg/kg	*	*	*	*	*	3 J CF	*	*	*	*	*	*	*	*	*	*	*
Endrin ketone	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
gamma-BHC	440	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
gamma-Chlordane	1,600	µg/kg	*	10 J CF	*	*	*	11 J CF	5.8 J CF	*	2.3 J CF	*	2.7 J CF	*	*	1.9 J CF	0.77 J CF	0.65 J P4	*
Heptachlor	110	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Heptachlor epoxide	53	µg/kg	*	*	*	*	*	*	*	2.8 J CF	*	*	*	*	*	*	*	*	*
Methoxychlor	310,000	µg/kg	*	*	*	*	*	*	*	7 J CF	*	*	*	*	*	*	*	*	*
Toxaphene	440	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dioxins/Furans (1)																			
1,2,3,4,6,7,8-HpCDD	390	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
1,2,3,4,6,7,8-HpCDF	390	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
1,2,3,4,7,8,9-HpCDF	390	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
1,2,3,4,7,8-HxCDD	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
1,2,3,4,7,8-HxCDF	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
1,2,3,6,7,8-HxCDD	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
1,2,3,6,7,8-HxCDF	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
1,2,3,7,8,9-HxCDD	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
1,2,3,7,8,9-HxCDF	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
1,2,3,7,8-PeCDD	3.9	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
1,2,3,7,8-PeCDF	78	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
2,3,4,6,7,8-HxCDF	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
2,3,4,7,8-PeCDF	7.8	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
2,3,7,8-TCDD	3.9	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
2,3,7,8-TCDF	39	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
OCDD	39,000	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*
OCDF	39,000	ng/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-31	RSB-32	RSB-32	RSB-33	RSB-33	RSB-34	RSB-35	RSB-36	RSB-36	RSB-37	RSB-37	RSB-37	RSB-37	RSB-38	RSB-38	RSB-39	RSB-40
			6 ft bgs	3 ft bgs	6 ft bgs	2.5 ft bgs	5.5 ft bgs	3 ft bgs	3 ft bgs	3 ft bgs	6 ft bgs	3.5 ft bgs	3.5 ft bgs (FD)	6 ft bgs	6 ft bgs (FD)	3 ft bgs	6 ft bgs	3 ft bgs	2.5 ft bgs
		Sample Date	9/17/2004	9/16/2004	9/16/2004	9/17/2004	9/17/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	1,200,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
1,1,2,2-Tetrachloroethane	410	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*
1,1,2-Trichloroethane	730	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
1,1-Dichloroethane	2,800	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
1,1-Dichloroethene	120,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
1,2,4-Trichlorobenzene	62,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*
1,2-Dibromo-3-chloropropane	30	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*
1,2-Dibromoethane	32	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*
1,2-Dichlorobenzene	600,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	15 J Sur	*	*	*
1,2-Dichloroethane	280	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
1,2-Dichloropropane	340	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
1,3-Dichlorobenzene	530,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*
1,4-Dichlorobenzene	3,400	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	2 J Sur	*	*	*
1,4-Dioxane (p-dioxane)	44,000	µg/kg	300 UJ HT, IRRF	300 UJ HT, IRRF	300 UJ HT, IRRF	280 UJ HT, IRRF	290 UJ HT, IRRF	*	*	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*
Acetone	14,000,000	µg/kg	12 UJ HT, RSD	25 J HT, RSD	11 J HT, RSD	50 J HT, RSD	23 J HT, RSD	110 J C%D, RSD, Sur	45 U LB	74 UJ C%D, RSD, LB	92 J C%D, RSD, LB	11 UJ C%D, RSD, LB	15 UJ C%D, RSD, LB	12 UJ C%D, RSD	*	11 UJ C%D, IS, Sur	33 U LB	78 UJ C%D, RSD, LB	21 UJ C%D, RSD, LB
Benzene	640	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Bromodichloromethane	820	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Bromoform	62,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Bromomethane	3,900	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	11 UJ C%D	*	11 UJ C%D	*	*	11 UJ C%D	*	*	11 UJ IS, Sur	*	11 UJ C%D	11 UJ C%D
Carbon disulfide	360,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	12 UJ C%D	*	*	12 UJ C%D	*	11 UJ IS, Sur	*	*	*
Carbon tetrachloride	250	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Chlorobenzene	150,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*
Chloroethane	3,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Chloroform	940	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Chloromethane	47,000	µg/kg	12 UJ C%D	12 UJ C%D, HT	12 UJ C%D, HT	11 UJ C%D, HT	12 UJ C%D, HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
cis-1,2-Dichloroethene	43,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	2 J HT	12 UJ HT	3 J Sur	*	*	*	*	*	*	*	44 J IS, Sur	*	*	*
cis-1,3-Dichloropropene	780	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Cyclohexane	140,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Dibromochloromethane	1,100	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Ethylbenzene	400,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	4 J Sur	*	*	*	*	*	*	*	45 J Sur	*	*	*
Freon 11	390,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Freon 113	5,600,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	11 UJ C%D	*	11 UJ C%D	11 UJ C%D	*	*	11 UJ IS, Sur	*	11 UJ C%D	11 UJ C%D
Freon 12	94,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	11 UJ C%D	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Isopropylbenzene (cumene)	570,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	430 J Sur	*	*	*
Methyl acetate	22,000,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Methyl ethyl ketone	22,000,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	21 J HT	12 UJ HT	*	*	*	*	*	*	*	*	6 J C%D, IS, Sur	*	*	*
Methyl isobutyl ketone	5,300,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	32,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Methylcyclohexane	2,600,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	15 J IS, Sur	*	*	*
Methylene chloride	9,100	µg/kg	12 UJ HT, LB	12 UJ HT	12 UJ HT	2 J HT	12 UJ HT	*	*	*	*	*	*	*	*	11 J IS, Sur	*	*	*
Styrene	1,700,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*
tert-Butyl alcohol	13,000,000	µg/kg	120 UJ C%D, HT	120 UJ HT	120 UJ C%D, HT	110 UJ C%D, HT	120 UJ C%D, HT	*	*	*	*	*	*	*	*	110 UJ Sur	*	*	*
Tetrachloroethene	480	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*
Toluene	520,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	9 J HT	3 J HT	11 U LB	*	11 U LB	12 U LB	11 U LB	11 U LB	*	*	*	*	11 U LB	11 U LB
trans-1,2-Dichloroethene	69,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
trans-1,3-Dichloropropene	780	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*
Trichloroethene	53	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	4 J IS, Sur	*	*	*
Vinyl chloride	79	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	11 UJ HT	12 UJ HT	*	*	*	*	*	*	*	*	11 UJ IS, Sur	*	*	*

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RSB-31	RSB-32	RSB-32	RSB-33	RSB-33	RSB-34	RSB-35	RSB-36	RSB-36	RSB-37	RSB-37	RSB-37	RSB-37	RSB-38	RSB-38	RSB-39	RSB-40
			6 ft bgs	3 ft bgs	6 ft bgs	2.5 ft bgs	5.5 ft bgs	3 ft bgs	3 ft bgs	3 ft bgs	6 ft bgs	3.5 ft bgs	3.5 ft bgs (FD)	6 ft bgs	6 ft bgs (FD)	3 ft bgs	6 ft bgs	3 ft bgs	2.5 ft bgs
	Sample Date		9/17/2004	9/16/2004	9/16/2004	9/17/2004	9/17/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
Xylenes, total	270,000	µg/kg	12 UJ HT	12 UJ HT	12 UJ HT	5 J HT	12 UJ HT	14 J Sur	*	*	*	*	*	*	*	370 J Sur	*	*	*
Semivolatile Organic Compounds																			
1,1'-Biphenyl	3,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4,5-Tetrachlorobenzene	3,200	µg/kg	390 UJ C%D	*	390 UJ C%D	380 UJ C%D	770 UJ C%D	*	*	*	*	*	*	*	*	*	*	*	*
2,2'-Oxybis(1-Chloropropane)	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,5-Trichlorophenol	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,6-Trichlorophenol	6,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	180,000	µg/kg	390 UJ C%D	*	390 UJ C%D	380 UJ C%D	770 UJ C%D	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dimethylphenol	1,200,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrophenol	120,000	µg/kg	990 UJ C%D	2,000 UJ C%D	990 UJ C%D	940 UJ C%D	1,900 UJ C%D	*	*	950 UJ C%D	1,100 UJ C%D	940 UJ C%D	930 UJ C%D	1,000 UJ C%D	*	*	*	*	1,900 UJ C%D
2,4-Dinitrotoluene	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,6-Dinitrotoluene	61,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chloronaphthalene	4,900,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chlorophenol	63,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylnaphthalene	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylphenol	3,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitroaniline	180,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3,3'-Dichlorobenzidine	1,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3-Nitroaniline	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Bromophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloro-3-methylphenol	3,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloroaniline	240,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Methylphenol	310,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitroaniline	23,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitrophenol	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthene	3,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthylene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetophenone	100,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Anthracene	22,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Atrazine	2,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BAP Equivalents	900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1,900 J C%D
Benzaldehyde	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)anthracene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)pyrene	62	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	380	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	890 J C%D
Benzyl butyl phthalate	12,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethoxy)methane	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	35,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Caprolactam	31,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbazole	24,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chrysene	3,800	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibenz(a,h)anthracene	62	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibenzofuran	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Diethylphthalate	49,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RSB-31	RSB-32	RSB-32	RSB-33	RSB-33	RSB-34	RSB-35	RSB-36	RSB-36	RSB-37	RSB-37	RSB-37	RSB-37	RSB-38	RSB-38	RSB-39	RSB-40
			6 ft bgs	3 ft bgs	6 ft bgs	2.5 ft bgs	5.5 ft bgs	3 ft bgs	3 ft bgs	3 ft bgs	6 ft bgs	3.5 ft bgs	3.5 ft bgs (FD)	6 ft bgs	6 ft bgs (FD)	3 ft bgs	6 ft bgs	3 ft bgs	2.5 ft bgs
	Sample Date		9/17/2004	9/16/2004	9/16/2004	9/17/2004	9/17/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
Dimethylphthalate	100,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Di-n-butyl phthalate	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Di-n-octyl phthalate	2,400,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluoranthene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluorene	2,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobenzene	300	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	6,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	370,000	µg/kg	*	800 UJ C%D	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachloroethane	35,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isophorone	510,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	1,700	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrobenzene	20,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	69	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	99,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pentachlorophenol	3,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	910 UJ C%D	1,000 UJ C%D	*	*
Phenanthrene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenol	18,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pyrene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Metals																			
Aluminum	76,000	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Antimony	31	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.57 J MS	*
Arsenic	22	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Barium	5,400	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Beryllium	150	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium	37	mg/kg	*	*	*	*	*	0.13 J ICS	0.2 J ICS	*	*	*	*	*	*	0.36 J ICS	*	*	*
Calcium	NE	mg/kg	*	*	*	*	*	5,720 J SerDil	6,620 J SerDil	*	*	*	*	*	*	7,610 J SerDil	8,540 J SerDil	*	*
Chromium	210	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cobalt	900	mg/kg	*	*	*	*	*	5.3 J SerDil	5.6 J SerDil	*	*	*	*	*	*	3.4 J SerDil	4 J SerDil	*	*
Copper	3,100	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Iron	23,000	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	15,600 J LD	*
Lead	194	mg/kg	*	*	*	*	*	**203 J SerDil**	**340 J SerDil**	*	*	*	*	*	*	**323 J SerDil**	180 J SerDil	*	*
Magnesium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manganese	1,800	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	291 J MS	*
Nickel	1,600	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Potassium	NE	mg/kg	*	*	*	*	*	*	*	1,030 J LCS	819 J LCS	917 J LCS	1,030 J LCS	994 J LCS	886 J LCS	*	*	1,080 J LCS	956 J LCS
Selenium	390	mg/kg	*	*	*	*	*	7 UJ ICS	7 UJ ICS	*	*	*	*	*	*	*	*	*	*
Silver	390	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sodium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thallium	5.2	mg/kg	*	*	*	*	*	5 UJ MS	5 UJ MS	*	*	*	*	*	*	5 UJ MS	5 UJ MS	*	*
Vanadium	78	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Zinc	23,000	mg/kg	*	*	*	*	*	221 J SerDil	211 J SerDil	*	*	*	*	*	*	199 J SerDil	180 J SerDil	*	*
Organochlorine Pesticides/PCBs																			
4,4'-DDD	2,400	µg/kg	*	*	*	3.7 J Sur	65 J Sur	*	*	*	*	*	*	*	*	*	32 J Sur	*	*
4,4'-DDE	1,700	µg/kg	*	3.5 NJ CF	*	3.1 NJ CF, Sur	26 J CF, Sur	*	*	*	*	*	*	*	*	4.3 J CF	21 J Sur	*	*
4,4'-DDT	1,700	µg/kg	*	9.5 NJ CF	*	3 NJ CF, Sur	2.6 J CF, Sur	16 J CF	*	*	*	*	*	*	*	*	*	*	*
Aldrin	29	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
alpha-BHC	90	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
alpha-Chlordane	1,600	µg/kg	*	*	*	*	*	2.1 J CF	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1016	3,900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-31	RSB-32	RSB-32	RSB-33	RSB-33	RSB-34	RSB-35	RSB-36	RSB-36	RSB-37	RSB-37	RSB-37	RSB-37	RSB-38	RSB-38	RSB-39	RSB-40
			6 ft bgs	3 ft bgs	6 ft bgs	2.5 ft bgs	5.5 ft bgs	3 ft bgs	3 ft bgs	3 ft bgs	6 ft bgs	3.5 ft bgs	3.5 ft bgs (FD)	6 ft bgs	6 ft bgs (FD)	3 ft bgs	6 ft bgs	3 ft bgs	2.5 ft bgs
		Sample Date	9/17/2004	9/16/2004	9/16/2004	9/17/2004	9/17/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/29/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Organochlorine Pesticides/PCBs																			
Aroclor-1221	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1232	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1242	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1248	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1254	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1260	220	µg/kg	*	*	*	*	*	33 J CF	20 J CF	*	*	*	*	*	*	*	*	*	*
beta-BHC	320	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
delta-BHC	90	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dieldrin	30	µg/kg	*	*	*	*	10 J Sur	4.9 J CF	*	*	*	*	*	*	*	*	6.2 J Sur	*	*
Endosulfan I	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endosulfan II	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endosulfan sulfate	370,000	µg/kg	*	1.4 UJ P4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endrin	18,000	µg/kg	*	*	*	5.5 NJ CF, Sur	1.8 UJ P4	0.8 J CF	*	*	*	*	*	*	*	*	*	*	*
Endrin aldehyde	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endrin ketone	18,000	µg/kg	*	2.4 NJ CF	*	14 J Sur	5.8 J CF, Sur	*	*	*	*	*	*	*	*	*	*	*	*
gamma-BHC	440	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
gamma-Chlordane	1,600	µg/kg	*	1.7 NJ CF	*	*	*	2.3 J CF	1 J CF	*	*	*	*	*	*	*	1.6 J CF, Sur	*	*
Heptachlor	110	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Heptachlor epoxide	53	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methoxychlor	310,000	µg/kg	*	*	*	9.9 NJ CF, Sur	*	*	*	*	*	*	*	*	*	*	*	*	*
Toxaphene	440	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dioxins/Furans (1)																			
1,2,3,4,6,7,8-HpCDD	390	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3,4,6,7,8-HpCDF	390	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3,4,7,8,9-HpCDF	390	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3,4,7,8-HxCDD	39	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3,4,7,8-HxCDF	39	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3,6,7,8-HxCDD	39	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3,6,7,8-HxCDF	39	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3,7,8,9-HxCDD	39	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3,7,8,9-HxCDF	39	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3,7,8-PeCDD	3.9	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2,3,7,8-PeCDF	78	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
2,3,4,6,7,8-HxCDF	39	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
2,3,4,7,8-PeCDF	7.8	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
2,3,7,8-TCDD	3.9	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
2,3,7,8-TCDF	39	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
OCDD	39,000	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---
OCDF	39,000	ng/kg	---	*	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-41	RSB-42
			3 ft bgs	5 ft bgs
		Sample Date	9/29/2004	10/8/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**	
Volatile Organic Compounds				
1,1,1-Trichloroethane	1,200,000	µg/kg	11 UJ IS	12 UJ Sur
1,1,2,2-Tetrachloroethane	410	µg/kg	11 UJ IS	12 UJ IS, Sur
1,1,2-Trichloroethane	730	µg/kg	11 UJ IS	12 UJ Sur
1,1-Dichloroethane	2,800	µg/kg	11 UJ IS	34 J Sur
1,1-Dichloroethene	120,000	µg/kg	11 UJ IS	12 UJ Sur
1,2,4-Trichlorobenzene	62,000	µg/kg	11 UJ IS	*
1,2-Dibromo-3-chloropropane	30	µg/kg	11 UJ IS	12 UJ IS, Sur
1,2-Dibromoethane	32	µg/kg	11 UJ IS	12 UJ IS, Sur
1,2-Dichlorobenzene	600,000	µg/kg	11 UJ IS	*
1,2-Dichloroethane	280	µg/kg	11 UJ IS	12 UJ Sur
1,2-Dichloropropane	340	µg/kg	11 UJ IS	12 UJ Sur
1,3-Dichlorobenzene	530,000	µg/kg	11 UJ IS	*
1,4-Dichlorobenzene	3,400	µg/kg	11 UJ IS	*
1,4-Dioxane (p-dioxane)	44,000	µg/kg	*	*
2-Hexanone	NE	µg/kg	11 UJ IS	12 UJ Sur
Acetone	14,000,000	µg/kg	150 J C%D, IS, Sur	110 J Sur
Benzene	640	µg/kg	11 UJ IS	25 J Sur
Bromodichloromethane	820	µg/kg	11 UJ IS	12 UJ Sur
Bromoform	62,000	µg/kg	11 UJ IS	*
Bromomethane	3,900	µg/kg	11 UJ C%D, IS	*
Carbon disulfide	360,000	µg/kg	11 UJ IS	12 UJ Sur
Carbon tetrachloride	250	µg/kg	11 UJ IS	12 UJ Sur
Chlorobenzene	150,000	µg/kg	11 UJ IS	*
Chloroethane	3,000	µg/kg	11 UJ IS	*
Chloroform	940	µg/kg	11 UJ IS	12 UJ Sur
Chloromethane	47,000	µg/kg	11 UJ IS	12 UJ C%D, Sur
cis-1,2-Dichloroethene	43,000	µg/kg	11 UJ IS	47 J RSD, Sur
cis-1,3-Dichloropropene	780	µg/kg	11 UJ IS	12 UJ Sur
Cyclohexane	140,000	µg/kg	11 UJ IS	99 J Sur
Dibromochloromethane	1,100	µg/kg	11 UJ IS	12 UJ Sur
Ethylbenzene	400,000	µg/kg	11 UJ IS	330 J RSD, IS, Sur
Freon 11	390,000	µg/kg	11 UJ IS	12 UJ C%D, Sur
Freon 113	5,600,000	µg/kg	11 UJ C%D, IS	12 UJ C%D, Sur
Freon 12	94,000	µg/kg	11 UJ IS	12 UJ Sur
Isopropylbenzene (cumene)	570,000	µg/kg	11 UJ IS	*
Methyl acetate	22,000,000	µg/kg	11 UJ IS	12 UJ Sur
Methyl ethyl ketone	22,000,000	µg/kg	41 J IS	36 UJ LB, Sur
Methyl isobutyl ketone	5,300,000	µg/kg	11 UJ IS	12 UJ IS, Sur
Methyl tert-butyl ether	32,000	µg/kg	11 UJ IS	12 UJ Sur
Methylcyclohexane	2,600,000	µg/kg	11 UJ IS	270 J RSD, Sur
Methylene chloride	9,100	µg/kg	11 UJ IS	12 UJ Sur
Styrene	1,700,000	µg/kg	11 UJ IS	*
tert-Butyl alcohol	13,000,000	µg/kg	110 UJ IS	120 UJ Sur
Tetrachloroethene	480	µg/kg	11 UJ IS	29 J Sur
Toluene	520,000	µg/kg	11 UJ IS, LB, Sur	*
trans-1,2-Dichloroethene	69,000	µg/kg	11 UJ IS	6 J Sur
trans-1,3-Dichloropropene	780	µg/kg	11 UJ IS	12 UJ Sur
Trichloroethene	53	µg/kg	11 UJ IS	9 J Sur

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-41	RSB-42
			3 ft bgs	5 ft bgs
		Sample Date	9/29/2004	10/8/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**	
Volatile Organic Compounds				
Vinyl chloride	79	µg/kg	11 UJ IS	*
Xylenes, total	270,000	µg/kg	11 UJ IS	*
Semivolatile Organic Compounds				
1,1'-Biphenyl	3,000,000	µg/kg	*	*
1,2,4,5-Tetrachlorobenzene	3,200	µg/kg	*	*
2,2'-Oxybis(1-Chloropropane)	220	µg/kg	*	*
2,4,5-Trichlorophenol	6,100,000	µg/kg	*	*
2,4,6-Trichlorophenol	6,100	µg/kg	*	*
2,4-Dichlorophenol	180,000	µg/kg	*	*
2,4-Dimethylphenol	1,200,000	µg/kg	*	*
2,4-Dinitrophenol	120,000	µg/kg	950 UJ C%D	30,000 UJ RSD
2,4-Dinitrotoluene	120,000	µg/kg	*	*
2,6-Dinitrotoluene	61,000	µg/kg	*	*
2-Chloronaphthalene	4,900,000	µg/kg	*	*
2-Chlorophenol	63,000	µg/kg	*	*
2-Methylnaphthalene	150,000	µg/kg	*	*
2-Methylphenol	3,100,000	µg/kg	*	*
2-Nitroaniline	180,000	µg/kg	*	*
2-Nitrophenol	NE	µg/kg	*	12,000 UJ C%D
3,3'-Dichlorobenzidine	1,100	µg/kg	*	*
3-Nitroaniline	18,000	µg/kg	*	*
4,6-Dinitro-2-methylphenol	NE	µg/kg	*	*
4-Bromophenylphenyl ether	NE	µg/kg	*	*
4-Chloro-3-methylphenol	3,100,000	µg/kg	*	*
4-Chloroaniline	240,000	µg/kg	*	*
4-Chlorophenylphenyl ether	NE	µg/kg	*	*
4-Methylphenol	310,000	µg/kg	*	*
4-Nitroaniline	23,000	µg/kg	*	*
4-Nitrophenol	120,000	µg/kg	*	*
Acenaphthene	3,700,000	µg/kg	*	*
Acenaphthylene	2,300,000	µg/kg	*	*
Acetophenone	100,000,000	µg/kg	*	*
Anthracene	22,000,000	µg/kg	*	*
Atrazine	2,200	µg/kg	*	*
BAP Equivalents	900	µg/kg	*	*
Benzaldehyde	6,100,000	µg/kg	*	*
Benzo(a)anthracene	620	µg/kg	*	*
Benzo(a)pyrene	62	µg/kg	*	*
Benzo(b)fluoranthene	620	µg/kg	*	*
Benzo(g,h,i)perylene	2,300,000	µg/kg	*	*
Benzo(k)fluoranthene	380	µg/kg	*	*
Benzyl butyl phthalate	12,000,000	µg/kg	*	*
bis(2-Chloroethoxy)methane	220	µg/kg	*	*
bis(2-Chloroethyl)ether	220	µg/kg	*	*
bis(2-Ethylhexyl)phthalate	35,000	µg/kg	*	*
Caprolactam	31,000,000	µg/kg	*	*
Carbazole	24,000	µg/kg	*	*
Chrysene	3,800	µg/kg	*	*
Dibenz(a,h)anthracene	62	µg/kg	*	*
Dibenzofuran	150,000	µg/kg	*	*

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-41	RSB-42
			3 ft bgs	5 ft bgs
		Sample Date	9/29/2004	10/8/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**	
Semivolatile Organic Compounds				
Diethylphthalate	49,000,000	µg/kg	*	*
Dimethylphthalate	100,000,000	µg/kg	*	*
Di-n-butyl phthalate	6,100,000	µg/kg	*	*
Di-n-octyl phthalate	2,400,000	µg/kg	*	*
Fluoranthene	2,300,000	µg/kg	*	*
Fluorene	2,700,000	µg/kg	*	*
Hexachlorobenzene	300	µg/kg	*	*
Hexachlorobutadiene	6,200	µg/kg	*	*
Hexachlorocyclopentadiene	370,000	µg/kg	*	*
Hexachloroethane	35,000	µg/kg	*	*
Indeno(1,2,3-c,d)pyrene	620	µg/kg	*	*
Isophorone	510,000	µg/kg	*	*
Naphthalene	1,700	µg/kg	*	*
Nitrobenzene	20,000	µg/kg	*	*
N-Nitrosodi-n-propylamine	69	µg/kg	*	*
N-Nitrosodiphenylamine	99,000	µg/kg	*	*
Pentachlorophenol	3,000	µg/kg	*	*
Phenanthrene	2,300,000	µg/kg	*	*
Phenol	18,000,000	µg/kg	*	*
Pyrene	2,300,000	µg/kg	*	*
Metals				
Aluminum	76,000	mg/kg	*	*
Antimony	31	mg/kg	*	12 UJ MS
Arsenic	22	mg/kg	*	*
Barium	5,400	mg/kg	*	*
Beryllium	150	mg/kg	*	*
Cadmium	37	mg/kg	*	*
Calcium	NE	mg/kg	*	4,650 J LD
Chromium	210	mg/kg	*	*
Cobalt	900	mg/kg	*	*
Copper	3,100	mg/kg	*	*
Iron	23,000	mg/kg	*	*
Lead	194	mg/kg	*	13.2 J LD
Magnesium	NE	mg/kg	*	*
Manganese	1,800	mg/kg	*	309 J LD, MS
Nickel	1,600	mg/kg	*	*
Potassium	NE	mg/kg	1,010 J LCS	1,160 J LCS
Selenium	390	mg/kg	*	*
Silver	390	mg/kg	*	*
Sodium	NE	mg/kg	*	*
Thallium	5.2	mg/kg	*	*
Vanadium	78	mg/kg	*	*
Zinc	23,000	mg/kg	*	23.1 J SerDil
Organochlorine Pesticides/PCBs				
4,4'-DDD	2,400	µg/kg	*	*
4,4'-DDE	1,700	µg/kg	*	*
4,4'-DDT	1,700	µg/kg	*	*
Aldrin	29	µg/kg	*	*
alpha-BHC	90	µg/kg	*	*
alpha-Chlordane	1,600	µg/kg	*	1.7 J CF

TABLE A1-6
Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSB-41	RSB-42
			3 ft bgs	5 ft bgs
		Sample Date	9/29/2004	10/8/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**	
Organochlorine Pesticides/PCBs				
Aroclor-1016	3,900	µg/kg	*	*
Aroclor-1221	220	µg/kg	*	*
Aroclor-1232	220	µg/kg	*	*
Aroclor-1242	220	µg/kg	*	*
Aroclor-1248	220	µg/kg	*	*
Aroclor-1254	220	µg/kg	*	*
Aroclor-1260	220	µg/kg	*	*
beta-BHC	320	µg/kg	*	*
delta-BHC	90	µg/kg	*	*
Dieldrin	30	µg/kg	*	*
Endosulfan I	370,000	µg/kg	*	*
Endosulfan II	370,000	µg/kg	*	*
Endosulfan sulfate	370,000	µg/kg	*	*
Endrin	18,000	µg/kg	*	1.2 J CF
Endrin aldehyde	18,000	µg/kg	*	*
Endrin ketone	18,000	µg/kg	*	*
gamma-BHC	440	µg/kg	*	*
gamma-Chlordane	1,600	µg/kg	*	1.5 J CF
Heptachlor	110	µg/kg	*	*
Heptachlor epoxide	53	µg/kg	*	*
Methoxychlor	310,000	µg/kg	*	*
Toxaphene	440	µg/kg	*	*
Dioxins/Furans (1)				
1,2,3,4,6,7,8-HpCDD	390	ng/kg	---	---
1,2,3,4,6,7,8-HpCDF	390	ng/kg	---	---
1,2,3,4,7,8,9-HpCDF	390	ng/kg	---	---
1,2,3,4,7,8-HxCDD	39	ng/kg	---	---
1,2,3,4,7,8-HxCDF	39	ng/kg	---	---
1,2,3,6,7,8-HxCDD	39	ng/kg	---	---
1,2,3,6,7,8-HxCDF	39	ng/kg	---	---
1,2,3,7,8,9-HxCDD	39	ng/kg	---	---
1,2,3,7,8,9-HxCDF	39	ng/kg	---	---
1,2,3,7,8-PeCDD	3.9	ng/kg	---	---
1,2,3,7,8-PeCDF	78	ng/kg	---	---
2,3,4,6,7,8-HxCDF	39	ng/kg	---	---
2,3,4,7,8-PeCDF	7.8	ng/kg	---	---
2,3,7,8-TCDD	3.9	ng/kg	---	---
2,3,7,8-TCDF	39	ng/kg	---	---
OCDD	39,000	ng/kg	---	---
OCDF	39,000	ng/kg	---	---

TABLE A1-6

Result Qualification and Associated Reason Codes - Soil, Phase 1 (September - October 2004)

AMCO Chemical Superfund Site, Oakland, California

Notes:

Results greater than the screening level are bolded

(1) Dioxin/Furan screening levels calculated using Toxicity Equivalency Factors (EPA), 2000, "Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds, Part II: Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and Related Compour Final, National Center for Environmental Assessment, May.

See Soil Screening Level table for source of screening levels.

---	not analyzed
*	result not qualified for Quality Control outliers
FD	field duplicate
NE	not established
µg/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
ng/kg	nanograms per kilogram
J	estimated value
NJ	qualitatively uncertain; estimated value
U	not detected at or above the reporting limit.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
>IC	Result greater than linear calibration range
C%D	Continuing calibration verification is outside control limit
CF	Confirmation precision exceeded
FD	Field duplicate exceeds relative percent difference criteria
HT	Holding time exceeded
ICS	Interference check standard recovery greater than upper control limit
IRRF	Initial calibration relative response factor exceeds control limit
IS	Internal standard response exceeds control limit
LB	Laboratory blank concentration exceeds criteria
LCS	Laboratory Control Sample recovery is outside control limit
LD	Laboratory duplicate exceeds relative percent difference criteria
MS	Matrix spike recovery exceeds control limilt
P1	spectral criteria not met
P4	If analyte concentration < 1/2 Contract Required Quanitation Limit, result raised to Contract Required Quanitation Limit and reported as nondetect
RSD	Initial calibration relative standard deviation exceeded
SerDil	Serial dilution percent difference exceeds control limit
Sur	Surrogate recovery outside control limits

TABLE A1-7
Result Qualification and Associated Reason Codes - Soil Gas Probes, Phase 1 (October 2004)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RSP-01	RSP-01	RSP-02	RSP-02	RSP-03	RSP-03	RSP-04	RSP-04	RSP-04	RSP-04	RSP-05	RSP-05	RSP-06	RSP-06	RSP-07	RSP-07	RSP-08
			AM	PM	AM	PM	AM	PM	AM	AM (FD)	PM	PM (FD)	AM	PM	AM	PM	AM	PM	AM
	Sample Date		10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	23,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.33	µg/m3	*	*	*	*	*	*	*	*	*	0.27 UJ C%D	*	*	*	*	*	*	0.26 UJ C%D
1,1,2-Trichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	12	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	37	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.034	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	2,100	µg/m3	*	420 UJ C%D	*	4.3 UJ C%D	*	4.1 UJ C%D	*	4.1 UJ C%D	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.74	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	0.99	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Butadiene	0.11	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,2,4-Trimethylpentane	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3-Chloropropene	10	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Ethyltoluene	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetone	33,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzene	2.5	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzyl chloride	0.4	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	1.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromoform	17	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromomethane	52	µg/m3	*	*	*	*	*	*	*	*	*	2.7 UJ LCS	*	*	*	*	*	*	*
Carbon disulfide	7,300	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	1.3	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	620	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	23	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	0.83	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	950	µg/m3	*	*	*	*	*	*	*	*	*	5.7 UJ C%D	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	370	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cyclohexane	62,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibromochloromethane	0.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethanol	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	7,300	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	310,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 114	NE	µg/m3	*	*	*	*	*	*	*	*	4.9 UJ C%D	4.8 UJ C%D	*	48 UJ C%D	*	9.4 UJ C%D	*	290 UJ C%D	*
Freon 12	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/m3	*	*	*	*	1.5 UJ C%D	*	*	*	*	*	*	*	*	*	*	*	2 UJ C%D
Isopropanol	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	4,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl ethyl ketone	51,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	31,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	74	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	41	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
n-Heptane	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A1-7

Result Qualification and Associated Reason Codes - Soil Gas Probes, Phase 1 (October 2004)

AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSP-01	RSP-01	RSP-02	RSP-02	RSP-03	RSP-03	RSP-04	RSP-04	RSP-04	RSP-04	RSP-05	RSP-05	RSP-06	RSP-06	RSP-07	RSP-07	RSP-08
			AM	PM	AM	PM	AM	PM	AM	AM (FD)	PM	PM (FD)	AM	PM	AM	PM	AM	PM	AM
		Sample Date	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
n-Propylbenzene	1,500	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Styrene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	3.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrahydrofuran	9.9	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	4,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total hexanes	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	730	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	0.17	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vinyl acetate	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vinyl chloride	1.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A1-7
Result Qualification and Associated Reason Codes - Soil Gas Probes, Phase 1 (October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSP-08 PM	RSP-09 AM	RSP-09 PM	RSP-10 AM	RSP-10 PM	RSP-11 AM	RSP-11 PM	RSP-12 AM	RSP-12 PM
		Sample Date	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004	10/13/2004
Analyte	Screening Level	Units	Analytical Results								
Volatile Organic Compounds											
1,1,1-Trichloroethane	23,000	µg/m3	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.33	µg/m3	*	*	*	*	*	0.19 UJ C%D	*	0.18 UJ C%D	*
1,1,2-Trichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	12	µg/m3	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	2,100	µg/m3	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	37	µg/m3	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.034	µg/m3	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	2,100	µg/m3	*	4 UJ C%D	*	4.2 UJ C%D	*	4.2 UJ C%D	*	4 UJ C%D	*
1,2-Dichloroethane	0.74	µg/m3	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	0.99	µg/m3	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*
1,3-Butadiene	0.11	µg/m3	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3.1	µg/m3	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/m3	*	*	*	*	*	*	*	*	*
2,2,4-Trimethylpentane	NE	µg/m3	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/m3	*	*	*	*	*	*	*	*	*
3-Chloropropene	10	µg/m3	*	*	*	*	*	*	*	*	*
4-Ethyltoluene	NE	µg/m3	*	*	*	*	*	*	*	*	*
Acetone	33,000	µg/m3	*	*	*	*	*	*	*	*	*
Benzene	2.5	µg/m3	*	*	*	*	*	*	*	*	*
Benzyl chloride	0.4	µg/m3	*	*	*	*	*	*	*	*	*
Bromodichloromethane	1.1	µg/m3	*	*	*	*	*	*	*	*	*
Bromoform	17	µg/m3	*	*	*	*	*	*	*	*	*
Bromomethane	52	µg/m3	*	*	*	*	*	*	*	*	2.9 UJ LCS
Carbon disulfide	7,300	µg/m3	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	1.3	µg/m3	*	*	*	*	*	*	*	*	*
Chlorobenzene	620	µg/m3	*	*	*	*	*	*	*	*	*
Chloroethane	23	µg/m3	*	*	*	*	*	*	*	*	*
Chloroform	0.83	µg/m3	*	*	*	*	*	*	*	*	*
Chloromethane	950	µg/m3	*	*	*	*	*	*	*	*	6.2 UJ C%D
cis-1,2-Dichloroethene	370	µg/m3	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*
Cyclohexane	62,000	µg/m3	*	*	*	*	*	*	*	*	*
Dibromochloromethane	0.8	µg/m3	*	*	*	*	*	*	*	*	*
Ethanol	NE	µg/m3	*	*	*	*	*	*	*	*	*
Ethylbenzene	11,000	µg/m3	*	*	*	*	*	*	*	*	*
Freon 11	7,300	µg/m3	*	*	*	*	*	*	*	*	*
Freon 113	310,000	µg/m3	*	*	*	*	*	*	*	*	*
Freon 114	NE	µg/m3	4.8 UJ C%D	*	4.9 UJ C%D	*	4.9 UJ C%D	*	4.9 UJ C%D	*	5.2 UJ C%D
Freon 12	2,100	µg/m3	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/m3	*	1.4 UJ C%D	*	1.5 UJ C%D	*	1.5 UJ C%D	*	1.4 UJ C%D	*
Isopropanol	NE	µg/m3	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	4,000	µg/m3	*	*	*	*	*	*	*	*	*
Methyl ethyl ketone	51,000	µg/m3	*	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	31,000	µg/m3	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	74	µg/m3	*	*	*	*	*	*	*	*	*
Methylene chloride	41	µg/m3	*	*	*	*	*	*	*	*	*
n-Heptane	NE	µg/m3	*	*	*	*	*	*	*	*	*

TABLE A1-7
Result Qualification and Associated Reason Codes - Soil Gas Probes, Phase 1 (October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSP-08 PM	RSP-09 AM	RSP-09 PM	RSP-10 AM	RSP-10 PM	RSP-11 AM	RSP-11 PM	RSP-12 AM	RSP-12 PM
		Sample Date	**10/13/2004**	**10/13/2004**	**10/13/2004**	**10/13/2004**	**10/13/2004**	**10/13/2004**	**10/13/2004**	**10/13/2004**	**10/13/2004**
Analyte	**Screening Level**	**Units**	**Analytical Results**								
Volatile Organic Compounds											
n-Propylbenzene	1,500	µg/m3	*	*	*	*	*	*	*	*	*
Styrene	11,000	µg/m3	*	*	*	*	*	*	*	*	*
Tetrachloroethene	3.2	µg/m3	*	*	*	*	*	*	*	*	*
Tetrahydrofuran	9.9	µg/m3	*	*	*	*	*	*	*	*	*
Toluene	4,000	µg/m3	*	*	*	*	*	*	*	*	*
Total hexanes	NE	µg/m3	*	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	730	µg/m3	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*
Trichloroethene	0.17	µg/m3	*	*	*	*	*	*	*	*	*
Vinyl acetate	2,100	µg/m3	*	*	*	*	*	*	*	*	*
Vinyl chloride	1.1	µg/m3	*	*	*	*	*	*	*	*	*
Xylenes, total	NE	µg/m3	*	*	*	*	*	*	*	*	*

Notes:
Results greater than the screening level are bolded
See Soil Gas Screening Level table for source of screening levels.
* result not qualified for Quality Control outliers
FD field duplicate
NE not established
µg/m3 micrograms per cubic meter
UJ not detected at or above the reporting limit; the reporting limit is an estimate.
C%D Continuing calibration verification is outside control limit
LCS Laboratory Control Sample recovery is outside control limit

TABLE A1-8
Result Qualification and Associated Reason Codes - Soil Gas Survey, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSG-01	RSG-02	RSG-03	RSG-03A*	RSG-03A* (FD)	RSG-04	RSG-05	RSG-06	RSG-07	RSG-08	RSG-09	RSG-10	RSG-11	RSG-11A*	RSG-11A* (FD)	RSG-12	RSG-13
		Sample Date	9/16/2004	9/15/2004	9/30/2004	10/8/2004	10/8/2004	9/24/2004	9/24/2004	9/30/2004	9/15/2004	9/15/2004	9/16/2004	9/13/2004	9/15/2004	10/8/2004	10/8/2004	9/20/2004	9/16/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	23,000	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R P3	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.33	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
1,1,2-Trichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
1,1-Dichloroethane	12	µg/m3	*	*	*	*	*	*	*	*	*	*	**25 R P3**	*	*	*	*	*	*
1,1-Dichloroethene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R P3	*	*	*	*	*	*
1,2,4-Trichlorobenzene	37	µg/m3	*	*	*	*	*	*	100 UJ LB	*	*	100 UJ LB	**100 R P3**	*	*	*	*	*	*
1,2,4-Trimethylbenzene	62	µg/m3	100 UJ LB	100 UJ LB	*	100 UJ LB	100 UJ LB	*	*	*	100 UJ LB	100 UJ LB	**100 R P3**	*	100 UJ LB	100 UJ LB	*	100 UJ LB	100 UJ LB
1,2-Dibromoethane	0.034	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
1,2-Dichlorobenzene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R P3	*	*	*	*	*	*
1,2-Dichloroethane	0.74	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
1,2-Dichloropropane	0.99	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
1,3,5-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
1,3-Dichlorobenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R P3	*	*	*	*	*	*
1,4-Dichlorobenzene	3.1	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	100 UJ LB	100 UJ LB	*	*
Benzene	2.5	µg/m3	*	*	*	50 UJ LB	50 UJ LB	*	*	*	50 UJ LB	51 UJ LB	**50 R P3**	*	64 UJ LB	83 UJ LB	61 UJ LB	50 UJ LB	50 UJ LB
Bromomethane	52	µg/m3	*	*	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	*	*	**100 R P3**	100 UJ C%D	*	100 UJ C%D	100 UJ C%D	*	*
Carbon tetrachloride	1.3	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
Chlorobenzene	620	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R P3	*	*	*	*	*	*
Chloroethane	23	µg/m3	**550 J C%D**	*	100 UJ C%D	100 UJ C%D	100 UJ C%D	*	*	100 UJ C%D	*	*	**100 R P3**	100 UJ C%D	*	100 UJ C%D	100 UJ C%D	**67 J C%D**	100 UJ C%D
Chloroform	0.83	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
Chloromethane	950	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R P3	*	*	*	*	*	*
cis-1,2-Dichloroethene	370	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R P3	*	*	*	*	*	*
cis-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
Ethylbenzene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R P3	*	*	*	*	*	*
Freon 11	7,300	µg/m3	100 UJ C%D	100 UJ C%D	100 UJ C%D	28 J C%D	25 J C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	20 J C%D	100 UJ C%D	100 R P3	*	73 J C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	*
Freon 113	310,000	µg/m3	*	*	100 UJ C%D	*	*	*	*	100 UJ C%D	*	*	100 R P3	*	*	*	*	*	*
Freon 12	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R P3	100 UJ C%D	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/m3	*	*	*	*	*	*	*	*	*	100 UJ LB	**100 R P3**	*	100 UJ LB	*	*	*	*
Methyl tert-butyl ether	74	µg/m3	*	100 UJ C%D	*	*	*	*	*	*	31 J C%D	30 J C%D	**100 R P3**	*	100 UJ C%D	*	*	*	*
Methylene chloride	41	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
Styrene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R P3	*	*	*	*	*	*
Tetrachloroethene	3.2	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
Toluene	4,000	µg/m3	100 UJ LB	100 UJ LB	*	120 UJ LB	140 UJ LB	*	*	*	140 UJ LB	180 UJ LB	100 R P3	*	100 UJ LB	*	140 UJ LB	100 UJ LB	100 UJ LB
trans-1,2-Dichloroethene	730	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R P3	*	*	*	*	*	*
trans-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R P3**	*	*	*	*	*	*
Trichloroethene	0.17	µg/m3	*	*	*	*	*	*	*	*	*	*	**50 R P3**	*	*	*	*	*	*
Vinyl chloride	1.1	µg/m3	*	*	*	*	*	*	*	*	*	*	**50 R P3**	*	*	*	*	*	*
Xylenes, total	NE	µg/m3	100 U LB	100 UJ LB	*	100 U LB	100 U LB	100 U LB	36 J LB	*	120 UJ LB	150 UJ LB	100 R P3	100 U LB	100 U LB	29 J LB	100 U LB	100 U LB	100 U LB

TABLE A1-8
Result Qualification and Associated Reason Codes - Soil Gas Survey, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RSG-13A*	RSG-13A* (FD)	RSG-14	RSG-14A*	RSG-14A* (FD)	RSG-15	RSG-17	RSG-18	RSG-19	RSG-20	RSG-21	RSG-22	RSG-23	RSG-24	RSG-25	RSG-26	RSG-27
	Sample Date		10/8/2004	10/8/2004	9/16/2004	10/8/2004	10/8/2004	9/22/2004	9/22/2004	9/27/2004	9/13/2004	9/17/2004	9/13/2004	9/27/2004	9/28/2004	9/29/2004	9/14/2004	9/14/2004	9/14/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	23,000	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R Leak	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.33	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R Leak**	*	100 UJ C%D	*	*	*	*
1,1,2-Trichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R Leak**	*	*	*	*	*	*
1,1-Dichloroethane	12	µg/m3	*	*	*	*	*	*	*	**55,000 J >IC**	*	*	**8,400 R Leak**	*	*	*	*	*	*
1,1-Dichloroethene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R Leak	*	*	*	*	*	*
1,2,4-Trichlorobenzene	37	µg/m3	*	*	*	*	*	*	*	100 UJ LB	*	*	**100 R Leak**	*	*	*	*	*	*
1,2,4-Trimethylbenzene	62	µg/m3	100 UJ LB	100 UJ LB	*	100 UJ LB	100 UJ LB	*	32 J Sur	100 UJ LB	100 UJ LB	*	**100 R Leak**	530 UJ LB	*	100 UJ LB	100 UJ LB	100 UJ LB	100 UJ LB
1,2-Dibromoethane	0.034	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R Leak**	*	100 UJ C%D	*	*	*	*
1,2-Dichlorobenzene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R Leak	*	*	*	*	*	*
1,2-Dichloroethane	0.74	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R Leak**	*	*	*	*	*	*
1,2-Dichloropropane	0.99	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R Leak**	*	*	*	*	*	*
1,3,5-Trimethylbenzene	62	µg/m3	*	*	*	100 UJ LB	*	*	*	100 UJ LB	*	*	**100 R Leak**	480 UJ LB	*	42 J Sur	*	*	*
1,3-Dichlorobenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R Leak	*	*	*	*	*	*
1,4-Dichlorobenzene	3.1	µg/m3	100 UJ LB	100 UJ LB	*	*	*	*	*	*	*	*	**100 R Leak**	*	*	*	*	*	*
Benzene	2.5	µg/m3	81 UJ LB	74 UJ LB	69 UJ LB	*	*	*	2,600 J Sur	*	*	*	**11,000 R Leak**	*	*	*	*	*	*
Bromomethane	52	µg/m3	100 UJ C%D	100 UJ C%D	*	100 UJ C%D	100 UJ C%D	*	*	100 UJ C%D	100 UJ C%D	100 UJ C%D	**100 R Leak**	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D
Carbon tetrachloride	1.3	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R Leak**	*	*	*	*	*	*
Chlorobenzene	620	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R Leak	*	*	1,300 J Sur	*	*	*
Chloroethane	23	µg/m3	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	*	**38,000 J >IC**	**410 J C%D**	**1,200 J C%D**	**640 J C%D**	**120,000 R Leak**	**23,000 J C%D**	*	100 UJ C%D	100 UJ C%D	100 UJ C%D	**150 J C%D**
Chloroform	0.83	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R Leak**	*	*	*	*	*	*
Chloromethane	950	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R Leak	*	*	*	*	*	*
cis-1,2-Dichloroethene	370	µg/m3	*	*	*	*	*	*	*	**54,000 J >IC**	*	*	**790 R Leak**	*	**810,000 J >IC**	**6,900,000 J >IC**	*	*	*
cis-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R Leak**	*	*	*	*	*	*
Ethylbenzene	11,000	µg/m3	*	*	*	*	*	*	390 J Sur	*	*	*	120 R Leak	*	*	15,000 J Sur	*	*	*
Freon 11	7,300	µg/m3	62 J C%D	27 J C%D	*	54 J C%D	52 J C%D	*	*	100 UJ C%D	*	42 J C%D	100 R Leak	100 UJ C%D	*	100 UJ C%D	*	*	*
Freon 113	310,000	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R Leak	*	*	*	*	*	*
Freon 12	2,100	µg/m3	*	*	*	*	*	*	*	*	100 UJ C%D	*	100 R Leak	*	*	*	100 UJ C%D	100 UJ C%D	100 UJ C%D
Hexachlorobutadiene	0.86	µg/m3	*	*	*	*	*	*	*	100 UJ LB	*	*	**100 R Leak**	*	*	*	*	*	*
Methyl tert-butyl ether	74	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R Leak**	*	*	*	*	*	*
Methylene chloride	41	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R Leak**	*	*	*	*	*	*
Styrene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	100 R Leak	*	*	*	*	*	*
Tetrachloroethene	3.2	µg/m3	*	*	*	*	*	*	40 J Sur	*	*	*	**100 R Leak**	*	*	180 J Sur	*	*	*
Toluene	4,000	µg/m3	100 UJ LB	120 UJ LB	100 UJ LB	160 UJ LB	170 UJ LB	*	8,700 J Sur	*	100 UJ LB	*	270 R Leak	*	**600,000 J >IC**	*	100 UJ LB	110 UJ LB	100 UJ LB
trans-1,2-Dichloroethene	730	µg/m3	*	*	*	*	*	*	*	*	*	*	280 R Leak	*	*	*	*	*	*
trans-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	**100 R Leak**	*	*	*	*	*	*
Trichloroethene	0.17	µg/m3	*	*	*	*	*	*	240 J Sur	*	*	*	**33 R Leak**	*	*	*	*	*	*
Vinyl chloride	1.1	µg/m3	*	*	*	*	*	*	*	*	*	*	**4,700 R Leak**	**780,000 J >IC**	*	*	*	*	*
Xylenes, total	NE	µg/m3	100 U LB	100 U LB	100 U LB	34 J LB	30 J LB	*	307 J Sur	100 U LB	33 J LB	36 J LB	100 R Leak	*	*	43,700 J Sur	100 U LB	30 J LB	100 U LB

TABLE A1-8
Result Qualification and Associated Reason Codes - Soil Gas Survey, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSG-28	RSG-29	RSG-30	RSG-31	RSG-32	RSG-33	RSG-34	RSG-35	RSG-36	RSG-37	RSG-38	RSG-39	RSG-40	RSG-41	RSG-42
		Sample Date	9/14/2004	9/14/2004	9/15/2004	9/17/2004	9/16/2004	9/17/2004	9/28/2004	9/28/2004	9/29/2004	9/29/2004	9/28/2004	9/29/2004	9/29/2004	9/29/2004	10/8/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**														
Volatile Organic Compounds																	
1,1,1-Trichloroethane	23,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.33	µg/m3	*	*	*	*	*	*	100 UJ C%D	**35 J C%D**	*	*	100 UJ C%D	*	*	*	*
1,1,2-Trichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	12	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	37	µg/m3	*	100 UJ LB	*	*	*	*	*	*	*	100 UJ LB	*	*	*	*	*
1,2,4-Trimethylbenzene	62	µg/m3	100 UJ LB	100 UJ LB	100 UJ LB	*	100 UJ LB	*	*	*	100 UJ LB	100 UJ LB	*	100 UJ LB	100 UJ LB	100 UJ LB	100 UJ LB
1,2-Dibromoethane	0.034	µg/m3	*	*	*	*	*	*	100 UJ C%D	100 UJ C%D	*	*	100 UJ C%D	*	*	*	*
1,2-Dichlorobenzene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.74	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	0.99	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	100 UJ LB
1,3-Dichlorobenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	100 UJ LB
Benzene	2.5	µg/m3	*	*	*	*	*	*	220 J Sur	*	*	*	*	*	*	*	*
Bromomethane	52	µg/m3	100 UJ C%D	**140 J C%D**	*	100 UJ C%D	*	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D
Carbon tetrachloride	1.3	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	620	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	23	µg/m3	100 UJ C%D	**120 J C%D**	*	100 UJ C%D	100 UJ C%D	100 UJ C%D	*	*	100 UJ C%D	100 UJ C%D	*	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D
Chloroform	0.83	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	950	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	370	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	7,300	µg/m3	*	*	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D	*	*	100 UJ C%D	100 UJ C%D	*	100 UJ C%D	100 UJ C%D	100 UJ C%D	100 UJ C%D
Freon 113	310,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	2,100	µg/m3	100 UJ C%D	190 J C%D	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	74	µg/m3	*	*	100 UJ C%D	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	41	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Styrene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	3.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	4,000	µg/m3	100 UJ LB	100 UJ LB	100 UJ LB	100 UJ LB	100 UJ LB	*	960 J Sur	*	110 UJ LB	100 UJ LB	*	100 UJ LB	100 UJ LB	100 UJ LB	*
trans-1,2-Dichloroethene	730	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	0.17	µg/m3	*	*	*	*	*	*	150 J Sur	*	*	*	*	*	*	*	*
Vinyl chloride	1.1	µg/m3	*	*	*	*	*	*	*	**660 J FD**	*	*	*	*	*	*	*
Xylenes, total	NE	µg/m3	100 U LB	31 J LB	100 U LB	100 U LB	100 U LB	46 J LB	*	42 J LB	100 U LB	100 U LB	*	100 U LB	100 U LB	100 U LB	62 J LB

TABLE A1-8
Result Qualification and Associated Reason Codes - Soil Gas Survey, Phase 1 (September - October 2004)
AMCO Chemical Superfund Site, Oakland, California

Notes:
Results greater than the screening level are bolded
* Repeat sample collected at the same location as the original, but on a different date.
Rejected Results are enclosed by boxes
See Soil Gas Screening Level table for source of screening levels.

*	result not qualified for Quality Control outliers
FD	field duplicate
µg/m3	micrograms per cubic meter
J	estimated value
R	rejected for failure to meet quality control requirement.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
>IC	Result greater than linear calibration range
C%D	Continuing calibration verification is outside control limit
FD	Field duplicate exceeds relative percent difference criteria
LB	Laboratory blank concentration exceeds criteria
Leak	leak in system, biased low
P3	Sample collected below water table
Sur	Surrogate recovery outside control limits

Appendix A2
Residential Air and Soil Gas, September 2004

APPENDIX A2-1

Residential Ambient and Crawl Space Air and Soil Gas Sampling, September 2004

A2.1 Summary

The following sections describe the samples collected during the Residential Ambient and Crawl Space Air and Soil Gas sampling event which occurred in September, 2004. The sample collection techniques are described below.

Residential Air: The September 2004 residential ambient and crawl space air samples were collected on September 21, 2004 using certified clean 4-liter (L) Summa canisters. Samples were analyzed by EPA Method TO-15 using selected ion monitoring (SIM) techniques. Method QC requirements were consistent with EPA TO-15 and TO-15 SIM methodology and the project Quality Assurance Project Plan (QAPP). For ambient and crawl space air, the selected screening levels are the EPA Region 9 ambient air preliminary remediation goals (PRGs).

Residential Soil Gas: Samples were collected September 21 and 30, 2004 at six residences and from locations within Prescott Park. Certified clean 4-L Summa canisters were used to collect samples for TO-15 and TO-15 SIM analyses. The appropriate method QC requirements were followed. For the residential soil gas, the selected screening levels are 10 times the EPA Region 9 ambient air PRGs, based on a conservative attenuation factor.

A2.2 Data Review and Validation Findings

Tables A2-1 and A2-2 present a list of sample delivery groups, sample identifications, and validation levels for the vapor phase samples collected during the September 2004 sampling event. Tables A2-3, Residential Ambient and Crawl Space Air, and A2-4, Residential Soil Gas, present the Tier 3 qualified results with accompanying reason code identifying the type of QC outlier. All samples from this event were validated at the Tier 3 level. Results that are unqualified based on QC outliers are not shown.

A2.2.1 Residential Air – TO-15 Full Scan and SIM VOCs

The following sections discuss the results qualified based on the Tier 3 validation findings. The residential ambient and crawl space air results were qualified for outliers associated with the following QC metrics: initial calibration and continuing calibration.

A2.2.1.1 Initial Calibration (Reason Code RSD)

The initial calibration exceeded the <30 %RSD control limit for the following analytes in the indicated samples:

- Benzene in all samples

The results and quantitation limits for the analytes listed above were flagged as estimated, J/UJ.

A2.2.1.2 Continuing Calibration (Reason Code C%D)

The results for the following analytes in the samples from the indicated locations were estimated due to %Ds outside the ± 25%control criteria:

- 1,2,4-Trichlorobenzene and hexachlorobutadiene in 326CA, 326AA, 1436AA, 1432CA, and 1432CA duplicate
- 1,3-Dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, and 1,2,4-trichlorobenzene in 1432AA, 1428CAa, 1428CAb, 1428AA, 329BA-AM, 329BA-PM, 360AA, and 1428AA duplicate

A2.2.2 Residential Soil Gas – TO-15 Full Scan and SIM VOCs in Air

The following sections discuss the results qualified based on the Tier 3 validation findings. The residential soil gas results were qualified for outliers associated with continuing calibration outliers.

A2.2.2.1 Continuing Calibration (Reason Code C%D)

The results for the following analyte in the samples from the indicated locations were estimated due to %Ds outside the ± 25%control criteria:

- Freon-12 in PP-NW-SG and PP-SW-SG

TABLE A2-1

Sample Delivery Group Reference - Residential Air, Phase 1 (September 2004)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
0409415B (Air Toxics)				
Volatile Organics, EPA Method TO-15 (SIM)				
	1428AA	N	1428AA-0904	Tier 3
	1428AA	FD	91AA-0904	Tier 3
	1428CAa	N	1428CAa-0904	Tier 3
	1428CAb	N	1428CAb-0904	Tier 3
	1432AA	N	1432AA-0904	Tier 3
	1432CA	N	1432CA-0904	Tier 3
	1432CA	FD	91CA-0904	Tier 3
	1436AA	N	1436AA-0904	Tier 3
	326AA	N	326AA-0904	Tier 3
	326CA	N	326CA-0904	Tier 3
	360AA	N	360AA-0904	Tier 3
	Background1	N	329BA-AM-0904	Tier 3
	Background1	N	329BA-PM-0904	Tier 3

Notes:

N regular sample

FD field duplicate

TABLE A2-2

Sample Delivery Group Reference - Residential Soil Gas, Phase1 (September 2004)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
0409415A (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	1428SG	N	1428SG-02-0904	Tier 3
	1428SG	FD	91SG-0904	Tier 3
	1432SGa	N	1432SGa-02-0904	Tier 3
	1432SGb	N	1432SGb-02-0904	Tier 3
	1436SG	N	1436SG-02-0904	Tier 3
	326SG	N	326SG-02-0904	Tier 3
	356SG	N	356SG-02-0904	Tier 3
	360SGa	N	360SGa-02-0904	Tier 3
	360SGb	N	360SGb-02-0904	Tier 3
	360SGc	N	360SGc-02-0904	Tier 3
0409415C (Air Toxics)				
Volatile Organics, EPA Method TO-15 (SIM)				
	1428SG	N	1428SG-02-0904	Tier 3
	1428SG	FD	91SG-0904	Tier 3
	1432SGa	N	1432SGa-02-0904	Tier 3
	1432SGb	N	1432SGb-02-0904	Tier 3
	1436SG	N	1436SG-02-0904	Tier 3
	326SG	N	326SG-02-0904	Tier 3
	356SG	N	356SG-02-0904	Tier 3
	360SGa	N	360SGa-02-0904	Tier 3
	360SGb	N	360SGb-02-0904	Tier 3
	360SGc	N	360SGc-02-0904	Tier 3
0410027 (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	PP-E	N	PP-E-SG-0904	Tier 3
	PP-NW	N	PP-NW-SG-0904	Tier 3
	PP-SW	N	PP-SW-SG-0904	Tier 3
0410027B (Air Toxics)				
Volatile Organics, EPA Method TO-15 (SIM)				
	PP-E	N	PP-E-SG-0904	Tier 3
	PP-NW	N	PP-NW-SG-0904	Tier 3
	PP-SW	N	PP-SW-SG-0904	Tier 3

Notes:

N regular sample

FD field duplicate

Table A2-3
Result Qualification and Associated Reason Codes - Residential Ambient and Crawlspace Air, Phase 1 (September 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	329BA AM	329BA PM	1428AA	1428AA (FD)	1428CAa	1428CAb	1432AA	1432CA	1432CA (FD)	1436AA	326AA	326CA	360AA
		Sample Date	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**												
Volatile Organic Compounds															
1,1,1-Trichloroethane	2,300	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.033	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	0.12	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	210	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	3.7	µg/m3	1.4 UJ C%D	1.3 UJ C%D	1.3 UJ C%D	1.2 UJ C%D	1.4 UJ C%D	1.4 UJ C%D	1.2 UJ C%D	1.2 UJ C%D	1.2 UJ C%D	1.2 UJ C%D	1.3 UJ C%D	1.2 UJ C%D	1.4 UJ C%D
1,2,4-Trimethylbenzene	6.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.0034	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	210	µg/m3	0.22 UJ C%D	0.21 UJ C%D	0.21 UJ C%D	0.2 UJ C%D	0.22 UJ C%D	0.22 UJ C%D	0.19 UJ C%D	*	*	*	*	*	0.22 UJ C%D
1,2-Dichloroethane	0.074	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	0.099	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	6.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	110	µg/m3	0.22 UJ C%D	0.21 UJ C%D	51 J C%D	39 J C%D	0.22 UJ C%D	0.22 UJ C%D	0.19 UJ C%D	*	*	*	*	*	0.22 UJ C%D
1,4-Dichlorobenzene	0.31	µg/m3	0.22 UJ C%D	0.21 UJ C%D	**3.5 J C%D**	**2.5 J C%D**	0.25 J C%D	0.22 UJ C%D	0.19 UJ C%D	*	*	*	*	*	0.28 J C%D
1,4-Dioxane (p-dioxane)	0.61	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzene	0.25	µg/m3	**1.3 J RSD**	**0.59 J RSD**	**4.8 J RSD**	**5.6 J RSD**	**1.1 J RSD**	**1.2 J RSD**	**0.74 J RSD**	**11 J RSD**	**16 J RSD**	**0.79 J RSD**	**0.66 J RSD**	**0.65 J RSD**	0.59 UJ RSD
Bromomethane	5.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	0.13	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	2.3	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	0.083	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	95	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	37	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	0.48	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	730	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	31,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 114	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	210	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.086	µg/m3	*	*	*	*	*	*	*	1.7 UJ C%D	1.7 UJ C%D	1.7 UJ C%D	1.8 UJ C%D	1.8 UJ C%D	*
Methyl tert-butyl ether	7.4	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	4.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Styrene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	0.32	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	400	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	73	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	0.48	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	0.017	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Vinyl chloride	0.11	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*

Notes:
Results greater than the screening level are bolded
* result not qualified for Quality Control outliers
FD field duplicate
NE not established
µg/m3 micrograms per cubic meter
J estimated value
UJ not detected at or above the reporting limit; the reporting limit is an estimate.
C%D Continuing calibration verification is outside control limit
RSD Initial calibration relative standard deviation exceeded

Table A2-4
Result Qualification and Associated Reason Codes - Residential Soil Gas, Phase1 (September 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1428SG	1428SG (FD)	1432SGa	1432SGb	1436SG	326SG	356SG	360SGa	360SGb	360SGc	PP-E	PP-NW	PP-SW
		Sample Date	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/21/2004	9/30/2004	9/30/2004	9/30/2004
Analyte	**Screening Level**	**Units**	**Analytical Results**												
Volatile Organic Compounds															
1,1,1-Trichloroethane	23,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.33	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	12	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	37	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.034	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.74	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	0.99	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Butadiene	0.11	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
2,2,4-Trimethylpentane	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
3-Chloropropene	10	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Ethyltoluene	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetone	33,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzene	2.5	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzyl chloride	0.4	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	1.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromoform	17	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromomethane	52	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon disulfide	7,300	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	1.3	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	620	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	23	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	0.83	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	950	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	370	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Cyclohexane	62,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibromochloromethane	0.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethanol	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	7,300	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	310,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 114	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	11 UJ C%D	3.6 UJ C%D
Hexachlorobutadiene	0.86	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropanol	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	4,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl ethyl ketone	51,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	31,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	74	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	41	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Heptane	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*

Table A2-4
Result Qualification and Associated Reason Codes - Residential Soil Gas, Phase1 (September 2004)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1428SG	1428SG (FD)	1432SGa	1432SGb	1436SG	326SG	356SG	360SGa	360SGb	360SGc	PP-E	PP-NW	PP-SW
		Sample Date	**9/21/2004**	**9/21/2004**	**9/21/2004**	**9/21/2004**	**9/21/2004**	**9/21/2004**	**9/21/2004**	**9/21/2004**	**9/21/2004**	**9/21/2004**	**9/30/2004**	**9/30/2004**	**9/30/2004**
Analyte	**Screening Level**	**Units**	**Analytical Results**												
Volatile Organic Compounds															
n-Propylbenzene	1,500	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Styrene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	3.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrahydrofuran	9.9	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	4,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Total hexanes	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	730	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	0.17	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Vinyl acetate	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Vinyl chloride	1.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, m & p	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, o	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*

Notes:
Results greater than the screening level are bolded
* no associated reason codes
FD field duplicate
NE not established
µg/m3 micrograms per cubic meter
UJ not detected at or above the reporting limit; the reporting limit is an estimate.
C%D Continuing calibration verification is outside control limit

Appendix A3
Residential Air and Soil Gas, May 2005

APPENDIX A3

Residential Ambient and Crawl Space Air and Soil Gas Sampling, May 2005

A3.1 Summary

The following sections describe the collection of vapor phase samples from residential locations during May 2005.

Residential Ambient and Crawl Space Air Samples: Certified Clean 4L Summa Canisters were used to collect ambient air and crawl space samples from five residences, from locations in Prescott Park, and AM and PM background samples on May 12, 2005. All 14 samples were analyzed for TO-15 SIM and a subset of 8 samples was analyzed for naphthalene by method TO-13A. For ambient and crawl space air, the selected screening levels are the EPA Region 9 ambient air PRGs.

Residential Soil Gas Sampling: Certified Clean 4L Summa Canisters were used to collect 8 soil gas samples from three residences and from locations in Prescott Park on May 12 and 13, 2005. All 8 samples were analyzed for TO-15 full scan and TO-15 SIM. For soil gas, the selected screening levels are 10 times the EPA Region 9 ambient air PRGs based on a conservative attenuation factor.

A3.2 Data Review and Validation Findings

Table A3-1 and A3-2 presents a list of sample delivery groups, sample identifications, and validation levels for the vapor phase samples collected in May, 2005. Tables A3-3 and A3-4 present the Tier 3 qualified results. Results that are unqualified are indicated by an asterisk. Rejected results are shown in boxes. The following discussion presents the findings of the Tier 3 validation of the residential air and soil gas sample results. All of the results were validated by EPA in accordance with Tier 3 procedures.

A3.2.1 Residential Ambient and Crawlspace Air – TO-15

The following section discusses the results qualified based on the Tier 3 validation finding. The results were qualified for outliers associated with the following QC metrics: laboratory method blank, initial calibration, continuing calibration and laboratory control sample.

A3.2.1.1 Laboratory Method Blank (Reason Code LB)

The following analytes in the indicated samples were estimated due to method blank contamination:

- Bromomethane in all samples

- Methylene chloride in samples from locations PP-AA, 326CA, 326AA, 360AA, 322BA-AM, and 322BA-PM
- Trichloroethene in samples from locations 1428AA, 1428AA duplicate, PP-AA, 1432CA, 1432CA duplicate, 1432AA, 1436AA, 326CA, 326AA, 360AA, 322BA-PM, and 322BA-AM
- 1,1,2,2-Tetrachloroethane in samples from locations 1428CAa, 1428CAc, 1432AA, 1432CA duplicate, 1436AA, 326CA, 326AA, 322BA-AM, and 322BA-PM
- 1,3-Dichlorobenzene in samples from locations 1428CAa, 1428CAc, 1428AA, and PP-AA
- 1,4-Dichlorobenzene in samples from locations 1428CAa, 1428AA, 1428AA-0505 duplicate, 322-BA-PM, and PP-AA
- 1,2-Dichlorobenzene in 1428CAa, 1428CAc, 1428AA, 1428AA-0505-duplicate, 326AA, PP-AA, 322BA-PM, 360AA, and 322BA-AM

Where sample results were below the reporting limit but less than 5 times the blank concentration, the results were qualified as not detected, U, at the reporting limit. Where samples are above the reporting limit, but less than 5 times the blank concentration, the results were qualified as not detected, U, at the concentration found.

A3.2.1.2 Initial Calibration (Reason Code RSD)

The initial calibration exceeded the ± 25% RSD control limit for the following analytes:

- 1,4-Dichlorobenzene and 1,2,4-trichlorobenzene in all samples
- 1,2-Dichlorobenzene in samples from locations 1428AA, 1428AA duplicate, 1428CAa, 1428CAc, 1432AA, 1432CA, 1432CA duplicate, 1436AA, 326AA, 326CA, 360-AA, 322BA-AM, and 322BA-PM

The results and quantitation limits were qualified as estimated, J/UJ.

A3.2.1.3 Continuing Calibration (Reason Code C%D)

The continuing calibration %D was outside the ± 25% control limit for the following analyte results in the samples from the indicated locations:

- Carbon tetrachloride and 1,2,4-trichlorobenzene in 1428CAa, 1428CAc, 1428AA, 1428AA duplicate, and PP-AA

The results and quantitation limits were estimated, J/UJ.

A3.2.1.4 Laboratory Control Sample (Reason Code LCS)

Results and quantitation limits for the following analytes indicated below were estimated due to LCS recoveries below the 70% lower control limit:

- 1,2,4-trichlorobenzene in all samples
- Hexachlorobutadiene in samples from locations 1432CA-0505, 1432CA-0505 duplicate, 1432AA-0505, 1436AA-0505, 326CA-0505, 326AA-0505, 360AA-0505, 322BA-AM-0505, and 322BA-PM-0505

A3.2.2 Residential Soil Gas – TO-15

The following section discusses the results qualified based on the Tier 3 validation of Residential Soil Gas samples. The results were qualified for outliers associated with the following QC metrics: laboratory method blank, initial calibration, continuing calibration and laboratory control sample.

A3.2.2.1 Laboratory Method Blank (Reason Code LB)

The following analytes in samples from the indicated locations were estimated due to method blank contamination:

- Naphthalene and trichloroethene in PP-SW-SG
- 1,1,2,2-Tetrachlorethane in PP-E-SG
- Acetone in PP-E-SG and PP-E-SG duplicate

Where sample results were below the reporting limit but less than 5 times the blank concentration, the results were qualified as not detected, U, at the reporting limit. Where samples were above the reporting limit, but less than 5 times the blank concentration, the results were qualified as not detected, U, at the concentration found.

A3.2.2.2 Initial Calibration (Reason Code RSD)

The initial calibration exceeded the ± 25% RSD control limit for the following analyte:

- Tetrahydrofuran all samples

The results and quantitation limits were qualified as estimated, J/UJ.

A3.2.2.3 Continuing Calibration (Reason Code C%D)

The continuing calibration %D was outside the ± 25% control limit for the following analyte results in samples from the indicated locations:

- Benzene in 326SG, 356SG, 360SGa, 360-SGb and 360-SGc
- Carbon tetrachloride in PP-SW-SG

The results and quantitation limits were estimated, J/UJ.

A3.2.2.4 Laboratory Control Sample (Reason Code LCS)

Results and quantitation limits for the following analytes in samples from the indicated locations were estimated due to LCS recoveries below the 70% lower control limit:

- Trichloroethene in PP-SW-SG
- Hexachlorobutadiene in PP-E-SG, PP-E-SG duplicate, and PP-SW-SG
- Benzene in 326SG, 356SG, 360SGa, 360-SGb and 360-SGc

TABLE A3-1

Sample Delivery Group Reference - Residential Air, Phase 2 (May 2005)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
0505293R1 (Air Toxics)				
Naphthalene, EPA Method TO-13A				
	1428AA	N	1428AA-0505	Tier 3
	1428AA	FD	91AA-0505	Tier 3
	1432AA	N	1432AA-0505	Tier 3
	1436AA	N	1436AA-0505	Tier 3
	326AA	N	326AA-0505	Tier 3
	360AA	N	360AA-0505	Tier 3
	Background2	N	322BA-AM-0505	Tier 3
	Background2	N	322BA-PM-0505	Tier 3
0505295R1 (Air Toxics)				
Volatile Organics, EPA Method TO-15 (SIM)				
	1428AA	N	1428AA-0505	Tier 3
	1428AA	FD	91AA-0505	Tier 3
	1428CAa	N	1428CAa-0505	Tier 3
	1428CAc	N	1428CAc-0505	Tier 3
	1432AA	N	1432AA-0505	Tier 3
	1432CA	N	1432CA-0505	Tier 3
	1432CA	FD	91CA-0505	Tier 3
	1436AA	N	1436AA-0505	Tier 3
	326AA	N	326AA-0505	Tier 3
	326CA	N	326CA-0505	Tier 3
	360AA	N	360AA-0505	Tier 3
	Background2	N	322BA-AM-0505	Tier 3
	Background2	N	322BA-PM-0505	Tier 3
	PP-AA	N	PP-AA-0505	Tier 3

Notes:

N regular sample

FD field duplicate

TABLE A3-2
Sample Delivery Group Reference - Soil Gas Residential, Phase 2 (May 2005)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
0505294AR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	326SG	N	326SG-02-0505	Tier 3
	356SG	N	356SG-02-0505	Tier 3
	360SGa	N	360SGa-02-0505	Tier 3
	360SGb	N	360SGb-02-0505	Tier 3
	360SGc	N	360SGc-02-0505	Tier 3
0505294bR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	326SG	N	326SG-02-0505	Tier 3
	356SG	N	356SG-02-0505	Tier 3
	360SGa	N	360SGa-02-0505	Tier 3
	360SGb	N	360SGb-02-0505	Tier 3
	360SGc	N	360SGc-02-0505	Tier 3
0505294CR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15 (SIM)				
	326SG	N	326SG-02-0505	Tier 3
	356SG	N	356SG-02-0505	Tier 3
	360SGa	N	360SGa-02-0505	Tier 3
	360SGb	N	360SGb-02-0505	Tier 3
	360SGc	N	360SGc-02-0505	Tier 3
0505338DR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	PP-E	N	PP-E-SG-0505	Tier 3
	PP-E	FD	92SG-0505	Tier 3
	PP-SW	N	PP-SW-SG-0505	Tier 3
0505338eR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	PP-E	N	PP-E-SG-0505	Tier 3
	PP-E	FD	92SG-0505	Tier 3
	PP-SW	N	PP-SW-SG-0505	Tier 3
0505338fR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15 (SIM)				
	PP-E	N	PP-E-SG-0505	Tier 3
	PP-E	FD	92SG-0505	Tier 3
	PP-SW	N	PP-SW-SG-0505	Tier 3

Notes:
N regular sample
FD field duplicate

Table A3-3
Result Qualification and Associated Reason Codes - Residential Ambient and Crawlspace Air, Phase 2 (May 2005)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	322BA AM	322BA PM	1428AA	1428AA (FD)	1428CAa	1428CAc	1432AA	1432CA	1432CA (FD)	1436AA	326AA	326CA	360AA	PP-AA
		Sample Date	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/12/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**													
Volatile Organic Compounds																
1,1,1-Trichloroethane	2,300	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.033	µg/m3	0.24 UJ LB	0.22 UJ LB	*	*	0.21 UJ LB	0.21 UJ LB	0.23 UJ LB	*	0.22 UJ LB	0.22 UJ LB	0.22 UJ LB	0.21 UJ LB	*	*
1,1,2-Trichloroethane	0.12	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	210	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	3.7	µg/m3	1.3 UJ RSD, LCS	1.2 UJ RSD, LCS	1.2 UJ C%D, RSD, LCS	1.2 UJ C%D, RSD, LCS	1.2 UJ C%D, RSD, LCS	1.2 UJ C%D, RSD, LCS	1.2 UJ RSD, LCS	1.2 UJ RSD, LCS	1.2 UJ RSD, LCS	1.2 UJ RSD, LCS	1.2 UJ RSD, LCS	1.2 UJ RSD, LCS	1.1 UJ RSD, LCS	1.2 UJ C%D, RSD, LCS
1,2,4-Trimethylbenzene	6.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.0034	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	210	µg/m3	0.21 UJ RSD, LB	0.2 UJ RSD, LB	0.19 UJ RSD, LB	0.19 UJ RSD, LB	0.19 UJ RSD, LB	0.19 UJ RSD, LB	0.13 J RSD	0.11 J RSD	0.16 J RSD	0.1 J RSD	0.19 UJ RSD, LB	0.13 J RSD	0.18 UJ RSD, LB	0.19 UJ LB
1,2-Dichloroethane	0.074	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	0.099	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	6.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	110	µg/m3	*	*	0.19 UJ LB	*	0.19 UJ LB	0.19 UJ LB	*	*	*	*	*	*	*	0.19 UJ LB
1,4-Dichlorobenzene	0.31	µg/m3	0.069 J RSD	0.2 UJ RSD, LB	0.2 UJ RSD, LB	0.19 UJ RSD, LB	0.19 UJ RSD, LB	**0.4 J RSD**	0.25 J RSD	**0.32 J RSD**	0.3 J RSD	0.14 J RSD	0.077 J RSD	0.088 J RSD	0.2 J RSD	0.19 UJ RSD, LB
1,4-Dioxane (p-dioxane)	0.61	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzene	0.25	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromomethane	5.2	µg/m3	0.34 UJ LB	0.32 UJ LB	0.3 UJ LB	0.3 UJ LB	0.47 UJ LB	0.45 UJ LB	0.33 UJ LB	0.32 UJ LB	0.31 UJ LB	0.31 UJ LB	0.31 UJ LB	0.3 UJ LB	0.3 UJ LB	0.31 UJ LB
Carbon tetrachloride	0.13	µg/m3	*	*	**0.51 J C%D**	**0.54 J C%D**	**0.49 J C%D**	**0.63 J C%D**	*	*	*	*	*	*	*	**0.55 J C%D**
Chlorobenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	2.3	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	0.083	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	95	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	37	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	0.48	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	730	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	31,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 114	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	210	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.086	µg/m3	1.9 UJ LCS	1.7 UJ LCS	*	*	*	*	1.8 UJ LCS	1.7 UJ LCS	1.7 UJ LCS	1.7 UJ LCS	1.7 UJ LCS	*	1.6 UJ LCS	*
Methyl tert-butyl ether	7.4	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	4.1	µg/m3	1.2 UJ LB	1.1 UJ LB	*	*	*	*	*	*	*	*	1.1 UJ LB	1.1 UJ LB	1.1 UJ LB	1.1 UJ LB
Naphthalene	0.056	µg/m3	*	*	*	*	---	---	*	---	---	*	*	---	*	---
Styrene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	0.32	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	400	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	73	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	0.48	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	0.017	µg/m3	0.06 UJ LB	0.042 UJ LB	0.032 UJ LB	0.034 UJ LB	*	*	0.057 UJ LB	0.036 UJ LB	0.05 UJ LB	0.043 UJ LB	0.03 UJ LB	0.042 UJ LB	0.032 UJ LB	0.03 UJ LB
Vinyl chloride	0.11	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Table A3-3
Result Qualification and Associated Reason Codes - Residential Ambient and Crawlspace Air, Phase 2 (May 2005)
AMCO Chemical Superfund Site, Oakland, California

Notes:
Results greater than the screening level are bolded

*	result not qualified for Quality Control outliers
FD	field duplicate
NE	not established
µg/m3	micrograms per cubic meter
J	estimated value
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
C%D	Continuing calibration verification is outside control limit
LB	Laboratory blank concentration exceeds criteria
LCS	Laboratory Control Sample recovery is outside control limit
RSD	Initial calibration relative standard deviation exceeded

Table A3-4
Result Qualification and Associated Reason Codes - Soil Gas Residential, Phase 2 (May 2005)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	326SG	356SG	360SGa	360SGb	360SGc	PP-E	PP-E (FD)	PP-SW
		Sample Date	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/12/2005	5/13/2005	5/13/2005	5/13/2005
Analyte	Screening Level	Units	Analytical Results							
Volatile Organic Compounds										
1,1,1-Trichloroethane	23,000	µg/m3	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.33	µg/m3	*	*	*	*	*	0.18 UJ LB	*	*
1,1,2-Trichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*
1,1-Dichloroethane	12	µg/m3	*	*	*	*	*	*	*	*
1,1-Dichloroethene	2,100	µg/m3	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	37	µg/m3	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.034	µg/m3	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	2,100	µg/m3	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.74	µg/m3	*	*	*	*	*	*	*	*
1,2-Dichloropropane	0.99	µg/m3	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*
1,3-Butadiene	0.11	µg/m3	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	1,100	µg/m3	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3.1	µg/m3	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/m3	*	*	*	*	*	*	*	*
2,2,4-Trimethylpentane	NE	µg/m3	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/m3	*	*	*	*	*	*	*	*
3-Chloropropene	10	µg/m3	*	*	*	*	*	*	*	*
4-Ethyltoluene	NE	µg/m3	*	*	*	*	*	*	*	*
Acetone	33,000	µg/m3	*	*	*	*	*	13 UJ LB	9.1 UJ LB	*
Benzene	2.5	µg/m3	2.3 UJ C%D, LCS	8 UJ C%D, LCS	1.6 J C%D, LCS	2.6 UJ C%D, LCS	2.4 UJ C%D, LCS	*	*	*
Benzyl chloride	0.4	µg/m3	*	*	*	*	*	*	*	*
Bromodichloromethane	1.1	µg/m3	*	*	*	*	*	*	*	*
Bromoform	17	µg/m3	*	*	*	*	*	*	*	*
Bromomethane	52	µg/m3	*	*	*	*	*	*	*	*
Carbon disulfide	7,300	µg/m3	*	*	*	*	*	*	*	*
Carbon tetrachloride	1.3	µg/m3	*	*	*	*	*	*	*	0.38 UJ C%D
Chlorobenzene	620	µg/m3	*	*	*	*	*	*	*	*
Chloroethane	23	µg/m3	*	*	*	*	*	*	*	*
Chloroform	0.83	µg/m3	*	*	*	*	*	*	*	*
Chloromethane	950	µg/m3	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	370	µg/m3	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*
Cyclohexane	62,000	µg/m3	*	*	*	*	*	*	*	*
Dibromochloromethane	0.8	µg/m3	*	*	*	*	*	*	*	*
Ethanol	NE	µg/m3	*	*	*	*	*	*	*	*
Ethylbenzene	11,000	µg/m3	*	*	*	*	*	*	*	*
Freon 11	7,300	µg/m3	*	*	*	*	*	*	*	*
Freon 113	310,000	µg/m3	*	*	*	*	*	*	*	*
Freon 114	NE	µg/m3	*	*	*	*	*	*	*	*
Freon 12	2,100	µg/m3	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/m3	*	*	*	*	*	1.4 UJ LCS	2.4 UJ LCS	3.2 UJ LCS
Isopropanol	NE	µg/m3	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	4,000	µg/m3	*	*	*	*	*	*	*	*
Methyl ethyl ketone	51,000	µg/m3	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	31,000	µg/m3	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	74	µg/m3	*	*	*	*	*	*	*	*
Methylene chloride	41	µg/m3	*	*	*	*	*	*	*	*
Naphthalene	0.56	µg/m3	*	*	*	*	*	*	*	12 UJ LB

Table A3-4
Result Qualification and Associated Reason Codes - Soil Gas Residential, Phase 2 (May 2005)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	326SG	356SG	360SGa	360SGb	360SGc	PP-E	PP-E (FD)	PP-SW
		Sample Date	**5/12/2005**	**5/12/2005**	**5/12/2005**	**5/12/2005**	**5/12/2005**	**5/13/2005**	**5/13/2005**	**5/13/2005**
Analyte	**Screening Level**	**Units**	**Analytical Results**							
Volatile Organic Compounds										
n-Heptane	NE	µg/m3	*	*	*	*	*	*	*	*
n-Propylbenzene	1,500	µg/m3	*	*	*	*	*	*	*	*
Styrene	11,000	µg/m3	*	*	*	*	*	*	*	*
Tetrachloroethene	3.2	µg/m3	*	*	*	*	*	*	*	*
Tetrahydrofuran	9.9	µg/m3	1.5 J RSD	5 J C%D, RSD	1.6 J RSD	1.8 J RSD	1.5 J RSD	1.4 J RSD	1.4 J RSD	3.4 J RSD
Toluene	4,000	µg/m3	*	*	*	*	*	*	*	*
Total hexanes	NE	µg/m3	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	730	µg/m3	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*
Trichloroethene	0.17	µg/m3	*	*	*	*	*	*	*	0.32 UJ LB, LCS
Vinyl chloride	1.1	µg/m3	*	*	*	*	*	*	*	*
Xylenes, total	NE	µg/m3	*	*	*	*	*	*	*	*

Notes:
Results greater than the screening level are bolded
--- not analyzed
* result not qualified for Quality Control outliers
FD field duplicate
NE not established
µg/m3 micrograms per cubic meter
J estimated value
UJ not detected at or above the reporting limit; the reporting limit is an estimate.
C%D Continuing calibration verification is outside control limit
LB Laboratory blank concentration exceeds criteria
LCS Laboratory Control Sample recovery is outside control limit
RSD Initial calibration relative standard deviation exceeded

Appendix A4
Phase 2 Soil Gas Probes

APPENDIX A4

Phase 2 Soil Gas Probes

A4.1 Summary

The following sections describe the samples collected during the Phase 2 soil gas probe sampling event which occurred May 13, 2005.

Phase 2 Soil Gas Probe Sampling: Morning (AM) and evening (PM) samples were collected from twelve permanent soil probes over four-hour intervals on May 13, 2005. Certified clean 4-L Summa canisters were used to collect samples for TO-15 and TO-15 SIM analyses. Methods TO-15 and TO-15 SIM were performed on all samples. The appropriate methodology and method QC requirements were followed. For soil gas, the selected screening levels are 10 time the EPA Region 9 ambient air PRGs, based on a conservative attenuation factor.

A4.2 Data Review and Validation Findings

Twenty soil gas samples were collected using soil gas probes during May 2005. Table A4-1 presents a list of sample delivery groups, sample identifications, and validation levels for the soil gas samples. Table A4-2 presents the Tier 3 qualified results with accompanying reason code identifying the type of QC outlier. Results that are unqualified are not shown. Rejected results are shown in boxes.

The following section discusses the results qualified based on the Tier 3 validation of Phase 2 soil gas probe samples. The results were qualified for outliers associated with the following QC metrics: laboratory method blank, initial calibration, continuing calibration and laboratory control sample.

A4.2.1 Laboratory Method Blank (Reason Code LB)

The following analytes in the samples from the indicated locations and times were estimated due to method blank contamination:

- 1,1,2,2-Tetrachloroethane in RSP-03-AM, RSP-03-PM, RSP-03-PM duplicate, RSP-05-AM, RSP-06-AM, RSP-06-PM, RSP-08-AM, RSP-08-PM, RSP-09-AM, RSP-09-PM, RSP-10-AM, RSP-10-PM, RSP-12-AM, and RSP-12-PM
- Acetone in RSP-03-PM, RSP-03-PM duplicate, RSP-05-PM, RSP-06-PM, RSP-08-PM, RSP-09-PM, RSP-10-PM, RSP-11-PM, RSP-12-PM, and RSP-12-AM
- 1,2-Dibromoethane in RSP-09-AM
- Trichloroethene in RSP-03-AM, RSP-03-PM, RSP-08-PM, RSP-09-AM, RSP-09-PM, RSP-10-AM, RSP-10-PM, and RSP-11-AM
- Hexachlorobutadiene in RSP-07-PM

Where sample results were below the reporting limit but less than 5 times the blank concentration, the results were qualified as not detected, U, at the reporting limit. Where samples were above the reporting limit, but less than 5 times the blank concentration, the results were qualified as not detected, U, at the concentration found.

A4.2.2 Initial Calibration (Reason Code RSD)

The initial calibration was outside the ± 30% RSD control limit for the following analyte results in the indicated samples:

- Tetrahydrofuran in all samples

The results and quantitation limits are qualified J/UJ in all samples.

A4.2.3 Continuing Calibration (Reason Code C%D)

The continuing calibration %D was outside the ± 25% control limit for the following analyte results in the samples from the indicated locations and times:

- Benzene in RSP-03-AM, RSP-03-PM, RSP-05-AM, RSP-05-PM, RSP-06-AM, RSP-06-PM, RSP-07-AM, RSP-07-AM duplicate, RSP-07-PM, RSP-08-AM, RSP-08-PM, RSP-09-AM, RSP-09-PM, RSP-10-AM, RSP-10-PM, RSP-11-AM, RSP-11-PM, and RSP-12-AM
- Carbon tetrachloride in RSP-03-PM duplicate, RSP-05-PM, RSP-06-PM, RSP-07-PM, RSP-08-PM, andRSP-09-PM
- Tetrahydrofuran in RSP-03-AM, RSP-03-PM, RSP-05-AM, RSP-05-PM, RSP-06-AM, RSP-06-PM, RSP-07-AM, RSP-07-AM duplicate, RSP-07-PM, RSP-08-AM, RSP-08-PM, RSP-09-AM, RSP-10-AM, RSP-11-AM, and RSP-12-AM

The results and quantitation limits were qualified as estimated, J/UJ.

A4.2.4 Laboratory Control Sample (Reason Code LCS)

Results and quantitation limits for the following analytes in the samples from the indicated locations and times were estimated due to LCS recoveries below the 70% lower control limit:

- Benzene in RSP-03-AM, RSP-03-PM, RSP-05-AM, RSP-05-PM, RSP-06-AM, RSP-06-PM, RSP-07-AM, RSP-07-AM duplicate, RSP-07-PM, RSP-08-AM, RSP-08-PM, RSP-09-AM, RSP-10-AM, RSP-11-AM, and RSP-12-AM
- Hexachlorobutadiene in RSP-03-PM, RSP-05-PM, RSP-06-PM, RSP-07-PM, RSP-08-PM, RSP-03-PM duplicate, RSP-07-AM, RSP-07-AM duplicate, RSP-08-AM, RSP-09-AM, RSP-09-PM, RSP-10-AM, RSP-10-PM, RSP-11-AM, RSP-11-PM, RSP-12-AM, and RSP-12-PM
- Trichloroethene in RSP-05-PM, RSP-06-PM, RSP-08-PM, and RSP-09-PM

TABLE A4-1
Sample Delivery Group Reference - Soil Gas Probes, Phase 2 (May 2005)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
0505338AR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	RSP-03	N	RSP-03-AM-0505	Tier 3
	RSP-05	N	RSP-05-AM	Tier 3
	RSP-06	N	RSP-06-AM	Tier 3
	RSP-07	N	RSP-07-AM	Tier 3
	RSP-07	FD	RSP-91-AM-0505	Tier 3
	RSP-08	N	RSP-08-AM	Tier 3
	RSP-09	N	RSP-09-AM	Tier 3
	RSP-10	N	RSP-10-AM	Tier 3
	RSP-11	N	RSP-11-AM	Tier 3
	RSP-12	N	RSP-12-AM	Tier 3
0505338bR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	RSP-03	N	RSP-03-AM-0505	Tier 3
	RSP-05	N	RSP-05-AM	Tier 3
	RSP-06	N	RSP-06-AM	Tier 3
	RSP-07	N	RSP-07-AM	Tier 3
	RSP-07	FD	RSP-91-AM-0505	Tier 3
	RSP-08	N	RSP-08-AM	Tier 3
	RSP-09	N	RSP-09-AM	Tier 3
	RSP-10	N	RSP-10-AM	Tier 3
	RSP-11	N	RSP-11-AM	Tier 3
	RSP-12	N	RSP-12-AM	Tier 3
0505338cR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15 (SIM)				
	RSP-03	N	RSP-03-AM-0505	Tier 3
	RSP-05	N	RSP-05-AM	Tier 3
	RSP-06	N	RSP-06-AM	Tier 3
	RSP-07	N	RSP-07-AM	Tier 3
	RSP-07	FD	RSP-91-AM-0505	Tier 3
	RSP-08	N	RSP-08-AM	Tier 3
	RSP-09	N	RSP-09-AM	Tier 3
	RSP-10	N	RSP-10-AM	Tier 3
	RSP-11	N	RSP-11-AM	Tier 3
	RSP-12	N	RSP-12-AM	Tier 3
0505338DR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	RSP-03	N	RSP-03-PM-0505	Tier 3
	RSP-03	FD	RSP-91-PM-0505	Tier 3
	RSP-05	N	RSP-05-PM-0505	Tier 3
	RSP-06	N	RSP-06-PM-0505	Tier 3
	RSP-07	N	RSP-07-PM-0505	Tier 3
	RSP-08	N	RSP-08-PM-0505	Tier 3
	RSP-09	N	RSP-09-PM-0505	Tier 3
	RSP-10	N	RSP-10-PM-0505	Tier 3
	RSP-11	N	RSP-11-PM-0505	Tier 3
	RSP-12	N	RSP-12-PM-0505	Tier 3

TABLE A4-1
Sample Delivery Group Reference - Soil Gas Probes, Phase 2 (May 2005)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
0505338eR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	RSP-03	N	RSP-03-PM-0505	Tier 3
	RSP-03	FD	RSP-91-PM-0505	Tier 3
	RSP-05	N	RSP-05-PM-0505	Tier 3
	RSP-06	N	RSP-06-PM-0505	Tier 3
	RSP-07	N	RSP-07-PM-0505	Tier 3
	RSP-08	N	RSP-08-PM-0505	Tier 3
	RSP-09	N	RSP-09-PM-0505	Tier 3
	RSP-10	N	RSP-10-PM-0505	Tier 3
	RSP-11	N	RSP-11-PM-0505	Tier 3
	RSP-12	N	RSP-12-PM-0505	Tier 3
0505338fR1 (Air Toxics)				
Volatile Organics, EPA Method TO-15 (SIM)				
	RSP-03	N	RSP-03-PM-0505	Tier 3
	RSP-03	FD	RSP-91-PM-0505	Tier 3
	RSP-05	N	RSP-05-PM-0505	Tier 3
	RSP-06	N	RSP-06-PM-0505	Tier 3
	RSP-07	N	RSP-07-PM-0505	Tier 3
	RSP-08	N	RSP-08-PM-0505	Tier 3
	RSP-09	N	RSP-09-PM-0505	Tier 3
	RSP-10	N	RSP-10-PM-0505	Tier 3
	RSP-11	N	RSP-11-PM-0505	Tier 3
	RSP-12	N	RSP-12-PM-0505	Tier 3

Notes:
N regular sample
FD field duplicate

TABLE A4-2
Result Qualification and Associated Reason Codes - Soil Gas Probes, Phase 2 (May 2005)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		RSP-03	RSP-03	RSP-03	RSP-05	RSP-05	RSP-06	RSP-06	RSP-07	RSP-07	RSP-07	RSP-08	RSP-08	RSP-09	RSP-09	RSP-10	RSP-10	RSP-11
			AM	PM	PM (FD)	AM	PM	AM	PM	AM	AM (FD)	PM	AM	PM	AM	PM	AM	PM	AM
	Sample Date		5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	23,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.33	µg/m3	0.26 UJ LB	0.3 UJ LB	0.24 UJ LB	7.2 UJ LB	*	0.24 UJ LB	0.25 UJ LB	*	*	*	0.23 UJ LB	0.23 UJ LB	0.28 UJ LB	0.2 UJ LB	0.23 UJ LB	0.22 UJ LB	*
1,1,2-Trichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	12	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	37	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.034	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	0.32 UJ LB	*	*	*	*
1,2-Dichlorobenzene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.74	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	0.99	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Butadiene	0.11	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,2,4-Trimethylpentane	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3-Chloropropene	10	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Ethyltoluene	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetone	33,000	µg/m3	*	7.4 UJ LB	12 UJ LB	*	30 UJ LB	*	8.7 UJ LB	*	*	*	*	7.9 UJ LB	*	6.8 UJ LB	*	7.5 UJ LB	*
Benzene	2.5	µg/m3	2.5 UJ C%D, LCS	2.5 UJ C%D, LCS	*	10 UJ C%D, LCS	10 UJ C%D, LCS	2.4 UJ C%D, LCS	2.9 UJ C%D, LCS	47 UJ C%D, LCS	44 UJ C%D, LCS	67 UJ C%D, LCS	2.3 UJ C%D, LCS	2.6 UJ C%D, LCS	2.8 UJ C%D, LCS	2.3 UJ C%D	2.4 UJ C%D, LCS	2.5 UJ C%D	2.8 UJ C%D, LCS
Benzyl chloride	0.4	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	1.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromoform	17	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromomethane	52	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon disulfide	7,300	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	1.3	µg/m3	*	*	0.22 UJ C%D	*	9.3 UJ C%D	*	0.23 UJ C%D	*	*	5.3 UJ C%D	*	0.21 J C%D	*	0.13 J C%D	*	*	*
Chlorobenzene	620	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	23	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	0.83	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	950	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	370	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cyclohexane	62,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibromochloromethane	0.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethanol	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	7,300	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	310,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 114	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/m3	*	2.3 UJ LCS	1.9 UJ LCS	*	79 UJ LCS	*	2 UJ LCS	35 UJ LCS	52 UJ LCS	45 UJ LB, LCS	1.8 UJ LCS	1.8 UJ LCS	2.2 UJ LCS	1.5 UJ LCS	1.8 UJ LCS	1.7 UJ LCS	2.2 UJ LCS
Isopropanol	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	4,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl ethyl ketone	51,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	31,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	74	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	41	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	0.56	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A4-2

Result Qualification and Associated Reason Codes - Soil Gas Probes, Phase 2 (May 2005)

AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSP-03	RSP-03	RSP-03	RSP-05	RSP-05	RSP-06	RSP-06	RSP-07	RSP-07	RSP-07	RSP-08	RSP-08	RSP-09	RSP-09	RSP-10	RSP-10	RSP-11
			AM	PM	PM (FD)	AM	PM	AM	PM	AM	AM (FD)	PM	AM	PM	AM	PM	AM	PM	AM
		Sample Date	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005	5/13/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
n-Heptane	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
n-Propylbenzene	1,500	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Styrene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	3.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrahydrofuran	9.9	µg/m3	1.2 J C%D, RSD	0.89 J C%D, RSD	1.6 J RSD	9.3 UJ C%D, RSD	9.4 UJ C%D, RSD	2.2 UJ C%D, RSD	1.1 J C%D, RSD	43 UJ C%D, RSD	40 UJ C%D, RSD	62 UJ C%D, RSD	0.94 J C%D, RSD	1 J C%D, RSD	1 J C%D, RSD	1.5 J RSD	2.2 UJ C%D, RSD	1.2 J RSD	1.2 J C%D, RSD
Toluene	4,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total hexanes	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	730	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	0.17	µg/m3	0.2 UJ LB	0.23 UJ LB	*	*	**4,200 J LCS**	*	**120 J LCS**	*	*	*	*	0.18 UJ LB, LCS	0.22 UJ LB	0.15 UJ LB, LCS	0.18 UJ LB	0.17 UJ LB	0.24 UJ LB
Vinyl chloride	1.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A4-2
Result Qualification and Associated Reason Codes - Soil Gas Probes, Phase 2 (May 2005)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSP-11 PM	RSP-12 AM	RSP-12 PM
		Sample Date	5/13/2005	5/13/2005	5/13/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**		
Volatile Organic Compounds					
1,1,1-Trichloroethane	23,000	µg/m3	*	*	*
1,1,2,2-Tetrachloroethane	0.33	µg/m3	*	0.22 UJ LB	0.26 UJ LB
1,1,2-Trichloroethane	1.2	µg/m3	*	*	*
1,1-Dichloroethane	12	µg/m3	*	*	*
1,1-Dichloroethene	2,100	µg/m3	*	*	*
1,2,4-Trichlorobenzene	37	µg/m3	*	*	*
1,2,4-Trimethylbenzene	62	µg/m3	*	*	*
1,2-Dibromoethane	0.034	µg/m3	*	*	*
1,2-Dichlorobenzene	2,100	µg/m3	*	*	*
1,2-Dichloroethane	0.74	µg/m3	*	*	*
1,2-Dichloropropane	0.99	µg/m3	*	*	*
1,3,5-Trimethylbenzene	62	µg/m3	*	*	*
1,3-Butadiene	0.11	µg/m3	*	*	*
1,3-Dichlorobenzene	1,100	µg/m3	*	*	*
1,4-Dichlorobenzene	3.1	µg/m3	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/m3	*	*	*
2,2,4-Trimethylpentane	NE	µg/m3	*	*	*
2-Hexanone	NE	µg/m3	*	*	*
3-Chloropropene	10	µg/m3	*	*	*
4-Ethyltoluene	NE	µg/m3	*	*	*
Acetone	33,000	µg/m3	8 UJ LB	8.2 UJ LB	8.9 UJ LB
Benzene	2.5	µg/m3	2.7 UJ C%D	2.2 UJ C%D, LCS	*
Benzyl chloride	0.4	µg/m3	*	*	*
Bromodichloromethane	1.1	µg/m3	*	*	*
Bromoform	17	µg/m3	*	*	*
Bromomethane	52	µg/m3	*	*	*
Carbon disulfide	7,300	µg/m3	*	*	*
Carbon tetrachloride	1.3	µg/m3	*	*	*
Chlorobenzene	620	µg/m3	*	*	*
Chloroethane	23	µg/m3	*	*	*
Chloroform	0.83	µg/m3	*	*	*
Chloromethane	950	µg/m3	*	*	*
cis-1,2-Dichloroethene	370	µg/m3	*	*	*
cis-1,3-Dichloropropene	4.8	µg/m3	*	*	*
Cyclohexane	62,000	µg/m3	*	*	*
Dibromochloromethane	0.8	µg/m3	*	*	*
Ethanol	NE	µg/m3	*	*	*
Ethylbenzene	11,000	µg/m3	*	*	*
Freon 11	7,300	µg/m3	*	*	*
Freon 113	310,000	µg/m3	*	*	*
Freon 114	NE	µg/m3	*	*	*
Freon 12	2,100	µg/m3	*	*	*
Hexachlorobutadiene	0.86	µg/m3	1.8 UJ LCS	1.7 UJ LCS	2 UJ LCS
Isopropanol	NE	µg/m3	*	*	*
Isopropylbenzene (cumene)	4,000	µg/m3	*	*	*
Methyl ethyl ketone	51,000	µg/m3	*	*	*
Methyl isobutyl ketone	31,000	µg/m3	*	*	*
Methyl tert-butyl ether	74	µg/m3	*	*	*
Methylene chloride	41	µg/m3	*	*	*
Naphthalene	0.56	µg/m3	*	*	*

TABLE A4-2
Result Qualification and Associated Reason Codes - Soil Gas Probes, Phase 2 (May 2005)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSP-11 PM	RSP-12 AM	RSP-12 PM
		Sample Date	5/13/2005	5/13/2005	5/13/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**		
Volatile Organic Compounds					
n-Heptane	NE	µg/m3	*	*	*
n-Propylbenzene	1,500	µg/m3	*	*	*
Styrene	11,000	µg/m3	*	*	*
Tetrachloroethene	3.2	µg/m3	*	*	*
Tetrahydrofuran	9.9	µg/m3	1.2 J RSD	2 UJ C%D, RSD	1.8 J RSD
Toluene	4,000	µg/m3	*	*	*
Total hexanes	NE	µg/m3	*	*	*
trans-1,2-Dichloroethene	730	µg/m3	*	*	*
trans-1,3-Dichloropropene	4.8	µg/m3	*	*	*
Trichloroethene	0.17	µg/m3	*	*	*
Vinyl chloride	1.1	µg/m3	*	*	*
Xylenes, total	NE	µg/m3	*	*	*

Notes:
Results greater than the screening level are bolded
See Soil Gas Screening Level table for source of screening levels.

*	result not qualified for Quality Control outliers
FD	field duplicate
NE	not established
µg/m3	micrograms per cubic meter
J	estimated value
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
C%D	Continuing calibration verification is outside control limit
LB	Laboratory blank concentration exceeds criteria
LCS	Laboratory Control Sample recovery is outside control limit
RSD	Initial calibration relative standard deviation exceeded

Appendix A5
First Quarter 2005 Groundwater

APPENDIX A5

First Quarter 2005 Groundwater Sampling

A5.1 Summary

The following sections describe the sample collected during the First Quarter 2005 sampling event which occurred in March, 2005.

First Quarter 2005 Groundwater: Groundwater samples were collected March 14 through March 23, 2005, and were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs) using full scan and selected ion monitoring (SIM) techniques, pesticides and PCBs, metals and cyanides, and dissolved gases. For groundwater, the selected screening levels are based on federal and state maximum contaminant levels (MCLs) and EPA Region 9 tap water PRGs. EPA CLP special analytical services were used to include additional analytes and lower detection limits as needed.

One sample of non-aqueous phase liquid (NAPL) was collected from MW-14 on March 14, 2005 to characterize the free product. This sample was analyzed for metals and mercury, flashpoint, dioxins and furans, SVOCs, VOCs, and pesticides and PCBs. No quality control samples were associated with this sample and it was only analyzed to provide a reference point for future recommendations.

A5.2 Data Review and Validation Findings

Table A5-1 presents a list of sample delivery groups, sample identifications, and validation levels for the groundwater samples collected during this event. Table A-5-2 presents Tier 2 and Tier 3 qualified results with accompanying reason codes identifying the type of QC outlier. Results that were unqualified are not shown. Rejected results are shown in boxes. Equipment blank and trip blank qualifications are discussed in section 3 of the main DQUA and are not discussed further in this section, although the qualified results are presented on the attached tables.

The findings of the Tier 3 validation are considered representative of the quality of the entire data set. For this event, Tier 3 validation was performed on 24 of the 25 groundwater samples for VOCs, SVOCs, 3 of the 11 samples for pesticides and PCBs, and 9 of the 25 groundwater samples for total metals.

The following discussion presents the findings of the Tier 3 validation of the first quarter 2005, groundwater monitoring sample results and includes outliers associated with the following QC metrics: holding time, sample preservation, initial calibration, continuing calibration, surrogates, matrix spike and matrix spike duplicates, internal standard, and second column confirmation:

A5.2.1 Holding Time (Reason Code HT)

VOCs in Groundwater: Sample from location RMW-01-17 was collected on 3/23/2005 and analyzed on 4/6/2005, one day past holding time, due to matrix issues (the sample foamed). All results and quantitation limits for this sample were estimated and flagged J/UJ.

A5.2.2 Sample Preservation (Reason Code Pres)

Dissolved Gases in Groundwater: Sample from location BPZ-01 was not properly preserved in the field. Methane and ethane detected results were flagged as estimated, J, and the quantitation limit for the non-detected ethene is flagged as estimated, UJ.

A5.2.3 Initial Calibration (Reason Code RSD)

VOCs in Groundwater: The initial calibration exceeded the ± 30% RSD control limit for the following analytes in the samples from the indicated locations:

- 1,2-Dibromo-3-chloropropane, methyl acetate, methyl-ethyl-ketone, 2-hexanone, and methylene chloride samples BMW-01, BMW-03. BMW-06, BMW-07, BMW-08, BPZ-01, RMW-01-17, RMW-01-35, RMW-02-13, RMW-02-32, RMW-02-50, RMW-03-15, RMW-04-15, RMW-05-15, RMW-06-15, RMW-07-15, RMW-08-15, RMW-08-15 duplicate, RMW-08-35, RMW-09-15, RMW-09-35, RMW-10-15, RMW-10-15 duplicate, and RMW-10-35

Results and quantitation limits were qualified as estimated, J/UJ.

SVOCs in Groundwater: The initial calibration exceeded the ± 30% RSD control limit for the following analytes in the samples from the indicated locations:

- 3-nitroanaline in BMW-01, BMW-03, BMW-06, BMW-07, BMW-08, BPZ-01, RMW-01-17, RMW-01-35, RMW-02-13, RMW-02-32, RMW-02-50, RMW-03-15, RMW-04-15, RMW-05-15, RMW-06-15, RMW-07-15, RMW-08-15, RMW-08-15 duplicate, RMW-08-35, RMW-09-15, RMW-09-35, RMW-10-15, RMW-10-15 duplicate, and RMW-10-35

Results and quantitation limits were qualified as estimated, J/UJ.

A5.2.4 Initial Calibration Verification (Reason Code ICV)

Dissolved Gases in Groundwater: The initial calibration verification standard exceeded the upper control limit for methane in the samples from the indicated locations:

- BPZ-01, RMW-02-13, RMW-02-32, RMW-02-50, RMW-08-15, and RMW-08-15 duplicate

Detected results for methane were qualified as estimated, J.

A5.2.5 Initial Calibration (Reason Code IRRF)

VOCs in Groundwater: The RRF was below the minimum RRF of 0.05 for the following analyte in samples.

- 1,2-dibromo-3-chloropropane in BPZ-01, RMW-01-17, RMW-01-35, RMW-02-13, RMW-02-32, RMW-02-50, RMW-08-15, RMW-08-35, and RMW-08-15 duplicate

Non detected results were flagged “R” and rejected.

A5.2.6 Continuing Calibration (Reason Code C%D)

VOCs in Groundwater: The continuing calibration %D was outside the ± 30% control limit for the following compounds in the samples from the indicated locations:

- Bromomethane, methyl acetate, methyl-ethyl-ketone, methyl isobutyl ketone, 2-hexanone in BPZ-01, BMW-03, RMW-08-15, RMW-08-15 duplicate, and RMW-08-35
- Methyl-ethyl-ketone, bromomethane, and methyl-tert-butyl ether in RMW-01-35, RMW-02-13, RMW-02-32, and RMW-02-50
- Methyl-ethyl-ketone, bromomethane, isopropylbenzene, and methyl-tert-butyl ether in RMW-01-17
- Methyl-isobutyl ketone in RMW-02-32
- 1,2-Dibromo-3-chloropropane in BMW-03, BPZ-01, RMW-08-15, RMW-08-15 duplicate, RMW-08-35
- tert-Butyl alcohol in RMW-01-17, RMW-01-35, RMW-02-13, RMW-02-32, and RMW-02-50
- Acetone in RMW-09-15 and RMW-10-15 duplicate
- 2-Hexanone in BMW-01, BMW-06, BMW-07, BMW-08, RMW-03-15, RMW-04-15, RMW-05-15, RMW-06-15, RMW-07-15, RMW-09-15, RMW-09-35, RMW-10-15, RMW-10-15 duplicate, and RMW-10-35
- Methyl acetate in BMW-01, BMW-06, BMW-07, BMW-08, RMW-02-13, RMW-02-32, RMW-02-50, RMW-03-15, RMW-04-15, RMW-05-15, RMW-06-15, RMW-07-15, RMW-09-15, RMW-09-35, RMW-10-15, RMW-10-15 duplicate, and RMW-10-35

The results and quantitation limits were flagged as estimated, J/UJ.

A5.2.7 Relative Response Factor (Reason Code CRRF)

VOCs in Groundwater: The RRF for tert-butyl alcohol was below the minimum required CCV RRF of 0.01. The RRF for 1,2-dibromo-3-chloropropane was below the minimum required CCV RRF criteria of 0.05. The following quantitation limits in samples from the indicated locations were qualified as unusable and flagged R.

- 1,2-Dibromo-3-chloropropane and tert-butyl alcohol in BPZ-01, RMW-01-17, RMW-01-35, RMW-02-13, RMW-02-32, RMW-02-50, RMW-08-15, RMW-08-15 duplicate, and RMW-08-35

A5.2.8 Continuing Calibration Verification (Reason Code C%D)

SVOCs in Groundwater: The continuing calibration %D was outside the ±30% control limit for the following compounds in the samples from the indicated locations:

- Benzylbutylphthalate in RMW-02-13, RMW-02-32, and RMW-02-50
- 4,6-Dinitro-2-methylphenol BPZ-01, BMW-01, BMW-03, BMW-06, BMW-07, BMW-08, RMW-01-17, RMW-02-13, RMW-02-32, RMW-02-50, RMW-03-15, RMW-04-15, RMW-05-

15, RMW-06-15, RMW-07-15, RMW-09-15, RMW-09-35, RMW-10-15, RMW-10-15duplicate, and RMW-10-35

- di-n-Octylphthalate in RMW-02-13, RMW-02-32, and RMW-02-50
- 2,4-Dinitrophenol in BMW-01, BMW-03, BMW-06, BMW-07, BMW-08, BPZ-01, RMW-01-17, RMW-02-32, RMW-02-13, RMW-02-50-, RMW-03-15, RMW-04-15, RMW-05-15, RMW-06-15, RMW-07-15, RMW-09-15, RMW-09-35, RMW-10-15, RMW-10-15duplicate, and RMW-10-35
- Hexachlorocyclopentadiene in BPZ-01, BMW-01, BMW-06, RMW-01-35, RMW-08-15, RMW-08-15 duplicate, RMW-08-35, RMW-09-15, RMW-09-35, RMW-10-15 duplicate, and RMW-10-35
- N-Nitrosodiphenylamine in RMW-02-13, RMW-02-32, and RMW-02-50
- 3-Nitroaniline in BMW-01, BMW-03, BMW-06, BMW-07, BMW-08, RMW-01-17, RMW-02-13, RMW-02-32, RMW-02-50, RMW-03-15-, RMW-04-15, RMW-05-15, RMW-06-15, RMW-07-15, RMW-09-15, RMW-09-35, RMW-10-15, RMW-10-15duplicate, and RMW-10-35
- 2,2′-Oxybis(1-chloroporopane) in BPZ-01
- 4-Nitrophenol in RMW-03-15, RMW-04-15, RMW-05-15, RMW-06-15, and RMW-07-15
- Pentachlorophenol in all samples

All detected results are flagged as estimated, J and quantitation limits were flagged as estimated, UJ.

A5.2.9 Relative Response Factor (Reason Code CRRF)

SVOCs in Groundwater: The RRF for 2,4-dinitrophenol was below the minimum RRF requirement of 0.05. The quantitation limits for 2,4-dinitrophenol in the following samples from the indicated locations are rejected, R:

- BPZ-01, RMW-01-17, RMW-02-13, RMW-02-32, RMW-02-50

A5.2.10 Surrogates (Reason Code Sur)

SVOCs in Groundwater: The following samples had surrogate recoveries that exceeded the control limits. A total of 568 quantitation limits for analytes associated with the non-compliant surrogate recoveries were flagged as "UJ" in the samples from the indicated locations:

- BMW-03, BMW-07, BMW-08, RMW-01-17, RMW-02-32, RMW-02-50, RMW-10-15, RMW-10-15duplicate, and RMW-10-35

Dissolved Gases in Groundwater: The acetylene surrogate was above the upper control limit in the sample from location BPZ-01. The methane result was flagged as J.

A5.2.11 Matrix Spike Matrix Spike Duplicates (Reason Codes MS and SD)

VOCs in Groundwater: The MS/MSD was analyzed on the sample from location RMW-09-15. The benzene and trichloroethene recovery in the MSD was above the upper control limit. The parent sample detected result was qualified as estimated, J.

SVOCs in Groundwater: The MS/MSD was analyzed on the sample from location RMW-06-15. The 4-nitrophenol recovery in the MS was below the 10% LCL. The parent sample quantitation limit was qualified as estimated, UJ.

There was no recovery for the sample from location MW-12 in the MS or MSD for 4-chloroaniline or 3,3′-dichlorobenzidine. The parent sample quantitation limits were qualified as rejected, R for these analytes.

A5.2.12 Internal Standard (Reason Code IS)

VOCs in Groundwater: The internal standard recovery for 1,4-difluorobenzene was below the lower control limit (50% of the response in the daily calibration standard) in the sample from location RMW-08-15 duplicate. The internal standard recovery for bromochloromethane was below the lower control limit (50% of the response in the daily calibration standard) in the sample from location RMW-10-15 duplicate. All results and quantitation limits for analytes associated with these internal standards were flagged as estimated J/UJ.

A5.2.13 Second Column Confirmation (Reason Code CF)

Organochlorine Pesticides/PCBs in Groundwater: Target compound concentrations with a relative percent difference between the primary and secondary column of greater than 25% were qualified as estimated and flagged "J" for the following compounds in the samples from the indicated locations:

- 4,4′-DDT, alpha-chlordane, endosulfan sulfate, endrin ketone, gamma-chlordane, heptachlor, and heptachlor epoxide in RMW-03-15
- 4,4′-DDE, 4,4′-DDD, 4,4′-DDT, dieldrin, heptachlor epoxide, and endosulfan sulfate in RMW-06-15-0305
- 4,4′-DDE, and endosulfan sulfate in RMW-07-15

TABLE A5-1
Sample Delivery Group Reference - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
0505002 (DAT)				
Dioxins and Furans, EPA Method SW8290				
	RMW-02-13	N	RMW-02-13-0305	Tier 2
	RMW-07-15	N	RMW-07-15-0305	Tier 2
05075B (EPA Region 9)				
Anions, EPA Method 300.0				
	BMW-01	N	BMW-01-0305	Tier 2
	BMW-03	N	BMW-03-0305	Tier 2
	BMW-06	N	BMW-06-0305	Tier 2
	BMW-07	N	BMW-07-0305	Tier 2
	BMW-08	N	BMW-08-0305	Tier 2
	RMW-01-17	N	RMW-01-17-0305	Tier 2
	RMW-01-35	N	RMW-01-35-0305	Tier 2
	RMW-03-15	N	RMW-03-15-0305	Tier 2
	RMW-04-15	N	RMW-04-15-0305	Tier 2
	RMW-05-15	N	RMW-05-15-0305	Tier 2
	RMW-06-15	N	RMW-06-15-0305	Tier 2
	RMW-07-15	N	RMW-07-15-0305	Tier 2
	RMW-09-15	N	RMW-09-15-0305	Tier 2
	RMW-09-35	N	RMW-09-35-0305	Tier 2
	RMW-10-15	N	RMW-10-15-0305	Tier 2
	RMW-10-15	FD	MW-92-0305	Tier 2
	RMW-10-35	N	RMW-10-35-0305	Tier 2
Dissolved Gases, EPA Method RSK-175				
	BMW-01	N	BMW-01-0305	Tier 2
	BMW-03	N	BMW-03-0305	Tier 2
	BMW-06	N	BMW-06-0305	Tier 2
	BMW-07	N	BMW-07-0305	Tier 2
	BMW-08	N	BMW-08-0305	Tier 2
	RMW-01-17	N	RMW-01-17-0305	Tier 2
	RMW-01-35	N	RMW-01-35-0305	Tier 2
	RMW-03-15	N	RMW-03-15-0305	Tier 2
	RMW-04-15	N	RMW-04-15-0305	Tier 2
	RMW-05-15	N	RMW-05-15-0305	Tier 2
	RMW-06-15	N	RMW-06-15-0305	Tier 2
	RMW-07-15	N	RMW-07-15-0305	Tier 2
	RMW-09-15	N	RMW-09-15-0305	Tier 2
	RMW-09-35	N	RMW-09-35-0305	Tier 2
	RMW-10-15	N	RMW-10-15-0305	Tier 2
	RMW-10-15	FD	MW-92-0305	Tier 2
	RMW-10-35	N	RMW-10-35-0305	Tier 2
Hexavalent Chromium, EPA Method 218.6				
	RMW-01-17	N	RMW-01-17-0305	Tier 2
	RMW-01-35	N	RMW-01-35-0305	Tier 2
	RMW-03-15	N	RMW-03-15-0305	Tier 2
	RMW-06-15	N	RMW-06-15-0305	Tier 2
	RMW-07-15	N	RMW-07-15-0305	Tier 2

TABLE A5-1
Sample Delivery Group Reference - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
05075B (EPA Region 9)				
Total Dissolved Solids, EPA Method 160.1 (Filtered)				
	RMW-01-17	N	RMW-01-17-0305	Tier 2
	RMW-03-15	N	RMW-03-15-0305	Tier 2
	RMW-06-15	N	RMW-06-15-0305	Tier 2
	RMW-10-15	N	RMW-10-15-0305	Tier 2
	RMW-10-15	FD	MW-92-0305	Tier 2
Total Organic Carbon, EPA Method 415.1				
	RMW-01-17	N	RMW-01-17-0305	Tier 2
	RMW-03-15	N	RMW-03-15-0305	Tier 2
	RMW-06-15	N	RMW-06-15-0305	Tier 2
	RMW-10-15	N	RMW-10-15-0305	Tier 2
	RMW-10-15	FD	MW-92-0305	Tier 2
05083A (EPA Region 9)				
Anions, EPA Method 300.0				
	BPZ-01	N	BPZ-01-0305	Tier 2
	RMW-02-13	N	RMW-02-13-0305	Tier 2
	RMW-02-32	N	RMW-02-32-0305	Tier 2
	RMW-02-50	N	RMW-02-50-0305	Tier 2
	RMW-08-15	N	RMW-08-15-0305	Tier 2
	RMW-08-15	FD	MW-91-0305	Tier 2
	RMW-08-35	N	RMW-08-35-0305	Tier 2
Dissolved Gases, EPA Method RSK-175				
	BPZ-01	N	BPZ-01-0305	Tier 3
	RMW-02-13	N	RMW-02-13-0305	Tier 3
	RMW-02-32	N	RMW-02-32-0305	Tier 3
	RMW-02-50	N	RMW-02-50-0305	Tier 3
	RMW-08-15	N	RMW-08-15-0305	Tier 3
	RMW-08-15	FD	MW-91-0305	Tier 3
	RMW-08-35	N	RMW-08-35-0305	Tier 3
Hexavalent Chromium, EPA Method 218.6				
	RMW-02-13	N	RMW-02-13-0305	Tier 2
	RMW-02-32	N	RMW-02-32-0305	Tier 2
	RMW-08-15	N	RMW-08-15-0305	Tier 2
	RMW-08-15	FD	MW-91-0305	Tier 2
	RMW-08-35	N	RMW-08-35-0305	Tier 2
05112A (EPA Region 9)				
Anions, EPA Method 300.0				
	MW-12	N	MW-12-0305	Tier 2
Dissolved Gases, EPA Method RSK-175				
	MW-12	N	MW-12-0305	Tier 2
Mercury, Method N6000				
	MW-12	N	MW-12-0305	Tier 2
Mercury, Method N6000 (Filtered)				
	MW-12	N	MW-12-0305	Tier 2
Metals, EPA Method 200.7				
	MW-12	N	MW-12-0305	Tier 2
Metals, EPA Method 200.7 (Filtered)				
	MW-12	N	MW-12-0305	Tier 2
Metals, EPA Method 200.8				
	MW-12	N	MW-12-0305	Tier 2

TABLE A5-1
Sample Delivery Group Reference - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
05112A (EPA Region 9)				
Metals, EPA Method 200.8 (Filtered)				
	MW-12	N	MW-12-0305	Tier 2
Organochlorine Pesticides/PCBs, EPA Method 8081A				
	MW-12	N	MW-12-0305	Tier 2
Semivolatile Organics/1,4-Dioxane, EPA Method 8270C				
	MW-12	N	MW-12-0305	Tier 2
Volatile Organics, EPA Method 524.2				
	MW-12	N	MW-12-0305	Tier 2
MY1RY2 (Ceimic)				
Inorganics, CLP-SOW				
	BMW-01	N	BMW-01-0305	Tier 2
	BMW-03	N	BMW-03-0305	Tier 2
	BMW-06	N	BMW-06-0305	Tier 2
	BMW-07	N	BMW-07-0305	Tier 2
	BMW-08	N	BMW-08-0305	Tier 2
	RMW-03-15	N	RMW-03-15-0305	Tier 2
	RMW-04-15	N	RMW-04-15-0305	Tier 2
	RMW-05-15	N	RMW-05-15-0305	Tier 2
	RMW-06-15	N	RMW-06-15-0305	Tier 2
	RMW-07-15	N	RMW-07-15-0305	Tier 2
	RMW-09-15	N	RMW-09-15-0305	Tier 2
	RMW-09-35	N	RMW-09-35-0305	Tier 2
	RMW-10-15	N	RMW-10-15-0305	Tier 2
	RMW-10-15	FD	MW-92-0305	Tier 2
	RMW-10-35	N	RMW-10-35-0305	Tier 2
MY1RY5 (Ceimic)				
Inorganics, CLP-SOW				
	BMW-01	N	BMW-01-0305	Tier 2
	BMW-03	N	BMW-03-0305	Tier 2
	BMW-06	N	BMW-06-0305	Tier 2
	BMW-07	N	BMW-07-0305	Tier 2
	BMW-08	N	BMW-08-0305	Tier 2
	RMW-03-15	N	RMW-03-15-0305	Tier 2
	RMW-04-15	N	RMW-04-15-0305	Tier 2
	RMW-05-15	N	RMW-05-15-0305	Tier 2
	RMW-06-15	N	RMW-06-15-0305	Tier 2
	RMW-07-15	N	RMW-07-15-0305	Tier 2
	RMW-09-15	N	RMW-09-15-0305	Tier 2
	RMW-09-35	N	RMW-09-35-0305	Tier 2
	RMW-10-15	N	RMW-10-15-0305	Tier 2
	RMW-10-15	FD	MW-92-0305	Tier 2
	RMW-10-35	N	RMW-10-35-0305	Tier 2

TABLE A5-1
Sample Delivery Group Reference - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY1RY7 (Ceimic)				
Inorganics, CLP-SOW				
	BPZ-01	N	BPZ-01-0305	Tier 3
	RMW-01-17	N	RMW-01-17-0305	Tier 3
	RMW-01-35	N	RMW-01-35-0305	Tier 3
	RMW-02-13	N	RMW-02-13-0305	Tier 3
	RMW-02-32	N	RMW-02-32-0305	Tier 3
	RMW-02-50	N	RMW-02-50-0305	Tier 3
	RMW-08-15	N	RMW-08-15-0305	Tier 3
	RMW-08-15	FD	MW-91-0305	Tier 3
	RMW-08-35	N	RMW-08-35-0305	Tier 3
MY1RZ2 (Ceimic)				
Inorganics, CLP-SOW				
	BPZ-01	N	BPZ-01-0305	Tier 2
	RMW-01-17	N	RMW-01-17-0305	Tier 2
	RMW-01-35	N	RMW-01-35-0305	Tier 2
	RMW-02-13	N	RMW-02-13-0305	Tier 2
	RMW-02-32	N	RMW-02-32-0305	Tier 2
	RMW-02-50	N	RMW-02-50-0305	Tier 2
	RMW-08-15	N	RMW-08-15-0305	Tier 2
	RMW-08-15	FD	MW-91-0305	Tier 2
	RMW-08-35	N	RMW-08-35-0305	Tier 2
MY1TE9 (Ceimic)				
Inorganics, CLP-SOW (Filtered)				
	BMW-01	N	BMW-01-0305	Tier 2
	BMW-03	N	BMW-03-0305	Tier 2
	BMW-06	N	BMW-06-0305	Tier 2
	BMW-07	N	BMW-07-0305	Tier 2
	BMW-08	N	BMW-08-0305	Tier 2
	RMW-03-15	N	RMW-03-15-0305	Tier 2
	RMW-04-15	N	RMW-04-15-0305	Tier 2
	RMW-05-15	N	RMW-05-15-0305	Tier 2
	RMW-06-15	N	RMW-06-15-0305	Tier 2
	RMW-07-15	N	RMW-07-15-0305	Tier 2
	RMW-09-15	N	RMW-09-15-0305	Tier 2
	RMW-09-35	N	RMW-09-35-0305	Tier 2
	RMW-10-15	N	RMW-10-15-0305	Tier 2
	RMW-10-15	FD	MW-92-0305	Tier 2
	RMW-10-35	N	RMW-10-35-0305	Tier 2

TABLE A5-1
Sample Delivery Group Reference - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY1TF0 (Ceimic)				
Inorganics, CLP-SOW (Filtered)				
	BMW-01	N	BMW-01-0305	Tier 2
	BMW-03	N	BMW-03-0305	Tier 2
	BMW-06	N	BMW-06-0305	Tier 2
	BMW-07	N	BMW-07-0305	Tier 2
	BMW-08	N	BMW-08-0305	Tier 2
	RMW-03-15	N	RMW-03-15-0305	Tier 2
	RMW-04-15	N	RMW-04-15-0305	Tier 2
	RMW-05-15	N	RMW-05-15-0305	Tier 2
	RMW-06-15	N	RMW-06-15-0305	Tier 2
	RMW-07-15	N	RMW-07-15-0305	Tier 2
	RMW-09-15	N	RMW-09-15-0305	Tier 2
	RMW-09-35	N	RMW-09-35-0305	Tier 2
	RMW-10-15	N	RMW-10-15-0305	Tier 2
	RMW-10-15	FD	MW-92-0305	Tier 2
	RMW-10-35	N	RMW-10-35-0305	Tier 2
MY1TG4 (Ceimic)				
Inorganics, CLP-SOW (Filtered)				
	RMW-01-17	N	RMW-01-17-0305	Tier 2
	RMW-01-35	N	RMW-01-35-0305	Tier 2
	RMW-02-13	N	RMW-02-13-0305	Tier 2
	RMW-02-32	N	RMW-02-32-0305	Tier 2
	RMW-02-50	N	RMW-02-50-0305	Tier 2
	RMW-08-15	N	RMW-08-15-0305	Tier 2
	RMW-08-15	FD	MW-91-0305	Tier 2
	RMW-08-35	N	RMW-08-35-0305	Tier 2
MY1TG5 (Ceimic)				
Inorganics, CLP-SOW (Filtered)				
	RMW-01-17	N	RMW-01-17-0305	Tier 2
	RMW-01-35	N	RMW-01-35-0305	Tier 2
	RMW-02-13	N	RMW-02-13-0305	Tier 2
	RMW-02-32	N	RMW-02-32-0305	Tier 2
	RMW-02-50	N	RMW-02-50-0305	Tier 2
	RMW-08-15	N	RMW-08-15-0305	Tier 2
	RMW-08-15	FD	MW-91-0305	Tier 2
	RMW-08-35	N	RMW-08-35-0305	Tier 2
Y1RY2 (Data Chem)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	RMW-03-15	N	RMW-03-15-0305	Tier 3
	RMW-06-15	N	RMW-06-15-0305	Tier 3
	RMW-07-15	N	RMW-07-15-0305	Tier 3

TABLE A5-1
Sample Delivery Group Reference - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y1RY2 (Data Chem)				
Semivolatile Organics, CLP-SOW				
	BMW-01	N	BMW-01-0305	Tier 3
	BMW-03	N	BMW-03-0305	Tier 3
	BMW-06	N	BMW-06-0305	Tier 3
	BMW-07	N	BMW-07-0305	Tier 3
	BMW-08	N	BMW-08-0305	Tier 3
	RMW-03-15	N	RMW-03-15-0305	Tier 3
	RMW-04-15	N	RMW-04-15-0305	Tier 3
	RMW-05-15	N	RMW-05-15-0305	Tier 3
	RMW-06-15	N	RMW-06-15-0305	Tier 3
	RMW-07-15	N	RMW-07-15-0305	Tier 3
	RMW-09-15	N	RMW-09-15-0305	Tier 3
	RMW-09-35	N	RMW-09-35-0305	Tier 3
	RMW-10-15	N	RMW-10-15-0305	Tier 3
	RMW-10-15	FD	MW-92-0305	Tier 3
	RMW-10-35	N	RMW-10-35-0305	Tier 3
Volatile Organics, CLP-SOW				
	BMW-01	N	BMW-01-0305	Tier 2
	BMW-03	N	BMW-03-0305	Tier 2
	BMW-06	N	BMW-06-0305	Tier 2
	BMW-07	N	BMW-07-0305	Tier 2
	BMW-08	N	BMW-08-0305	Tier 2
	RMW-03-15	N	RMW-03-15-0305	Tier 2
	RMW-04-15	N	RMW-04-15-0305	Tier 2
	RMW-05-15	N	RMW-05-15-0305	Tier 2
	RMW-06-15	N	RMW-06-15-0305	Tier 2
	RMW-07-15	N	RMW-07-15-0305	Tier 2
	RMW-09-15	N	RMW-09-15-0305	Tier 2
	RMW-09-35	N	RMW-09-35-0305	Tier 2
	RMW-10-15	N	RMW-10-15-0305	Tier 2
	RMW-10-15	FD	MW-92-0305	Tier 2
	RMW-10-35	N	RMW-10-35-0305	Tier 2
Y1RY5 (Envirosystems)				
Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW				
	BMW-01	N	BMW-01-0305	Tier 2
	BMW-03	N	BMW-03-0305	Tier 2
	BMW-06	N	BMW-06-0305	Tier 2
	BMW-07	N	BMW-07-0305	Tier 2
	BMW-08	N	BMW-08-0305	Tier 2
	RMW-03-15	N	RMW-03-15-0305	Tier 2
	RMW-04-15	N	RMW-04-15-0305	Tier 2
	RMW-05-15	N	RMW-05-15-0305	Tier 2
	RMW-06-15	N	RMW-06-15-0305	Tier 2
	RMW-07-15	N	RMW-07-15-0305	Tier 2
	RMW-09-15	N	RMW-09-15-0305	Tier 2
	RMW-09-35	N	RMW-09-35-0305	Tier 2
	RMW-10-15	N	RMW-10-15-0305	Tier 2
	RMW-10-15	FD	MW-92-0305	Tier 2
	RMW-10-35	N	RMW-10-35-0305	Tier 2

TABLE A5-1
Sample Delivery Group Reference - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y1RZ2 (Data Chem)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	RMW-01-17	N	RMW-01-17-0305	Tier 2
	RMW-01-35	N	RMW-01-35-0305	Tier 2
	RMW-02-13	N	RMW-02-13-0305	Tier 2
	RMW-02-32	N	RMW-02-32-0305	Tier 2
	RMW-08-15	N	RMW-08-15-0305	Tier 2
	RMW-08-15	FD	MW-91-0305	Tier 2
	RMW-08-35	N	RMW-08-35-0305	Tier 2
Y1S16 (Envirosystems)				
Semivolatile Organics, CLP-SOW				
	BPZ-01	N	BPZ-01-0305	Tier 3
	RMW-01-17	N	RMW-01-17-0305	Tier 3
	RMW-01-35	N	RMW-01-35-0305	Tier 3
	RMW-02-13	N	RMW-02-13-0305	Tier 3
	RMW-02-32	N	RMW-02-32-0305	Tier 3
	RMW-02-50	N	RMW-02-50-0305	Tier 3
	RMW-08-15	N	RMW-08-15-0305	Tier 3
	RMW-08-15	FD	MW-91-0305	Tier 3
	RMW-08-35	N	RMW-08-35-0305	Tier 3
Volatile Organics, CLP-SOW				
	BPZ-01	N	BPZ-01-0305	Tier 3
	RMW-01-17	N	RMW-01-17-0305	Tier 3
	RMW-01-35	N	RMW-01-35-0305	Tier 3
	RMW-02-13	N	RMW-02-13-0305	Tier 3
	RMW-02-32	N	RMW-02-32-0305	Tier 3
	RMW-02-50	N	RMW-02-50-0305	Tier 3
	RMW-08-15	N	RMW-08-15-0305	Tier 3
	RMW-08-15	FD	MW-91-0305	Tier 3
	RMW-08-35	N	RMW-08-35-0305	Tier 3
Y1S17 (Envirosystems)				
Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW				
	BPZ-01	N	BPZ-01-0305	Tier 2
	RMW-01-17	N	RMW-01-17-0305	Tier 2
	RMW-01-35	N	RMW-01-35-0305	Tier 2
	RMW-02-13	N	RMW-02-13-0305	Tier 2
	RMW-02-32	N	RMW-02-32-0305	Tier 2
	RMW-02-50	N	RMW-02-50-0305	Tier 2
	RMW-08-15	N	RMW-08-15-0305	Tier 2
	RMW-08-15	FD	MW-91-0305	Tier 2
	RMW-08-35	N	RMW-08-35-0305	Tier 2

Notes:
N regular sample
FD field duplicate

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12*	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	3/17/2005	3/18/2005	3/17/2005	3/17/2005	3/17/2005	3/23/2005	4/21/2005	3/22/2005	3/22/2005	3/23/2005	3/23/2005	3/23/2005	3/15/2005	3/16/2005	3/16/2005	3/15/2005	3/15/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1,2-Tetrachloroethane	0.43	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
1,1,1-Trichloroethane	200	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	5	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	5	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
1,1-Dichloropropene	NE	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
1,2,3-Trichlorobenzene	NE	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
1,2,3-Trichloropropane	0.0056	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
1,2,4-Trichlorobenzene	5	µg/L	*	*	*	*	*	*	---	10 UJ HT	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	12	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
1,2-Dibromo-3-chloropropane	0.2	µg/L	0.5 UJ RSD	0.5 UJ C%D, RSD	0.5 UJ RSD	0.5 UJ RSD	0.5 UJ RSD	**0.5 R C%D, RSD, IRRF, CRRF**	*	**10 R CRRF, HT, IRRF, RSD**	**5 R CRRF, RSD, IRRF**	**100 R CRRF, RSD, IRRF**	**100 R CRRF, RSD, IRRF**	**0.5 R CRRF, RSD, IRRF**	0.5 UJ RSD	0.5 UJ RSD	0.5 UJ RSD	0.5 UJ RSD	0.5 UJ RSD
1,2-Dibromoethane	0.05	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	600	µg/L	*	*	*	*	*	*	---	38 J HT	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.5	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	5	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	12	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	180	µg/L	*	*	*	*	*	*	---	10 UJ HT	*	*	*	*	*	*	*	*	*
1,3-Dichloropropane	120	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	5	µg/L	*	*	*	*	*	*	---	10 UJ HT	*	*	*	*	*	*	*	*	*
2,2-Dichloropropane	NE	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
2-Chlorotoluene	120	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
2-Hexanone	NE	µg/L	10 UJ C%D, RSD	10 UJ C%D, RSD	10 UJ C%D, RSD	10 UJ C%D, RSD	10 UJ C%D, RSD	4 UJ C%D, RSD	---	80 UJ HT, RSD	40 UJ RSD	400 UJ RSD	400 UJ RSD	4 UJ RSD	10 UJ C%D, RSD	10 UJ C%D, RSD	10 UJ C%D, RSD	10 UJ C%D, RSD	10 UJ C%D, RSD
4-Chlorotoluene	NE	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
Acetone	5,500	µg/L	*	*	*	*	*	*	720 J C%D	80 UJ HT	*	*	*	*	*	*	*	*	*
Benzene	1	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Bromobenzene	20	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
Bromochloromethane	NE	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
Bromodichloromethane	100	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Bromoform	100	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Bromomethane	8.7	µg/L	*	0.5 UJ C%D	*	*	*	0.5 UJ C%D	*	10 UJ C%D, HT	5 UJ C%D	400 UJ C%D	400 UJ C%D	0.5 UJ C%D	*	*	*	*	*
Carbon disulfide	1,000	µg/L	*	*	*	*	*	0.6 U TB	---	10 UJ HT	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	0.5	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Chlorobenzene	70	µg/L	*	*	*	*	*	*	*	**530 J HT**	*	*	*	*	*	*	*	*	*
Chloroethane	4.6	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Chloroform	100	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Chloromethane	160	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Cyclohexane	10,000	µg/L	*	*	*	*	*	*	---	10 UJ HT	*	*	*	*	*	*	*	*	*
Dibromochloromethane	100	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Dibromomethane	61	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
Ethyl tert-butyl ether	NE	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Ethylbenzene	700	µg/L	*	*	*	*	*	*	*	38 J HT	*	*	*	*	*	*	*	*	*
Freon 11	150	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Freon 113	1,200	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Freon 12	390	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	660	µg/L	*	*	*	*	*	*	*	14 J C%D, HT	*	*	*	*	*	*	*	*	*

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12*	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	3/17/2005	3/18/2005	3/17/2005	3/17/2005	3/17/2005	3/23/2005	4/21/2005	3/22/2005	3/22/2005	3/23/2005	3/23/2005	3/23/2005	3/15/2005	3/16/2005	3/16/2005	3/15/2005	3/15/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
Methyl acetate	6,100	µg/L	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	---	10 UJ HT, RSD	5 UJ RSD	400 UJ RSD	400 UJ RSD	0.5 UJ RSD	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD
Methyl ethyl ketone	7,000	µg/L	10 UJ RSD	10 UJ C%D, RSD	10 UJ RSD	10 UJ RSD	10 UJ RSD	4 UJ C%D, RSD	*	80 UJ C%D, HT, RSD	40 UJ C%D, RSD	2,900 J C%D, RSD	1,800 J C%D, RSD	4 UJ C%D, RSD	10 UJ RSD	10 UJ RSD	10 UJ RSD	10 UJ RSD	10 UJ RSD
Methyl isobutyl ketone	2,000	µg/L	*	10 UJ C%D	*	*	*	4 UJ C%D	---	80 UJ HT	*	*	**14,000 J C%D**	*	*	*	*	*	*
Methyl tert-butyl ether	13	µg/L	*	*	*	*	*	*	*	10 UJ C%D, HT	**17 J C%D**	400 UJ C%D	400 UJ C%D	0.5 UJ C%D	*	*	*	*	*
Methylcyclohexane	NE	µg/L	*	*	*	*	*	*	---	10 UJ HT	*	*	*	*	*	*	*	*	*
Methylene chloride	5	µg/L	0.9 J RSD	0.5 UJ RSD	0.7 UJ RSD, LB	0.5 UJ RSD	0.5 UJ RSD	0.5 UJ RSD	*	10 UJ HT, RSD	**6 J RSD**	**110 J RSD**	**180 J RSD**	0.5 UJ RSD	0.5 UJ RSD	1 UJ RSD, LB	0.6 UJ RSD, LB	0.8 UJ RSD, LB	0.5 UJ RSD, LB
Naphthalene	0.093	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
n-Butylbenzene	240	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
n-Propylbenzene	240	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
p-Cymene (p-isopropyltoluene)	NE	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
sec-Butylbenzene	240	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
Styrene	100	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
tert-Amyl methyl ether	NE	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
tert-Butyl alcohol	NE	µg/L	50 R CRRF	50 R CRRF	50 R CRRF	50 R CRRF	50 R CRRF	50 R CRRF	*	1,000 R C%D, CRRF, HT	50 R C%D, CRRF	10,000 R C%D, CRRF	10,000 R C%D, CRRF	50 R C%D, CRRF	50 R CRRF	50 R CRRF	50 R CRRF	50 R CRRF	50 R CRRF
tert-Butylbenzene	240	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	5	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Toluene	150	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	10	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Trichloroethene	5	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Vinyl chloride	0.5	µg/L	*	*	*	*	*	*	*	10 UJ HT	*	*	*	*	*	*	*	*	*
Xylenes, total	1,750	µg/L	*	*	*	*	*	*	*	35 J HT	*	*	*	*	*	*	*	*	*
Semivolatile Organic Compounds																			
1,1'-Biphenyl	300	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	---	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
1,2,4-Trichlorobenzene	5	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	600	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	180	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	5	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
1,4-Dioxane (p-dioxane)	6.1	µg/L	*	*	*	*	*	*	**30 J MS**	5 U EB	*	*	*	5 U EB	*	*	*	*	*
2,2'-Oxybis(1-Chloropropane)	NE	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	20 UJ C%D	---	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
2,4,5-Trichlorophenol	3,600	µg/L	*	25 UJ Sur	*	25 UJ Sur	25 UJ Sur	*	*	25 UJ Sur	*	*	25 UJ Sur	25 UJ Sur	*	*	*	*	*
2,4,6-Trichlorophenol	0.96	µg/L	*	*	*	*	*	0.1 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	110	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
2,4-Dimethylphenol	730	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
2,4-Dinitrophenol	73	µg/L	25 UJ C%D	25 UJ C%D, Sur	25 UJ C%D	25 UJ C%D, Sur	25 UJ C%D, Sur	50 R C%D, CRRF	5 UJ C%D	25 R C%D, CRRF, Sur	*	**250 R C%D, CRRF**	25 R C%D, CRRF, Sur	25 R C%D, CRRF, Sur	25 UJ C%D	25 UJ C%D	25 UJ C%D	25 UJ C%D	25 UJ C%D
2,4-Dinitrotoluene	73	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	1 UJ LCS, SD	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
2,6-Dinitrotoluene	36	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
2-Chloronaphthalene	490	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
2-Chlorophenol	30	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	5 UJ Sur	3 J Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
2-Methylnaphthalene	NE	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*	*	1 J Sur	*	*	*	*	*
2-Methylphenol	1,800	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	540 J SD	10 UJ Sur	*	*	*	10 UJ Sur	*	*	*	*	*
2-Nitroaniline	110	µg/L	*	*	*	*	*	0.1 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
3,3'-Dichlorobenzidine	0.15	µg/L	*	*	*	*	*	0.1 UJ Sur	**5 R MS, SD**	*	*	*	*	*	*	*	*	*	*
3,4-methylphenol	NE	µg/L	---	---	---	---	---	---	840 J MS, SD	---	---	---	---	---	---	---	---	---	---
3-Nitroaniline	NE	µg/L	25 UJ C%D, RSD	25 UJ C%D, RSD, Sur	25 UJ C%D, RSD	25 UJ C%D, RSD, Sur	25 UJ C%D, RSD, Sur	50 UJ RSD	5 UJ SD	25 UJ C%D, RSD, Sur	25 UJ RSD	250 UJ C%D, RSD	25 UJ C%D, RSD, Sur	25 UJ C%D, RSD, Sur	25 UJ C%D, RSD	25 UJ C%D, RSD	25 UJ C%D, RSD	25 UJ C%D, RSD	25 UJ C%D, RSD
4,6-Dinitro-2-methylphenol	NE	µg/L	25 UJ C%D	25 UJ C%D, Sur	25 UJ C%D	25 UJ C%D, Sur	25 UJ C%D, Sur	50 UJ C%D	5 UJ C%D	25 UJ C%D, Sur	*	250 UJ C%D	25 UJ C%D, Sur	25 UJ C%D, Sur	25 UJ C%D	25 UJ C%D	25 UJ C%D	25 UJ C%D	25 UJ C%D

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12*	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	3/17/2005	3/18/2005	3/17/2005	3/17/2005	3/17/2005	3/23/2005	4/21/2005	3/22/2005	3/22/2005	3/23/2005	3/23/2005	3/23/2005	3/15/2005	3/16/2005	3/16/2005	3/15/2005	3/15/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
4-Bromophenylphenyl ether	NE	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
4-Chloro-3-methylphenol	NE	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	58 J MS, SD	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
4-Chloroaniline	150	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	5 R ICV, MS, SD	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
4-Methylphenol	180	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	---	10 UJ Sur	*	*	*	10 UJ Sur	*	*	*	*	*
4-Nitroaniline	NE	µg/L	*	25 UJ Sur	*	25 UJ Sur	25 UJ Sur	*	*	25 UJ Sur	*	*	25 UJ Sur	25 UJ Sur	*	*	*	*	*
4-Nitrophenol	NE	µg/L	*	25 UJ Sur	*	25 UJ Sur	25 UJ Sur	*	5 UJ MS, SD	25 UJ Sur	*	*	25 UJ Sur	25 UJ Sur	25 UJ C%D	25 UJ C%D	25 UJ C%D	25 UJ C%D, MS	25 UJ C%D
Acenaphthene	370	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	1 UJ SD	2 J Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Acenaphthylene	NE	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Acetophenone	NE	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	---	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Anthracene	1,800	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Atrazine	3	µg/L	*	*	*	*	*	0.1 UJ Sur	---	*	*	*	*	*	*	*	*	*	*
Benzaldehyde	3,600	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	---	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Benzo(a)anthracene	0.092	µg/L	0.04 U LB	*	0.04 U LB	*	*	0.01 UJ Sur	*	*	*	*	*	*	0.04 U LB	0.04 U EB, LB	0.04 U EB, LB	0.04 U LB	0.04 U LB
Benzo(a)pyrene	0.2	µg/L	*	*	*	*	*	0.01 J Sur	*	*	*	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	0.092	µg/L	*	*	*	*	*	0.02 J Sur	*	*	*	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	NE	µg/L	*	*	*	*	*	0.02 J Sur	*	*	*	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	0.056	µg/L	*	*	*	*	*	0.01 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
Benzyl butyl phthalate	7,300	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	100 UJ C%D	10 UJ C%D, Sur	10 UJ C%D, Sur	*	*	*	*	*
bis(2-Chloroethoxy)methane	NE	µg/L	*	*	*	*	*	0.2 J Sur	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	0.01	µg/L	0.1 U LB	0.1 U LB	0.1 U LB	0.08 U LB	0.08 U LB	0.1 UJ EB, LB, Sur	*	0.1 U EB, LB	0.1 U EB, LB	3 U LB	*	0.1 U EB, LB	0.1 U LB	0.1 U EB, LB	0.1 U EB, LB	0.1 U LB	0.1 U LB
bis(2-Chloroisopropyl) ether	NE	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
bis(2-Ethylhexyl)phthalate	4.8	µg/L	5 U LB	*	5 U LB	5 U LB	5 U LB	4.8 UJ EB, LB, Sur	*	4.8 U EB, LB	4.8 U EB, LB	48 U EB, LB	4.8 U EB, LB	4.8 U EB, LB	5 U LB	5 U EB, LB	5 U EB, LB	5 U LB	5 U LB
Caprolactam	18,000	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	---	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Carbazole	3.4	µg/L	*	*	*	*	*	0.1 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
Chrysene	0.56	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Dibenz(a,h)anthracene	0.0092	µg/L	*	*	*	*	*	0.01 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
Dibenzofuran	12	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Diethylphthalate	29,000	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Dimethylphthalate	360,000	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	1 UJ LCS	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Di-n-butyl phthalate	3,600	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Di-n-octyl phthalate	1,500	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	100 UJ C%D	10 UJ C%D, Sur	10 UJ C%D, Sur	*	*	*	*	*
Diphenylamine	NE	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
Fluoranthene	1,500	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Fluorene	240	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	1 J Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Hexachlorobenzene	1	µg/L	*	*	*	*	*	0.1 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/L	*	*	*	*	*	0.1 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	50	µg/L	10 UJ C%D	10 UJ Sur	10 UJ C%D	10 UJ Sur	10 UJ Sur	20 UJ C%D	1 UJ C%D	10 UJ Sur	10 UJ C%D	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Hexachloroethane	4.8	µg/L	*	*	*	*	*	0.1 UJ Sur	1 UJ MS	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	0.092	µg/L	*	*	*	*	*	0.01 J Sur	*	*	*	*	*	*	*	*	*	*	*
Isophorone	71	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Naphthalene	0.093	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	---	18 J Sur	*	*	*	10 UJ Sur	*	*	*	*	*
Nitrobenzene	3.4	µg/L	*	*	*	*	*	2 J Sur	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	0.0096	µg/L	*	*	*	*	*	0.01 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	14	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	---	10 UJ Sur	*	100 UJ C%D	10 UJ C%D, Sur	10 UJ C%D, Sur	*	*	*	*	*
Pentachlorophenol	1	µg/L	1 UJ C%D	1 UJ C%D	1 UJ C%D	1 UJ C%D	1 UJ C%D	1 UJ C%D, Sur	**11 J C%D, MS, SD**	0.2 J C%D	**2 J C%D**	**85 J C%D**	0.5 J C%D	1 UJ C%D	1 UJ C%D	0.5 J C%D	1 UJ C%D	1 UJ C%D	1 UJ C%D
Phenanthrene	NE	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	2 J Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Phenol	11,000	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	190 J MS, SD	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12*	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
	Sample Date		3/17/2005	3/18/2005	3/17/2005	3/17/2005	3/17/2005	3/23/2005	4/21/2005	3/22/2005	3/22/2005	3/23/2005	3/23/2005	3/23/2005	3/15/2005	3/16/2005	3/16/2005	3/15/2005	3/15/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
Pyrene	180	µg/L	*	10 UJ Sur	*	10 UJ Sur	10 UJ Sur	*	*	10 UJ Sur	*	*	10 UJ Sur	10 UJ Sur	*	*	*	*	*
Metals																			
Aluminum	1,000	µg/L	*	*	200 UJ CCB	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Antimony	6	µg/L	*	2 UJ CCB, ICB	*	*	2 UJ CCB, ICB	*	*	2 UJ CCB, ICB	*	2 UJ CCB, ICB	2 UJ CCB, ICB	*	2 UJ CCB, ICB	2 UJ CCB, ICB	*	*	*
Arsenic	10	µg/L	*	*	*	*	*	*	**54 J+ MS, SD**	*	*	*	*	*	*	*	*	*	*
Barium	1,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Beryllium	4	µg/L	*	*	*	*	0.11 J C%D, CRQL	0.36 J C%D	*	*	*	*	*	*	*	*	*	0.27 J C%D, CRQL	*
Boron	NE	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
Cadmium	5	µg/L	*	*	*	*	*	1 UJ CCB	*	1 U EB	*	*	*	*	*	*	*	*	*
Calcium	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chromium	50	µg/L	2.2 J CRQL	2 UJ CCB, CRQL, EB, LB	2 UJ CRQL, EB, LB	2.4 J CRQL	9.7 J CRQL	*	*	*	2 UJ CCB, EB	*	*	2 UJ CCB	12.5 J CRQL	4.3 J CRQL	3.9 J CRQL	37.9 J CRQL	8.1 J CRQL
Cobalt	730	µg/L	1 U LB	*	1 UJ CCB, LB	*	3 J C%D	7.6 J C%D	*	*	*	*	*	*	*	1 U LB	*	8.4 J C%D	3.2 J SerDil
Copper	1,300	µg/L	27.4 J CRQL	16.6 J CRQL	12.5 J CRQL	13.8 J CRQL	**1,650 J C%D, CRQL**	51.7 J C%D, CRQL	*	*	*	*	*	2 U EB	14.7 J CRQL	6.2 J CRQL	12.1 J CRQL	11.7 J C%D, CRQL	9.5 J CRQL
Iron	11	mg/L	*	*	0.1 UJ CCB, LB	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lead	15	µg/L	*	*	*	*	1 U EB	*	*	*	*	*	*	*	*	*	*	*	*
Magnesium	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manganese	880	µg/L	*	*	*	*	371 J C%D	*	*	*	*	*	*	*	261 J C%D	*	*	*	**2,380 J SerDil**
Mercury	2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Molybdenum	NE	µg/L	---	---	---	---	---	---	0.78 J+ MS, SD	---	---	---	---	---	---	---	---	---	---
Nickel	100	µg/L	6.1 J CRQL	40.6 J CRQL	3.1 J CRQL	14.5 J CRQL	13.1 J C%D, CRQL	39.6 J C%D	*	*	*	*	*	*	21 J CRQL	8.7 J CRQL	29.7 J CRQL	42.4 J C%D, CRQL	18.2 J CRQL, SerDil
Potassium	NE	mg/L	*	*	*	*	*	*	*	*	5 U EB	*	*	*	*	*	*	*	*
Selenium	50	µg/L	*	*	*	*	*	*	0.95 J- MS, SD	*	*	*	*	*	*	5 UJ CCB	*	*	5 UJ CCB
Silver	180	µg/L	*	*	*	*	1 UJ CCB	1 UJ CCB	*	*	*	*	*	*	1 UJ CCB	*	*	1 UJ CCB	*
Sodium	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thallium	2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vanadium	36	µg/L	1 UJ CCB, CRQL	2.2 J CRQL	10.7 J CRQL	1 UJ CCB, CRQL	6.5 J C%D, CRQL	**70.3 J CRQL**	*	*	*	*	*	*	22.9 J CRQL	4.4 J CRQL	9.5 J CRQL	22.2 J CRQL	6 J CRQL
Zinc	11,000	µg/L	44.1 J CRQL	138 J CRQL	10.2 J CRQL	11.3 J CRQL	18.1 J C%D, CRQL	*	*	*	*	*	*	*	35.2 J CRQL	9.3 J CRQL	11.1 J CRQL	28.5 J CRQL	14.7 J CRQL, SerDil
Cyanide																			
Cyanide	200	µg/L	---	---	---	---	---	---	---	*	*	*	*	---	*	---	---	*	*
Metals (Dissolved)																			
Aluminum (Dissolved)	1,000	µg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	*
Antimony (Dissolved)	6	µg/L	*	2 UJ CCB, ICB	2 UJ CCB, ICB	2 UJ CCB, ICB	*	---	*	2 UJ CCB, ICB, LB	*	2 UJ CCB, ICB, LB	2 UJ CCB, ICB, LB	*	2 UJ CCB, ICB	2 UJ CCB, ICB	2 UJ CCB, ICB	*	*
Arsenic (Dissolved)	10	µg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	*
Barium (Dissolved)	1,000	µg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	*
Beryllium (Dissolved)	4	µg/L	*	*	*	*	0.07 J C%D	---	*	*	*	*	*	*	*	*	*	*	*
Boron (Dissolved)	NE	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
Cadmium (Dissolved)	5	µg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	1 UJ CCB
Calcium (Dissolved)	NE	mg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	*
Chromium (Dissolved)	50	µg/L	2 UJ CCB, C%D, CRQL, LB	2 UJ CCB, C%D, CRQL, LB	2 UJ CCB, C%D, CRQL, LB	2 UJ CCB, C%D, CRQL, LB	16.5 J C%D, CRQL	---	*	2 UJ CCB	2 UJ CCB	2.5 J C%D	2.2 J C%D	2 UJ CCB	3.3 J C%D, CRQL	2 UJ CCB, C%D, CRQL, LB	2 UJ CCB, C%D, CRQL, LB	2.9 J C%D, CRQL	2 UJ CCB, C%D, CRQL, LB
Cobalt (Dissolved)	730	µg/L	0.54 J C%D	16.5 J C%D	0.09 J C%D	6 J C%D	3.2 J C%D	---	*	*	*	5.3 J C%D	7 J C%D	*	2.8 J C%D	0.59 J C%D	1.3 J C%D	4.2 J C%D	2.3 J C%D
Copper (Dissolved)	1,300	µg/L	24.2 J C%D, CRQL	16.3 J C%D, CRQL	11 J C%D, CRQL	8.9 J C%D, CRQL	196 J C%D, CRQL	---	*	*	*	1.7 J C%D, CRQL	7 J C%D, CRQL	*	12.2 J C%D, CRQL	4.2 J C%D, CRQL	10.5 J C%D, CRQL	2 UJ CCB, C%D, CRQL	3.8 J C%D, CRQL
Iron (Dissolved)	11	mg/L	*	0.1 UJ CCB, LB	*	*	*	---	*	*	*	*	*	*	*	0.1 UJ CCB, LB	*	*	0.1 UJ CCB, LB
Lead (Dissolved)	15	µg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	*
Magnesium (Dissolved)	NE	mg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	*

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12*	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	3/17/2005	3/18/2005	3/17/2005	3/17/2005	3/17/2005	3/23/2005	4/21/2005	3/22/2005	3/22/2005	3/23/2005	3/23/2005	3/23/2005	3/15/2005	3/16/2005	3/16/2005	3/15/2005	3/15/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Metals (Dissolved)																			
Manganese (Dissolved)	880	µg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	*
Mercury (Dissolved)	2	µg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	*
Molybdenum (Dissolved)	NE	µg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
Nickel (Dissolved)	100	µg/L	6.2 J C%D	44.7 J C%D	3.4 J C%D	13.9 J C%D	15.5 J C%D	---	*	*	*	32.1 J C%D	**270 J C%D**	*	19.7 J C%D	7.4 J C%D	32.3 J C%D	17.9 J C%D	13.2 J C%D
Potassium (Dissolved)	NE	mg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	*
Selenium (Dissolved)	50	µg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	5 UJ CCB
Silver (Dissolved)	180	µg/L	*	*	*	*	1 UJ ICB	---	*	*	*	*	*	*	*	*	*	*	*
Sodium (Dissolved)	NE	mg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	*
Thallium (Dissolved)	2	µg/L	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*	*
Vanadium (Dissolved)	36	µg/L	0.33 J C%D, CRQL	2.2 J C%D, CRQL	11 J C%D, CRQL	*	16 J C%D, CRQL	---	*	*	*	2.2 J CRQL	3.7 J CRQL	*	11.1 J C%D, CRQL	2 J C%D, CRQL	9.6 J C%D, CRQL	1.3 J C%D, CRQL	1.5 J C%D, CRQL
Zinc (Dissolved)	11,000	µg/L	37.9 J C%D, CRQL	142 J C%D, CRQL	9 J C%D, CRQL	6.1 J C%D, CRQL	27.9 J C%D, CRQL	---	*	*	*	*	*	*	22.8 J C%D, CRQL	5 J C%D, CRQL	6 J C%D, CRQL	4.5 J C%D, CRQL	8.2 J C%D, CRQL
Hexavalent Chromium																			
Chromium, hexavalent	50	µg/L	---	---	---	---	---	---	---	*	*	*	*	---	1 UJ MS	---	---	*	*
Organochlorine Pesticides																			
4,4'-DDD	0.28	µg/L	---	---	---	---	---	---	*	*	0.0031 J CF	*	0.0085 J CF, Sur	---	*	---	---	0.0072 J CF	*
4,4'-DDE	0.2	µg/L	---	---	---	---	---	---	*	0.096 J CF, Sur	*	*	0.0052 J CF, Sur	---	*	---	---	0.00073 J CF	0.00022 J CF
4,4'-DDT	0.2	µg/L	---	---	---	---	---	---	*	0.02 UJ CF, EB, Sur	*	0.18 J CF	0.02 UJ Sur	---	0.0053 J CF	---	---	0.0015 J CF	*
Aldrin	0.004	µg/L	---	---	---	---	---	---	**0.086 J CF**	0.029 J CF, Sur	0.01 UJ CF, EB	*	0.0086 J CF, Sur	---	*	---	---	*	*
alpha-BHC	0.011	µg/L	---	---	---	---	---	---	*	0.013 J Sur	*	*	0.0047 J CF, Sur	---	*	---	---	*	*
alpha-Chlordane	0.1	µg/L	---	---	---	---	---	---	*	0.01 J Sur	*	0.0088 J CF	0.01 UJ Sur	---	0.0035 J CF	---	---	*	*
Aroclor-1016	0.5	µg/L	---	---	---	---	---	---	1 UJ Sur	*	*	*	*	---	*	---	---	*	*
Aroclor-1221	0.5	µg/L	---	---	---	---	---	---	2 UJ Sur	*	*	*	*	---	*	---	---	*	*
Aroclor-1232	0.5	µg/L	---	---	---	---	---	---	1 UJ Sur	*	*	*	*	---	*	---	---	*	*
Aroclor-1242	0.5	µg/L	---	---	---	---	---	---	1 UJ Sur	*	*	*	*	---	*	---	---	*	*
Aroclor-1248	0.5	µg/L	---	---	---	---	---	---	1 UJ Sur	*	*	*	*	---	*	---	---	*	*
Aroclor-1254	0.5	µg/L	---	---	---	---	---	---	1 UJ Sur	*	*	*	*	---	*	---	---	*	*
Aroclor-1260	0.5	µg/L	---	---	---	---	---	---	1 UJ Sur	*	*	**4.3 J CF**	*	---	*	---	---	*	*
beta-BHC	0.037	µg/L	---	---	---	---	---	---	*	0.01 UJ Sur	*	0.021 J CF	0.013 J Sur	---	*	---	---	*	*
delta-BHC	NE	µg/L	---	---	---	---	---	---	*	0.01 UJ Sur	*	*	0.01 UJ Sur	---	*	---	---	*	*
Dieldrin	0.0042	µg/L	---	---	---	---	---	---	*	0.24 J Sur	**0.013 J CF**	*	0.1 J Sur	---	*	---	---	0.002 J CF	0.02 U EB
Endosulfan I	220	µg/L	---	---	---	---	---	---	*	0.01 UJ Sur	*	0.022 J CF	0.01 UJ Sur	---	*	---	---	*	*
Endosulfan II	220	µg/L	---	---	---	---	---	---	*	0.02 UJ Sur	*	*	0.02 UJ Sur	---	*	---	---	*	*
Endosulfan sulfate	NE	µg/L	---	---	---	---	---	---	*	0.0011 J CF, Sur	*	0.077 J CF	0.019 J CF, Sur	---	0.0012 J CF	---	---	*	0.0072 J CF
Endrin	2	µg/L	---	---	---	---	---	---	*	0.02 UJ Sur	*	*	0.02 UJ Sur	---	*	---	---	0.0013 J CF	*
Endrin aldehyde	NE	µg/L	---	---	---	---	---	---	*	0.0037 J Sur	0.0011 J CF	0.14 J CF	0.0053 J CF, Sur	---	*	---	---	*	*
Endrin ketone	NE	µg/L	---	---	---	---	---	---	*	0.00085 J Sur	*	*	0.02 UJ Sur	---	0.00042 J CF	---	---	*	*
gamma-BHC	0.052	µg/L	---	---	---	---	---	---	0.037 J CF	0.01 UJ Sur	*	*	0.01 UJ Sur	---	*	---	---	*	*
gamma-Chlordane	0.1	µg/L	---	---	---	---	---	---	*	0.0013 J CF, Sur	*	*	0.01 UJ Sur	---	0.0063 J CF	---	---	*	*
Heptachlor	0.01	µg/L	---	---	---	---	---	---	*	0.01 UJ Sur	0.00028 J CF	*	0.004 J CF, Sur	---	0.0016 J CF	---	---	*	*
Heptachlor epoxide	0.01	µg/L	---	---	---	---	---	---	*	0.01 UJ Sur	*	*	0.01 UJ Sur	---	0.0018 J CF	---	---	0.00011 J CF	*
Methoxychlor	30	µg/L	---	---	---	---	---	---	*	0.1 UJ Sur	*	*	0.1 UJ Sur	---	*	---	---	*	*
Toxaphene	3	µg/L	---	---	---	---	---	---	*	1 UJ Sur	*	*	1 UJ Sur	---	*	---	---	*	*
Dioxins/Furans (1)																			
1,2,3,4,6,7,8-HpCDD	45	pg/L	---	---	---	---	---	---	---	---	---	*	---	---	---	---	---	---	11.2 UJ IS
1,2,3,4,6,7,8-HpCDF	45	pg/L	---	---	---	---	---	---	---	---	---	*	---	---	---	---	---	---	9.4 UJ IS
1,2,3,4,7,8,9-HpCDF	45	pg/L	---	---	---	---	---	---	---	---	---	14.1 J1 IS	---	---	---	---	---	---	15.7 UJ IS
1,2,3,4,7,8-HxCDD	4.5	pg/L	---	---	---	---	---	---	---	---	---	**5.3 J IS**	---	---	---	---	---	---	10.7 UJ IS
1,2,3,4,7,8-HxCDF	4.5	pg/L	---	---	---	---	---	---	---	---	---	**15.7 J1 IS**	---	---	---	---	---	---	3.4 UJ IS

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12*	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	3/17/2005	3/18/2005	3/17/2005	3/17/2005	3/17/2005	3/23/2005	4/21/2005	3/22/2005	3/22/2005	3/23/2005	3/23/2005	3/23/2005	3/15/2005	3/16/2005	3/16/2005	3/15/2005	3/15/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Dioxins/Furans (1)																			
1,2,3,6,7,8-HxCDD	4.5	pg/L	---	---	---	---	---	---	---	---	---	**20 J IS**	---	---	---	---	---	---	9 UJ IS
1,2,3,6,7,8-HxCDF	4.5	pg/L	---	---	---	---	---	---	---	---	---	*	---	---	---	---	---	---	3.2 UJ IS
1,2,3,7,8,9-HxCDD	4.5	pg/L	---	---	---	---	---	---	---	---	---	**13 J IS**	---	---	---	---	---	---	10.6 UJ IS
1,2,3,7,8,9-HxCDF	4.5	pg/L	---	---	---	---	---	---	---	---	---	**6.5 J1 IS**	---	---	---	---	---	---	7.3 UJ IS
1,2,3,7,8-PeCDD	0.45	pg/L	---	---	---	---	---	---	---	---	---	**4.3 J IS**	---	---	---	---	---	---	3.8 UJ IS
1,2,3,7,8-PeCDF	9	pg/L	---	---	---	---	---	---	---	---	---	4.3 J1 IS	---	---	---	---	---	---	3.8 UJ IS
2,3,4,6,7,8-HxCDF	4.5	pg/L	---	---	---	---	---	---	---	---	---	**6.6 J1 IS**	---	---	---	---	---	---	4.8 UJ IS
2,3,4,7,8-PeCDF	0.9	pg/L	---	---	---	---	---	---	---	---	---	**5.5 J1 IS**	---	---	---	---	---	---	3.8 UJ IS
2,3,7,8-TCDD	0.45	pg/L	---	---	---	---	---	---	---	---	---	*	---	---	---	---	---	---	1.9 UJ IS
2,3,7,8-TCDF	4.5	pg/L	---	---	---	---	---	---	---	---	---	*	---	---	---	---	---	---	4.6 UJ IS
OCDD	4,500	pg/L	---	---	---	---	---	---	---	---	---	*	---	---	---	---	---	---	35.2 UJ IS
OCDF	4,500	pg/L	---	---	---	---	---	---	---	---	---	1,050 J IS	---	---	---	---	---	---	21 UJ IS
Anions																			
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dissolved Gases																			
Ethane	NE	µg/L	*	*	*	*	1.1 UJ Pres	1.4 J Pres	*	*	*	*	*	*	*	*	1.1 UJ Sur	0.7 J Pres	*
Ethene	NE	µg/L	*	*	*	*	1 UJ Pres	1 UJ Pres	*	*	*	*	*	*	*	*	1 UJ Sur	0.8 J Pres	*
Methane	NE	µg/L	*	*	*	*	790 J HT, Pres, Sur	4,400 J ICV, Pres, Sur	*	670 J Sur	*	18,000 J ICV	17,000 J ICV	1.5 J ICV, LB	*	*	25 J Sur	40 J C%D, Pres	*
Water Quality Indicators																			
Hardness (as CaCO3)	NE	mg/L	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---
Total Dissolved Solids	NE	mg/L	---	---	---	---	---	---	---	*	---	---	---	---	*	---	---	*	---
Total Organic Carbon	NE	mg/L	---	---	---	---	---	---	---	15 J ICV	---	---	---	---	48 J ICV	---	---	35 J ICV	---

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35
		Sample Date	**3/23/2005**	**3/23/2005**	**3/23/2005**	**3/16/2005**	**3/16/2005**	**3/16/2005**	**3/16/2005**	**3/16/2005**
Analyte	**Screening Level**	**Units**	**Analytical Results**							
Volatile Organic Compounds										
1,1,1,2-Tetrachloroethane	0.43	µg/L	---	---	---	---	---	---	---	---
1,1,1-Trichloroethane	200	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
1,1,2-Trichloroethane	5	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
1,1-Dichloroethane	5	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
1,1-Dichloroethene	6	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
1,1-Dichloropropene	NE	µg/L	---	---	---	---	---	---	---	---
1,2,3-Trichlorobenzene	NE	µg/L	---	---	---	---	---	---	---	---
1,2,3-Trichloropropane	0.0056	µg/L	---	---	---	---	---	---	---	---
1,2,4-Trichlorobenzene	5	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
1,2,4-Trimethylbenzene	12	µg/L	---	---	---	---	---	---	---	---
1,2-Dibromo-3-chloropropane	0.2	µg/L	**0.5 R C%D, RSD, IRRF, CRRF**	**0.5 R C%D, RSD, IRRF, CRRF, IS**	**0.5 R C%D, RSD, IRRF, CRRF**	0.5 UJ RSD	0.5 UJ RSD	0.5 UJ RSD	3 UJ RSD, IS	3 UJ RSD
1,2-Dibromoethane	0.05	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
1,2-Dichlorobenzene	600	µg/L	*	*	*	*	*	*	3 UJ IS	*
1,2-Dichloroethane	0.5	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
1,2-Dichloropropane	5	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
1,3,5-Trimethylbenzene	12	µg/L	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	180	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
1,3-Dichloropropane	120	µg/L	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	5	µg/L	*	2 J IS	*	*	*	*	3 UJ IS	*
2,2-Dichloropropane	NE	µg/L	---	---	---	---	---	---	---	---
2-Chlorotoluene	120	µg/L	---	---	---	---	---	---	---	---
2-Hexanone	NE	µg/L	4 UJ C%D, RSD	4 UJ C%D, RSD, IS	4 UJ C%D, RSD	10 UJ C%D, RSD	10 UJ C%D, RSD	10 UJ C%D, RSD	20 UJ C%D, RSD, IS	20 UJ C%D, RSD
4-Chlorotoluene	NE	µg/L	---	---	---	---	---	---	---	---
Acetone	5,500	µg/L	*	4 UJ IS	*	4 J C%D	*	10 UJ FD	25 J C%D, FD, IS, Sur	*
Benzene	1	µg/L	*	1 J IS	*	*	**2 J SD**	*	3 UJ IS	*
Bromobenzene	20	µg/L	---	---	---	---	---	---	---	---
Bromochloromethane	NE	µg/L	---	---	---	---	---	---	---	---
Bromodichloromethane	100	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Bromoform	100	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Bromomethane	8.7	µg/L	0.5 UJ C%D	0.5 UJ C%D, IS	0.5 UJ C%D	*	*	*	3 UJ IS	*
Carbon disulfide	1,000	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Carbon tetrachloride	0.5	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Chlorobenzene	70	µg/L	37 J FD	53 J FD	*	*	*	*	3 UJ IS	*
Chloroethane	4.6	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Chloroform	100	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Chloromethane	160	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
cis-1,2-Dichloroethene	6	µg/L	*	6 J IS	*	*	*	*	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Cyclohexane	10,000	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Dibromochloromethane	100	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Dibromomethane	61	µg/L	---	---	---	---	---	---	---	---
Ethyl tert-butyl ether	NE	µg/L	*	0.5 UJ IS	*	*	*	*	50 UJ IS	*
Ethylbenzene	700	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Freon 11	150	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Freon 113	1,200	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Freon 12	390	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35
		Sample Date	**3/23/2005**	**3/23/2005**	**3/23/2005**	**3/16/2005**	**3/16/2005**	**3/16/2005**	**3/16/2005**	**3/16/2005**
Analyte	**Screening Level**	**Units**	**Analytical Results**							
Volatile Organic Compounds										
Isopropylbenzene (cumene)	660	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Methyl acetate	6,100	µg/L	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD, IS	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	3 UJ C%D, RSD, IS	3 UJ C%D, RSD
Methyl ethyl ketone	7,000	µg/L	4 UJ C%D, RSD	4 UJ C%D, RSD, IS	4 UJ C%D, RSD	10 UJ RSD	10 UJ RSD	10 UJ RSD	20 UJ RSD, IS	20 UJ RSD
Methyl isobutyl ketone	2,000	µg/L	4 UJ C%D	4 UJ C%D, IS	4 UJ C%D	*	*	*	20 UJ IS	*
Methyl tert-butyl ether	13	µg/L	4 J FD	0.9 J FD, IS	*	*	*	*	3 UJ IS	*
Methylcyclohexane	NE	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Methylene chloride	5	µg/L	0.5 UJ RSD	0.5 UJ RSD, IS	0.5 UJ RSD	0.8 J RSD	0.5 UJ RSD	1 J RSD	3 UJ RSD, IS	**7 J RSD**
Naphthalene	0.093	µg/L	---	---	---	---	---	---	---	---
n-Butylbenzene	240	µg/L	---	---	---	---	---	---	---	---
n-Propylbenzene	240	µg/L	---	---	---	---	---	---	---	---
p-Cymene (p-isopropyltoluene)	NE	µg/L	---	---	---	---	---	---	---	---
sec-Butylbenzene	240	µg/L	---	---	---	---	---	---	---	---
Styrene	100	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
tert-Amyl methyl ether	NE	µg/L	*	0.5 UJ IS	*	*	*	*	50 UJ IS	*
tert-Butyl alcohol	NE	µg/L	50 R CRRF	50 R CRRF, IS	50 R CRRF	50 R CRRF	50 R CRRF	50 R CRRF	250 R CRRF, IS	1,800 R CRRF
tert-Butylbenzene	240	µg/L	---	---	---	---	---	---	---	---
Tetrachloroethene	5	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Toluene	150	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
trans-1,2-Dichloroethene	10	µg/L	3 J FD	1 J FD, IS	*	*	*	*	3 UJ IS	*
trans-1,3-Dichloropropene	0.5	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Trichloroethene	5	µg/L	*	1 J IS	*	*	**7 J SD**	5 J FD	34 J FD, IS, Sur	*
Vinyl chloride	0.5	µg/L	**10 J FD**	**6 J FD, IS**	*	*	*	*	3 UJ IS	*
Xylenes, total	1,750	µg/L	*	0.5 UJ IS	*	*	*	*	3 UJ IS	*
Semivolatile Organic Compounds										
1,1'-Biphenyl	300	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
1,2,4-Trichlorobenzene	5	µg/L	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	600	µg/L	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	180	µg/L	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	5	µg/L	---	---	---	---	---	---	---	---
1,4-Dioxane (p-dioxane)	6.1	µg/L	5 U EB	5 U EB	*	*	*	*	*	*
2,2'-Oxybis(1-Chloropropane)	NE	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
2,4,5-Trichlorophenol	3,600	µg/L	*	*	*	*	*	25 UJ Sur	25 UJ Sur	25 UJ Sur
2,4,6-Trichlorophenol	0.96	µg/L	*	*	*	*	*	*	*	0.4 J IS
2,4-Dichlorophenol	110	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
2,4-Dimethylphenol	730	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
2,4-Dinitrophenol	73	µg/L	*	*	*	25 UJ C%D	25 UJ C%D	25 UJ C%D, Sur	25 UJ C%D, Sur	25 UJ C%D, Sur
2,4-Dinitrotoluene	73	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
2,6-Dinitrotoluene	36	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
2-Chloronaphthalene	490	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
2-Chlorophenol	30	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
2-Methylnaphthalene	NE	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
2-Methylphenol	1,800	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
2-Nitroaniline	110	µg/L	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
3,3'-Dichlorobenzidine	0.15	µg/L	*	*	*	*	*	*	*	*
3,4-methylphenol	NE	µg/L	---	---	---	---	---	---	---	---
3-Nitroaniline	NE	µg/L	25 UJ RSD	25 UJ RSD	25 UJ RSD	25 UJ C%D, RSD	25 UJ C%D, RSD	25 UJ C%D, RSD, Sur	25 UJ C%D, RSD, Sur	25 UJ C%D, RSD, Sur
4,6-Dinitro-2-methylphenol	NE	µg/L	*	*	*	25 UJ C%D	25 UJ C%D	25 UJ C%D, Sur	25 UJ C%D, Sur	25 UJ C%D, Sur

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35
		Sample Date	3/23/2005	3/23/2005	3/23/2005	3/16/2005	3/16/2005	3/16/2005	3/16/2005	3/16/2005
Analyte	Screening Level	Units	Analytical Results							
Semivolatile Organic Compounds										
4-Bromophenylphenyl ether	NE	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
4-Chloro-3-methylphenol	NE	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
4-Chloroaniline	150	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
4-Chlorophenylphenyl ether	NE	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
4-Methylphenol	180	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
4-Nitroaniline	NE	µg/L	*	*	*	*	*	25 UJ Sur	25 UJ Sur	25 UJ Sur
4-Nitrophenol	NE	µg/L	*	*	*	*	*	25 UJ Sur	25 UJ Sur	25 UJ Sur
Acenaphthene	370	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Acenaphthylene	NE	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Acetophenone	NE	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Anthracene	1,800	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Atrazine	3	µg/L	*	*	*	*	*	*	*	*
Benzaldehyde	3,600	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Benzo(a)anthracene	0.092	µg/L	*	*	*	*	0.04 U EB, LB	*	*	0.04 U EB, LB
Benzo(a)pyrene	0.2	µg/L	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	0.092	µg/L	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	NE	µg/L	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	0.056	µg/L	*	*	*	*	*	*	*	*
Benzyl butyl phthalate	7,300	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
bis(2-Chloroethoxy)methane	NE	µg/L	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	0.01	µg/L	0.1 U EB, LB	0.1 U EB, LB	0.1 U EB, LB	0.1 U EB, LB	0.1 U EB, LB	0.1 U EB, LB	0.1 U EB, LB	0.3 U EB, LB
bis(2-Chloroisopropyl) ether	NE	µg/L	---	---	---	---	---	---	---	---
bis(2-Ethylhexyl)phthalate	4.8	µg/L	4.8 U EB, LB	4.8 U EB, LB	4.8 U EB, LB	5 U EB, LB	5 U EB, LB	5 U EB, LB	5 U EB, LB	5 U EB, LB
Caprolactam	18,000	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Carbazole	3.4	µg/L	*	*	*	*	*	*	*	*
Chrysene	0.56	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Dibenz(a,h)anthracene	0.0092	µg/L	*	*	*	*	*	*	*	*
Dibenzofuran	12	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Diethylphthalate	29,000	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Dimethylphthalate	360,000	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Di-n-butyl phthalate	3,600	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Di-n-octyl phthalate	1,500	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Diphenylamine	NE	µg/L	---	---	---	---	---	---	---	---
Fluoranthene	1,500	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Fluorene	240	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Hexachlorobenzene	1	µg/L	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/L	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	50	µg/L	10 UJ C%D	10 UJ C%D	10 UJ C%D	10 UJ C%D	10 UJ C%D	10 UJ Sur	10 UJ C%D, Sur	10 UJ C%D, Sur
Hexachloroethane	4.8	µg/L	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	0.092	µg/L	*	*	*	*	*	*	*	*
Isophorone	71	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Naphthalene	0.093	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Nitrobenzene	3.4	µg/L	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	0.0096	µg/L	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	14	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Pentachlorophenol	1	µg/L	1 UJ C%D	1 UJ C%D	0.3 J C%D	1 UJ C%D	1 UJ C%D	1 UJ C%D	1 UJ C%D	1 UJ C%D
Phenanthrene	NE	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Phenol	11,000	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Pyrene	180	µg/L	*	*	*	*	*	10 UJ Sur	10 UJ Sur	10 UJ Sur
Metals										

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35
		Sample Date	3/23/2005	3/23/2005	3/23/2005	3/16/2005	3/16/2005	3/16/2005	3/16/2005	3/16/2005
Analyte	Screening Level	Units	Analytical Results							
Metals										
Aluminum	1,000	µg/L	*	*	200 UJ CCB	*	**5,200 J MS**	*	*	*
Antimony	6	µg/L	2 UJ CCB, ICB	2 UJ CCB, ICB	*	2 UJ CCB, ICB	*	*	*	*
Arsenic	10	µg/L	*	*	*	*	*	*	*	*
Barium	1,000	µg/L	*	*	*	*	*	*	*	*
Beryllium	4	µg/L	*	*	*	*	0.09 J CRQL	*	*	*
Boron	NE	µg/L	---	---	---	---	---	---	---	---
Cadmium	5	µg/L	*	*	*	*	*	*	*	*
Calcium	NE	mg/L	*	*	*	*	*	*	*	*
Chromium	50	µg/L	*	*	*	5.2 J CRQL	14.9 J CRQL	5.1 J CRQL	5.3 J CRQL	13 J CRQL
Cobalt	730	µg/L	*	*	8.5 J SerDil	*	*	*	18.7 J C%D	231 J C%D
Copper	1,300	µg/L	2 U EB	2 U EB	*	6.2 J CRQL	7.1 J CRQL	20.1 J CRQL	18.6 J C%D, CRQL	73.9 J C%D, CRQL
Iron	11	mg/L	*	*	0.666 J LD	*	*	0.921 J FD	0.422 J FD	*
Lead	15	µg/L	*	*	*	*	*	7.4 J FD	4.3 J FD	*
Magnesium	NE	mg/L	*	*	*	*	*	*	*	*
Manganese	880	µg/L	*	*	**1,330 J SerDil**	*	*	*	*	**24,300 J C%D**
Mercury	2	µg/L	*	*	0.2 UJ MS	*	*	*	*	*
Molybdenum	NE	µg/L	---	---	---	---	---	---	---	---
Nickel	100	µg/L	*	*	74 J SerDil	37.7 J CRQL	19.7 J CRQL	**180 J CRQL**	**159 J C%D, CRQL**	**429 J C%D, CRQL**
Potassium	NE	mg/L	*	*	*	*	*	*	*	*
Selenium	50	µg/L	*	*	*	*	5 UJ CCB	*	*	*
Silver	180	µg/L	*	*	*	*	*	*	*	1 UJ CCB
Sodium	NE	mg/L	*	*	*	*	*	*	*	*
Thallium	2	µg/L	*	*	*	*	*	*	*	*
Vanadium	36	µg/L	*	*	*	3.6 J CRQL	16.8 J CRQL	2.8 J CRQL	1.7 J CRQL	4 J CRQL
Zinc	11,000	µg/L	*	*	*	42 J CRQL	17.6 J CRQL	3,250 J CRQL, FD	2,490 J CRQL, FD	124 J CRQL
Cyanide										
Cyanide	200	µg/L	*	*	*	---	---	---	---	---
Metals (Dissolved)										
Aluminum (Dissolved)	1,000	µg/L	*	*	*	*	*	*	*	*
Antimony (Dissolved)	6	µg/L	2 UJ CCB, ICB, LB	2 UJ CCB, ICB, LB	*	2 UJ CCB, ICB	*	*	*	2 UJ CCB, ICB
Arsenic (Dissolved)	10	µg/L	**198 J FD**	**217 J FD**	*	*	*	*	*	*
Barium (Dissolved)	1,000	µg/L	*	*	*	*	*	*	*	*
Beryllium (Dissolved)	4	µg/L	*	*	*	*	*	*	*	*
Boron (Dissolved)	NE	µg/L	---	---	---	---	---	---	---	---
Cadmium (Dissolved)	5	µg/L	*	*	*	1 UJ CCB	*	*	*	*
Calcium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*
Chromium (Dissolved)	50	µg/L	*	*	2 UJ CCB	2 UJ CCB, C%D, CRQL, LB	2 UJ CCB, C%D, CRQL, LB	2 UJ CCB, C%D, CRQL, LB	2 UJ CCB, C%D, CRQL, LB	6.6 J C%D, CRQL
Cobalt (Dissolved)	730	µg/L	*	*	8.4 J SerDil	7.3 J C%D	0.59 J C%D	19.7 J C%D	20.1 J C%D	192 J C%D
Copper (Dissolved)	1,300	µg/L	*	*	*	5.4 J C%D, CRQL	3.5 J C%D, CRQL	15.1 J C%D, CRQL	15.3 J C%D, CRQL	52.4 J C%D, CRQL
Iron (Dissolved)	11	mg/L	*	*	*	*	0.1 UJ CCB, LB	*	0.1 UJ CCB, LB	*
Lead (Dissolved)	15	µg/L	*	*	*	*	*	*	*	*
Magnesium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*
Manganese (Dissolved)	880	µg/L	**2,100 J FD**	**2,090 J FD**	**1,370 J SerDil**	*	*	*	*	*
Mercury (Dissolved)	2	µg/L	*	*	0.2 UJ MS	*	*	*	*	*
Molybdenum (Dissolved)	NE	µg/L	---	---	---	---	---	---	---	---

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35
		Sample Date	**3/23/2005**	**3/23/2005**	**3/23/2005**	**3/16/2005**	**3/16/2005**	**3/16/2005**	**3/16/2005**	**3/16/2005**
Analyte	**Screening Level**	**Units**	**Analytical Results**							
Metals (Dissolved)										
Nickel (Dissolved)	100	µg/L	4.8 J FD	5.1 J FD	73 J SerDil	38.3 J C%D	7.1 J C%D, SerDil	**167 J C%D**	**173 J C%D**	**365 J C%D**
Potassium (Dissolved)	NE	mg/L	*	*	*	*	5.69 J SerDil	*	*	*
Selenium (Dissolved)	50	µg/L	*	*	*	*	5 UJ CCB	*	*	*
Silver (Dissolved)	180	µg/L	*	*	*	*	*	*	*	*
Sodium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*
Thallium (Dissolved)	2	µg/L	*	*	*	*	*	*	*	*
Vanadium (Dissolved)	36	µg/L	1.9 J FD	2.1 J FD	1 UJ CCB	1.7 J C%D, CRQL	11.1 J C%D, CRQL	1.3 J C%D, CRQL	1.5 J C%D, CRQL	1.3 J C%D, CRQL
Zinc (Dissolved)	11,000	µg/L	4.5 J FD	5.2 J FD	*	36.4 J C%D, CRQL	4.4 J C%D, CRQL	2,560 J C%D, CRQL	2,820 J C%D, CRQL	113 J C%D, CRQL
Hexavalent Chromium										
Chromium, hexavalent	50	µg/L	*	0.2 UJ HT	0.4 UJ HT	---	---	---	---	---
Organochlorine Pesticides										
4,4'-DDD	0.28	µg/L	0.021 J Sur	0.022 J Sur	*	---	---	---	---	---
4,4'-DDE	0.2	µg/L	0.012 J CF, Sur	0.014 J Sur	*	---	---	---	---	---
4,4'-DDT	0.2	µg/L	0.02 UJ CF, EB, Sur	0.02 UJ CF, EB, Sur	0.0098 J CF	---	---	---	---	---
Aldrin	0.004	µg/L	0.01 UJ Sur	0.01 UJ Sur	0.0025 J CF	---	---	---	---	---
alpha-BHC	0.011	µg/L	0.01 UJ Sur	0.0049 J CF, Sur	*	---	---	---	---	---
alpha-Chlordane	0.1	µg/L	0.01 UJ Sur	0.01 UJ Sur	0.0064 J CF	---	---	---	---	---
Aroclor-1016	0.5	µg/L	*	*	*	---	---	---	---	---
Aroclor-1221	0.5	µg/L	*	*	*	---	---	---	---	---
Aroclor-1232	0.5	µg/L	*	*	*	---	---	---	---	---
Aroclor-1242	0.5	µg/L	*	*	*	---	---	---	---	---
Aroclor-1248	0.5	µg/L	*	*	*	---	---	---	---	---
Aroclor-1254	0.5	µg/L	*	*	*	---	---	---	---	---
Aroclor-1260	0.5	µg/L	*	*	*	---	---	---	---	---
beta-BHC	0.037	µg/L	0.01 UJ Sur	0.0075 J Sur	*	---	---	---	---	---
delta-BHC	NE	µg/L	0.01 UJ Sur	0.01 UJ Sur	*	---	---	---	---	---
Dieldrin	0.0042	µg/L	0.0014 J CF, Sur	0.0014 J CF, Sur	**0.0085 J CF**	---	---	---	---	---
Endosulfan I	220	µg/L	0.01 UJ Sur	0.01 UJ Sur	*	---	---	---	---	---
Endosulfan II	220	µg/L	0.02 UJ Sur	0.02 UJ Sur	*	---	---	---	---	---
Endosulfan sulfate	NE	µg/L	0.02 UJ Sur	0.02 UJ Sur	*	---	---	---	---	---
Endrin	2	µg/L	0.02 UJ Sur	0.02 UJ Sur	*	---	---	---	---	---
Endrin aldehyde	NE	µg/L	0.02 UJ Sur	0.02 UJ Sur	0.003 J CF	---	---	---	---	---
Endrin ketone	NE	µg/L	0.02 UJ Sur	0.02 UJ Sur	*	---	---	---	---	---
gamma-BHC	0.052	µg/L	0.01 UJ Sur	0.0064 J Sur	0.0022 J CF	---	---	---	---	---
gamma-Chlordane	0.1	µg/L	0.01 UJ Sur	0.01 UJ Sur	*	---	---	---	---	---
Heptachlor	0.01	µg/L	0.01 UJ Sur	0.01 UJ Sur	*	---	---	---	---	---
Heptachlor epoxide	0.01	µg/L	0.01 UJ Sur	0.01 UJ Sur	*	---	---	---	---	---
Methoxychlor	30	µg/L	0.1 UJ Sur	0.1 UJ Sur	*	---	---	---	---	---
Toxaphene	3	µg/L	1 UJ Sur	1 UJ Sur	*	---	---	---	---	---
Dioxins/Furans (1)										
1,2,3,4,6,7,8-HpCDD	45	pg/L	---	---	---	---	---	---	---	---
1,2,3,4,6,7,8-HpCDF	45	pg/L	---	---	---	---	---	---	---	---
1,2,3,4,7,8,9-HpCDF	45	pg/L	---	---	---	---	---	---	---	---
1,2,3,4,7,8-HxCDD	4.5	pg/L	---	---	---	---	---	---	---	---
1,2,3,4,7,8-HxCDF	4.5	pg/L	---	---	---	---	---	---	---	---
1,2,3,6,7,8-HxCDD	4.5	pg/L	---	---	---	---	---	---	---	---
1,2,3,6,7,8-HxCDF	4.5	pg/L	---	---	---	---	---	---	---	---

TABLE A5-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35
		Sample Date	3/23/2005	3/23/2005	3/23/2005	3/16/2005	3/16/2005	3/16/2005	3/16/2005	3/16/2005
Analyte	Screening Level	Units	Analytical Results							
Dioxins/Furans (1)										
1,2,3,7,8,9-HxCDD	4.5	pg/L	---	---	---	---	---	---	---	---
1,2,3,7,8,9-HxCDF	4.5	pg/L	---	---	---	---	---	---	---	---
1,2,3,7,8-PeCDD	0.45	pg/L	---	---	---	---	---	---	---	---
1,2,3,7,8-PeCDF	9	pg/L	---	---	---	---	---	---	---	---
2,3,4,6,7,8-HxCDF	4.5	pg/L	---	---	---	---	---	---	---	---
2,3,4,7,8-PeCDF	0.9	pg/L	---	---	---	---	---	---	---	---
2,3,7,8-TCDD	0.45	pg/L	---	---	---	---	---	---	---	---
2,3,7,8-TCDF	4.5	pg/L	---	---	---	---	---	---	---	---
OCDD	4,500	pg/L	---	---	---	---	---	---	---	---
OCDF	4,500	pg/L	---	---	---	---	---	---	---	---
Anions										
Chloride	NE	mg/L	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*
Dissolved Gases										
Ethane	NE	µg/L	*	*	*	*	*	*	*	1.1 UJ Sur
Ethene	NE	µg/L	*	*	*	*	*	*	*	0.9 J Sur
Methane	NE	µg/L	260 J ICV	240 J ICV	*	*	*	50 J FD	79 J FD	*
Water Quality Indicators										
Hardness (as CaCO3)	NE	mg/L	---	---	---	---	---	---	---	---
Total Dissolved Solids	NE	mg/L	---	---	---	---	---	*	*	---
Total Organic Carbon	NE	mg/L	---	---	---	---	---	81 J ICV	79 J ICV	---

TABLE A5-2

Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2005 (March)

AMCO Chemical Superfund Site, Oakland, California

Notes:

Results greater than the screening level are bolded

(1) Dioxin/Furan screening levels calculated using Toxicity Equivalency Factors (EPA), 2000, "Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds, Part II: Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and Related Compounds,' Final, National Center for Environmental Assessment, May.

* MW-12 was analyzed by the EPA Region 9 laboratory rather than an EPA CLP laboratory. EPA Region 9 uses an analyte list consistent with EPA Method 524.2 which includes analytes not in the CLP Target Compound List.

In cases where target analytes are reported from more than one method or from multiple dilutions, the most conservative result or reporting limit is presented; that is, the values presented represent either the maximum positive result or the minimum reporting limit selected from the available data.

Rejected Results are enclosed by boxes

See Groundwater Screening Level table for source of screening levels.

---	not analyzed
*	result not qualified for Quality Control outliers
NE	not established
µg/L	micrograms per liter
mg/L	milligrams per liter
pg/L	picograms per liter
J	estimated value
J-	estimated value, low bias
J+	estimated value, high bias
J1	estimated maximum possible concentration
R	rejected for failure to meet quality control requirement.
U	not detected at or above the reporting limit.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
C%D	Continuing calibration verification is outside control limit
CCB	Continuing calibration blank concentration less than Reporting Limit
CF	Confirmation precision exceeded
CRQL	Contract Required Quanitation Limit recovery greater than upper control limit
CRRF	Continuing calibration relative response factor below lower control limit
EB	Equipment blank concentration exceeds criteria
FD	Field duplicate exceeds relative percent difference criteria
HT	Holding time exceeded
ICB	Initial calibration blank exceeds control limit
ICV	Second source verification std. recovery exceeds control limit
IRRF	Initial calibration relative response factor exceeds control limit
IS	Internal standard response exceeds control limit
LB	Laboratory blank concentration exceeds criteria
LCS	Laboratory Control Sample recovery is outside control limit
LD	Laboratory duplicate exceeds relative percent difference criteria
MS	Matrix spike recovery exceeds control limilt
Pres	Sample not properly preserved in the field
RSD	Initial calibration relative standard deviation exceeded
SD	Matrix spike duplicate recovery exceeds criteria
SerDil	Serial dilution percent difference exceeds control limit
Sur	Surrogate recovery outside control limits
TB	Trip blank concentration exceeds control limit

Appendix A6
Second Quarter 2005 Groundwater Sampling

APPENDIX A6

Second Quarter 2005 Groundwater Sampling

A6.1 Summary

The following sections describe the samples collection during the Second Quarter 2005 groundwater sampling event which occurred in June, 2005.

Second Quarter 2005 Groundwater: Groundwater samples were collected June 20 through June 30, 2005 and were analyzed for VOCs, pesticides and PCBs, and dissolved gases. For groundwater, the selected screening levels are based on federal and state maximum contaminant levels (MCLs) and EPA Region 9 tap water PRGs. EPA CLP special analytical services were used to include additional analytes and lower detection limits as needed.

The 2005 Second Quarter VOC data is not consistent with the conceptual site mode, nor data sets collected before or after the second quarter of 2005. This data will not be discussed in this document (see Appendix B). The Tier 3 validation findings for the pesticide and PCB analyses are discussed in the following sections.

A6.2 Data Review and Validation Findings

Table A6-1 presents a list of sample delivery groups, sample identifications, and validation levels for the groundwater samples collected during this event. Table A6-2 presents the both the Tier 3 and Tier 2 qualified results. Results that are unqualified are not shown. Rejected results are shown in boxes. Equipment blank and trip blank qualifications are discussed in section 3 of the main DQUA and are not discussed further in this section, although the qualified results are presented on the attached tables. The following sections discuss the results qualified based on the Tier 3 validation.

The findings of the Tier 3 validation are considered representative of the quality of the entire data set. For this event, Tier 3 validation was performed on all 25 groundwater samples for pesticides and PCBs.

The following discussion presents the findings of the Tier 3 validation of the second quarter, 2005, groundwater monitoring sample results. The 2005 Second Quarter Groundwater results were qualified for outliers associated with the following QC metrics: surrogates, matrix spike samples, method performance, and second column confirmation.

A6.2.1 Surrogates (Reason Code Sur)

Pesticides and PCBs in Groundwater: The tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) surrogate recoveries were above acceptance criteria in the sample from location RMW-02-13 at a 100 fold-dilution. The sample was also analyzed at 1000-fold dilution and both surrogates were diluted out. All detected results were reported from the 1000-fold solution except for aldrin, which was reported from the 100-fold dilution. The aldrin result was estimated and flagged J based on the surrogate outliers.

A6.2.2 Matrix Spike Matrix Spike Duplicates (Reason Codes MS and SD)

Pesticides and PCBs in Groundwater: A matrix spike and matrix spike duplicate analysis was performed on the sample from location RMW-09-35. The RPD exceeded acceptance criteria for all compounds. The detected result for 4,4'-DDT was qualified as estimated J, based on this precision outlier.

A matrix spike and matrix spike duplicate analysis was performed on parent sample from location RMW-07-15. The non-detected gamma-BHC quantitation limit was qualified UJ for low matrix spike recovery.

A6.2.3 Second Column Confirmation (Reason Code CF)

Pesticides and PCBs in Groundwater: Target compound detected concentrations with a relative percent difference between the primary and secondary column of greater than 25% were qualified as estimated and flagged "J" for the following compounds in samples from the indicated locations:

- 4,4'-DDD in RMW-08-15 duplicate, and RMW-08-35
- 4,4'-DDE in RMW-02-50, RMW-04-15, and RMW-08-15
- Dieldrin in RMW-01-17, RMW-02-13, and RMW-02-50
- 4,4'-DDT for RMW-04-15

A6.2.4 Method Performance (Reason Code MP)

Pesticides and PCBs in Groundwater: Manual integrations of the surrogates were evaluated by the laboratory and revised as needed. The sample from location RMW-02-32 had no TCX recovery on one column and an elevated recovery on the second column. In addition, the DCB recovery was below acceptance criteria on both columns. The inconsistent TCX recoveries and low DCB recoveries indicate method performance issues for this sample. The quantitation for all target analytes were qualified as estimated and flagged UJ.

Sample from location MW-12 had no TCX recovery on one column and a recovery of 4178 percent on the other column. The sample was reanalyzed at a five-fold dilution for 4,4'-DDD with similar TCX surrogate recoveries. The inconsistent surrogate recoveries indicate method performance issues for this sample; therefore, results and quantitation limits were qualified as estimated and flagged J and UJ, respectively.

TABLE A6-1
Sample Delivery Group Reference - Groundwater, Second Quarter 2005 (June)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
05172A (EPA Region 9)				
1,4-Dioxane, EPA Method 8270C				
	BMW-01	N	BMW-01-0605	Tier 2
	BMW-03	N	BMW-03-0605	Tier 2
	BMW-06	N	BMW-06-0605	Tier 2
	BMW-07	N	BMW-07-0605	Tier 2
	BMW-08	N	BMW-08-0605	Tier 2
	BPZ-01	N	BPZ-01-0605	Tier 2
	RMW-01-17	N	RMW-01-17-0605	Tier 2
	RMW-01-35	N	RMW-01-35-0605	Tier 2
	RMW-03-15	N	RMW-03-15-0605	Tier 2
	RMW-04-15	N	RMW-04-15-0605	Tier 2
	RMW-05-15	N	RMW-05-15-0605	Tier 2
	RMW-06-15	N	RMW-06-15-0605	Tier 2
	RMW-07-15	N	RMW-07-15-0605	Tier 2
	RMW-08-15	N	RMW-08-15-0605	Tier 2
	RMW-08-15	FD	MW-92-0605	Tier 2
	RMW-08-35	N	RMW-08-35-0605	Tier 2
	RMW-09-15	N	RMW-09-15-0605	Tier 2
	RMW-09-35	N	RMW-09-35-0605	Tier 2
	RMW-10-15	N	RMW-10-15-0605	Tier 2
	RMW-10-35	N	RMW-10-35-0605	Tier 2
	RMW-10-35	FD	MW-90-0605	Tier 2
Anions, EPA Method 300.0				
	BMW-01	N	BMW-01-0605	Tier 2
	BMW-03	N	BMW-03-0605	Tier 2
	BMW-06	N	BMW-06-0605	Tier 2
	BMW-07	N	BMW-07-0605	Tier 2
	BMW-08	N	BMW-08-0605	Tier 2
	BPZ-01	N	BPZ-01-0605	Tier 2
	RMW-01-17	N	RMW-01-17-0605	Tier 2
	RMW-01-35	N	RMW-01-35-0605	Tier 2
	RMW-03-15	N	RMW-03-15-0605	Tier 2
	RMW-04-15	N	RMW-04-15-0605	Tier 2
	RMW-05-15	N	RMW-05-15-0605	Tier 2
	RMW-06-15	N	RMW-06-15-0605	Tier 2
	RMW-07-15	N	RMW-07-15-0605	Tier 2
	RMW-08-15	N	RMW-08-15-0605	Tier 2
	RMW-08-15	FD	MW-92-0605	Tier 2
	RMW-08-35	N	RMW-08-35-0605	Tier 2
	RMW-09-15	N	RMW-09-15-0605	Tier 2
	RMW-09-35	N	RMW-09-35-0605	Tier 2
	RMW-10-15	N	RMW-10-15-0605	Tier 2
	RMW-10-35	N	RMW-10-35-0605	Tier 2
	RMW-10-35	FD	MW-90-0605	Tier 2

TABLE A6-1
Sample Delivery Group Reference - Groundwater, Second Quarter 2005 (June)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
05172A (EPA Region 9)				
Dissolved Gases, EPA Method RSK-175				
	BMW-01	N	BMW-01-0605	Tier 2
	BMW-03	N	BMW-03-0605	Tier 2
	BMW-06	N	BMW-06-0605	Tier 2
	BMW-07	N	BMW-07-0605	Tier 2
	BMW-08	N	BMW-08-0605	Tier 2
	BPZ-01	N	BPZ-01-0605	Tier 2
	RMW-01-17	N	RMW-01-17-0605	Tier 2
	RMW-01-35	N	RMW-01-35-0605	Tier 2
	RMW-03-15	N	RMW-03-15-0605	Tier 2
	RMW-04-15	N	RMW-04-15-0605	Tier 2
	RMW-05-15	N	RMW-05-15-0605	Tier 2
	RMW-06-15	N	RMW-06-15-0605	Tier 2
	RMW-07-15	N	RMW-07-15-0605	Tier 2
	RMW-08-15	N	RMW-08-15-0605	Tier 2
	RMW-08-15	FD	MW-92-0605	Tier 2
	RMW-08-35	N	RMW-08-35-0605	Tier 2
	RMW-09-15	N	RMW-09-15-0605	Tier 2
	RMW-09-35	N	RMW-09-35-0605	Tier 2
	RMW-10-15	N	RMW-10-15-0605	Tier 2
	RMW-10-35	N	RMW-10-35-0605	Tier 2
	RMW-10-35	FD	MW-90-0605	Tier 2
05181A (EPA Region 9)				
1,4-Dioxane, EPA Method 8270C				
	MW-12	N	MW-12-0605	Tier 3
	RMW-02-13	N	RMW-02-13-0605	Tier 3
	RMW-02-32	N	RMW-02-32-0605	Tier 3
	RMW-02-50	N	RMW-02-50-0605	Tier 3
Anions, EPA Method 300.0				
	MW-12	N	MW-12-0605	Tier 2
	RMW-02-13	N	RMW-02-13-0605	Tier 2
	RMW-02-32	N	RMW-02-32-0605	Tier 2
	RMW-02-50	N	RMW-02-50-0605	Tier 2
Dissolved Gases, EPA Method RSK-175				
	MW-12	N	MW-12-0605	Tier 2
	RMW-02-13	N	RMW-02-13-0605	Tier 2
	RMW-02-32	N	RMW-02-32-0605	Tier 2
	RMW-02-50	N	RMW-02-50-0605	Tier 2

TABLE A6-1
Sample Delivery Group Reference - Groundwater, Second Quarter 2005 (June)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y1Y18 (A4 Scientific)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	BMW-01	N	BMW-01-0605	Tier 3
	BMW-03	N	BMW-03-0605	Tier 3
	BMW-06	N	BMW-06-0605	Tier 3
	BMW-07	N	BMW-07-0605	Tier 3
	BMW-08	N	BMW-08-0605	Tier 3
	BPZ-01	N	BPZ-01-0605	Tier 3
	RMW-03-15	N	RMW-03-15-0605	Tier 3
	RMW-04-15	N	RMW-04-15-0605	Tier 3
	RMW-05-15	N	RMW-05-15-0605	Tier 3
	RMW-06-15	N	RMW-06-15-0605	Tier 3
	RMW-07-15	N	RMW-07-15-0605	Tier 3
	RMW-10-15	N	RMW-10-15-0605	Tier 3
	RMW-10-35	N	RMW-10-35-0605	Tier 3
	RMW-10-35	FD	MW-90-0605	Tier 3
Volatile Organics, CLP-SOW				
	BMW-01	N	BMW-01-0605	Tier 3
	BMW-06	N	BMW-06-0605	Tier 3
	BMW-07	N	BMW-07-0605	Tier 3
	RMW-03-15	N	RMW-03-15-0605	Tier 3
	RMW-04-15	N	RMW-04-15-0605	Tier 3
	RMW-05-15	N	RMW-05-15-0605	Tier 3
	RMW-06-15	N	RMW-06-15-0605	Tier 3
	RMW-07-15	N	RMW-07-15-0605	Tier 3
Y1Y22 (A4 Scientific)				
Volatile Organics, CLP-SOW				
	BMW-03	N	BMW-03-0605	Tier 3
	BMW-08	N	BMW-08-0605	Tier 3
	BPZ-01	N	BPZ-01-0605	Tier 3
	RMW-09-15	N	RMW-09-15-0605	Tier 3
	RMW-09-35	N	RMW-09-35-0605	Tier 3
	RMW-10-15	N	RMW-10-15-0605	Tier 3
	RMW-10-35	N	RMW-10-35-0605	Tier 3
	RMW-10-35	FD	MW-90-0605	Tier 3
Y1Y24 (A4 Scientific)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	MW-12	N	MW-12-0605	Tier 3
	RMW-01-17	N	RMW-01-17-0605	Tier 3
	RMW-01-35	N	RMW-01-35-0605	Tier 3
	RMW-02-13	N	RMW-02-13-0605	Tier 3
	RMW-02-32	N	RMW-02-32-0605	Tier 3
	RMW-02-50	N	RMW-02-50-0605	Tier 3
	RMW-08-15	N	RMW-08-15-0605	Tier 3
	RMW-08-15	FD	MW-92-0605	Tier 3
	RMW-08-35	N	RMW-08-35-0605	Tier 3

TABLE A6-1

Sample Delivery Group Reference - Groundwater, Second Quarter 2005 (June)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y1Y24 (A4 Scientific)				
Volatile Organics, CLP-SOW				
	MW-12	N	MW-12-0605	Tier 3
	RMW-01-17	N	RMW-01-17-0605	Tier 3
	RMW-01-35	N	RMW-01-35-0605	Tier 3
	RMW-02-13	N	RMW-02-13-0605	Tier 3
	RMW-02-32	N	RMW-02-32-0605	Tier 3
	RMW-02-50	N	RMW-02-50-0605	Tier 3
	RMW-08-15	N	RMW-08-15-0605	Tier 3
	RMW-08-15	FD	MW-92-0605	Tier 3
	RMW-08-35	N	RMW-08-35-0605	Tier 3
Y1Y26 (A4 Scientific)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	RMW-09-15	N	RMW-09-15-0605	Tier 3
	RMW-09-35	N	RMW-09-35-0605	Tier 3

Notes:

N regular sample

TABLE A6-2
Result Qualification and Associated Reason Codes - Groundwater, Second Quarter 2005 (June)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	6/21/2005	6/23/2005	6/21/2005	6/22/2005	6/22/2005	6/23/2005	6/29/2005	6/28/2005	6/28/2005	6/29/2005	6/29/2005	6/29/2005	6/22/2005	6/21/2005	6/22/2005	6/20/2005	6/20/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
1,4-Dioxane (p-dioxane)	6.1	µg/L	*	*	*	*	*	**200 J HT**	*	*	*	*	*	*	*	*	*	*	0.5 J HT
Organochlorine Pesticides																			
4,4'-DDD	0.28	µg/L	*	*	*	*	*	*	**0.61 J MP, RR**	*	*	*	0.02 UJ MP	*	*	*	*	*	*
4,4'-DDE	0.2	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	0.02 UJ MP	0.004 J CF	*	0.003 J CF	*	*	*
4,4'-DDT	0.2	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	0.02 UJ MP	*	*	0.005 J CF	*	*	*
Aldrin	0.004	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	3.6 J Sur	0.01 UJ MP	*	*	*	*	*	*
alpha-BHC	0.011	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	0.01 UJ MP	*	*	*	*	*	*
alpha-Chlordane	0.1	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	0.01 UJ MP	*	*	*	*	*	*
Aroclor-1016	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	0.2 UJ MP	*	*	*	*	*	*
Aroclor-1221	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	0.4 UJ MP	*	*	*	*	*	*
Aroclor-1232	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	0.2 UJ MP	*	*	*	*	*	*
Aroclor-1242	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	0.2 UJ MP	*	*	*	*	*	*
Aroclor-1248	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	0.2 UJ MP	*	*	*	*	*	*
Aroclor-1254	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	0.2 UJ MP	*	*	*	*	*	*
Aroclor-1260	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	0.2 UJ MP	*	*	*	*	*	*
beta-BHC	0.037	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	0.01 UJ MP	*	*	*	*	*	*
delta-BHC	NE	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	0.01 UJ MP	*	*	*	*	*	*
Dieldrin	0.0042	µg/L	*	*	*	*	*	*	0.02 UJ MP	**0.16 J CF**	*	**6.8 J CF**	0.02 UJ MP	**0.037 J CF**	*	*	*	*	*
Endosulfan I	220	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	0.01 UJ MP	*	*	*	*	*	*
Endosulfan II	220	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	0.02 UJ MP	*	*	*	*	*	*
Endosulfan sulfate	NE	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	0.02 UJ MP	*	*	*	*	*	*
Endrin	2	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	0.02 UJ MP	*	*	*	*	*	*
Endrin aldehyde	NE	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	0.02 UJ MP	*	*	*	*	*	*
Endrin ketone	NE	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	0.02 UJ MP	*	*	*	*	*	*
gamma-BHC	0.052	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	0.01 UJ MP	*	*	*	*	*	0.01 UJ MS
gamma-Chlordane	0.1	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	0.01 UJ MP	*	*	*	*	*	*
Heptachlor	0.01	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	0.01 UJ MP	*	*	*	*	*	*
Heptachlor epoxide	0.01	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	0.01 UJ MP	*	*	*	*	*	*
Methoxychlor	30	µg/L	*	*	*	*	*	*	0.1 UJ MP	*	*	*	0.1 UJ MP	*	*	*	*	*	*
Toxaphene	3	µg/L	*	*	*	*	*	*	1 UJ MP	*	*	*	1 UJ MP	*	*	*	*	*	*
Anions																			
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dissolved Gases																			
Ethane	NE	µg/L	*	*	*	*	*	*	1,100 J Sur	*	*	*	*	*	*	*	*	1.1 UJ HT, Pres	*
Ethene	NE	µg/L	*	*	*	*	*	*	3,900 J Sur	*	*	*	*	*	*	*	*	1.5 J HT, Pres, Sur	*
Methane	NE	µg/L	*	*	*	*	*	*	19,000 J Sur	*	*	*	26,000 J Sur	*	*	*	*	170 J HT, Pres, Sur	*

TABLE A6-2
Result Qualification and Associated Reason Codes - Groundwater, Second Quarter 2005 (June)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-35	RMW-10-35 (FD)
		Sample Date	**6/28/2005**	**6/28/2005**	**6/28/2005**	**6/24/2005**	**6/24/2005**	**6/23/2005**	**6/23/2005**	**6/23/2005**
Analyte	**Screening Level**	**Units**	**Analytical Results**							
Semivolatile Organic Compounds										
1,4-Dioxane (p-dioxane)	6.1	µg/L	*	*	*	*	*	*	*	*
Organochlorine Pesticides										
4,4'-DDD	0.28	µg/L	*	0.014 J CF	0.2 J CF	*	*	*	*	*
4,4'-DDE	0.2	µg/L	0.019 J CF	*	*	*	*	*	*	*
4,4'-DDT	0.2	µg/L	*	*	*	*	0.026 J MS	*	*	*
Aldrin	0.004	µg/L	*	*	*	*	*	*	*	*
alpha-BHC	0.011	µg/L	*	*	*	*	*	*	*	*
alpha-Chlordane	0.1	µg/L	*	*	*	*	*	*	*	*
Aroclor-1016	0.5	µg/L	*	*	*	*	*	*	*	*
Aroclor-1221	0.5	µg/L	*	*	*	*	*	*	*	*
Aroclor-1232	0.5	µg/L	*	*	*	*	*	*	*	*
Aroclor-1242	0.5	µg/L	*	*	*	*	*	*	*	*
Aroclor-1248	0.5	µg/L	*	*	*	*	*	*	*	*
Aroclor-1254	0.5	µg/L	*	*	*	*	*	*	*	*
Aroclor-1260	0.5	µg/L	*	*	*	*	*	*	*	*
beta-BHC	0.037	µg/L	*	*	*	*	*	*	*	*
delta-BHC	NE	µg/L	*	*	*	*	*	*	*	*
Dieldrin	0.0042	µg/L	*	*	*	*	*	*	*	*
Endosulfan I	220	µg/L	*	*	*	*	*	*	*	*
Endosulfan II	220	µg/L	*	*	*	*	*	*	*	*
Endosulfan sulfate	NE	µg/L	*	*	*	*	*	*	*	*
Endrin	2	µg/L	*	*	*	*	*	*	*	*
Endrin aldehyde	NE	µg/L	*	*	*	*	*	*	*	*
Endrin ketone	NE	µg/L	*	*	*	*	*	*	*	*
gamma-BHC	0.052	µg/L	*	*	*	*	*	*	*	*
gamma-Chlordane	0.1	µg/L	*	*	*	*	*	*	*	*
Heptachlor	0.01	µg/L	*	*	*	*	*	*	*	*
Heptachlor epoxide	0.01	µg/L	*	*	*	*	*	*	*	*
Methoxychlor	30	µg/L	*	*	*	*	*	*	*	*
Toxaphene	3	µg/L	*	*	*	*	*	*	*	*
Anions										
Chloride	NE	mg/L	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*
Dissolved Gases										
Ethane	NE	µg/L	*	*	*	*	*	*	*	*
Ethene	NE	µg/L	*	*	*	*	*	*	*	*
Methane	NE	µg/L	*	*	*	*	*	*	*	*

TABLE A6-2
Result Qualification and Associated Reason Codes - Groundwater, Second Quarter 2005 (June)
AMCO Chemical Superfund Site, Oakland, California

Notes:
Results greater than the screening level are bolded
In cases where target analytes are reported from more than one method or from multiple dilutions, the most conservative result or reporting limit is presented; that is, the values presented represent either the maximum positive result or the minimum reporting limit selected from the available data.
See Groundwater Screening Level table for source of screening levels.

*	result not qualified for Quality Control outliers
NE	not established
µg/L	micrograms per liter
mg/L	milligrams per liter
J	estimated value
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
>IC	Result greater than linear calibration range
C%D	Continuing calibration verification is outside control limit
CF	Confirmation precision exceeded
EB	Equipment blank concentration exceeds criteria
FD	Field duplicate exceeds relative percent difference criteria
HT	Holding time exceeded
LB	Laboratory blank concentration exceeds criteria
MP	Method performance issues
MS	Matrix spike recovery exceeds control limilt
NSM	Mass spectra does not match library
Pres	Sample not properly preserved in the field
RR	Manual integration revision
RSD	Initial calibration relative standard deviation exceeded
Sur	Surrogate recovery outside control limits
TB	Trip blank concentration exceeds control limit

Appendix A7
Third Quarter 2005 Groundwater Sampling

APPENDIX A7

Third Quarter 2005 Groundwater Sampling

A7.1 Summary

The following sections describe the samples collected during the Third Quarter 2005 sampling event which occurred from September to October, 2005.

Third Quarter Groundwater: Groundwater samples were collected from September 28, 2005 through October 12, 2005 and were analyzed for VOCs, SVOCs, pesticides and PCBs, ICP/MS metals, ICP metals, dissolved gases, and anions. EPA CLP special analytical services were used to include additional analytes and lower reporting limits as needed. For groundwater, the selected screening levels are based on federal and state maximum contaminant levels (MCLs) and EPA Region 9 tap water PRGs.

A7.2 Data Review and Validation Findings

Table A7-1 presents a list of sample delivery groups, sample identifications, and validation levels for the samples collected during this event. Table A7-2 presents the both the Tier 3 and Tier 2 qualified results. Results that are unqualified are not shown. Rejected results are shown in boxes. Equipment blank and trip blank qualifications are discussed in section 3 of the main DQUA and are not discussed further in this section, although the qualified results are presented on the attached tables. The following discussion presents the findings of the Tier 3 validation of the third quarter 2005 groundwater monitoring sample results.

The findings of the Tier 3 validation are considered representative of the quality of the entire data set. For this event, Tier 3 validation was performed on 32 of the 32 samples for VOCs, SVOCs, and pesticides/PCBs and 14 of the 32 samples for metals.

The results were qualified for outliers associated with the following QC metrics: sample preservation, laboratory method blank, initial calibration, continuing calibration, surrogates, matrix spike and matrix spike duplicate, internal standard, ICP interference check sample, contract required quantitation limit check sample, ICP serial dilution, method performance, and second column confirmation.

A7.2.1 Sample Preservation (Reason Code Pres)

VOCs in Groundwater: The sample from location RMW-02-13 was received at pH 7 above the pH 2 preservation requirement. Results and quantitation limits associated VOCs were flagged as estimated, J/UJ and the 2-hexanone and styrene results were qualified as rejected, R.

A7.2.2 Laboratory Method Blank (Reason Code LB)

VOCs in Groundwater: The following analyte results in the samples from the indicated locations were qualified as non-detected at the RL and flagged U based on contamination in the associated laboratory method blank:

- Acetone in BMW-01, BMW-03, RMW-01-17, RMW-04-15, RMW-05-15, and RMW-12-51 duplicate
- Methylene chloride in BMW-01, BMW-06, BMW-07, RMW-03-15, RMW-07-35, RMW-10-15 duplicate, and RMW-11-35
- Chloromethane in BPZ-01, BMW-01, BMW-06, BMW-07, BMW-08, RMW-01-35, RMW-02-50, RMW-06-15, RMW-07-35, RMW-08-15, RMW-08-35, RMW-09-15, RMW-10-15 duplicate, RMW-11-35, RMW-12-32, RMW-13-35, and RMW-14-50
- Ethyl-tert-butyl ether in RMW-11-35
- Chloromethane was detected in RMW-02-13 was flagged J at the detected concentration

SVOCs in Groundwater: The following analyte results in the samples from the indicated locations were qualified as non-detected at the RL and flagged U based on contamination in the associated laboratory method blank:

- Bis(2-ethylhexyl)phthalate in RMW-03-15 and RMW-07-35

Metals in Groundwater: The following analyte results in the samples from the indicated locations were qualified as non-detected at the RL and flagged U based on contamination in the associated laboratory method blank:

- Chromium in BMW-01, BMW-03, RMW-02-50, RMW-04-15, and RMW-07-15

A7.2.3 Initial Calibration (Reason Code RSD)

VOCs in Groundwater: The initial calibration exceeded the 30% (40% for poor responders) RSD control limit for the following analytes in the samples from the indicated locations:

- Methylene chloride and 1,2,3-trichlorobenzene in BMW-03, RMW-04-15, RMW-05-15, RMW-07-15, RMW-09-15 duplicate, RMW-09-35, RMW-10-15, and RMW-10-35
- Methyl acetate, methylene chloride and trans-1,3-dichloropropene in RMW-01-17, RMW-12-51, and RMW-12-51 duplicate.

Results and quantitation limits were flagged as estimated J/UJ

SVOCs in Groundwater: The initial calibration associated with the listed analyte in the samples from the indicated locations exceeded the 40% RSD control limit:

- 2,4-Dinitrophenol in RMW-02-50 and RMW-08-15

Results and quantitation limits were flagged as estimated J/UJ

Organochlorine Pesticides and PCBs in Groundwater: The %RSD for 4,4′-DDD in the initial calibration on the confirmatory column was above the 20% acceptance criterion. Results and

quantitation limits for 4,4'-DDD in samples from locations MW-12, RMW-02-13, RMW-03-15, and RMW-12-32 were estimated, J/UJ.

A7.2.4 Continuing Calibration (Reason Code C%D)

VOCs in Groundwater: The continuing calibration %D was above the 30% (40% for poor responders) upper control limit for the following compounds in the indicated samples, from the indicated locations. The results and quantitation limits were flagged as estimated, J/UJ:

- Carbon tetrachloride in BMW-01, RMW-10-15 duplicate, and RMW-11-35
- Methylcyclohexane, isopropylbenzene and styrene in RMW-09-15 duplicate and RMW-09-35
- Chloroethane in BMW-06, BMW-07, RMW-02-32, BMW-07-35, RMW-08-35, RMW-11-35, and RMW-12-32
- Methylcyclohexane in RMW-03-15, RMW-07-15, RMW-11-35, RMW-09-15 duplicate, and RMW-09-35
- Total xylenes and styrene in RMW-03-15 and RMW-07-15
- Methyl acetate in RMW-01-17, RMW-12-51 duplicate, and RMW-12-51
- Methylene chloride in RMW-01-17, RMW-12-51, RMW-12-51 duplicate
- Styrene in RMW-09-15 and RMW-09-15 duplicate
- Isopropylbenzene in RMW-09-15 and RMW-09-15 duplicate

SVOCs in Groundwater: The results for the following analytes in the samples from the indicated locations were estimated due to %Ds in the continuing calibrations that did not meet method specifications:

- n-Nitroso-di-n-propylamine, 2,4-dinitrophenol, butylbenzylphthalate, and di-n-octylphthalate in RMW-09-15 duplicate and RMW-09-35

Total Metals by ICP-AES in Groundwater: Potassium recoveries in the continuing calibration verification were above the acceptance limits; therefore all associated detected results were estimated, J, and may be biased high in the following samples from the indicated locations:

- BMW-01, BMW-03, RMW-03-15, RMW-04-15, RMW-05-15, RMW-06-15, RWM-07-15, RMW-07-35, RMW-09-15, MW-09-15 duplicate, RMW-09-35, RMW-10-15, RMW-10-15 duplicate, and RMW-10-35.

The closing calibration verification standard recoveries were below the acceptance limits for beryllium, chromium, cobalt, copper, nickel and vanadium. The results for these analytes in associated samples from locations RMW-10-15, MW-10-15 duplicate, and RMW-10-35 were estimated, J. The results for these analytes may be biased low.

A7.2.5 Surrogates (Reason Code Sur)

VOCs in Groundwater: Surrogate recoveries exceeded the method specified lower control limit in the following samples. Results for the analytes in sample from the locations listed below were estimated and may be biased low. The affected results are listed in Table A7-2, indicated by the Reason Code "Sur":

- MW-12, BMW-03, BMW-07, RMW-01-17, RMW-01-35, RMW-02-50, RMW-03-15, RMW-05-15, RMW-06-15, RMW-07-15, RMW-08-15, RMW-08-35, RMW-09-15, RMW-09-15 duplicate, RMW-09-35, RMW-10-15, MW-10-15 duplicate, RMW-12-51, RMW-13-35, and RMW-14-50

The following analyte in the sample from the indicated location was associated with a surrogate that was below 10% recovery rejection criterion.

- Methyl ethyl ketone in MW-12

The quantitation limit for this analyte were rejected as unusable, R

SVOCs in Groundwater: Surrogate recoveries exceeded the method specified lower control limit in the following samples. Results for the analytes in the samples from the indicated locations may be biased low:

- MW-12, BMW-01, BMW-06, RMW-02-13, RMW-02-32, RMW-04-15, MW-09-15 duplicate, RMW-09-35, RMW-10-35, RMW-11-35, RMW-12-32, RMW-12-51, and RMW-14-50

The affected results were listed in Table A7-2, indicated by the Reason Code "Sur".

SVOCs in Groundwater: The following analytes were associated with surrogates that were recovered below the 10% recovery rejection criterion. The non-detected analytes were rejected as unusable, R for the following analytes in samples from the indicated locations:

- 3,3′-Dichlorobenzidine, 4-chloroaniline, and hexachlorocyclopentadiene in BPZ-01, MW-12, RMW-07-35, and RMW-12-51
- 4,6-Dinitro-2-methylphenol in MW-12 and RMW-02-50

The affected results were listed in Table A7-2, indicated by the Reason Code "Sur".

Organochlorine Pesticides and PCBs in Groundwater: The laboratory reported no tetrachloro-m-xylene (TCMX) recovery associated with the analysis of 4,4′-DDE in sample from location RMW-02-13. The result for 4,4′-DDE is flagged was estimated, J.

The laboratory reported high recovery of the surrogate, dichlorobiphenyl (DCB) associated with the analysis of 4,4′-DDE in sample from location BPZ-01. The 4,4′-DDE result in sample BPZ-01 was qualified as estimated, J. Reporting limits are considered unaffected by high surrogate recoveries.

Dissolved Gases in Groundwater: The surrogate recovery for the sample from location MW-13-35 was below acceptance criteria. Methane, ethane and ethene were qualified as estimated, J.

A7.2.6 Matrix Spike Matrix Spike Duplicates (Reason Code MS or SD)

VOCs in Groundwater: The trichloroethene recovery was greater than the upper control limit in the MSD performed on the sample from location RMW-09-15. The relative percent differences for all compounds exceeded acceptable QC limits. Detected results for trichloroethene, 1,1-dichloroethene and benzene were flagged as estimated ,J.

Trichloroethene and 1,1-dichloroethene MS recoveries were below the LCL control limits in the MS/MSD pair performed on the sample from location RMW-02-13. The MS/MSD RPDs were outside the acceptance criteria for chlorobenzene, 1,1-dichloroethene, and trichloroethene. The detected parent results for these analytes were flagged as estimated ,J.

A7.2.7 Internal Standard (Reason Code IS)

Total Metals by ICP-AES in Groundwater: Internal standard recoveries were above the acceptance criteria based on the internal standard response in the daily standard in both the original and two-fold dilutions in the following samples. Data were reported from the dilution for each of these samples. Detected results and quantitation limits for the following analytes in the samples from the indicated locations were qualified as estimated, J":

- Antimony, lead and barium in RMW-10-15, RMW-10-15 duplicate, and RMW-10-35

A7.2.8 Contract Required Quantitation Limit (Reason Code CRI)

Total Metals by ICP-AES in Groundwater: The contract required quantitation limit check samples were outside the acceptance criteria for arsenic and copper in the standard associated with the sample from RMW-07-15. The results for these analytes were qualified as estimated, J+ and may be biased high.

A7.2.9 ICP Interference Check Sample (Reason Code ICS)

Total Metals by ICP-AES in Groundwater: Zinc was recovered in the interference check sample at 123% and 125%, above the upper control limit of 120%. Zinc results were qualified as estimated, J+ and may be biased high. The following samples from the indicated locations were affected:

- BMW-01, BMW-03, RMW-03-15, RMW-04-15, RMW-05-15, RMW-06-15, RMW-07-15, RMW-07-35, RMW-09-15,MW-09-15 duplicate, RMW-09-35, RMW-10-15, MW-10-15 duplicate, and RMW-10-35.

A7.2.10 ICP Serial Dilution (Reason Code SerDil)

Total Metals by ICP-AES in Groundwater: A serial dilution was performed on the sample from location BMW-01. All recovery criteria were met except for the potassium recovery. The sample result for potassium was flagged as estimated, J.

A7.2.11 Method Performance (Reason Code MP)

Organochlorine Pesticides/PCBs in Groundwater: Manual integrations were performed on the surrogates in several samples. The integrations were inconsistent between samples. Manual integration on a peak shoulder, partial peak, multiple peaks, or on the baseline,

although documented, did not appear to be appropriate. Manual integrations of the surrogates were re-evaluated by the laboratory and revised as needed.

Samples from locations RMW-10-35 and MW-12 had no TCX recovery on one column and a recovery of 266 percent and 5498 percent, respectively on the confirmatory column. The inconsistent surrogate recoveries indicate method performance issues for these samples; therefore, all pesticide quantitation limits were qualified as estimated, UJ.

A7.2.12 Second Column Confirmation (Reason Code CF)

Organochlorine Pesticides/PCBs in Groundwater: The RPDs between the primary and confirmation columns exceeded the QC limits of 25% for the following analytes in the indicated samples from the indicated locations:

- 4,4'-DDD in RMW-02-13, RMW-03-15, RMW-12-32, and RMW-12-51 duplicate
- Heptachlor in RMW-14-50
- 4,4'-DDE and dieldrin in BPZ-01
- Dieldrin in RMW-02-50

Results were flagged as estimated, J.

TABLE A7-1

Sample Delivery Group Reference - Groundwater, Third Quarter 2005 (September-October)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
05272B (EPA Region 9)				
Anions, EPA Method 300.0				
	BMW-01	N	BMW-01-0905	Tier 2
	BMW-03	N	BMW-03-0905	Tier 2
	RMW-04-15	N	RMW-04-15-0905	Tier 2
	RMW-05-15	N	RMW-05-15-0905	Tier 2
	RMW-09-15	N	RMW-09-15-0905	Tier 2
	RMW-09-15	FD	MW-91-0905	Tier 2
	RMW-09-35	N	RMW-09-35-0905	Tier 2
	RMW-10-15	N	RMW-10-15-0905	Tier 2
	RMW-10-15	FD	MW-90-15-0905	Tier 2
	RMW-10-35	N	RMW-10-35-0905	Tier 2
Dissolved Gases, EPA Method RSK-175				
	BMW-01	N	BMW-01-0905	Tier 2
	BMW-03	N	BMW-03-0905	Tier 2
	RMW-04-15	N	RMW-04-15-0905	Tier 2
	RMW-05-15	N	RMW-05-15-0905	Tier 2
	RMW-09-15	N	RMW-09-15-0905	Tier 2
	RMW-09-15	FD	MW-91-0905	Tier 2
	RMW-09-35	N	RMW-09-35-0905	Tier 2
	RMW-10-15	N	RMW-10-15-0905	Tier 2
	RMW-10-15	FD	MW-90-15-0905	Tier 2
	RMW-10-35	N	RMW-10-35-0905	Tier 2
05277I (EPA Region 9)				
Anions, EPA Method 300.0				
	BMW-06	N	BMW-06-0905	Tier 2
	BMW-07	N	BMW-07-0905	Tier 2
	BMW-08	N	BMW-08-0905	Tier 2
	BPZ-01	N	BPZ-01-0905	Tier 2
	RMW-01-17	N	RMW-01-17-0905	Tier 2
	RMW-01-35	N	RMW-01-35-0905	Tier 2
	RMW-03-15	N	RMW-03-15-0905	Tier 2
	RMW-06-15	N	RMW-06-15-0905	Tier 2
	RMW-07-15	N	RMW-07-15-0905	Tier 2
	RMW-07-35	N	RMW-07-35-0905	Tier 2
	RMW-11-35	N	RMW-11-35-0905	Tier 2
	RMW-13-35	N	RMW-13-35-0905	Tier 2
	RMW-14-50	N	RMW-14-50-0905	Tier 2

TABLE A7-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
05277I (EPA Region 9)				
Dissolved Gases, EPA Method RSK-175				
	BMW-06	N	BMW-06-0905	Tier 2
	BMW-07	N	BMW-07-0905	Tier 2
	BMW-08	N	BMW-08-0905	Tier 2
	BPZ-01	N	BPZ-01-0905	Tier 2
	RMW-01-17	N	RMW-01-17-0905	Tier 2
	RMW-01-35	N	RMW-01-35-0905	Tier 2
	RMW-03-15	N	RMW-03-15-0905	Tier 2
	RMW-06-15	N	RMW-06-15-0905	Tier 2
	RMW-07-15	N	RMW-07-15-0905	Tier 2
	RMW-07-35	N	RMW-07-35-0905	Tier 2
	RMW-11-35	N	RMW-11-35-0905	Tier 2
	RMW-13-35	N	RMW-13-35-0905	Tier 2
	RMW-14-50	N	RMW-14-50-0905	Tier 2
05284A (EPA Region 9)				
Anions, EPA Method 300.0				
	MW-12	N	MW-12-0905	Tier 2
	RMW-02-13	N	RMW-02-13-0905	Tier 2
	RMW-02-32	N	RMW-02-32-0905	Tier 2
	RMW-02-50	N	RMW-02-50-0905	Tier 2
	RMW-08-15	N	RMW-08-15-0905	Tier 2
	RMW-08-35	N	RMW-08-35-0905	Tier 2
	RMW-12-32	N	RMW-12-32-0905	Tier 2
	RMW-12-51	N	RMW-12-51-0905	Tier 2
	RMW-12-51	FD	MW-88-51-0905	Tier 2
Dissolved Gases, EPA Method RSK-175				
	MW-12	N	MW-12-0905	Tier 2
	RMW-02-13	N	RMW-02-13-0905	Tier 2
	RMW-02-32	N	RMW-02-32-0905	Tier 2
	RMW-02-50	N	RMW-02-50-0905	Tier 2
	RMW-08-15	N	RMW-08-15-0905	Tier 2
	RMW-08-35	N	RMW-08-35-0905	Tier 2
	RMW-12-32	N	RMW-12-32-0905	Tier 2
	RMW-12-51	N	RMW-12-51-0905	Tier 2
	RMW-12-51	FD	MW-88-51-0905	Tier 2
48633 (APPL)				
Organophosphorus Pesticides, EPA Method 8141A				
	BMW-01	N	BMW-01-0905	Tier 2
	BMW-03	N	BMW-03-0905	Tier 2
	RMW-04-15	N	RMW-04-15-0905	Tier 2
	RMW-05-15	N	RMW-05-15-0905	Tier 2

TABLE A7-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
48634 (APPL)				
Organophosphorus Pesticides, EPA Method 8141A				
	RMW-09-15	N	RMW-09-15-0905	Tier 2
	RMW-09-15	FD	MW-91-0905	Tier 2
	RMW-09-35	N	RMW-09-35-0905	Tier 2
	RMW-10-15	N	RMW-10-15-0905	Tier 2
	RMW-10-15	FD	MW-90-15-0905	Tier 2
	RMW-10-35	N	RMW-10-35-0905	Tier 2
48654 (APPL)				
Organophosphorus Pesticides, EPA Method 8141A				
	RMW-06-15	N	RMW-06-15-0905	Tier 2
	RMW-07-15	N	RMW-07-15-0905	Tier 2
	RMW-07-35	N	RMW-07-35-0905	Tier 2
48673 (APPL)				
Organophosphorus Pesticides, EPA Method 8141A				
	BMW-06	N	BMW-06-0905	Tier 2
	BMW-07	N	BMW-07-0905	Tier 2
	RMW-03-15	N	RMW-03-15-0905	Tier 2
	RMW-14-50	N	RMW-14-50-0905	Tier 2
48699 (APPL)				
Organophosphorus Pesticides, EPA Method 8141A				
	BMW-08	N	BMW-08-0905	Tier 2
	BPZ-01	N	BPZ-01-0905	Tier 2
	RMW-11-35	N	RMW-11-35-0905	Tier 2
	RMW-13-35	N	RMW-13-35-0905	Tier 2
48717 (APPL)				
Organophosphorus Pesticides, EPA Method 8141A				
	RMW-01-17	N	RMW-01-17-0905	Tier 2
	RMW-01-35	N	RMW-01-35-0905	Tier 2
48753 (APPL)				
Organophosphorus Pesticides, EPA Method 8141A				
	RMW-02-32	N	RMW-02-32-0905	Tier 2
	RMW-02-50	N	RMW-02-50-0905	Tier 2
	RMW-08-15	N	RMW-08-15-0905	Tier 2
	RMW-08-35	N	RMW-08-35-0905	Tier 2
	RMW-12-32	N	RMW-12-32-0905	Tier 2
	RMW-12-51	N	RMW-12-51-0905	Tier 2
	RMW-12-51	FD	MW-88-51-0905	Tier 2
48768 (APPL)				
Organophosphorus Pesticides, EPA Method 8141A				
	MW-12	N	MW-12-0905	Tier 2
	RMW-02-13	N	RMW-02-13-0905	Tier 2

TABLE A7-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY23M1 (Bonner)				
Inorganics, CLP-SOW				
	BMW-01	N	BMW-01-0905	Tier 3
	BMW-01	N	BMW-01-0905	Tier 3
	BMW-03	N	BMW-03-0905	Tier 3
	BMW-03	N	BMW-03-0905	Tier 3
	RMW-03-15	N	RMW-03-15-0905	Tier 3
	RMW-03-15	N	RMW-03-15-0905	Tier 3
	RMW-04-15	N	RMW-04-15-0905	Tier 3
	RMW-04-15	N	RMW-04-15-0905	Tier 3
	RMW-05-15	N	RMW-05-15-0905	Tier 3
	RMW-05-15	N	RMW-05-15-0905	Tier 3
	RMW-06-15	N	RMW-06-15-0905	Tier 3
	RMW-06-15	N	RMW-06-15-0905	Tier 3
	RMW-07-15	N	RMW-07-15-0905	Tier 3
	RMW-07-15	N	RMW-07-15-0905	Tier 3
	RMW-07-35	N	RMW-07-35-0905	Tier 3
	RMW-07-35	N	RMW-07-35-0905	Tier 3
	RMW-09-15	N	RMW-09-15-0905	Tier 3
	RMW-09-15	N	RMW-09-15-0905	Tier 3
	RMW-09-15	FD	MW-91-0905	Tier 3
	RMW-09-15	FD	MW-91-0905	Tier 3
	RMW-09-35	N	RMW-09-35-0905	Tier 3
	RMW-09-35	N	RMW-09-35-0905	Tier 3
	RMW-10-15	N	RMW-10-15-0905	Tier 3
	RMW-10-15	N	RMW-10-15-0905	Tier 3
	RMW-10-15	FD	MW-90-15-0905	Tier 3
	RMW-10-15	FD	MW-90-15-0905	Tier 3
	RMW-10-35	N	RMW-10-35-0905	Tier 3
	RMW-10-35	N	RMW-10-35-0905	Tier 3
MY23P5 (Bonner)				
Inorganics, CLP-SOW				
	BMW-06	N	BMW-06-0905	Tier 2
	BMW-07	N	BMW-07-0905	Tier 2
	BMW-08	N	BMW-08-0905	Tier 2
	BPZ-01	N	BPZ-01-0905	Tier 2
	RMW-01-17	N	RMW-01-17-0905	Tier 2
	RMW-01-35	N	RMW-01-35-0905	Tier 2
	RMW-11-35	N	RMW-11-35-0905	Tier 2
	RMW-13-35	N	RMW-13-35-0905	Tier 2
	RMW-14-50	N	RMW-14-50-0905	Tier 2
Inorganics, CLP-SOW (Filtered)				
	BMW-06	N	BMW-06-0905	Tier 2
	BMW-07	N	BMW-07-0905	Tier 2
	BMW-08	N	BMW-08-0905	Tier 2
	BPZ-01	N	BPZ-01-0905	Tier 2
	RMW-01-35	N	RMW-01-35-0905	Tier 2
	RMW-11-35	N	RMW-11-35-0905	Tier 2
	RMW-13-35	N	RMW-13-35-0905	Tier 2
	RMW-14-50	N	RMW-14-50-0905	Tier 2

TABLE A7-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY23R4 (Sentinel)				
Inorganics, CLP-SOW				
	BMW-06	N	BMW-06-0905	Tier 2
	BMW-07	N	BMW-07-0905	Tier 2
	BMW-08	N	BMW-08-0905	Tier 2
	BPZ-01	N	BPZ-01-0905	Tier 2
	RMW-01-17	N	RMW-01-17-0905	Tier 2
	RMW-01-35	N	RMW-01-35-0905	Tier 2
	RMW-02-32	N	RMW-02-32-0905	Tier 2
	RMW-02-50	N	RMW-02-50-0905	Tier 2
	RMW-08-15	N	RMW-08-15-0905	Tier 2
	RMW-08-35	N	RMW-08-35-0905	Tier 2
	RMW-11-35	N	RMW-11-35-0905	Tier 2
	RMW-12-32	N	RMW-12-32-0905	Tier 2
	RMW-12-51	N	RMW-12-51-0905	Tier 2
	RMW-12-51	FD	MW-88-51-0905	Tier 2
	RMW-13-35	N	RMW-13-35-0905	Tier 2
	RMW-14-50	N	RMW-14-50-0905	Tier 2
MY23R5 (Sentinel)				
Inorganics, CLP-SOW (Filtered)				
	BMW-06	N	BMW-06-0905	Tier 2
	BMW-07	N	BMW-07-0905	Tier 2
	BMW-08	N	BMW-08-0905	Tier 2
	BPZ-01	N	BPZ-01-0905	Tier 2
	RMW-01-17	N	RMW-01-17-0905	Tier 2
	RMW-01-35	N	RMW-01-35-0905	Tier 2
	RMW-02-32	N	RMW-02-32-0905	Tier 2
	RMW-02-50	N	RMW-02-50-0905	Tier 2
	RMW-08-15	N	RMW-08-15-0905	Tier 2
	RMW-08-35	N	RMW-08-35-0905	Tier 2
	RMW-11-35	N	RMW-11-35-0905	Tier 2
	RMW-12-32	N	RMW-12-32-0905	Tier 2
	RMW-12-51	N	RMW-12-51-0905	Tier 2
	RMW-12-51	FD	MW-88-51-0905	Tier 2
	RMW-13-35	N	RMW-13-35-0905	Tier 2
	RMW-14-50	N	RMW-14-50-0905	Tier 2
MY23R8 (Bonner)				
Inorganics, CLP-SOW (Filtered)				
	RMW-01-17	N	RMW-01-17-0905	Tier 2

TABLE A7-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY23S0 (Bonner)				
Inorganics, CLP-SOW				
	MW-12	N	MW-12-0905	Tier 2
	RMW-02-13	N	RMW-02-13-0905	Tier 2
	RMW-02-32	N	RMW-02-32-0905	Tier 2
	RMW-02-50	N	RMW-02-50-0905	Tier 2
	RMW-08-15	N	RMW-08-15-0905	Tier 2
	RMW-08-35	N	RMW-08-35-0905	Tier 2
	RMW-12-32	N	RMW-12-32-0905	Tier 2
	RMW-12-51	N	RMW-12-51-0905	Tier 2
	RMW-12-51	FD	MW-88-51-0905	Tier 2
Inorganics, CLP-SOW (Filtered)				
	MW-12	N	MW-12-0905	Tier 2
	RMW-02-13	N	RMW-02-13-0905	Tier 2
	RMW-02-32	N	RMW-02-32-0905	Tier 2
	RMW-02-50	N	RMW-02-50-0905	Tier 2
	RMW-08-15	N	RMW-08-15-0905	Tier 2
	RMW-08-35	N	RMW-08-35-0905	Tier 2
	RMW-12-32	N	RMW-12-32-0905	Tier 2
	RMW-12-51	N	RMW-12-51-0905	Tier 2
	RMW-12-51	FD	MW-88-51-0905	Tier 2
MY23T5 (Sentinel)				
Inorganics, CLP-SOW				
	MW-12	N	MW-12-0905	Tier 2
	RMW-02-13	N	RMW-02-13-0905	Tier 2
MY23T6 (Sentinel)				
Inorganics, CLP-SOW (Filtered)				
	MW-12	N	MW-12-0905	Tier 2
	RMW-02-13	N	RMW-02-13-0905	Tier 2

TABLE A7-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY26K3 (Bonner)				
Inorganics, CLP-SOW (Filtered)				
	BMW-01	N	BMW-01-0905	Tier 2
	BMW-01	N	BMW-01-0905	Tier 2
	BMW-03	N	BMW-03-0905	Tier 2
	BMW-03	N	BMW-03-0905	Tier 2
	RMW-03-15	N	RMW-03-15-0905	Tier 2
	RMW-03-15	N	RMW-03-15-0905	Tier 2
	RMW-04-15	N	RMW-04-15-0905	Tier 2
	RMW-04-15	N	RMW-04-15-0905	Tier 2
	RMW-05-15	N	RMW-05-15-0905	Tier 2
	RMW-05-15	N	RMW-05-15-0905	Tier 2
	RMW-06-15	N	RMW-06-15-0905	Tier 2
	RMW-06-15	N	RMW-06-15-0905	Tier 2
	RMW-07-15	N	RMW-07-15-0905	Tier 2
	RMW-07-15	N	RMW-07-15-0905	Tier 2
	RMW-07-35	N	RMW-07-35-0905	Tier 2
	RMW-07-35	N	RMW-07-35-0905	Tier 2
	RMW-09-15	N	RMW-09-15-0905	Tier 2
	RMW-09-15	N	RMW-09-15-0905	Tier 2
	RMW-09-15	FD	MW-91-0905	Tier 2
	RMW-09-15	FD	MW-91-0905	Tier 2
	RMW-09-35	N	RMW-09-35-0905	Tier 2
	RMW-09-35	N	RMW-09-35-0905	Tier 2
	RMW-10-15	N	RMW-10-15-0905	Tier 2
	RMW-10-15	N	RMW-10-15-0905	Tier 2
	RMW-10-15	FD	MW-90-15-0905	Tier 2
	RMW-10-15	FD	MW-90-15-0905	Tier 2
	RMW-10-35	N	RMW-10-35-0905	Tier 2
	RMW-10-35	N	RMW-10-35-0905	Tier 2
Y23M1 (A4 Scientific)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	BMW-01	N	BMW-01-0905	Tier 3
	BMW-03	N	BMW-03-0905	Tier 3
	RMW-04-15	N	RMW-04-15-0905	Tier 3
	RMW-05-15	N	RMW-05-15-0905	Tier 3
	RMW-09-15	N	RMW-09-15-0905	Tier 3
	RMW-09-15	FD	MW-91-0905	Tier 3
	RMW-09-35	N	RMW-09-35-0905	Tier 3
	RMW-10-15	N	RMW-10-15-0905	Tier 3
	RMW-10-15	FD	MW-90-15-0905	Tier 3
	RMW-10-35	N	RMW-10-35-0905	Tier 3

TABLE A7-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y23M1 (A4 Scientific)				
Semivolatile Organics, CLP-SOW				
	BMW-01	N	BMW-01-0905	Tier 3
	BMW-03	N	BMW-03-0905	Tier 3
	RMW-04-15	N	RMW-04-15-0905	Tier 3
	RMW-05-15	N	RMW-05-15-0905	Tier 3
	RMW-09-15	N	RMW-09-15-0905	Tier 3
	RMW-09-15	FD	MW-91-0905	Tier 3
	RMW-09-35	N	RMW-09-35-0905	Tier 3
	RMW-10-15	N	RMW-10-15-0905	Tier 3
	RMW-10-15	FD	MW-90-15-0905	Tier 3
	RMW-10-35	N	RMW-10-35-0905	Tier 3
Volatile Organics, CLP-SOW				
	BMW-01	N	BMW-01-0905	Tier 3
	BMW-03	N	BMW-03-0905	Tier 3
	RMW-04-15	N	RMW-04-15-0905	Tier 3
	RMW-05-15	N	RMW-05-15-0905	Tier 3
	RMW-09-15	N	RMW-09-15-0905	Tier 3
	RMW-09-15	FD	MW-91-0905	Tier 3
	RMW-09-35	N	RMW-09-35-0905	Tier 3
	RMW-10-15	N	RMW-10-15-0905	Tier 3
	RMW-10-15	FD	MW-90-15-0905	Tier 3
	RMW-10-35	N	RMW-10-35-0905	Tier 3
Y23M2 (A4 Scientific)				
1,4-Dioxane (SIM), CLP-SOW				
	BMW-01	N	BMW-01-0905	Tier 3
	BMW-03	N	BMW-03-0905	Tier 3
	RMW-04-15	N	RMW-04-15-0905	Tier 3
	RMW-05-15	N	RMW-05-15-0905	Tier 3
	RMW-09-15	N	RMW-09-15-0905	Tier 3
	RMW-09-15	FD	MW-91-0905	Tier 3
	RMW-09-35	N	RMW-09-35-0905	Tier 3
	RMW-10-15	N	RMW-10-15-0905	Tier 3
	RMW-10-15	FD	MW-90-15-0905	Tier 3
	RMW-10-35	N	RMW-10-35-0905	Tier 3
Y23N7 (A4 Scientific)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	BMW-06	N	BMW-06-0905	Tier 3
	BMW-07	N	BMW-07-0905	Tier 3
	BMW-08	N	BMW-08-0905	Tier 3
	BPZ-01	N	BPZ-01-0905	Tier 3
	RMW-03-15	N	RMW-03-15-0905	Tier 3
	RMW-06-15	N	RMW-06-15-0905	Tier 3
	RMW-07-15	N	RMW-07-15-0905	Tier 3
	RMW-07-35	N	RMW-07-35-0905	Tier 3
	RMW-11-35	N	RMW-11-35-0905	Tier 3
	RMW-13-35	N	RMW-13-35-0905	Tier 3
	RMW-14-50	N	RMW-14-50-0905	Tier 3

TABLE A7-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y23N7 (A4 Scientific)				
Semivolatile Organics, CLP-SOW				
	BMW-06	N	BMW-06-0905	Tier 3
	BMW-07	N	BMW-07-0905	Tier 3
	BMW-08	N	BMW-08-0905	Tier 3
	BPZ-01	N	BPZ-01-0905	Tier 3
	RMW-03-15	N	RMW-03-15-0905	Tier 3
	RMW-06-15	N	RMW-06-15-0905	Tier 3
	RMW-07-15	N	RMW-07-15-0905	Tier 3
	RMW-07-35	N	RMW-07-35-0905	Tier 3
	RMW-11-35	N	RMW-11-35-0905	Tier 3
	RMW-13-35	N	RMW-13-35-0905	Tier 3
	RMW-14-50	N	RMW-14-50-0905	Tier 3
Volatile Organics, CLP-SOW				
	BMW-06	N	BMW-06-0905	Tier 3
	BMW-07	N	BMW-07-0905	Tier 3
	BMW-08	N	BMW-08-0905	Tier 3
	BPZ-01	N	BPZ-01-0905	Tier 3
	RMW-03-15	N	RMW-03-15-0905	Tier 3
	RMW-06-15	N	RMW-06-15-0905	Tier 3
	RMW-07-15	N	RMW-07-15-0905	Tier 3
	RMW-07-35	N	RMW-07-35-0905	Tier 3
	RMW-11-35	N	RMW-11-35-0905	Tier 3
	RMW-13-35	N	RMW-13-35-0905	Tier 3
	RMW-14-50	N	RMW-14-50-0905	Tier 3
Y23N8 (A4 Scientific)				
1,4-Dioxane (SIM), CLP-SOW				
	BMW-06	N	BMW-06-0905	Tier 3
	BMW-07	N	BMW-07-0905	Tier 3
	BMW-08	N	BMW-08-0905	Tier 3
	BPZ-01	N	BPZ-01-0905	Tier 3
	RMW-03-15	N	RMW-03-15-0905	Tier 3
	RMW-06-15	N	RMW-06-15-0905	Tier 3
	RMW-07-15	N	RMW-07-15-0905	Tier 3
	RMW-07-35	N	RMW-07-35-0905	Tier 3
	RMW-11-35	N	RMW-11-35-0905	Tier 3
	RMW-13-35	N	RMW-13-35-0905	Tier 3
	RMW-14-50	N	RMW-14-50-0905	Tier 3
Y23R4 (A4 Scientific)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	RMW-01-17	N	RMW-01-17-0905	Tier 3
	RMW-01-35	N	RMW-01-35-0905	Tier 3
	RMW-02-32	N	RMW-02-32-0905	Tier 3
	RMW-02-50	N	RMW-02-50-0905	Tier 3
	RMW-08-15	N	RMW-08-15-0905	Tier 3
	RMW-08-35	N	RMW-08-35-0905	Tier 3
	RMW-12-32	N	RMW-12-32-0905	Tier 3
	RMW-12-51	N	RMW-12-51-0905	Tier 3
	RMW-12-51	FD	MW-88-51-0905	Tier 3

TABLE A7-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y23R4 (A4 Scientific)				
Semivolatile Organics, CLP-SOW				
	RMW-01-17	N	RMW-01-17-0905	Tier 3
	RMW-01-35	N	RMW-01-35-0905	Tier 3
	RMW-02-32	N	RMW-02-32-0905	Tier 3
	RMW-02-50	N	RMW-02-50-0905	Tier 3
	RMW-08-15	N	RMW-08-15-0905	Tier 3
	RMW-08-35	N	RMW-08-35-0905	Tier 3
	RMW-12-32	N	RMW-12-32-0905	Tier 3
	RMW-12-51	N	RMW-12-51-0905	Tier 3
	RMW-12-51	FD	MW-88-51-0905	Tier 3
Volatile Organics, CLP-SOW				
	RMW-01-17	N	RMW-01-17-0905	Tier 3
	RMW-01-35	N	RMW-01-35-0905	Tier 3
	RMW-02-32	N	RMW-02-32-0905	Tier 3
	RMW-02-50	N	RMW-02-50-0905	Tier 3
	RMW-08-15	N	RMW-08-15-0905	Tier 3
	RMW-08-35	N	RMW-08-35-0905	Tier 3
	RMW-12-32	N	RMW-12-32-0905	Tier 3
	RMW-12-51	N	RMW-12-51-0905	Tier 3
	RMW-12-51	FD	MW-88-51-0905	Tier 3
Y23R7 (A4 Scientific)				
1,4-Dioxane (SIM), CLP-SOW				
	RMW-01-17	N	RMW-01-17-0905	Tier 3
	RMW-01-35	N	RMW-01-35-0905	Tier 3
	RMW-02-32	N	RMW-02-32-0905	Tier 3
	RMW-02-50	N	RMW-02-50-0905	Tier 3
	RMW-08-15	N	RMW-08-15-0905	Tier 3
	RMW-08-35	N	RMW-08-35-0905	Tier 3
	RMW-12-32	N	RMW-12-32-0905	Tier 3
	RMW-12-51	N	RMW-12-51-0905	Tier 3
	RMW-12-51	FD	MW-88-51-0905	Tier 3
Y23T5 (A4 Scientific)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	MW-12	N	MW-12-0905	Tier 3
	RMW-02-13	N	RMW-02-13-0905	Tier 3
Semivolatile Organics, CLP-SOW				
	MW-12	N	MW-12-0905	Tier 3
	RMW-02-13	N	RMW-02-13-0905	Tier 3
Volatile Organics, CLP-SOW				
	MW-12	N	MW-12-0905	Tier 3
	RMW-02-13	N	RMW-02-13-0905	Tier 3
Y23T9 (A4 Scientific)				
1,4-Dioxane (SIM), CLP-SOW				
	MW-12	N	MW-12-0905	Tier 3
	RMW-02-13	N	RMW-02-13-0905	Tier 3

Notes:
N regular sample
FD field duplicate

TABLE A7-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	9/28/2005	9/29/2005	10/5/2005	10/4/2005	10/5/2005	10/5/2005	10/11/2005	10/6/2005	10/6/2005	10/12/2005	10/11/2005	10/11/2005	10/4/2005	9/28/2005	9/29/2005	10/3/2005	10/3/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	200	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	0.5 UJ Sur	*	*	*	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	0.5 UJ Sur	*	*	*	*	*	*	*	**1.9 J Pres**	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*	0.5 UJ Sur
1,1,2-Trichloroethane	5	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*	*
1,1-Dichloroethane	5	µg/L	*	*	*	*	*	*	*	*	*	**480 J Pres**	*	*	*	*	*	*	*
1,1-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	*	*	**13 J MS, MS, Pres**	*	*	0.5 UJ Sur	*	*	*	*
1,2,3-Trichlorobenzene	NE	µg/L	*	0.5 UJ RSD	*	*	*	*	*	*	*	3.9 J Pres	*	*	*	0.5 UJ RSD	0.5 UJ RSD	*	0.5 UJ RSD
1,2,4-Trichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	**14 J Pres**	*	*	*	*	*	*	*
1,2-Dibromo-3-chloropropane	0.2	µg/L	*	0.5 UJ Sur	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*	0.5 UJ Sur
1,2-Dibromoethane	0.05	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	*	*	*	*	*
1,2-Dichlorobenzene	600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.5	µg/L	*	*	*	*	*	*	*	*	*	**23 J Pres**	*	*	0.5 UJ Sur	*	*	*	*
1,2-Dichloropropane	5	µg/L	*	*	*	*	*	*	*	*	0.5 UJ Sur	1 J Pres	*	*	*	*	*	*	*
1,3-Dichlorobenzene	180	µg/L	*	*	*	*	*	*	*	*	*	1.9 J Pres	*	*	*	*	*	*	*
1,4-Dichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	**10 J Pres**	*	*	*	*	*	*	*
2-Hexanone	NE	µg/L	*	*	*	*	*	*	*	*	*	5 R Pres	*	*	*	*	*	*	*
Acetone	5,500	µg/L	5 U EB, LB, TB	5 U EB, LB, TB	5 U EB	5 UJ EB, Sur	*	5 U EB	*	5 U LB	*	1,500 J Pres	*	*	5 U EB	5 U EB, LB, TB	5 U EB, LB, TB	5 U TB	5 U TB
Benzene	1	µg/L	*	*	*	*	*	*	*	*	*	**200 J Pres**	*	*	*	*	*	*	*
Bromochloromethane	NE	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	*	*	*	*	*
Bromodichloromethane	100	µg/L	*	*	*	*	*	*	*	*	0.5 UJ Sur	0.5 UJ Pres	*	*	*	*	*	*	*
Bromoform	100	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	*	*	*	*	*
Bromomethane	8.7	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	*	*	*	*	*
Carbon disulfide	1,000	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	*	*	*	*	*
Carbon tetrachloride	0.5	µg/L	0.5 UJ C%D	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	0.5 UJ Sur	*	*	*	*
Chlorobenzene	70	µg/L	*	*	*	*	*	*	*	*	*	24 J MS, Pres	*	*	*	*	*	*	*
Chloroethane	4.6	µg/L	*	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	*	*	*	500 UJ C%D	*	*	*	*	*	*
Chloroform	100	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	*	*	*	*	*
Chloromethane	160	µg/L	1.8 U LB	*	1.3 U EB, LB, TB	1.2 U EB, LB, TB	1 U LB	1 U EB, LB, TB	*	1.6 U TB	1.6 UJ LB, Sur, TB	1.7 J LB, Pres	*	1.1 UJ LB, Sur	*	*	*	1.3 UJ LB, Sur, TB	*
cis-1,2-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	*	*	**4,500 J Pres**	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*	*
Cyclohexane	10,000	µg/L	*	*	*	*	*	*	*	*	4.8 J Sur	16 J Pres	*	*	*	*	*	*	*
Dibromochloromethane	100	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	*	*	*	*	*
Ethyl tert-butyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	*	*	*	*	*
Ethylbenzene	700	µg/L	*	*	*	*	*	*	*	*	*	490 J Pres	*	*	*	*	*	*	*
Freon 11	150	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	0.5 UJ Sur	*	*	*	*
Freon 113	1,200	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	0.5 UJ Sur	*	*	*	*
Freon 12	390	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	660	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl acetate	6,100	µg/L	*	*	*	*	*	*	*	0.5 UJ C%D, RSD	*	0.5 UJ Pres	*	*	0.5 UJ Sur	*	*	*	*
Methyl ethyl ketone	7,000	µg/L	*	*	*	*	*	*	5 R Sur	*	*	1,900 J Pres	*	*	*	*	*	*	*
Methyl isobutyl ketone	2,000	µg/L	*	*	*	*	*	*	*	*	*	**2,100 J Pres**	*	*	*	*	*	*	*
Methyl tert-butyl ether	13	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	0.69 J Sur	*	*	*	*
Methylcyclohexane	NE	µg/L	*	*	*	*	*	*	*	*	2.2 J Sur	*	*	*	0.5 UJ C%D	*	*	*	0.5 UJ C%D
Methylene chloride	5	µg/L	0.5 U LB	0.5 UJ RSD	0.5 U LB	0.5 U LB	*	0.5 U TB	*	0.5 UJ C%D, EB, RSD	*	**6.6 J Pres**	*	*	0.5 UJ LB, Sur	0.39 J RSD	0.5 UJ RSD	0.5 U EB	1.8 J RSD
Styrene	100	µg/L	*	*	*	*	*	*	0.5 UJ Sur	*	*	0.5 R Pres	*	*	0.5 UJ C%D	*	*	*	0.5 UJ C%D
tert-Amyl methyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	0.5 UJ Pres	*	*	*	*	*	*	*
tert-Butyl alcohol	NE	µg/L	*	*	*	*	*	*	*	*	*	33 J Pres	*	*	*	*	*	*	*
Tetrachloroethene	5	µg/L	*	*	*	*	*	*	2.7 J Sur	*	*	2.4 J Pres	*	*	*	*	*	*	*
Toluene	150	µg/L	*	*	*	*	*	*	*	*	*	**8,200 J Pres**	*	*	*	*	*	*	*

TABLE A7-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	9/28/2005	9/29/2005	10/5/2005	10/4/2005	10/5/2005	10/5/2005	10/11/2005	10/6/2005	10/6/2005	10/12/2005	10/11/2005	10/11/2005	10/4/2005	9/28/2005	9/29/2005	10/3/2005	10/3/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
trans-1,2-Dichloroethene	10	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	*	0.5 UJ RSD	*	0.5 UJ Pres	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*	*
Trichloroethene	5	µg/L	*	*	*	*	*	*	16 J Sur	*	*	**20 J MS, MS, Pres**	*	*	*	*	*	*	*
Vinyl chloride	0.5	µg/L	*	*	*	*	*	*	*	*	*	**1,000 J Pres**	*	*	*	*	*	*	*
Xylenes, total	1,750	µg/L	*	*	*	*	*	*	*	*	*	**2,600 J Pres**	*	*	0.5 UJ C%D	*	*	*	0.5 UJ C%D
Semivolatile Organic Compounds																			
1,1'-Biphenyl	300	µg/L	*	*	*	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
1,2,4,5-Tetrachlorobenzene	11	µg/L	*	*	*	*	*	*	50 UJ Sur	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,5-Trichlorophenol	3,600	µg/L	*	*	*	*	*	*	200 UJ Sur	*	*	*	*	*	*	*	*	*	*
2,4,6-Trichlorophenol	0.96	µg/L	*	*	*	*	*	*	50 UJ Sur	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	110	µg/L	*	*	*	*	*	*	50 UJ Sur	*	*	*	*	*	*	*	*	*	*
2,4-Dimethylphenol	730	µg/L	*	*	5 UJ Sur	*	*	*	*	*	*	300 J Sur	*	*	*	*	*	*	*
2,4-Dinitrophenol	73	µg/L	*	*	*	*	*	*	200 UJ Sur	*	*	200 UJ Sur	20 UJ RSD, Sur	20 UJ RSD	*	*	*	*	*
2,4-Dinitrotoluene	73	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,6-Dinitrotoluene	36	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chloronaphthalene	490	µg/L	*	*	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
2-Chlorophenol	30	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylnaphthalene	NE	µg/L	*	*	5 UJ Sur	*	*	*	*	2.4 J Sur	*	*	*	*	*	*	*	*	*
2-Methylphenol	1,800	µg/L	*	*	5 UJ Sur	*	*	*	*	*	*	380 J Sur	*	*	*	*	*	*	*
2-Nitroaniline	110	µg/L	*	*	*	*	*	*	200 UJ Sur	*	*	200 UJ Sur	20 UJ Sur	*	*	*	*	*	*
2-Nitrophenol	NE	µg/L	*	*	*	*	*	*	50 UJ Sur	*	*	*	*	*	*	*	*	*	*
3,3'-Dichlorobenzidine	0.15	µg/L	*	*	5 UJ Sur	*	*	5 R Sur	50 R Sur	*	*	50 UJ Sur	*	*	*	*	*	*	*
3-Nitroaniline	NE	µg/L	*	*	*	*	*	*	200 UJ Sur	*	*	200 UJ Sur	20 UJ Sur	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/L	20 UJ Sur	*	*	*	*	*	200 R Sur	*	*	*	*	20 R Sur	*	20 UJ Sur	*	*	*
4-Bromophenylphenyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*
4-Chloro-3-methylphenol	NE	µg/L	*	*	*	*	*	*	180 J Sur	*	*	*	*	*	*	*	*	*	*
4-Chloroaniline	150	µg/L	*	*	5 UJ Sur	*	*	5 R Sur	50 R Sur	*	*	50 UJ Sur	*	*	*	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*
4-Methylphenol	180	µg/L	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitroaniline	NE	µg/L	*	*	*	*	*	*	200 UJ Sur	*	*	200 UJ Sur	20 UJ Sur	*	*	*	*	*	*
4-Nitrophenol	NE	µg/L	*	*	*	*	*	*	*	*	*	200 UJ Sur	20 UJ Sur	*	*	*	*	*	*
Acenaphthene	370	µg/L	*	*	5 UJ Sur	*	*	*	*	1.6 J Sur	*	*	5 UJ Sur	*	*	*	*	*	*
Acenaphthylene	NE	µg/L	*	*	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
Acetophenone	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Anthracene	1,800	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Atrazine	3	µg/L	*	*	*	*	*	*	50 UJ Sur	*	*	*	*	*	*	*	*	*	*
Benzaldehyde	3,600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)anthracene	0.092	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)pyrene	0.2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	0.092	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	0.056	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzyl butyl phthalate	7,300	µg/L	*	*	*	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
bis(2-Chloroethoxy)methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	0.01	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroisopropyl) ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	4.8	µg/L	5 U EB	5.6 U EB	5 U EB	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	5 U LB	*	*	*	*
Caprolactam	18,000	µg/L	*	*	*	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
Chrysene	0.56	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	9/28/2005	9/29/2005	10/5/2005	10/4/2005	10/5/2005	10/5/2005	10/11/2005	10/6/2005	10/6/2005	10/12/2005	10/11/2005	10/11/2005	10/4/2005	9/28/2005	9/29/2005	10/3/2005	10/3/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
Dibenz(a,h)anthracene	0.0092	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibenzofuran	12	µg/L	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*
Diethylphthalate	29,000	µg/L	*	*	*	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
Dimethylphthalate	360,000	µg/L	*	*	*	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
Di-n-butyl phthalate	3,600	µg/L	*	*	*	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
Di-n-octyl phthalate	1,500	µg/L	*	*	*	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
Fluoranthene	1,500	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluorene	240	µg/L	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*
Hexachlorobenzene	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	50	µg/L	*	*	5 UJ Sur	*	*	5 R Sur	50 R Sur	*	*	50 UJ Sur	*	*	*	*	*	*	*
Hexachloroethane	4.8	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	0.092	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isophorone	71	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	0.093	µg/L	*	*	5 UJ Sur	*	*	*	*	5.9 J Sur	*	*	*	*	*	*	*	*	*
Nitrobenzene	3.4	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	0.0096	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	14	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pentachlorophenol	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenanthrene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenol	11,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pyrene	180	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Metals																			
Aluminum	1,000	µg/L	200 UJ CCB	*	200 UJ CCB, MS	200 UJ CCB, MS	400 UJ CCB, MS	654 J MS	*	**13,500 J MS**	200 UJ CCB, MS	*	200 UJ CCB	200 UJ CCB	*	*	200 UJ CCB	*	200 UJ CCB
Antimony	6	µg/L	*	*	*	*	2 UJ ICB	2 UJ ICB	*	*	*	*	2 UJ ICB	*	*	*	*	*	*
Arsenic	10	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.3 J+ CRI
Barium	1,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Beryllium	4	µg/L	*	*	*	*	*	*	*	1 UJ CCB, LB	*	1 UJ CCB, LB	*	*	*	*	*	*	*
Boron	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium	5	µg/L	*	1 UJ CCB	1 U EB	1 U EB	*	1 U EB	*	1 U EB	1 U EB	*	*	*	*	*	2 UJ CCB	*	*
Calcium	NE	mg/L	*	*	63.7 J SerDil	78.6 J SerDil	346. J SerDil	214. J SerDil	*	106. J SerDil	31.4 J SerDil	*	*	*	*	*	*	*	*
Chromium	50	µg/L	4 U LB	2 U LB	2.1 UJ CCB, ICB, LB	2 UJ CCB, ICB, LB	17.2 J+ EB	24.2 J+ EB	*	*	2.1 J+ EB	*	2.9 J+ EB	2 UJ CCB, ICB, LB	*	4 U LB	*	*	2 U LB
Cobalt	730	µg/L	*	*	*	*	*	*	1 UJ CCB, LB	*	*	*	*	*	*	*	*	*	*
Copper	1,300	µg/L	*	*	10.9 J SerDil	8.3 J SerDil	6.2 J SerDil	7.8 J SerDil	*	71.4 J SerDil	8.1 J SerDil	*	4.7 J SerDil	5.9 J SerDil	*	*	*	*	2.2 J+ CRI
Iron	11	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lead	15	µg/L	*	*	1.6 J+ EB	1.6 J+ EB	2.5 J+ EB	*	1 UJ ICB, LB	*	1 UJ CCB, EB	*	1 UJ CCB, EB	1 UJ CCB, EB	*	*	*	*	*
Magnesium	NE	mg/L	*	*	75.3 J SerDil	93.8 J SerDil	1,320. J SerDil	460. J SerDil	*	47.3 J SerDil	35.8 J SerDil	*	*	*	*	*	*	*	*
Manganese	880	µg/L	*	*	*	*	*	*	**7,910 J SerDil**	*	*	**9,870 J SerDil**	*	*	*	*	*	*	*
Mercury	2	µg/L	*	*	*	*	*	*	0.05 J- C%D	*	*	0.83 J- C%D	*	*	*	*	*	*	*
Molybdenum	NE	µg/L	5 UJ ICB	5 UJ ICB	*	*	*	*	*	5 UJ CCB, ICB	*	*	*	*	5 UJ ICB	*	5 UJ ICB	*	*
Nickel	100	µg/L	*	*	4.3 J+ EB	14.5 J+ EB	12.5 J+ EB	23 J+ EB	*	*	40.6 J+ EB	*	*	*	*	*	*	*	*
Potassium	NE	mg/L	33.5 J C%D, SerDil	35.5 J C%D	*	*	*	*	20.7 J SerDil	*	5 UJ CCB	54.2 J SerDil	5.65 J SerDil	6.37 J SerDil	63.3 J C%D	3.25 J C%D	73.3 J C%D	12.8 J C%D	14.6 J C%D
Selenium	50	µg/L	*	*	5 UJ CCB, ICB	5 UJ CCB, ICB	*	5 UJ CCB, ICB	5 UJ MS	*	*	5 UJ MS	5 UJ CCB, ICB	*	*	*	*	5 U EB	*
Silicon	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Silver	180	µg/L	*	*	*	*	1 UJ CCB, ICB	1 UJ CCB, ICB	*	1 UJ CCB, ICB	*	1 UJ CCB, ICB	*	*	1 UJ ICB	2 UJ ICB	*	1 UJ ICB	*
Sodium	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thallium	2	µg/L	*	1 UJ ICB	*	*	*	*	*	1 UJ CCB, ICB	*	1 UJ CCB, ICB	*	*	*	2 UJ ICB	*	1 UJ ICB	*
Vanadium	36	µg/L	2.6 J LD	*	11.6 J SerDil	1.4 J SerDil	13.9 J SerDil	**48.2 J SerDil**	2.5 J SerDil	24.7 J SerDil	2.1 J SerDil	**59.3 J SerDil**	3.1 J SerDil	4.5 J SerDil	*	*	*	*	*
Zinc	11,000	µg/L	9 J+ ICS	143 J+ ICS	12.5 J+ EB	6.4 J+ EB	12.2 J+ EB	30.6 J+ EB	*	*	16.4 J+ EB	*	7.3 J+ EB	13.9 J+ EB	62.4 J+ ICS	5.8 J+ ICS	47.9 R EB, ICS	33.8 R EB, ICS	7.5 R EB, ICS

TABLE A7-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	9/28/2005	9/29/2005	10/5/2005	10/4/2005	10/5/2005	10/5/2005	10/11/2005	10/6/2005	10/6/2005	10/12/2005	10/11/2005	10/11/2005	10/4/2005	9/28/2005	9/29/2005	10/3/2005	10/3/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Metals (Dissolved)																			
Aluminum (Dissolved)	1,000	µg/L	200 UJ CCB, LB	200 UJ CCB, LB	*	200 UJ CCB, MS	400 UJ CCB, MS	200 UJ CCB, MS	200 UJ CCB	200 UJ CCB	*	200 UJ CCB	*	*	200 UJ CCB, LB	200 UJ CCB, LB	200 UJ CCB, LB	200 UJ CCB, LB	200 UJ CCB, LB
Antimony (Dissolved)	6	µg/L	*	*	*	*	2 UJ IS	*	*	*	*	*	*	*	*	*	*	*	*
Arsenic (Dissolved)	10	µg/L	*	*	*	*	**39.8 J IS**	*	*	*	*	*	*	1.2 UJ CCB, CRI, ICB, LB	*	*	*	*	1.3 J+ CCB, CRI
Barium (Dissolved)	1,000	µg/L	*	*	82.1 J SerDil	16.1 J SerDil	45.6 J IS, SerDil	113 J SerDil	*	106 J SerDil	125 J SerDil	*	183 J SerDil	67.2 J SerDil	*	*	*	*	*
Beryllium (Dissolved)	4	µg/L	*	*	*	*	1 UJ IS	*	1 UJ ICB	*	*	*	*	*	*	*	*	*	*
Boron (Dissolved)	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium (Dissolved)	5	µg/L	2 UJ CCB	1 UJ CCB	*	*	1 UJ IS	*	*	*	*	*	*	*	*	*	*	*	*
Calcium (Dissolved)	NE	mg/L	*	*	59.8 J SerDil	67.6 J SerDil	387. J SerDil	217 J SerDil	*	*	31.9 J SerDil	*	*	*	*	*	*	*	*
Chromium (Dissolved)	50	µg/L	2 UJ CCB	2 UJ CCB	2 UJ CCB, LB	2 UJ CCB, LB	16.1 J IS	*	*	*	2 UJ CCB, LB	*	*	2 UJ CCB, LB	*	*	2.1 UJ CCB	*	2 UJ CCB
Cobalt (Dissolved)	730	µg/L	*	*	1 U LB	*	1.8 J IS	*	*	1 U LB	*	*	*	*	*	*	*	*	*
Copper (Dissolved)	1,300	µg/L	2.7 J+ CRI	*	*	*	2.6 J IS	2 U LB	*	2 U LB	2 U LB	*	2 U LB	*	2 UJ CCB, CRI	2 UJ CCB, CRI	2 UJ CCB, CRI	2 UJ CCB, CRI	2 J+ CRI
Iron (Dissolved)	11	mg/L	*	0.1 UJ CCB, LB	0.1 UJ CCB	*	*	*	*	*	*	*	*	*	*	0.1 UJ CCB, LB	*	*	0.1 UJ CCB, LB
Lead (Dissolved)	15	µg/L	*	*	1 U LB	1 U LB	1 UJ IS, LB	1 U LB	*	1 U LB	1 U LB	*	1 U LB	1 U LB	1 U LB	1 U LB	1 U LB	1 U LB	*
Magnesium (Dissolved)	NE	mg/L	*	*	70.4 J SerDil	96.5 J SerDil	1,530. J SerDil	465. J SerDil	*	*	35.7 J SerDil	*	*	*	*	5 UJ CCB, LB	*	*	*
Manganese (Dissolved)	880	µg/L	**1,140 J MS**	**8,080 J MS**	9.6 J+ MS, SerDil	**1,390 J+ MS, SerDil**	386 J+ IS, MS, SerDil	573 J+ MS, SerDil	**10,900 J SerDil**	**4,040 J+ MS, SerDil**	**2,420 J+ MS, SerDil**	**14,100 J SerDil**	444 J+ MS, SerDil	847 J+ MS, SerDil	**1,170 J MS**	79.7 J MS	522 J MS	**3,950 J MS**	**1,750 J MS**
Mercury (Dissolved)	2	µg/L	0.2 UJ CCB, ICB	0.2 UJ CCB, ICB	0.2 UJ CCB	*	0.2 UJ CCB, IS	0.2 UJ CCB	*	0.2 UJ CCB	0.2 UJ CCB	0.2 UJ CCB	*	0.2 UJ CCB	0.2 UJ CCB, ICB	0.2 UJ CCB, ICB	0.2 UJ CCB, ICB	0.2 UJ CCB, ICB	0.2 UJ CCB, ICB
Molybdenum (Dissolved)	NE	µg/L	5 UJ CCB, ICB	5 UJ CCB, ICB	*	*	*	*	*	*	*	*	*	*	5 UJ CCB, ICB	*	5 UJ CCB, ICB	*	*
Nickel (Dissolved)	100	µg/L	*	*	*	*	12.4 J IS	*	*	*	*	*	*	*	*	*	*	*	*
Potassium (Dissolved)	NE	mg/L	28.1 J SerDil	38.3 J SerDil	*	*	*	*	19.7 J SerDil	8.62 J SerDil	5 UJ CCB	50.7 J SerDil	5.6 J SerDil	6.27 J SerDil	55.4 J SerDil	5 UJ CCB, LB, SerDil	61.8 J SerDil	10.5 J SerDil	11.6 J SerDil
Selenium (Dissolved)	50	µg/L	*	5 UJ CCB	*	5 UJ CCB, LB	3 J IS	5 UJ CCB, LB	*	*	*	*	*	*	5 UJ CCB	*	5 UJ CCB	*	5 UJ CCB
Silicon (Dissolved)	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Silver (Dissolved)	180	µg/L	*	*	*	*	1 UJ CCB, ICB, IS	1 UJ CCB, ICB	1 UJ MS	*	*	*	*	*	*	*	*	*	*
Sodium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thallium (Dissolved)	2	µg/L	*	1 UJ CCB, ICB	*	*	1 UJ IS	*	1 UJ ICB	*	*	*	*	*	*	1 UJ CCB, ICB	1 UJ CCB, ICB	*	*
Vanadium (Dissolved)	36	µg/L	1 UJ CCB, ICB, LB	*	8.9 J- CRI	1 UJ CRI	1 UJ CRI	*	2.4 J SerDil	1.5 J- CRI	1.6 J- CRI	4.4 J SerDil	*	*	*	*	*	*	*
Zinc (Dissolved)	11,000	µg/L	6.8 J LD, SerDil	147 J LD, SerDil	*	*	4.1 J IS	2 UJ CCB, ICB, LB	8.7 J LD, SerDil	*	*	52.6 J LD, SerDil	*	*	3.6 J CRI, LD, SerDil	7.4 J LD, SerDil	11.6 J LD, SerDil	9 J LD, SerDil	4.2 J LD, SerDil
Organochlorine Pesticides																			
4,4'-DDD	0.28	µg/L	*	*	*	*	*	*	**0.32 J RSD, MP**	*	*	**17 J CF, RSD**	*	*	0.01 J CF, RSD	*	*	*	*
4,4'-DDE	0.2	µg/L	*	*	*	*	*	0.13 J CF, Sur	0.02 UJ MP	*	*	2 J Sur	*	*	*	*	*	*	*
4,4'-DDT	0.2	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*	*	*	*	*
Aldrin	0.004	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*	*	*	*	*
alpha-BHC	0.011	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*	*	*	*	*
alpha-Chlordane	0.1	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*	*	*	*	*
Aroclor-1016	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1221	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1232	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1242	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1248	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1254	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1260	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
beta-BHC	0.037	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*	*	*	*	*
delta-BHC	NE	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*	*	*	*	*
Dieldrin	0.0042	µg/L	*	*	*	*	*	**0.4 J CF**	0.02 UJ MP	*	*	*	*	**0.026 J CF**	*	*	*	*	*
Endosulfan I	220	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*	*	*	*	*
Endosulfan II	220	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*	*	*	*	*
Endosulfan sulfate	NE	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*	*	*	*	*

TABLE A7-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	9/28/2005	9/29/2005	10/5/2005	10/4/2005	10/5/2005	10/5/2005	10/11/2005	10/6/2005	10/6/2005	10/12/2005	10/11/2005	10/11/2005	10/4/2005	9/28/2005	9/29/2005	10/3/2005	10/3/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Organochlorine Pesticides																			
Endrin	2	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*	*	*	*	*
Endrin aldehyde	NE	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*	*	*	*	*
Endrin ketone	NE	µg/L	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*	*	*	*	*
gamma-BHC	0.052	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*	*	*	*	*
gamma-Chlordane	0.1	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*	*	*	*	*
Heptachlor	0.01	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*	*	*	*	*
Heptachlor epoxide	0.01	µg/L	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*	*	*	*	*
Methoxychlor	30	µg/L	*	*	*	*	*	*	0.1 UJ MP	*	*	*	*	*	*	*	*	*	*
Toxaphene	3	µg/L	*	*	*	*	*	*	1 UJ MP	*	*	*	*	*	*	*	*	*	*
Organophosphorus Pesticides																			
Azinphos methyl	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bolstar	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorpyrifos	110	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Coumaphos	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Demeton, Total	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Diazinon	33	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dichlorvos (DDVP)	0.23	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dimethoate	7.3	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Disulfoton	1.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
EPN	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethion	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethoprop	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fensulfothion	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fenthion	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Malathion	730	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Merphos	1.1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Mevinphos	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Monocrotophos	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naled	73	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Parathion, ethyl	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Parathion, methyl	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pendimethalin	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phorate	7.3	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ronnel	1,800	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
S-ethyl di-N,N-propylthiocarbamate	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Stirophos (Tetrachlorvinphos)	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sulfotep	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetraethyl pyrophosphite (TEPP)	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tokuthion (Protothiofos)	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tributyl phosphorotrithioate (DEF)	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloronate	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trifluralin	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Anions																			
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	46 J HT	*	*	1 UJ HT	1 UJ HT	*	*	*	*	*	*	*	*	0.1 UJ HT	*	*
Nitrite as Nitrogen	NE	mg/L	*	0.5 UJ HT	*	2.5 UJ HT	50 UJ HT	20 UJ HT	*	*	*	*	*	*	*	*	0.5 UJ HT	1 UJ HT	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dissolved Gases																			
Ethane	NE	µg/L	*	*	*	*	*	*	*	*	*	41 J HT, Pres	*	*	*	*	*	*	*
Ethene	NE	µg/L	*	*	*	*	*	*	*	*	*	850 J HT, Pres	*	*	*	*	*	*	*

TABLE A7-2

Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)

AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	**9/28/2005**	**9/29/2005**	**10/5/2005**	**10/4/2005**	**10/5/2005**	**10/5/2005**	**10/11/2005**	**10/6/2005**	**10/6/2005**	**10/12/2005**	**10/11/2005**	**10/11/2005**	**10/4/2005**	**9/28/2005**	**9/29/2005**	**10/3/2005**	**10/3/2005**
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Dissolved Gases																			
Methane	NE	µg/L	*	*	*	*	*	*	*	*	*	15,000 J HT, Pres	*	*	*	*	*	*	*

TABLE A7-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-08-15	RMW-08-35	RMW-09-15	RMW-09-15 (FD)	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	10/3/2005	10/10/2005	10/10/2005	9/30/2005	9/30/2005	9/30/2005	9/29/2005	9/29/2005	9/29/2005	10/6/2005	10/10/2005	10/10/2005	10/10/2005	10/5/2005	10/4/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**														
Volatile Organic Compounds																	
1,1,1-Trichloroethane	200	µg/L	*	*	0.5 UJ Sur	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	*	*	*	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	5	µg/L	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*	0.5 UJ Sur	*	*	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*
1,1-Dichloroethane	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	6	µg/L	*	*	0.45 J Sur	0.21 J MS	*	*	*	1.7 J Sur	*	*	*	*	*	*	*
1,2,3-Trichlorobenzene	NE	µg/L	*	*	*	*	0.5 UJ RSD	0.5 UJ RSD	0.5 UJ RSD	*	0.5 UJ RSD	*	*	*	*	*	*
1,2,4-Trichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromo-3-chloropropane	0.2	µg/L	*	*	*	*	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.05	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.5	µg/L	*	*	0.5 UJ Sur	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*
1,2-Dichloropropane	5	µg/L	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*
1,3-Dichlorobenzene	180	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetone	5,500	µg/L	5 U EB, TB	5 U TB	*	17 J FD	11 J FD	5 U EB	*	*	*	5 U EB	*	*	5 U LB	*	*
Benzene	1	µg/L	*	*	*	0.31 J MS	*	*	*	*	*	*	*	*	*	*	*
Bromochloromethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	100	µg/L	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*
Bromoform	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromomethane	8.7	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon disulfide	1,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	0.5	µg/L	*	*	0.5 UJ Sur	*	*	*	*	0.5 UJ C%D, Sur	*	0.5 UJ C%D	*	*	*	*	*
Chlorobenzene	70	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	4.6	µg/L	0.5 UJ C%D	*	0.5 UJ C%D	*	*	*	*	*	*	0.5 UJ C%D	12 UJ C%D	*	*	*	*
Chloroform	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	160	µg/L	1.2 U LB, TB	1.1 UJ EB, LB, TB, Sur	1.1 U EB, LB, TB	1.6 UJ LB, Sur	*	*	*	2 UJ LB, Sur	0.5 U EB, TB	1.2 U EB, LB	1.6 U LB, TB	1.4 U TB	*	1 U EB, LB, TB	1.4 UJ EB, LB, TB, Sur
cis-1,2-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*	0.32 J Sur	*	*	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*
Cyclohexane	10,000	µg/L	*	*	*	*	*	*	*	0.21 J Sur	*	*	*	*	*	*	*
Dibromochloromethane	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethyl tert-butyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	0.5 U EB, LB	*	*	*	*	*
Ethylbenzene	700	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	150	µg/L	*	*	0.5 UJ Sur	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*
Freon 113	1,200	µg/L	*	*	0.5 UJ Sur	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*
Freon 12	390	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	660	µg/L	*	*	*	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	*	*	*	*	*	*
Methyl acetate	6,100	µg/L	*	*	0.5 UJ Sur	*	*	*	*	0.5 UJ Sur	*	*	*	0.5 UJ C%D, RSD	0.5 UJ C%D, RSD	*	*
Methyl ethyl ketone	7,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	2,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	13	µg/L	*	*	0.28 J Sur	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*
Methylcyclohexane	NE	µg/L	*	*	*	*	0.5 UJ C%D	0.5 UJ C%D	*	0.5 UJ Sur	*	0.5 UJ C%D	*	*	*	*	*
Methylene chloride	5	µg/L	0.5 U LB	*	1.9 J Sur	2.1 J FD	**7.2 J FD, RSD**	0.77 J RSD	0.5 UJ RSD	0.5 UJ LB, Sur	0.5 UJ RSD	1.8 U LB	*	2.9 J C%D, RSD	2.1 UJ C%D, RSD, TB	0.5 U TB	*
Styrene	100	µg/L	*	*	*	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	*	*	*	*	*	*
tert-Amyl methyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
tert-Butyl alcohol	NE	µg/L	*	*	*	120 J FD	62 J FD	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	150	µg/L	*	*	*	*	*	*	*	0.5 U EB	*	0.5 U EB	*	*	*	*	*

TABLE A7-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-08-15	RMW-08-35	RMW-09-15	RMW-09-15 (FD)	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	10/3/2005	10/10/2005	10/10/2005	9/30/2005	9/30/2005	9/30/2005	9/29/2005	9/29/2005	9/29/2005	10/6/2005	10/10/2005	10/10/2005	10/10/2005	10/5/2005	10/4/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**														
Volatile Organic Compounds																	
trans-1,2-Dichloroethene	10	µg/L	*	*	*	*	*	*	6.9 J FD	12 J FD, Sur	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	0.5	µg/L	*	*	0.5 UJ Sur	*	0.36 J Sur	*	0.5 UJ FD, Sur	**4.1 J FD**	*	*	*	0.5 UJ RSD, Sur	0.5 UJ RSD	0.5 UJ Sur	*
Trichloroethene	5	µg/L	*	*	*	2.6 J MS, SD	*	*	*	*	*	*	*	*	*	*	*
Vinyl chloride	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	1,750	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Semivolatile Organic Compounds																	
1,1'-Biphenyl	300	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*
1,2,4,5-Tetrachlorobenzene	11	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/L	*	3.6 J PO	1.1 U EB	*	*	*	*	*	*	*	*	*	*	*	*
2,4,5-Trichlorophenol	3,600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,6-Trichlorophenol	0.96	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	110	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dimethylphenol	730	µg/L	*	*	*	*	*	*	*	*	5 UJ Sur	5 UJ Sur	*	*	*	*	*
2,4-Dinitrophenol	73	µg/L	*	20 UJ RSD	*	*	20 UJ C%D	20 UJ C%D	*	*	*	*	*	*	*	*	*
2,4-Dinitrotoluene	73	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,6-Dinitrotoluene	36	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chloronaphthalene	490	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chlorophenol	30	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylnaphthalene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	7.1 J FD	34 J FD	*	*
2-Methylphenol	1,800	µg/L	*	*	*	*	*	*	*	*	5 UJ Sur	5 UJ Sur	*	*	*	*	*
2-Nitroaniline	110	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3,3'-Dichlorobenzidine	0.15	µg/L	5 R Sur	*	*	*	5 UJ Sur	*	*	*	*	*	*	5 R Sur	*	*	5 UJ Sur
3-Nitroaniline	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/L	*	*	*	*	20 UJ Sur	20 UJ Sur	*	*	*	*	20 UJ Sur	*	*	*	*
4-Bromophenylphenyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloro-3-methylphenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloroaniline	150	µg/L	5 R Sur	*	*	*	5 UJ Sur	*	*	*	*	*	*	5 R Sur	*	*	5 UJ Sur
4-Chlorophenylphenyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Methylphenol	180	µg/L	*	*	*	*	*	*	*	*	5 UJ Sur	5 UJ Sur	*	*	*	*	*
4-Nitroaniline	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitrophenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthene	370	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthylene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetophenone	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Anthracene	1,800	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Atrazine	3	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzaldehyde	3,600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)anthracene	0.092	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)pyrene	0.2	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*
Benzo(b)fluoranthene	0.092	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*
Benzo(g,h,i)perylene	NE	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*
Benzo(k)fluoranthene	0.056	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*
Benzyl butyl phthalate	7,300	µg/L	*	*	*	*	5 UJ C%D	5 UJ C%D	*	*	*	*	*	5 UJ Sur	*	*	*
bis(2-Chloroethoxy)methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	0.01	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroisopropyl) ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	4.8	µg/L	5 U LB	*	*	5.3 U EB	5 U EB	5 U EB	5 U EB	5 U EB	5 U EB	*	*	5 UJ Sur	*	*	*
Caprolactam	18,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*
Chrysene	0.56	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A7-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-08-15	RMW-08-35	RMW-09-15	RMW-09-15 (FD)	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	10/3/2005	10/10/2005	10/10/2005	9/30/2005	9/30/2005	9/30/2005	9/29/2005	9/29/2005	9/29/2005	10/6/2005	10/10/2005	10/10/2005	10/10/2005	10/5/2005	10/4/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**														
Semivolatile Organic Compounds																	
Dibenz(a,h)anthracene	0.0092	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*
Dibenzofuran	12	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Diethylphthalate	29,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*
Dimethylphthalate	360,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*
Di-n-butyl phthalate	3,600	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*
Di-n-octyl phthalate	1,500	µg/L	*	*	*	*	5 UJ C%D	5 UJ C%D	*	*	*	*	*	5 UJ Sur	*	*	*
Fluoranthene	1,500	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluorene	240	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobenzene	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	50	µg/L	5 R Sur	*	*	*	5 UJ Sur	*	*	*	*	*	*	5 R Sur	*	*	5 UJ Sur
Hexachloroethane	4.8	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	0.092	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*
Isophorone	71	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	0.093	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrobenzene	3.4	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	0.0096	µg/L	*	*	*	*	5 UJ C%D	5 UJ C%D	*	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	14	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pentachlorophenol	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenanthrene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenol	11,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	14 J FD	5 UJ FD	*	*
Pyrene	180	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Metals																	
Aluminum	1,000	µg/L	*	*	*	200 UJ CCB	*	*	200 UJ CCB	200 UJ CCB	*	200 UJ CCB, MS	*	*	*	**3,500 J MS**	325 J MS
Antimony	6	µg/L	*	*	*	2 UJ ICB	2 UJ ICB	*	2 J IS	2.3 J IS	2 UJ IS	*	*	*	*	*	*
Arsenic	10	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Barium	1,000	µg/L	*	*	*	*	*	*	21.8 J IS	23.5 J IS	22 J IS	*	10 U LB	*	*	*	*
Beryllium	4	µg/L	*	*	*	*	*	*	2 UJ C%D	2 UJ C%D	2 UJ C%D	*	*	*	*	*	*
Boron	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium	5	µg/L	*	*	*	1 UJ CCB	1 UJ CCB	*	*	*	*	*	*	*	*	*	*
Calcium	NE	mg/L	*	*	*	*	*	*	*	*	*	66.4 J SerDil	*	*	*	130 J SerDil	301 J SerDil
Chromium	50	µg/L	*	6.4 J+ EB	4.9 J+ EB	*	*	*	6.4 J- C%D	7.1 J- C%D	5 J- C%D	4.6 J+ EB	24.4 J+ EB	3.3 J+ EB	3.5 J+ EB	12.9 J+ EB	6.7 J+ EB
Cobalt	730	µg/L	*	*	*	*	*	*	24.5 J- C%D	25.4 J- C%D	228 J- C%D	*	*	*	*	*	*
Copper	1,300	µg/L	*	4.2 J SerDil	6.7 J SerDil	*	*	*	21.3 J- C%D	21.5 J- C%D	20.3 J- C%D	3.9 J SerDil	18 J SerDil	2.6 J SerDil	3.1 J SerDil	35.3 J SerDil	51.5 J SerDil
Iron	11	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lead	15	µg/L	*	3.2 J+ EB	1.3 J+ EB	*	*	*	8.7 J IS	9.2 J IS	6.6 J IS	2.2 J+ EB	2.7 J+ EB	1 UJ CCB, EB	1 UJ CCB, EB	3 J+ EB	1.7 J+ EB
Magnesium	NE	mg/L	*	*	*	*	*	*	*	*	*	74 J SerDil	5 UJ CCB, ICB, LB	*	*	299 J SerDil	575 J SerDil
Manganese	880	µg/L	*	*	*	*	*	*	*	*	*	*	4.7 J+ EB	*	*	*	*
Mercury	2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Molybdenum	NE	µg/L	*	*	*	5 UJ ICB	5 UJ ICB	5 UJ ICB	5 UJ ICB	*	*	*	*	*	*	5 UJ CCB, ICB	*
Nickel	100	µg/L	*	10.3 J+ EB	24.5 J+ EB	*	*	*	**227 J- C%D**	**236 J- C%D**	**510 J- C%D**	5.6 J+ EB	29.4 J+ EB	*	*	24.6 J+ EB	*
Potassium	NE	mg/L	7.01 J C%D	56.9 J SerDil	5 UJ CCB, ICB, LB, SerDil	48.7 J C%D	55.1 J C%D	2.96 J C%D	19.9 J C%D	19.8 J C%D	834 J C%D	*	15.6 J SerDil	5.51 J SerDil	5.56 J SerDil	*	*
Selenium	50	µg/L	*	*	*	5 U EB	5 U EB	5 U EB	*	*	*	*	5 UJ CCB, ICB	*	*	5 UJ CCB, ICB	5 UJ CCB, ICB
Silicon	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Silver	180	µg/L	*	*	*	*	1 UJ ICB	*	*	*	2 UJ ICB	*	*	*	*	1 UJ CCB, ICB	1 UJ CCB, ICB
Sodium	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thallium	2	µg/L	*	*	*	*	*	*	1 UJ ICB	1 UJ ICB	1 UJ ICB	*	*	*	*	*	*
Vanadium	36	µg/L	*	2.2 J SerDil	7.3 J SerDil	*	*	*	1.8 J- C%D	2.2 J- C%D	2.9 J- C%D	2.7 J SerDil	**112 J SerDil**	1.6 J SerDil	3 J SerDil	6.6 J SerDil	4.8 J SerDil
Zinc	11,000	µg/L	28.1 R EB, ICS	6.3 J+ EB	27 J+ EB	50.3 J+ ICS	39.7 J+ ICS	7.1 R EB, ICS	4,520 J+ ICS	4,920 J+ ICS	115 J+ ICS	16 J+ EB	17.2 J+ EB	8 J+ EB	8.4 J+ EB	13.1 J+ EB	38.7 J+ EB

TABLE A7-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-08-15	RMW-08-35	RMW-09-15	RMW-09-15 (FD)	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	10/3/2005	10/10/2005	10/10/2005	9/30/2005	9/30/2005	9/30/2005	9/29/2005	9/29/2005	9/29/2005	10/6/2005	10/10/2005	10/10/2005	10/10/2005	10/5/2005	10/4/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**														
Metals (Dissolved)																	
Aluminum (Dissolved)	1,000	µg/L	200 UJ CCB, LB	*	*	200 UJ CCB, LB	200 UJ CCB, LB	*	200 UJ CCB, LB	200 UJ CCB, LB	200 UJ CCB, LB	200 UJ CCB, MS	*	*	*	200 UJ CCB, MS	200 UJ CCB, MS
Antimony (Dissolved)	6	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Arsenic (Dissolved)	10	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Barium (Dissolved)	1,000	µg/L	*	44.2 J SerDil	139 J SerDil	*	*	*	*	*	*	97.8 J SerDil	10 UJ LB, SerDil	31.3 J SerDil	31 J SerDil	62.9 J SerDil	45.3 J SerDil
Beryllium (Dissolved)	4	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Boron (Dissolved)	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium (Dissolved)	5	µg/L	*	*	*	1 UJ CCB	1 UJ CCB	*	*	*	1 UJ CCB	*	*	*	*	*	*
Calcium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*	*	67.3 J SerDil	*	*	*	124 J SerDil	296 J SerDil
Chromium (Dissolved)	50	µg/L	2 UJ CCB	*	2 UJ CCB, LB	*	*	2 UJ CCB	*	*	*	2 UJ CCB, LB	*	2 UJ CCB, LB	2 UJ CCB, LB	*	*
Cobalt (Dissolved)	730	µg/L	*	*	*	*	*	*	*	*	*	1 U LB	*	*	*	*	*
Copper (Dissolved)	1,300	µg/L	2 UJ CCB, CRI	2 U LB	2 U LB	*	*	2.7 J+ CRI	*	*	*	2 U LB	*	2 U LB	2 U LB	2 U LB	2 U LB
Iron (Dissolved)	11	mg/L	0.1 UJ CCB, LB	*	0.1 UJ CCB	*	*	0.1 UJ CCB, LB	0.1 UJ CCB, LB	0.1 UJ CCB, LB	*	*	0.1 UJ CCB	*	*	*	*
Lead (Dissolved)	15	µg/L	1 U LB	*	1 U LB	*	*	1 U LB	*	*	*	1 U LB	*	1 U LB	1 U LB	1 U LB	1 U LB
Magnesium (Dissolved)	NE	mg/L	*	*	*	*	*	5 UJ CCB, LB	*	*	*	72 J SerDil	5 UJ CCB, ICB, LB	*	*	296 J SerDil	578 J SerDil
Manganese (Dissolved)	880	µg/L	510 J MS	**3,240 J+ MS, SerDil**	**1,000 J+ MS, SerDil**	**9,490 J MS**	**9,300 J MS**	11.6 J MS	**2,790 J MS**	**2,990 J MS**	**13,900 J MS**	603 J+ MS, SerDil	1.2 J+ MS, SerDil	419 J+ MS, SerDil	416 J+ MS, SerDil	**2,990 J+ MS, SerDil**	**84,400 J+ MS, SerDil**
Mercury (Dissolved)	2	µg/L	0.2 UJ CCB, ICB	0.2 UJ CCB	0.2 UJ CCB	0.2 UJ CCB, ICB	0.2 UJ CCB, ICB	0.2 UJ CCB, ICB	0.2 UJ CCB, ICB	0.2 UJ CCB, ICB	0.2 UJ CCB, ICB	0.2 UJ CCB	0.2 UJ CCB	0.2 UJ CCB	0.2 UJ CCB	0.2 UJ CCB	0.2 UJ CCB
Molybdenum (Dissolved)	NE	µg/L	*	*	*	5 UJ CCB, ICB	5 UJ CCB, ICB	*	*	*	*	*	*	*	*	5 UJ CCB, ICB	*
Nickel (Dissolved)	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Potassium (Dissolved)	NE	mg/L	5.3 J SerDil	56.4 J SerDil	5 UJ CCB, ICB, LB, SerDil	39.8 J SerDil	41.7 J SerDil	5 UJ CCB, LB, SerDil	15.3 J SerDil	15.8 J SerDil	686 J SerDil	*	16 J SerDil	5.43 J SerDil	5.43 J SerDil	*	*
Selenium (Dissolved)	50	µg/L	*	*	5 UJ CCB, LB	5 UJ CCB	*	5 UJ CCB	5 UJ CCB	5 UJ CCB	*	*	5 UJ CCB, LB	*	*	5 UJ CCB, LB	5 UJ CCB, LB
Silicon (Dissolved)	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Silver (Dissolved)	180	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sodium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thallium (Dissolved)	2	µg/L	*	*	*	1 UJ CCB, ICB	*	*	1 UJ CCB, ICB	1 UJ CCB, ICB	1 UJ CCB, ICB	*	*	*	*	*	*
Vanadium (Dissolved)	36	µg/L	*	2 J- CRI	*	*	*	*	*	*	*	1 UJ CCB, CRI	*	1 UJ CRI	1 UJ CCB, CRI	1 UJ CRI	1 UJ CRI
Zinc (Dissolved)	11,000	µg/L	17.2 J LD, SerDil	*	*	29.3 J LD, SerDil	28.8 J LD, SerDil	4.1 J LD, SerDil	5,540 J LD, SerDil	5,640 J LD, SerDil	30.8 J LD, SerDil	*	*	2 UJ CCB, ICB, LB	2 UJ CCB, ICB, LB	*	*
Organochlorine Pesticides																	
4,4'-DDD	0.28	µg/L	*	*	*	*	*	*	*	*	0.02 UJ MP	*	0.062 J CF, RSD	*	0.26 J CF	*	*
4,4'-DDE	0.2	µg/L	*	*	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*
4,4'-DDT	0.2	µg/L	*	*	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*
Aldrin	0.004	µg/L	*	*	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*
alpha-BHC	0.011	µg/L	*	*	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*
alpha-Chlordane	0.1	µg/L	*	*	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*
Aroclor-1016	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1221	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1232	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1242	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1248	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1254	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1260	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
beta-BHC	0.037	µg/L	*	*	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*
delta-BHC	NE	µg/L	*	*	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*
Dieldrin	0.0042	µg/L	*	*	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*
Endosulfan I	220	µg/L	*	*	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*
Endosulfan II	220	µg/L	*	*	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*
Endosulfan sulfate	NE	µg/L	*	*	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*
Endrin	2	µg/L	*	*	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*

TABLE A7-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-08-15	RMW-08-35	RMW-09-15	RMW-09-15 (FD)	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	10/3/2005	10/10/2005	10/10/2005	9/30/2005	9/30/2005	9/30/2005	9/29/2005	9/29/2005	9/29/2005	10/6/2005	10/10/2005	10/10/2005	10/10/2005	10/5/2005	10/4/2005
Analyte	**Screening Level**	**Units**	**Analytical Results**														
Organochlorine Pesticides																	
Endrin aldehyde	NE	µg/L	*	*	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*
Endrin ketone	NE	µg/L	*	*	*	*	*	*	*	*	0.02 UJ MP	*	*	*	*	*	*
gamma-BHC	0.052	µg/L	*	*	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*
gamma-Chlordane	0.1	µg/L	*	*	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*
Heptachlor	0.01	µg/L	*	*	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	0.012 J CF
Heptachlor epoxide	0.01	µg/L	*	*	*	*	*	*	*	*	0.01 UJ MP	*	*	*	*	*	*
Methoxychlor	30	µg/L	*	*	*	*	*	*	*	*	0.1 UJ MP	*	*	*	*	*	*
Toxaphene	3	µg/L	*	*	*	*	*	*	*	*	1 UJ MP	*	*	*	*	*	*
Organophosphorus Pesticides																	
Azinphos methyl	NE	µg/L	*	*	*	*	*	*	1 UJ FD	1 UJ FD	*	*	*	*	*	*	*
Bolstar	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Chlorpyrifos	110	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.05 UJ FD	*	*	*	*	*	*	*
Coumaphos	NE	µg/L	*	*	*	*	*	*	1.25 UJ FD	0.2 UJ FD	*	*	*	*	*	*	*
Demeton, Total	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.2 UJ FD	*	*	*	*	*	*	*
Diazinon	33	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.05 UJ FD	*	*	*	*	*	*	*
Dichlorvos (DDVP)	0.23	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.2 UJ FD	*	*	*	*	*	*	*
Dimethoate	7.3	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Disulfoton	1.5	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
EPN	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Ethion	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Ethoprop	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Fensulfothion	NE	µg/L	*	*	*	*	*	*	1.25 UJ FD	0.5 UJ FD	*	*	*	*	*	*	*
Fenthion	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Malathion	730	µg/L	*	*	*	*	*	*	0.5 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Merphos	1.1	µg/L	*	*	*	*	*	*	0.5 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Mevinphos	NE	µg/L	*	*	*	*	*	*	0.7 UJ FD	0.7 UJ FD	*	*	*	*	*	*	*
Monocrotophos	NE	µg/L	*	*	*	*	*	*	10 UJ FD	5 UJ FD	*	*	*	*	*	*	*
Naled	73	µg/L	*	*	*	*	*	*	1 UJ FD	0.5 UJ FD	*	*	*	*	*	*	*
Parathion, ethyl	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Parathion, methyl	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Pendimethalin	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Phorate	7.3	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Ronnel	1,800	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
S-ethyl di-N,N-propylthiocarbamate	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Stirophos (Tetrachlorvinphos)	NE	µg/L	*	*	*	*	*	*	0.5 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Sulfotep	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Tetraethyl pyrophosphite (TEPP)	NE	µg/L	*	*	*	*	*	*	10 UJ FD	15 UJ FD	*	*	*	*	*	*	*
Tokuthion (Protothiofos)	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Tributyl phosphorotrithioate (DEF)	NE	µg/L	*	*	*	*	*	*	0.5 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Trichloronate	NE	µg/L	*	*	*	*	*	*	0.5 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Trifluralin	NE	µg/L	*	*	*	*	*	*	0.25 UJ FD	0.1 UJ FD	*	*	*	*	*	*	*
Anions																	
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	67 J HT	58 J HT	*	*	*	2.4 J HT	2 J HT	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	0.36 J HT	50 UJ HT	*	1 UJ HT	0.5 UJ HT	0.5 UJ HT	*	20 UJ HT
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dissolved Gases																	
Ethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	1.9 J Sur	*
Ethene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.7 J Sur	*
Methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	34 J Sur	*

TABLE A7-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2005 (September-October)
AMCO Chemical Superfund Site, Oakland, California

Notes:
Results greater than the screening level are bolded
In cases where target analytes are reported from more than one method or from multiple dilutions, the most conservative result or reporting limit is presented; that is, the values presented represent either the maximum positive result or the minimum reporting limit selected from the available data.
Rejected Results are enclosed by boxes
See Groundwater Screening Level table for source of screening levels.

---	not analyzed
*	result not qualified for Quality Control outliers
NE	not established
µg/L	micrograms per liter
mg/L	milligrams per liter
J	estimated value
J-	estimated value, low bias
J+	estimated value, high bias
R	rejected for failure to meet quality control requirement.
U	not detected at or above the reporting limit.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
C%D	Continuing calibration verification is outside control limit
CCB	Continuing calibration blank concentration less than Reporting Limit
CF	Confirmation precision exceeded
CRI	CRQL check standard greater than upper control limit
EB	Equipment blank concentration exceeds criteria
FD	Field duplicate exceeds relative percent difference criteria
HT	Holding time exceeded
ICB	Initial calibration blank exceeds control limit
ICS	Interference check standard recovery greater than upper control limit
IS	Internal standard response exceeds control limit
LB	Laboratory blank concentration exceeds criteria
LD	Laboratory duplicate exceeds relative percent difference criteria
MP	Method performance issues
MS	Matrix spike recovery exceeds control limilt
PO	Possible carryover contamination of previous sample
Pres	Sample not properly preserved in the field
RSD	Initial calibration relative standard deviation exceeded
SD	Matrix spike duplicate recovery exceeds criteria
SerDil	Serial dilution percent difference exceeds control limit
Sur	Surrogate recovery outside control limits
TB	Trip blank concentration exceeds control limit

Appendix A8
Fourth Quarter 2005 Groundwater

APPENDIX A8

Fourth Quarter 2005 Groundwater Sampling

A8.1 Summary

The following sections describe the samples collected during the Fourth Quarter 2005 sampling event which occurred in January, 2006.

Fourth Quarter 2005 Groundwater: Groundwater was collected from January 10, 2006 through January 23, 2006 and analyzed for volatile organic compounds (VOCs), Semivolatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs), inductively coupled plasma (ICP) metals, ICP/Mass Spectroscopy (MS) metals and mercury, dioxins and furans, dissolved gases, total dissolved solids, and anions. U.S. Environmental Protection Agency (EPA) Contract Laboratory Program (CLP) special analytical services were used to include additional analytes and lower detection limits as needed. For groundwater, the selected screening levels are based on federal and state maximum contaminant levels (MCLs) and EPA Region 9 tap water preliminary remediation goals (PRGs).

A8.2 Data Review and Validation Findings

Table A8-1 presents a list of sample delivery groups, sample identifications, and validation levels for the samples collected during this event. Table A8-2 presents the both the Tier 3 and Tier 2 qualified results. Results that are unqualified are not shown. Rejected results are shown in boxes. Equipment blank and trip blank qualifications are discussed in section 3 of the main DQUA and are not discussed further in this section, although the qualified results are presented on the attached tables.

The findings of the Tier 3 validation are considered representative of the quality of the entire data set. For this event, Tier 3 validation was performed on 32 of the 32 groundwater samples for VOCs, SVOCs, pesticides and PCBs, and 3 of the 33 groundwater samples for total metals.

The results were qualified for outliers associated with the following QC metrics: initial calibration, initial calibration linear range exceeded, continuing calibration, surrogates, matrix spike and matrix spike duplicate, internal standard, ICP interference check sample, ICP serial dilution, and second column confirmation.

A8.2.1 Initial Calibration (Reason Code RSD)

VOCs in Groundwater: The initial calibration exceeded the ±30 %RSD control limit for the following analytes in the samples from the indicated locations:

- Trichloroethene in sample RMW-07-35
- Methylene chloride in all samples except RMW-02-13 and RMW-08-15
- Isopropylbenzene in MW-12, RMW-02-32, RMW-12-32, and RMW12-51
- 1,2,4-Trichlorobenzene in RMW-02-32

SVOCs in Groundwater: The initial calibration exceeded the ±30 %RSD control limit for the following analyte in the samples from the indicated locations:

- Bis (2-ethylhexyl)phthalate in BMW-01, BMW-03, BMW-06-01, BMW-07, BMW-08, BPZ-01, RMW-01-17, RMW-01-35, RMW-04-15, RMW-05-15, RMW-05-15, RMW-07-15, RMW-07-35, RMW-08-15, RMW-08-35, RMW-08-35 duplicate, RW-09-15, RMW-09-35, RMW-10-15, RMW-10-15 duplicate, RMW-10-35, RMW-11-35, RMW-13-35, and RMW-14-50

Results and quantitation limits were qualified as estimated, J/UJ.

A8.2.2 Initial Calibration Linear Range Exceeded (Reason Code >IC)

Several samples were reanalyzed at dilutions due to high concentrations of target compounds. After review of the original and diluted results, the best result was selected to report. Because in some cases, the target analyte was below the reporting limit in the dilution, some positive results that exceeded the calibration limit were retained. In other cases, the laboratory did not dilute the original analysis and did not provide an explanation The following original analyte results in the samples from the indicated locations were reported as the final value and qualified as estimated, J, because the final concentration exceeded the highest concentration calibration standard:

VOCs in Groundwater: The concentrations of the indicated analytes in the following samples were estimated, J:

- 1,1,1-Trichloroethane, benzene, ethylbenzene, Methyl isobutyl ketone, trans-1,2-dichloroethene, and total xylenes in MW-12

- cis-1,2-Dichloroethene in RMW-02-32

SVOCs SIM for Selected Compounds in Groundwater: The concentrations of the indicated analytes in the following samples were estimated, J:

- 1,4-Dioxane in BMW-03, RMW-02-32, RMW-10-15 duplicate, RMW-12-32, and RMW-10-35

- Carbazole in RMW-02-13

Organochlorine Pesticides and PCBs in Groundwater: The concentrations of the following analytes in samples from the indicated locations were estimated, J:

- 4,4'-DDD in MW-12
- 4,4'-DDD, 4,4'-DDE, and dieldrin in RMW-02-13

A8.2.3 Continuing Calibration (Reason Code C%D)

VOCs in Groundwater: The continuing calibration %D was below the method specified lower control limit in the standard associated with the samples listed below. The following

analyte results and quantitation limits in the samples from the indicated locations were flagged as estimated, J:

- Methyl acetate in BPZ-01, MW-12, BMW-07, BMW-08, and RMW-14-50
- Tert-butyl alcohol in RMW-02-32
- Methylene chloride in BMW-03, RMW-01-17, RMW-03-15, RMW-05-15, RMW-08-35, RMW-09-15, RMW-09-35, RMW-10-15 duplicate, RMW-12-32, RMW-12-51, and RMW-12-51 duplicate

SVOCs in Groundwater: The continuing calibration %D was below the method specified lower control limit in the standard associated with the samples listed below. The following analyte results and quantitation limits in the samples from the indicated locations were flagged as estimated, J:

- Benzylbutylphthalate and di-n-octylphthalate, - RMW-01-35, RMW-03-15, RMW-12-32, RMW-12-51, and RMW-12-51 duplicate
- Caprolactam in RMW-01-35
- Pyrene in RMW-03-15, RMW-12-32, RMW 12-51, and RMW-12-51 duplicate

A.8.2.4 Surrogates (Reason Code Sur)

VOCs in Groundwater: Surrogate recoveries exceeded the method specified upper control limit in the following samples. Results indicated by Reason Code "Sur" for the associated analytes in the samples from the indicated locations may be biased high. (see Table A8-2):

- MW-12, BMW-07, RMW-02-13, and RMW-12-51

VOCs in Groundwater: Surrogate recoveries were below the method specified lower control limit in the following samples. Results and quantitation limits indicated by Reason Code "Sur" for the associated analytes in the samples from the indicated locations may be biased low. (see Table A8-2):

- BMW-03, RMW-01-17, RMW-01-35, RMW-02-32, RMW-02-50, RMW-06-15, RMW-07-15, RMW-07-35, RMW-08-15-0105, RMW-08-35, RMW-09-15, RMW-10-35, RMW-12-32, and RMW-08-35 duplicate

SVOCs in Groundwater: Surrogate recoveries were below the method specified lower control limit in the following samples. Results and quantitation limits indicated by Reason Code "Sur" for the associated analytes in the samples from the specified locations may be biased low. (see Table A8-2):

- MW-12, BMW-07, BMW-08, RMW-02-13, RMW-02-32, RMW-02-50, RMW-07-35, RMW-08-35, RMW-08-35 duplicate, RMW-09-35, RMW-10-35, RMW-12-32

SVOCs in Groundwater: Surrogate recoveries were below 20% rejection criterion in the following samples. Quantitation limits for the associated analytes in the samples from the indicated locations were rejected, R:

- 4-Chloroaniline and hexachlorocyclopentadiene in RMW-07-35, RMW-09-15, and RMW-12-32
- 1,4-Dioxane in RMW-02-50
- 1,1'-Biphenyl, 2-chloronaphthalene, 2-nitroaniline, 3-nitroaniline, 4-bromophenylphenyl ether, 4-chlorophenylphenyl ether, 4-nitroaniline, 4-nitrophenol, acenaphthene, acenaphthylene, benzyl butyl phthalate, caprolactam, dibenzofuran, diethylphthalate, dimethylphthalate, di-n-butylphthalate, di-n-octylphthalate, fluorene in MW-12

Organochlorine Pesticides and PCBs in Groundwater: Manual integration was performed for surrogates in several samples. "Before" and "after" documentation was provided for most of the manual integrations. However, the manual integrations were inconsistent. Manual integrations on a peak shoulder, partial peak, multiple peaks, or on the baseline, although documented, did not appear to be appropriate. The laboratory was requested to review and revise the manual integrations as appropriate. The following are the final qualifications.

- The recovery of dichlorobiphenyl (DCB) was below the lower control limit in the sample from location RMW-02-32. The result for dieldrin was estimated in this sample.
- The recovery of DCB was above the upper control limit in the sample from location RMW-02-13. The associated results for dieldrin, 4,4-DDE, 4,4-DDD, and aldrin were estimated, J in this sample.
- High tetrachloro-m-xylene (TCMX) recovery was observed on one column while no recovery was observed on the confirmation column for the sample from location RMW-08-15. Endrin ketone was reported from the column with high TCMX recoveries. Associated quantitation limits for endrin ketone in this sample were estimated.

A.8.2.5 Matrix Spike Matrix Spike Duplicates (Reason Code MS or SD)

VOCs in Groundwater: The benzene MS/MSD RPDs for the parent sample from location RMW-10-35 was outside the acceptance criterion. The benzene results in the parent sample were qualified as estimated, J.

SVOCs in Groundwater: The acenaphthene MSD recovery was below the lower acceptance criterion. The acenaphthene quantitation limits in the sample from location RMW-12-51 was qualified as estimated, UJ.

The pyrene MS/MSD RPD was outside the acceptance criterion. The pyrene result in parent sample from location RMW-12-51 was qualified as estimated.

Organochlorine Pesticides and PCBs in Groundwater: A MS/MSD was prepared using the sample from location RMW-10-35. Endrin and 4,4'-DDT recoveries in the MS were below the acceptance criterion. The RPDs for endrin and 4,4'-DDT for this MS/MSD pair were above acceptance criterion. The endrin and 4,4'-DDT quantitation limits were qualified as estimated.

An MS/MSD was prepared using the sample from location RMW-14-50. The recovery of 4,4'-DDT was less than the lower control limit in the MSD. The parent sample quantitation limit is estimated, UJ. Heptachlor and aldrin recoveries exceeded the upper control limits.

The RPD criteria was exceeded for gamma-BHC, heptachlor, aldrin, dieldrin, and 4,4'-DDT. The quantitation limits for these analytes in parent sample from location RMW-14-50 were estimated, UJ.

An MS/MSD was prepared using the sample from location RMW-12-51. Recoveries for the MS were below the lower control limit for aldrin, dieldrin, and endrin. MSD recoveries were below the lower control limit for heptachlor and 4,4'-DDT. The RPD exceeded criteria on both columns for heptachlor, dieldrin, endrin, aldrin, and 4,4'-DDT. Results and quantitation limits for these analytes in the parent sample were estimated, J/UJ.

An MS/MSD was prepared using the sample from location RMW-02-13. MS/MSD recoveries were below the lower control limit for gamma-BHC, heptachlor, endrin, and 4,4'-DDT. Aldrin and dieldrin were not recovered in either the MS or MSD. The RPD criteria were exceeded for all analytes. Results and quantitation limits for these analytes in the parent sample were estimates, J/UJ.

A.8.2.6 Internal Standard (Reason Code IS)

VOCs in Groundwater: Internal standard recoveries were above the acceptance criteria based on the response of the CCV. The results and quantitation limits for the affected analytes in the samples from the indicated locations were qualified as estimated and are listed below:

- 1,2-Dichlorobenzene, 1,4-dichlorobenzene, and isopropylbenzene in MW-12
- 1,3-Dichlorobenzene and 1,4-dichlorobenzene in RMW-01-17
- 1,3-Dichlorobenzene in RMW-01-35
- Isopropylbenzene in RMW-02-32
- Benzene, toluene, ethylbenzene and total xylenes in RMW-10-35
- Isopropylbenzene in RMW-12-32
- 1,2-Dichlorobenzene in RMW-12-32

SVOCs SIM in Groundwater:

- 1,4-Dioxane in RMW-02-32
- Carbazole in RMW-02-13 and RMW-02-32
- bis(2-Ethylhexyl)phthalate in MW-12, RMW-02-13, RMW-02-32, and RMW-03-15
- Pentachlorophenol in MW-12 and RMW-02-13
- Benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, and chrysene in RMW-02-13

A.8.2.7 ICP Serial Dilution (Reason Code ICP)

Total Metals by ICP-AES in Groundwater: A serial dilution was performed on the sample from location MW-12. Potassium and sodium were detected at a concentration greater than 50 times the MDL, and the percent difference between the initial and serial dilution results were outside the 90% to 100% control limits. The associated detected results were estimated.

A.8.2.8 Second Column Confirmation (Reason Code CF)

Organochlorine Pesticides/PCBs in Groundwater: The confirmation RPD results between the primary and secondary columns exceeded the QC limit of 25% for the following samples. Results in the samples from the indicated locations were flagged as estimated, J for the following analytes:

- Dieldrin and 4,4'-DDD in BMW-06
- 4,4'-DDD and 4,4'DDE in RMW-03-15, RMW-08-35 and RMW-08-35 duplicate, and RMW-12-51 duplicate
- Endrin ketone in BMW-03
- 4,4'DDE in RMW-01-17 and MW-12
- 4,4'-DDD in RMW-08-15
- 4,4'-DDD, 4,4'-DDE, aldrin, and dieldrin R in MW-02-13
- 4,4'-DDE and dieldrin in RMW-12-51

TABLE A8-1

Sample Delivery Group Reference - Groundwater, Fourth Quarter 2005 (January 2006)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
06011A (EPA Region 9)				
Anions, EPA Method 300.0				
	BMW-01	N	BMW-01-0106	Tier 2
	BMW-06	N	BMW-06-0106	Tier 2
	BMW-07	N	BMW-07-0106	Tier 2
	BMW-08	N	BMW-08-0106	Tier 2
	BPZ-01	N	BPZ-01-0106	Tier 2
	RMW-04-15	N	RMW-04-15-0106	Tier 2
	RMW-06-15	N	RMW-06-15-0106	Tier 2
	RMW-07-15	N	RMW-07-15-0106	Tier 2
	RMW-07-35	N	RMW-07-35-0106	Tier 2
	RMW-11-35	N	RMW-11-35-0106	Tier 2
	RMW-13-35	N	RMW-13-35-0106	Tier 2
	RMW-14-50	N	RMW-14-50-0106	Tier 2
Dissolved Gases, EPA Method RSK-175				
	BMW-01	N	BMW-01-0106	Tier 3
	BMW-06	N	BMW-06-0106	Tier 3
	BMW-07	N	BMW-07-0106	Tier 3
	BMW-08	N	BMW-08-0106	Tier 3
	BPZ-01	N	BPZ-01-0106	Tier 3
	RMW-04-15	N	RMW-04-15-0106	Tier 3
	RMW-06-15	N	RMW-06-15-0106	Tier 3
	RMW-07-15	N	RMW-07-15-0106	Tier 3
	RMW-07-35	N	RMW-07-35-0106	Tier 3
	RMW-11-35	N	RMW-11-35-0106	Tier 3
	RMW-13-35	N	RMW-13-35-0106	Tier 3
	RMW-14-50	N	RMW-14-50-0106	Tier 3
Total Dissolved Solids, EPA Method 160.1				
	BMW-01	N	BMW-01-0106	Tier 2
	BMW-06	N	BMW-06-0106	Tier 2
	BMW-08	N	BMW-08-0106	Tier 2
	RMW-04-15	N	RMW-04-15-0106	Tier 2
	RMW-07-15	N	RMW-07-15-0106	Tier 2
	RMW-07-35	N	RMW-07-35-0106	Tier 2
	RMW-11-35	N	RMW-11-35-0106	Tier 2
	RMW-13-35	N	RMW-13-35-0106	Tier 2
	RMW-14-50	N	RMW-14-50-0106	Tier 2

TABLE A8-1
Sample Delivery Group Reference - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
06017C (EPA Region 9)				
Anions, EPA Method 300.0				
	BMW-03	N	BMW-03-0106	Tier 2
	MW-12	N	MW-12-0106	Tier 2
	RMW-01-17	N	RMW-01-17-0106	Tier 2
	RMW-01-35	N	RMW-01-35-0106	Tier 2
	RMW-02-13	N	RMW-02-13-0106	Tier 2
	RMW-02-32	N	RMW-02-32-0106	Tier 2
	RMW-02-50	N	RMW-02-50-0106	Tier 2
	RMW-03-15	N	RMW-03-15-0106	Tier 2
	RMW-05-15	N	RMW-05-15-0106	Tier 2
	RMW-08-15	N	RMW-08-15-0106	Tier 2
	RMW-08-35	N	RMW-08-35-0106	Tier 2
	RMW-08-35	FD	MW-92-0106	Tier 2
	RMW-09-15	N	RMW-09-15-0106	Tier 2
	RMW-09-35	N	RMW-09-35-0106	Tier 2
	RMW-10-15	N	RMW-10-15-0106	Tier 2
	RMW-10-15	FD	MW-90-0106	Tier 2
	RMW-10-35	N	RMW-10-35-0106	Tier 2
	RMW-12-32	N	RMW-12-32-0106	Tier 2
	RMW-12-51	N	RMW-12-51-0106	Tier 2
	RMW-12-51	FD	MW-88-0106	Tier 2
Dissolved Gases, EPA Method RSK-175				
	BMW-03	N	BMW-03-0106	Tier 2
	MW-12	N	MW-12-0106	Tier 2
	RMW-01-17	N	RMW-01-17-0106	Tier 2
	RMW-01-35	N	RMW-01-35-0106	Tier 2
	RMW-02-13	N	RMW-02-13-0106	Tier 2
	RMW-02-32	N	RMW-02-32-0106	Tier 2
	RMW-02-50	N	RMW-02-50-0106	Tier 2
	RMW-03-15	N	RMW-03-15-0106	Tier 2
	RMW-05-15	N	RMW-05-15-0106	Tier 2
	RMW-08-15	N	RMW-08-15-0106	Tier 2
	RMW-08-35	N	RMW-08-35-0106	Tier 2
	RMW-08-35	FD	MW-92-0106	Tier 2
	RMW-09-15	N	RMW-09-15-0106	Tier 2
	RMW-09-35	N	RMW-09-35-0106	Tier 2
	RMW-10-15	N	RMW-10-15-0106	Tier 2
	RMW-10-15	FD	MW-90-0106	Tier 2
	RMW-10-35	N	RMW-10-35-0106	Tier 2
	RMW-12-32	N	RMW-12-32-0106	Tier 2
	RMW-12-51	N	RMW-12-51-0106	Tier 2
	RMW-12-51	FD	MW-88-0106	Tier 2

TABLE A8-1
Sample Delivery Group Reference - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
06017C (EPA Region 9)				
Total Dissolved Solids, EPA Method 160.1				
	MW-12	N	MW-12-0106	Tier 2
	RMW-02-13	N	RMW-02-13-0106	Tier 2
	RMW-02-50	N	RMW-02-50-0106	Tier 2
	RMW-08-35	N	RMW-08-35-0106	Tier 2
	RMW-08-35	FD	MW-92-0106	Tier 2
	RMW-10-35	N	RMW-10-35-0106	Tier 2
	RMW-12-51	N	RMW-12-51-0106	Tier 2
	RMW-12-51	FD	MW-88-0106	Tier 2
MW-EB-07-0106 (Paradigm)				
Chlorinated Furans/Dioxins Low Method				
	MW-12	N	MW-12-0106	Tier 1
	RMW-01-17	N	RMW-01-17-0106	Tier 1
	RMW-01-35	N	RMW-01-35-0106	Tier 1
	RMW-02-13	N	RMW-02-13-0106	Tier 1
	RMW-02-32	N	RMW-02-32-0106	Tier 1
	RMW-02-50	N	RMW-02-50-0106	Tier 1
	RMW-08-15	N	RMW-08-15-0106	Tier 1
	RMW-08-35	N	RMW-08-35-0106	Tier 1
	RMW-12-32	N	RMW-12-32-0106	Tier 1
	RMW-12-51	N	RMW-12-51-0106	Tier 1
	RMW-12-51	FD	MW-88-0106	Tier 1
MY2BJ4 (Sentinel)				
Inorganics, CLP-SOW				
	BMW-01	N	BMW-01-0106	Tier 2
	BMW-03	N	BMW-03-0106	Tier 2
	BMW-06	N	BMW-06-0106	Tier 2
	BMW-07	N	BMW-07-0106	Tier 2
	BMW-08	N	BMW-08-0106	Tier 2
	BPZ-01	N	BPZ-01-0106	Tier 2
	RMW-04-15	N	RMW-04-15-0106	Tier 2
	RMW-05-15	N	RMW-05-15-0106	Tier 2
	RMW-06-15	N	RMW-06-15-0106	Tier 2
	RMW-07-15	N	RMW-07-15-0106	Tier 2
	RMW-07-35	N	RMW-07-35-0106	Tier 2
	RMW-10-15	N	RMW-10-15-0106	Tier 2
	RMW-11-35	N	RMW-11-35-0106	Tier 2
	RMW-13-35	N	RMW-13-35-0106	Tier 2
	RMW-14-50	N	RMW-14-50-0106	Tier 2

TABLE A8-1
Sample Delivery Group Reference - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY2BJ5 (Sentinel)				
Inorganics, CLP-SOW (Filtered)				
	BMW-01	N	BMW-01-0106	Tier 2
	BMW-03	N	BMW-03-0106	Tier 2
	BMW-06	N	BMW-06-0106	Tier 2
	BMW-07	N	BMW-07-0106	Tier 2
	BMW-08	N	BMW-08-0106	Tier 2
	BPZ-01	N	BPZ-01-0106	Tier 2
	RMW-04-15	N	RMW-04-15-0106	Tier 2
	RMW-05-15	N	RMW-05-15-0106	Tier 2
	RMW-06-15	N	RMW-06-15-0106	Tier 2
	RMW-07-15	N	RMW-07-15-0106	Tier 2
	RMW-07-35	N	RMW-07-35-0106	Tier 2
	RMW-09-15	N	RMW-09-15-0106	Tier 2
	RMW-09-35	N	RMW-09-35-0106	Tier 2
	RMW-10-15	N	RMW-10-15-0106	Tier 2
	RMW-10-15	FD	MW-90-0106	Tier 2
	RMW-10-35	N	RMW-10-35-0106	Tier 2
	RMW-11-35	N	RMW-11-35-0106	Tier 2
	RMW-13-35	N	RMW-13-35-0106	Tier 2
	RMW-14-50	N	RMW-14-50-0106	Tier 2
MY2BJ6 (Sentinel)				
Inorganics, CLP-SOW				
	BMW-01	N	BMW-01-0106	Tier 2
	BMW-03	N	BMW-03-0106	Tier 2
	BMW-06	N	BMW-06-0106	Tier 2
	BMW-07	N	BMW-07-0106	Tier 2
	BMW-08	N	BMW-08-0106	Tier 2
	BPZ-01	N	BPZ-01-0106	Tier 2
	RMW-04-15	N	RMW-04-15-0106	Tier 2
	RMW-05-15	N	RMW-05-15-0106	Tier 2
	RMW-06-15	N	RMW-06-15-0106	Tier 2
	RMW-07-15	N	RMW-07-15-0106	Tier 2
	RMW-07-35	N	RMW-07-35-0106	Tier 2
	RMW-10-15	N	RMW-10-15-0106	Tier 2
	RMW-11-35	N	RMW-11-35-0106	Tier 2
	RMW-13-35	N	RMW-13-35-0106	Tier 2
	RMW-14-50	N	RMW-14-50-0106	Tier 2

TABLE A8-1
Sample Delivery Group Reference - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY2BJ8 (Sentinel)				
Inorganics, CLP-SOW (Filtered)				
	BMW-01	N	BMW-01-0106	Tier 2
	BMW-03	N	BMW-03-0106	Tier 2
	BMW-06	N	BMW-06-0106	Tier 2
	BMW-07	N	BMW-07-0106	Tier 2
	BMW-08	N	BMW-08-0106	Tier 2
	BPZ-01	N	BPZ-01-0106	Tier 2
	RMW-04-15	N	RMW-04-15-0106	Tier 2
	RMW-05-15	N	RMW-05-15-0106	Tier 2
	RMW-06-15	N	RMW-06-15-0106	Tier 2
	RMW-07-15	N	RMW-07-15-0106	Tier 2
	RMW-07-35	N	RMW-07-35-0106	Tier 2
	RMW-09-15	N	RMW-09-15-0106	Tier 2
	RMW-09-35	N	RMW-09-35-0106	Tier 2
	RMW-10-15	N	RMW-10-15-0106	Tier 2
	RMW-10-15	FD	MW-90-0106	Tier 2
	RMW-10-35	N	RMW-10-35-0106	Tier 2
	RMW-11-35	N	RMW-11-35-0106	Tier 2
	RMW-13-35	N	RMW-13-35-0106	Tier 2
	RMW-14-50	N	RMW-14-50-0106	Tier 2
MY2BN3 (Sentinel)				
Inorganics, CLP-SOW				
	RMW-01-17	N	RMW-01-17-0106	Tier 2
	RMW-01-35	N	RMW-01-35-0106	Tier 2
	RMW-02-50	N	RMW-02-50-0106	Tier 2
	RMW-03-15	N	RMW-03-15-0106	Tier 2
	RMW-08-15	N	RMW-08-15-0106	Tier 2
	RMW-08-35	N	RMW-08-35-0106	Tier 2
	RMW-08-35	FD	MW-92-0106	Tier 2
	RMW-09-15	N	RMW-09-15-0106	Tier 2
	RMW-09-35	N	RMW-09-35-0106	Tier 2
	RMW-10-15	FD	MW-90-0106	Tier 2
	RMW-10-35	N	RMW-10-35-0106	Tier 2
	RMW-12-32	N	RMW-12-32-0106	Tier 2
	RMW-12-51	N	RMW-12-51-0106	Tier 2
	RMW-12-51	FD	MW-88-0106	Tier 2

TABLE A8-1
Sample Delivery Group Reference - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY2BN5 (Sentinel)				
Inorganics, CLP-SOW				
	RMW-01-17	N	RMW-01-17-0106	Tier 2
	RMW-01-35	N	RMW-01-35-0106	Tier 2
	RMW-02-50	N	RMW-02-50-0106	Tier 2
	RMW-03-15	N	RMW-03-15-0106	Tier 2
	RMW-08-15	N	RMW-08-15-0106	Tier 2
	RMW-08-35	N	RMW-08-35-0106	Tier 2
	RMW-08-35	FD	MW-92-0106	Tier 2
	RMW-09-15	N	RMW-09-15-0106	Tier 2
	RMW-09-35	N	RMW-09-35-0106	Tier 2
	RMW-10-15	FD	MW-90-0106	Tier 2
	RMW-10-35	N	RMW-10-35-0106	Tier 2
	RMW-12-32	N	RMW-12-32-0106	Tier 2
	RMW-12-51	N	RMW-12-51-0106	Tier 2
	RMW-12-51	FD	MW-88-0106	Tier 2
MY2BP4 (Sentinel)				
Inorganics, CLP-SOW (Filtered)				
	MW-12	N	MW-12-0106	Tier 2
	RMW-01-17	N	RMW-01-17-0106	Tier 2
	RMW-01-35	N	RMW-01-35-0106	Tier 2
	RMW-02-13	N	RMW-02-13-0106	Tier 2
	RMW-02-32	N	RMW-02-32-0106	Tier 2
	RMW-02-50	N	RMW-02-50-0106	Tier 2
	RMW-03-15	N	RMW-03-15-0106	Tier 2
	RMW-08-15	N	RMW-08-15-0106	Tier 2
	RMW-08-35	N	RMW-08-35-0106	Tier 2
	RMW-08-35	FD	MW-92-0106	Tier 2
	RMW-12-32	N	RMW-12-32-0106	Tier 2
	RMW-12-51	N	RMW-12-51-0106	Tier 2
	RMW-12-51	FD	MW-88-0106	Tier 2
MY2BP6 (Sentinel)				
Inorganics, CLP-SOW (Filtered)				
	MW-12	N	MW-12-0106	Tier 2
	RMW-01-17	N	RMW-01-17-0106	Tier 2
	RMW-01-35	N	RMW-01-35-0106	Tier 2
	RMW-02-13	N	RMW-02-13-0106	Tier 2
	RMW-02-32	N	RMW-02-32-0106	Tier 2
	RMW-02-50	N	RMW-02-50-0106	Tier 2
	RMW-03-15	N	RMW-03-15-0106	Tier 2
	RMW-08-15	N	RMW-08-15-0106	Tier 2
	RMW-08-35	N	RMW-08-35-0106	Tier 2
	RMW-08-35	FD	MW-92-0106	Tier 2
	RMW-12-32	N	RMW-12-32-0106	Tier 2
	RMW-12-51	N	RMW-12-51-0106	Tier 2
	RMW-12-51	FD	MW-88-0106	Tier 2

TABLE A8-1
Sample Delivery Group Reference - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY2BR7 (Sentinel)				
Inorganics, CLP-SOW				
	MW-12	N	MW-12-0106	Tier 3
	RMW-02-13	N	RMW-02-13-0106	Tier 3
	RMW-02-32	N	RMW-02-32-0106	Tier 3
MY2BR9 (Sentinel)				
Inorganics, CLP-SOW				
	MW-12	N	MW-12-0106	Tier 3
	RMW-02-13	N	RMW-02-13-0106	Tier 3
	RMW-02-32	N	RMW-02-32-0106	Tier 3
Y2BJ4 (A4 Scientific)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	BMW-01	N	BMW-01-0106	Tier 3
	BMW-06	N	BMW-06-0106	Tier 3
	BMW-07	N	BMW-07-0106	Tier 3
	BMW-08	N	BMW-08-0106	Tier 3
	BPZ-01	N	BPZ-01-0106	Tier 3
	RMW-04-15	N	RMW-04-15-0106	Tier 3
	RMW-06-15	N	RMW-06-15-0106	Tier 3
	RMW-07-15	N	RMW-07-15-0106	Tier 3
	RMW-07-35	N	RMW-07-35-0106	Tier 3
	RMW-11-35	N	RMW-11-35-0106	Tier 3
	RMW-13-35	N	RMW-13-35-0106	Tier 3
	RMW-14-50	N	RMW-14-50-0106	Tier 3
Semivolatile Organics, CLP-SOW				
	BMW-01	N	BMW-01-0106	Tier 3
	BMW-06	N	BMW-06-0106	Tier 3
	BMW-07	N	BMW-07-0106	Tier 3
	BMW-08	N	BMW-08-0106	Tier 3
	BPZ-01	N	BPZ-01-0106	Tier 3
	RMW-04-15	N	RMW-04-15-0106	Tier 3
	RMW-06-15	N	RMW-06-15-0106	Tier 3
	RMW-07-15	N	RMW-07-15-0106	Tier 3
	RMW-07-35	N	RMW-07-35-0106	Tier 3
	RMW-11-35	N	RMW-11-35-0106	Tier 3
	RMW-13-35	N	RMW-13-35-0106	Tier 3
	RMW-14-50	N	RMW-14-50-0106	Tier 3
Volatile Organics, CLP-SOW				
	BMW-01	N	BMW-01-0106	Tier 3
	BMW-06	N	BMW-06-0106	Tier 3
	BMW-07	N	BMW-07-0106	Tier 3
	BMW-08	N	BMW-08-0106	Tier 3
	BPZ-01	N	BPZ-01-0106	Tier 3
	RMW-04-15	N	RMW-04-15-0106	Tier 3
	RMW-06-15	N	RMW-06-15-0106	Tier 3
	RMW-07-15	N	RMW-07-15-0106	Tier 3
	RMW-07-35	N	RMW-07-35-0106	Tier 3
	RMW-11-35	N	RMW-11-35-0106	Tier 3
	RMW-13-35	N	RMW-13-35-0106	Tier 3
	RMW-14-50	N	RMW-14-50-0106	Tier 3

TABLE A8-1
Sample Delivery Group Reference - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2BJ6 (A4 Scientific)				
Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW				
	BMW-01	N	BMW-01-0106	Tier 3
	BMW-06	N	BMW-06-0106	Tier 3
	BMW-07	N	BMW-07-0106	Tier 3
	BMW-08	N	BMW-08-0106	Tier 3
	BPZ-01	N	BPZ-01-0106	Tier 3
	RMW-04-15	N	RMW-04-15-0106	Tier 3
	RMW-06-15	N	RMW-06-15-0106	Tier 3
	RMW-07-15	N	RMW-07-15-0106	Tier 3
	RMW-07-35	N	RMW-07-35-0106	Tier 3
	RMW-11-35	N	RMW-11-35-0106	Tier 2
	RMW-11-35	N	RMW-11-35-0106	Tier 3
	RMW-13-35	N	RMW-13-35-0106	Tier 3
	RMW-14-50	N	RMW-14-50-0106	Tier 3
Y2BM5 (A4 Scientific)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	BMW-03	N	BMW-03-0106	Tier 3
	RMW-01-17	N	RMW-01-17-0106	Tier 3
	RMW-01-35	N	RMW-01-35-0106	Tier 3
	RMW-05-15	N	RMW-05-15-0106	Tier 3
	RMW-08-15	N	RMW-08-15-0106	Tier 3
	RMW-08-35	N	RMW-08-35-0106	Tier 3
	RMW-08-35	FD	MW-92-0106	Tier 3
	RMW-09-15	N	RMW-09-15-0106	Tier 3
	RMW-09-35	N	RMW-09-35-0106	Tier 3
	RMW-10-15	N	RMW-10-15-0106	Tier 3
	RMW-10-15	FD	MW-90-0106	Tier 3
	RMW-10-35	N	RMW-10-35-0106	Tier 3
Semivolatile Organics, CLP-SOW				
	BMW-03	N	BMW-03-0106	Tier 3
	RMW-01-17	N	RMW-01-17-0106	Tier 3
	RMW-01-35	N	RMW-01-35-0106	Tier 3
	RMW-05-15	N	RMW-05-15-0106	Tier 3
	RMW-08-15	N	RMW-08-15-0106	Tier 3
	RMW-08-35	N	RMW-08-35-0106	Tier 3
	RMW-08-35	FD	MW-92-0106	Tier 3
	RMW-09-15	N	RMW-09-15-0106	Tier 3
	RMW-09-35	N	RMW-09-35-0106	Tier 3
	RMW-10-15	N	RMW-10-15-0106	Tier 3
	RMW-10-15	FD	MW-90-0106	Tier 3
	RMW-10-35	N	RMW-10-35-0106	Tier 3

TABLE A8-1
Sample Delivery Group Reference - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2BM5 (A4 Scientific)				
Volatile Organics, CLP-SOW				
	BMW-03	N	BMW-03-0106	Tier 3
	RMW-01-17	N	RMW-01-17-0106	Tier 3
	RMW-01-35	N	RMW-01-35-0106	Tier 3
	RMW-05-15	N	RMW-05-15-0106	Tier 3
	RMW-08-15	N	RMW-08-15-0106	Tier 3
	RMW-08-35	N	RMW-08-35-0106	Tier 3
	RMW-08-35	FD	MW-92-0106	Tier 3
	RMW-09-15	N	RMW-09-15-0106	Tier 3
	RMW-09-35	N	RMW-09-35-0106	Tier 3
	RMW-10-15	N	RMW-10-15-0106	Tier 3
	RMW-10-15	FD	MW-90-0106	Tier 3
	RMW-10-35	N	RMW-10-35-0106	Tier 3
Y2BM6 (A4 Scientific)				
Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW				
	BMW-03	N	BMW-03-0106	Tier 3
	RMW-01-17	N	RMW-01-17-0106	Tier 3
	RMW-01-35	N	RMW-01-35-0106	Tier 3
	RMW-05-15	N	RMW-05-15-0106	Tier 3
	RMW-08-15	N	RMW-08-15-0106	Tier 3
	RMW-08-15	N	RMW-08-15-0106	Tier 2
	RMW-08-35	N	RMW-08-35-0106	Tier 3
	RMW-08-35	FD	MW-92-0106	Tier 2
	RMW-08-35	FD	MW-92-0106	Tier 3
	RMW-09-15	N	RMW-09-15-0106	Tier 3
	RMW-09-35	N	RMW-09-35-0106	Tier 3
	RMW-09-35	N	RMW-09-35-0106	Tier 2
	RMW-10-15	N	RMW-10-15-0106	Tier 3
	RMW-10-15	FD	MW-90-0106	Tier 3
	RMW-10-15	FD	MW-90-0106	Tier 2
	RMW-10-35	N	RMW-10-35-0106	Tier 3
Y2BQ4 (A4 Scientific)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	MW-12	N	MW-12-0106	Tier 3
	RMW-02-13	N	RMW-02-13-0106	Tier 3
	RMW-02-32	N	RMW-02-32-0106	Tier 3
	RMW-02-50	N	RMW-02-50-0106	Tier 3
	RMW-03-15	N	RMW-03-15-0106	Tier 3
	RMW-12-32	N	RMW-12-32-0106	Tier 3
	RMW-12-51	N	RMW-12-51-0106	Tier 3
	RMW-12-51	FD	MW-88-0106	Tier 3

TABLE A8-1
Sample Delivery Group Reference - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2BQ4 (A4 Scientific)				
Semivolatile Organics, CLP-SOW				
	MW-12	N	MW-12-0106	Tier 3
	RMW-02-13	N	RMW-02-13-0106	Tier 3
	RMW-02-32	N	RMW-02-32-0106	Tier 3
	RMW-02-50	N	RMW-02-50-0106	Tier 3
	RMW-03-15	N	RMW-03-15-0106	Tier 3
	RMW-12-32	N	RMW-12-32-0106	Tier 3
	RMW-12-51	N	RMW-12-51-0106	Tier 3
	RMW-12-51	FD	MW-88-0106	Tier 3
Volatile Organics, CLP-SOW				
	MW-12	N	MW-12-0106	Tier 3
	RMW-02-13	N	RMW-02-13-0106	Tier 3
	RMW-02-32	N	RMW-02-32-0106	Tier 3
	RMW-02-50	N	RMW-02-50-0106	Tier 3
	RMW-03-15	N	RMW-03-15-0106	Tier 3
	RMW-12-32	N	RMW-12-32-0106	Tier 3
	RMW-12-51	N	RMW-12-51-0106	Tier 3
	RMW-12-51	FD	MW-88-0106	Tier 3
Y2BQ5 (A4 Scientific)				
Semivolatile Organics (SIM)/1,4-Dioxane, CLP-SOW				
	MW-12	N	MW-12-0106	Tier 3
	RMW-02-13	N	RMW-02-13-0106	Tier 3
	RMW-02-32	N	RMW-02-32-0106	Tier 3
	RMW-02-50	N	RMW-02-50-0106	Tier 3
	RMW-03-15	N	RMW-03-15-0106	Tier 3
	RMW-12-32	N	RMW-12-32-0106	Tier 3
	RMW-12-51	N	RMW-12-51-0106	Tier 3
	RMW-12-51	FD	MW-88-0106	Tier 3

Notes:
N regular sample
FD field duplicate

TABLE A8-2
Result Qualification and Associated Reason Codes - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	1/12/2006	1/17/2006	1/10/2006	1/13/2006	1/13/2006	1/13/2006	1/23/2006	1/19/2006	1/19/2006	1/23/2006	1/23/2006	1/23/2006	1/20/2006	1/12/2006	1/17/2006	1/11/2006	1/11/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	200	µg/L	*	*	*	*	*	*	**640 J >IC**	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*
1,1,2-Trichloroethane	5	µg/L	*	0.5 UJ Sur	*	*	*	*	18 J Sur	0.5 UJ Sur	*	*	*	0.5 UJ Sur	*	*	*	*	*
1,1-Dichloroethane	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,3-Trichlorobenzene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	*	**34 J RSD**	*	*	*	*	*	*
1,2-Dibromo-3-chloropropane	0.2	µg/L	*	*	*	*	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*
1,2-Dibromoethane	0.05	µg/L	*	*	*	*	*	*	5 UJ Sur	0.5 UJ Sur	0.5 UJ Sur	*	5 UJ Sur	*	*	*	*	*	*
1,2-Dichlorobenzene	600	µg/L	*	*	*	*	*	*	11 J IS	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	5	µg/L	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	0.5 UJ Sur	0.5 UJ Sur
1,3-Dichlorobenzene	180	µg/L	*	*	*	*	*	*	*	0.18 J IS	5.9 J IS	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	5	µg/L	*	*	*	*	*	*	1.6 J IS	**6.6 J IS**	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetone	5,500	µg/L	*	5 U EB	*	*	7.2 U EB, TB	7.4 U EB, TB	*	*	5 U EB	5,000 U EB	*	5 U EB	6.7 U EB, TB	*	5 U EB	*	*
Benzene	1	µg/L	*	*	*	*	*	*	**4,000 J >IC**	*	*	*	*	*	*	*	*	*	*
Bromochloromethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	100	µg/L	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	0.5 UJ Sur	0.5 UJ Sur
Bromoform	100	µg/L	*	*	*	*	*	*	5 UJ Sur	0.5 UJ Sur	0.5 UJ Sur	*	5 UJ Sur	*	*	*	*	*	*
Bromomethane	8.7	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon disulfide	1,000	µg/L	*	*	*	*	0.5 U TB	*	5 U TB	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	70	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	4.6	µg/L	*	*	*	*	*	*	*	*	*	68 J Sur	*	*	*	*	*	*	*
Chloroform	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	160	µg/L	0.84 U LB	*	0.75 U LB	0.58 U LB	*	*	*	0.5 U LB, TB	0.5 U TB	*	*	*	*	0.76 U LB	*	0.84 U LB	*
cis-1,2-Dichloroethene	6	µg/L	*	*	*	0.28 J Sur	*	*	*	*	*	*	**250 J >IC**	*	*	*	*	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	0.5 UJ Sur	*	*	*	*	*	0.5 UJ Sur	*	*	*	0.5 UJ Sur	*	*	*	*	*
Cyclohexane	10,000	µg/L	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	0.5 UJ Sur	0.5 UJ Sur
Dibromochloromethane	100	µg/L	*	*	*	*	*	*	5 UJ Sur	0.5 UJ Sur	0.5 UJ Sur	*	5 UJ Sur	*	*	*	*	*	*
Ethyl tert-butyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	700	µg/L	*	*	*	*	*	*	**4,000 J >IC**	1.4 J Sur	6.1 J Sur	*	*	*	*	*	*	*	*
Freon 11	150	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	1,200	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	390	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	660	µg/L	*	*	*	*	*	*	42 J RSD, IS	14 J Sur	2.6 J Sur	*	210 J RSD, IS	*	*	*	*	*	*
Methyl acetate	6,100	µg/L	*	*	*	0.5 UJ C%D	0.5 UJ C%D	0.5 UJ C%D	5 UJ C%D	*	*	*	*	*	*	*	*	*	*
Methyl ethyl ketone	7,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	2,000	µg/L	*	*	*	*	*	*	**40,000 J >IC**	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	13	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylcyclohexane	NE	µg/L	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	0.5 UJ Sur	0.5 UJ Sur
Methylene chloride	5	µg/L	0.89 UJ EB, RSD, LB, TB	1.3 UJ C%D, EB, RSD, LB	2.3 UJ EB, RSD, LB, TB	0.75 UJ EB, RSD, LB, TB	0.94 UJ EB, RSD, LB, TB	1.1 UJ EB, RSD, LB, TB	13 UJ EB, RSD, LB, TB	1.1 UJ C%D, EB, RSD, LB	3.3 UJ EB, RSD, LB	14 U EB, LB, TB	41 UJ EB, RSD, LB, TB	1.1 UJ EB, RSD, LB, TB	2.5 UJ C%D, EB, RSD, LB, TB	0.98 UJ EB, RSD, LB, TB	1.2 UJ C%D, EB, RSD, LB	1.9 UJ EB, RSD, LB, TB	1.6 UJ EB, RSD, LB, TB
Styrene	100	µg/L	*	*	*	*	*	*	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	*	*	*	*
tert-Amyl methyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
tert-Butyl alcohol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	500 UJ C%D	*	*	*	*	*	*
Tetrachloroethene	5	µg/L	*	*	*	*	*	*	*	0.5 UJ Sur	1.6 J Sur	*	*	*	*	*	*	*	*
Toluene	150	µg/L	*	*	*	*	*	0.5 U EB	*	0.5 UJ Sur	20 J Sur	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	10	µg/L	*	*	*	*	*	*	**4,000 J >IC**	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	0.5	µg/L	*	0.5 UJ Sur	*	*	*	*	*	0.5 UJ Sur	*	*	*	0.5 UJ Sur	*	*	*	*	*

TABLE A8-2
Result Qualification and Associated Reason Codes - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	1/12/2006	1/17/2006	1/10/2006	1/13/2006	1/13/2006	1/13/2006	1/23/2006	1/19/2006	1/19/2006	1/23/2006	1/23/2006	1/23/2006	1/20/2006	1/12/2006	1/17/2006	1/11/2006	1/11/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
Trichloroethene	5	µg/L	*	*	*	*	*	*	*	0.22 J Sur	3.9 J Sur	10 U EB	6.7 U EB	0.5 U EB, LB	*	*	*	*	*
Vinyl chloride	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	1,750	µg/L	*	*	*	*	*	*	**4,000 J >IC**	2 J Sur	15 J Sur	*	*	*	*	*	*	*	*
Semivolatile Organic Compounds																			
1,1'-Biphenyl	300	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	5 R Sur	*	*	1.3 J Sur	*	5 UJ Sur	*	*	*	*	*
1,2,4,5-Tetrachlorobenzene	11	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/L	*	**170 J >IC**	*	*	*	*	*	*	*	*	**610 J >IC, IS**	2 R Sur	*	*	*	*	*
2,2'-Oxybis(1-Chloropropane)	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,5-Trichlorophenol	3,600	µg/L	*	*	*	*	*	*	*	*	*	20 UJ Sur	*	*	*	*	*	*	*
2,4,6-Trichlorophenol	0.96	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	110	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
2,4-Dimethylphenol	730	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrophenol	73	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrotoluene	73	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,6-Dinitrotoluene	36	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chloronaphthalene	490	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	5 R Sur	*	*	5 UJ Sur	*	*	*	*	*	*	*
2-Chlorophenol	30	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylnaphthalene	NE	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	70 J Sur	*	*	*	*	*	*	*	*	*	*
2-Methylphenol	1,800	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitroaniline	110	µg/L	*	*	*	*	*	*	20 R Sur	*	*	20 UJ Sur	20 UJ Sur	*	*	*	*	*	*
2-Nitrophenol	NE	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
3,3'-Dichlorobenzidine	0.15	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3-Nitroaniline	NE	µg/L	*	*	*	*	*	*	20 R Sur	*	*	20 UJ Sur	20 UJ Sur	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Bromophenylphenyl ether	NE	µg/L	*	*	*	*	5 UJ Sur	*	5 R Sur	*	*	5 UJ Sur	*	*	*	*	*	*	*
4-Chloro-3-methylphenol	NE	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
4-Chloroaniline	150	µg/L	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/L	*	*	*	*	5 UJ Sur	*	5 R Sur	*	*	5 UJ Sur	*	*	*	*	*	*	*
4-Methylphenol	180	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitroaniline	NE	µg/L	*	*	*	*	*	*	20 R Sur	*	*	20 UJ Sur	20 UJ Sur	*	*	*	*	*	*
4-Nitrophenol	NE	µg/L	*	*	*	*	*	*	20 R Sur	*	*	20 UJ Sur	20 UJ Sur	*	*	*	*	*	*
Acenaphthene	370	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	5 R Sur	*	*	1.2 J Sur	*	*	*	*	*	*	*
Acenaphthylene	NE	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	5 R Sur	*	*	5 UJ Sur	*	*	*	*	*	*	*
Acetophenone	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Anthracene	1,800	µg/L	*	*	*	*	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Atrazine	3	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzaldehyde	3,600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)anthracene	0.092	µg/L	*	*	*	*	*	*	*	*	*	**0.35 J IS**	*	*	*	*	*	*	*
Benzo(a)pyrene	0.2	µg/L	*	*	*	*	*	*	*	*	*	0.19 J IS	0.17 J IS	*	**0.33 J IS**	*	*	*	*
Benzo(b)fluoranthene	0.092	µg/L	*	*	*	*	*	*	*	*	*	**0.43 J IS**	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	0.056	µg/L	*	*	*	*	*	*	*	*	*	**0.46 J IS**	*	*	*	*	*	*	*
Benzyl butyl phthalate	7,300	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	5 R Sur	*	5 UJ C%D	5 UJ Sur	*	5 UJ Sur	5 UJ C%D	*	*	*	*
bis(2-Chloroethoxy)methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	0.01	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	4.8	µg/L	0.4 UJ EB, RSD, LB	0.1 UJ EB, RSD, LB	0.39 UJ EB, RSD, LB	0.27 UJ EB, RSD, LB	0.24 UJ EB, RSD, LB	0.17 UJ EB, RSD, LB	0.73 UJ IS, LB	0.1 UJ EB, RSD, LB	0.11 UJ EB, RSD, LB	0.3 UJ IS, LB	0.36 UJ IS, LB	0.25 U LB	0.27 UJ IS, LB	0.43 UJ EB, RSD, LB	0.18 UJ EB, RSD, LB	0.21 UJ EB, RSD, LB	0.2 UJ EB, RSD, LB
Caprolactam	18,000	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	5 R Sur	*	5 UJ C%D	5 UJ Sur	*	5 UJ Sur	*	*	*	*	*
Carbazole	3.4	µg/L	0.14 U EB	*	0.12 U EB	*	*	*	0.5 J IS	*	*	**11 J >IC, IS**	0.54 J IS	*	*	0.13 U EB	*	0.12 U EB	0.11 U EB
Chrysene	0.56	µg/L	*	*	*	*	*	*	*	*	*	0.42 J IS	*	*	*	*	*	*	*
Dibenz(a,h)anthracene	0.0092	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A8-2
Result Qualification and Associated Reason Codes - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	1/12/2006	1/17/2006	1/10/2006	1/13/2006	1/13/2006	1/13/2006	1/23/2006	1/19/2006	1/19/2006	1/23/2006	1/23/2006	1/23/2006	1/20/2006	1/12/2006	1/17/2006	1/11/2006	1/11/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
Dibenzofuran	12	µg/L	*	*	*	*	5 UJ Sur	*	5 R Sur	*	*	5 UJ Sur	*	*	*	*	*	*	*
Diethylphthalate	29,000	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	5 R Sur	*	*	5 UJ Sur	*	5 UJ Sur	*	*	*	*	*
Dimethylphthalate	360,000	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	5 R Sur	*	*	5 UJ Sur	*	5 UJ Sur	*	*	*	*	*
Di-n-butyl phthalate	3,600	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	5 R Sur	*	*	2.1 J Sur	2.9 J Sur	5 UJ Sur	*	*	*	*	*
Di-n-octyl phthalate	1,500	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	5 R Sur	*	5 UJ C%D	5 UJ Sur	*	5 UJ Sur	5 UJ C%D	*	*	*	*
Fluoranthene	1,500	µg/L	*	*	*	*	*	*	*	*	*	1.1 J Sur	*	*	*	*	*	*	*
Fluorene	240	µg/L	*	*	*	*	5 UJ Sur	*	5 R Sur	*	*	5 UJ Sur	*	*	*	*	*	*	*
Hexachlorobenzene	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	50	µg/L	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*
Hexachloroethane	4.8	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	0.092	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isophorone	71	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Naphthalene	0.093	µg/L	*	*	*	5 UJ Sur	5 UJ Sur	*	76 J Sur	*	*	*	*	*	*	*	*	*	*
Nitrobenzene	3.4	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	0.0096	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	14	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pentachlorophenol	1	µg/L	*	*	*	*	*	*	**13 J IS**	*	*	**3.7 J IS**	*	*	*	*	*	*	*
Phenanthrene	NE	µg/L	*	*	*	*	5 UJ Sur	*	*	*	*	2.6 J Sur	*	*	*	*	*	*	*
Phenol	11,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pyrene	180	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	5 UJ C%D	*	*	*	*
Metals																			
Aluminum	1,000	µg/L	*	*	*	*	*	*	*	**9,770 J SerDil**	375 J SerDil	*	*	644 J SerDil	**2,720 J SerDil**	*	*	*	*
Antimony	6	µg/L	*	4 UJ ICB	*	*	4 UJ ICB	*	2 UJ ICB	2 UJ ICB	*	2 UJ ICB	2 UJ ICB	2 UJ ICB	2 UJ ICB	*	*	*	*
Arsenic	10	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2 UJ CCB
Barium	1,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Beryllium	4	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Calcium	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chromium	50	µg/L	4 UJ CCB	4 UJ CCB	4 UJ CCB	4 UJ CCB	*	*	*	*	2 UJ CCB	*	*	*	*	4 UJ CCB	4 UJ CCB	*	4 UJ CCB
Cobalt	730	µg/L	0.5 J SerDil	19.3 J SerDil	1.6 J SerDil	6.1 J SerDil	2.4 J SerDil	35.7 J SerDil	*	*	*	*	*	*	*	0.53 J SerDil	4 J SerDil	4.6 J SerDil	4.3 J SerDil
Copper	1,300	µg/L	4 UJ ICS, LB	95.8 J+ ICS	6.6 J+ ICS	84.2 J+ ICS	54.4 J+ ICS	296 J+ ICS	*	*	*	*	*	*	*	5.5 J+ ICS	36.8 J+ ICS	15.8 J+ ICS	7.5 J+ ICS
Iron	11	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lead	15	µg/L	4 J+ ICS, SerDil	4.4 J+ ICS, SerDil	8.7 J+ ICS, SerDil	2.8 J+ ICS, SerDil	**18.1 J+ ICS, SerDil**	**1,050 J+ ICS, SerDil**	*	*	1 U EB	*	*	*	*	1.7 J+ ICS, SerDil	2.8 J+ ICS, SerDil	11.4 J+ ICS, SerDil	1.8 J+ ICS, SerDil
Magnesium	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manganese	880	µg/L	638 J SerDil	**9,640 J SerDil**	280 J SerDil	**1,220 J SerDil**	457 J SerDil	**1,790 J SerDil**	*	*	*	*	*	*	*	123 J SerDil	**2,070 J SerDil**	**4,460 J SerDil**	**4,330 J SerDil**
Mercury	2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nickel	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Potassium	NE	mg/L	*	*	*	*	*	*	19.7 J SerDil	*	5 UJ CCB, LB	*	*	*	*	5 U EB	*	*	*
Selenium	50	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Silver	180	µg/L	*	*	*	*	2 UJ CCB, ICB	2 UJ CCB, ICB	*	1 UJ CCB, ICB	*	*	*	*	1 UJ CCB, ICB	*	*	*	*
Sodium	NE	mg/L	*	*	*	*	*	*	190 J SerDil	*	*	*	*	*	*	*	*	*	*
Thallium	2	µg/L	*	*	*	*	*	2 UJ ICB	*	*	*	*	*	*	*	*	*	*	2 UJ ICB
Vanadium	36	µg/L	2 UJ CCB	*	*	2 UJ CCB	*	*	*	*	*	*	*	*	*	*	*	*	2 UJ CCB
Zinc	11,000	µg/L	*	*	*	*	*	*	*	82.9 J SerDil	11.8 J SerDil	*	*	28.2 J SerDil	73.7 J SerDil	*	*	*	*
Metals (Dissolved)																			
Aluminum (Dissolved)	1,000	µg/L	200 UJ CCB	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Antimony (Dissolved)	6	µg/L	*	4 UJ ICB	*	*	4 UJ ICB	4 UJ ICB	*	*	*	2 UJ ICB	2 UJ ICB	*	2 UJ ICB	*	*	*	*
Arsenic (Dissolved)	10	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	1/12/2006	1/17/2006	1/10/2006	1/13/2006	1/13/2006	1/13/2006	1/23/2006	1/19/2006	1/19/2006	1/23/2006	1/23/2006	1/23/2006	1/20/2006	1/12/2006	1/17/2006	1/11/2006	1/11/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Metals (Dissolved)																			
Barium (Dissolved)	1,000	µg/L	*	*	*	20 U LB	*	*	107 J SerDil	104 J SerDil	82.3 J SerDil	608 J SerDil	171 J SerDil	71.9 J SerDil	93.5 J SerDil	*	*	*	*
Beryllium (Dissolved)	4	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium (Dissolved)	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Calcium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chromium (Dissolved)	50	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cobalt (Dissolved)	730	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Copper (Dissolved)	1,300	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Iron (Dissolved)	11	mg/L	*	0.1 UJ CCB	0.1 UJ CCB	*	*	*	*	*	*	*	*	*	*	*	*	*	0.1 UJ CCB
Lead (Dissolved)	15	µg/L	1.1 J SerDil	2 J SerDil	5.4 J SerDil	1.5 J SerDil	1.3 J SerDil	2 UJ SerDil	*	*	*	*	*	*	*	0.22 J SerDil	0.3 J SerDil	4 J SerDil	0.8 J SerDil
Magnesium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manganese (Dissolved)	880	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Mercury (Dissolved)	2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nickel (Dissolved)	100	µg/L	*	*	2 U LB	*	*	*	17.4 J SerDil	4.6 J SerDil	20.5 J SerDil	42.8 J SerDil	**308 J SerDil**	**227 J SerDil**	12.2 J SerDil	*	*	*	*
Potassium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*	5 U LB	*	*	*	*	5 UJ CCB	*	*	*
Selenium (Dissolved)	50	µg/L	*	4.7 J+ ICS	*	*	5 J+ ICS	*	*	*	*	*	*	*	*	*	*	*	*
Silver (Dissolved)	180	µg/L	*	*	*	*	2 UJ CCB, ICB	2 UJ CCB, ICB	*	*	1 UJ MS	*	*	*	*	*	*	*	*
Sodium (Dissolved)	NE	mg/L	991 J SerDil	405. J SerDil	876 J SerDil	1,240 J SerDil	9,430 J SerDil	5,290. J SerDil	202 J SerDil	97.8 J SerDil	384. J SerDil	318 J SerDil	1,340. J SerDil	167 J SerDil	346 J SerDil	336. J SerDil	407 J SerDil	226 J SerDil	60.2 J SerDil
Thallium (Dissolved)	2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vanadium (Dissolved)	36	µg/L	2 UJ CCB	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2 UJ CCB
Zinc (Dissolved)	11,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Organochlorine Pesticides																			
4,4'-DDD	0.28	µg/L	*	*	0.011 J CF	*	*	*	**0.33 J >IC**	*	*	2 J >IC, CF, Sur	*	*	0.007 J CF	*	*	*	*
4,4'-DDE	0.2	µg/L	*	*	*	*	*	*	0.098 J CF	0.028 J CF	*	0.33 J >IC, CF, Sur	*	*	0.022 J CF, RR	*	*	*	*
4,4'-DDT	0.2	µg/L	*	*	*	*	*	*	*	*	*	0.02 UJ MS, SD	*	*	*	*	*	*	*
Aldrin	0.004	µg/L	*	*	*	*	*	*	*	*	*	0.13 J CF, MS, SD, Sur	*	*	*	*	*	*	*
alpha-BHC	0.011	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
alpha-Chlordane	0.1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1016	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1221	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1232	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1242	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1248	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1254	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1260	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
beta-BHC	0.037	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
delta-BHC	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dieldrin	0.0042	µg/L	*	*	0.003 J CF	*	*	*	*	*	*	0.53 J >IC, CF, MS, SD, Sur	0.071 J Sur	*	*	*	*	*	*
Endosulfan I	220	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endosulfan II	220	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endosulfan sulfate	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endrin	2	µg/L	*	*	*	*	*	*	*	*	*	0.02 UJ SD	*	*	*	*	*	*	*
Endrin aldehyde	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endrin ketone	NE	µg/L	*	0.17 J CF	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
gamma-BHC	0.052	µg/L	*	*	*	*	*	*	*	*	*	0.01 UJ MS, MS, SD	*	*	*	*	*	*	*
gamma-Chlordane	0.1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Heptachlor	0.01	µg/L	*	*	*	*	*	*	*	*	*	0.01 UJ MS, MS, SD	*	*	*	*	*	*	*
Heptachlor epoxide	0.01	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A8-2
Result Qualification and Associated Reason Codes - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	1/12/2006	1/17/2006	1/10/2006	1/13/2006	1/13/2006	1/13/2006	1/23/2006	1/19/2006	1/19/2006	1/23/2006	1/23/2006	1/23/2006	1/20/2006	1/12/2006	1/17/2006	1/11/2006	1/11/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Organochlorine Pesticides																			
Methoxychlor	30	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toxaphene	3	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dioxins/Furans (1)																			
1,2,3,4,6,7,8-HpCDD	45	pg/L	---	---	---	---	---	---	*	*	*	*	*	*	---	---	---	---	---
1,2,3,4,6,7,8-HpCDF	45	pg/L	---	---	---	---	---	---	6.38 U LB	19.7 U LB	1.83 U LB	**147 J LB**	*	*	---	---	---	---	---
1,2,3,4,7,8,9-HpCDF	45	pg/L	---	---	---	---	---	---	*	*	*	*	*	*	---	---	---	---	---
1,2,3,4,7,8-HxCDD	4.5	pg/L	---	---	---	---	---	---	*	*	*	*	*	*	---	---	---	---	---
1,2,3,4,7,8-HxCDF	4.5	pg/L	---	---	---	---	---	---	*	*	1.07 U LB	13.4 U LB	*	*	---	---	---	---	---
1,2,3,6,7,8-HxCDD	4.5	pg/L	---	---	---	---	---	---	*	*	*	*	*	*	---	---	---	---	---
1,2,3,6,7,8-HxCDF	4.5	pg/L	---	---	---	---	---	---	*	*	1.12 U LB	3.86 U LB	*	*	---	---	---	---	---
1,2,3,7,8,9-HxCDD	4.5	pg/L	---	---	---	---	---	---	*	*	*	*	*	*	---	---	---	---	---
1,2,3,7,8,9-HxCDF	4.5	pg/L	---	---	---	---	---	---	*	*	*	*	*	*	---	---	---	---	---
1,2,3,7,8-PeCDD	0.45	pg/L	---	---	---	---	---	---	*	*	*	2.01 U LB	*	*	---	---	---	---	---
1,2,3,7,8-PeCDF	9	pg/L	---	---	---	---	---	---	*	1.56 U LB	1.6 U LB	1.97 U LB	0.815 U LB	*	---	---	---	---	---
2,3,4,6,7,8-HxCDF	4.5	pg/L	---	---	---	---	---	---	*	1.47 U LB	0.91 U LB	6.27 U LB	1 U LB	*	---	---	---	---	---
2,3,4,7,8-PeCDF	0.9	pg/L	---	---	---	---	---	---	*	1.96 U LB	1.89 U LB	9.72 U LB	0.803 U LB	*	---	---	---	---	---
2,3,7,8-TCDD	0.45	pg/L	---	---	---	---	---	---	*	*	*	*	*	*	---	---	---	---	---
2,3,7,8-TCDF	4.5	pg/L	---	---	---	---	---	---	3.23 U LB	2.96 U LB	2.7 U LB	2.33 U LB	*	*	---	---	---	---	---
OCDD	4,500	pg/L	---	---	---	---	---	---	312 J LB	944 J LB	28.3 U LB	**10,500 J LB**	59.1 U LB	48.6 U LB	---	---	---	---	---
OCDF	4,500	pg/L	---	---	---	---	---	---	*	*	*	*	*	*	---	---	---	---	---
Anions																			
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dissolved Gases																			
Ethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethene	NE	µg/L	*	*	*	*	*	*	*	*	*	900 J Sur	*	*	*	*	*	*	*
Methane	NE	µg/L	*	*	*	*	*	*	*	*	*	22,000 J Sur	*	*	*	*	*	*	*
Water Quality Indicators																			
Total Dissolved Solids	NE	mg/L	*	---	*	---	*	---	*	---	---	*	---	*	---	*	---	---	*

TABLE A8-2
Result Qualification and Associated Reason Codes - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-08-15	RMW-08-35	RMW-08-35 (FD)	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	1/11/2006	1/19/2006	1/19/2006	1/19/2006	1/18/2006	1/18/2006	1/17/2006	1/17/2006	1/18/2006	1/10/2006	1/20/2006	1/20/2006	1/20/2006	1/12/2006	1/13/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**														
Volatile Organic Compounds																	
1,1,1-Trichloroethane	200	µg/L	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	5	µg/L	*	0.5 UJ Sur	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*
1,1-Dichloroethane	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	6	µg/L	*	*	*	0.46 J Sur	*	*	*	*	*	*	*	*	*	*	*
1,2,3-Trichlorobenzene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromo-3-chloropropane	0.2	µg/L	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.05	µg/L	*	*	*	*	0.5 UJ Sur	*	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*	*	*	*
1,2-Dichlorobenzene	600	µg/L	*	*	*	*	*	*	*	*	*	*	1.1 J IS	*	*	*	*
1,2-Dichloroethane	0.5	µg/L	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	5	µg/L	0.5 UJ Sur	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*
1,3-Dichlorobenzene	180	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetone	5,500	µg/L	*	*	5 U EB	5 U EB	*	5 U EB	10 U EB	10 U EB	*	*	400 U EB, TB	5 UJ EB, TB, Sur	5 U EB, TB	*	5 U EB, TB
Benzene	1	µg/L	*	*	*	*	*	*	*	*	**5.4 J IS, MS**	*	*	*	*	*	*
Bromochloromethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	100	µg/L	0.5 UJ Sur	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*
Bromoform	100	µg/L	*	*	*	*	0.5 UJ Sur	*	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*	*	*	*
Bromomethane	8.7	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon disulfide	1,000	µg/L	*	*	*	*	*	*	*	*	*	*	0.9 U TB	*	*	*	*
Carbon tetrachloride	0.5	µg/L	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	70	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	4.6	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	160	µg/L	0.76 U LB	*	*	*	0.5 U LB	0.5 U LB	0.59 U LB	*	*	*	0.58 U TB	0.68 U TB	0.61 U TB	0.91 U LB	*
cis-1,2-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	0.5 UJ Sur	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*
Cyclohexane	10,000	µg/L	0.5 UJ Sur	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*
Dibromochloromethane	100	µg/L	*	*	*	*	0.5 UJ Sur	*	*	*	0.5 UJ Sur	*	0.5 UJ Sur	*	*	*	*
Ethyl tert-butyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	700	µg/L	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	*	1.2 J IS	*	*	0.5 U TB	*	*	*
Freon 11	150	µg/L	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
Freon 113	1,200	µg/L	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
Freon 12	390	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	660	µg/L	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	*	*	*	3.8 J RSD, IS	0.11 J RSD	*	*	*
Methyl acetate	6,100	µg/L	*	*	*	0.5 UJ Sur	*	*	*	*	*	*	*	*	*	*	0.5 UJ C%D
Methyl ethyl ketone	7,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	2,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	13	µg/L	*	*	*	4.9 J Sur	*	*	*	*	*	*	*	*	*	*	*
Methylcyclohexane	NE	µg/L	0.5 UJ Sur	*	*	*	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*
Methylene chloride	5	µg/L	1.6 UJ EB, RSD, LB, TB	*	0.5 UJ C%D, EB, RSD, LB	1.2 UJ EB, RSD, LB, Sur	1.7 UJ C%D, EB, RSD, LB	1.6 UJ C%D, EB, RSD, LB	1.8 UJ EB, RSD, LB	6.1 UJ C%D, EB, RSD, LB	0.95 UJ EB, RSD, LB	2 UJ EB, RSD, LB, TB	2.7 UJ C%D, EB, RSD, LB, TB	1.5 UJ C%D, EB, RSD, LB, TB	2 UJ C%D, EB, RSD, LB, TB	1.3 UJ EB, RSD, LB, TB	1.7 UJ EB, RSD, LB, TB
Styrene	100	µg/L	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	*	*	*	*	*	*	*	*
tert-Amyl methyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
tert-Butyl alcohol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	5	µg/L	*	0.5 UJ Sur	5.4 J Sur	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	150	µg/L	*	0.5 UJ EB, Sur	0.5 UJ EB, Sur	0.5 U EB	*	*	*	*	1.5 J IS	*	*	*	*	*	*
trans-1,2-Dichloroethene	10	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	0.5	µg/L	*	0.5 UJ Sur	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	0.5 UJ Sur	*	*	*	*	*	*

TABLE A8-2
Result Qualification and Associated Reason Codes - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-08-15	RMW-08-35	RMW-08-35 (FD)	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	1/11/2006	1/19/2006	1/19/2006	1/19/2006	1/18/2006	1/18/2006	1/17/2006	1/17/2006	1/18/2006	1/10/2006	1/20/2006	1/20/2006	1/20/2006	1/12/2006	1/13/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**														
Volatile Organic Compounds																	
Trichloroethene	5	µg/L	**6.8 J RSD**	0.83 J Sur	16 J Sur	*	*	*	*	*	*	*	*	*	*	*	*
Vinyl chloride	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	1,750	µg/L	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	*	1.3 J IS	*	*	0.5 U TB	*	*	*
Semivolatile Organic Compounds																	
1,1'-Biphenyl	300	µg/L	*	*	*	*	*	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	*	*
1,2,4,5-Tetrachlorobenzene	11	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/L	*	*	*	*	*	*	*	**23 J >IC**	**98 J >IC**	*	140 J >IC, Sur	*	*	*	*
2,2'-Oxybis(1-Chloropropane)	NE	µg/L	*	*	5 UJ Sur	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	*	*	*	*
2,4,5-Trichlorophenol	3,600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,6-Trichlorophenol	0.96	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	110	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dimethylphenol	730	µg/L	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*
2,4-Dinitrophenol	73	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrotoluene	73	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,6-Dinitrotoluene	36	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chloronaphthalene	490	µg/L	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
2-Chlorophenol	30	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylnaphthalene	NE	µg/L	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
2-Methylphenol	1,800	µg/L	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*
2-Nitroaniline	110	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3,3'-Dichlorobenzidine	0.15	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3-Nitroaniline	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Bromophenylphenyl ether	NE	µg/L	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*
4-Chloro-3-methylphenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloroaniline	150	µg/L	5 R Sur	*	*	*	5 R Sur	*	*	*	*	*	5 R Sur	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/L	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*
4-Methylphenol	180	µg/L	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*
4-Nitroaniline	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitrophenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthene	370	µg/L	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	5 UJ SD	*	*	*
Acenaphthylene	NE	µg/L	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
Acetophenone	NE	µg/L	*	*	*	*	*	*	*	*	*	*	1.1 U EB	*	*	*	*
Anthracene	1,800	µg/L	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*
Atrazine	3	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzaldehyde	3,600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)anthracene	0.092	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)pyrene	0.2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	0.092	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	0.056	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzyl butyl phthalate	7,300	µg/L	*	*	*	*	*	5 UJ Sur	*	*	*	*	5 UJ C%D, Sur	5 UJ C%D	5 UJ C%D	*	*
bis(2-Chloroethoxy)methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	0.01	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	4.8	µg/L	0.61 J RSD	0.1 UJ EB, RSD, LB	0.1 UJ EB, RSD, LB	0.1 UJ EB, RSD, LB	0.2 UJ EB, RSD, LB	0.13 UJ EB, RSD, LB	0.18 UJ EB, RSD, LB	0.17 UJ EB, RSD, LB	0.73 J RSD	0.29 UJ EB, RSD, LB	0.17 U LB	0.62 U LB	0.55 U LB	0.26 UJ EB, RSD, LB	0.24 UJ EB, RSD, LB
Caprolactam	18,000	µg/L	*	*	*	*	*	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	*	*
Carbazole	3.4	µg/L	*	*	*	*	*	*	*	*	*	0.12 U EB	*	*	*	0.12 U EB	*
Chrysene	0.56	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibenz(a,h)anthracene	0.0092	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A8-2
Result Qualification and Associated Reason Codes - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-08-15	RMW-08-35	RMW-08-35 (FD)	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	1/11/2006	1/19/2006	1/19/2006	1/19/2006	1/18/2006	1/18/2006	1/17/2006	1/17/2006	1/18/2006	1/10/2006	1/20/2006	1/20/2006	1/20/2006	1/12/2006	1/13/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**														
Semivolatile Organic Compounds																	
Dibenzofuran	12	µg/L	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*
Diethylphthalate	29,000	µg/L	*	*	*	*	*	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	*	*
Dimethylphthalate	360,000	µg/L	*	*	*	*	*	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	*	*
Di-n-butyl phthalate	3,600	µg/L	*	*	*	*	*	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	*	*
Di-n-octyl phthalate	1,500	µg/L	*	*	*	*	*	5 UJ Sur	*	*	*	*	5 UJ C%D, Sur	5 UJ C%D	5 UJ C%D	*	*
Fluoranthene	1,500	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluorene	240	µg/L	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*
Hexachlorobenzene	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	50	µg/L	5 R Sur	*	*	*	5 R Sur	*	*	*	*	*	5 R Sur	*	*	*	*
Hexachloroethane	4.8	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	0.092	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isophorone	71	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	0.093	µg/L	5 UJ Sur	*	*	*	*	5 UJ Sur	*	*	5 UJ Sur	*	*	*	*	*	*
Nitrobenzene	3.4	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	0.0096	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	14	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pentachlorophenol	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenanthrene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*
Phenol	11,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pyrene	180	µg/L	*	*	*	*	*	*	*	*	*	*	5 UJ C%D	5 UJ C%D, MS	5 UJ C%D	*	*
Metals																	
Aluminum	1,000	µg/L	*	605 J SerDil	**1,090 J FD, SerDil**	292 J FD, SerDil	612 J SerDil	**5,260 J SerDil**	*	400 J SerDil	**3,340 J SerDil**	*	**7,190 J SerDil**	436 J SerDil	396 J SerDil	*	*
Antimony	6	µg/L	*	2 UJ ICB	*	*	2 UJ ICB	*	4 UJ ICB	*	2 UJ ICB, MS	*	*	*	*	4 UJ ICB	*
Arsenic	10	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Barium	1,000	µg/L	*	*	*	*	*	*	*	*	27.8 J MS	*	*	*	*	*	*
Beryllium	4	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Calcium	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chromium	50	µg/L	4 UJ CCB	*	*	2 UJ CCB	*	*	*	*	*	*	*	*	2 UJ CCB	*	*
Cobalt	730	µg/L	1.4 J SerDil	*	*	*	*	*	34.1 J SerDil	*	*	1.6 J SerDil	*	*	*	12.5 J SerDil	45.4 J SerDil
Copper	1,300	µg/L	8.9 J+ ICS	*	14 J FD	7 J FD	*	*	77 J+ ICS	*	*	16 J+ ICS	*	*	*	135 J+ ICS	84.2 J+ ICS
Iron	11	mg/L	*	*	2.34 J FD	0.992 J FD	*	*	*	*	*	*	*	*	*	*	*
Lead	15	µg/L	2.9 J+ ICS, SerDil	1 U EB	*	1 U EB	*	*	3.8 J+ ICS, SerDil	*	**21.3 J MS**	3 J+ ICS, SerDil	*	*	*	7.1 J+ ICS, SerDil	3.7 J+ ICS, SerDil
Magnesium	NE	mg/L	*	*	*	*	*	5 UJ CCB	*	*	*	*	5 UJ CCB	*	*	*	*
Manganese	880	µg/L	173 J SerDil	*	*	*	*	*	**3,440 J SerDil**	*	*	**1,370 J SerDil**	*	*	*	**3,060 J SerDil**	**49,500 J SerDil**
Mercury	2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nickel	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Potassium	NE	mg/L	5 U EB	*	5 UJ CCB, LB	5 UJ CCB, LB	*	5 UJ CCB, LB	*	*	*	*	*	5 UJ CCB, LB	5 UJ CCB, LB	*	*
Selenium	50	µg/L	*	*	*	*	*	*	*	*	30.5 J+ MS	*	*	*	*	*	*
Silver	180	µg/L	*	*	*	*	*	1 UJ CCB, ICB	*	1 UJ CCB, ICB	1 UJ CCB, ICB, MS	*	1 UJ CCB, ICB	*	*	2 UJ CCB, ICB	*
Sodium	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thallium	2	µg/L	2 UJ ICB	*	*	*	*	*	*	*	*	2 UJ ICB	*	*	*	*	*
Vanadium	36	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Zinc	11,000	µg/L	*	14.4 J SerDil	25.7 J FD, SerDil	16.4 J FD, SerDil	135 J SerDil	27.3 J SerDil	*	6,870 J SerDil	91.9 J SerDil	*	305 J SerDil	21.6 J+ EB, FD, SerDil	15.1 J+ EB, FD, SerDil	*	*
Metals (Dissolved)																	
Aluminum (Dissolved)	1,000	µg/L	*	*	*	*	*	200 UJ CCB	*	*	*	200 UJ CCB	*	*	*	200 UJ CCB	*

TABLE A8-2
Result Qualification and Associated Reason Codes - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-08-15	RMW-08-35	RMW-08-35 (FD)	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	1/11/2006	1/19/2006	1/19/2006	1/19/2006	1/18/2006	1/18/2006	1/17/2006	1/17/2006	1/18/2006	1/10/2006	1/20/2006	1/20/2006	1/20/2006	1/12/2006	1/13/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**														
Metals (Dissolved)																	
Antimony (Dissolved)	6	µg/L	*	2 UJ ICB	*	*	4 UJ ICB	*	4 UJ ICB	4 UJ ICB	*	*	*	*	*	*	*
Arsenic (Dissolved)	10	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Barium (Dissolved)	1,000	µg/L	20 U LB	42.2 J SerDil	57.8 J SerDil	57.2 J SerDil	*	20 U LB	*	*	20 U LB	*	12.7 J SerDil	38 J SerDil	37.4 J SerDil	*	*
Beryllium (Dissolved)	4	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium (Dissolved)	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Calcium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chromium (Dissolved)	50	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cobalt (Dissolved)	730	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Copper (Dissolved)	1,300	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Iron (Dissolved)	11	mg/L	0.1 UJ CCB	*	*	*	0.1 UJ CCB	*	*	*	*	*	0.1 UJ CCB	*	*	*	*
Lead (Dissolved)	15	µg/L	0.93 J SerDil	*	*	*	6.4 J SerDil	0.26 J SerDil	4.4 J SerDil	4.6 J SerDil	11.4 J SerDil	2 UJ SerDil	*	*	*	2.1 J SerDil	2 UJ SerDil
Magnesium (Dissolved)	NE	mg/L	*	*	*	*	*	5 U LB	*	*	*	*	5 UJ CCB	*	*	*	*
Manganese (Dissolved)	880	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Mercury (Dissolved)	2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nickel (Dissolved)	100	µg/L	*	4.9 J SerDil	67.2 J SerDil	67.5 J SerDil	*	*	*	*	*	*	84.5 J SerDil	88.2 J SerDil	87 J SerDil	*	*
Potassium (Dissolved)	NE	mg/L	5 UJ CCB	*	5 U LB	5 U LB	*	5 UJ CCB	*	*	*	*	*	5 UJ SerDil	5 U LB	*	*
Selenium (Dissolved)	50	µg/L	*	*	*	*	*	*	*	*	30.5 J+ ICS	*	*	*	*	*	3.9 J+ ICS
Silver (Dissolved)	180	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sodium (Dissolved)	NE	mg/L	291 J SerDil	96.9 J SerDil	256 J SerDil	262 J SerDil	160 J SerDil	303 J SerDil	146 J SerDil	150 J SerDil	3,640. J SerDil	260 J SerDil	501. J SerDil	194 J SerDil	215 J SerDil	6,150. J SerDil	5,520. J SerDil
Thallium (Dissolved)	2	µg/L	*	*	*	*	*	*	*	*	2 UJ ICB	2 UJ ICB	*	*	*	*	*
Vanadium (Dissolved)	36	µg/L	*	*	*	*	*	*	*	2 UJ CCB	*	2 UJ CCB	*	*	*	*	2 UJ CCB
Zinc (Dissolved)	11,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Organochlorine Pesticides																	
4,4'-DDD	0.28	µg/L	*	0.016 J CF	0.16 J CF	0.13 J CF	*	*	*	*	*	*	*	*	0.14 J CF	*	*
4,4'-DDE	0.2	µg/L	*	*	0.044 J CF	0.033 J CF	*	*	*	*	*	*	*	0.01 J CF	0.004 J CF	*	*
4,4'-DDT	0.2	µg/L	*	*	*	*	*	*	*	*	0.02 UJ MS, MS, SD	*	*	0.02 UJ MS, SD	*	*	0.02 UJ MS, SD
Aldrin	0.004	µg/L	*	*	*	*	*	*	*	*	*	*	*	0.01 UJ MS, SD	*	*	0.01 UJ MS
alpha-BHC	0.011	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
alpha-Chlordane	0.1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1016	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1221	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1232	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1242	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1248	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1254	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1260	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
beta-BHC	0.037	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
delta-BHC	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dieldrin	0.0042	µg/L	*	*	*	*	*	*	*	*	*	*	*	**0.066 J CF, MS, MS, SD**	*	*	0.02 UJ MS
Endosulfan I	220	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endosulfan II	220	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endosulfan sulfate	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endrin	2	µg/L	*	*	*	*	*	*	*	*	0.02 UJ MS, MS	*	*	0.02 UJ MS, MS, SD	*	*	*
Endrin aldehyde	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Endrin ketone	NE	µg/L	*	0.022 J Sur	*	*	*	*	*	*	*	*	*	*	*	*	*
gamma-BHC	0.052	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.01 UJ MS
gamma-Chlordane	0.1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Heptachlor	0.01	µg/L	*	*	*	*	*	*	*	*	*	*	*	0.01 UJ MS, SD	*	*	0.01 UJ MS

TABLE A8-2
Result Qualification and Associated Reason Codes - Groundwater, Fourth Quarter 2005 (January 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-08-15	RMW-08-35	RMW-08-35 (FD)	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	1/11/2006	1/19/2006	1/19/2006	1/19/2006	1/18/2006	1/18/2006	1/17/2006	1/17/2006	1/18/2006	1/10/2006	1/20/2006	1/20/2006	1/20/2006	1/12/2006	1/13/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**														
Organochlorine Pesticides																	
Heptachlor epoxide	0.01	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methoxychlor	30	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toxaphene	3	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dioxins/Furans (1)																	
1,2,3,4,6,7,8-HpCDD	45	pg/L	---	*	*	---	---	---	---	---	---	---	*	*	*	---	---
1,2,3,4,6,7,8-HpCDF	45	pg/L	---	*	*	---	---	---	---	---	---	---	15 U LB	*	*	---	---
1,2,3,4,7,8,9-HpCDF	45	pg/L	---	*	*	---	---	---	---	---	---	---	*	*	*	---	---
1,2,3,4,7,8-HxCDD	4.5	pg/L	---	*	*	---	---	---	---	---	---	---	*	*	*	---	---
1,2,3,4,7,8-HxCDF	4.5	pg/L	---	1.24 U LB	*	---	---	---	---	---	---	---	3.66 U LB	0.977 U LB	1.16 U LB	---	---
1,2,3,6,7,8-HxCDD	4.5	pg/L	---	*	*	---	---	---	---	---	---	---	*	*	*	---	---
1,2,3,6,7,8-HxCDF	4.5	pg/L	---	0.95 U LB	*	---	---	---	---	---	---	---	2.92 U LB	1.02 U LB	*	---	---
1,2,3,7,8,9-HxCDD	4.5	pg/L	---	*	*	---	---	---	---	---	---	---	*	*	*	---	---
1,2,3,7,8,9-HxCDF	4.5	pg/L	---	*	*	---	---	---	---	---	---	---	*	*	*	---	---
1,2,3,7,8-PeCDD	0.45	pg/L	---	*	*	---	---	---	---	---	---	---	*	*	*	---	---
1,2,3,7,8-PeCDF	9	pg/L	---	1.32 U LB	1.25 U LB	---	---	---	---	---	---	---	2.15 U LB	1.41 U LB	1.41 U LB	---	---
2,3,4,6,7,8-HxCDF	4.5	pg/L	---	1.11 U LB	*	---	---	---	---	---	---	---	*	1.03 U LB	1.17 U LB	---	---
2,3,4,7,8-PeCDF	0.9	pg/L	---	1.28 U LB	1.27 U LB	---	---	---	---	---	---	---	2.96 U LB	1.24 U LB	1.43 U LB	---	---
2,3,7,8-TCDD	0.45	pg/L	---	*	*	---	---	---	---	---	---	---	*	*	*	---	---
2,3,7,8-TCDF	4.5	pg/L	---	2.94 U LB	2.86 U LB	---	---	---	---	---	---	---	3.49 U LB	3.55 U LB	3.12 U LB	---	---
OCDD	4,500	pg/L	---	10.5 U LB	6.1 U LB	---	---	---	---	---	---	---	40 U LB	27.2 U LB	27.2 U LB	---	---
OCDF	4,500	pg/L	---	*	*	---	---	---	---	---	---	---	*	*	*	---	---
Anions																	
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dissolved Gases																	
Ethane	NE	µg/L	*	*	*	*	*	*	*	*	0.6 J Sur	*	260 J Sur	*	*	*	*
Ethene	NE	µg/L	*	*	*	*	*	*	*	*	2 J Sur	*	1,800 J Sur	*	*	*	*
Methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	4,200 J Sur	*	*	*	*
Water Quality Indicators																	
Total Dissolved Solids	NE	mg/L	*	---	*	*	---	---	---	---	*	*	---	*	*	*	*

TABLE A8-2

Result Qualification and Associated Reason Codes - Groundwater, Fourth Quarter 2005 (January 2006)

AMCO Chemical Superfund Site, Oakland, California

Notes:

Results greater than the screening level are bolded

(1) Dioxin/Furan screening levels calculated using Toxicity Equivalency Factors (EPA), 2000, "Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds, Part II: Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and Related Compounds,' Final, National Center for Environmental Assessment, May.

In cases where target analytes are reported from more than one method or from multiple dilutions, the most conservative result or reporting limit is presented; that is, the values presented represent either the maximum positive result or the minimum reporting limit selected from the available data.

Rejected Results are enclosed by boxes

See Groundwater Screening Level table for source of screening levels.

---	not analyzed
*	result not qualified for Quality Control outliers
NE	not established
µg/L	micrograms per liter
mg/L	milligrams per liter
pg/L	picograms per liter
J	estimated value
J+	estimated value, high bias
R	rejected for failure to meet quality control requirement.
U	not detected at or above the reporting limit.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
>IC	Result greater than linear calibration range
C%D	Continuing calibration verification is outside control limit
CCB	Continuing calibration blank concentration less than Reporting Limit
CF	Confirmation precision exceeded
EB	Equipment blank concentration exceeds criteria
FD	Field duplicate exceeds relative percent difference criteria
ICB	Initial calibration blank exceeds control limit
ICS	Interference check standard recovery greater than upper control limit
IS	Internal standard response exceeds control limit
LB	Laboratory blank concentration exceeds criteria
MS	Matrix spike recovery exceeds control limilt
RR	Manual integration revision
RSD	Initial calibration relative standard deviation exceeded
SD	Matrix spike duplicate recovery exceeds criteria
SerDil	Serial dilution percent difference exceeds control limit
Sur	Surrogate recovery outside control limits
TB	Trip blank concentration exceeds control limit

Appendix A9
First Quarter 2006 Groundwater

APPENDIX A9

First Quarter 2006 Groundwater Sampling

A9.1 Introduction

The following sections describe the samples collected during the First Quarter 2006 Groundwater sampling event which occurred from March 29 to April 6, 2006.

Phase 1 Grab Groundwater: Groundwater was collected from March 29, 2006 to April 6, 2006 and analyzed for VOCs, pesticides and PCBs, and anions. Split samples from 19 of the 33 VOC samples were also analyzed by the USEPA Region IX Lab. EPA CLP special analytical services were used to include additional analytes and lower detection limits as needed. For groundwater, the selected screening levels are based on federal and state maximum contaminant levels (MCLs) and EPA Region 9 tap water PRGs.

A9.2 Data Review and Validation Findings

Table A9-1 presents a list of sample delivery groups, sample identifications, and validation levels for the groundwater, samples collected during this event. Table A9-2 presents both the Tier 3 and Tier 2 qualified results with accompanying reason codes identifying the type of QC outlier. Results that are unqualified are not shown. Rejected results are shown in boxes. Equipment blank and trip blank qualifications are discussed in section 3 of the main DQUA and are not discussed further in this section, although the qualified results are presented on the attached tables. The following sections discuss the results qualified based on the Tier 3 validation.

Reports for each of the 19 samples that were split between the two labs contain results from both laboratories. Table A9-3 identifies which laboratory (EPA Region 9 or KAP) results were selected to report for each analyte and the validation level for each analyte. In general, the minimum reporting limit or the maximum detected value were selected. The exceptions included situations where the reporting limit was rejected, excessive dilutions were performed or the analyte was not reported by one of the laboratories. The results not reported are shown in parentheses. *Note that not all analytes for each sample are reviewed to the same validation level.*

The findings of the Tier 3 validation are considered representative of the quality of the entire data set. For this event, Tier 3 validation was performed on all analytes in 9 of the 33 groundwater samples for VOCs from the EPA Region 9 lab. The KAP laboratory results for 6 of the 33 VOC groundwater samples were validated at Tier 3. Four of the 33 groundwater samples were validated at Tier 3 for pesticides and PCBs.

The First Quarter 2006 groundwater results were qualified for outliers associated with the following QC metrics: holding time, initial calibration, initial calibration linear range, continuing calibration, surrogates, matrix spike and matrix spike duplicate, internal standard, and second column confirmation.

A9.2.1 Holding Time (Reason Code HT)

VOCs in Groundwater: Holding time requirements were exceeded for six samples. The following results were estimated or rejected in the samples from the listed locations:

- RMW-02-13 was collected on 4/6/2006 and the final dilution was analyzed on 4/23/2006. The detected results reported by KAP laboratory were estimated and flagged J, and quantitation limits for methyl acetate were rejected.
- RMW-02-32 and RMW-02-50 were collected on 4/6/2006 and analyzed on 4/22/2006, 2 days past holding time. All detected results were estimated and flagged J. Quantitation limits were rejected.
- MW-12 was collected on 4/6/2006 and the final dilution was analyzed on 4/23/06, three days past holding time. All detected results reported by KAP laboratory were estimated and flagged J and quantitation limits were rejected.
- RMW-12-51 and RMW-12-51 duplicate were collected on 4/5/2006 and the final dilution was analyzed on 4/22/0306, three days past holding time. All detected results reported by KAP laboratory were estimated and flagged J and quantitation limits were rejected.

A9.2.2 Initial Calibration (Reason Code IRRF)

VOCs in Groundwater: The response for 1,4-dioxane did not meet the minimum RRF of 0.01. Detected 1,4-dioxane results were flagged as estimated, J and non-detected quantitation limits were flagged as rejected, R in the sample from the indicated locations:

- MW-12, RMW-02-13, RMW-02-32, RMW-02-50, RMW-07-35 duplicate, RMW-12-51, and RMW-12-51 duplicate

A9.2.3 Initial Calibration Linear Range Exceeded (Reason Code <IC):

VOCs in Groundwater: The laboratory reanalyzed the following samples at an additional dilution to bring target compounds within the linear range of the instrument, but for these compounds the diluted results were reported as not detected at the elevated reporting limit. Therefore the estimated results from the undiluted samples were used and were qualified as estimated, J. The affected analytes in the sample from the indicated location were as follows:

- Benzene, ethylbenzene, methyl isobutyl ketone in RMW-02-13

A9.2.4 Continuing Calibration (Reason Code C&D):

VOCs in Groundwater: The continuing calibration %D was above the upper control limit for the following compounds in the samples from the indicated locations and the results were flagged, J:

- o-Xylene and m/p-xylene in MW-12 and RMW-02-13

A9.2.5 Continuing Calibration Relative Response Factor (Reason Code CRRF):

VOCs in Groundwater: The opening and closing RRF for 1,4-dioxane was below the lower control limit. Detected results were estimated, J and non-detected result quantitation limits were rejected, R in the samples from the indicated locations:

- MW-12, RMW-02-13, RMW-02-32, RMW-02-50, RMW-07-35 duplicate, RMW-12-51, and RMW-12-51 duplicate

A9.2.6 Surrogate (Reason Code Sur):

VOCs in Groundwater: Surrogates exceeded the method specified upper control limit in the following samples. Results for the analytes in the samples from the indicated locations were qualified as estimated, J, and the results may be biased high:

- Toluene in MW-12
- 2-Hexanone in RMW-02-13
- Xylenes and toluene in RMW-02-32
- Trichloroethene in RMW-12-51 duplicate

Surrogates recoveries were below the method specified lower control limit in the following samples. Results and quantitation limits for analytes in the samples from the indicated locations were qualified as estimated, J and may be biased low:

- Vinyl chloride in MW-12
- 1,2,4-Trichlorobenzene, 1,2,3-trichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene in RMW-02-13
- 2-Hexanone and methyl isobutyl ketone in RMW-07-35 duplicate
- Acetone and methyl ethyl ketone in RMW-07-35

The recoveries for the surrogates associated with the analytes listed below were below the 10% rejection criterion. The quantitation limits for the listed analytes in the samples from the indicated locations were rejected, R:

- 1,4-Dioxane in RMW-09-15 and RMW-07-35 duplicate
- Acetone and methyl ethyl ketone in sample RMW-02-50
- 1,2-Dibromoethane in RMW-02-13 and RMW-12-51 duplicate
- 1,2-Dibromoethane and 1,2-dibromo-3-chloropropane in RMW-02-32

Pesticides and PCBs in Groundwater: The recovery for tetrachlor-m-xylene (TCX) in the undiluted analysis of the sample from location RMW-01-17 was above the upper control limit on both columns. Detected results for 4,4'-DDE, beta-BHC, dieldrin, and gamma-BHC were qualified as estimated, J.

TCX recovery in the sample from location RMW-01-17 duplicate was above the upper control limit on one column. 4,4-DDE and gamma-chlordane detected results were qualified as estimated, J.

TCX was not recovered on either column during analysis of the sample from MW-12. DCB was also recovered below the lower control limit on one column. Results for 4,4'DDE, endosulfan sulfate, gamma-chlordane, heptachlor epoxide, and methoxychlor are estimated. The quantitation limits for the remaining target analytes were rejected.

A9.2.7 Internal Standard (Reason Code IS):

VOCs in Groundwater: Internal standards were above the upper control limits based on the daily standard for the following analytes in the indicated sample:

- Trichloroethene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,4-dioxane, 2-hexanone, and tetrachloroethene in the sample from location RMW-02-13

Results were qualified as estimated, J.

A9.2.8 Matrix Spike Matrix Spike Duplicates (Reason Code MS/SD)

Pesticides and PCBS in Groundwater: A MS/MSD pair was prepared using the sample from location RMW-01-17. Dieldrin was recovered above the upper control limit on both columns. The result for dieldrin in the parent sample was qualified as estimated, J.

The relative percent differences (RPDs) between the gamma-BHC, aldrin, and dieldrin MS/MSD results were above the upper control limit on both columns. The results and quantitation limits in the parent sample were qualified as estimated, J/UJ.

A9.2.9 Second Column Confirmation (Reason Code CF)

Organochlorine Pesticides/PCBs in Groundwater: The confirmation RPD results exceeded the 25% QC limits for the following analytes in the samples from the indicated locations:

- 4,4'-DDE, aldrin, alpha-BHC, beta-BHC, endosulfan sulfate, endrin, gamma-BHC, gamma-chlordane, heptachlor epoxide, and methoxychlor in MW-12
- beta-BHC and gamma-BHC in RMW-01-17
- gamma-chlordane in RMW-02-13
- aldrin, alpha-chlordane, gamma chlordane, and beta-BHC in RMW-01-17 duplicate

The results were qualified as estimated, J.

TABLE A9-1
Sample Delivery Group Reference - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
06089E (EPA Region 9)				
Anions, EPA Method 300.0				
	BMW-01	N	BMW-01-0306	Tier 2
	BMW-06	N	BMW-06-0306	Tier 2
	BMW-07	N	BMW-07-0306	Tier 2
	BMW-08	N	BMW-08-0306	Tier 2
	BPZ-01	N	BPZ-01-0306	Tier 2
	RMW-03-15	N	RMW-03-15-0306	Tier 2
	RMW-04-15	N	RMW-04-15-0306	Tier 2
	RMW-05-15	N	RMW-05-15-0306	Tier 2
	RMW-06-15	N	RMW-06-15-0306	Tier 2
	RMW-07-15	N	RMW-07-15-0306	Tier 2
	RMW-07-35	N	RMW-07-35-0306	Tier 2
	RMW-07-35	FD	RMW-93-35-0306	Tier 2
	RMW-09-15	N	RMW-09-15-0306	Tier 2
	RMW-09-35	N	RMW-09-35-0306	Tier 2
	RMW-11-35	N	RMW-11-35-0306	Tier 2
	RMW-13-35	N	RMW-13-35-0306	Tier 2
	RMW-14-50	N	RMW-14-50-0306	Tier 2
Dissolved Gases, EPA Method RSK-175				
	BMW-01	N	BMW-01-0306	Tier 1A
	BMW-06	N	BMW-06-0306	Tier 1A
	BMW-07	N	BMW-07-0306	Tier 1A
	BMW-08	N	BMW-08-0306	Tier 1A
	BPZ-01	N	BPZ-01-0306	Tier 1A
	RMW-03-15	N	RMW-03-15-0306	Tier 1A
	RMW-04-15	N	RMW-04-15-0306	Tier 1A
	RMW-05-15	N	RMW-05-15-0306	Tier 1A
	RMW-06-15	N	RMW-06-15-0306	Tier 1A
	RMW-07-15	N	RMW-07-15-0306	Tier 1A
	RMW-07-35	N	RMW-07-35-0306	Tier 1A
	RMW-07-35	FD	RMW-93-35-0306	Tier 1A
	RMW-09-15	N	RMW-09-15-0306	Tier 1A
	RMW-09-35	N	RMW-09-35-0306	Tier 1A
	RMW-11-35	N	RMW-11-35-0306	Tier 1A
	RMW-13-35	N	RMW-13-35-0306	Tier 1A
	RMW-14-50	N	RMW-14-50-0306	Tier 1A
Volatile Organics, EPA Method 524.2				
	BMW-06	N	BMW-06-0306	Tier 3
	RMW-03-15	N	RMW-03-15-0306	Tier 3
	RMW-04-15	N	RMW-04-15-0306	Tier 3
	RMW-06-15	N	RMW-06-15-0306	Tier 3
	RMW-07-15	N	RMW-07-15-0306	Tier 3
	RMW-07-35	N	RMW-07-35-0306	Tier 3
	RMW-07-35	FD	RMW-93-35-0306	Tier 3
	RMW-09-15	N	RMW-09-15-0306	Tier 3
	RMW-09-35	N	RMW-09-35-0306	Tier 3

TABLE A9-1
Sample Delivery Group Reference - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
06095A (EPA Region 9)				
Anions, EPA Method 300.0				
	BMW-03	N	BMW-03-0306	Tier 2
	MW-12	N	MW-12-0306	Tier 2
	RMW-01-17	N	RMW-01-17-0306	Tier 2
	RMW-01-17	FD	RMW-99-17-0306	Tier 2
	RMW-01-35	N	RMW-01-35-0306	Tier 2
	RMW-02-13	N	RMW-02-13-0306	Tier 2
	RMW-02-32	N	RMW-02-32-0306	Tier 2
	RMW-02-50	N	RMW-02-50-0306	Tier 2
	RMW-08-15	N	RMW-08-15-0306	Tier 2
	RMW-08-15	FD	RMW-92-15-0306	Tier 2
	RMW-08-35	N	RMW-08-35-0306	Tier 2
	RMW-10-15	N	RMW-10-15-0306	Tier 2
	RMW-10-35	N	RMW-10-35-0306	Tier 2
	RMW-12-32	N	RMW-12-32-0306	Tier 2
	RMW-12-51	N	RMW-12-51-0306	Tier 2
	RMW-12-51	FD	RMW-88-51-0306	Tier 2
Dissolved Gases, EPA Method RSK-175				
	BMW-03	N	BMW-03-0306	Tier 1A
	MW-12	N	MW-12-0306	Tier 1A
	RMW-01-17	N	RMW-01-17-0306	Tier 1A
	RMW-01-17	FD	RMW-99-17-0306	Tier 1A
	RMW-01-35	N	RMW-01-35-0306	Tier 1A
	RMW-02-13	N	RMW-02-13-0306	Tier 1A
	RMW-02-32	N	RMW-02-32-0306	Tier 1A
	RMW-02-50	N	RMW-02-50-0306	Tier 1A
	RMW-08-15	N	RMW-08-15-0306	Tier 1A
	RMW-08-15	FD	RMW-92-15-0306	Tier 1A
	RMW-08-35	N	RMW-08-35-0306	Tier 1A
	RMW-10-15	N	RMW-10-15-0306	Tier 1A
	RMW-10-35	N	RMW-10-35-0306	Tier 1A
	RMW-12-32	N	RMW-12-32-0306	Tier 1A
	RMW-12-51	N	RMW-12-51-0306	Tier 1A
	RMW-12-51	FD	RMW-88-51-0306	Tier 1A
Volatile Organics, EPA Method 524.2				
	BMW-03	N	BMW-03-0306	Tier 2
	MW-12	N	MW-12-0306	Tier 2
	RMW-01-17	N	RMW-01-17-0306	Tier 2
	RMW-01-35	N	RMW-01-35-0306	Tier 2
	RMW-02-13	N	RMW-02-13-0306	Tier 2
	RMW-08-15	N	RMW-08-15-0306	Tier 2
	RMW-08-35	N	RMW-08-35-0306	Tier 2
	RMW-10-35	N	RMW-10-35-0306	Tier 2
	RMW-12-32	N	RMW-12-32-0306	Tier 2
	RMW-12-51	N	RMW-12-51-0306	Tier 2

TABLE A9-1
Sample Delivery Group Reference - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2FJ7 (KAP Technologies)				
Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW				
	BMW-01	N	BMW-01-0306	Tier 2
	BMW-06	N	BMW-06-0306	Tier 2
	BMW-07	N	BMW-07-0306	Tier 2
	BMW-08	N	BMW-08-0306	Tier 2
	BPZ-01	N	BPZ-01-0306	Tier 2
	RMW-03-15	N	RMW-03-15-0306	Tier 2
	RMW-04-15	N	RMW-04-15-0306	Tier 2
	RMW-05-15	N	RMW-05-15-0306	Tier 2
	RMW-06-15	N	RMW-06-15-0306	Tier 2
	RMW-11-35	N	RMW-11-35-0306	Tier 2
	RMW-13-35	N	RMW-13-35-0306	Tier 2
	RMW-14-50	N	RMW-14-50-0306	Tier 2
Volatile Organics/1,4-Dioxane, CLP-SOW				
	BMW-01	N	BMW-01-0306	Tier 2
	BMW-06	N	BMW-06-0306	Tier 2
	BMW-07	N	BMW-07-0306	Tier 2
	BMW-08	N	BMW-08-0306	Tier 2
	BPZ-01	N	BPZ-01-0306	Tier 2
	RMW-03-15	N	RMW-03-15-0306	Tier 2
	RMW-04-15	N	RMW-04-15-0306	Tier 2
	RMW-05-15	N	RMW-05-15-0306	Tier 2
	RMW-06-15	N	RMW-06-15-0306	Tier 2
	RMW-11-35	N	RMW-11-35-0306	Tier 2
	RMW-13-35	N	RMW-13-35-0306	Tier 2
	RMW-14-50	N	RMW-14-50-0306	Tier 2
Y2FL4 (KAP Technologies)				
Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW				
	BMW-03	N	BMW-03-0306	Tier 2
	RMW-01-17	N	RMW-01-17-0306	Tier 2
	RMW-01-17	FD	RMW-99-17-0306	Tier 2
	RMW-01-35	N	RMW-01-35-0306	Tier 2
	RMW-07-15	N	RMW-07-15-0306	Tier 2
	RMW-07-35	N	RMW-07-35-0306	Tier 2
	RMW-07-35	FD	RMW-93-35-0306	Tier 2
	RMW-08-15	N	RMW-08-15-0306	Tier 2
	RMW-08-15	FD	RMW-92-15-0306	Tier 2
	RMW-08-35	N	RMW-08-35-0306	Tier 2
	RMW-09-15	N	RMW-09-15-0306	Tier 2
	RMW-09-35	N	RMW-09-35-0306	Tier 2
	RMW-10-15	N	RMW-10-15-0306	Tier 2
	RMW-10-35	N	RMW-10-35-0306	Tier 2
	RMW-12-32	N	RMW-12-32-0306	Tier 2

TABLE A9-1
Sample Delivery Group Reference - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2FL4 (KAP Technologies)				
Volatile Organics/1,4-Dioxane, CLP-SOW				
	BMW-03	N	BMW-03-0306	Tier 2
	RMW-01-17	N	RMW-01-17-0306	Tier 2
	RMW-01-17	FD	RMW-99-17-0306	Tier 2
	RMW-01-35	N	RMW-01-35-0306	Tier 2
	RMW-07-15	N	RMW-07-15-0306	Tier 2
	RMW-07-35	N	RMW-07-35-0306	Tier 2
	RMW-07-35	FD	RMW-93-35-0306	Tier 2
	RMW-08-15	N	RMW-08-15-0306	Tier 2
	RMW-08-15	FD	RMW-92-15-0306	Tier 2
	RMW-08-35	N	RMW-08-35-0306	Tier 2
	RMW-09-15	N	RMW-09-15-0306	Tier 2
	RMW-09-35	N	RMW-09-35-0306	Tier 2
	RMW-10-15	N	RMW-10-15-0306	Tier 2
	RMW-10-35	N	RMW-10-35-0306	Tier 2
	RMW-12-32	N	RMW-12-32-0306	Tier 2
Y2FN0 (Liberty)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	MW-12	N	MW-12-0306	Tier 3
	RMW-01-17	N	RMW-01-17-0306	Tier 3
	RMW-01-17	FD	RMW-99-17-0306	Tier 3
	RMW-02-13	N	RMW-02-13-0306	Tier 3
Y2FN4 (KAP Technologies)				
Volatile Organics (SIM)/1,4-Dioxane, CLP-SOW				
	MW-12	N	MW-12-0306	Tier 3
	RMW-02-13	N	RMW-02-13-0306	Tier 3
	RMW-02-32	N	RMW-02-32-0306	Tier 3
	RMW-02-50	N	RMW-02-50-0306	Tier 3
	RMW-12-51	N	RMW-12-51-0306	Tier 3
	RMW-12-51	FD	RMW-88-51-0306	Tier 3
Volatile Organics/1,4-Dioxane, CLP-SOW				
	MW-12	N	MW-12-0306	Tier 3
	RMW-02-13	N	RMW-02-13-0306	Tier 3
	RMW-02-32	N	RMW-02-32-0306	Tier 3
	RMW-02-50	N	RMW-02-50-0306	Tier 3
	RMW-12-51	N	RMW-12-51-0306	Tier 3
	RMW-12-51	FD	RMW-88-51-0306	Tier 3

Notes:
N regular sample
FD field duplicate

TABLE A9-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-17 (FD)	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15
		Sample Date	3/29/2006	4/4/2006	3/29/2006	3/30/2006	3/31/2006	3/31/2006	4/6/2006	4/5/2006	4/5/2006	4/5/2006	4/6/2006	4/6/2006	4/6/2006	3/30/2006	3/29/2006	3/30/2006	3/31/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1,2-Tetrachloroethane	0.43	µg/L	---	*	*	---	---	---	1 UJ Sur	*	---	*	1 UJ Sur	---	---	*	*	---	*
1,1,1-Trichloroethane	200	µg/L	*	*	*	*	*	*	**960 J HT**	*	*	*	*	5 R HT	0.5 R HT	*	*	*	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	**5 R HT**	0.5 R HT	*	*	*	*
1,1,2-Trichloroethane	5	µg/L	*	*	*	*	*	*	14 J Sur	5 UJ Sur	5 UJ Sur	*	*	5 R HT	0.5 R HT	*	0.5 UJ Sur	*	*
1,1-Dichloroethane	5	µg/L	*	*	*	*	*	*	**3,200 J HT**	*	*	*	**1,300 J HT**	**410 J HT**	0.5 R HT	*	*	*	*
1,1-Dichloroethene	6	µg/L	*	*	*	*	*	*	**240 J HT**	*	*	*	**7.3 J HT**	5 R HT	0.5 R HT	*	*	*	*
1,1-Dichloropropene	NE	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
1,2,3-Trichlorobenzene	NE	µg/L	0.5 R IS	*	*	*	*	*	*	*	*	*	4 J HT, IS, Sur	5 R HT	0.5 R HT	*	*	*	*
1,2,3-Trichloropropane	0.0056	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
1,2,4-Trichlorobenzene	5	µg/L	0.5 R IS	*	*	*	*	*	*	*	*	*	17 J HT, IS, Sur	**35 J HT**	0.5 R HT	*	*	*	*
1,2,4-Trimethylbenzene	12	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
1,2-Dibromo-3-chloropropane	0.2	µg/L	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT, Sur	0.05 R HT	*	*	*	*
1,2-Dibromoethane	0.05	µg/L	*	*	*	*	*	*	1 UJ Sur	*	0.25 UJ Sur	*	*	0.5 R HT, Sur	0.05 R HT	*	*	*	*
1,2-Dichlorobenzene	600	µg/L	0.5 R IS	*	*	*	*	*	*	*	*	*	160 J HT	**5,000 J HT**	0.5 R HT	*	*	*	*
1,2-Dichloroethane	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	**8 J HT**	**5.4 J HT**	0.5 R HT	*	*	*	*
1,2-Dichloropropane	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 R HT	0.5 R HT	*	*	*	*
1,3,5-Trimethylbenzene	12	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
1,3-Dichlorobenzene	180	µg/L	0.5 R IS	*	*	*	*	*	*	*	*	*	3.7 J HT, IS, Sur	19 J HT	0.5 R HT	*	*	*	*
1,3-Dichloropropane	120	µg/L	---	*	*	---	---	---	1 UJ Sur	*	---	*	1 UJ Sur	---	---	*	*	---	*
1,4-Dichlorobenzene	5	µg/L	0.5 R IS	*	*	*	*	*	*	*	*	*	16 J HT, IS, Sur	**740 J HT**	0.5 R HT	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/L	2 R CRRF, IRRF	**200 J CRRF, IRRF**	2 R CRRF, IRRF	2 R CRRF, IRRF	2 R CRRF, IRRF, IS, Sur	10 J CRRF, IRRF, Sur	**79 J CRRF, HT, IRRF**	10 R CRRF, IRRF, Sur	10 R CRRF, IRRF, IS, Sur	**27 J CRRF, IRRF**	**50 J CRRF, HT, IRRF, IS**	**1,700 J CRRF, HT, IRRF**	**41 J CRRF, HT, IRRF**	**70 J CRRF, IRRF**	1.3 J CRRF, IRRF	2 R CRRF, IRRF, Sur	2 R CRRF, IRRF
2,2-Dichloropropane	NE	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
2-Chlorotoluene	120	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
2-Hexanone	NE	µg/L	*	*	*	*	*	*	8.9 J Sur	*	*	*	9.6 J HT, IS, Sur	50 R HT	5 R HT	*	*	*	*
4-Chlorotoluene	NE	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
Acetone	5,500	µg/L	*	*	*	*	*	*	1,900 J HT	*	*	*	3,300 J HT	3,300 J HT	5 R HT, Sur	*	*	*	*
Benzene	1	µg/L	*	*	*	*	*	*	**300 J HT**	*	*	*	**630 J >IC, HT**	**97 J HT**	0.5 R HT	*	*	*	*
Bromobenzene	20	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
Bromochloromethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 R HT	0.5 R HT	*	*	*	*
Bromodichloromethane	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 R HT	0.5 R HT	*	*	*	*
Bromoform	100	µg/L	0.5 R IS	*	*	*	*	*	1 UJ Sur	*	*	*	1 UJ Sur	5 R HT	0.5 R HT	*	*	*	*
Bromomethane	8.7	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 R HT	0.5 R HT	*	*	*	*
Carbon disulfide	1,000	µg/L	*	*	*	*	*	1.2 U TB	*	*	*	*	*	5 R HT	0.5 R HT	*	*	*	*
Carbon tetrachloride	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	**5 R HT**	0.5 R HT	*	*	*	*
Chlorobenzene	70	µg/L	*	*	*	*	*	*	19 J Sur	*	*	*	32 J HT	**76 J HT**	0.5 R HT	*	*	*	*
Chloroethane	4.6	µg/L	*	*	*	*	*	*	**190 J HT**	*	*	*	**88 J HT**	**340 J HT**	0.5 R HT	*	*	*	*
Chloroform	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 R HT	0.5 R HT	*	*	*	*
Chloromethane	160	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 R HT	0.5 R HT	*	*	*	*
cis-1,2-Dichloroethene	6	µg/L	*	*	*	*	*	*	**90,000 J HT**	**530 J >IC, FD**	5 UJ FD	*	**9,000 J HT**	**370 J HT**	0.5 R HT	*	*	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	1 UJ Sur	5 UJ Sur	5 UJ Sur	*	*	**5 R HT**	0.5 R HT	*	0.5 UJ Sur	*	*
Cyclohexane	10,000	µg/L	*	*	*	*	*	*	50 R HT	*	*	*	15 J HT	5 R HT	0.5 R HT	*	*	*	*
Dibromochloromethane	100	µg/L	*	*	*	*	*	*	1 UJ Sur	*	*	*	1 UJ Sur	5 R HT	0.5 R HT	*	*	*	*
Dibromomethane	61	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
Ethyl tert-butyl ether	NE	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
Ethylbenzene	700	µg/L	*	*	*	*	*	*	250 J HT	*	*	*	**1,200 J >IC, HT**	170 J HT	0.5 R HT	*	*	*	*
Freon 11	150	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 R HT	0.5 R HT	*	*	*	*
Freon 113	1,200	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 R HT	0.5 R HT	*	*	*	*
Freon 12	390	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 R HT	0.5 R HT	*	*	*	*
Hexachlorobutadiene	0.86	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
Isopropyl ether	NE	µg/L	---	---	---	---	---	---	---	---	---	---	*	---	---	---	---	---	---

TABLE A9-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-17 (FD)	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15
		Sample Date	3/29/2006	4/4/2006	3/29/2006	3/30/2006	3/31/2006	3/31/2006	4/6/2006	4/5/2006	4/5/2006	4/5/2006	4/6/2006	4/6/2006	4/6/2006	3/30/2006	3/29/2006	3/30/2006	3/31/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
Isopropylbenzene (cumene)	660	µg/L	*	*	*	*	*	*	31 J Sur	*	*	*	43 J HT	150 J HT	0.5 R HT	*	*	*	*
Methyl acetate	6,100	µg/L	*	*	*	*	*	*	50 R HT	*	*	*	0.5 R HT	5 R HT	0.5 R HT	*	*	*	*
Methyl ethyl ketone	7,000	µg/L	*	*	*	*	*	*	1,200 J HT	*	*	*	3,800 J HT	840 J HT	5 R HT, Sur	*	*	*	*
Methyl isobutyl ketone	2,000	µg/L	*	*	*	*	*	*	**5,300 J HT**	*	*	*	**4,800 J >IC, HT**	**10,000 J HT**	5 R HT	*	*	*	*
Methyl tert-butyl ether	13	µg/L	*	*	*	*	*	*	*	*	*	*	**83 J HT**	5 R HT	0.5 R HT	*	*	*	*
Methylcyclohexane	NE	µg/L	*	*	*	*	*	*	50 R HT	*	*	*	36 J HT	5 R HT	0.5 R HT	*	*	*	*
Methylene chloride	5	µg/L	*	*	*	0.5 U EB	0.66 UJ EB, Sur, TB	0.6 U EB, TB	*	*	*	*	*	**30 J HT**	0.5 R HT	*	*	0.5 U EB	0.58 U EB, TB
Naphthalene	0.093	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
n-Butylbenzene	240	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
n-Propylbenzene	240	µg/L	---	*	*	---	---	---	*	19 J SD	---	*	*	---	---	*	*	---	*
p-Cymene (p-isopropyltoluene)	NE	µg/L	---	*	*	---	---	---	*	8 J MS, SD	---	*	*	---	---	*	*	---	*
sec-Butylbenzene	240	µg/L	---	*	*	---	---	---	*	13 J SD	---	*	*	---	---	*	*	---	*
Styrene	100	µg/L	*	*	*	*	*	*	1 UJ Sur	*	*	*	23 J Sur	5 R HT	0.5 R HT	*	*	*	*
tert-Amyl methyl ether	NE	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
tert-Butyl alcohol	NE	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
tert-Butylbenzene	240	µg/L	---	*	*	---	---	---	*	*	---	*	*	---	---	*	*	---	*
Tetrachloroethene	5	µg/L	*	*	*	*	*	*	4.6 J Sur	*	*	*	0.61 J HT, IS	5 R HT	0.5 R HT	*	*	*	*
Toluene	150	µg/L	*	*	*	*	*	*	28,000 J HT, Sur	110 J FD, MS, MS, SD	5 UJ FD	*	**19,000 J HT**	3,500 J HT, Sur	0.5 R HT	*	*	*	*
trans-1,2-Dichloroethene	10	µg/L	*	*	*	*	*	*	**810 J HT**	*	*	*	**84 J HT**	**33 J HT**	0.5 R HT	*	*	*	*
trans-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	1 UJ Sur	5 UJ Sur	5 UJ Sur	*	1 UJ Sur	**5 R HT**	0.5 R HT	*	0.5 UJ Sur	*	*
Trichloroethene	5	µg/L	*	*	*	*	*	*	*	*	*	*	3.6 J HT, IS	5 J HT	0.5 R HT	*	*	*	*
Vinyl chloride	0.5	µg/L	*	**10 J RSD**	*	*	*	*	6,500 J HT, Sur	**33 J RSD**	**32.8 J C%D, RSD**	**2.1 J C%D, RSD**	**4,100 J HT**	**3,500 J HT**	0.5 R HT	*	*	**2.7 J RSD**	0.4 J RSD
Xylenes, total	1,750	µg/L	*	*	*	*	*	*	**1,920 J C%D, HT**	*	*	17.8 J RSD	**5,600 J C%D, HT**	650 J HT, Sur	0.5 R HT	*	*	*	*
Organochlorine Pesticides																			
4,4'-DDD	0.28	µg/L	---	---	---	---	---	---	*	*	*	---	*	---	---	---	---	---	---
4,4'-DDE	0.2	µg/L	---	---	---	---	---	---	0.07 J CF, Sur	0.036 J Sur	0.044 J Sur	---	*	---	---	---	---	---	---
4,4'-DDT	0.2	µg/L	---	---	---	---	---	---	0.02 R Sur	*	*	---	*	---	---	---	---	---	---
Aldrin	0.004	µg/L	---	---	---	---	---	---	**0.23 J CF**	0.01 UJ MS	**0.014 J CF**	---	*	---	---	---	---	---	---
alpha-BHC	0.011	µg/L	---	---	---	---	---	---	**0.3 J CF**	*	*	---	*	---	---	---	---	---	---
alpha-Chlordane	0.1	µg/L	---	---	---	---	---	---	0.01 R Sur	*	0.0054 J CF	---	*	---	---	---	---	---	---
Aroclor-1016	0.5	µg/L	---	---	---	---	---	---	0.2 R Sur	*	*	---	*	---	---	---	---	---	---
Aroclor-1221	0.5	µg/L	---	---	---	---	---	---	0.4 R Sur	*	*	---	*	---	---	---	---	---	---
Aroclor-1232	0.5	µg/L	---	---	---	---	---	---	0.2 R Sur	*	*	---	*	---	---	---	---	---	---
Aroclor-1242	0.5	µg/L	---	---	---	---	---	---	0.2 R Sur	*	*	---	*	---	---	---	---	---	---
Aroclor-1248	0.5	µg/L	---	---	---	---	---	---	0.2 R Sur	*	*	---	*	---	---	---	---	---	---
Aroclor-1254	0.5	µg/L	---	---	---	---	---	---	0.2 R Sur	*	*	---	*	---	---	---	---	---	---
Aroclor-1260	0.5	µg/L	---	---	---	---	---	---	0.2 R Sur	*	*	---	*	---	---	---	---	---	---
beta-BHC	0.037	µg/L	---	---	---	---	---	---	**1.1 J CF**	0.072 J CF, FD, Sur	**0.05 J CF, FD**	---	*	---	---	---	---	---	---
delta-BHC	NE	µg/L	---	---	---	---	---	---	0.01 R Sur	*	*	---	*	---	---	---	---	---	---
Dieldrin	0.0042	µg/L	---	---	---	---	---	---	0.02 R Sur	0.18 J MS, MS, Sur	*	---	*	---	---	---	---	---	---
Endosulfan I	220	µg/L	---	---	---	---	---	---	0.01 R Sur	*	*	---	*	---	---	---	---	---	---
Endosulfan II	220	µg/L	---	---	---	---	---	---	0.02 R Sur	*	*	---	*	---	---	---	---	---	---
Endosulfan sulfate	NE	µg/L	---	---	---	---	---	---	0.033 J CF, Sur	*	*	---	*	---	---	---	---	---	---
Endrin	2	µg/L	---	---	---	---	---	---	0.7 J CF	*	*	---	*	---	---	---	---	---	---
Endrin aldehyde	NE	µg/L	---	---	---	---	---	---	0.02 R Sur	*	*	---	*	---	---	---	---	---	---
Endrin ketone	NE	µg/L	---	---	---	---	---	---	0.02 R Sur	*	*	---	*	---	---	---	---	---	---

TABLE A9-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-17 (FD)	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15
		Sample Date	3/29/2006	4/4/2006	3/29/2006	3/30/2006	3/31/2006	3/31/2006	4/6/2006	4/5/2006	4/5/2006	4/5/2006	4/6/2006	4/6/2006	4/6/2006	3/30/2006	3/29/2006	3/30/2006	3/31/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Organochlorine Pesticides																			
gamma-BHC	0.052	µg/L	---	---	---	---	---	---	**0.36 J CF**	0.017 J CF, MS, Sur	0.01 U EB	---	*	---	---	---	---	---	---
gamma-Chlordane	0.1	µg/L	---	---	---	---	---	---	0.12 J CF, Sur	*	0.0054 J CF, Sur	---	0.086 J CF	---	---	---	---	---	---
Heptachlor	0.01	µg/L	---	---	---	---	---	---	0.01 R Sur	*	*	---	*	---	---	---	---	---	---
Heptachlor epoxide	0.01	µg/L	---	---	---	---	---	---	0.01 J CF, Sur	*	*	---	*	---	---	---	---	---	---
Methoxychlor	30	µg/L	---	---	---	---	---	---	0.12 J CF, Sur	*	*	---	*	---	---	---	---	---	---
Toxaphene	3	µg/L	---	---	---	---	---	---	1 R Sur	*	*	---	*	---	---	---	---	---	---
Anions																			
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dissolved Gases																			
Ethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A9-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-15	RMW-07-35	RMW-07-35 (FD)	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	4/3/2006	4/3/2006	4/3/2006	4/4/2006	4/4/2006	4/4/2006	4/3/2006	4/3/2006	4/4/2006	4/4/2006	3/29/2006	4/5/2006	4/5/2006	4/5/2006	3/30/2006	3/30/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**															
Volatile Organic Compounds																		
1,1,1,2-Tetrachloroethane	0.43	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
1,1,1-Trichloroethane	200	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
1,1,2-Trichloroethane	5	µg/L	*	*	*	2.5 UJ Sur	2.5 UJ Sur	*	*	*	*	*	*	*	*	0.5 R HT	*	*
1,1-Dichloroethane	5	µg/L	*	*	*	*	*	0.61 J HT	*	*	*	**63 J >IC**	*	*	*	0.5 R HT	*	*
1,1-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
1,1-Dichloropropene	NE	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
1,2,3-Trichlorobenzene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
1,2,3-Trichloropropane	0.0056	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
1,2,4-Trichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
1,2,4-Trimethylbenzene	12	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
1,2-Dibromo-3-chloropropane	0.2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.05 R HT	*	*
1,2-Dibromoethane	0.05	µg/L	*	*	*	*	*	*	*	*	0.05 UJ Sur	0.05 UJ Sur	*	0.25 UJ Sur	*	0.05 R Sur	*	*
1,2-Dichlorobenzene	600	µg/L	*	*	*	*	192 J Sur	118 J IS, Sur	*	*	*	*	*	*	*	0.5 R HT	*	*
1,2-Dichloroethane	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
1,2-Dichloropropane	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
1,3,5-Trimethylbenzene	12	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
1,3-Dichlorobenzene	180	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
1,3-Dichloropropane	120	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
1,4-Dichlorobenzene	5	µg/L	*	*	*	*	*	2.4 J HT	*	*	*	*	*	*	*	0.5 R HT	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/L	2 R CRRF, IRRF	2 R CRRF, IRRF	2 R CRRF, IRRF, Sur	10 R CRRF, IRRF, Sur	2 R CRRF, IRRF, Sur	10 R CRRF, IRRF, Sur	2 R CRRF, IRRF, Sur	**53 J CRRF, IRRF, IS**	27 J CRRF, IRRF, IS, Sur	370 J CRRF, IRRF, IS, Sur	2 R CRRF, IRRF	1,400 J CRRF, IRRF, IS, Sur	2 R CRRF, HT, IRRF	2 R CRRF, HT, IRRF	2 R CRRF, IRRF	2 R CRRF, IRRF, Sur
2,2-Dichloropropane	NE	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
2-Chlorotoluene	120	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
2-Hexanone	NE	µg/L	*	*	5 UJ Sur	25 UJ Sur	25 UJ Sur	*	*	*	*	*	*	*	*	5 R HT	*	*
4-Chlorotoluene	NE	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
Acetone	5,500	µg/L	*	5 UJ Sur	*	*	*	*	*	*	11 J Sur	*	*	*	*	5 R HT	*	*
Benzene	1	µg/L	*	*	*	*	*	**2 J HT**	*	*	*	**1.4 J IS**	*	*	*	0.5 R HT	*	*
Bromobenzene	20	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
Bromochloromethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Bromodichloromethane	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Bromoform	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Bromomethane	8.7	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Carbon disulfide	1,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Carbon tetrachloride	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Chlorobenzene	70	µg/L	*	*	*	*	152 J Sur	112 J Sur	*	*	*	*	*	*	*	0.5 R HT	*	*
Chloroethane	4.6	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Chloroform	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Chloromethane	160	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
cis-1,2-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	*	**370 J HT**	*	*	*	*	0.5 R HT	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	*	*	2.5 UJ Sur	2.5 UJ Sur	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Cyclohexane	10,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	0.5 R HT	*	*
Dibromochloromethane	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Dibromomethane	61	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
Ethyl tert-butyl ether	NE	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
Ethylbenzene	700	µg/L	*	*	*	*	*	*	*	*	*	1.6 J IS	*	*	*	0.5 R HT	*	*
Freon 11	150	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Freon 113	1,200	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Freon 12	390	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Hexachlorobutadiene	0.86	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
Isopropyl ether	NE	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE A9-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-15	RMW-07-35	RMW-07-35 (FD)	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	4/3/2006	4/3/2006	4/3/2006	4/4/2006	4/4/2006	4/4/2006	4/3/2006	4/3/2006	4/4/2006	4/4/2006	3/29/2006	4/5/2006	4/5/2006	4/5/2006	3/30/2006	3/30/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**															
Volatile Organic Compounds																		
Isopropylbenzene (cumene)	660	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Methyl acetate	6,100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	0.5 R HT	*	*
Methyl ethyl ketone	7,000	µg/L	*	5 UJ Sur	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	5 R HT	*	*
Methyl isobutyl ketone	2,000	µg/L	*	*	5 UJ Sur	25 UJ Sur	25 UJ Sur	*	*	*	*	*	*	*	*	5 R HT	*	*
Methyl tert-butyl ether	13	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Methylcyclohexane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	0.5 R HT	*	*
Methylene chloride	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	0.52 U EB	0.5 U EB
Naphthalene	0.093	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
n-Butylbenzene	240	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
n-Propylbenzene	240	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
p-Cymene (p-isopropyltoluene)	NE	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
sec-Butylbenzene	240	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
Styrene	100	µg/L	*	*	*	2.5 UJ C%D	2.5 UJ C%D	10 UJ C%D	*	*	*	*	*	*	*	0.5 R HT	*	*
tert-Amyl methyl ether	NE	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
tert-Butyl alcohol	NE	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
tert-Butylbenzene	240	µg/L	*	*	*	*	---	*	*	*	---	*	---	*	*	---	---	---
Tetrachloroethene	5	µg/L	*	*	*	*	*	4 J HT	*	*	*	*	*	*	*	0.5 R HT	*	*
Toluene	150	µg/L	*	*	*	*	*	0.45 J HT	*	*	*	1.1 J IS	*	*	*	0.5 R HT	*	*
trans-1,2-Dichloroethene	10	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	0.5 R HT	*	*
trans-1,3-Dichloropropene	0.5	µg/L	*	*	*	2.5 UJ Sur	2.5 UJ Sur	*	*	*	*	*	*	*	*	0.5 R HT	*	*
Trichloroethene	5	µg/L	*	*	*	*	*	*	*	*	**24 J >IC**	*	*	*	1.6 J HT	1.6 J HT, Sur	*	*
Vinyl chloride	0.5	µg/L	*	**0.63 J RSD**	**0.62 J RSD**	**12 J C%D, RSD**	**9 J C%D, RSD**	**19 J C%D, RSD**	*	**68 J RSD**	*	**10 J RSD**	*	**190 J RSD**	*	0.5 R HT	*	0.38 J RSD
Xylenes, total	1,750	µg/L	*	*	*	2.5 UJ C%D	2.5 UJ C%D	10 UJ C%D	*	*	*	1.42 J RSD, IS	*	66 J RSD	*	0.5 R HT	*	*
Organochlorine Pesticides																		
4,4'-DDD	0.28	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4,4'-DDE	0.2	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4,4'-DDT	0.2	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aldrin	0.004	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
alpha-BHC	0.011	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
alpha-Chlordane	0.1	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor-1016	0.5	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor-1221	0.5	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor-1232	0.5	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor-1242	0.5	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor-1248	0.5	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor-1254	0.5	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor-1260	0.5	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
beta-BHC	0.037	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
delta-BHC	NE	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dieldrin	0.0042	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan I	220	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan II	220	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan sulfate	NE	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endrin	2	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endrin aldehyde	NE	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endrin ketone	NE	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
gamma-BHC	0.052	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
gamma-Chlordane	0.1	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Heptachlor	0.01	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Heptachlor epoxide	0.01	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE A9-2
Result Qualification and Associated Reason Codes - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-15	RMW-07-35	RMW-07-35 (FD)	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	4/3/2006	4/3/2006	4/3/2006	4/4/2006	4/4/2006	4/4/2006	4/3/2006	4/3/2006	4/4/2006	4/4/2006	3/29/2006	4/5/2006	4/5/2006	4/5/2006	3/30/2006	3/30/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**															
Organochlorine Pesticides																		
Methoxychlor	30	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toxaphene	3	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Anions																		
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dissolved Gases																		
Ethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Notes:
Results greater than the screening level are bolded
In cases where target analytes are reported from more than one method or from multiple dilutions, the most conservative result or reporting limit is presented; that is, the values presented represent either the maximum positive result or the minimum reporting limit selected from the available data.
Rejected Results are enclosed by boxes
See Groundwater Screening Level table for source of screening levels.

---	not analyzed
*	result not qualified for Quality Control outliers
NE	not established
µg/L	micrograms per liter
mg/L	milligrams per liter
J	estimated value
R	rejected for failure to meet quality control requirement.
U	not detected at or above the reporting limit.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
>IC	Result greater than linear calibration range
C%D	Continuing calibration verification is outside control limit
CF	Confirmation precision exceeded
CRRF	Continuing calibration relative response factor below lower control limit
EB	Equipment blank concentration exceeds criteria
FD	Field duplicate exceeds relative percent difference criteria
HT	Holding time exceeded
IRRF	Initial calibration relative response factor exceeds control limit
IS	Internal standard response exceeds control limit
MS	Matrix spike recovery exceeds control limilt
RSD	Initial calibration relative standard deviation exceeded
SD	Matrix spike duplicate recovery exceeds criteria
Sur	Surrogate recovery outside control limits
TB	Trip blank concentration exceeds control limit

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
BMW-03-0306	04/04/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	65	NP
		1,1-Dichloroethene	NP	1.7
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.05 U
		1,2-Dibromoethane	NP	0.05 U
		1,2-Dichlorobenzene	NP	0.5 U
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	NP	0.5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	0.5 U
		1,4-Dioxane (p-dioxane)	NP	200 J
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	NP	5 U
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	4.8 J
		Benzene	NP	1.4
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	0.5 U
		Chloroethane	NP	0.5 U
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	56
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	4 U	NP
		Ethylbenzene	NP	0.5 U
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	NP	5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
BMW-03-0306	04/04/06	Methyl isobutyl ketone	NP	5 U
		Methyl tert-butyl ether	NP	0.5 U
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.5
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	25	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	0.5 U
		Toluene	NP	0.5 U
		trans-1,2-Dichloroethene	NP	1.2
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	2.6
		Vinyl chloride	NP	10 J
		Xylenes, total	NP	0.5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
BMW-06-0306	03/29/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	NP	0.5 U
		1,1-Dichloroethene	NP	0.5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.05 U
		1,2-Dibromoethane	NP	0.05 U
		1,2-Dichlorobenzene	NP	0.5 U
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	NP	0.5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	0.5 U
		1,4-Dioxane (p-dioxane)	NP	2 R
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	4 U	NP
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	5 U
		Benzene	NP	0.5 U
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	0.5 U
		Chloroethane	NP	0.5 U
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	0.5 U
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	4 U	NP
		Ethylbenzene	NP	0.5 U
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	4 U	NP

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
BMW-06-0306	03/29/06	Methyl isobutyl ketone	4 U	NP
		Methyl tert-butyl ether	NP	0.5 U
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.5 U
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	20 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	0.5 U
		Toluene	NP	0.5 U
		trans-1,2-Dichloroethene	NP	0.5 U
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	0.5 U
		Vinyl chloride	NP	0.5 U
		Xylenes, total	NP	0.5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 3
MW-12-0306	04/06/06	1,1,1,2-Tetrachloroethane	1 UJ	NP
		1,1,1-Trichloroethane	NP	960 J
		1,1,2,2-Tetrachloroethane	1 U	NP
		1,1,2-Trichloroethane	14 J	NP
		1,1-Dichloroethane	NP	3200 J
		1,1-Dichloroethene	NP	240 J
		1,1-Dichloropropene	1 U	NP
		1,2,3-Trichlorobenzene	1 U	NP
		1,2,3-Trichloropropane	1 U	NP
		1,2,4-Trichlorobenzene	1 U	NP
		1,2,4-Trimethylbenzene	540	NP
		1,2-Dibromo-3-chloropropane	4 U	NP
		1,2-Dibromoethane	1 UJ	NP
		1,2-Dichlorobenzene	8.2	NP
		1,2-Dichloroethane	30	NP
		1,2-Dichloropropane	5.1	NP
		1,3,5-Trimethylbenzene	180	NP
		1,3-Dichlorobenzene	1 U	NP
		1,3-Dichloropropane	1 UJ	NP
		1,4-Dichlorobenzene	0.6 J	NP
		1,4-Dioxane (p-dioxane)	NP	79 J
		2,2-Dichloropropane	1 U	NP
		2-Chlorotoluene	1 U	NP
		2-Hexanone	8.9 J	NP
		4-Chlorotoluene	1 U	NP
		Acetone	NP	1900 J
		Benzene	NP	300 J
		Bromobenzene	1 U	NP
		Bromochloromethane	1 U	NP
		Bromodichloromethane	1 U	NP
		Bromoform	1 UJ	NP
		Bromomethane	1 U	NP
		Carbon disulfide	3.1	NP
		Carbon tetrachloride	1 U	NP
		Chlorobenzene	19 J	NP
		Chloroethane	NP	190 J
		Chloroform	1	NP
		Chloromethane	1 U	NP
		cis-1,2-Dichloroethene	NP	90000 J
		cis-1,3-Dichloropropene	1 UJ	NP
		Cyclohexane	NP	50 R
		Dibromochloromethane	1 UJ	NP
		Dibromomethane	1 U	NP
		Ethyl tert-butyl ether	8 U	NP
		Ethylbenzene	NP	250 J
		Freon 11	1 U	NP
		Freon 113	1 U	NP
		Freon 12	1 U	NP
		Hexachlorobutadiene	1 U	NP
		Isopropylbenzene (cumene)	31 J	NP
		Methyl acetate	NP	50 R
		Methyl ethyl ketone	NP	1200 J

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 3
MW-12-0306	04/06/06	Methyl isobutyl ketone	NP	5300 J
		Methyl tert-butyl ether	4 U	NP
		Methylcyclohexane	NP	50 R
		Methylene chloride	4.4	NP
		Naphthalene	140	NP
		n-Butylbenzene	1 U	NP
		n-Propylbenzene	71	NP
		p-Cymene (p-isopropyltoluene)	140	NP
		sec-Butylbenzene	7.5	NP
		Styrene	1 UJ	NP
		tert-Amyl methyl ether	8 U	NP
		tert-Butyl alcohol	48	NP
		tert-Butylbenzene	0.7 J	NP
		Tetrachloroethene	4.6 J	NP
		Toluene	NP	28000 J
		trans-1,2-Dichloroethene	NP	810 J
		trans-1,3-Dichloropropene	1 UJ	NP
		Trichloroethene	31	NP
		Vinyl chloride	NP	6500 J
		Xylenes, total	NP	1920 J

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-01-17-0306	04/05/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	5 U
		1,1,2,2-Tetrachloroethane	NP	5 U
		1,1,2-Trichloroethane	NP	5 UJ
		1,1-Dichloroethane	NP	19
		1,1-Dichloroethene	NP	5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	5 U
		1,2,4-Trimethylbenzene	4.5	NP
		1,2-Dibromo-3-chloropropane	NP	0.25 U
		1,2-Dibromoethane	NP	0.25 U
		1,2-Dichlorobenzene	28	NP
		1,2-Dichloroethane	NP	5 U
		1,2-Dichloropropane	NP	5 U
		1,3,5-Trimethylbenzene	0.2 J	NP
		1,3-Dichlorobenzene	NP	5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	5.7
		1,4-Dioxane (p-dioxane)	NP	10 R
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	NP	50 U
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	50 U
		Benzene	NP	5 U
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	5 U
		Bromodichloromethane	NP	5 U
		Bromoform	NP	5 U
		Bromomethane	NP	5 U
		Carbon disulfide	NP	5 U
		Carbon tetrachloride	NP	5 U
		Chlorobenzene	NP	728
		Chloroethane	NP	5 U
		Chloroform	NP	5 U
		Chloromethane	NP	5 U
		cis-1,2-Dichloroethene	NP	530 J
		cis-1,3-Dichloropropene	NP	5 UJ
		Cyclohexane	NP	5 U
		Dibromochloromethane	NP	5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	2 U	NP
		Ethylbenzene	NP	5 U
		Freon 11	NP	5 U
		Freon 113	NP	5 U
		Freon 12	NP	5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	8.7
		Methyl acetate	NP	5 U
		Methyl ethyl ketone	NP	50 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-01-17-0306	04/05/06	Methyl isobutyl ketone	NP	50 U
		Methyl tert-butyl ether	NP	5 U
		Methylcyclohexane	NP	5 U
		Methylene chloride	NP	5 U
		Naphthalene	8.9	NP
		n-Butylbenzene	7	NP
		n-Propylbenzene	19 J	NP
		p-Cymene (p-isopropyltoluene)	8 J	NP
		sec-Butylbenzene	13 J	NP
		Styrene	NP	5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	20 U	NP
		tert-Butylbenzene	1.8	NP
		Tetrachloroethene	NP	5 U
		Toluene	NP	110 J
		trans-1,2-Dichloroethene	NP	5 U
		trans-1,3-Dichloropropene	NP	5 UJ
		Trichloroethene	NP	5 U
		Vinyl chloride	NP	33 J
		Xylenes, total	NP	5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-01-35-0306	04/05/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	NP	13
		1,1-Dichloroethene	NP	0.5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	6.4	NP
		1,2-Dibromo-3-chloropropane	NP	0.25 U
		1,2-Dibromoethane	NP	0.25 U
		1,2-Dichlorobenzene	NP	96
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	2.1	NP
		1,3-Dichlorobenzene	NP	5.5
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	42
		1,4-Dioxane (p-dioxane)	NP	27 J
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	NP	5 U
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	5 U
		Benzene	NP	4.7
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	64
		Chloroethane	NP	126
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	50
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.96
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	4 U	NP
		Ethylbenzene	NP	5.1
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	2.7
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	NP	5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-01-35-0306	04/05/06	Methyl isobutyl ketone	NP	5 U
		Methyl tert-butyl ether	NP	6.3
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	2
		Naphthalene	0.2 J	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	2.4	NP
		p-Cymene (p-isopropyltoluene)	6.7	NP
		sec-Butylbenzene	0.3 J	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	20 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	0.63
		Toluene	NP	24
		trans-1,2-Dichloroethene	NP	3.4
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	2.5
		Vinyl chloride	NP	2.1 J
		Xylenes, total	NP	17.8 J

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 3
RMW-02-13-0306	04/06/06	1,1,1,2-Tetrachloroethane	1 UJ	NP
		1,1,1-Trichloroethane	1 U	NP
		1,1,2,2-Tetrachloroethane	18	NP
		1,1,2-Trichloroethane	1 UJ	NP
		1,1-Dichloroethane	NP	1300 J
		1,1-Dichloroethene	NP	7.3 J
		1,1-Dichloropropene	1 U	NP
		1,2,3-Trichlorobenzene	NP	4 J
		1,2,3-Trichloropropane	1 U	NP
		1,2,4-Trichlorobenzene	NP	17 J
		1,2,4-Trimethylbenzene	590	NP
		1,2-Dibromo-3-chloropropane	NP	0.5 U
		1,2-Dibromoethane	NP	0.5 U
		1,2-Dichlorobenzene	NP	160 J
		1,2-Dichloroethane	NP	8 J
		1,2-Dichloropropane	1.7	NP
		1,3,5-Trimethylbenzene	160	NP
		1,3-Dichlorobenzene	NP	3.7 J
		1,3-Dichloropropane	1 UJ	NP
		1,4-Dichlorobenzene	NP	16 J
		1,4-Dioxane (p-dioxane)	NP	50 J
		2,2-Dichloropropane	0.5 J	NP
		2-Chlorotoluene	1 U	NP
		2-Hexanone	NP	9.6 J
		4-Chlorotoluene	1 U	NP
		Acetone	NP	3300 J
		Benzene	NP	630 J
		Bromobenzene	1 U	NP
		Bromochloromethane	1 U	NP
		Bromodichloromethane	1 U	NP
		Bromoform	1 UJ	NP
		Bromomethane	1 U	NP
		Carbon disulfide	1 U	NP
		Carbon tetrachloride	1 U	NP
		Chlorobenzene	NP	32 J
		Chloroethane	NP	88 J
		Chloroform	1 U	NP
		Chloromethane	1 U	NP
		cis-1,2-Dichloroethene	NP	9000 J
		cis-1,3-Dichloropropene	1 U	NP
		Cyclohexane	NP	15 J
		Dibromochloromethane	1 UJ	NP
		Dibromomethane	1 U	NP
		Ethyl tert-butyl ether	8 U	NP
		Ethylbenzene	NP	1200 J
		Freon 11	1 U	NP
		Freon 113	1 U	NP
		Freon 12	1 U	NP
		Hexachlorobutadiene	1 U	NP
		Isopropyl ether	430	NP
		Isopropylbenzene (cumene)	NP	43 J
		Methyl acetate	NP	0.5 R

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 3
RMW-02-13-0306	04/06/06	Methyl ethyl ketone	NP	3800 J
		Methyl isobutyl ketone	NP	4800 J
		Methyl tert-butyl ether	NP	83 J
		Methylcyclohexane	NP	36 J
		Methylene chloride	4.9	NP
		Naphthalene	670	NP
		n-Butylbenzene	22	NP
		n-Propylbenzene	64	NP
		p-Cymene (p-isopropyltoluene)	74	NP
		sec-Butylbenzene	12	NP
		Styrene	23 J	NP
		tert-Amyl methyl ether	8 U	NP
		tert-Butyl alcohol	46	NP
		tert-Butylbenzene	2.1	NP
		Tetrachloroethene	NP	0.61 J
		Toluene	NP	19000 J
		trans-1,2-Dichloroethene	NP	84 J
		trans-1,3-Dichloropropene	1 UJ	NP
		Trichloroethene	NP	3.6 J
		Vinyl chloride	NP	4100 J
		Xylenes, total	NP	5600 J

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-03-15-0306	03/30/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	NP	0.35 J
		1,1-Dichloroethene	NP	0.5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.05 U
		1,2-Dibromoethane	NP	0.05 U
		1,2-Dichlorobenzene	NP	0.5 U
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	NP	0.5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	0.5 U
		1,4-Dioxane (p-dioxane)	NP	70 J
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	4 U	NP
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	11
		Benzene	NP	0.5 U
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	0.5 U
		Chloroethane	NP	0.5 U
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	0.5 U
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	4 U	NP
		Ethylbenzene	NP	0.5 U
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	4 U	NP

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-03-15-0306	03/30/06	Methyl isobutyl ketone	4 U	NP
		Methyl tert-butyl ether	NP	1.9
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.5 U
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	20 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	0.5 U
		Toluene	NP	0.5 U
		trans-1,2-Dichloroethene	NP	0.5 U
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	0.5 U
		Vinyl chloride	NP	0.5 U
		Xylenes, total	NP	0.5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-04-15-0306	03/29/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 UJ
		1,1-Dichloroethane	NP	0.5 U
		1,1-Dichloroethene	NP	0.5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.05 U
		1,2-Dibromoethane	NP	0.05 U
		1,2-Dichlorobenzene	NP	0.5 U
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	NP	0.5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	0.5 U
		1,4-Dioxane (p-dioxane)	NP	1.3 J
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	4 U	NP
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	5 U
		Benzene	NP	0.5 U
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	0.5 U
		Chloroethane	NP	0.5 U
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	0.5 U
		cis-1,3-Dichloropropene	NP	0.5 UJ
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	4 U	NP
		Ethylbenzene	NP	0.5 U
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	4 U	NP

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-04-15-0306	03/29/06	Methyl isobutyl ketone	4 U	NP
		Methyl tert-butyl ether	NP	0.5 U
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.5 U
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	20 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	0.5 U
		Toluene	NP	0.5 U
		trans-1,2-Dichloroethene	NP	0.5 U
		trans-1,3-Dichloropropene	NP	0.5 UJ
		Trichloroethene	NP	0.5 U
		Vinyl chloride	NP	0.5 U
		Xylenes, total	NP	0.5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-06-15-0306	03/31/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	NP	0.5 U
		1,1-Dichloroethene	NP	0.5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.05 U
		1,2-Dibromoethane	NP	0.05 U
		1,2-Dichlorobenzene	NP	0.5 U
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	NP	0.5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	0.5 U
		1,4-Dioxane (p-dioxane)	NP	2 R
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	4 U	NP
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	5 U
		Benzene	NP	0.5 U
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	0.5 U
		Chloroethane	NP	0.5 U
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	1.2
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	4 U	NP
		Ethylbenzene	NP	0.5 U
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	4 U	NP

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-06-15-0306	03/31/06	Methyl isobutyl ketone	4 U	NP
		Methyl tert-butyl ether	NP	0.5 U
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.58 U
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	10 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	0.5 U
		Toluene	NP	0.5 U
		trans-1,2-Dichloroethene	NP	0.5 U
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	0.5 U
		Vinyl chloride	NP	0.4 J
		Xylenes, total	NP	0.5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-07-15-0306	04/03/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	NP	0.5 U
		1,1-Dichloroethene	NP	0.5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.05 U
		1,2-Dibromoethane	NP	0.05 U
		1,2-Dichlorobenzene	NP	0.5 U
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	NP	0.5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	0.5 U
		1,4-Dioxane (p-dioxane)	NP	2 R
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	4 U	NP
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	5 U
		Benzene	NP	0.5 U
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	0.5 U
		Chloroethane	NP	0.5 U
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	0.5 U
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	2 U	NP
		Ethylbenzene	NP	0.5 U
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	4 U	NP

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-07-15-0306	04/03/06	Methyl isobutyl ketone	4 U	NP
		Methyl tert-butyl ether	NP	0.5 U
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.5 U
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	10 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	0.5 U
		Toluene	NP	0.5 U
		trans-1,2-Dichloroethene	NP	0.5 U
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	0.5 U
		Vinyl chloride	NP	0.5 U
		Xylenes, total	NP	0.5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-07-35-0306	04/03/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	NP	0.5 U
		1,1-Dichloroethene	NP	0.5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.05 U
		1,2-Dibromoethane	NP	0.05 U
		1,2-Dichlorobenzene	NP	0.5 U
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	NP	0.5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	0.5 U
		1,4-Dioxane (p-dioxane)	NP	2 R
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	4 U	NP
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	5 UJ
		Benzene	NP	0.5 U
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	0.5 U
		Chloroethane	NP	0.5 U
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	18
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	2 U	NP
		Ethylbenzene	NP	0.5 U
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	NP	5 UJ

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-07-35-0306	04/03/06	Methyl isobutyl ketone	4 U	NP
		Methyl tert-butyl ether	NP	0.5 U
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.5 U
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	10 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	4.8
		Toluene	NP	0.5 U
		trans-1,2-Dichloroethene	NP	7.9
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	6.1
		Vinyl chloride	NP	0.63 J
		Xylenes, total	NP	0.5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-08-15-0306	04/04/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	2.5 U
		1,1,2,2-Tetrachloroethane	NP	2.5 U
		1,1,2-Trichloroethane	NP	2.5 UJ
		1,1-Dichloroethane	NP	2.5 U
		1,1-Dichloroethene	NP	2.5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	2.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	2.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.25 U
		1,2-Dibromoethane	NP	0.25 U
		1,2-Dichlorobenzene	NP	146
		1,2-Dichloroethane	NP	2.5 U
		1,2-Dichloropropane	NP	2.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	NP	2.5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	5.5
		1,4-Dioxane (p-dioxane)	NP	10 R
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	NP	25 UJ
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	25 U
		Benzene	NP	1.8 J
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	2.5 U
		Bromodichloromethane	NP	2.5 U
		Bromoform	NP	2.5 U
		Bromomethane	NP	2.5 U
		Carbon disulfide	NP	2.5 U
		Carbon tetrachloride	NP	2.5 U
		Chlorobenzene	NP	122
		Chloroethane	NP	2.5 U
		Chloroform	NP	2.5 U
		Chloromethane	NP	2.5 U
		cis-1,2-Dichloroethene	NP	13.5
		cis-1,3-Dichloropropene	NP	2.5 UJ
		Cyclohexane	NP	2.5 U
		Dibromochloromethane	NP	2.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	4 U	NP
		Ethylbenzene	NP	2.5 U
		Freon 11	NP	2.5 U
		Freon 113	NP	2.5 U
		Freon 12	NP	2.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	2.5 U
		Methyl acetate	NP	2.5 U
		Methyl ethyl ketone	NP	25 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-08-15-0306	04/04/06	Methyl isobutyl ketone	NP	25 UJ
		Methyl tert-butyl ether	NP	1.75 J
		Methylcyclohexane	NP	2.5 U
		Methylene chloride	NP	2.5 U
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	2.5 UJ
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	20 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	2.5 U
		Toluene	NP	2.5 U
		trans-1,2-Dichloroethene	NP	3.75
		trans-1,3-Dichloropropene	NP	2.5 UJ
		Trichloroethene	NP	2.5 U
		Vinyl chloride	NP	12 J
		Xylenes, total	NP	2.5 UJ

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-08-35-0306	04/04/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	NP	0.61 J
		1,1-Dichloroethene	NP	0.5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	0.5 U	NP
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	0.5 U	NP
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.25 U
		1,2-Dibromoethane	NP	0.25 U
		1,2-Dichlorobenzene	NP	118 J
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	0.5 U	NP
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	2.4 J
		1,4-Dioxane (p-dioxane)	NP	10 R
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	NP	5 U
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	5 U
		Benzene	NP	2 J
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	0.5 U	NP
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	112 J
		Chloroethane	NP	0.5 U
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	34
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	4 U	NP
		Ethylbenzene	NP	0.5 U
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	NP	5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-08-35-0306	04/04/06	Methyl isobutyl ketone	NP	5 U
		Methyl tert-butyl ether	NP	10
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.5 U
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	10 UJ
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	20 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	4 J
		Toluene	NP	0.45 J
		trans-1,2-Dichloroethene	NP	11
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	11
		Vinyl chloride	NP	19 J
		Xylenes, total	NP	10 UJ

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-09-15-0306	04/03/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	NP	0.58
		1,1-Dichloroethene	NP	0.5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.05 U
		1,2-Dibromoethane	NP	0.05 U
		1,2-Dichlorobenzene	NP	0.5 U
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	NP	0.5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	0.5 U
		1,4-Dioxane (p-dioxane)	NP	2 R
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	4 U	NP
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	19
		Benzene	NP	0.5 U
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	0.5 U
		Chloroethane	NP	0.5 U
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	0.5 U
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	2 U	NP
		Ethylbenzene	NP	0.5 U
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	4 U	NP

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-09-15-0306	04/03/06	Methyl isobutyl ketone	4 U	NP
		Methyl tert-butyl ether	NP	0.5 U
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.5 U
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	10 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	0.5 U
		Toluene	NP	0.5 U
		trans-1,2-Dichloroethene	NP	0.5 U
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	0.5 U
		Vinyl chloride	NP	0.5 U
		Xylenes, total	NP	0.5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-09-35-0306	04/03/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	61	NP
		1,1-Dichloroethene	NP	2.5
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.05 U
		1,2-Dibromoethane	NP	0.05 U
		1,2-Dichlorobenzene	80	NP
		1,2-Dichloroethane	1.2	NP
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	0.4 J	NP
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	5.9	NP
		1,4-Dioxane (p-dioxane)	NP	53 J
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	4 U	NP
		4-Chlorotoluene	0.5 U	NP
		Acetone	2 U	NP
		Benzene	NP	2.9
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	3.6
		Chloroethane	0.7	NP
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	98	NP
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	2 U	NP
		Ethylbenzene	NP	0.5 U
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	4 U	NP

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-09-35-0306	04/03/06	Methyl isobutyl ketone	4 U	NP
		Methyl tert-butyl ether	NP	0.5 U
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.5 U
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	10 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	0.55
		Toluene	NP	0.5 U
		trans-1,2-Dichloroethene	19	NP
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	8.9
		Vinyl chloride	NP	68 J
		Xylenes, total	NP	0.5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-10-35-0306	04/04/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	NP	63 J
		1,1-Dichloroethene	NP	2.1
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.05 U
		1,2-Dibromoethane	NP	0.05 UJ
		1,2-Dichlorobenzene	NP	0.5 U
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.2 J	NP
		1,3-Dichlorobenzene	NP	0.5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	0.5 U
		1,4-Dioxane (p-dioxane)	NP	370 J
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	NP	5 U
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	29
		Benzene	NP	1.4 J
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	0.5 U
		Chloroethane	NP	0.5 U
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	320
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	2 U	NP
		Ethylbenzene	NP	1.6 J
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	NP	5 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-10-35-0306	04/04/06	Methyl isobutyl ketone	NP	5 U
		Methyl tert-butyl ether	NP	0.5 U
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.5 U
		Naphthalene	0.2 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.3 J	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	480	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	0.5 U
		Toluene	NP	1.1 J
		trans-1,2-Dichloroethene	NP	2.6
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	126
		Vinyl chloride	NP	10 J
		Xylenes, total	NP	1.42 J

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-12-32-0306	04/05/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	5 U
		1,1,2,2-Tetrachloroethane	NP	5 U
		1,1,2-Trichloroethane	NP	5 U
		1,1-Dichloroethane	NP	96
		1,1-Dichloroethene	NP	16
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	5 U
		1,2,4-Trimethylbenzene	46	NP
		1,2-Dibromo-3-chloropropane	NP	0.25 U
		1,2-Dibromoethane	NP	0.25 UJ
		1,2-Dichlorobenzene	NP	5 U
		1,2-Dichloroethane	NP	5 U
		1,2-Dichloropropane	NP	5 U
		1,3,5-Trimethylbenzene	22	NP
		1,3-Dichlorobenzene	NP	5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	5 U
		1,4-Dioxane (p-dioxane)	NP	1400 J
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	NP	50 U
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	77
		Benzene	NP	100
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	5 U
		Bromodichloromethane	NP	5 U
		Bromoform	NP	5 U
		Bromomethane	NP	5 U
		Carbon disulfide	NP	5 U
		Carbon tetrachloride	NP	5 U
		Chlorobenzene	NP	5 U
		Chloroethane	NP	100
		Chloroform	NP	5 U
		Chloromethane	NP	5 U
		cis-1,2-Dichloroethene	NP	680
		cis-1,3-Dichloropropene	NP	5 U
		Cyclohexane	NP	5 U
		Dibromochloromethane	NP	5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	2 U	NP
		Ethylbenzene	NP	12
		Freon 11	NP	5 U
		Freon 113	NP	5 U
		Freon 12	NP	5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	5 U
		Methyl acetate	NP	5 U
		Methyl ethyl ketone	NP	50 U

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 2
RMW-12-32-0306	04/05/06	Methyl isobutyl ketone	NP	50 U
		Methyl tert-butyl ether	NP	5 U
		Methylcyclohexane	NP	5 U
		Methylene chloride	NP	5 U
		Naphthalene	12	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	5.3	NP
		p-Cymene (p-isopropyltoluene)	20	NP
		sec-Butylbenzene	2.2	NP
		Styrene	NP	5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	570	NP
		tert-Butylbenzene	0.3 J	NP
		Tetrachloroethene	NP	5 U
		Toluene	NP	200
		trans-1,2-Dichloroethene	NP	27
		trans-1,3-Dichloropropene	NP	5 U
		Trichloroethene	NP	47
		Vinyl chloride	NP	190 J
		Xylenes, total	NP	66 J

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 3
RMW-12-51-0306	04/05/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	0.5 U	NP
		1,1,2,2-Tetrachloroethane	0.5 U	NP
		1,1,2-Trichloroethane	0.5 U	NP
		1,1-Dichloroethane	0.5 U	NP
		1,1-Dichloroethene	0.5 U	NP
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	0.5 U	NP
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	0.5 U	NP
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	2 U	NP
		1,2-Dibromoethane	0.5 U	NP
		1,2-Dichlorobenzene	0.5 U	NP
		1,2-Dichloroethane	0.5 U	NP
		1,2-Dichloropropane	0.5 U	NP
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	0.5 U	NP
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	0.5 U	NP
		1,4-Dioxane (p-dioxane)	NP	2 R
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	4 U	NP
		4-Chlorotoluene	0.5 U	NP
		Acetone	2 U	NP
		Benzene	0.5 U	NP
		Bromobenzene	0.5 U	NP
		Bromochloromethane	0.5 U	NP
		Bromodichloromethane	0.5 U	NP
		Bromoform	0.5 U	NP
		Bromomethane	0.5 U	NP
		Carbon disulfide	0.2 U	NP
		Carbon tetrachloride	0.5 U	NP
		Chlorobenzene	0.5 U	NP
		Chloroethane	0.5 U	NP
		Chloroform	0.5 U	NP
		Chloromethane	0.5 U	NP
		cis-1,2-Dichloroethene	0.2 J	NP
		cis-1,3-Dichloropropene	0.5 U	NP
		Cyclohexane	NP	0.5 R
		Dibromochloromethane	0.5 U	NP
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	2 U	NP
		Ethylbenzene	0.5 U	NP
		Freon 11	0.5 U	NP
		Freon 113	0.5 U	NP
		Freon 12	0.5 U	NP
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	0.5 U	NP
		Methyl acetate	NP	0.5 R
		Methyl ethyl ketone	4 U	NP

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 2	Tier 3
RMW-12-51-0306	04/05/06	Methyl isobutyl ketone	4 U	NP
		Methyl tert-butyl ether	2 U	NP
		Methylcyclohexane	NP	0.5 R
		Methylene chloride	0.2 U	NP
		Naphthalene	0.2 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	0.5 U	NP
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	20 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	0.2 J	NP
		Toluene	0.5 U	NP
		trans-1,2-Dichloroethene	0.5 U	NP
		trans-1,3-Dichloropropene	0.5 U	NP
		Trichloroethene	NP	1.6 J
		Vinyl chloride	0.5 U	NP
		Xylenes, total	1 U	NP

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-93-35-0306	04/03/06	1,1,1,2-Tetrachloroethane	0.5 U	NP
		1,1,1-Trichloroethane	NP	0.5 U
		1,1,2,2-Tetrachloroethane	NP	0.5 U
		1,1,2-Trichloroethane	NP	0.5 U
		1,1-Dichloroethane	NP	0.5 U
		1,1-Dichloroethene	NP	0.5 U
		1,1-Dichloropropene	0.5 U	NP
		1,2,3-Trichlorobenzene	NP	0.5 U
		1,2,3-Trichloropropane	0.5 U	NP
		1,2,4-Trichlorobenzene	NP	0.5 U
		1,2,4-Trimethylbenzene	0.5 U	NP
		1,2-Dibromo-3-chloropropane	NP	0.05 U
		1,2-Dibromoethane	NP	0.05 U
		1,2-Dichlorobenzene	NP	0.5 U
		1,2-Dichloroethane	NP	0.5 U
		1,2-Dichloropropane	NP	0.5 U
		1,3,5-Trimethylbenzene	0.5 U	NP
		1,3-Dichlorobenzene	NP	0.5 U
		1,3-Dichloropropane	0.5 U	NP
		1,4-Dichlorobenzene	NP	0.5 U
		1,4-Dioxane (p-dioxane)	NP	2 R
		2,2-Dichloropropane	0.5 U	NP
		2-Chlorotoluene	0.5 U	NP
		2-Hexanone	NP	5 UJ
		4-Chlorotoluene	0.5 U	NP
		Acetone	NP	5 U
		Benzene	NP	0.5 U
		Bromobenzene	0.5 U	NP
		Bromochloromethane	NP	0.5 U
		Bromodichloromethane	NP	0.5 U
		Bromoform	NP	0.5 U
		Bromomethane	NP	0.5 U
		Carbon disulfide	NP	0.5 U
		Carbon tetrachloride	NP	0.5 U
		Chlorobenzene	NP	0.5 U
		Chloroethane	NP	0.5 U
		Chloroform	NP	0.5 U
		Chloromethane	NP	0.5 U
		cis-1,2-Dichloroethene	NP	17
		cis-1,3-Dichloropropene	NP	0.5 U
		Cyclohexane	NP	0.5 U
		Dibromochloromethane	NP	0.5 U
		Dibromomethane	0.5 U	NP
		Ethyl tert-butyl ether	4 U	NP
		Ethylbenzene	NP	0.5 U
		Freon 11	NP	0.5 U
		Freon 113	NP	0.5 U
		Freon 12	NP	0.5 U
		Hexachlorobutadiene	0.5 U	NP
		Isopropylbenzene (cumene)	NP	0.5 U
		Methyl acetate	NP	0.5 U
		Methyl ethyl ketone	4 U	NP

TABLE A9-3
Split Sample Selection - Groundwater, First Quarter 2006 (March)
AMCO Chemical Superfund Site, Oakland, California

Sample ID	Sample Date	Analyte Name	EPA R9	KAP
			Tier 3	Tier 2
RMW-93-35-0306	04/03/06	Methyl isobutyl ketone	NP	5 UJ
		Methyl tert-butyl ether	NP	0.5 U
		Methylcyclohexane	NP	0.5 U
		Methylene chloride	NP	0.5 U
		Naphthalene	0.5 U	NP
		n-Butylbenzene	0.5 U	NP
		n-Propylbenzene	0.5 U	NP
		p-Cymene (p-isopropyltoluene)	0.5 U	NP
		sec-Butylbenzene	0.5 U	NP
		Styrene	NP	0.5 U
		tert-Amyl methyl ether	4 U	NP
		tert-Butyl alcohol	20 U	NP
		tert-Butylbenzene	0.5 U	NP
		Tetrachloroethene	NP	5
		Toluene	NP	0.5 U
		trans-1,2-Dichloroethene	NP	7.9
		trans-1,3-Dichloropropene	NP	0.5 U
		Trichloroethene	NP	6
		Vinyl chloride	NP	0.62 J
		Xylenes, total	NP	0.5 U

Notes

EPA R9 - EPA Region IX Lab
KAP - KAP Technologies, Inc.
NP - result not picked
J - estimated value.
U - not detected at or above the reporting limit.
UJ - not detected at or above the reporting limit; the reporting limit is an estimate.
R - rejected for failure to meet quality control requirement.

Appendix A10
Second Quarter, 2006 Groundwater Sampling

APPENDIX A10

Second Quarter, 2006 Groundwater Sampling

A10.1 Summary

The following sections describe the samples collected during the Second Quarter 2006 Groundwater sampling event which occurred in June, 2006.

Second Quarter, 2006 Groundwater: Groundwater was collected on June 19 through June 22, 2006 and analyzed for VOCs. For groundwater, the selected screening levels are based on federal and state maximum contaminant levels (MCLs) and EPA Region 9 tap water PRGs.

A10.2 Data Review and Validation Findings

Table A10-1 presents a list of sample delivery groups, sample identifications, and validation levels for the groundwater samples collected during this event. Table A10-2 presents both the Tier 3 and Tier 2 qualified results with accompanying reason codes identifying the type of QC outlier. Results that are unqualified are not shown. Rejected results are shown in boxes. Equipment blank and trip blank qualifications are discussed in section 3 of the main DQUA and are not discussed further in this section, although the qualified results are presented on the attached tables. The following sections discuss the results qualified based on the Tier 3 validation.

The findings of the Tier 3 validation are considered representative of the quality of the entire data set. For this event, Tier 3 validation was performed on 15 of the 33 groundwater samples for VOCs.

The Second Quarter 2006 groundwater results were qualified for outliers associated with the following QC metrics: continuing calibration and matrix spike and matrix spike duplicate.

A10.2.1 Continuing Calibration (Reason Code C%D)

VOCs in Groundwater: The CCV %D for methylene chloride was outside the ± 25% control limit. The quantitation limits for the following methylene chloride in the samples from the indicated locations were qualified as estimate, J/UJ:

- Methylene chloride in RMW-06-15, RMW-07-15, RMW-07-35, RMW-07-35 duplicate, and RMW-13-35

A10.2.2 Matrix Spike Matrix Spike Duplicates (Reason Code MS and SD)

VOCs in Groundwater: A matrix spike and matrix spike duplicate (MS/MSD) was analyzed using the sample from location BMW-06 as the parent sample. Bromodichloromethane was outside the control limit in MS. Bromodichloromethane, chlorobenzene, 1,1,1,2-tetrachloroethane, bromobenzene, 2-chlorotoluene, 4-chlorotoluene, 1,3-dichlorobenzene,

and 1,4-dichlorobenzene had recoveries outside the control limit in BMW-06. The quantitation limits for these analytes in the parent sample were qualified as estimated, UJ.

TABLE A10-1
Sample Delivery Group Reference - Groundwater, Second Quarter 2006 (June)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
06171A (EPA Region 9)				
Anions, EPA Method 300.0				
	BMW-01	N	BMW-01-0606	Tier 1A
	BMW-03	N	BMW-03-0606	Tier 1A
	BMW-06	N	BMW-06-0606	Tier 1A
	BPZ-01	N	BPZ-01-0606	Tier 1A
	RMW-03-15	N	RMW-03-15-0606	Tier 1A
	RMW-04-15	N	RMW-04-15-0606	Tier 1A
	RMW-05-15	N	RMW-05-15-0606	Tier 1A
	RMW-06-15	N	RMW-06-15-0606	Tier 1A
	RMW-07-15	N	RMW-07-15-0606	Tier 1A
	RMW-07-35	N	RMW-07-35-0606	Tier 1A
	RMW-07-35	FD	RMW-93-35-0606	Tier 1A
	RMW-09-15	N	RMW-09-15-0606	Tier 1A
	RMW-09-35	N	RMW-09-35-0606	Tier 1A
	RMW-11-35	N	RMW-11-35-0606	Tier 1A
	RMW-13-35	N	RMW-13-35-0606	Tier 1A
Dissolved Gases, EPA Method RSK-175				
	BMW-01	N	BMW-01-0606	Tier 1A
	BMW-03	N	BMW-03-0606	Tier 1A
	BMW-06	N	BMW-06-0606	Tier 1A
	BPZ-01	N	BPZ-01-0606	Tier 1A
	RMW-03-15	N	RMW-03-15-0606	Tier 1A
	RMW-04-15	N	RMW-04-15-0606	Tier 1A
	RMW-05-15	N	RMW-05-15-0606	Tier 1A
	RMW-06-15	N	RMW-06-15-0606	Tier 1A
	RMW-07-15	N	RMW-07-15-0606	Tier 1A
	RMW-07-35	N	RMW-07-35-0606	Tier 1A
	RMW-07-35	FD	RMW-93-35-0606	Tier 1A
	RMW-09-15	N	RMW-09-15-0606	Tier 1A
	RMW-09-35	N	RMW-09-35-0606	Tier 1A
	RMW-11-35	N	RMW-11-35-0606	Tier 1A
	RMW-13-35	N	RMW-13-35-0606	Tier 1A
Volatile Organics, EPA Method 524.2				
	BMW-01	N	BMW-01-0606	Tier 3
	BMW-03	N	BMW-03-0606	Tier 3
	BMW-06	N	BMW-06-0606	Tier 3
	BPZ-01	N	BPZ-01-0606	Tier 3
	RMW-03-15	N	RMW-03-15-0606	Tier 3
	RMW-04-15	N	RMW-04-15-0606	Tier 3
	RMW-05-15	N	RMW-05-15-0606	Tier 3
	RMW-06-15	N	RMW-06-15-0606	Tier 3
	RMW-07-15	N	RMW-07-15-0606	Tier 3
	RMW-07-35	N	RMW-07-35-0606	Tier 3
	RMW-07-35	FD	RMW-93-35-0606	Tier 3
	RMW-09-15	N	RMW-09-15-0606	Tier 3
	RMW-09-35	N	RMW-09-35-0606	Tier 3
	RMW-11-35	N	RMW-11-35-0606	Tier 3
	RMW-13-35	N	RMW-13-35-0606	Tier 3

TABLE A10-1
Sample Delivery Group Reference - Groundwater, Second Quarter 2006 (June)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
06178A (EPA Region 9)				
Anions, EPA Method 300.0				
	BMW-07	N	BMW-07-0606	Tier 1A
	BMW-08	N	BMW-08-0606	Tier 1A
	RMW-01-17	N	RMW-01-17-0606	Tier 1A
	RMW-01-35	N	RMW-01-35-0606	Tier 1A
	RMW-02-32	N	RMW-02-32-0606	Tier 1A
	RMW-02-50	N	RMW-02-50-0606	Tier 1A
	RMW-08-15	N	RMW-08-15-0606	Tier 1A
	RMW-08-15	FD	RMW-92-15-0606	Tier 1A
	RMW-08-35	N	RMW-08-35-0606	Tier 1A
	RMW-10-15	N	RMW-10-15-0606	Tier 1A
	RMW-10-15	FD	RMW-90-15-0606	Tier 1A
	RMW-10-35	N	RMW-10-35-0606	Tier 1A
	RMW-12-32	N	RMW-12-32-0606	Tier 1A
	RMW-12-51	N	RMW-12-51-0606	Tier 1A
	RMW-12-51	FD	RMW-88-51-0606	Tier 1A
	RMW-14-50	N	RMW-14-50-0606	Tier 1A
Dissolved Gases, EPA Method RSK-175				
	BMW-07	N	BMW-07-0606	Tier 1A
	BMW-08	N	BMW-08-0606	Tier 1A
	RMW-01-17	N	RMW-01-17-0606	Tier 1A
	RMW-01-35	N	RMW-01-35-0606	Tier 1A
	RMW-02-32	N	RMW-02-32-0606	Tier 1A
	RMW-02-50	N	RMW-02-50-0606	Tier 1A
	RMW-08-15	N	RMW-08-15-0606	Tier 1A
	RMW-08-15	FD	RMW-92-15-0606	Tier 1A
	RMW-08-35	N	RMW-08-35-0606	Tier 1A
	RMW-10-15	N	RMW-10-15-0606	Tier 1A
	RMW-10-15	FD	RMW-90-15-0606	Tier 1A
	RMW-10-35	N	RMW-10-35-0606	Tier 1A
	RMW-12-32	N	RMW-12-32-0606	Tier 1A
	RMW-12-51	N	RMW-12-51-0606	Tier 1A
	RMW-12-51	FD	RMW-88-51-0606	Tier 1A
	RMW-14-50	N	RMW-14-50-0606	Tier 1A

TABLE A10-1
Sample Delivery Group Reference - Groundwater, Second Quarter 2006 (June)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
06178A (EPA Region 9)				
Volatile Organics, EPA Method 524.2				
	BMW-07	N	BMW-07-0606	Tier 2
	BMW-08	N	BMW-08-0606	Tier 2
	RMW-01-17	N	RMW-01-17-0606	Tier 2
	RMW-01-35	N	RMW-01-35-0606	Tier 2
	RMW-02-32	N	RMW-02-32-0606	Tier 2
	RMW-02-50	N	RMW-02-50-0606	Tier 2
	RMW-08-15	N	RMW-08-15-0606	Tier 2
	RMW-08-15	FD	RMW-92-15-0606	Tier 2
	RMW-08-35	N	RMW-08-35-0606	Tier 2
	RMW-10-15	N	RMW-10-15-0606	Tier 2
	RMW-10-15	FD	RMW-90-15-0606	Tier 2
	RMW-10-35	N	RMW-10-35-0606	Tier 2
	RMW-12-32	N	RMW-12-32-0606	Tier 2
	RMW-12-51	N	RMW-12-51-0606	Tier 2
	RMW-12-51	FD	RMW-88-51-0606	Tier 2
	RMW-14-50	N	RMW-14-50-0606	Tier 2
06181A (EPA Region 9)				
Anions, EPA Method 300.0				
	MW-12	N	MW-12-0606	Tier 1A
	RMW-02-13	N	RMW-02-13-0606	Tier 1A
Dissolved Gases, EPA Method RSK-175				
	MW-12	N	MW-12-0606	Tier 1A
	RMW-02-13	N	RMW-02-13-0606	Tier 1A
Volatile Organics, EPA Method 524.2				
	MW-12	N	MW-12-0606	Tier 2
	RMW-02-13	N	RMW-02-13-0606	Tier 2

Notes:
N regular sample
FD field duplicate

TABLE A10-2
Result Qualification and Associated Reason Codes - Groundwater, Second Quarter 2006 (June)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	6/20/2006	6/22/2006	6/19/2006	6/26/2006	6/26/2006	6/21/2006	6/29/2006	6/27/2006	6/27/2006	6/29/2006	6/28/2006	6/28/2006	6/20/2006	6/20/2006	6/22/2006	6/21/2006	6/21/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1,2-Tetrachloroethane	0.43	µg/L	*	*	0.5 UJ SD	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
1,1,1-Trichloroethane	200	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
1,1,2-Trichloroethane	5	µg/L	*	*	*	*	*	*	*	*	*	3.1 J Sur	*	*	*	*	*	*	*
1,1-Dichloroethane	5	µg/L	*	*	*	*	*	*	*	1.1 J Sur	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	*	*	8.4 J Sur	*	*	*	*	*	*	*
1,1-Dichloropropene	NE	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
1,2,3-Trichlorobenzene	NE	µg/L	*	*	*	*	*	*	*	*	*	9.2 J Sur	*	*	*	*	*	*	*
1,2,3-Trichloropropane	0.0056	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	5	µg/L	*	*	*	*	*	*	*	0.3 J SD, Sur	*	25 J Sur	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	12	µg/L	*	*	*	*	*	*	*	0.6 J Sur	*	*	*	*	*	*	*	*	*
1,2-Dibromo-3-chloropropane	0.2	µg/L	*	*	*	*	*	*	*	*	*	20 UJ Sur	*	*	*	*	*	*	*
1,2-Dibromoethane	0.05	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
1,2-Dichlorobenzene	600	µg/L	*	*	*	*	*	*	*	*	*	96 J Sur	*	*	*	*	*	*	*
1,2-Dichloroethane	0.5	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
1,2-Dichloropropane	5	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	12	µg/L	*	*	*	*	*	*	*	*	*	140 J Sur	*	*	*	*	*	*	*
1,3-Dichlorobenzene	180	µg/L	*	*	0.5 UJ SD	*	*	*	*	9.1 J MS, SD, Sur	*	2.7 J Sur	*	*	*	*	*	*	*
1,3-Dichloropropane	120	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
1,4-Dichlorobenzene	5	µg/L	*	*	0.5 UJ SD	*	*	*	*	9.6 J MS, Sur	*	13 J Sur	*	*	*	*	*	*	*
2,2-Dichloropropane	NE	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
2-Chlorotoluene	120	µg/L	*	*	0.5 UJ SD	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
2-Hexanone	NE	µg/L	*	*	*	*	*	*	*	*	*	40 UJ Sur	*	*	*	*	*	*	*
4-Chlorotoluene	NE	µg/L	*	*	0.5 UJ SD	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Acetone	5,500	µg/L	*	4 U EB	*	*	*	8 U EB	640 J C%D	*	*	1,600 J Sur	*	*	11 U EB	*	*	*	*
Benzene	1	µg/L	*	*	*	*	*	*	*	1.4 J Sur	*	*	*	*	*	*	*	*	*
Bromobenzene	20	µg/L	*	*	0.5 UJ SD	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Bromochloromethane	NE	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Bromodichloromethane	100	µg/L	*	*	0.5 UJ MS, SD	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Bromoform	100	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Bromomethane	8.7	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Carbon disulfide	1,000	µg/L	*	*	*	*	*	1.5 U TB	*	0.2 J Sur	*	5 UJ Sur	*	*	*	*	*	*	*
Carbon tetrachloride	0.5	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Chlorobenzene	70	µg/L	*	*	0.5 UJ SD	*	*	*	*	*	*	23 J Sur	*	*	*	*	*	*	*
Chloroethane	4.6	µg/L	*	*	*	*	*	*	*	*	*	37 J Sur	*	*	*	*	*	*	*
Chloroform	100	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Chloromethane	160	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	0.5 J Sur	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Dibromochloromethane	100	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Dibromomethane	61	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Ethyl tert-butyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	40 UJ Sur	*	*	*	*	*	*	*
Ethyl thiocyanate	NE	µg/L	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ethylbenzene	700	µg/L	*	*	*	*	*	*	*	0.9 J Sur	*	*	*	*	*	*	*	*	*
Freon 11	150	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Freon 113	1,200	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Freon 12	390	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Isopropyl ether	NE	µg/L	---	---	---	*	*	---	---	*	*	---	*	*	---	---	---	---	---
Isopropylbenzene (cumene)	660	µg/L	*	*	*	*	*	*	*	12 J Sur	*	33 J Sur	*	*	*	*	*	*	*

TABLE A10-2
Result Qualification and Associated Reason Codes - Groundwater, Second Quarter 2006 (June)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15	RMW-07-15
		Sample Date	6/20/2006	6/22/2006	6/19/2006	6/26/2006	6/26/2006	6/21/2006	6/29/2006	6/27/2006	6/27/2006	6/29/2006	6/28/2006	6/28/2006	6/20/2006	6/20/2006	6/22/2006	6/21/2006	6/21/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
Methyl ethyl ketone	7,000	µg/L	*	*	*	*	*	*	*	*	*	2,800 J C%D, RSD	*	*	*	*	*	*	*
Methyl isobutyl ketone	2,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	13	µg/L	*	*	*	*	*	*	*	*	*	56 J Sur	*	*	*	*	*	*	*
Methylene chloride	5	µg/L	*	*	*	0.5 UJ C%D	*	*	*	*	**7 J RSD**	5.9 J Sur	*	*	*	*	*	0.5 UJ C%D	0.5 UJ C%D
Naphthalene	0.093	µg/L	*	*	*	*	*	*	*	4.5 J MS, SD, Sur	*	*	*	*	*	*	*	*	*
n-Butylbenzene	240	µg/L	*	*	*	*	*	*	*	5.3 J Sur	*	23 J Sur	*	*	*	*	*	*	*
n-Propylbenzene	240	µg/L	*	*	*	*	*	*	*	16 J SD, Sur	*	54 J Sur	*	*	*	*	*	*	*
p-Cymene (p-isopropyltoluene)	NE	µg/L	*	*	*	*	*	*	*	0.8 J Sur	*	88 J Sur	*	*	*	*	*	*	*
sec-Butylbenzene	240	µg/L	*	*	*	*	*	*	*	11 J Sur	*	13 J Sur	*	*	*	*	*	*	*
Styrene	100	µg/L	*	*	*	*	*	*	*	*	*	37 J Sur	*	*	*	*	*	*	*
tert-Amyl methyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	40 UJ Sur	*	*	*	*	*	*	*
tert-Butyl alcohol	NE	µg/L	*	*	*	*	*	*	*	*	*	200 UJ Sur	*	*	*	*	*	*	*
tert-Butylbenzene	240	µg/L	*	*	*	*	*	*	*	1.7 J Sur	*	5 UJ Sur	*	*	*	*	*	*	*
Tetrachloroethene	5	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Toluene	150	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	10	µg/L	*	*	*	*	*	*	*	*	*	68 J Sur	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*
Trichloroethene	5	µg/L	*	*	*	*	*	*	*	0.2 J Sur	*	5 J Sur	*	*	*	*	*	*	*
Vinyl chloride	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	1,750	µg/L	*	*	*	*	*	*	*	1.2 J Sur	*	*	*	*	*	*	*	*	*
Anions																			
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dissolved Gases																			
Ethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A10-2
Result Qualification and Associated Reason Codes - Groundwater, Second Quarter 2006 (June)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-07-35 (FD)	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	6/21/2006	6/21/2006	6/27/2006	6/27/2006	6/27/2006	6/22/2006	6/22/2006	6/26/2006	6/26/2006	6/26/2006	6/19/2006	6/28/2006	6/28/2006	6/28/2006	6/20/2006	6/26/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**															
Volatile Organic Compounds																		
1,1,1,2-Tetrachloroethane	0.43	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,1-Trichloroethane	200	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	5	µg/L	*	*	0.7 J FD	1 J FD	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloropropene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,3-Trichlorobenzene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,3-Trichloropropane	0.0056	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	12	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromo-3-chloropropane	0.2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.05	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	12	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	180	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichloropropane	120	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,2-Dichloropropane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chlorotoluene	120	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chlorotoluene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetone	5,500	µg/L	*	*	*	11 U EB	*	38 U EB	*	7 U EB	*	47 U EB	*	53 UJ C%D, EB	*	*	*	*
Benzene	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromobenzene	20	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromochloromethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromoform	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromomethane	8.7	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon disulfide	1,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	70	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	4.6	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	160	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	6	µg/L	*	*	**8.1 J FD**	**11 J FD**	*	*	*	*	*	*	*	*	0.5 U EB	0.5 U EB	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibromochloromethane	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibromomethane	61	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethyl tert-butyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethyl thiocyanate	NE	µg/L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*	---
Ethylbenzene	700	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	150	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	1,200	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	390	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropyl ether	NE	µg/L	---	---	*	*	*	---	---	*	*	*	---	*	*	*	---	*
Isopropylbenzene (cumene)	660	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A10-2
Result Qualification and Associated Reason Codes - Groundwater, Second Quarter 2006 (June)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-35	RMW-07-35 (FD)	RMW-08-15	RMW-08-15 (FD)	RMW-08-35	RMW-09-15	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-51	RMW-12-51 (FD)	RMW-13-35	RMW-14-50
		Sample Date	6/21/2006	6/21/2006	6/27/2006	6/27/2006	6/27/2006	6/22/2006	6/22/2006	6/26/2006	6/26/2006	6/26/2006	6/19/2006	6/28/2006	6/28/2006	6/28/2006	6/20/2006	6/26/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**															
Volatile Organic Compounds																		
Methyl ethyl ketone	7,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	58 J RSD	*	*	*	*
Methyl isobutyl ketone	2,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	13	µg/L	*	*	4.5 J FD	6.3 J FD	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	5	µg/L	0.5 UJ C%D	0.5 UJ C%D	*	*	*	*	*	0.5 UJ C%D	*	*	*	1.1 U LB	*	*	0.5 UJ C%D	0.5 UJ C%D
Naphthalene	0.093	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
n-Butylbenzene	240	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
n-Propylbenzene	240	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
p-Cymene (p-isopropyltoluene)	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
sec-Butylbenzene	240	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Styrene	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
tert-Amyl methyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
tert-Butyl alcohol	NE	µg/L	*	*	*	*	*	*	*	*	*	910 J C%D	*	*	*	*	*	*
tert-Butylbenzene	240	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	150	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	0.5 U EB	0.5 U EB	*	*
trans-1,2-Dichloroethene	10	µg/L	*	*	3 J FD	4.4 J FD	*	*	*	6.6 J FD	9.9 J FD	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vinyl chloride	0.5	µg/L	*	*	**9.8 J FD**	**14 J FD**	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	1,750	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Anions																		
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dissolved Gases																		
Ethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Notes:
Results greater than the screening level are bolded
In cases where target analytes are reported from more than one method or from multiple dilutions, the most conservative result or reporting limit is presented; that is, the values presented represent either the maximum positive result or the minimum reporting limit selected from the available data.
See Groundwater Screening Level table for source of screening levels.

---	not analyzed
*	result not qualified for Quality Control outliers
NE	not established
µg/L	micrograms per liter
mg/L	milligrams per liter
J	estimated value
U	not detected at or above the reporting limit.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
C%D	Continuing calibration verification is outside control limit
EB	Equipment blank concentration exceeds criteria
FD	Field duplicate exceeds relative percent difference criteria
LB	Laboratory blank concentration exceeds criteria
MS	Matrix spike recovery exceeds control limilt
RSD	Initial calibration relative standard deviation exceeded
SD	Matrix spike duplicate recovery exceeds criteria
Sur	Surrogate recovery outside control limits
TB	Trip blank concentration exceeds control limit

Appendix A11
Third Quarter 2006 Groundwater Sampling

APPENDIX A11

Third Quarter 2006 Groundwater Sampling

A11.1 Summary

The following sections describe the samples collected during the Third Quarter 2006 sampling event which occurred in September, 2006.

Third Quarter 2006 Groundwater: Groundwater was collected on September 18 through September 28, 2006 and analyzed for VOCs, SVOCs, pesticides and PCBs, ICP total and dissolved metals, and dioxins and furans. For groundwater, the selected screening levels are based on federal and state maximum contaminant levels (MCLs) and EPA Region 9 tap water PRGs.

A11.2 Data Review and Validation Findings

Table A11-1 presents a list of sample delivery groups, sample identifications, and validation levels for the groundwater samples collected during this event. Table A11-2 presents both the Tier 3 and Tier 2 qualified results with accompanying reason codes identifying the type of QC outlier. Results that are unqualified are not shown. Rejected results are shown in boxes. Equipment blank and trip blank qualifications are discussed in section 3 of the main DQUA and are not discussed further in this section, although the qualified results are presented on the attached tables. The following sections discuss the results qualified based on the Tier 3 validation.

The findings of the Tier 3 validation are considered representative of the quality of the entire data set. For this event, Tier 3 validation was performed on 7 of the 33 groundwater samples for VOCs, SVOCs, pesticides and PCBs, 5 of the 31 groundwater samples for dioxins and furans, 8 of the 33 groundwater samples for total metals, and 18 of the 33 groundwater samples for SVOC SIM for 1,4-dioxane only.

The Third Quarter 2006 groundwater results were qualified for outliers associated with the following QC metrics: laboratory method blank, initial calibration, continuing calibration, surrogates, internal standard, ICP serial dilution, and second column confirmation.

A11.2.1 Laboratory Method Blank (Reason Code LB)

VOCs in Groundwater: Acetone, benzene, toluene, carbon disulfide, cis-1,2-dichloroethene, 1,4-dioxane, methylene chloride, and chloromethane were detected in the method blanks. The results for analytes below the reporting limits in samples from the indicated locations were qualified as non-detected at the quantitation limit and flagged "U".

- Acetone in RMW-08-35, RMW-12-51, and RMW-13-35
- Benzene in BPZ-01, RMW-08-35, and RMW-14-50
- Carbon disulfide in BMW-07, and RMW-14-50

- Chloromethane in BMW-07, BMW-08, and RMW-13-35
- Toluene and cis-1,2-dichloroethene in RMW-12-51

Pesticides and PCBs in Groundwater: Beta-BHC, gamma-chlordane, 4,4'-DDD, and heptachlor, were detected in the method blanks. The results for analytes below the reporting limits in samples from the indicated locations were qualified as non-detected at the quantitation limit and flagged "U".

- beta-BHC in RMW-14-50
- gamma-Chlordane in RMW-08-35 and RMW-13-35
- 4,4'DDD in BMW-07 and RMW-08-35
- Heptachlor in RMW-14-50

SVOCs in Groundwater: Dibenz(a,h)anthracene, di-n-butyl phthalate, and naphthalene were detected in the method blanks. The results for these analytes below the reporting limits were qualified as non-detected at the quantitation limit and flagged "U".

- Dibenz(a,h)anthracene in BPZ-01
- Di-n-butyl phthalate in BPZ-01, RMW-08-35, and RMW-12-51
- Naphthalene in BPZ-01 and RMW-13-35

A11.2.2 Initial Calibration (Reason Code RSD)

SVOCs in Groundwater: The pentachlorophenol initial calibration exceeded the %RSD control limit. The result for pentachlorophenol in the sample from location RMW-13-35 was qualified as estimated, J.

A11.2.3 Initial Calibration (Reason Code IRRF)

VOCs in Groundwater: The tert-butyl alcohol initial calibration %RRF was below the required limit. The quantitation limit for tert-butyl alcohol in the sample from location RMW-12-51 was rejected, R.

A11.2.4 Continuing Calibration (Reason Code C%D)

VOCs in Groundwater: The continuing calibration %D was outside the control limit for the following analytes in the samples from the indicated locations:

- Acetone, tert-butyl alcohol, 1,2-dibromo-3-chloropropane, methyl ethyl ketone, 1,1,1-trichloroethane, carbon tetrachloride, and Freon 11 in BMW-07
- Methyl acetate in RMW-12-51
- Bromoform in RMW-14-50
- Tert-butyl alcohol in RMW-12-51
- 1,1,1-Trichloroethane, 1,2-dibromo-3-chloropropane, acetone, carbon tetrachloride, Freon 11, methyl ethyl ketone, and tert-butyl alcohol in BMW-08

The results and quantitation limits were estimated, J.

SVOCs in Groundwater: The result for the following analytes was estimated due to %Ds outside the acceptance criteria in the associated continuing calibrations standard:

- Pentachlorophenol in the sample from location RMW-13-35

Pesticides and PCBs in Groundwater: The result for the following analytes was estimated due to %Ds outside the acceptance criteria in the associated continuing calibrations standard:

- Endrin aldehyde in the sample from location BMW-07

A11.2.5 Surrogates (Reason Code Sur)

VOCs in Groundwater: At least one surrogate in the samples from the indicated locations was outside the control limits. The affected results in the following samples are listed in Table A11-2, indicated by the Reason Code "Sur":

- BPZ-01, BMW-07, BMW-08, and RMW-12-51

VOCs in Groundwater: Quantitation limits in the following samples were rejected in samples from the indicated locations because surrogates were recovered below 20 percent:

- Forty-five VOCs in BMW-08
- Twenty-five VOCs in BPZ-01
- Twenty-three VOCs in RMW-03-15

See Table A11-2 for the specific target analytes qualified.

SVOCs in Groundwater: At least one surrogate was outside the control limits. The affected target analyte results in the samples from the indicated locations were listed in Table A11-2, indicated by the Reason Code "Sur":

- BPZ-01 and RMW-14-50

Organochlorine Pesticides and PCBs in Groundwater: The recovery for decachlorobiphenyl (DCB) was below the lower control limit but greater than 10 percent in samples from the following locations: BMW-07, RMW-13-35, and BPZ-01. Associated quantitation limits for Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260 were estimated, UJ.

The recovery for DCB was below the LCL for both columns, but above 10 percent in samples from locations BMW-08 and RMW-13-35. Associated results and quantitation limits were qualified as estimated, J.

DCB recovery was below the LCL on one column for the sample from location BMW-07. Associated results for 4,4'-DDD and endrin aldehyde were qualified as estimated, J.

The DCB recovery was below the LCL on one column for the sample from location RMW-08-35. Results for 4,4'DDE and 4,4'DDD were qualified as estimated, J.

The DCB recovery was below 10 percent for both columns for the sample from location RMW-14-50. Detected results for aldrin and gamma-chlordane were estimated, J.

Organochlorine Pesticides and PCBs in Groundwater: The analyte quantitation limits were rejected, R, because surrogates were recovered below 10 percent for 26 analytes in the

sample from location RMW-14-50. The specific analytes are listed in Table A11-2 with Reason Code "Sur."

A11.2.6 Internal Standard (Reason Code IS)

VOCs in Groundwater: All internal standard responses were below the lower control limit based on the continuing calibration standard. The quantitation limits for the following analytes in the samples from the indicated locations were flagged as estimated, "J":

- Chloromethane in BMW-08
- Carbon disulfide, benzene and tert-butyl-alcohol in BPZ-01

VOCs in Groundwater: All internal standard responses were below the lower control limit based on the continuing calibration standard. The quantitation limits for the following analytes in the samples from the indicated locations were qualified as rejected, R:

- All target analytes in BPZ-01 and BMW-08

SVOCs SIM in Groundwater: All internal standard responses were below the lower control limit based on the daily calibration standard. The quantitation limit for the following analytes in the sample from the indicated location flagged as estimated, J:

- Anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-c,d)pyrene, naphthalene, phenanthrene, pyrene and acenaphthylene in BPZ-01

SVOCs SIM in Groundwater: Internal standard responses were below the lower control limit based on the continuing calibration standard. The quantitation limits for the following analytes in the sample from the indicated location were qualified as rejected, R:

- 2-Methylnaphthalene, acenaphthene, fluorene, and pentachlorophenol in BPZ-01

A11.2.7 ICP Serial Dilution (Reason Code ICP)

Total Metals by ICP-AES in Groundwater: A serial dilution was performed on the sample from location RMW-02-50. The ±10% serial dilution criteria were met except for potassium, barium, manganese and nickel. The results for these were qualified as estimated, J.

A11.2.8 Second Column Confirmation (Reason Code CF)

Organochlorine Pesticides/PCBs in Groundwater: The confirmation %RPD results exceeded the QC limits for the following samples. Results for the following analytes in the samples from the indicated locations were flagged as estimated, J:

- Aldrin, beta-BHC, gamma chlordane and heptachlor in RMW-14-50
- Alpha-BHC and gamma chlordane in BMW-08
- Gamma chlordane in RMW-08-35
- Gamma chlordane and endrin aldehyde in RMW-13-35
- Dieldrin and endrin aldehyde in RMW-12-51
- Endrin aldehyde in BMW-07
- Heptachlor in BPZ-01

TABLE A11-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
06262G (EPA Region 9)				
Anions, EPA Method 300.0				
	BMW-01	N	BMW-01-0906	Tier 1A
	BMW-03	N	BMW-03-0906	Tier 1A
	BMW-06	N	BMW-06-0906	Tier 1A
	BMW-07	N	BMW-07-0906	Tier 1A
	BMW-08	N	BMW-08-0906	Tier 1A
	RMW-04-15	N	RMW-04-15-0906	Tier 1A
	RMW-05-15	N	RMW-05-15-0906	Tier 1A
	RMW-06-15	N	RMW-06-15-0906	Tier 1A
	RMW-07-15	N	RMW-07-15-0906	Tier 1A
	RMW-07-35	N	RMW-07-35-0906	Tier 1A
	RMW-09-15	N	RMW-09-15-0906	Tier 1A
	RMW-09-15	FD	RMW-91-15-0906	Tier 1A
	RMW-09-35	N	RMW-09-35-0906	Tier 1A
	RMW-10-15	N	RMW-10-15-0906	Tier 1A
	RMW-10-15	FD	RMW-90-15-0906	Tier 1A
	RMW-10-35	N	RMW-10-35-0906	Tier 1A
	RMW-11-35	N	RMW-11-35-0906	Tier 1A
	RMW-14-50	N	RMW-14-50-0906	Tier 1A
Dissolved Gases, EPA Method RSK-175				
	BMW-01	N	BMW-01-0906	Tier 1A
	BMW-03	N	BMW-03-0906	Tier 1A
	BMW-06	N	BMW-06-0906	Tier 1A
	BMW-07	N	BMW-07-0906	Tier 1A
	BMW-08	N	BMW-08-0906	Tier 1A
	RMW-04-15	N	RMW-04-15-0906	Tier 1A
	RMW-05-15	N	RMW-05-15-0906	Tier 1A
	RMW-06-15	N	RMW-06-15-0906	Tier 1A
	RMW-07-15	N	RMW-07-15-0906	Tier 1A
	RMW-07-35	N	RMW-07-35-0906	Tier 1A
	RMW-09-15	N	RMW-09-15-0906	Tier 1A
	RMW-09-15	FD	RMW-91-15-0906	Tier 1A
	RMW-09-35	N	RMW-09-35-0906	Tier 1A
	RMW-10-15	N	RMW-10-15-0906	Tier 1A
	RMW-10-15	FD	RMW-90-15-0906	Tier 1A
	RMW-10-35	N	RMW-10-35-0906	Tier 1A
	RMW-11-35	N	RMW-11-35-0906	Tier 1A
	RMW-14-50	N	RMW-14-50-0906	Tier 1A

TABLE A11-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
06271A (EPA Region 9)				
Anions, EPA Method 300.0				
	BPZ-01	N	BPZ-01-0906	Tier 1A
	MW-12	N	MW-12-0906	Tier 1A
	RMW-01-17	N	RMW-01-17-0906	Tier 1A
	RMW-01-35	N	RMW-01-35-0906	Tier 1A
	RMW-01-35	FD	RMW-99-35-0906	Tier 1A
	RMW-02-13	N	RMW-02-13-0906	Tier 1A
	RMW-02-32	N	RMW-02-32-0906	Tier 1A
	RMW-02-50	N	RMW-02-50-0906	Tier 1A
	RMW-03-15	N	RMW-03-15-0906	Tier 1A
	RMW-08-15	N	RMW-08-15-0906	Tier 1A
	RMW-08-35	N	RMW-08-35-0906	Tier 1A
	RMW-12-32	N	RMW-12-32-0906	Tier 1A
	RMW-12-51	N	RMW-12-51-0906	Tier 1A
	RMW-13-35	N	RMW-13-35-0906	Tier 1A
Dissolved Gases, EPA Method RSK-175				
	BPZ-01	N	BPZ-01-0906	Tier 1A
	RMW-01-17	N	RMW-01-17-0906	Tier 1A
	RMW-01-35	N	RMW-01-35-0906	Tier 1A
	RMW-01-35	FD	RMW-99-35-0906	Tier 1A
	RMW-02-13	N	RMW-02-13-0906	Tier 1A
	RMW-02-32	N	RMW-02-32-0906	Tier 1A
	RMW-02-50	N	RMW-02-50-0906	Tier 1A
	RMW-03-15	N	RMW-03-15-0906	Tier 1A
	RMW-08-15	N	RMW-08-15-0906	Tier 1A
	RMW-08-35	N	RMW-08-35-0906	Tier 1A
	RMW-12-32	N	RMW-12-32-0906	Tier 1A
	RMW-12-32	FD	RMW-88-32-0906	Tier 1A
	RMW-12-51	N	RMW-12-51-0906	Tier 1A
	RMW-13-35	N	RMW-13-35-0906	Tier 1A

TABLE A11-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
BMW-01-0906 (Frontier)				
Chlorinated Furans/Dioxins Low Method				
	BMW-01	N	BMW-01-0906	Tier 2
	BMW-03	N	BMW-03-0906	Tier 2
	BMW-07	N	BMW-07-0906	Tier 2
	BMW-08	N	BMW-08-0906	Tier 2
	BPZ-01	N	BPZ-01-0906	Tier 2
	MW-12	N	MW-12-0906	Tier 2
	RMW-01-17	N	RMW-01-17-0906	Tier 2
	RMW-01-35	N	RMW-01-35-0906	Tier 2
	RMW-04-15	N	RMW-04-15-0906	Tier 2
	RMW-05-15	N	RMW-05-15-0906	Tier 2
	RMW-08-35	N	RMW-08-35-0906	Tier 2
	RMW-09-15	N	RMW-09-15-0906	Tier 2
	RMW-09-15	FD	RMW-91-15-0906	Tier 2
	RMW-09-35	N	RMW-09-35-0906	Tier 2
	RMW-12-32	N	RMW-12-32-0906	Tier 2
	RMW-12-51	N	RMW-12-51-0906	Tier 2
	RMW-13-35	N	RMW-13-35-0906	Tier 2
	RMW-14-50	N	RMW-14-50-0906	Tier 2
MY2W27 (Sentinel)				
Inorganics, CLP-SOW (Filtered)				
	BMW-01	N	BMW-01-0906	Tier 2
	BMW-03	N	BMW-03-0906	Tier 2
	BMW-06	N	BMW-06-0906	Tier 2
	RMW-04-15	N	RMW-04-15-0906	Tier 2
	RMW-05-15	N	RMW-05-15-0906	Tier 2
	RMW-06-15	N	RMW-06-15-0906	Tier 2
	RMW-07-15	N	RMW-07-15-0906	Tier 2
	RMW-07-35	N	RMW-07-35-0906	Tier 2
	RMW-10-15	N	RMW-10-15-0906	Tier 2
	RMW-10-15	FD	RMW-90-15-0906	Tier 2
	RMW-10-35	N	RMW-10-35-0906	Tier 2
	RMW-11-35	N	RMW-11-35-0906	Tier 2
MY2W28 (Sentinel)				
Inorganics, CLP-SOW				
	BMW-01	N	BMW-01-0906	Tier 2
	BMW-03	N	BMW-03-0906	Tier 2
	BMW-06	N	BMW-06-0906	Tier 2
	RMW-04-15	N	RMW-04-15-0906	Tier 2
	RMW-05-15	N	RMW-05-15-0906	Tier 2
	RMW-06-15	N	RMW-06-15-0906	Tier 2
	RMW-07-15	N	RMW-07-15-0906	Tier 2
	RMW-07-35	N	RMW-07-35-0906	Tier 2
	RMW-10-15	N	RMW-10-15-0906	Tier 2
	RMW-10-15	FD	RMW-90-15-0906	Tier 2
	RMW-10-35	N	RMW-10-35-0906	Tier 2
	RMW-11-35	N	RMW-11-35-0906	Tier 2

TABLE A11-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY2W29 (Sentinel)				
Inorganics, CLP-SOW (Filtered)				
	BMW-01	N	BMW-01-0906	Tier 2
	BMW-03	N	BMW-03-0906	Tier 2
	BMW-06	N	BMW-06-0906	Tier 2
	RMW-04-15	N	RMW-04-15-0906	Tier 2
	RMW-05-15	N	RMW-05-15-0906	Tier 2
	RMW-06-15	N	RMW-06-15-0906	Tier 2
	RMW-07-15	N	RMW-07-15-0906	Tier 2
	RMW-07-35	N	RMW-07-35-0906	Tier 2
	RMW-10-15	N	RMW-10-15-0906	Tier 2
	RMW-10-15	FD	RMW-90-15-0906	Tier 2
	RMW-10-35	N	RMW-10-35-0906	Tier 2
	RMW-11-35	N	RMW-11-35-0906	Tier 2
MY2W30 (Sentinel)				
Inorganics, CLP-SOW				
	BMW-01	N	BMW-01-0906	Tier 2
	BMW-03	N	BMW-03-0906	Tier 2
	BMW-06	N	BMW-06-0906	Tier 2
	RMW-04-15	N	RMW-04-15-0906	Tier 2
	RMW-05-15	N	RMW-05-15-0906	Tier 2
	RMW-06-15	N	RMW-06-15-0906	Tier 2
	RMW-07-15	N	RMW-07-15-0906	Tier 2
	RMW-07-35	N	RMW-07-35-0906	Tier 2
	RMW-10-15	N	RMW-10-15-0906	Tier 2
	RMW-10-15	FD	RMW-90-15-0906	Tier 2
	RMW-10-35	N	RMW-10-35-0906	Tier 2
	RMW-11-35	N	RMW-11-35-0906	Tier 2
MY2W55 (Sentinel)				
Inorganics, CLP-SOW (Filtered)				
	BMW-07	N	BMW-07-0906	Tier 2
	BMW-08	N	BMW-08-0906	Tier 2
	BPZ-01	N	BPZ-01-0906	Tier 2
	MW-12	N	MW-12-0906	Tier 2
	RMW-01-17	N	RMW-01-17-0906	Tier 2
	RMW-01-35	N	RMW-01-35-0906	Tier 2
	RMW-01-35	FD	RMW-99-35-0906	Tier 2
	RMW-02-13	N	RMW-02-13-0906	Tier 2
	RMW-02-32	N	RMW-02-32-0906	Tier 2
	RMW-02-50	N	RMW-02-50-0906	Tier 2
	RMW-08-15	N	RMW-08-15-0906	Tier 2
	RMW-08-35	N	RMW-08-35-0906	Tier 2
	RMW-09-15	N	RMW-09-15-0906	Tier 2
	RMW-09-15	FD	RMW-91-15-0906	Tier 2
	RMW-09-35	N	RMW-09-35-0906	Tier 2
	RMW-12-32	N	RMW-12-32-0906	Tier 2
	RMW-12-51	N	RMW-12-51-0906	Tier 2
	RMW-13-35	N	RMW-13-35-0906	Tier 2
	RMW-14-50	N	RMW-14-50-0906	Tier 2

TABLE A11-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY2W56 (Sentinel)				
Inorganics, CLP-SOW				
	BMW-07	N	BMW-07-0906	Tier 2
	BMW-08	N	BMW-08-0906	Tier 2
	BPZ-01	N	BPZ-01-0906	Tier 2
	MW-12	N	MW-12-0906	Tier 2
	RMW-01-17	N	RMW-01-17-0906	Tier 2
	RMW-01-35	N	RMW-01-35-0906	Tier 2
	RMW-01-35	FD	RMW-99-35-0906	Tier 2
	RMW-08-35	N	RMW-08-35-0906	Tier 2
	RMW-09-15	N	RMW-09-15-0906	Tier 2
	RMW-09-15	FD	RMW-91-15-0906	Tier 2
	RMW-09-35	N	RMW-09-35-0906	Tier 2
	RMW-12-32	N	RMW-12-32-0906	Tier 2
	RMW-12-51	N	RMW-12-51-0906	Tier 2
	RMW-13-35	N	RMW-13-35-0906	Tier 2
	RMW-14-50	N	RMW-14-50-0906	Tier 2
MY2W57 (Sentinel)				
Inorganics, CLP-SOW (Filtered)				
	BMW-07	N	BMW-07-0906	Tier 2
	BMW-08	N	BMW-08-0906	Tier 2
	BPZ-01	N	BPZ-01-0906	Tier 2
	MW-12	N	MW-12-0906	Tier 2
	RMW-01-17	N	RMW-01-17-0906	Tier 2
	RMW-01-35	N	RMW-01-35-0906	Tier 2
	RMW-01-35	FD	RMW-99-35-0906	Tier 2
	RMW-02-13	N	RMW-02-13-0906	Tier 2
	RMW-02-32	N	RMW-02-32-0906	Tier 2
	RMW-02-50	N	RMW-02-50-0906	Tier 2
	RMW-08-15	N	RMW-08-15-0906	Tier 2
	RMW-08-35	N	RMW-08-35-0906	Tier 2
	RMW-09-15	N	RMW-09-15-0906	Tier 2
	RMW-09-15	FD	RMW-91-15-0906	Tier 2
	RMW-09-35	N	RMW-09-35-0906	Tier 2
	RMW-12-32	N	RMW-12-32-0906	Tier 2
	RMW-12-51	N	RMW-12-51-0906	Tier 2
	RMW-13-35	N	RMW-13-35-0906	Tier 2
	RMW-14-50	N	RMW-14-50-0906	Tier 2
MY2WA3 (Sentinel)				
Inorganics, CLP-SOW				
	RMW-02-13	N	RMW-02-13-0906	Tier 3
	RMW-02-32	N	RMW-02-32-0906	Tier 3
	RMW-02-50	N	RMW-02-50-0906	Tier 3
	RMW-03-15	N	RMW-03-15-0906	Tier 3
	RMW-08-15	N	RMW-08-15-0906	Tier 3

TABLE A11-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY2WA5 (Sentinel)				
Inorganics, CLP-SOW				
	RMW-02-13	N	RMW-02-13-0906	Tier 3
	RMW-02-32	N	RMW-02-32-0906	Tier 3
	RMW-02-50	N	RMW-02-50-0906	Tier 3
	RMW-03-15	N	RMW-03-15-0906	Tier 3
	RMW-08-15	N	RMW-08-15-0906	Tier 3
MY2Z54 (Sentinel)				
Inorganics, CLP-SOW				
	BMW-07	N	BMW-07-0906	Tier 2
	BMW-08	N	BMW-08-0906	Tier 2
	BPZ-01	N	BPZ-01-0906	Tier 2
	MW-12	N	MW-12-0906	Tier 2
	RMW-01-17	N	RMW-01-17-0906	Tier 2
	RMW-01-35	N	RMW-01-35-0906	Tier 2
	RMW-01-35	FD	RMW-99-35-0906	Tier 2
	RMW-08-35	N	RMW-08-35-0906	Tier 2
	RMW-09-15	N	RMW-09-15-0906	Tier 2
	RMW-09-15	FD	RMW-91-15-0906	Tier 2
	RMW-09-35	N	RMW-09-35-0906	Tier 2
	RMW-12-32	N	RMW-12-32-0906	Tier 2
	RMW-12-51	N	RMW-12-51-0906	Tier 2
	RMW-13-35	N	RMW-13-35-0906	Tier 2
	RMW-14-50	N	RMW-14-50-0906	Tier 2
RMW-02-13-0906 (Frontier)				
Chlorinated Furans/Dioxins Low Method				
	RMW-02-13	N	RMW-02-13-0906	Tier 3
	RMW-02-32	N	RMW-02-32-0906	Tier 3
	RMW-02-50	N	RMW-02-50-0906	Tier 3
	RMW-03-15	N	RMW-03-15-0906	Tier 3
	RMW-08-15	N	RMW-08-15-0906	Tier 3
RMW-06-15-0906 (Frontier)				
Chlorinated Furans/Dioxins Low Method				
	BMW-06	N	BMW-06-0906	Tier 2
	RMW-06-15	N	RMW-06-15-0906	Tier 2
	RMW-07-15	N	RMW-07-15-0906	Tier 2
	RMW-07-35	N	RMW-07-35-0906	Tier 2
	RMW-10-15	N	RMW-10-15-0906	Tier 2
	RMW-10-15	FD	RMW-90-15-0906	Tier 2
	RMW-10-35	N	RMW-10-35-0906	Tier 2
	RMW-11-35	N	RMW-11-35-0906	Tier 2

TABLE A11-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2W27 (Shealy)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	BMW-01	N	BMW-01-0906	Tier 2
	BMW-03	N	BMW-03-0906	Tier 2
	BMW-06	N	BMW-06-0906	Tier 2
	RMW-04-15	N	RMW-04-15-0906	Tier 2
	RMW-05-15	N	RMW-05-15-0906	Tier 2
	RMW-06-15	N	RMW-06-15-0906	Tier 2
	RMW-07-15	N	RMW-07-15-0906	Tier 2
	RMW-07-35	N	RMW-07-35-0906	Tier 2
	RMW-09-15	N	RMW-09-15-0906	Tier 2
	RMW-09-15	FD	RMW-91-15-0906	Tier 2
	RMW-09-35	N	RMW-09-35-0906	Tier 2
	RMW-10-15	N	RMW-10-15-0906	Tier 2
	RMW-10-15	FD	RMW-90-15-0906	Tier 2
	RMW-10-35	N	RMW-10-35-0906	Tier 2
	RMW-11-35	N	RMW-11-35-0906	Tier 2
Semivolatile Organics (SIM), CLP-SOW				
	BMW-01	N	BMW-01-0906	Tier 2
	BMW-03	N	BMW-03-0906	Tier 2
	BMW-06	N	BMW-06-0906	Tier 2
	RMW-04-15	N	RMW-04-15-0906	Tier 2
	RMW-05-15	N	RMW-05-15-0906	Tier 2
	RMW-06-15	N	RMW-06-15-0906	Tier 2
	RMW-07-15	N	RMW-07-15-0906	Tier 2
	RMW-07-35	N	RMW-07-35-0906	Tier 2
	RMW-09-15	N	RMW-09-15-0906	Tier 2
	RMW-09-15	FD	RMW-91-15-0906	Tier 2
	RMW-09-35	N	RMW-09-35-0906	Tier 2
	RMW-10-15	N	RMW-10-15-0906	Tier 2
	RMW-10-15	FD	RMW-90-15-0906	Tier 2
	RMW-10-35	N	RMW-10-35-0906	Tier 2
	RMW-11-35	N	RMW-11-35-0906	Tier 2
Semivolatile Organics, CLP-SOW				
	BMW-01	N	BMW-01-0906	Tier 2
	BMW-03	N	BMW-03-0906	Tier 2
	BMW-06	N	BMW-06-0906	Tier 2
	RMW-04-15	N	RMW-04-15-0906	Tier 2
	RMW-05-15	N	RMW-05-15-0906	Tier 2
	RMW-06-15	N	RMW-06-15-0906	Tier 2
	RMW-07-15	N	RMW-07-15-0906	Tier 2
	RMW-07-35	N	RMW-07-35-0906	Tier 2
	RMW-09-15	N	RMW-09-15-0906	Tier 2
	RMW-09-15	FD	RMW-91-15-0906	Tier 2
	RMW-09-35	N	RMW-09-35-0906	Tier 2
	RMW-10-15	N	RMW-10-15-0906	Tier 2
	RMW-10-15	FD	RMW-90-15-0906	Tier 2
	RMW-10-35	N	RMW-10-35-0906	Tier 2
	RMW-11-35	N	RMW-11-35-0906	Tier 2

TABLE A11-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2W27 (Shealy)				
Volatile Organics/1,4-Dioxane, CLP-SOW				
	BMW-01	N	BMW-01-0906	Tier 2
	BMW-03	N	BMW-03-0906	Tier 2
	BMW-06	N	BMW-06-0906	Tier 2
	RMW-04-15	N	RMW-04-15-0906	Tier 2
	RMW-05-15	N	RMW-05-15-0906	Tier 2
	RMW-06-15	N	RMW-06-15-0906	Tier 2
	RMW-07-15	N	RMW-07-15-0906	Tier 2
	RMW-07-35	N	RMW-07-35-0906	Tier 2
	RMW-09-15	N	RMW-09-15-0906	Tier 2
	RMW-09-15	FD	RMW-91-15-0906	Tier 2
	RMW-09-35	N	RMW-09-35-0906	Tier 2
	RMW-10-15	N	RMW-10-15-0906	Tier 2
	RMW-10-15	FD	RMW-90-15-0906	Tier 2
	RMW-10-35	N	RMW-10-35-0906	Tier 2
	RMW-11-35	N	RMW-11-35-0906	Tier 2
Y2W29 (Shealy)				
1,4-Dioxane, CLP-SOW				
	BMW-01	N	BMW-01-0906	Tier 3
	BMW-03	N	BMW-03-0906	Tier 3
	BMW-06	N	BMW-06-0906	Tier 3
	BMW-07	N	BMW-07-0906	Tier 3
	BMW-08	N	BMW-08-0906	Tier 3
	RMW-04-15	N	RMW-04-15-0906	Tier 3
	RMW-05-15	N	RMW-05-15-0906	Tier 3
	RMW-06-15	N	RMW-06-15-0906	Tier 3
	RMW-07-15	N	RMW-07-15-0906	Tier 3
	RMW-07-35	N	RMW-07-35-0906	Tier 3
	RMW-09-15	N	RMW-09-15-0906	Tier 3
	RMW-09-15	FD	RMW-91-15-0906	Tier 3
	RMW-09-35	N	RMW-09-35-0906	Tier 3
	RMW-10-15	N	RMW-10-15-0906	Tier 3
	RMW-10-15	FD	RMW-90-15-0906	Tier 3
	RMW-10-35	N	RMW-10-35-0906	Tier 3
	RMW-11-35	N	RMW-11-35-0906	Tier 3
	RMW-14-50	N	RMW-14-50-0906	Tier 3
Y2W62 (Shealy)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	BMW-07	N	BMW-07-0906	Tier 3
	BMW-08	N	BMW-08-0906	Tier 3
	BPZ-01	N	BPZ-01-0906	Tier 3
	RMW-08-35	N	RMW-08-35-0906	Tier 3
	RMW-12-51	N	RMW-12-51-0906	Tier 3
	RMW-13-35	N	RMW-13-35-0906	Tier 3
	RMW-14-50	N	RMW-14-50-0906	Tier 3

TABLE A11-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2W62 (Shealy)				
Semivolatile Organics (SIM), CLP-SOW				
	BMW-07	N	BMW-07-0906	Tier 3
	BMW-08	N	BMW-08-0906	Tier 3
	BPZ-01	N	BPZ-01-0906	Tier 3
	RMW-08-35	N	RMW-08-35-0906	Tier 3
	RMW-12-51	N	RMW-12-51-0906	Tier 3
	RMW-13-35	N	RMW-13-35-0906	Tier 3
	RMW-14-50	N	RMW-14-50-0906	Tier 3
Semivolatile Organics, CLP-SOW				
	BMW-07	N	BMW-07-0906	Tier 3
	BMW-08	N	BMW-08-0906	Tier 3
	BPZ-01	N	BPZ-01-0906	Tier 3
	RMW-08-35	N	RMW-08-35-0906	Tier 3
	RMW-12-51	N	RMW-12-51-0906	Tier 3
	RMW-13-35	N	RMW-13-35-0906	Tier 3
	RMW-14-50	N	RMW-14-50-0906	Tier 3
Volatile Organics/1,4-Dioxane, CLP-SOW				
	BMW-07	N	BMW-07-0906	Tier 3
	BMW-08	N	BMW-08-0906	Tier 3
	BPZ-01	N	BPZ-01-0906	Tier 3
	RMW-08-35	N	RMW-08-35-0906	Tier 3
	RMW-12-51	N	RMW-12-51-0906	Tier 3
	RMW-13-35	N	RMW-13-35-0906	Tier 3
	RMW-14-50	N	RMW-14-50-0906	Tier 3
Y2W78 (Shealy)				
1,4-Dioxane, CLP-SOW				
	BPZ-01	N	BPZ-01-0906	Tier 2
	MW-12	N	MW-12-0906	Tier 2
	RMW-01-17	N	RMW-01-17-0906	Tier 2
	RMW-01-35	N	RMW-01-35-0906	Tier 2
	RMW-01-35	FD	RMW-99-35-0906	Tier 2
	RMW-02-13	N	RMW-02-13-0906	Tier 2
	RMW-02-32	N	RMW-02-32-0906	Tier 2
	RMW-02-50	N	RMW-02-50-0906	Tier 2
	RMW-03-15	N	RMW-03-15-0906	Tier 2
	RMW-08-15	N	RMW-08-15-0906	Tier 2
	RMW-08-35	N	RMW-08-35-0906	Tier 2
	RMW-12-32	N	RMW-12-32-0906	Tier 2
	RMW-12-32	FD	RMW-88-32-0906	Tier 2
	RMW-12-51	N	RMW-12-51-0906	Tier 2
	RMW-13-35	N	RMW-13-35-0906	Tier 2

TABLE A11-1
Sample Delivery Group Reference - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2W87 (Shealy)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	MW-12	N	MW-12-0906	Tier 2
	RMW-01-17	N	RMW-01-17-0906	Tier 2
	RMW-01-35	N	RMW-01-35-0906	Tier 2
	RMW-01-35	FD	RMW-99-35-0906	Tier 2
	RMW-02-13	N	RMW-02-13-0906	Tier 2
	RMW-02-32	N	RMW-02-32-0906	Tier 2
	RMW-02-50	N	RMW-02-50-0906	Tier 2
	RMW-03-15	N	RMW-03-15-0906	Tier 2
	RMW-08-15	N	RMW-08-15-0906	Tier 2
	RMW-12-32	N	RMW-12-32-0906	Tier 2
Semivolatile Organics (SIM), CLP-SOW				
	MW-12	N	MW-12-0906	Tier 2
	RMW-01-17	N	RMW-01-17-0906	Tier 2
	RMW-01-35	N	RMW-01-35-0906	Tier 2
	RMW-01-35	FD	RMW-99-35-0906	Tier 2
	RMW-02-13	N	RMW-02-13-0906	Tier 2
	RMW-02-32	N	RMW-02-32-0906	Tier 2
	RMW-02-50	N	RMW-02-50-0906	Tier 2
	RMW-03-15	N	RMW-03-15-0906	Tier 2
	RMW-08-15	N	RMW-08-15-0906	Tier 2
	RMW-12-32	N	RMW-12-32-0906	Tier 2
	RMW-12-32	FD	RMW-88-32-0906	Tier 2
Semivolatile Organics, CLP-SOW				
	MW-12	N	MW-12-0906	Tier 2
	RMW-01-17	N	RMW-01-17-0906	Tier 2
	RMW-01-35	N	RMW-01-35-0906	Tier 2
	RMW-01-35	FD	RMW-99-35-0906	Tier 2
	RMW-02-13	N	RMW-02-13-0906	Tier 2
	RMW-02-32	N	RMW-02-32-0906	Tier 2
	RMW-02-50	N	RMW-02-50-0906	Tier 2
	RMW-03-15	N	RMW-03-15-0906	Tier 2
	RMW-08-15	N	RMW-08-15-0906	Tier 2
	RMW-12-32	N	RMW-12-32-0906	Tier 2
	RMW-12-32	FD	RMW-88-32-0906	Tier 2
Volatile Organics/1,4-Dioxane, CLP-SOW				
	MW-12	N	MW-12-0906	Tier 2
	RMW-01-17	N	RMW-01-17-0906	Tier 2
	RMW-01-35	N	RMW-01-35-0906	Tier 2
	RMW-01-35	FD	RMW-99-35-0906	Tier 2
	RMW-02-13	N	RMW-02-13-0906	Tier 2
	RMW-02-32	N	RMW-02-32-0906	Tier 2
	RMW-02-50	N	RMW-02-50-0906	Tier 2
	RMW-03-15	N	RMW-03-15-0906	Tier 2
	RMW-08-15	N	RMW-08-15-0906	Tier 2
	RMW-12-32	N	RMW-12-32-0906	Tier 2
	RMW-12-32	FD	RMW-88-32-0906	Tier 2

Notes:
N regular sample
FD field duplicate

TABLE A11-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-01-35 (FD)	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15
	Sample Date		9/22/2006	9/22/2006	9/20/2006	9/26/2006	9/26/2006	9/27/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/29/2006	9/29/2006	9/29/2006	9/29/2006	9/22/2006	9/22/2006	9/19/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	200	µg/L	*	*	*	0.5 UJ C%D	0.5 R C%D, IS, Sur	0.5 R IS, Sur	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	0.5 R IS, Sur	*	*	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	*	*	*	*	*	*	*	0.5 R IS	*	*	*
1,1,2-Trichloroethane	5	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	0.5 UJ Sur	*	*	13 J Sur	*	*	0.5 R IS, Sur	*	*	*
1,1-Dichloroethane	5	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	*	**240 J FD**	**150 J FD**	*	**1,300 J >IC**	*	0.5 R IS, Sur	*	*	*
1,1-Dichloroethene	6	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	0.5 R IS, Sur	*	*	*
1,2,3-Trichlorobenzene	NE	µg/L	*	*	*	*	0.5 R IS	0.5 R IS	*	*	*	*	3.9 J Sur	*	*	0.5 R IS	*	*	*
1,2,4-Trichlorobenzene	5	µg/L	*	*	*	*	0.5 R IS	0.5 R IS	*	*	*	*	12 J Sur	*	*	0.5 R IS	*	*	*
1,2,4-Trimethylbenzene	12	µg/L	*	*	*	*	5 R IS	5 R IS	**170 J >IC**	*	*	*	**130 J >IC**	**990 J >IC**	*	5 R IS	*	*	*
1,2-Dibromo-3-chloropropane	0.2	µg/L	*	*	*	0.5 UJ C%D	0.5 R C%D, IS, Sur	**0.5 R IS**	*	*	*	*	*	*	*	**0.5 R IS**	*	*	*
1,2-Dibromoethane	0.05	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	0.5 R IS, Sur	*	*	*
1,2-Dichlorobenzene	600	µg/L	*	*	*	*	0.5 R IS	0.5 R IS	*	*	470 J FD	290 J FD	*	**5,700 J >IC**	*	0.5 R IS	*	*	*
1,2-Dichloroethane	0.5	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	0.5 UJ Sur	0.5 UJ Sur	*	**38 J >IC**	*	*	0.5 R IS, Sur	*	*	*
1,2-Dichloropropane	5	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	*	*	*	*	*	*	*	0.5 R IS	*	*	*
1,3,5-Trimethylbenzene	12	µg/L	*	*	*	*	5 R IS	5 R IS	**270 J >IC**	*	*	*	*	**2,500 J >IC**	*	5 R IS	*	*	*
1,3-Dichlorobenzene	180	µg/L	*	*	*	*	0.5 R IS	0.5 R IS	*	*	*	*	*	*	*	0.5 R IS	*	*	*
1,4-Dichlorobenzene	5	µg/L	*	*	*	*	0.5 R IS	0.5 R IS	*	*	**230 J FD**	**140 J FD**	11 J Sur	**990 J >IC**	*	0.5 R IS	*	*	*
2-Hexanone	NE	µg/L	*	*	*	*	5 R IS, Sur	5 R IS	*	*	*	*	*	*	*	5 R IS	*	*	*
Acetone	5,500	µg/L	*	5.9 U LB, SB, TB	*	5 UJ C%D, Sur	5 R C%D, IS, Sur	5 R IS, Sur	*	5 UJ Sur	5 UJ Sur	5 UJ Sur	*	**7,400 J >IC**	5 UJ Sur	23 J IS	5 UJ Sur	5 UJ LB, SB, Sur, TB	5 U LB, SB
Benzene	1	µg/L	0.5 U SB, TB	*	0.5 U SB	0.5 U TB	0.5 R IS, Sur	0.5 UJ IS, LB	*	*	*	*	*	*	0.5 U TB	0.5 UJ IS, TB	*	*	0.5 U SB
Bromochloromethane	NE	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	*	*	*	*	*	*	0.5 R IS, Sur	*	*	*
Bromodichloromethane	100	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	*	*	*	*	*	*	*	0.5 R IS	*	*	*
Bromoform	100	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	*	*	*	*	*	*	0.5 R IS, Sur	*	*	*
Bromomethane	8.7	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	*	*	*	*	*	*	0.5 R IS, Sur	*	*	*
Carbon disulfide	1,000	µg/L	0.5 U SB, TB	0.5 U SB, TB	*	0.5 U LB, TB	0.5 R IS, Sur	1.7 J IS, Sur	*	*	1.4 J Sur	1 J Sur	0.98 U TB	*	*	0.5 UJ IS, Sur, TB	*	3.1 J Sur	0.5 U SB
Carbon tetrachloride	0.5	µg/L	*	*	*	0.5 UJ C%D	0.5 R C%D, IS, Sur	0.5 R IS, Sur	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	0.5 R IS, Sur	*	*	*
Chlorobenzene	70	µg/L	*	*	*	*	0.5 R IS	0.5 R IS	24 J >IC	*	**470 J FD**	**280 J FD**	25 J >IC, Sur	*	*	0.5 R IS	*	*	*
Chloroethane	4.6	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	*	**330 J FD**	**200 J FD**	**37 J >IC**	*	*	0.5 R IS, Sur	*	*	*
Chloroform	100	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	*	*	*	*	*	*	0.5 R IS, Sur	*	*	*
Chloromethane	160	µg/L	0.5 U SB, TB	*	0.5 UJ SB, Sur	0.69 U LB, TB	0.5 UJ IS, LB, Sur, TB	0.5 R IS, Sur	*	0.5 U LB, SB, TB	0.66 UJ LB, SB, Sur, TB	0.69 UJ LB, SB, Sur, TB	*	*	0.5 U LB, SB, TB	0.5 R IS, Sur	*	*	0.5 U SB
cis-1,2-Dichloroethene	6	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	25,000 J Sur	*	**920 J FD**	**610 J FD**	8,900 J Sur	*	3 J Sur	0.62 UJ IS, Sur, TB	*	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	0.5 UJ Sur	*	*	*	*	*	0.5 R IS, Sur	*	*	*
Cyclohexane	10,000	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	*	*	*	*	*	*	*	0.5 R IS	*	*	*
Dibromochloromethane	100	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	*	*	*	*	*	*	0.5 R IS, Sur	*	*	*
Ethyl tert-butyl ether	NE	µg/L	*	*	*	*	5 R IS	5 R IS	*	*	*	*	*	*	*	5 R IS	*	*	*
Ethylbenzene	700	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	*	*	*	*	*	*	*	0.5 R IS	*	*	*
Freon 11	150	µg/L	*	*	*	0.5 UJ C%D	0.5 R C%D, IS, Sur	0.5 R IS, Sur	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	0.5 R IS, Sur	*	*	*
Freon 113	1,200	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	0.5 UJ Sur	0.5 UJ Sur	*	*	*	*	0.5 R IS, Sur	*	*	*
Freon 12	390	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	*	*	*	*	*	*	0.5 R IS, Sur	*	*	*
Isopropylbenzene (cumene)	660	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	35 J >IC, Sur	*	*	*	32 J >IC, Sur	*	*	0.5 R IS	*	*	*
Methyl acetate	6,100	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	80 J >IC	0.5 UJ Sur	0.5 UJ Sur	*	0.5 UJ C%D	4,000 J >IC	0.5 UJ C%D	0.5 R IS, Sur	*	*	*
Methyl ethyl ketone	7,000	µg/L	*	*	*	5 UJ C%D, Sur	5 R C%D, IS, Sur	5 R IS, Sur	5 R Sur	5 UJ Sur	5 UJ Sur	5 UJ Sur	5 UJ Sur	*	5 UJ Sur	5 R IS	5 UJ Sur	5 UJ Sur	*
Methyl isobutyl ketone	2,000	µg/L	*	*	*	*	5 R IS, Sur	5 R IS	*	*	*	*	*	**49,000 J >IC**	*	5 R IS	*	*	*
Methyl tert-butyl ether	13	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	0.25 J Sur	3.9 J Sur	*	*	*	*	0.96 J IS, Sur	*	*	*
Methylcyclohexane	NE	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	*	*	*	*	*	*	*	0.5 R IS	*	*	*
Methylene chloride	5	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	0.5 UJ Sur	4.4 J Sur	*	*	*	*	0.5 R IS, Sur	*	*	*

TABLE A11-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-01-35 (FD)	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15
	Sample Date		9/22/2006	9/22/2006	9/20/2006	9/26/2006	9/26/2006	9/27/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/29/2006	9/29/2006	9/29/2006	9/29/2006	9/22/2006	9/22/2006	9/19/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
Styrene	100	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	0.5 R RSD, Sur	0.5 UJ RSD	0.5 UJ RSD	0.5 UJ RSD	26 J >IC, Sur	*	*	0.5 R IS	*	*	*
tert-Amyl methyl ether	NE	µg/L	*	*	*	*	5 R IS	5 R IS	*	*	*	*	*	*	*	5 R IS	*	*	*
tert-Butyl alcohol	NE	µg/L	*	*	*	10 UJ C%D	10 R C%D, IS	240 J IS	*	*	*	*	10 R CRRF	*	10 R CRRF	10 R CRRF, IS	*	*	*
Tetrachloroethene	5	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	3.7 J Sur	*	1.6 J FD	2.5 J FD	1.4 J Sur	*	*	0.5 R IS	*	*	*
Toluene	150	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	**6,700 J MS, MS, SD**	0.5 U TB	*	*	**12,000 J >IC**	**6,100 J >IC**	7 J LB, MS, MS, SD, TB	1.8 J IS	*	*	*
trans-1,2-Dichloroethene	10	µg/L	*	1.4 J Sur	*	*	0.5 R IS, Sur	0.5 R IS	220 J Sur	*	*	*	45 J Sur	*	*	0.5 R IS	*	*	*
trans-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	0.5 UJ Sur	*	*	*	*	*	0.5 R IS, Sur	*	*	*
Trichloroethene	5	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	22 J >IC, MS, SD, Sur	*	*	*	11 J Sur	*	*	0.5 R IS	*	*	*
Vinyl chloride	0.5	µg/L	*	19 J Sur	*	*	0.5 R IS, Sur	0.5 R IS, Sur	*	*	**170 J FD**	**110 J FD**	*	15,000 J >IC, Sur	*	0.5 R IS, Sur	*	3.7 J Sur	*
Xylenes, total	1,750	µg/L	*	*	*	*	0.5 R IS, Sur	0.5 R IS	*	*	*	*	*	**1,810 J >IC**	*	0.8 R IS, TB	*	*	*
Semivolatile Organic Compounds																			
1,1'-Biphenyl	300	µg/L	*	*	*	*	*	*	5 R Sur	*	*	*	*	*	*	*	*	*	*
1,2,4,5-Tetrachlorobenzene	11	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/L	*	*	*	*	*	48 J Sur	*	*	110 J Sur	110 J Sur	35 J Sur	**1,600 J >IC**	0.22 J Sur	29 J Sur	*	*	*
2,2'-Oxybis(1-Chloropropane)	NE	µg/L	*	*	*	*	*	25 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
2,3,4,6-Tetrachlorophenol	NE	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
2,4,5-Trichlorophenol	3,600	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
2,4,6-Trichlorophenol	0.96	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	110	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
2,4-Dimethylphenol	730	µg/L	*	*	*	*	*	25 UJ Sur	5 R Sur	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrophenol	73	µg/L	*	10 R Sur	*	*	*	*	10 R C%D, Sur	10 UJ C%D	10 UJ C%D	10 UJ C%D	*	*	*	*	*	*	*
2,4-Dinitrotoluene	73	µg/L	*	*	*	*	*	25 UJ Sur	5 R Sur	*	*	*	*	*	*	*	*	*	*
2,6-Dinitrotoluene	36	µg/L	*	*	*	*	*	25 UJ Sur	5 R Sur	*	*	*	*	*	*	*	*	*	*
2-Chloronaphthalene	490	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
2-Chlorophenol	30	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	5 UJ MS	*	*	*	*
2-Methylnaphthalene	NE	µg/L	*	*	*	*	*	0.1 R IS, Sur	170 J >IC, C%D	*	2.9 J C%D	2.7 J C%D	290 J >IC	190 J >IC	*	*	*	*	*
2-Methylphenol	1,800	µg/L	*	*	*	*	*	25 UJ Sur	5 R Sur	*	*	*	*	*	*	*	*	*	*
2-Nitroaniline	110	µg/L	*	10 R Sur	*	*	*	*	10 R Sur	*	*	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3,3'-Dichlorobenzidine	0.15	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	5 R Sur	*	*	*	*
3-Nitroaniline	NE	µg/L	*	10 R Sur	*	*	*	*	10 R Sur	*	*	*	*	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/L	*	*	*	*	*	*	10 R C%D, Sur	10 UJ C%D	10 UJ C%D	10 UJ C%D	*	*	*	*	*	*	*
4-Bromophenylphenyl ether	NE	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
4-Chloro-3-methylphenol	NE	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
4-Chloroaniline	150	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	5 R Sur	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
4-Methylphenol	180	µg/L	*	*	*	*	*	25 UJ Sur	5 R Sur	*	*	*	*	*	*	*	*	*	*
4-Nitroaniline	NE	µg/L	*	10 R Sur	*	*	*	*	10 R Sur	*	*	*	*	*	*	*	*	*	*
4-Nitrophenol	NE	µg/L	*	10 R Sur	*	*	*	*	10 R Sur	*	*	*	*	*	*	*	*	*	*
Acenaphthene	370	µg/L	*	*	*	*	*	0.1 R IS, Sur	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	*	0.51 J IS	*	*	*	*	*
Acenaphthylene	NE	µg/L	*	*	*	*	*	0.051 J IS, Sur	11 J C%D	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	*	*	*	*
Acetophenone	NE	µg/L	*	*	*	*	*	25 UJ Sur	5 R Sur	*	*	*	*	*	*	*	*	*	*
Anthracene	1,800	µg/L	*	*	*	*	*	0.17 J IS, Sur	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	*	*	*	*
Atrazine	3	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzaldehyde	3,600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)anthracene	0.092	µg/L	*	*	*	*	*	**0.1 J IS**	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	0.5 UJ Sur	*	0.1 UJ Sur	*
Benzo(a)pyrene	0.2	µg/L	*	*	*	*	*	0.094 J IS	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	0.5 UJ Sur	*	0.1 UJ Sur	*
Benzo(b)fluoranthene	0.092	µg/L	*	*	*	*	*	**0.18 J IS**	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	0.5 UJ Sur	*	0.1 UJ Sur	*
Benzo(g,h,i)perylene	NE	µg/L	0.1 U LB	0.1 U LB	*	*	*	0.16 J IS	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	0.5 U LB	1 U LB	0.1 U LB	0.5 UJ Sur	0.1 U LB	0.1 UJ LB, Sur	*

TABLE A11-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-01-35 (FD)	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15
		Sample Date	9/22/2006	9/22/2006	9/20/2006	9/26/2006	9/26/2006	9/27/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/29/2006	9/29/2006	9/29/2006	9/29/2006	9/22/2006	9/22/2006	9/19/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
Benzo(k)fluoranthene	0.056	µg/L	*	*	*	*	*	**0.059 J IS**	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	0.5 U LB	*	*	0.5 UJ Sur	*	0.1 UJ Sur	*
Benzyl butyl phthalate	7,300	µg/L	*	*	*	*	*	*	5 R Sur	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethoxy)methane	NE	µg/L	*	*	*	*	*	25 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	0.01	µg/L	*	*	*	*	*	25 UJ Sur	*	*	*	*	*	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	4.8	µg/L	*	*	*	*	*	*	5 R Sur	*	*	*	*	*	*	*	*	*	*
Caprolactam	18,000	µg/L	*	*	*	*	*	*	5 R Sur	*	*	*	*	*	*	*	*	*	*
Carbazole	3.4	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
Chrysene	0.56	µg/L	*	*	*	*	*	0.13 J IS	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	0.5 UJ Sur	*	0.1 UJ Sur	*
Dibenz(a,h)anthracene	0.0092	µg/L	0.1 U LB	0.1 U LB	*	*	*	0.14 UJ IS, LB	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	0.5 U LB	1 U LB	0.1 U LB	0.5 UJ Sur	0.1 U LB	0.1 UJ LB, Sur	*
Dibenzofuran	12	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
Diethylphthalate	29,000	µg/L	*	*	*	*	*	*	38 J Sur	*	*	*	*	*	*	*	*	*	*
Dimethylphthalate	360,000	µg/L	*	*	*	*	*	*	5 R Sur	*	*	*	*	*	*	*	*	*	*
Di-n-butyl phthalate	3,600	µg/L	5 U LB	*	*	*	*	25 U EB, LB	5 R Sur	*	*	*	*	*	5 U LB	25 U LB	5 U LB	*	5 U LB
Di-n-octyl phthalate	1,500	µg/L	*	*	*	*	*	*	5 R IS, Sur	*	*	*	*	*	*	*	*	*	*
Fluoranthene	1,500	µg/L	*	*	*	*	*	0.35 J IS	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	0.5 UJ Sur	*	0.1 UJ Sur	*
Fluorene	240	µg/L	*	*	*	*	*	0.1 R IS, Sur	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	*	*	*	*
Hexachlorobenzene	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/L	*	*	*	*	*	*	5 UJ Sur	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	50	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	5 R Sur	*	*	*	*
Hexachloroethane	4.8	µg/L	*	*	*	*	*	25 UJ Sur	5 R Sur	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	0.092	µg/L	0.1 U LB	0.1 U LB	*	*	*	**0.13 J IS**	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	0.5 U LB	1 U LB	0.1 U LB	0.5 UJ Sur	0.1 U LB	0.1 UJ LB, Sur	*
Isophorone	71	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	0.093	µg/L	*	*	*	*	*	0.1 UJ EB, IS, LB, Sur	**220 J >IC, C%D**	*	**0.12 J C%D**	0.5 UJ C%D	**140 J >IC**	**67 J >IC**	*	*	*	*	*
Nitrobenzene	3.4	µg/L	*	*	*	*	*	25 UJ Sur	5 R Sur	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	0.0096	µg/L	*	*	*	*	*	25 UJ Sur	5 R Sur	*	*	*	*	*	5 UJ MS	*	*	*	*
N-Nitrosodiphenylamine	14	µg/L	*	*	*	*	*	25 UJ Sur	5 R Sur	*	*	*	*	*	*	*	*	*	*
Pentachlorophenol	1	µg/L	*	*	*	*	*	0.2 R IS, Sur	0.9 J C%D, RSD	1 UJ C%D	0.24 J C%D	0.21 J C%D, RSD	0.81 J C%D, RSD	2 UJ C%D	0.2 UJ C%D	1 UJ C%D	*	*	*
Phenanthrene	NE	µg/L	*	*	*	*	*	0.23 J IS, Sur	2 UJ C%D	*	0.079 J C%D, RSD	0.5 UJ C%D	*	*	*	*	*	*	*
Phenol	11,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pyrene	180	µg/L	*	*	*	*	*	0.36 J IS	2 UJ C%D	*	0.5 UJ C%D	0.5 UJ C%D	*	*	*	*	*	0.1 UJ Sur	*
Metals																			
Aluminum	1,000	µg/L	*	200 UJ CCB	*	*	419 J- Pres	*	*	*	*	*	*	*	*	*	*	*	**6,400 J LD, SerDil**
Antimony	6	µg/L	*	2 UJ ICB	*	*	2 UJ ICB, IS, Pres	2 UJ ICB	*	*	*	*	4 U LB	*	*	*	*	*	*
Arsenic	10	µg/L	*	*	*	*	**77.5 J- IS, Pres**	**126 J IS**	*	*	*	*	*	*	*	*	*	*	*
Barium	1,000	µg/L	*	*	*	*	45.5 J- IS, Pres	*	*	*	*	*	*	*	63.2 J SerDil	*	*	*	*
Beryllium	4	µg/L	*	*	*	*	1 R IS, Pres	1 UJ IS	*	*	*	*	*	*	*	*	*	*	*
Cadmium	5	µg/L	*	*	*	*	1 R IS, Pres	0.63 J IS	*	*	*	*	*	*	*	*	*	*	*
Calcium	NE	mg/L	*	*	*	*	363 J- Pres	*	*	*	*	*	*	*	*	*	*	*	*
Chromium	50	µg/L	2 UJ ICB, LB	2 UJ ICB	*	2 UJ CCB, LB	14.3 J- IS, Pres	25.9 J IS	*	*	2 UJ CCB, LB	2 UJ CCB, LB	*	4 U LB	4 U LB	*	2 UJ ICB, LB	*	*
Cobalt	730	µg/L	*	*	1 UJ CCB, ICB	*	3.2 J- IS, Pres	4.4 J IS	*	*	*	*	*	*	*	*	*	*	*
Copper	1,300	µg/L	*	*	*	*	3.3 J- IS, Pres	4.4 J IS	*	*	*	*	*	*	*	*	*	*	*
Iron	11	mg/L	*	0.1 UJ CCB, LB	0.1 U LB	*	**28.1 J- Pres**	*	*	*	*	*	*	*	*	*	*	*	7.19 J+ MS
Lead	15	µg/L	*	*	*	*	0.28 J- IS, Pres	8.2 J IS	*	*	*	*	*	*	*	*	*	*	*
Magnesium	NE	mg/L	*	*	*	*	1,790 J- Pres	*	*	*	*	*	*	*	*	*	*	*	*
Manganese	880	µg/L	*	*	*	*	309 J- IS, Pres	293 J IS	*	*	*	*	*	*	830 J SerDil	*	*	*	*
Mercury	2	µg/L	*	*	*	*	0.2 R Pres	*	*	*	*	*	*	*	*	*	*	*	*
Nickel	100	µg/L	*	*	*	*	14.8 J- IS, Pres	19.7 J IS	*	*	*	*	*	*	**225 J SerDil**	*	*	*	*

TABLE A11-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-01-35 (FD)	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15
		Sample Date	9/22/2006	9/22/2006	9/20/2006	9/26/2006	9/26/2006	9/27/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/29/2006	9/29/2006	9/29/2006	9/29/2006	9/22/2006	9/22/2006	9/19/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Metals																			
Potassium	NE	mg/L	*	*	*	*	485 J- Pres	*	*	*	*	*	*	*	5.47 J SerDil	*	*	*	9.15 J SerDil
Selenium	50	µg/L	*	*	*	*	3.6 J- IS, Pres	2.1 J IS	*	*	*	*	*	*	*	*	*	*	*
Silver	180	µg/L	*	*	*	*	1 UJ ICB, IS, Pres	1 UJ CCB, ICB, IS	*	1 UJ CCB, ICB	*	*	*	*	*	*	*	*	*
Sodium	NE	mg/L	*	*	*	*	11,900 J- Pres	*	*	*	*	*	*	*	*	*	*	*	196 J SerDil
Thallium	2	µg/L	*	*	*	*	1 R IS, Pres	1 UJ IS	*	*	*	*	*	*	*	*	*	*	*
Vanadium	36	µg/L	*	*	*	*	7.7 J- IS, Pres	**57.5 J IS**	*	*	*	*	*	*	5.5 J LD	*	*	*	*
Zinc	11,000	µg/L	*	*	*	*	5.5 J- IS, Pres	11.2 J IS	*	*	2 U LB	2 U LB	*	*	*	*	*	*	*
Metals (Dissolved)																			
Aluminum (Dissolved)	1,000	µg/L	*	*	*	*	438 J- Pres	*	*	*	*	*	*	*	*	---	*	*	*
Antimony (Dissolved)	6	µg/L	*	2 UJ ICB	2 UJ ICB	*	4 UJ ICB, IS, LB, Pres	4 UJ ICB, LB	*	*	*	*	4 UJ ICB, LB	*	*	---	*	*	*
Arsenic (Dissolved)	10	µg/L	*	*	*	*	**89.7 J- IS, Pres**	*	*	*	*	*	*	*	*	---	*	*	*
Barium (Dissolved)	1,000	µg/L	*	*	*	*	47 J- IS, Pres	*	*	*	*	*	*	*	*	---	*	*	*
Beryllium (Dissolved)	4	µg/L	*	*	1 UJ IS	*	2 R IS, Pres	*	*	*	*	*	*	*	*	---	*	*	*
Cadmium (Dissolved)	5	µg/L	*	1 UJ CCB	1 UJ CCB	*	2 R IS, Pres	0.86 J IS	*	*	*	*	*	*	*	---	*	1 UJ CCB	1 UJ CCB
Calcium (Dissolved)	NE	mg/L	*	*	*	*	370 J- Pres	*	*	*	*	*	*	*	*	---	*	*	*
Chromium (Dissolved)	50	µg/L	2 U LB	2 U LB	*	4 U LB	13.8 J- IS, Pres	*	4 U LB	4 U LB	4 U LB	4 U LB	4 U LB	4 U LB	4 U LB	---	2 U LB	*	*
Cobalt (Dissolved)	730	µg/L	*	*	1 UJ CCB, ICB	*	2.6 J- IS, Pres	*	2 UJ ICB	2 UJ ICB	*	*	*	*	*	---	*	*	*
Copper (Dissolved)	1,300	µg/L	*	*	*	*	2.5 J- IS, Pres	*	*	*	*	*	*	*	*	---	*	*	*
Iron (Dissolved)	11	mg/L	*	*	0.1 U LB	*	**28.5 J- Pres**	*	*	*	*	*	*	*	*	---	0.1 U LB	*	*
Lead (Dissolved)	15	µg/L	*	*	*	*	0.39 J- IS, Pres	*	*	*	*	*	*	*	*	---	*	*	*
Magnesium (Dissolved)	NE	mg/L	*	*	*	*	1,920 J- Pres	*	*	*	*	*	*	*	*	---	*	*	*
Manganese (Dissolved)	880	µg/L	*	*	*	*	317 J- IS, Pres	*	*	*	*	*	*	*	*	---	*	*	*
Mercury (Dissolved)	2	µg/L	*	*	*	*	0.2 R Pres	*	*	*	*	*	*	*	*	---	*	*	*
Nickel (Dissolved)	100	µg/L	*	*	*	*	11.2 J- IS, Pres	*	*	*	*	*	*	*	*	---	*	*	*
Potassium (Dissolved)	NE	mg/L	*	*	*	*	514 J- Pres	*	*	*	*	*	*	*	*	---	*	*	*
Selenium (Dissolved)	50	µg/L	*	*	*	*	10 R IS, Pres	*	*	*	*	*	*	*	*	---	*	*	*
Silver (Dissolved)	180	µg/L	*	1 UJ CCB, ICB	*	*	2 UJ ICB, IS, Pres	2 UJ ICB, IS	*	*	*	*	*	*	*	---	*	*	*
Sodium (Dissolved)	NE	mg/L	*	*	*	*	13,300 J- Pres	*	*	*	*	*	*	*	*	---	*	*	*
Thallium (Dissolved)	2	µg/L	*	*	*	*	2 R IS, Pres	*	*	*	*	*	*	*	*	---	*	*	*
Vanadium (Dissolved)	36	µg/L	*	*	*	2 U LB	13.6 J- IS, Pres	*	*	2 U LB	2 U LB	2 U LB	*	*	*	---	*	*	1 UJ ICB
Zinc (Dissolved)	11,000	µg/L	*	*	*	*	4 J- IS, Pres	*	*	*	*	*	*	*	*	---	*	*	*
Organochlorine Pesticides																			
4,4'-DDD	0.28	µg/L	0.1 UJ Sur	0.1 UJ Sur	*	0.1 UJ LB, Sur	0.1 UJ Sur	*	0.18 J CF, Sur	0.8 J Sur	0.1 UJ Sur	0.1 UJ Sur	*	0.1 UJ CF, LB, Sur	0.1 U LB	0.1 UJ LB, Sur	*	0.1 UJ Sur	*
4,4'-DDE	0.2	µg/L	0.1 UJ Sur	0.1 UJ Sur	*	*	0.1 UJ Sur	*	0.13 J CF, Sur	0.02 J Sur	0.1 UJ Sur	0.1 UJ Sur	0.4 J Sur	0.1 UJ Sur	*	0.014 J Sur	*	0.1 UJ Sur	*
4,4'-DDT	0.2	µg/L	0.1 UJ Sur	0.1 UJ Sur	*	*	0.1 UJ Sur	*	0.065 J CF, Sur	0.1 UJ Sur	0.1 UJ Sur	0.1 UJ Sur	0.057 J CF, Sur	0.1 UJ CF, LB, Sur	*	0.1 R Sur	*	0.1 UJ Sur	*
Aldrin	0.004	µg/L	0.05 UJ Sur	0.0069 J CF, Sur	*	*	0.05 UJ Sur	*	0.093 J CF, Sur	0.0066 J Sur	0.05 UJ Sur	0.05 UJ Sur	0.11 J CF, Sur	0.03 J CF, Sur	*	0.05 R Sur	*	0.05 UJ Sur	*
alpha-BHC	0.011	µg/L	0.05 UJ Sur	0.02 J CF, Sur	*	*	0.0065 J CF, Sur	*	0.052 J Sur	0.05 UJ Sur	0.05 UJ Sur	0.05 UJ Sur	0.017 J CF, Sur	0.018 J CF, Sur	*	0.05 R Sur	*	0.05 UJ Sur	*
alpha-Chlordane	0.1	µg/L	0.05 UJ Sur	0.0053 J CF, Sur	*	*	0.05 UJ Sur	*	0.22 J CF, Sur	0.05 UJ Sur	0.05 UJ Sur	0.05 UJ Sur	0.033 J CF, Sur	0.031 J CF, Sur	*	0.05 R Sur	*	0.05 UJ Sur	*
Aroclor-1016	0.5	µg/L	*	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 R Sur	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur
Aroclor-1221	0.5	µg/L	*	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 R Sur	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur
Aroclor-1232	0.5	µg/L	*	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 R Sur	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur
Aroclor-1242	0.5	µg/L	*	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 R Sur	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur
Aroclor-1248	0.5	µg/L	*	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 R Sur	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur
Aroclor-1254	0.5	µg/L	*	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 R Sur	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur
Aroclor-1260	0.5	µg/L	*	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 UJ Sur	1 R Sur	1 UJ Sur	*	1 UJ Sur	*	1 UJ Sur	1 UJ Sur
beta-BHC	0.037	µg/L	0.05 UJ Sur	0.05 UJ CF, LB, Sur	0.05 UJ CF, LB	*	0.05 UJ Sur	*	0.38 J CF, Sur	0.05 UJ Sur	0.0067 J CF, Sur	0.0068 J Sur	0.065 J CF, Sur	0.059 J CF, Sur	*	0.05 R Sur	*	0.05 UJ CF, LB, Sur	0.05 UJ CF, LB, Sur

TABLE A11-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	BMW-01	BMW-03	BMW-06	BMW-07	BMW-08	BPZ-01	MW-12	RMW-01-17	RMW-01-35	RMW-01-35 (FD)	RMW-02-13	RMW-02-32	RMW-02-50	RMW-03-15	RMW-04-15	RMW-05-15	RMW-06-15
		Sample Date	9/22/2006	9/22/2006	9/20/2006	9/26/2006	9/26/2006	9/27/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/29/2006	9/29/2006	9/29/2006	9/29/2006	9/22/2006	9/22/2006	9/19/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Organochlorine Pesticides																			
delta-BHC	NE	µg/L	0.05 UJ Sur	0.03 J Sur	*	*	0.05 UJ Sur	*	0.12 J CF, Sur	0.05 UJ Sur	0.05 UJ Sur	0.05 UJ Sur	0.0056 J CF, Sur	0.05 UJ Sur	*	0.05 R Sur	*	0.05 UJ Sur	*
Dieldrin	0.0042	µg/L	0.1 UJ Sur	0.013 J Sur	*	*	0.1 UJ Sur	*	0.67 J Sur	0.094 J Sur	0.012 J CF, Sur	0.014 J CF, Sur	0.81 J Sur	0.093 J CF, Sur	*	0.1 R Sur	*	0.1 UJ Sur	*
Endosulfan I	220	µg/L	0.05 UJ Sur	0.05 UJ Sur	*	*	0.05 UJ Sur	*	0.42 J CF, Sur	0.05 UJ Sur	0.05 UJ Sur	0.05 UJ Sur	0.0057 J CF, Sur	0.0072 J CF, Sur	*	0.05 R Sur	*	0.05 UJ Sur	*
Endosulfan II	220	µg/L	0.1 UJ Sur	0.1 UJ Sur	*	*	0.1 UJ Sur	*	0.23 J CF, Sur	0.1 UJ Sur	0.1 UJ Sur	0.1 UJ Sur	0.027 J CF, Sur	0.1 UJ Sur	*	0.1 R Sur	*	0.1 UJ Sur	*
Endosulfan sulfate	NE	µg/L	0.1 UJ Sur	0.1 UJ Sur	*	*	0.1 UJ Sur	*	0.013 J CF, Sur	0.1 UJ Sur	0.1 UJ Sur	0.1 UJ Sur	0.012 J CF, Sur	0.1 UJ Sur	*	0.1 R Sur	*	0.1 UJ Sur	*
Endrin	2	µg/L	0.1 UJ C%D, Sur	0.1 UJ C%D, Sur	*	*	0.1 UJ Sur	*	0.22 J CF, Sur	0.1 UJ Sur	0.1 UJ Sur	0.1 UJ Sur	0.015 J CF, Sur	0.039 J CF, Sur	*	0.1 R Sur	0.1 UJ C%D	0.1 UJ C%D, Sur	*
Endrin aldehyde	NE	µg/L	0.1 UJ Sur	0.1 UJ Sur	0.1 UJ C%D, CF, LB	0.0055 J C%D, CF, Sur	0.1 UJ Sur	*	0.022 J CF, Sur	0.1 UJ Sur	0.0075 J CF, Sur	0.0076 J CF, Sur	0.057 J Sur	0.015 J CF, Sur	*	0.1 R Sur	*	0.1 UJ Sur	0.1 UJ CF, LB
Endrin ketone	NE	µg/L	0.1 UJ Sur	0.1 UJ Sur	*	*	0.1 UJ Sur	*	0.1 UJ Sur	0.1 UJ Sur	0.1 UJ Sur	0.1 UJ Sur	0.047 J CF, Sur	0.022 J CF, Sur	*	0.1 R Sur	*	0.1 UJ Sur	*
gamma-BHC	0.052	µg/L	0.05 UJ Sur	0.045 J CF, Sur	*	*	0.05 UJ Sur	*	0.14 J CF, Sur	0.05 UJ Sur	0.05 UJ Sur	0.05 UJ Sur	0.038 J CF, Sur	0.021 J CF, Sur	*	0.05 R Sur	*	0.05 UJ Sur	*
gamma-Chlordane	0.1	µg/L	0.05 UJ Sur	0.05 UJ Sur	*	*	0.0062 J CF, Sur	*	0.05 UJ CF, LB, Sur	0.05 UJ CF, LB, Sur	0.05 UJ Sur	0.05 UJ CF, LB, Sur	0.0099 J CF, Sur	0.018 J CF, Sur	*	0.05 R Sur	*	0.05 UJ Sur	*
Heptachlor	0.01	µg/L	0.05 UJ Sur	0.05 UJ CF, LB, Sur	*	*	0.05 UJ Sur	**0.76 J CF**	0.19 J CF, Sur	0.05 UJ Sur	0.05 UJ Sur	0.05 UJ Sur	0.02 J CF, Sur	0.015 J CF, Sur	*	0.05 R Sur	*	0.05 UJ Sur	*
Heptachlor epoxide	0.01	µg/L	0.05 UJ Sur	0.008 J Sur	*	*	0.05 UJ Sur	*	0.11 J Sur	0.05 UJ Sur	0.05 UJ Sur	0.05 UJ Sur	0.032 J CF, Sur	0.042 J CF, Sur	*	0.05 R Sur	*	0.05 UJ Sur	*
Methoxychlor	30	µg/L	0.5 UJ Sur	0.5 UJ Sur	*	*	0.5 UJ Sur	*	0.051 J CF, Sur	0.5 UJ Sur	0.5 UJ Sur	0.0077 J CF, Sur	0.014 J CF, Sur	0.01 J CF, Sur	*	0.5 R Sur	*	0.5 UJ Sur	0.5 UJ LB, Sur
Toxaphene	3	µg/L	5 UJ Sur	5 UJ Sur	*	*	5 UJ Sur	*	5 UJ Sur	5 UJ Sur	5 UJ Sur	5 UJ Sur	5 UJ Sur	5 UJ Sur	*	5 R Sur	*	5 UJ Sur	*
Dioxins/Furans (1)																			
1,2,3,4,6,7,8-HpCDD	45	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
1,2,3,4,6,7,8-HpCDF	45	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
1,2,3,4,7,8,9-HpCDF	45	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
1,2,3,4,7,8-HxCDD	4.5	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
1,2,3,4,7,8-HxCDF	4.5	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
1,2,3,6,7,8-HxCDD	4.5	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
1,2,3,6,7,8-HxCDF	4.5	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
1,2,3,7,8,9-HxCDD	4.5	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
1,2,3,7,8,9-HxCDF	4.5	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
1,2,3,7,8-PeCDD	0.45	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
1,2,3,7,8-PeCDF	9	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
2,3,4,6,7,8-HxCDF	4.5	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
2,3,4,7,8-PeCDF	0.9	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
2,3,7,8-TCDD	0.45	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
2,3,7,8-TCDF	4.5	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
OCDD	4,500	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
OCDF	4,500	pg/L	*	*	*	*	*	*	*	*	*	---	*	*	*	*	*	*	*
Anions																			
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dissolved Gases																			
Ethane	NE	µg/L	*	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*
Ethene	NE	µg/L	*	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*
Methane	NE	µg/L	*	*	*	*	*	*	---	*	*	*	*	*	*	*	*	*	*

TABLE A11-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-15	RMW-07-35	RMW-08-15	RMW-08-35	RMW-09-15	RMW-09-15 (FD)	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-32 (FD)	RMW-12-51	RMW-13-35	RMW-14-50
		Sample Date	9/18/2006	9/18/2006	9/29/2006	9/27/2006	9/25/2006	9/25/2006	9/25/2006	9/20/2006	9/20/2006	9/20/2006	9/19/2006	9/27/2006	9/27/2006	9/27/2006	9/26/2006	9/25/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**															
Volatile Organic Compounds																		
1,1,1-Trichloroethane	200	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	77 J Sur	*	*	*	*
1,1-Dichloroethene	6	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,3-Trichlorobenzene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	12	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromo-3-chloropropane	0.2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.05	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	12	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	180	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetone	5,500	µg/L	*	5 U LB, SB, TB	*	5 U LB, TB	19 UJ FD, LB, SB	34 J FD	*	20 UJ LB, SB, Sur	*	*	*	23 J FD, Sur	33 J FD	5 U LB, TB	5 U LB	*
Benzene	1	µg/L	0.5 U SB	0.5 U SB	10 U TB	0.5 U LB	0.62 U LB, SB	0.65 U LB, SB	*	2 U LB, SB	2 U LB, SB	*	0.5 U SB	*	*	*	*	0.5 U LB, TB
Bromochloromethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromoform	100	µg/L	*	*	*	*	0.5 UJ CVES	0.5 UJ CVES	*	2 UJ CVES	2 UJ CVES	1 UJ CVES	*	*	*	*	*	0.5 UJ C%D
Bromomethane	8.7	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon disulfide	1,000	µg/L	0.5 U SB, TB	*	10 U LB, TB	*	0.5 U LB, SB	0.5 U LB, SB	0.5 U LB, SB	2 U LB, SB	2 U LB, SB	*	0.97 UJ SB, Sur	5.3 J FD	9 J FD	*	0.63 U TB	0.5 U LB, TB
Carbon tetrachloride	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	70	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	4.6	µg/L	*	0.36 J Sur	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	160	µg/L	0.5 U SB, TB	*	*	*	*	*	0.56 U LB, SB	*	*	1.7 U LB	*	0.62 U LB, SB	*	*	0.51 U LB, TB	*
cis-1,2-Dichloroethene	6	µg/L	*	*	10 U LB, TB	*	*	*	*	*	*	*	*	400 J Sur	*	0.71 UJ LB, Sur	*	*
cis-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cyclohexane	10,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibromochloromethane	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethyl tert-butyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	700	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	150	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	1,200	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	390	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	660	µg/L	*	*	*	*	0.5 UJ FD	1.4 J FD	*	*	*	*	*	*	*	*	*	*
Methyl acetate	6,100	µg/L	*	*	69 J C%D	*	*	*	*	*	*	*	*	*	*	0.5 UJ C%D	*	*
Methyl ethyl ketone	7,000	µg/L	*	*	*	*	*	*	*	20 UJ Sur	*	*	*	5 UJ Sur	*	*	*	*
Methyl isobutyl ketone	2,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	13	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylcyclohexane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	5	µg/L	*	*	10 U SB	*	*	0.5 U LB, SB	*	2 U LB, SB	2 U LB, SB	1 U LB, SB	*	0.65 U LB, SB	0.61 U LB, SB	*	*	*
Styrene	100	µg/L	*	*	*	*	*	*	*	*	*	*	*	0.5 UJ RSD	0.5 UJ RSD	*	*	*
tert-Amyl methyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
tert-Butyl alcohol	NE	µg/L	*	*	200 R CRRF	*	43 J FD	82 J FD	*	*	*	*	*	240 J FD	340 J FD	10 R C%D, IRRF	*	*
Tetrachloroethene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	150	µg/L	*	*	14 U LB, TB	0.5 U EB	*	*	0.5 U LB	2 U LB	2 U LB	*	*	*	*	0.5 U EB, LB	*	*

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Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-15	RMW-07-35	RMW-08-15	RMW-08-35	RMW-09-15	RMW-09-15 (FD)	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-32 (FD)	RMW-12-51	RMW-13-35	RMW-14-50
		Sample Date	9/18/2006	9/18/2006	9/29/2006	9/27/2006	9/25/2006	9/25/2006	9/25/2006	9/20/2006	9/20/2006	9/20/2006	9/19/2006	9/27/2006	9/27/2006	9/27/2006	9/26/2006	9/25/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**															
Volatile Organic Compounds																		
trans-1,2-Dichloroethene	10	µg/L	*	*	*	*	*	*	*	*	*	5.3 J Sur	*	29 J Sur	*	*	*	*
trans-1,3-Dichloropropene	0.5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	5	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vinyl chloride	0.5	µg/L	*	5.6 J Sur	*	*	*	*	*	*	*	21 J Sur	*	*	*	*	*	*
Xylenes, total	1,750	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Semivolatile Organic Compounds																		
1,1'-Biphenyl	300	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4,5-Tetrachlorobenzene	11	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur
1,4-Dioxane (p-dioxane)	6.1	µg/L	2 UJ Sur	*	3.6 J Sur	*	*	*	*	*	*	190 J Sur	*	**1,100 J FD**	**720 J FD**	2 UJ Sur	*	*
2,2'-Oxybis(1-Chloropropane)	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,3,4,6-Tetrachlorophenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur
2,4,5-Trichlorophenol	3,600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur
2,4,6-Trichlorophenol	0.96	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur
2,4-Dichlorophenol	110	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur
2,4-Dimethylphenol	730	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur
2,4-Dinitrophenol	73	µg/L	*	*	*	*	*	*	*	*	*	*	*	10 UJ C%D	10 UJ C%D	*	*	*
2,4-Dinitrotoluene	73	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,6-Dinitrotoluene	36	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chloronaphthalene	490	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chlorophenol	30	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylnaphthalene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	11 J >IC, C%D, FD	5.3 J FD	*	*	*
2-Methylphenol	1,800	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur
2-Nitroaniline	110	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3,3'-Dichlorobenzidine	0.15	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3-Nitroaniline	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	10 UJ C%D	10 UJ C%D	*	*	*
4-Bromophenylphenyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloro-3-methylphenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur
4-Chloroaniline	150	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Methylphenol	180	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur
4-Nitroaniline	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitrophenol	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthene	370	µg/L	*	*	*	*	*	*	*	*	*	*	*	1 UJ C%D	*	*	*	*
Acenaphthylene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	1 UJ C%D	*	*	*	*
Acetophenone	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Anthracene	1,800	µg/L	*	*	*	*	*	*	*	*	*	*	*	1 UJ C%D	*	*	*	*
Atrazine	3	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*
Benzaldehyde	3,600	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)anthracene	0.092	µg/L	*	*	0.5 R Sur	*	0.1 UJ Sur	0.1 UJ Sur	*	0.1 UJ Sur	*	*	*	1 UJ C%D	*	*	*	*
Benzo(a)pyrene	0.2	µg/L	*	*	0.5 R Sur	*	0.1 UJ Sur	0.1 UJ Sur	*	0.1 UJ Sur	*	*	*	1 UJ C%D	*	*	*	*
Benzo(b)fluoranthene	0.092	µg/L	*	*	0.5 R Sur	*	0.1 UJ Sur	0.1 UJ Sur	*	0.1 UJ Sur	*	*	*	1 UJ C%D	*	*	*	*
Benzo(g,h,i)perylene	NE	µg/L	*	*	0.5 UJ LB, Sur	*	0.1 UJ LB, Sur	0.1 UJ LB, Sur	0.1 U LB	0.03 J Sur	*	*	*	0.1 J C%D	*	*	*	*
Benzo(k)fluoranthene	0.056	µg/L	*	*	0.5 R Sur	*	0.1 UJ Sur	0.1 UJ Sur	*	0.1 UJ Sur	*	*	*	1 UJ C%D	*	*	*	*
Benzyl butyl phthalate	7,300	µg/L	5 U LB	5 U LB	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethoxy)methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	0.01	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	4.8	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Caprolactam	18,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A11-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-15	RMW-07-35	RMW-08-15	RMW-08-35	RMW-09-15	RMW-09-15 (FD)	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-32 (FD)	RMW-12-51	RMW-13-35	RMW-14-50
		Sample Date	9/18/2006	9/18/2006	9/29/2006	9/27/2006	9/25/2006	9/25/2006	9/25/2006	9/20/2006	9/20/2006	9/20/2006	9/19/2006	9/27/2006	9/27/2006	9/27/2006	9/26/2006	9/25/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**															
Semivolatile Organic Compounds																		
Carbazole	3.4	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chrysene	0.56	µg/L	*	*	0.5 R Sur	*	0.1 UJ Sur	0.1 UJ Sur	*	0.1 UJ Sur	*	*	*	1 UJ C%D	*	*	*	*
Dibenz(a,h)anthracene	0.0092	µg/L	*	*	0.5 UJ LB, Sur	*	0.1 UJ LB, Sur	0.1 UJ LB, Sur	0.1 U LB	0.029 J Sur	*	*	*	**0.094 J C%D**	*	*	*	*
Dibenzofuran	12	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Diethylphthalate	29,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dimethylphthalate	360,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Di-n-butyl phthalate	3,600	µg/L	5 U LB	5 U LB	25 U LB	5 U EB, LB	5 U LB	*	*	*	*	*	5 U LB	*	*	5 U EB, LB	*	*
Di-n-octyl phthalate	1,500	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluoranthene	1,500	µg/L	*	*	0.5 R Sur	*	0.1 UJ Sur	0.062 J Sur	*	0.1 UJ Sur	*	*	*	1 UJ C%D	*	*	*	*
Fluorene	240	µg/L	*	*	*	*	*	*	*	*	*	*	*	1 UJ C%D	*	*	*	*
Hexachlorobenzene	1	µg/L	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur	*	*	*	*
Hexachlorobutadiene	0.86	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5 UJ Sur
Hexachlorocyclopentadiene	50	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachloroethane	4.8	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	0.092	µg/L	*	*	0.5 UJ LB, Sur	*	0.1 UJ LB, Sur	0.1 UJ LB, Sur	0.1 U LB	0.027 J Sur	*	*	*	**0.1 J C%D**	*	*	*	*
Isophorone	71	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	0.093	µg/L	*	*	*	*	*	*	*	*	*	*	*	**5.5 J C%D, FD**	**3 J FD**	*	0.1 U EB, LB	*
Nitrobenzene	3.4	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	0.0096	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	14	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pentachlorophenol	1	µg/L	*	*	1 UJ C%D	*	*	*	*	*	*	*	*	2 UJ C%D	*	*	0.17 J C%D, RSD	*
Phenanthrene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	1 UJ C%D	*	*	*	*
Phenol	11,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pyrene	180	µg/L	*	*	0.076 J Sur	*	0.1 UJ Sur	0.1 UJ Sur	*	0.1 UJ Sur	*	*	*	1 UJ C%D	*	*	*	*
Metals																		
Aluminum	1,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
Antimony	6	µg/L	*	*	*	*	2 UJ ICB	2 UJ ICB	*	*	*	2 UJ IS	*	2 UJ ICB	---	*	*	*
Arsenic	10	µg/L	*	*	*	*	*	*	*	*	*	**819 J IS**	*	*	---	*	**46.3 J IS**	*
Barium	1,000	µg/L	*	*	*	*	*	*	*	*	*	21.9 J IS	*	*	---	*	*	*
Beryllium	4	µg/L	*	*	*	*	*	*	*	*	*	1 UJ IS	*	*	---	*	1 UJ IS	1 UJ IS
Cadmium	5	µg/L	*	*	*	*	*	*	*	*	*	0.39 J IS	*	*	---	*	1 UJ IS	*
Calcium	NE	mg/L	*	*	*	*	*	*	5 U LB	*	*	*	*	*	---	*	*	*
Chromium	50	µg/L	2 UJ ICB, LB	2 UJ ICB, LB	*	2 UJ CCB, EB, LB	*	*	2 U LB	*	*	5.6 J IS	2 UJ ICB, LB	*	---	*	5.3 J IS	*
Cobalt	730	µg/L	*	*	*	*	*	*	1 UJ ICB	*	*	213 J IS	1 UJ CCB, ICB	*	---	*	10.1 J IS	*
Copper	1,300	µg/L	*	*	*	*	*	*	*	*	*	16.3 J IS	*	*	---	*	2.6 J IS	*
Iron	11	mg/L	*	0.1 U LB	*	0.1 U EB	*	*	0.1 UJ CCB	*	*	*	*	0.1 U EB	---	*	*	*
Lead	15	µg/L	*	*	*	1 U EB	*	*	*	*	*	0.55 J IS	*	*	---	1 U EB	0.39 J IS	*
Magnesium	NE	mg/L	*	*	*	*	*	*	5 UJ CCB	*	*	*	*	5 U EB	---	*	*	*
Manganese	880	µg/L	*	*	*	*	*	*	*	*	*	**22,200 J IS**	*	*	---	*	*	*
Mercury	2	µg/L	*	*	*	*	*	*	*	*	*	0.2 UJ IS	*	*	---	*	*	*
Nickel	100	µg/L	*	*	*	*	*	*	*	*	*	**510 J IS**	*	*	---	*	19.1 J IS	*
Potassium	NE	mg/L	*	*	*	5 U EB	*	*	*	*	*	*	*	*	---	5 U EB	*	*
Selenium	50	µg/L	*	*	*	*	*	*	*	*	*	25.7 J IS	*	*	---	*	5 UJ IS	*
Silver	180	µg/L	*	*	*	*	*	*	*	*	*	1 UJ IS	*	*	---	*	1 UJ IS	*
Sodium	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
Thallium	2	µg/L	*	*	*	*	*	*	*	*	*	1 UJ IS	*	*	---	*	*	*
Vanadium	36	µg/L	*	*	*	*	*	*	*	*	*	10 J IS	*	*	---	*	1 UJ IS	*
Zinc	11,000	µg/L	*	*	*	*	*	*	2 U LB	*	*	10.9 J IS	*	*	---	*	7.6 J IS	*
Metals (Dissolved)																		

TABLE A11-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-15	RMW-07-35	RMW-08-15	RMW-08-35	RMW-09-15	RMW-09-15 (FD)	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-32 (FD)	RMW-12-51	RMW-13-35	RMW-14-50
		Sample Date	9/18/2006	9/18/2006	9/29/2006	9/27/2006	9/25/2006	9/25/2006	9/25/2006	9/20/2006	9/20/2006	9/20/2006	9/19/2006	9/27/2006	9/27/2006	9/27/2006	9/26/2006	9/25/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**															
Metals (Dissolved)																		
Aluminum (Dissolved)	1,000	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
Antimony (Dissolved)	6	µg/L	*	*	*	*	4 UJ ICB, LB	4 UJ ICB, LB	*	*	*	2 UJ ICB, IS	2 UJ ICB	4 UJ ICB, LB	---	*	4 UJ ICB, LB	4 UJ ICB, LB
Arsenic (Dissolved)	10	µg/L	*	*	*	*	*	*	*	*	*	**918 J IS**	*	*	---	*	*	*
Barium (Dissolved)	1,000	µg/L	*	*	*	*	*	*	*	*	*	23.9 J IS	*	*	---	*	*	*
Beryllium (Dissolved)	4	µg/L	*	*	*	*	*	*	*	*	*	1 UJ IS	*	*	---	*	*	*
Cadmium (Dissolved)	5	µg/L	1 UJ CCB	1 UJ CCB	*	*	*	*	*	*	*	1 UJ CCB, ICB, IS	*	*	---	*	2 UJ IS	*
Calcium (Dissolved)	NE	mg/L	*	*	*	*	*	*	5 U LB	*	*	*	*	*	---	*	*	*
Chromium (Dissolved)	50	µg/L	2 U LB	2 U LB	*	4 U LB	4 U LB	4 U LB	4 U LB	2 U LB	2 U LB	3.6 J IS	2 U LB	4 U LB	---	4 U LB	*	4 U LB
Cobalt (Dissolved)	730	µg/L	*	*	4 UJ ICB	*	*	*	2 UJ ICB	*	*	237 J IS	1 UJ CCB, ICB	*	---	*	*	*
Copper (Dissolved)	1,300	µg/L	*	*	*	*	*	*	*	*	*	6.1 J IS	*	*	---	*	*	*
Iron (Dissolved)	11	mg/L	*	0.1 U LB	*	*	*	*	*	0.1 U LB	0.1 U LB	*	*	0.1 UJ CCB, LB	---	0.1 UJ CCB, LB	*	*
Lead (Dissolved)	15	µg/L	*	*	*	*	*	*	*	*	*	0.11 J IS	*	*	---	*	0.28 J IS	*
Magnesium (Dissolved)	NE	mg/L	*	*	*	*	*	*	5 UJ CCB	*	*	*	*	5 UJ CCB	---	*	*	*
Manganese (Dissolved)	880	µg/L	*	*	*	*	*	*	*	*	*	**26,400 J IS**	*	*	---	*	*	*
Mercury (Dissolved)	2	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
Nickel (Dissolved)	100	µg/L	*	*	*	*	*	*	*	*	*	**552 J IS**	*	*	---	*	*	*
Potassium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
Selenium (Dissolved)	50	µg/L	*	*	*	*	*	*	*	*	*	30.5 J IS	*	*	---	*	*	*
Silver (Dissolved)	180	µg/L	*	*	2 UJ ICB	*	*	*	*	1 UJ CCB, ICB	*	1 UJ CCB, ICB, IS	*	*	---	*	2 UJ IS	*
Sodium (Dissolved)	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
Thallium (Dissolved)	2	µg/L	*	*	*	*	*	*	*	*	*	1 UJ IS	*	*	---	*	2 UJ IS	*
Vanadium (Dissolved)	36	µg/L	*	6.5 J LD	*	*	*	*	*	*	*	10.3 J IS	*	*	---	*	2 U LB	*
Zinc (Dissolved)	11,000	µg/L	*	*	*	*	*	*	*	*	*	13.8 J IS	*	*	---	*	*	*
Organochlorine Pesticides																		
4,4'-DDD	0.28	µg/L	*	*	0.1 UJ CF, LB, Sur	0.1 UJ EB, LB, Sur	0.1 R Sur	0.1 R Sur	*	0.1 UJ Sur	0.075 J CF, Sur	0.14 J CF, Sur, Sur	0.031 J CF, Sur	0.1 UJ Sur	---	*	0.1 UJ Sur	0.1 R Sur
4,4'-DDE	0.2	µg/L	*	0.0055 J CF	0.0089 J Sur	0.013 J Sur	0.1 R Sur	0.019 J CF, Sur	*	0.21 J CF, Sur, Sur	0.048 J CF, Sur	0.031 J CF, Sur, Sur	0.1 UJ Sur	0.1 UJ Sur	---	*	0.1 UJ Sur	0.1 R Sur
4,4'-DDT	0.2	µg/L	*	*	0.1 UJ Sur	*	0.1 R Sur	0.1 R Sur	*	0.1 UJ Sur	0.1 UJ CF, LB, Sur	0.1 UJ CF, LB, Sur, Sur	0.1 UJ Sur	0.0099 J CF, Sur	---	*	0.1 UJ Sur	0.1 R Sur
Aldrin	0.004	µg/L	*	**0.0054 J CF**	0.05 UJ Sur	*	0.031 J CF, Sur	0.075 J CF, Sur	*	0.15 J CF, Sur, Sur	0.18 J CF, Sur	0.042 J CF, Sur, Sur	0.05 UJ Sur	0.05 UJ Sur	---	*	0.05 UJ Sur	0.016 J CF, Sur
alpha-BHC	0.011	µg/L	*	*	0.05 UJ Sur	*	0.029 J CF, Sur	0.0065 J CF, Sur	*	0.028 J CF, Sur, Sur	0.054 J CF, Sur	0.061 J CF, Sur, Sur	0.05 UJ Sur	0.05 UJ Sur	---	*	0.05 UJ Sur	0.05 R Sur
alpha-Chlordane	0.1	µg/L	*	*	0.05 UJ Sur	*	0.009 J CF, Sur	0.036 J CF, Sur	*	0.2 J CF, Sur, Sur	0.5 J CF, Sur	0.11 J CF, Sur, Sur	0.05 UJ Sur	0.05 UJ Sur	---	*	0.05 UJ Sur	0.05 R Sur
Aroclor-1016	0.5	µg/L	*	*	1 UJ Sur	*	1 R Sur	1 R Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	*	1 UJ Sur	---	*	1 UJ Sur	1 R Sur
Aroclor-1221	0.5	µg/L	*	*	1 UJ Sur	*	1 R Sur	1 R Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	*	1 UJ Sur	---	*	1 UJ Sur	1 R Sur
Aroclor-1232	0.5	µg/L	*	*	1 UJ Sur	*	1 R Sur	1 R Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	*	1 UJ Sur	---	*	1 UJ Sur	1 R Sur
Aroclor-1242	0.5	µg/L	*	*	1 UJ Sur	*	1 R Sur	1 R Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	*	1 UJ Sur	---	*	1 UJ Sur	1 R Sur
Aroclor-1248	0.5	µg/L	*	*	1 UJ Sur	*	1 R Sur	1 R Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	*	1 UJ Sur	---	*	1 UJ Sur	1 R Sur
Aroclor-1254	0.5	µg/L	*	*	1 UJ Sur	*	1 R Sur	1 R Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	*	1 UJ Sur	---	*	1 UJ Sur	1 R Sur
Aroclor-1260	0.5	µg/L	*	*	1 UJ Sur	*	1 R Sur	1 R Sur	*	1 UJ Sur	1 UJ Sur	1 UJ Sur	*	1 UJ Sur	---	*	1 UJ Sur	1 R Sur
beta-BHC	0.037	µg/L	0.05 UJ CF, LB	0.05 UJ CF, LB	0.05 UJ CF, LB, Sur	*	0.13 J CF, Sur	0.05 UJ CF, LB, Sur	*	0.21 J CF, Sur, Sur	0.27 J CF, Sur	0.57 J CF, Sur, Sur	0.05 UJ CF, LB, Sur	0.01 J CF, Sur	---	*	0.05 UJ Sur	0.05 UJ CF, LB, Sur
delta-BHC	NE	µg/L	*	*	0.05 UJ Sur	*	0.054 J Sur	0.035 J CF, Sur	*	0.1 J CF, FD, Sur, Sur	0.16 J CF, FD, Sur	0.059 J CF, Sur, Sur	0.013 J CF, Sur	0.05 UJ Sur	---	*	0.05 UJ Sur	0.05 R Sur
Dieldrin	0.0042	µg/L	*	**0.0092 J CF**	0.1 UJ Sur	*	0.033 J CF, Sur	0.058 J Sur	*	0.18 J CF, Sur, Sur	0.23 J CF, Sur	0.055 J CF, Sur, Sur	0.1 UJ Sur	0.04 J Sur	---	**0.035 J CF**	0.1 UJ Sur	0.1 R Sur
Endosulfan I	220	µg/L	*	*	0.05 UJ Sur	*	0.0076 J CF, Sur	0.018 J CF, Sur	*	0.047 J CF, Sur, Sur	0.15 J CF, Sur	0.041 J CF, Sur, Sur	0.05 UJ Sur	0.05 UJ Sur	---	*	0.05 UJ Sur	0.05 R Sur

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Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RMW-07-15	RMW-07-35	RMW-08-15	RMW-08-35	RMW-09-15	RMW-09-15 (FD)	RMW-09-35	RMW-10-15	RMW-10-15 (FD)	RMW-10-35	RMW-11-35	RMW-12-32	RMW-12-32 (FD)	RMW-12-51	RMW-13-35	RMW-14-50
		Sample Date	9/18/2006	9/18/2006	9/29/2006	9/27/2006	9/25/2006	9/25/2006	9/25/2006	9/20/2006	9/20/2006	9/20/2006	9/19/2006	9/27/2006	9/27/2006	9/27/2006	9/26/2006	9/25/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**															
Organochlorine Pesticides																		
Endosulfan II	220	µg/L	*	*	0.1 UJ Sur	*	0.1 R Sur	0.01 J CF, Sur	*	0.043 J CF, Sur, Sur	0.064 J CF, Sur	0.1 UJ Sur	0.1 UJ Sur	0.1 UJ Sur	---	*	0.1 UJ Sur	0.1 R Sur
Endosulfan sulfate	NE	µg/L	*	0.094 J CF	0.1 UJ Sur	*	0.1 R Sur	0.1 R Sur	*	0.033 J CF, Sur, Sur	0.092 J CF, Sur	0.1 UJ Sur	0.1 UJ Sur	0.1 UJ Sur	---	*	0.1 UJ Sur	0.1 R Sur
Endrin	2	µg/L	*	*	0.1 UJ Sur	*	0.026 J C%D, CF, Sur	0.017 J C%D, CF, Sur	0.1 UJ C%D	0.14 J CF, Sur, Sur	0.22 J CF, Sur	0.17 J CF, Sur, Sur	0.046 J CF, Sur	0.1 UJ Sur	---	*	0.1 UJ Sur	0.1 R Sur
Endrin aldehyde	NE	µg/L	0.1 UJ CF, LB	0.1 UJ CF, LB	0.1 UJ Sur	*	0.1 R Sur	0.1 R Sur	*	0.1 UJ C%D, Sur	0.1 UJ C%D, CF, LB, Sur	0.1 UJ C%D, CF, LB, Sur, Sur	0.1 UJ Sur	0.01 J CF, Sur	---	0.0086 J CF	0.0057 J CF, Sur	0.1 R Sur
Endrin ketone	NE	µg/L	*	*	0.1 UJ Sur	*	0.1 R Sur	0.1 R Sur	*	0.1 UJ Sur	0.016 J CF, Sur	0.1 UJ Sur	0.1 UJ Sur	0.1 UJ Sur	---	*	0.1 UJ Sur	0.1 R Sur
gamma-BHC	0.052	µg/L	*	*	0.05 UJ Sur	*	0.086 J CF, Sur	0.06 J CF, Sur	*	0.061 J CF, FD, Sur, Sur	0.17 J CF, FD, Sur	0.45 J CF, Sur, Sur	0.028 J CF, Sur	0.05 UJ Sur	---	*	0.05 UJ Sur	0.05 R Sur
gamma-Chlordane	0.1	µg/L	*	*	0.05 UJ Sur	0.05 UJ CF, LB	0.041 J Sur	0.037 J CF, Sur	*	0.23 J CF, Sur, Sur	0.25 J CF, Sur	0.012 J CF, Sur, Sur	0.012 J CF, Sur	0.07 J Sur	---	*	0.05 UJ CF, LB, Sur	0.0085 J CF, Sur
Heptachlor	0.01	µg/L	*	*	0.05 UJ Sur	*	0.05 UJ CF, LB, Sur	0.05 UJ CF, LB, Sur	*	0.075 J CF, Sur, Sur	0.05 UJ CF, LB, Sur	0.34 J CF, Sur, Sur	0.076 J Sur	0.05 UJ Sur	---	*	0.05 UJ Sur	0.05 UJ CF, LB, Sur
Heptachlor epoxide	0.01	µg/L	*	*	0.05 UJ Sur	*	0.0074 J CF, Sur	0.056 J CF, Sur	*	0.068 J CF, Sur, Sur	0.12 J CF, Sur	0.019 J CF, Sur, Sur	0.05 UJ Sur	0.0051 J CF, Sur	---	*	0.05 UJ Sur	0.05 R Sur
Methoxychlor	30	µg/L	0.5 UJ CF, LB	*	0.5 UJ Sur	*	0.5 R Sur	0.5 R Sur	*	0.5 UJ Sur	0.5 UJ CF, LB, Sur	0.5 UJ CF, LB, Sur, Sur	0.5 UJ LB, Sur	0.5 UJ Sur	---	*	0.5 UJ Sur	0.5 R Sur
Toxaphene	3	µg/L	*	*	5 UJ Sur	*	5 R Sur	5 R Sur	*	5 UJ Sur	5 R Sur	5 UJ Sur	5 UJ Sur	5 UJ Sur	---	*	5 UJ Sur	5 R Sur
Dioxins/Furans (1)																		
1,2,3,4,6,7,8-HpCDD	45	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
1,2,3,4,6,7,8-HpCDF	45	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
1,2,3,4,7,8,9-HpCDF	45	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
1,2,3,4,7,8-HxCDD	4.5	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
1,2,3,4,7,8-HxCDF	4.5	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
1,2,3,6,7,8-HxCDD	4.5	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
1,2,3,6,7,8-HxCDF	4.5	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
1,2,3,7,8,9-HxCDD	4.5	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
1,2,3,7,8,9-HxCDF	4.5	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
1,2,3,7,8-PeCDD	0.45	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
1,2,3,7,8-PeCDF	9	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
2,3,4,6,7,8-HxCDF	4.5	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
2,3,4,7,8-PeCDF	0.9	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
2,3,7,8-TCDD	0.45	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
2,3,7,8-TCDF	4.5	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
OCDD	4,500	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
OCDF	4,500	pg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
Anions																		
Chloride	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
Nitrate as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
Nitrite as Nitrogen	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
Sulfate	NE	mg/L	*	*	*	*	*	*	*	*	*	*	*	*	---	*	*	*
Dissolved Gases																		
Ethane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethene	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methane	NE	µg/L	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A11-2
Result Qualification and Associated Reason Codes - Groundwater, Third Quarter 2006 (September)
AMCO Chemical Superfund Site, Oakland, California

Notes:
Results greater than the screening level are bolded
In cases where target analytes are reported from more than one method or from multiple dilutions, the most conservative result or reporting limit is presented; that is, the values presented represent either the maximum positive result or the minimum reporting limit selected from the available data.
Rejected Results are enclosed by boxes
See Groundwater Screening Level table for source of screening levels.

---	not analyzed
*	result not qualified for Quality Control outliers
NE	not established
µg/L	micrograms per liter
mg/L	milligrams per liter
pg/L	picograms per liter
J	estimated value
J-	estimated value, low bias
J+	estimated value, high bias
R	rejected for failure to meet quality control requirement.
U	not detected at or above the reporting limit.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
>IC	Result greater than linear calibration range
C%D	Continuing calibration verification is outside control limit
CCB	Continuing calibration blank concentration less than Reporting Limit
CF	Confirmation precision exceeded
CRRF	Continuing calibration relative response factor below lower control limit
CVES	Calibration verification ending standard exceeded percent difference criteria
DPE	Diphenyl ether interference
EB	Equipment blank concentration exceeds criteria
EMPC	Estimated Maximum Possible Concentration
FD	Field duplicate exceeds relative percent difference criteria
ICB	Initial calibration blank exceeds control limit
IRRF	Initial calibration relative response factor exceeds control limit
IS	Internal standard response exceeds control limit
LB	Laboratory blank concentration exceeds criteria
LD	Laboratory duplicate exceeds relative percent difference criteria
MS	Matrix spike recovery exceeds control limilt
Pres	Sample not properly preserved in the field
RSD	Initial calibration relative standard deviation exceeded
SB	Source blank concentration exceeds control limit
SD	Matrix spike duplicate recovery exceeds criteria
SerDil	Serial dilution percent difference exceeds control limit
Sur	Surrogate recovery outside control limits
TB	Trip blank concentration exceeds control limit
WDM	No window defining mix

Appendix A12
Residential Soil Sampling, 2006

APPENDIX A12

Residential Soil Sampling, 2006

A12.1 Summary

The following sections describe the samples collected from residences during October 2006.

Residential Soil, 2006: Soil samples were collected in acetate or brass sleeves and analyzed by for VOCs, SVOCs, metals, polychlorinated biphenyls (PCBs), and pesticides. The screening limits for soil are the EPA Region 9 PRGs for residential and industrial soil.

A12.2 Data Review and Validation Findings

Table A12-1 presents a list of sample delivery groups, sample identifications, and validation levels for the soil samples collected during this event. Table A12-2 presents both the Tier 3, Tier 2, and Tier 1A qualified results with accompanying reason codes identifying the type of QC outlier. Results that are unqualified are not shown. Rejected results are shown in boxes. Equipment blank and trip blank qualifications are discussed in section 3 of the main DQUA and are not discussed further in this section, although the qualified results are presented on the attached tables. The following sections discuss the results qualified based on the Tier 3 validation.

The findings of the Tier 3 validation are considered representative of the quality of the entire data set. For this event, Tier 3 validation was performed on 2 of the 44 samples for VOCs, 6 of the 44 soil samples for SVOCs and pesticides and PCBs, and 10 of the 44 soils samples for metals.

The following sections discuss the results qualified based on the Tier 3 validations. The Residential soil results were qualified for outliers associated with the following QC metrics: laboratory method blank, initial calibration verification, continuing calibration, initial calibration linear range exceeded, surrogates, laboratory control sample, matrix spike and matrix spike duplicate, internal standard, CRQL check sample, second column confirmation, and gel permeation chromatography recovery.

A12.2.1 Laboratory Method Blank (Reason Code LB)

Metals in Soil: Sodium was detected in method blanks. The following analyte results in the samples from the indicated locations were below the reporting limits (RLs) and were qualified as non-detected at the RL, U:

- Sodium in 1428SSd-3, 1432SSa-1, 326SSb-1, 326SSc-1, and 326SSc-1 duplicate

SVOCs in Soil: Bis(2-ethylhexyl)phthalate was detected in method blanks. The following analyte results in the samples from the indicated locations were below the reporting limits (RLs) and were qualified as non-detected at the RL, U:

- Bis(2-ethylhexyl)phthalate in 326SSc-1, 326SSd-3, and 326SSe-1

A12.1.2 Initial Calibration Verification (Reason Code ICV)

VOCs in Soil: Bromoform was recovered below the lower control limit in the initial calibration verification standard. The bromoform quantitation limits in the following samples from the indicated locations were qualified as UJ:

- 1432SSc-1 and 1432SSc-3

A12.1.3 Initial Calibration Linear Range Exceeded (Reason Code >IC)

VOCs in Soil: Sample from location 326SSe-1 was analyzed at a dilution but remained above the calibration range. The detected results were qualified as estimated and flagged J.

A12.1.4 Continuing Calibration (Reason Code C%D)

VOCs in Soil: The results for the following analytes in the samples from the indicated locations were estimated due to the continuing calibration verification %D exceeding the ±25% QC criteria:

- Acetone and bromoform in 1432SSc-1 and 1432SSc-3

Metals in Soil: The results for the following analyte in the samples from the indicated locations were estimated due to the continuing calibration verification %D exceeding the ±25% QC criteria:

- Lead in 1428SSd-3, 326SSb-1, 326SSc-1 duplicate, 356SSc-1, and 356SSc-3-3

Pesticides in Soil: The results for the following analytes in the samples from the indicated locations were estimated due to the continuing calibration verification %D exceeding the ±25% QC criteria:

- Endosulfan sulfate in 1428SSd-3, 326SSc-1, and 326SSd-2.5
- Gamma-BHC in 326SSc-1

A12.1.5 Surrogates (Reason Code Sur)

The following samples had associated surrogate recoveries that exceeded the method specific control limits. The specific analytes results qualified are presented in Table A12-2.

SVOCs in Soil: The recovery of the surrogate associated with 1,4-dioxane was recovered below the lower control limit in the sample from the indicated locations. The quantitation limits were estimated and flagged as estimated, UJ

- 1432SS1-3, 1432SSb-1, 1436SSa-1, 1436SSa-3, 1436SSb-10, 1436SSb-3, 326SSa-1, 326SSa-3, 326SSb-1, 326SSc-1, 326SSc-1 duplicate, 326SSd-2.5, 326SSe-1, 326SSe-3, 356SSa-1, 356SSc-1, 356SSc-3, and 360-SSb-3

The recovery of the surrogate associated with 1,4-dioxane was recovered below 10% in the samples from the indicated locations. The results were flagged, R, and rejected:

- 1428SSb-1 duplicate, 1428SSd-1, and 1428SSd-3

Organochlorine Pesticides and PCBs in Soil: Results were qualified as estimated due to low decachlorobiphenyl (DCB) surrogate recoveries for the following samples:

- 4,4'-DDD, alpha chlordane, endosulfan II, endrin, endrin aldehyde, gamma chlordane, and heptachlor epoxide in the sample from location 1428SSd-3
- 4,4'-DDT, aldrin, alpha chlordane, endosulfan I, endosulfan II, endrin, endrin aldehyde, and gamma BHC in the sample from location 326SSc-1
- Alpha chlordane, dieldrin, endosulfan I, endosulfan II, endrin aldehyde, endrin ketone, and gamma BHC in the sample from location 326SSd-2.5

Results were qualified as rejected, R, due to the recovery of decachlorobiphenyl (DCB) below 10% on the second column in the sample from the indicated location:

- Methoxychlor in 356SSc-3

A12.1.6 Laboratory Control Sample (Reason Code LCS)

VOCs in Soil: The laboratory control sample recovery for dibromochloromethane was below the 75% accuracy criterion. Reporting limits for the samples from the indicated locations were estimated and flagged UJ:

- 1432SSc-1 and 1432SSc-3

A12.1.7 Matrix Spike and Matrix Spike Duplicate (Reason Code MS)

Metals in Soil: The matrix spike was analyzed on the sample from location 356SSc-1. Antimony and zinc MS recoveries were below 30 percent with post spike recoveries greater than 75 percent. The parent zinc results were qualified as estimated and flagged J. Antimony was not detected in the parent sample and the reporting limit was qualified as UJ.

Arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, nickel, selenium, thallium, and vanadium MS recoveries were greater than 30 percent but less than 74 percent with post spike recoveries greater than 75 percent. Parent sample results were qualified as estimated J, and reporting limits were qualified as UJ.

Silver was recovered at 54 percent in the MS. The parent sample detected result was qualified as estimated and flagged J- and may be biased low.

A12.1.8 Contract Required Quantitation Limit Check Sample (Reason Code CRI)

Total Metals in Soil: The lead closing Contract Required Reporting Limit Check Sample exceeded the 200% upper limit. This high recovery may indicate a high bias in the sample results due to a positive spectral interference. However, all the results with the exception of the sample from location 356SSc-3 are greater than 100 times the reporting limit, so the effect of a positive bias at the reporting limit would not be expected to have a significant effect at these reported concentrations. The following lead results were qualified as estimated with a high bias, J+.

- Lead in samples from locations 1428SSd-3, 326SSb-1, 326SSc-1, 326SSc-1 duplicate, 326SSd-2.5, 326SSe-1, 326SSe-3, 356SSc-1, and 356SSc-3

A12.1.9 Second Column Confirmation (Reason Code CF)

Organochlorine Pesticides/PCBs in Soil: A number of results were presumptively identified since the %Ds between the primary column and the confirmation column exceeded the QC limit. This could be due to co-eluting interferences on one of the columns. The analyte results in the samples from the indicated locations were qualified as estimated, J, and are qualitatively and quantitatively uncertain:

- 4,4′-DDD, endosulfan II, endrin, endosulfan sulfate, endrin aldehyde, heptachlor epoxide, methoxychlor in 1428SSd-3
- 4,4′-DDD, 4,4′-DDT, aldrin, beta BHC, dieldrin, endosulfan I, endosulfan II, endosulfan sulfate, endrin, endrin aldehyde, endrin ketone, gamma-BHC, heptachlor epoxide, and methoxychlor in 326SSc-1
- 4,4′-DDE, alpha chlordane, beta BHC, delta BHC, dieldrin, endosulfan I, endosulfan II, endosulfan sulfate, endrin, endrin ketone, gamma-BHC, gamma chlordane, heptachlor epoxide, and methoxychlor in 326SSd-2.5
- 4,4′-DDD, alpha chlordane, beta BHC, endosulfan sulfate, endrin, endrin aldehyde, endrin ketone, gamma chlordane, and methoxychlor in 326SSe-1
- 4,4′-DDD, dieldrin, endosulfan II, endrin, endrin aldehyde, endrin ketone, gamma BHC, gamma chlordane, and methoxychlor in 326SSe-3
- 4,4′-DDE, alpha chlordane, and methoxychlor in 356SSc-3

TABLE A12-1
Sample Delivery Group Reference - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
06292B (EPA Region 9)				
Volatile Organics, EPA Method 8260B				
	1428SSa	N	1428SSa-1-1006	Tier 1A
	1428SSa	N	1428SSa-3-1006	Tier 1A
	1428SSb	N	1428SSb-1-1006	Tier 1A
	1428SSb	N	1428SSb-3-1006	Tier 1A
	1428SSc	N	1428SSc-1-1006	Tier 1A
	1428SSc	N	1428SSc-3-1006	Tier 1A
	1428SSd	N	1428SSd-1-1006	Tier 1A
	1428SSd	N	1428SSd-3-1006	Tier 1A
	1428SSe	N	1428SSe-1-1006	Tier 1A
	1428SSe	N	1428SSe-3-1006	Tier 1A
	1432SSa	N	1432SSa-1-1006	Tier 1A
	1432SSa	N	1432SSa-3-1006	Tier 1A
	1432SSb	N	1432SSb-1-1006	Tier 1A
	1432SSb	N	1432SSb-3-1006	Tier 1A
	1436SSa	N	1436SSa-1-1006	Tier 1A
	1436SSa	N	1436SSa-3-1006	Tier 1A
	1436SSb	N	1436SSb-1-1006	Tier 1A
	1436SSb	N	1436SSb-3-1006	Tier 1A
	326SSa	N	326SSa-1-1006	Tier 1A
	326SSa	N	326SSa-3-1006	Tier 1A
	326SSb	N	326SSb-1-1006	Tier 1A
	326SSb	N	326SSb-3-1006	Tier 1A
06292C (EPA Region 9)				
Volatile Organics, EPA Method 8260B				
	1428SSb	FD	8572SSb-1-1006	Tier 1A
	1432SSb	FD	8568SSb-1-1006	Tier 1A
	326SSc	N	326SSc-1-1006	Tier 1A
	326SSc	N	326SSc-3-1006	Tier 1A
	326SSc	FD	674SSc-1-1006	Tier 1A
	326SSd	N	326SSd-1-1006	Tier 1A
	326SSd	N	326SSd-2_5-1006	Tier 1A
	326SSe	N	326SSe-1-1006	Tier 1A
	326SSe	N	326SSe-3-1006	Tier 1A
	356SSa	N	356SSa-1-1006	Tier 1A
	356SSa	N	356SSa-3-1006	Tier 1A
	356SSa	FD	644SSa-1-1006	Tier 1A
	356SSb	N	356SSb-1-1006	Tier 1A
	356SSb	N	356SSb-3-1006	Tier 1A
	356SSc	N	356SSc-1-1006	Tier 1A
	356SSc	N	356SSc-3-1006	Tier 1A
	360SSa	N	360SSa-1-1006	Tier 1A
	360SSa	N	360SSa-3-1006	Tier 1A
	360SSb	N	360SSb-1-1006	Tier 1A
	360SSb	N	360SSb-3-1006	Tier 1A
06312B (EPA Region 9)				
Volatile Organics, EPA Method 8260B				
	1432SSc	N	1432SSc-1-1006	Tier 3
	1432SSc	N	1432SSc-3-1006	Tier 3

TABLE A12-1
Sample Delivery Group Reference - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY2WB3 (Sentinel)				
Inorganics, CLP-SOW				
	1428SSd	N	1428SSd-3-1006	Tier 3
	1432SSa	N	1432SSa-3-1006	Tier 3
	326SSb	N	326SSb-1-1006	Tier 3
	326SSc	N	326SSc-1-1006	Tier 3
	326SSc	FD	674SSc-1-1006	Tier 3
	326SSd	N	326SSd-2_5-1006	Tier 3
	326SSe	N	326SSe-1-1006	Tier 3
	326SSe	N	326SSe-3-1006	Tier 3
	356SSc	N	356SSc-1-1006	Tier 3
	356SSc	N	356SSc-3-1006	Tier 3
MY2WC3 (Sentinel)				
Inorganics, CLP-SOW				
	1428SSa	N	1428SSa-3-1006	Tier 2
	1428SSb	N	1428SSb-1-1006	Tier 2
	1428SSb	FD	8572SSb-1-1006	Tier 2
	1428SSc	N	1428SSc-3-1006	Tier 2
	1428SSd	N	1428SSd-1-1006	Tier 2
	1428SSe	N	1428SSe-1-1006	Tier 2
	1428SSe	N	1428SSe-3-1006	Tier 2
	1432SSb	N	1432SSb-1-1006	Tier 2
	1432SSb	N	1432SSb-3-1006	Tier 2
	1436SSa	N	1436SSa-3-1006	Tier 2
	1436SSb	N	1436SSb-1-1006	Tier 2
	1436SSb	N	1436SSb-3-1006	Tier 2
	326SSa	N	326SSa-1-1006	Tier 2
	326SSa	N	326SSa-3-1006	Tier 2
	326SSd	N	326SSd-1-1006	Tier 2
	356SSa	N	356SSa-3-1006	Tier 2
	356SSa	FD	644SSa-1-1006	Tier 2
	356SSb	N	356SSb-1-1006	Tier 2
	360SSa	N	360SSa-1-1006	Tier 2
	360SSb	N	360SSb-3-1006	Tier 2
MY2WE3 (Sentinel)				
Inorganics, CLP-SOW				
	1428SSa	N	1428SSa-1-1006	Tier 2
	1428SSb	N	1428SSb-3-1006	Tier 2
	1428SSc	N	1428SSc-1-1006	Tier 2
	1432SSa	N	1432SSa-1-1006	Tier 2
	1432SSb	FD	8568SSb-1-1006	Tier 2
	1436SSa	N	1436SSa-1-1006	Tier 2
	326SSb	N	326SSb-3-1006	Tier 2
	326SSc	N	326SSc-3-1006	Tier 2
	356SSa	N	356SSa-1-1006	Tier 2
	356SSb	N	356SSb-3-1006	Tier 2
	360SSa	N	360SSa-3-1006	Tier 2
	360SSb	N	360SSb-1-1006	Tier 2

TABLE A12-1
Sample Delivery Group Reference - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
MY2WF8 (Sentinel)				
Inorganics, CLP-SOW				
	1432SSc	N	1432SSc-1-1006	Tier 2
	1432SSc	N	1432SSc-3-1006	Tier 2
Y2WB3 (Shealy)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	1428SSd	N	1428SSd-3-1006	Tier 3
	326SSc	N	326SSc-1-1006	Tier 3
	326SSd	N	326SSd-2_5-1006	Tier 3
	326SSe	N	326SSe-1-1006	Tier 3
	326SSe	N	326SSe-3-1006	Tier 3
	356SSc	N	356SSc-3-1006	Tier 3
Semivolatile Organics, CLP-SOW				
	1428SSd	N	1428SSd-3-1006	Tier 3
	326SSc	N	326SSc-1-1006	Tier 3
	326SSd	N	326SSd-2_5-1006	Tier 3
	326SSe	N	326SSe-1-1006	Tier 3
	326SSe	N	326SSe-3-1006	Tier 3
	356SSc	N	356SSc-3-1006	Tier 3
Y2WB4 (Shealy)				
1,4-Dioxane (SIM), CLP-SOW				
	1428SSb	N	1428SSb-1-1006	Tier 3
	1428SSd	N	1428SSd-1-1006	Tier 3
	1428SSd	N	1428SSd-3-1006	Tier 3
	1432SSa	N	1432SSa-3-1006	Tier 3
	1432SSb	N	1432SSb-1-1006	Tier 3
	1436SSa	N	1436SSa-3-1006	Tier 3
	1436SSb	N	1436SSb-1-1006	Tier 3
	1436SSb	N	1436SSb-3-1006	Tier 3
	326SSa	N	326SSa-1-1006	Tier 3
	326SSa	N	326SSa-3-1006	Tier 3
	326SSb	N	326SSb-1-1006	Tier 3
	326SSc	N	326SSc-1-1006	Tier 3
	326SSc	FD	674SSc-1-1006	Tier 3
	326SSd	N	326SSd-2_5-1006	Tier 3
	326SSe	N	326SSe-1-1006	Tier 3
	326SSe	N	326SSe-3-1006	Tier 3
	356SSa	N	356SSa-3-1006	Tier 3
	356SSc	N	356SSc-1-1006	Tier 3
	356SSc	N	356SSc-3-1006	Tier 3
	360SSb	N	360SSb-3-1006	Tier 3

TABLE A12-1
Sample Delivery Group Reference - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2WB6 (Shealy)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	1428SSb	N	1428SSb-1-1006	Tier 2
	1428SSc	N	1428SSc-3-1006	Tier 2
	1428SSd	N	1428SSd-1-1006	Tier 2
	1428SSe	N	1428SSe-1-1006	Tier 2
	1432SSa	N	1432SSa-3-1006	Tier 2
	1432SSb	N	1432SSb-1-1006	Tier 2
	1432SSb	N	1432SSb-3-1006	Tier 2
	1436SSa	N	1436SSa-3-1006	Tier 2
	1436SSb	N	1436SSb-1-1006	Tier 2
	1436SSb	N	1436SSb-3-1006	Tier 2
	326SSa	N	326SSa-1-1006	Tier 2
	326SSa	N	326SSa-3-1006	Tier 2
	326SSb	N	326SSb-1-1006	Tier 2
	326SSc	FD	674SSc-1-1006	Tier 2
	326SSd	N	326SSd-1-1006	Tier 2
	356SSa	N	356SSa-3-1006	Tier 2
	356SSa	FD	644SSa-1-1006	Tier 2
	356SSc	N	356SSc-1-1006	Tier 2
	360SSa	N	360SSa-1-1006	Tier 2
	360SSb	N	360SSb-3-1006	Tier 2
Semivolatile Organics, CLP-SOW				
	1428SSb	N	1428SSb-1-1006	Tier 2
	1428SSc	N	1428SSc-3-1006	Tier 2
	1428SSd	N	1428SSd-1-1006	Tier 2
	1428SSe	N	1428SSe-1-1006	Tier 2
	1432SSa	N	1432SSa-3-1006	Tier 2
	1432SSb	N	1432SSb-1-1006	Tier 2
	1432SSb	N	1432SSb-3-1006	Tier 2
	1436SSa	N	1436SSa-3-1006	Tier 2
	1436SSb	N	1436SSb-1-1006	Tier 2
	1436SSb	N	1436SSb-3-1006	Tier 2
	326SSa	N	326SSa-1-1006	Tier 2
	326SSa	N	326SSa-3-1006	Tier 2
	326SSb	N	326SSb-1-1006	Tier 2
	326SSc	FD	674SSc-1-1006	Tier 2
	326SSd	N	326SSd-1-1006	Tier 2
	356SSa	N	356SSa-3-1006	Tier 2
	356SSa	FD	644SSa-1-1006	Tier 2
	356SSc	N	356SSc-1-1006	Tier 2
	360SSa	N	360SSa-1-1006	Tier 2
	360SSb	N	360SSb-3-1006	Tier 2

TABLE A12-1
Sample Delivery Group Reference - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2WD3 (Shealy)				
1,4-Dioxane (SIM), CLP-SOW				
	1428SSa	N	1428SSa-1-1006	Tier 2
	1428SSa	N	1428SSa-3-1006	Tier 2
	1428SSb	N	1428SSb-3-1006	Tier 2
	1428SSb	FD	8572SSb-1-1006	Tier 2
	1428SSc	N	1428SSc-1-1006	Tier 2
	1428SSc	N	1428SSc-3-1006	Tier 2
	1428SSe	N	1428SSe-1-1006	Tier 2
	1428SSe	N	1428SSe-3-1006	Tier 2
	1432SSa	N	1432SSa-1-1006	Tier 2
	1432SSb	N	1432SSb-3-1006	Tier 2
	1436SSa	N	1436SSa-1-1006	Tier 2
	326SSb	N	326SSb-3-1006	Tier 2
	326SSc	N	326SSc-3-1006	Tier 2
	326SSd	N	326SSd-1-1006	Tier 2
	356SSa	N	356SSa-1-1006	Tier 2
	356SSa	FD	644SSa-1-1006	Tier 2
	356SSb	N	356SSb-1-1006	Tier 2
	360SSa	N	360SSa-1-1006	Tier 2
	360SSa	N	360SSa-3-1006	Tier 2
	360SSb	N	360SSb-1-1006	Tier 2
Y2WD9 (Shealy)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	1428SSa	N	1428SSa-1-1006	Tier 2
	1428SSa	N	1428SSa-3-1006	Tier 2
	1428SSb	N	1428SSb-3-1006	Tier 2
	1428SSb	FD	8572SSb-1-1006	Tier 2
	1428SSc	N	1428SSc-1-1006	Tier 2
	1428SSe	N	1428SSe-3-1006	Tier 2
	1432SSa	N	1432SSa-1-1006	Tier 2
	1432SSb	FD	8568SSb-1-1006	Tier 2
	1436SSa	N	1436SSa-1-1006	Tier 2
	326SSb	N	326SSb-3-1006	Tier 2
	326SSc	N	326SSc-3-1006	Tier 2
	356SSa	N	356SSa-1-1006	Tier 2
	356SSb	N	356SSb-1-1006	Tier 2
	356SSb	N	356SSb-3-1006	Tier 2
	360SSa	N	360SSa-3-1006	Tier 2
	360SSb	N	360SSb-1-1006	Tier 2

TABLE A12-1
Sample Delivery Group Reference - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
Y2WD9 (Shealy)				
Semivolatile Organics, CLP-SOW				
	1428SSa	N	1428SSa-1-1006	Tier 2
	1428SSa	N	1428SSa-3-1006	Tier 2
	1428SSb	N	1428SSb-3-1006	Tier 2
	1428SSb	FD	8572SSb-1-1006	Tier 2
	1428SSc	N	1428SSc-1-1006	Tier 2
	1428SSe	N	1428SSe-3-1006	Tier 2
	1432SSa	N	1432SSa-1-1006	Tier 2
	1432SSb	FD	8568SSb-1-1006	Tier 2
	1436SSa	N	1436SSa-1-1006	Tier 2
	326SSb	N	326SSb-3-1006	Tier 2
	326SSc	N	326SSc-3-1006	Tier 2
	356SSa	N	356SSa-1-1006	Tier 2
	356SSb	N	356SSb-1-1006	Tier 2
	356SSb	N	356SSb-3-1006	Tier 2
	360SSa	N	360SSa-3-1006	Tier 2
	360SSb	N	360SSb-1-1006	Tier 2
Y2WF3 (Shealy)				
1,4-Dioxane (SIM), CLP-SOW				
	1432SSb	FD	8568SSb-1-1006	Tier 2
	356SSb	N	356SSb-3-1006	Tier 2
Y2WF8 (Shealy)				
Organochlorine Pesticides/PCBs, CLP-SOW				
	1432SSc	N	1432SSc-1-1006	Tier 2
	1432SSc	N	1432SSc-3-1006	Tier 2
Semivolatile Organics, CLP-SOW				
	1432SSc	N	1432SSc-1-1006	Tier 2
	1432SSc	N	1432SSc-3-1006	Tier 2

Notes:
N regular sample
FD field duplicate

TABLE A12-2
Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1428SSa	1428SSa	1428SSb	1428SSb	1428SSb	1428SSc	1428SSc	1428SSd	1428SSd	1428SSe	1428SSe	1432SSa	1432SSa	1432SSb	1432SSb	1432SSb	1432SSc
			1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs
		Sample Date	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	11/7/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	1,200,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	410	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	730	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	2,800	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloropropene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,3-Trichlorobenzene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,3-Trichloropropane	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	62,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromo-3-chloropropane	30	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	32	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	600,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	280	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	340	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	530,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichloropropane	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3,400	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetone	14,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	29 UJ C%D
Benzene	640	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromochloromethane	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	820	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromoform	62,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.6 UJ C%D, ICV
Bromomethane	3,900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon disulfide	360,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	250	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	3,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	940	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	47,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	43,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	780	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibromochloromethane	1,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.6 UJ LCS
Ethyl tert-butyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	400,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	390,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	5,600,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	94,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	570,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl ethyl ketone	22,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	5,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	32,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	9,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Styrene	1,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
tert-Amyl methyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
tert-Butyl alcohol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	480	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	520,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A12-2
Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1428SSa	1428SSa	1428SSb	1428SSb	1428SSb	1428SSc	1428SSc	1428SSd	1428SSd	1428SSe	1428SSe	1432SSa	1432SSa	1432SSb	1432SSb	1432SSb	1432SSc
			1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs
		Sample Date	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	11/7/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
trans-1,2-Dichloroethene	69,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	780	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	53	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vinyl chloride	79	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	270,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Semivolatile Organic Compounds																			
1,1'-Biphenyl	3,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4,5-Tetrachlorobenzene	3,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	44,000	µg/kg	360 UJ Sur	130 UJ Sur	390 UJ Sur	75 R Sur	80 UJ Sur	390 UJ Sur	95 R Sur	83 R Sur	410 R Sur	530 UJ Sur	6.6 J Sur	81 R Sur	400 UJ Sur	400 UJ Sur	490 UJ Sur	410 UJ Sur	---
2,2'-Oxybis(1-Chloropropane)	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,3,4,6-Tetrachlorophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,5-Trichlorophenol	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,6-Trichlorophenol	6,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	180,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dimethylphenol	1,200,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrophenol	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrotoluene	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,6-Dinitrotoluene	61,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chloronaphthalene	4,900,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chlorophenol	63,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylnaphthalene	1,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylphenol	3,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitroaniline	180,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3,3'-Dichlorobenzidine	1,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3-Nitroaniline	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Bromophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloro-3-methylphenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloroaniline	240,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Methylphenol	310,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitroaniline	23,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitrophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthene	3,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthylene	NE	µg/kg	*	*	2,300 J FD	400 J FD	*	*	*	*	*	*	*	*	*	1,200 J FD	180 J FD	*	*
Acetophenone	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Anthracene	22,000,000	µg/kg	*	*	3,000 J FD	270 J FD, Sur	*	*	*	*	*	*	*	*	*	*	*	*	*
Atrazine	2,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BAP Equivalents	900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzaldehyde	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)anthracene	620	µg/kg	*	*	**8,300 J FD**	**970 J FD**	*	*	*	*	*	*	*	*	*	**1,600 J FD**	480 J FD	*	*
Benzo(a)pyrene	62	µg/kg	*	*	**9,200 J FD**	**1,500 J FD**	*	*	*	*	*	*	*	*	*	**2,800 J FD**	**790 J FD**	*	*
Benzo(b)fluoranthene	620	µg/kg	*	*	**9,800 J FD**	**1,500 J FD**	*	*	*	*	*	*	*	*	*	**3,000 J FD**	**820 J FD**	*	*
Benzo(g,h,i)perylene	NE	µg/kg	*	*	4,400 J FD	810 J FD	*	*	*	*	*	*	*	*	*	1,400 J FD	390 J FD	*	*
Benzo(k)fluoranthene	380	µg/kg	*	*	**3,600 J FD**	**720 J FD**	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzyl butyl phthalate	12,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethoxy)methane	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	35,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A12-2
Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1428SSa	1428SSa	1428SSb	1428SSb	1428SSb	1428SSc	1428SSc	1428SSd	1428SSd	1428SSe	1428SSe	1432SSa	1432SSa	1432SSb	1432SSb	1432SSb	1432SSc
			1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs
		Sample Date	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	11/7/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
Caprolactam	31,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbazole	24,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chrysene	3,800	µg/kg	*	*	**10,000 J FD**	1,400 J FD	*	*	*	*	*	*	*	*	*	2,300 J FD	750 J FD	*	*
Dibenz(a,h)anthracene	62	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibenzofuran	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Diethylphthalate	49,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dimethylphthalate	100,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Di-n-butyl phthalate	6,100,000	µg/kg	*	320 U LB	230 J FD	960 U FD, LB	200 U LB	990 U LB	*	*	*	*	*	1,000 U LB	*	*	*	*	*
Di-n-octyl phthalate	2,400,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluoranthene	2,300,000	µg/kg	*	*	19,000 J FD	2,600 J FD	*	*	*	*	*	*	*	*	*	5,200 J FD	1,500 J FD	*	*
Fluorene	2,700,000	µg/kg	*	*	1,600 J FD	110 J FD, Sur	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobenzene	300	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	6,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	230 UJ C%D
Hexachloroethane	35,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	620	µg/kg	*	*	**4,600 J FD**	**970 J FD**	*	*	*	*	*	*	*	*	*	**1,800 J FD**	490 J FD	*	*
Isophorone	510,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	1,700	µg/kg	*	*	1,000 J FD	330 J FD	*	*	*	*	*	*	*	*	*	**2,800 J FD**	140 J FD	*	*
Nitrobenzene	20,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	69	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	99,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pentachlorophenol	3,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenanthrene	NE	µg/kg	*	*	20,000 J FD	2,200 J FD, Sur	*	*	*	*	400 J Sur	*	*	*	*	*	*	*	*
Phenol	18,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pyrene	2,300,000	µg/kg	*	*	20,000 J FD	2,900 J FD	*	*	*	*	*	*	*	*	*	5,800 J FD	1,500 J FD	*	*
Metals																			
Aluminum	76,000	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	6,870 J FD	3,610 J FD	*	6,760 J SerDil
Antimony	31	mg/kg	*	6.8 U LB	*	*	*	*	8.7 U LB	7.1 U LB	*	*	*	*	*	7.2 U LB	*	7.6 U LB	5.7 J MS
Arsenic	22	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Barium	5,400	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	1,180 J FD	660 J FD	*	1,170 J MS
Beryllium	150	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium	37	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	5.7 J FD	3.4 J FD	*	*
Calcium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	13,500 J FD	5,630 J FD	*	10,500 J SerDil
Chromium	210	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	47.7 J FD	24.1 J FD	*	62.6 J SerDil
Cobalt	900	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Copper	3,100	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	544 J FD	235 J FD	*	458 J SerDil
Iron	23,000	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	21,700 J LD, SerDil
Lead	194	mg/kg	*	72.1 J+ CRI	*	**1,590 J+ CRI**	*	*	**4,170 J+ CRI**	*	**318 J+ C%D, CRI**	**2,660 J+ CRI**	**1,050 J+ CRI**	*	**524 J+ C%D, CRI**	*	*	**1,500 J+ CRI**	**2,280 J LD, SerDil**
Magnesium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	2,200 J FD	1,050 J FD	*	2,030 J SerDil
Manganese	1,800	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	436 J FD	237 J FD	*	369 J SerDil
Mercury	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nickel	1,600	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	43.6 J FD	20.8 J FD	*	39 J SerDil
Potassium	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	1,360 J FD	663 J FD	*	*
Selenium	390	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Silver	390	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	7.1 J FD	3 J FD	*	6.6 J+ MS
Sodium	NE	mg/kg	536 U LB	*	*	*	567 U LB	562 U LB	*	*	602 U LB	*	*	747 U LB	770 U LB	5,810 J FD	704 UJ FD, LB	*	4,570 J+ LCS, SerDil
Thallium	5.2	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vanadium	78	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	29.6 J FD	15 J FD	*	28.2 J SerDil

TABLE A12-2
Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

	Sample Location		1428SSa	1428SSa	1428SSb	1428SSb	1428SSb	1428SSc	1428SSc	1428SSd	1428SSd	1428SSe	1428SSe	1432SSa	1432SSa	1432SSb	1432SSb	1432SSb	1432SSc
			1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs
	Sample Date		10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	11/7/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Metals																			
Zinc	23,000	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	2,290 J FD	973 J FD	*	1,880 J SerDil
Organochlorine Pesticides																			
4,4'-DDD	2,400	µg/kg	160 J Sur	4.7 J CF	30 J CF, FD, Sur	180 J FD, Sur	13 J CF	14 J CF	0.53 J CF, Sur	13 J CF	4.3 J CF, Sur	*	4.7 J CF	17 J CF	0.82 J CF	21 J CF, Sur	14 J CF	13 J CF	8.3 J CF
4,4'-DDE	1,700	µg/kg	240 J Sur	*	6.1 J FD	260 J FD, Sur	180 J Sur	*	3.1 J CF	9 J CF, Sur	*	7.7 J CF	20 J CF	230 J Sur	0.5 J CF	220 J FD	870 J FD	4.7 J CF	62 J CF
4,4'-DDT	1,700	µg/kg	360 J CF, Sur	38 J CF	270 J >IC, FD	**1,800 J FD**	450 J CF, Sur	340 J Sur	*	1,000 J >IC	*	0.34 J CF, Sur	200 J CF, Sur	980 J CF	*	610 J >IC, FD, Sur	**3,100 J FD**	510 J >IC	220 J Sur
Aldrin	29	µg/kg	0.15 J CF, GPC, Sur	3.2 UJ GPC	2 UJ GPC	0.18 J CF, GPC, Sur	0.16 J CF, GPC	0.64 J CF, GPC, Sur	2.4 UJ GPC	0.68 J CF, GPC, Sur	*	2.7 UJ GPC	2.3 UJ GPC	0.098 J CF, GPC, Sur	2 UJ GPC	0.21 J CF, GPC, Sur	0.2 J CF, GPC	0.53 J CF, GPC	2.7 J CF
alpha-BHC	90	µg/kg	0.082 J CF	*	1.5 J C%D, CF, Sur	2.5 J CF, Sur	0.3 J CF	0.042 J CF, Sur	*	0.55 J Sur	*	*	0.18 J CF	1.5 J CF, Sur	*	10 J CF, Sur	1.5 J CF	0.56 J CF	0.67 J CF
alpha-Chlordane	1,600	µg/kg	0.44 J CF	0.18 J CF	1.7 J CF	*	0.64 J CF	*	*	10 J CF, Sur	0.21 J Sur	0.54 J CF, Sur	2.5 J CF	28 J CF, Sur	7.6 J CF	73 J CF	23 J CF, Sur	0.3 J CF	*
Aroclor-1016	3,900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1221	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1232	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1242	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1248	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1254	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1260	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
beta-BHC	320	µg/kg	0.45 J CF	0.25 J CF	2 UJ CF, LB, Sur	2.3 J CF, Sur	0.36 J CF	1.2 J CF, Sur	*	2.1 UJ CF, LB	*	2.7 UJ CF, LB	0.7 J CF	2.9 J CF, Sur	2 UJ CF, LB	2.3 J CF, Sur	0.52 J CF, Sur	2.1 UJ CF, LB	0.85 J CF
delta-BHC	NE	µg/kg	0.43 J CF	*	0.92 J CF, Sur	0.23 J CF, Sur	0.14 J CF	0.1 J CF, Sur	*	0.25 J CF	*	0.68 J Sur	0.26 J CF	0.037 J CF, Sur	0.33 J CF	1.4 J CF	0.72 J CF	0.27 J CF	0.34 J CF
Dieldrin	30	µg/kg	3.3 UJ CF, EB, Sur	*	0.2 J CF, Sur	15 J CF	18 J CF	8.1 J CF	*	2 J CF	*	0.77 J CF, Sur	5.8 J CF	*	*	17 J CF, FD	10 J FD, Sur	3.5 J CF	12 J CF
Endosulfan I	370,000	µg/kg	*	*	*	0.4 J CF, Sur	0.069 J CF	0.067 J CF, Sur	*	1.9 J CF, Sur	*	*	0.095 J CF	0.62 J CF, Sur	0.25 J CF	0.44 J CF, Sur	0.21 J CF, Sur	0.53 J CF	0.3 J CF
Endosulfan II	370,000	µg/kg	0.53 J CF	*	0.31 J CF, Sur	0.83 J CF	0.4 J CF	0.31 J CF	*	2.2 J CF	0.62 J CF, Sur	0.31 J CF, Sur	0.24 J CF	0.54 J CF	0.62 J CF	0.82 J CF, Sur	0.28 J CF	0.55 J CF	1.1 J CF
Endosulfan sulfate	NE	µg/kg	0.57 J CF	0.54 J CF	0.58 J CF	2.7 J CF, Sur	0.16 J CF	2.1 J Sur	0.52 J CF, Sur	0.92 J CF, Sur	0.26 J C%D, CF	2.1 J CF	2.6 J CF	2.7 J CF, Sur	0.31 J CF	16 J CF, Sur	0.83 J CF, Sur	2.7 J CF	*
Endrin	18,000	µg/kg	11 J CF, Sur	0.44 J CF	0.57 J CF, Sur	*	0.73 J CF	0.32 J CF, Sur	1.4 J Sur	2 J CF	0.58 J CF, Sur	7.5 J CF	3.9 J CF	19 J CF	6.7 J CF	150 J >IC, CF, FD, Sur	15 J CF, FD	0.22 J CF	9.2 J CF
Endrin aldehyde	NE	µg/kg	3.3 UJ CF, LB, Sur	3.3 U LB	1 J CF	3.3 UJ CF, LB	3.3 UJ CF, LB	3.3 UJ CF, LB	*	5.4 J Sur	0.42 J CF, Sur	3.3 J CF	3.3 UJ CF, LB	3.3 UJ CF, LB	0.24 J CF	24 J Sur	3.3 UJ CF, LB, Sur	*	2.5 J CF
Endrin ketone	NE	µg/kg	0.19 J CF, Sur	*	4.9 J CF, FD, Sur	7 J CF, FD	0.16 J CF	0.21 J CF	*	1.4 J CF	*	0.41 J CF, Sur	4 J CF	0.36 J CF	*	0.29 J CF	0.46 J CF	2.5 J CF	5.5 J CF
gamma-BHC	440	µg/kg	0.28 J CF, GPC, Sur	3.2 UJ GPC	0.32 J C%D, CF, GPC, Sur	0.48 J CF, GPC	2 UJ GPC	0.21 J CF, GPC	2.4 UJ GPC	2.1 UJ GPC	*	2.7 UJ GPC	2.3 UJ GPC	0.36 J CF, GPC	2 UJ GPC	0.51 J C%D, CF, GPC	0.28 J CF, GPC	2.1 UJ GPC	0.16 J CF
gamma-Chlordane	1,600	µg/kg	1.7 UJ CF, LB, Sur	1.7 UJ CF, LB	4.4 J CF, Sur	1.9 J CF	1.7 UJ CF, LB	2 J CF	0.29 J CF, Sur	4.4 J CF, Sur	1.3 J Sur	1.5 J CF	*	27 J Sur	8.3 J CF	68 J CF	*	7.8 J CF	19 J CF
Heptachlor	110	µg/kg	0.11 J CF, GPC	3.2 UJ GPC	0.29 J CF, GPC	0.69 J CF, GPC, Sur	0.16 J GPC	0.25 J CF, GPC, Sur	2.4 UJ GPC	0.84 J CF, GPC, Sur	*	0.32 J CF, GPC	0.036 J CF, GPC	0.34 J GPC, Sur	2 UJ GPC	0.36 J CF, GPC, Sur	0.04 J CF, GPC, Sur	2.1 UJ GPC	1.7 UJ CF, LB
Heptachlor epoxide	53	µg/kg	0.28 J CF	0.14 J CF	1.9 J Sur	6.1 J Sur	0.44 J CF	*	*	*	0.48 J CF, Sur	0.38 J CF, Sur	*	1.6 J GPC, Sur	*	1.1 J CF, Sur	1.4 J CF, Sur	*	0.73 J CF
Methoxychlor	310,000	µg/kg	18 J CF, Sur	17 UJ CF, LB	1.1 J CF, Sur	17 J CF	17 U LB	17 UJ CF, LB	*	0.71 J CF, Sur	0.5 J CF	12 J CF	17 UJ CF, LB	27 J CF	4.4 J CF	8.5 J CF	17 UJ CF, LB, Sur	0.22 J CF	0.63 J CF
Toxaphene	440	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A12-2
Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1432SSc	1436SSa	1436SSa	1436SSb	1436SSb	326SSa	326SSa	326SSb	326SSb	326SSc	326SSc	326SSc	326SSd	326SSd	326SSe	326SSe	356SSa
			3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs	2.5 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs
		Sample Date	11/7/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	1,200,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	410	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	730	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	2,800	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloropropene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,3-Trichlorobenzene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,3-Trichloropropane	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	62,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromo-3-chloropropane	30	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	32	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	600,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	280	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	340	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	530,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichloropropane	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3,400	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetone	14,000,000	µg/kg	25 UJ C%D	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzene	640	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromochloromethane	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	820	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromoform	62,000	µg/kg	3.2 UJ C%D, ICV	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromomethane	3,900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon disulfide	360,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	250	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	3,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	940	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	47,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	43,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	780	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibromochloromethane	1,100	µg/kg	3.2 UJ LCS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethyl tert-butyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	400,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	390,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	5,600,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	94,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	570,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl ethyl ketone	22,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	5,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	32,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	9,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Styrene	1,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
tert-Amyl methyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
tert-Butyl alcohol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	480	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	520,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TABLE A12-2
Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1432SSc	1436SSa	1436SSa	1436SSb	1436SSb	326SSa	326SSa	326SSb	326SSb	326SSc	326SSc	326SSc	326SSd	326SSd	326SSe	326SSe	356SSa
			3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs	2.5 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs
		Sample Date	11/7/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
trans-1,2-Dichloroethene	69,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	780	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	53	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vinyl chloride	79	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	270,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Semivolatile Organic Compounds																			
1,1'-Biphenyl	3,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4,5-Tetrachlorobenzene	3,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	44,000	µg/kg	---	440 UJ Sur	81 UJ Sur	400 UJ Sur	77 UJ Sur	75 UJ Sur	80 UJ Sur	76 UJ Sur	86 UJ Sur	77 UJ Sur	75 UJ Sur	83 UJ Sur	86 UJ Sur	86 UJ Sur	73 UJ Sur	87 UJ Sur	370 UJ Sur
2,2'-Oxybis(1-Chloropropane)	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,3,4,6-Tetrachlorophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,5-Trichlorophenol	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4,6-Trichlorophenol	6,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	180,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dimethylphenol	1,200,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrophenol	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrotoluene	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2,6-Dinitrotoluene	61,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chloronaphthalene	4,900,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Chlorophenol	63,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylnaphthalene	1,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Methylphenol	3,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitroaniline	180,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3,3'-Dichlorobenzidine	1,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3-Nitroaniline	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Bromophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloro-3-methylphenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chloroaniline	240,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Methylphenol	310,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitroaniline	23,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4-Nitrophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthene	3,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acenaphthylene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Acetophenone	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Anthracene	22,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Atrazine	2,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BAP Equivalents	900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzaldehyde	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)anthracene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(a)pyrene	62	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	380	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzyl butyl phthalate	12,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethoxy)methane	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethyl)ether	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	35,000	µg/kg	*	*	*	*	*	*	*	*	*	200 U LB	*	*	*	220 U LB	190 U LB	220 U LB	*

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Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1432SSc	1436SSa	1436SSa	1436SSb	1436SSb	326SSa	326SSa	326SSb	326SSb	326SSc	326SSc	326SSc	326SSd	326SSd	326SSe	326SSe	356SSa
			3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs	2.5 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs
		Sample Date	11/7/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Semivolatile Organic Compounds																			
Caprolactam	31,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbazole	24,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chrysene	3,800	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibenz(a,h)anthracene	62	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dibenzofuran	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Diethylphthalate	49,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dimethylphthalate	100,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Di-n-butyl phthalate	6,100,000	µg/kg	*	1,100 U LB	*	*	*	*	*	*	220 U LB	200 U LB	*	210 U LB	*	220 U LB	190 U LB	220 U LB	930 U LB
Di-n-octyl phthalate	2,400,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluoranthene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fluorene	2,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobenzene	300	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	6,200	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	370,000	µg/kg	200 UJ C%D	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachloroethane	35,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	620	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Isophorone	510,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	1,700	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nitrobenzene	20,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	69	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
N-Nitrosodiphenylamine	99,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pentachlorophenol	3,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenanthrene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	210 J Sur
Phenol	18,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pyrene	2,300,000	µg/kg	*	5,600 J MS, MS RPD, SD	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Metals																			
Aluminum	76,000	mg/kg	*	4,210 J SerDil	*	*	*	*	*	*	*	2,460 J FD	4,280 J FD	*	*	*	*	*	2,680 J FD
Antimony	31	mg/kg	*	1.7 J MS	7.3 U LB	7.3 U LB	6.8 U LB	6.4 U LB	7.1 U LB	*	*	*	*	*	6.9 U LB	*	*	*	*
Arsenic	22	mg/kg	*	7.6 J MS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4.3 J FD
Barium	5,400	mg/kg	*	333 J MS, SerDil	*	*	*	*	*	*	*	173 J FD	483 J FD	*	*	*	*	*	174 J FD
Beryllium	150	mg/kg	*	0.12 J MS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cadmium	37	mg/kg	*	3 J MS, SerDil	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Calcium	NE	mg/kg	*	4,370 J SerDil	*	*	*	*	*	*	*	1,660 J FD	4,250 J FD	*	*	*	*	*	3,190 J FD
Chromium	210	mg/kg	*	26.1 J MS, SerDil	*	*	*	*	*	*	*	14.7 J FD	42.5 J FD	*	*	*	*	*	10.3 J FD
Cobalt	900	mg/kg	*	4.2 J MS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Copper	3,100	mg/kg	*	234 J MS, SerDil	*	*	*	*	*	*	*	40.5 J FD	120 J FD	*	*	*	*	*	28 J FD
Iron	23,000	mg/kg	*	*	*	*	*	*	*	*	*	5,270 J FD	17,400 J FD	*	*	*	*	*	*
Lead	194	mg/kg	*	*	*	*	**216 J+ CRI**	*	*	**261 J+ C%D, CRI**	*	167 J+ C%D, CRI, FD	**389 J+ C%D, CRI, FD**	*	*	**631 J+ C%D, CRI**	**1,270 J+ C%D, CRI**	**53,000 J C%D, CRI**	*
Magnesium	NE	mg/kg	*	1,230 J SerDil	*	*	*	*	*	*	*	784 J FD	1,660 J FD	*	*	*	*	*	879 J FD
Manganese	1,800	mg/kg	*	304 J MS, SerDil	*	*	*	*	*	*	*	175 J FD	465 J FD	*	*	*	*	*	99.7 J FD
Mercury	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nickel	1,600	mg/kg	*	14.3 J MS, SerDil	*	*	*	*	*	*	*	9.5 J FD	34.1 J FD	*	*	*	*	*	11.8 J FD
Potassium	NE	mg/kg	*	705 J SerDil	*	*	*	*	*	*	*	*	*	*	*	*	*	*	624 J FD
Selenium	390	mg/kg	*	4.2 UJ MS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Silver	390	mg/kg	*	2.8 J MS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sodium	NE	mg/kg	3,810 J+ LCS	595 U LB	*	*	*	*	*	607 U LB	635 U LB	642 U LB	585 U LB	652 U LB	*	587 U LB	545 U LB	*	556 UJ FD, LB
Thallium	5.2	mg/kg	*	1.1 J MS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vanadium	78	mg/kg	*	12.5 J MS, SerDil	*	*	*	*	*	*	*	8.5 J FD	16.9 J FD	*	*	*	*	*	9 J FD
Zinc	23,000	mg/kg	*	1,580 J SerDil	*	*	*	*	*	*	*	175 J FD	555 J FD	*	*	*	*	*	254 J FD

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Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1432SSc	1436SSa	1436SSa	1436SSb	1436SSb	326SSa	326SSa	326SSb	326SSb	326SSc	326SSc	326SSc	326SSd	326SSd	326SSe	326SSe	356SSa
			3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	1 ft bgs (FD)	3 ft bgs	1 ft bgs	2.5 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs
		Sample Date	11/7/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Organochlorine Pesticides																			
4,4'-DDD	2,400	µg/kg	3.1 J CF	9.9 J CF	0.81 J CF	12 J CF	*	13 J Sur	0.36 J CF, Sur	0.39 J CF, Sur	0.48 J CF	490 J CF, FD	1,000 J CF, FD	45 J CF	*	*	15 J CF	3.5 J CF	9.2 J CF, FD
4,4'-DDE	1,700	µg/kg	*	300 J Sur	*	*	3.1 J CF	*	8.1 J CF, Sur	1.1 J CF	3.3 UJ CF, EB	**2,100 J FD**	**11,000 J >IC, FD**	590 J Sur	740 J CF	810 J CF	*	*	110 J FD
4,4'-DDT	1,700	µg/kg	*	*	17 J CF, Sur	320 J >IC	12 J CF	14 J CF	25 J Sur	*	2.4 J CF, RSD	9 J CF, Sur	**3,100 J C%D, CF**	**4,400 J >IC, CF**	*	*	400 J >IC	*	480 J FD
Aldrin	29	µg/kg	0.15 J CF	0.17 J CF, GPC	2.1 UJ GPC	0.57 J GPC	1.9 UJ GPC	1.9 UJ GPC	2 R GPC, Sur	3.8 UJ GPC	2.2 UJ GPC	1.7 J CF, Sur	190 UJ GPC	2.1 UJ GPC	1.6 J GPC, Sur	*	*	*	0.77 J GPC
alpha-BHC	90	µg/kg	0.18 J CF	0.9 J CF, Sur	*	0.71 J CF	*	*	2 R Sur	*	0.24 J CF	*	*	*	*	*	*	*	0.14 J CF
alpha-Chlordane	1,600	µg/kg	*	100 J CF, Sur	2.8 J CF	120 J CF	0.41 J CF	2.3 J CF	2 R Sur	*	0.29 J CF	7.9 J Sur	*	0.59 J CF	0.55 J CF, Sur	0.5 J CF, Sur	3.3 J CF	*	370 J CF
Aroclor-1016	3,900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1221	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1232	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1242	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1248	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1254	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Aroclor-1260	220	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
beta-BHC	320	µg/kg	*	0.57 J CF, Sur	2.1 UJ CF, LB, Sur	2.7 J CF	1.9 UJ CF, LB	1.9 UJ CF, LB	2 UJ CF, LB, Sur	3.8 UJ CF, LB	0.054 J CF	1.4 J CF	*	0.2 J CF	*	0.57 J CF	0.86 J CF	*	0.07 J CF
delta-BHC	NE	µg/kg	*	1.4 J CF	*	*	*	0.28 J Sur	2 R Sur	*	*	*	*	0.24 J CF	0.25 J CF	0.62 J CF	*	*	0.41 J CF
Dieldrin	30	µg/kg	3.5 J CF	*	4.4 J CF	*	0.2 J CF	0.34 J CF, Sur	4 R Sur	*	3.3 UJ CF, EB	**160 J CF, FD**	23 J CF, FD	*	1.4 J CF, Sur	9.8 J CF, Sur	*	0.47 J CF	5.1 J CF
Endosulfan I	370,000	µg/kg	0.14 J CF	0.79 J CF, Sur	*	1.5 J CF	*	1.6 J CF	2 R Sur	*	*	5.7 J CF, Sur	*	0.67 J CF	0.6 J CF, Sur	0.34 J CF, Sur	*	*	3.5 J CF
Endosulfan II	370,000	µg/kg	0.29 J CF	0.51 J CF	0.43 J CF	2.4 J CF	*	0.35 J CF, Sur	4 R Sur	*	*	5.9 J CF, Sur	32 J CF	3 J CF	2.5 J CF, Sur	0.77 J CF, Sur	*	0.42 J CF	1.8 J CF
Endosulfan sulfate	NE	µg/kg	*	4.7 J CF, Sur	0.82 J CF	0.97 J CF	1.9 J CF, Sur	3 J CF, Sur	4 R Sur	*	0.37 J CF	6.8 J C%D, CF	*	1.6 J CF	0.78 J CF	1.2 J C%D	0.35 J CF	*	0.3 J CF
Endrin	18,000	µg/kg	3.3 UJ CF, LB	1.2 J CF	*	13 J CF	1.3 J CF	0.44 J CF, Sur	0.21 J CF, Sur	*	*	0.78 J CF, Sur	*	0.26 J CF	340 J >IC, CF, Sur	0.28 J CF, Sur	0.82 J CF	0.44 J CF	37 J CF
Endrin aldehyde	NE	µg/kg	1.5 J CF	3.3 UJ CF, LB	0.5 J CF, Sur	0.56 J CF	*	*	0.47 J CF, Sur	*	3.3 UJ CF, LB	0.75 J CF, Sur	24 J CF	3.3 UJ CF, LB	0.33 J CF, Sur	*	1.3 J CF	0.28 J CF	3.3 U LB
Endrin ketone	NE	µg/kg	2.6 J CF	8.7 J CF	0.65 J CF	1.7 J CF	0.59 J CF	0.34 J CF, Sur	1.5 J CF, Sur	0.53 J CF, Sur	0.41 J CF	5.2 J CF	*	0.95 J CF	0.44 J CF	1.6 J CF, Sur	0.21 J CF	0.33 J CF	0.73 J CF
gamma-BHC	440	µg/kg	0.26 J CF	0.36 J CF, GPC	2.1 UJ GPC	2 UJ GPC	1.9 UJ GPC	5 J GPC	2 R GPC, Sur	3.8 UJ GPC	0.2 J CF, GPC	3.7 J C%D, CF, Sur	190 UJ GPC	0.27 J GPC	220 J GPC	26 J CF, Sur	*	1 J CF	1.9 UJ GPC
gamma-Chlordane	1,600	µg/kg	*	110 J Sur	1.4 J Sur	1.5 J CF	1 J CF, Sur	0.23 J CF, Sur	0.57 J CF, Sur	*	1.7 UJ CF, LB	*	110 J CF	1.7 J CF	*	23 J CF	3.1 J CF	0.73 J CF	*
Heptachlor	110	µg/kg	1.7 U LB	0.34 J GPC	2.1 UJ GPC	1.3 J GPC	1.9 UJ GPC	1.9 UJ GPC	2 R GPC, Sur	3.8 UJ GPC	2.2 UJ GPC	*	190 UJ GPC	2.1 UJ GPC	2.2 UJ GPC	*	*	*	3.4 J CF, GPC
Heptachlor epoxide	53	µg/kg	0.46 J CF	2.3 J CF, Sur	*	0.74 J CF	*	0.47 J CF, Sur	2 R Sur	*	*	4.3 J CF	*	0.49 J CF	*	0.34 J CF	*	*	11 J CF
Methoxychlor	310,000	µg/kg	*	45 J CF	2.5 J CF	*	0.42 J CF, Sur	*	0.79 J CF, Sur	1.8 J CF, Sur	17 UJ CF, LB	12 J CF	82 J CF	*	5.9 J CF	6.2 J CF	9.5 J CF	3.4 J CF	17 UJ CF, LB
Toxaphene	440	µg/kg	*	*	*	*	*	*	200 R Sur	*	*	*	*	*	*	*	*	*	*

TABLE A12-2
Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	356SSa	356SSa	356SSb	356SSb	356SSc	356SSc	360SSa	360SSa	360SSb	360SSb
			1 ft bgs (FD)	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs
		Sample Date	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**									
Volatile Organic Compounds												
1,1,1-Trichloroethane	1,200,000	µg/kg	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	410	µg/kg	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	730	µg/kg	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	2,800	µg/kg	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*
1,1-Dichloropropene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
1,2,3-Trichlorobenzene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
1,2,3-Trichloropropane	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	62,000	µg/kg	*	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
1,2-Dibromo-3-chloropropane	30	µg/kg	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	32	µg/kg	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	600,000	µg/kg	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	280	µg/kg	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	340	µg/kg	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	530,000	µg/kg	*	*	*	*	*	*	*	*	*	*
1,3-Dichloropropane	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3,400	µg/kg	*	*	*	*	*	*	*	*	*	*
2-Hexanone	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
Acetone	14,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Benzene	640	µg/kg	*	*	*	*	*	*	*	*	*	*
Bromochloromethane	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
Bromodichloromethane	820	µg/kg	*	*	*	*	*	*	*	*	*	*
Bromoform	62,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Bromomethane	3,900	µg/kg	*	*	*	*	*	*	*	*	*	*
Carbon disulfide	360,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	250	µg/kg	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Chloroethane	3,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Chloroform	940	µg/kg	*	*	*	*	*	*	*	*	*	*
Chloromethane	47,000	µg/kg	*	*	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	43,000	µg/kg	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	780	µg/kg	*	*	*	*	*	*	*	*	*	*
Dibromochloromethane	1,100	µg/kg	*	*	*	*	*	*	*	*	*	*
Ethyl tert-butyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	400,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Freon 11	390,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Freon 113	5,600,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Freon 12	94,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Isopropyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
Isopropylbenzene (cumene)	570,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Methyl ethyl ketone	22,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Methyl isobutyl ketone	5,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	32,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Methylene chloride	9,100	µg/kg	*	*	*	*	*	*	*	*	*	*
Styrene	1,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*
tert-Amyl methyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
tert-Butyl alcohol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	480	µg/kg	*	*	*	*	*	*	*	*	*	*
Toluene	520,000	µg/kg	*	*	*	*	*	*	*	*	*	*

TABLE A12-2
Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	356SSa	356SSa	356SSb	356SSb	356SSc	356SSc	360SSa	360SSa	360SSb	360SSb
			1 ft bgs (FD)	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs
		Sample Date	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**									
Volatile Organic Compounds												
trans-1,2-Dichloroethene	69,000	µg/kg	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	780	µg/kg	*	*	*	*	*	*	*	*	*	*
Trichloroethene	53	µg/kg	*	*	*	*	*	*	*	*	*	*
Vinyl chloride	79	µg/kg	*	*	*	*	*	*	*	*	*	*
Xylenes, total	270,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Semivolatile Organic Compounds												
1,1'-Biphenyl	3,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*
1,2,4,5-Tetrachlorobenzene	3,200	µg/kg	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	44,000	µg/kg	73 UJ Sur	79 UJ Sur	89 UJ Sur	83 UJ Sur	73 UJ Sur	76 UJ Sur	73 UJ Sur	76 UJ Sur	410 UJ Sur	76 UJ Sur
2,2'-Oxybis(1-Chloropropane)	NE	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
2,3,4,6-Tetrachlorophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
2,4,5-Trichlorophenol	6,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*
2,4,6-Trichlorophenol	6,100	µg/kg	*	*	*	*	*	*	*	*	*	*
2,4-Dichlorophenol	180,000	µg/kg	*	*	*	*	*	*	*	*	*	*
2,4-Dimethylphenol	1,200,000	µg/kg	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrophenol	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*
2,4-Dinitrotoluene	120,000	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
2,6-Dinitrotoluene	61,000	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
2-Chloronaphthalene	4,900,000	µg/kg	*	*	*	*	*	*	*	*	*	*
2-Chlorophenol	63,000	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
2-Methylnaphthalene	1,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*
2-Methylphenol	3,100,000	µg/kg	*	*	*	*	*	*	*	*	*	*
2-Nitroaniline	180,000	µg/kg	*	*	*	*	*	*	*	*	*	*
2-Nitrophenol	NE	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
3,3'-Dichlorobenzidine	1,100	µg/kg	*	*	*	*	*	*	*	*	*	*
3-Nitroaniline	18,000	µg/kg	*	*	*	*	*	*	*	*	*	*
4,6-Dinitro-2-methylphenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
4-Bromophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
4-Chloro-3-methylphenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
4-Chloroaniline	240,000	µg/kg	*	*	*	*	*	*	*	*	*	*
4-Chlorophenylphenyl ether	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
4-Methylphenol	310,000	µg/kg	*	*	*	*	*	*	*	*	*	*
4-Nitroaniline	23,000	µg/kg	*	*	*	*	*	*	*	*	*	*
4-Nitrophenol	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
Acenaphthene	3,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Acenaphthylene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
Acetophenone	NE	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
Anthracene	22,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Atrazine	2,200	µg/kg	*	*	*	*	*	*	*	*	*	*
BAP Equivalents	900	µg/kg	*	*	*	*	*	*	*	*	*	*
Benzaldehyde	6,100,000	µg/kg	*	*	*	210 UJ Sur	*	*	*	*	*	*
Benzo(a)anthracene	620	µg/kg	*	*	*	*	*	*	*	*	*	*
Benzo(a)pyrene	62	µg/kg	*	*	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	620	µg/kg	*	*	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	NE	µg/kg	*	*	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	380	µg/kg	*	*	*	*	*	*	*	*	*	*
Benzyl butyl phthalate	12,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*
bis(2-Chloroethoxy)methane	NE	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
bis(2-Chloroethyl)ether	220	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
bis(2-Ethylhexyl)phthalate	35,000	µg/kg	*	*	*	*	*	*	*	*	150 J Sur	*

TABLE A12-2
Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	356SSa	356SSa	356SSb	356SSb	356SSc	356SSc	360SSa	360SSa	360SSb	360SSb
			1 ft bgs (FD)	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs
		Sample Date	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006
Analyte	Screening Level	Units	Analytical Results									
Semivolatile Organic Compounds												
Caprolactam	31,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Carbazole	24,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Chrysene	3,800	µg/kg	*	*	*	*	*	*	*	*	*	*
Dibenz(a,h)anthracene	62	µg/kg	*	*	*	*	*	*	*	*	*	*
Dibenzofuran	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Diethylphthalate	49,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Dimethylphthalate	100,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Di-n-butyl phthalate	6,100,000	µg/kg	*	*	230 U LB	210 U LB	*	190 U LB	*	190 U LB	*	*
Di-n-octyl phthalate	2,400,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Fluoranthene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Fluorene	2,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Hexachlorobenzene	300	µg/kg	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	6,200	µg/kg	*	*	*	*	*	*	*	*	*	*
Hexachlorocyclopentadiene	370,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Hexachloroethane	35,000	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
Indeno(1,2,3-c,d)pyrene	620	µg/kg	*	*	*	*	*	*	*	*	*	*
Isophorone	510,000	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
Naphthalene	1,700	µg/kg	*	*	*	*	*	*	*	*	*	*
Nitrobenzene	20,000	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
N-Nitrosodi-n-propylamine	69	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
N-Nitrosodiphenylamine	99,000	µg/kg	*	*	*	210 R Sur	*	*	*	*	*	*
Pentachlorophenol	3,000	µg/kg	*	*	*	*	360 UJ MS, SD	*	*	*	*	*
Phenanthrene	NE	µg/kg	*	*	*	*	*	*	*	*	770 J Sur	*
Phenol	18,000,000	µg/kg	*	*	*	210 UJ Sur	*	*	*	*	*	*
Pyrene	2,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*
Metals												
Aluminum	76,000	mg/kg	5,670 J FD	*	*	*	6,380 J LD	*	*	*	*	6,640 J SerDil
Antimony	31	mg/kg	6.6 U LB	*	6.8 U LB	*	6.5 UJ MS	*	9.2 U LB	*	*	6.8 UJ LB, MS
Arsenic	22	mg/kg	7.8 J FD	*	*	*	7.5 J LD, MS	*	*	*	*	*
Barium	5,400	mg/kg	360 J FD	*	*	*	190 J LD, MS	*	*	*	*	168 J SerDil
Beryllium	150	mg/kg	*	*	*	*	0.27 J MS	*	*	*	*	*
Cadmium	37	mg/kg	*	*	*	*	1.1 J MS	*	*	*	*	*
Calcium	NE	mg/kg	5,490 J FD	*	*	*	8,310 J LD	*	*	*	*	8,450 J SerDil
Chromium	210	mg/kg	30.6 J FD	*	*	*	19.1 J LD, MS	*	*	*	*	22.9 J LD, SerDil
Cobalt	900	mg/kg	*	*	*	*	5.7 J MS	*	*	*	*	*
Copper	3,100	mg/kg	80 J FD	*	*	*	48.3 J LD, MS	*	*	*	*	105 J MS, SerDil
Iron	23,000	mg/kg	*	*	*	*	13,700 J LD	*	*	*	*	14,800 J SerDil
Lead	194	mg/kg	**822 J+ CRI**	*	**563 J+ CRI**	*	**354 J+ C%D, CRI, LD**	26.2 J+ C%D, CRI	**2,230 J+ CRI**	*	*	**478 J SerDil**
Magnesium	NE	mg/kg	2,100 J FD	*	*	*	3,610 J LD	*	*	*	*	3,090 J SerDil
Manganese	1,800	mg/kg	271 J FD	*	*	*	*	*	*	*	*	245 J SerDil
Mercury	NE	mg/kg	*	*	*	*	*	*	*	*	*	1.7 J LD
Nickel	1,600	mg/kg	28.4 J FD	*	*	*	21.3 J LD, MS	*	*	*	*	20.9 J SerDil
Potassium	NE	mg/kg	1,520 J FD	*	*	*	1,660 J LD	*	*	*	*	1,510 J SerDil
Selenium	390	mg/kg	*	*	*	*	3.8 UJ MS	*	*	*	*	*
Silver	390	mg/kg	*	*	*	*	0.61 J- MS	*	*	*	*	*
Sodium	NE	mg/kg	1,920 J FD	*	*	605 U LB	542 U LB	566 U LB	*	569 U LB	571 U LB	*
Thallium	5.2	mg/kg	*	*	*	*	0.56 J MS	*	*	*	*	*
Vanadium	78	mg/kg	22.4 J FD	*	*	*	18.5 J LD, MS	*	*	*	*	22.3 J SerDil
Zinc	23,000	mg/kg	724 J FD	*	*	*	260 J LD, MS	*	*	*	*	178 J SerDil

TABLE A12-2
Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	356SSa	356SSa	356SSb	356SSb	356SSc	356SSc	360SSa	360SSa	360SSb	360SSb
			1 ft bgs (FD)	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs	1 ft bgs	3 ft bgs
		Sample Date	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006	10/18/2006
Analyte	Screening Level	Units	Analytical Results									
Organochlorine Pesticides												
4,4'-DDD	2,400	µg/kg	5.9 J CF, FD	0.44 J CF	5.8 J CF	*	0.89 J CF	*	1.6 J CF, Sur	1.8 J CF	7.5 J CF	0.39 J CF
4,4'-DDE	1,700	µg/kg	0.67 J CF, FD	1.1 J CF	*	3.3 UJ CF, EB	1.2 J CF	0.37 J CF	130 J CF	50 J CF	54 J CF	5.2 J CF
4,4'-DDT	1,700	µg/kg	210 J >IC, FD	*	33 J CF	9.9 J CF, RSD	*	*	9 J CF, Sur	380 J CF	800 J CF	38 J CF
Aldrin	29	µg/kg	0.51 J CF, GPC	2 UJ GPC	0.094 J CF, GPC	0.11 J CF, GPC	1.9 UJ GPC	*	0.48 J CF, GPC, Sur	1.2 J CF, GPC	0.11 J CF, GPC	1.9 UJ GPC
alpha-BHC	90	µg/kg	*	*	*	*	*	*	0.34 J C%D, CF	0.28 J CF	0.26 J CF	*
alpha-Chlordane	1,600	µg/kg	2.5 J CF	1.7 J CF	19 J CF	0.1 J CF	2.1 J CF	0.25 J CF	7.3 J CF, Sur	1.3 J CF	3 J CF	*
Aroclor-1016	3,900	µg/kg	*	*	*	*	*	*	*	*	*	*
Aroclor-1221	220	µg/kg	*	*	*	*	*	*	*	*	*	*
Aroclor-1232	220	µg/kg	*	*	*	*	*	*	*	*	*	*
Aroclor-1242	220	µg/kg	*	*	*	*	*	*	*	*	*	*
Aroclor-1248	220	µg/kg	*	*	*	*	*	*	*	*	*	*
Aroclor-1254	220	µg/kg	*	*	*	*	*	*	*	**2,400 J >IC**	*	*
Aroclor-1260	220	µg/kg	*	*	*	*	*	*	*	*	*	*
beta-BHC	320	µg/kg	1.8 UJ CF, LB	2 UJ CF, LB	0.17 J CF	0.089 J CF	1.9 UJ CF, LB	*	1.8 UJ CF, LB, Sur	1.2 J CF	0.057 J CF	1.9 UJ CF, LB
delta-BHC	NE	µg/kg	*	*	0.56 J CF	*	*	*	0.23 J CF, Sur	0.18 J CF	0.032 J CF	*
Dieldrin	30	µg/kg	*	*	2.3 J CF	3.3 UJ CF, EB	*	*	14 J CF	12 J CF	3.9 J CF	*
Endosulfan I	370,000	µg/kg	3.3 J CF	*	*	*	*	*	20 J CF, Sur	4 J CF	0.35 J CF	*
Endosulfan II	370,000	µg/kg	1.4 J CF	*	0.29 J CF	0.2 J CF	*	*	53 J CF	8.6 J CF	0.87 J CF	*
Endosulfan sulfate	NE	µg/kg	0.71 J CF	*	1.2 J CF	0.3 J CF	*	*	0.42 J CF	0.32 J CF	0.16 J CF	0.4 J CF
Endrin	18,000	µg/kg	0.25 J CF	*	0.3 J CF	0.67 J CF	*	*	*	5.3 J CF	0.64 J CF	0.57 J CF
Endrin aldehyde	NE	µg/kg	0.19 J CF	0.55 J CF	3.3 UJ CF, LB	3.3 UJ CF, LB	*	*	8.2 J CF, Sur	*	3.3 UJ CF, LB	*
Endrin ketone	NE	µg/kg	0.75 J CF	19 J CF	0.93 J CF	1.6 J CF	*	*	1.5 J CF	0.15 J CF	0.27 J CF	*
gamma-BHC	440	µg/kg	0.22 J GPC	2 UJ GPC	2.3 UJ GPC	0.17 J CF, GPC	1.9 UJ GPC	*	1.8 UJ GPC	1.9 UJ GPC	0.2 J CF, GPC	1.9 UJ GPC
gamma-Chlordane	1,600	µg/kg	2.8 J CF	0.48 J CF	*	1.7 UJ CF, LB	1.8 J CF	*	3.9 J CF	29 J CF	2.9 J CF	*
Heptachlor	110	µg/kg	1.4 J CF, GPC	2 UJ GPC	0.042 J CF, GPC	2.1 UJ GPC	1.9 UJ GPC	*	1.8 UJ GPC	0.47 J GPC	0.33 J CF, GPC	1.9 UJ GPC
Heptachlor epoxide	53	µg/kg	0.97 J CF	*	2.2 J CF	0.057 J CF	*	*	**310 J CF**	9.9 J CF	2.5 J CF	*
Methoxychlor	310,000	µg/kg	0.68 J CF	1.8 J CF	17 UJ CF, LB	17 UJ CF, LB	*	0.22 R CF, Sur	9.6 J CF, Sur	17 UJ CF, LB	220 J CF	2 J CF
Toxaphene	440	µg/kg	*	*	*	*	*	*	*	*	*	*

TABLE A12-2
Result Qualification and Associated Reason Codes - Residential Soil (October 2006)
AMCO Chemical Superfund Site, Oakland, California

Notes:
Results greater than the screening level are bolded
Rejected Results are enclosed by boxes
See Soil Screening Level table for source of screening levels.

*	result not qualified for Quality Control outliers
FD	field duplicate
ft bgs	feet below ground surface
NE	not established
µg/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
J	estimated value
J-	estimated value, low bias
J+	estimated value, high bias
R	rejected for failure to meet quality control requirement.
U	not detected at or above the reporting limit.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
>IC	Result greater than linear calibration range
C%D	Continuing calibration verification is outside control limit
CF	Confirmation precision exceeded
CRI	CRQL check standard greater than upper control limit
EB	Equipment blank concentration exceeds criteria
FD	Field duplicate exceeds relative percent difference criteria
GPC	Gel permeation chromatography recovery less than lower limit
ICV	Second source verification std. recovery exceeds control limit
LB	Laboratory blank concentration exceeds criteria
LCS	Laboratory Control Sample recovery is outside control limit
LD	Laboratory duplicate exceeds relative percent difference criteria
MS	Matrix spike recovery exceeds control limilt
RSD	Initial calibration relative standard deviation exceeded
SD	Matrix spike duplicate recovery exceeds criteria
SerDil	Serial dilution percent difference exceeds control limit
Sur	Surrogate recovery outside control limits

Appendix A13
Residential Produce Sampling, November 2006

APPENDIX A13

Residential Produce Sampling, November 2006

A13.1 Summary

The following sections describe the samples collected during the Residential Produce 2006 sampling event which occurred in November, 2006.

Residential Produce, 2006: Produce samples were collected on November, 2006 from fig, grape, pomegranate, tomato, bell pepper, green chili, lemon, mint, red chili, tomatillo, apple blackberry and cactus plants and analyzed for VOCs and ICP/MS metals.

A13.2 Data Review and Validation Findings

Table A13-1 presents a list of sample delivery groups, sample identifications, and validation levels for the Residential produce samples collected in November, 2006. Table A13-2 presents the Tier 3 qualified results. Results that are unqualified are indicated by an asterisk. Rejected results are shown in boxes. The following discussion presents the findings of the Tier 3 validation of the residential produce sample results. All of the results were validated by EPA in accordance with Tier 3 procedures.

The following section discusses the results qualified based on the Tier 3 validation of Residential produce samples. The results were qualified for outliers associated with the following QC metrics: continuing calibration and surrogate.

A13.2.1 Continuing Calibration (Reason Code CRRF)

VOCs in Produce: The minimum RRF for tert-butyl alcohol was not met in the continuing calibration. Tert-butyl alcohol quantitation limits were rejected in all samples

A13.2.2 Surrogate (Reason Code Sur)

VOCs in Produce: The surrogate recovery for the sample from location 356PC-Apple was below the lower control limit but greater than 10%. The laboratory re-extracted the sample with similar results. The quantitation limits for all analytes in this sample were qualified as estimated and flagged UJ.

TABLE A13-1
Sample Delivery Group Reference - Produce Samples (October 2006)
AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
K0609319 (Columbia)				
Metals, EPA Method 6020				
	1432-Fig	N	1432PC-Fig-1006	Tier 3
	1432-Grape	N	1432PC-Grape-1006	Tier 3
	1432-Pomengranate	N	1432PC-Pomengran-1006	Tier 3
	1432-Tomato	N	1432PC-Tomato-1006	Tier 3
	1436-Bell Pepper	N	1436PC-Bell Pepper-1006	Tier 3
	1436-Green Chili	N	1436PC-G Chili-1006	Tier 3
	1436-Lemon	N	1436PC-Lemon-1006	Tier 3
	1436-Lemon	FD	1436PC-Lemon-Dup-1006	Tier 3
	1436-Mint	N	1436PC-Mint-1006-1006	Tier 3
	1436-Red Chili	N	1436PC-Red Chili-1006	Tier 3
	1436-Tomatillo	N	1436PC-Tomatillo-1006	Tier 3
	1436-Tomato	N	1436PC-Tomato-1006	Tier 3
	356-Apple	N	356PC-Apple-1006	Tier 3
	360-Apple	N	360PC-Apple-1006	Tier 3
	360-Blackberry	CS	360PC-Blackberry-1006	Tier 3
	360-Cactus	N	360PC-Cactus-1006	Tier 3
	360-Cactus	FD	360PC-Cactus-Dup-1006	Tier 3
Volatile Organics, EPA Method 8260B				
	1432-Fig	N	1432PC-Fig-1006	Tier 3
	1432-Grape	N	1432PC-Grape-1006	Tier 3
	1432-Pomengranate	N	1432PC-Pomengran-1006	Tier 3
	1432-Tomato	N	1432PC-Tomato-1006	Tier 3
	1436-Bell Pepper	N	1436PC-Bell Pepper-1006	Tier 3
	1436-Green Chili	N	1436PC-G Chili-1006	Tier 3
	1436-Lemon	N	1436PC-Lemon-1006	Tier 3
	1436-Lemon	FD	1436PC-Lemon-Dup-1006	Tier 3
	1436-Mint	N	1436PC-Mint-1006-1006	Tier 3
	1436-Red Chili	N	1436PC-Red Chili-1006	Tier 3
	1436-Tomatillo	N	1436PC-Tomatillo-1006	Tier 3
	1436-Tomato	N	1436PC-Tomato-1006	Tier 3
	356-Apple	N	356PC-Apple-1006	Tier 3
	360-Apple	N	360PC-Apple-1006	Tier 3
	360-Blackberry	CS	360PC-Blackberry-1006	Tier 3
	360-Cactus	N	360PC-Cactus-1006	Tier 3
	360-Cactus	FD	360PC-Cactus-Dup-1006	Tier 3

Notes:
N regular sample
FD field duplicate
CS composite

Table A13-2
Result Qualification and Associated Reason Codes - Produce Samples (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1432 3rd St Fig	1432 3rd St Grape	1432 3rd St Pomengranate	1432 3rd St Tomato	1436 3rd St Bell Pepper	1436 3rd St Green Chili	1436 3rd St Lemon	1436 3rd St Lemon (FD)	1436 3rd St Mint	1436 3rd St Red Chili	1436 3rd St Tomatillo	1436 3rd St Tomato	356 Center St Apple	360 Center St Apple	360 Center St Blackberry	360 Center St Cactus	360 Center St Cactus (FD)
		Sample Date	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
1,1,1-Trichloroethane	1,200,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	17 UJ Sur	*	*	*	*
1,1,2,2-Tetrachloroethane	410	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	21 UJ Sur	*	*	*	*
1,1,2-Trichloroethane	730	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	15 UJ Sur	*	*	*	*
1,1-Dichloroethane	2,800	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	14 UJ Sur	*	*	*	*
1,1-Dichloroethene	120,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	18 UJ Sur	*	*	*	*
1,2,4-Trichlorobenzene	62,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	33 UJ Sur	*	*	*	*
1,2,4-Trimethylbenzene	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	0.021 UJ Sur	*	*	*	*
1,2-Dibromo-3-chloropropane	30	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	150 UJ Sur	*	*	*	*
1,2-Dibromoethane	32	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*	*
1,2-Dichlorobenzene	600,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	13 UJ Sur	*	*	*	*
1,2-Dichloroethane	280	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	17 UJ Sur	*	*	*	*
1,2-Dichloropropane	340	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	28 UJ Sur	*	*	*	*
1,3-Dichlorobenzene	530,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	16 UJ Sur	*	*	*	*
1,4-Dichlorobenzene	3,400	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	13 UJ Sur	*	*	*	*
2-Hexanone	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	0.59 UJ Sur	*	*	*	*
Acetone	14,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	340 UJ Sur	*	*	*	*
Benzene	640	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	16 UJ Sur	*	*	*	*
Bromochloromethane	NE	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	0.019 UJ Sur	*	*	*	*
Bromodichloromethane	820	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	13 UJ Sur	*	*	*	*
Bromoform	62,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	42 UJ Sur	*	*	*	*
Bromomethane	3,900	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	32 UJ Sur	*	*	*	*
Carbon disulfide	360,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	24 UJ Sur	*	*	*	*
Carbon tetrachloride	250	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	19 UJ Sur	*	*	*	*
Chlorobenzene	150,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	14 UJ Sur	*	*	*	*
Chloroethane	3,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	26 UJ Sur	*	*	*	*
Chloroform	940	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	15 UJ Sur	*	*	*	*
Chloromethane	47,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	21 UJ Sur	*	*	*	*
cis-1,2-Dichloroethene	43,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	18 UJ Sur	*	*	*	*
cis-1,3-Dichloropropene	780	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	12 UJ Sur	*	*	*	*
Cyclohexane	140,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	15 UJ Sur	*	*	*	*
Dibromochloromethane	1,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	13 UJ Sur	*	*	*	*
Ethylbenzene	400,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	15 UJ Sur	*	*	*	*
Freon 11	390,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	20 UJ Sur	*	*	*	*
Freon 113	5,600,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	18 UJ Sur	*	*	*	*
Freon 12	94,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	25 UJ Sur	*	*	*	*
Isopropylbenzene (cumene)	570,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*	*
Methyl acetate	22,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	14 UJ Sur	*	*	*	*
Methyl ethyl ketone	22,000,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	480 UJ Sur	*	*	*	*
Methyl isobutyl ketone	5,300,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	420 UJ Sur	*	*	*	*
Methyl tert-butyl ether	32,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	11 UJ Sur	*	*	*	*
Methylcyclohexane	2,600,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	8.7 UJ Sur	*	*	*	*
Methylene chloride	9,100	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	29 UJ Sur	*	*	*	*
Styrene	1,700,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	14 UJ Sur	*	*	*	*
tert-Butyl alcohol	NE	mg/kg	0.19 R CRRF, IRRF	0.19 R CRRF, IRRF	0.19 R CRRF, IRRF	0.21 R CRRF, IRRF	0.18 R CRRF, IRRF	0.15 R CRRF, IRRF	0.16 R CRRF, IRRF	0.21 R CRRF, IRRF	0.18 R CRRF, IRRF	0.17 R CRRF, IRRF	0.18 R CRRF, IRRF	0.17 R CRRF, IRRF	0.16 R CRRF, IRRF, Sur	0.16 R CRRF, IRRF	0.16 R CRRF, IRRF	0.15 R CRRF, IRRF	0.21 R CRRF, IRRF
Tetrachloroethene	480	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	17 UJ Sur	*	*	*	*
Toluene	520,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	15 UJ Sur	*	*	*	*
trans-1,2-Dichloroethene	69,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	21 UJ Sur	*	*	*	*
trans-1,3-Dichloropropene	780	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	13 UJ Sur	*	*	*	*
Trichloroethene	53	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	28 UJ Sur	*	*	*	*
Vinyl chloride	79	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	32 UJ Sur	*	*	*	*

Table A13-2
Result Qualification and Associated Reason Codes - Produce Samples (October 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1432 3rd St Fig	1432 3rd St Grape	1432 3rd St Pomengranate	1432 3rd St Tomato	1436 3rd St Bell Pepper	1436 3rd St Green Chili	1436 3rd St Lemon	1436 3rd St Lemon (FD)	1436 3rd St Mint	1436 3rd St Red Chili	1436 3rd St Tomatillo	1436 3rd St Tomato	356 Center St Apple	360 Center St Apple	360 Center St Blackberry	360 Center St Cactus	360 Center St Cactus (FD)
		Sample Date	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006	10/19/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**																
Volatile Organic Compounds																			
Xylenes, total	270,000	µg/kg	*	*	*	*	*	*	*	*	*	*	*	*	28 UJ Sur	*	*	*	*
Metals																			
Arsenic	22	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chromium	210	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lead	194	mg/kg	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.7 J FD	1.21 J FD

Notes:
Results greater than the screening level are bolded
Produce results were evaluated using the Soil Screening Levels.
Rejected Results are enclosed by boxes

*	result not qualified for Quality Control outliers
FD	field duplicate
NE	not established
mg/kg	milligrams per kilogram
J	estimated value
R	rejected for failure to meet quality control requirement.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
CRRF	Continuing calibration relative response factor below lower control limit
FD	Field duplicate exceeds relative percent difference criteria
IRRF	Initial calibration relative response factor exceeds control limit
Sur	Surrogate recovery outside control limits

Appendix A14
Residential Air and Soil Gas Sampling, November 2006

APPENDIX A14-1

Residential Air and Soil Gas Sampling, November 2006

A14.1 Summary

The following sections describe the samples collected during the Residential Air and Soil Gas sampling event which occurred in November, 2006.

Residential Ambient Air and Crawl Space Air Samples: Samples were collected on November 7, 2006 from five residences, from locations in Prescott Park, and background locations. The background samples were collected in the morning (AM) and afternoon (PM). Certified Clean 4L Summa Canisters were used to collect all samples. All samples were analyzed for method TO-15 SIM. For ambient and crawl space air, the selected screening levels are the EPA Region 9 ambient air PRGs.

Residential Soil Gas Sampling: Certified Clean 4L Summa Canisters were used to collect samples from three residences and from locations in Prescott Park on May 12 and 13, 2005, for TO-15 and TO-15 SIM analyses. The appropriate methodology and method quality control requirements were followed. All samples were analyzed by method TO-15 SIM. For ambient and crawl space air, the selected screening levels are 10 time the EPA Region 9 ambient air PRGs.

A14.2 Data Review and Validation Findings

Table A14-1 and A14-2 presents a list of sample delivery groups, sample identifications, and validation levels for the Residential air and soil gas samples collected in November, 2006. Tables A14-3 and A14-4 present the Tier 3 qualified results. Results that are unqualified are indicated by an asterisk. Rejected results are shown in boxes. The following discussion presents the findings of the Tier 3 validation of the residential air and soil gas sample results. All of the results were validated by EPA in accordance with Tier 3 procedures.

A14.2.1 Residential Ambient and Crawlspace Air – TO-15

The following section discusses the results qualified based on the Tier 3 validation of Residential Ambient and Crawlspace air samples. The results were qualified for outliers associated with the following QC metrics: laboratory method blank, continuing calibration and target compound identification.

A14.2.1.1 Laboratory Method Blank (Reason Code LB)

The following analytes in the samples from the indicated locations were estimated due to method blank contamination:

- Methylene chloride in 1432AA, 1428AA, 1432CA, PPAA, 1414CAA duplicate, 1414CAA, 322-BA-PM, 322-BA-AM, and 1414CAB
- 1,4-Dichlorobenzene in 1414CAB, 1432CA, 1428AA, 1432AA, and PP-AA
- Freon 113 in 1414CAA

Where sample results are below the reporting limit but less than 5 times the blank concentration, the results were qualified as not detected, U, at the reporting limit. Where samples are above the reporting limit, but less than 5 times the blank concentration, the results were qualified as not detected, U, at the concentration found.

A14.2.1.2 Continuing Calibration (Reason Code C%D)

The continuing calibration %D was outside the ± 25% control limit for the following analyte results in the samples from the indicated locations:

- Freon 12 in 322-BA-PM, 322-BA-AM, 1436AA duplicate, 360AA, 1436AA, and 1414CAA

Detected results were flagged J.

A14.2.1.3 Target Compound Identification (Reason Code SI)

The mass spectrum and ion profile for chloroethane in the sample from location 1428-CAa were missing the qualifying ion. Therefore, the reported result was qualified as not detected at the RL, U.

A14.2.2 Residential Soil Gas – TO-15 SIM

The following section discusses the results qualified based on the Tier 3 validation of Residential Soil Gas samples. The results were qualified for outliers associated with the following QC metrics: laboratory method blank, initial calibration, Initial calibration linear range exceeded, continuing calibration, laboratory control sample, and spectral identification.

A14.2.2.1 Laboratory Method Blank (Reason Code LB)

The following analytes in the samples from the indicated locations were estimated due to method blank contamination:

- Ethylbenzene in 1428SG, 360SGB, 360SGB duplicate, and 356SG
- Naphthalene in 360-SGC, PP-NW, and PP-E
- Trichloroethene in 356-SG, 1436-SG, 1432-SGB, and 1432-SGA
- Tetrachloroethene in PP-NW

A14.2.2.2 Initial Calibration (Reason Code RSD)

The initial calibration exceeded the ± 25% RSD control limit for the following analytes in the samples from the indicated locations:

- Benzene in 360-SGa, 360-SGb, 360-SGc, PP-E, PP-NW, 360-SGb duplicate, 1436-SG, 1432-SGb, 1432-SGa, 1428-SG,

The results and quantitation limits are estimated, J/UJ.

A14.2.2.3 Initial Calibration Linear Range Exceeded (Reason Code >IC)

The initial calibration range was exceeded for Freon 134A in the samples from the indicated locations:

- 360-SGa, 360-SGb, 360-SGc, PP-E, PP-NW, 360-SGb duplicate, and 1436-SG

The results were estimated, J.

A14.2.2.4 Continuing Calibration (Reason Code C%D)

The continuing calibration %D was above the 125% upper control limit for the following compounds in the indicated samples:

- Freon 12 in 360-SGA, 360-SGB, and 360-SGb duplicate

Detected results were estimated and flagged, J.

A14.2.2.5 Laboratory Control Sample (Reason Code LCS)

The laboratory control sample recovery was below the 20% lower control limit for cis-1,3-dichloropropene in the samples from the indicated locations:

- 360-SGA, 360-SGB, 360-SGb, 360-SGb duplicate, 360-SGc, PP-E, and PP-NW

Quantitation limits were estimated and flagged, UJ.

TABLE A14-1

Sample Delivery Group Reference - Residential Ambient and Crawlspace Air, Phase 3 (November 2006)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
0611176B (Air Toxics)				
Volatile Organics, EPA Method TO-15 (SIM)				
	1414CAa	N	1414CAA-1106	Tier 3
	1414CAa	FD	8586CAA-1106	Tier 3
	1414CAb	N	1414CAB-1106	Tier 3
	1428AA	N	1428AA-1106	Tier 3
	1428CAa	N	1428CAA-1106	Tier 3
	1428CAc	N	1428CAC-1106	Tier 3
	1432AA	N	1432AA-1106	Tier 3
	1432CA	N	1432CA-1106	Tier 3
	1436AA	N	1436AA-1106	Tier 3
	1436AA	FD	8564AA-1106	Tier 3
	360AA	N	360AA-1106	Tier 3
	Background2	N	BGAM-1106	Tier 3
	Background2	N	BGPM-1106	Tier 3
	PP-AA	N	PPAA-1106	Tier 3
0611176C (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	1414CAa	N	1414CAA-1106	Tier 3
	1414CAa	FD	8586CAA-1106	Tier 3
	1414CAb	N	1414CAB-1106	Tier 3
	1428AA	N	1428AA-1106	Tier 3
	1428CAa	N	1428CAA-1106	Tier 3
	1428CAc	N	1428CAC-1106	Tier 3
	1432AA	N	1432AA-1106	Tier 3
	1432CA	N	1432CA-1106	Tier 3
	1436AA	N	1436AA-1106	Tier 3
	1436AA	FD	8564AA-1106	Tier 3
	360AA	N	360AA-1106	Tier 3
	Background2	N	BGAM-1106	Tier 3
	Background2	N	BGPM-1106	Tier 3
	PP-AA	N	PPAA-1106	Tier 3

Notes:

N regular sample

FD field duplicate

TABLE A14-2

Sample Delivery Group Reference - Soil Gas Residential, Phase 3 (November 2006)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
0611176A (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	1428SG	N	1428SG-1106	Tier 3
	1432SGa	N	1432SGA-1106	Tier 3
	1432SGb	N	1432SGB-1106	Tier 3
	1436SG	N	1436SG-1106	Tier 3
	356SG	N	356SG-1106	Tier 3
	360SGa	N	360SGA-1106	Tier 3
	360SGb	N	360SGB-1106	Tier 3
	360SGB	FD	640SGB-1106	Tier 3
	360SGc	N	360SGC-1106	Tier 3
	PP-E	N	PPE-1106	Tier 3
	PP-NW	N	PPNW-1106	Tier 3

Notes:

N regular sample

FD field duplicate

Table A14-3
Result Qualification and Associated Reason Codes - Residential Ambient and Crawlspace Air, Phase 3 (November 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	322BA AM	322BA PM	1414CAa	1414CAa (FD)	1414CAb	1428AA	1428CAa	1428CAc	1432AA	1432CA	1436AA	1436AA (FD)	360AA	PP-AA
		Sample Date	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**													
Volatile Organic Compounds																
1,1,1-Trichloroethane	2,300	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.033	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	0.12	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	210	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	3.7	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	6.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.0034	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	210	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.074	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	0.099	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	6.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	110	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	0.31	µg/m3	*	*	*	*	0.19 U LB	0.19 U LB	*	*	0.22 U LB	0.2 U LB	*	*	*	0.19 U LB
1,4-Dioxane (p-dioxane)	0.61	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzene	0.25	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Bromomethane	5.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Carbon tetrachloride	0.13	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	2.3	µg/m3	*	*	*	*	*	*	0.21 UJ SI	*	*	*	*	*	*	*
Chloroform	0.083	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	95	µg/m3	*	*	*	*	*	*	*	*	*	*	8 J FD	1.5 J FD	*	*
cis-1,2-Dichloroethene	37	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	0.48	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethylbenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 11	730	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	31,000	µg/m3	*	*	0.82 U LB	*	*	*	*	*	*	*	*	*	*	*
Freon 12	210	µg/m3	2.3 J C%D	2 J C%D	2.8 J C%D	*	*	*	*	*	*	*	1.8 J C%D	2.3 J C%D	1.7 J C%D	*
Hexachlorobutadiene	0.086	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	7.4	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	4.1	µg/m3	1.2 U LB	1.3 U LB	3.7 U LB	5.5 U LB	1.1 U LB	1.1 U LB	*	*	1.2 U LB	1.2 U LB	1.3 J FD	**4.5 J FD**	*	1.1 U LB
Naphthalene	0.056	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Styrene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	0.32	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	400	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	73	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	0.48	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	0.017	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vinyl chloride	0.11	µg/m3	*	*	*	*	*	*	*	*	*	*	**0.7 J FD**	0.036 UJ FD	*	*
Xylenes, total	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Table A14-3
Result Qualification and Associated Reason Codes - Residential Ambient and Crawlspace Air, Phase 3 (November 2006)
AMCO Chemical Superfund Site, Oakland, California

Notes:
Results greater than the screening level are bolded

*	result not qualified for Quality Control outliers
FD	field duplicate
NE	not established
µg/m3	micrograms per cubic meter
J	estimated value
U	not detected at or above the reporting limit.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
C%D	Continuing calibration verification is outside control limit
FD	Field duplicate exceeds relative percent difference criteria
LB	Laboratory blank concentration exceeds criteria
SI	Spectral Identification inconsistent with reference spectrum

Table A14-4
Result Qualification and Associated Reason Codes - Soil Gas Residential, Phase 3 (November 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	1428SG	1432SGa	1432SGb	1436SG	356SG	360SGa	360SGb	360SGb (FD)	360SGc	PP-E	PP-NW
		Sample Date	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006
Analyte	Screening Level	Units	Analytical Results										
Volatile Organic Compounds													
1,1,1-Trichloroethane	23,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.33	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	12	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	37	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,2-Dibromoethane	0.034	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.74	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloropropane	0.99	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Benzene	2.5	µg/m3	0.46 J RSD	0.6 J RSD	0.59 J RSD	1.1 J RSD	*	1.9 J RSD	0.56 J RSD	0.61 J RSD	1.5 J RSD	1.4 J RSD	1.7 J RSD
Bromomethane	52	µg/m3	*	*	0.52 UJ SI	0.65 UJ SI	*	*	*	*	*	*	*
Carbon tetrachloride	1.3	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	620	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	23	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Chloroform	0.83	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	950	µg/m3	*	*	*	*	*	*	*	*	*	*	*
cis-1,2-Dichloroethene	370	µg/m3	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	1.5 UJ LCS	0.62 UJ LCS	0.72 UJ LCS	0.6 UJ LCS	1.6 UJ LCS	0.45 UJ LCS
Ethylbenzene	11,000	µg/m3	0.14 U LB	*	*	*	0.13 U LB	*	0.12 U LB	0.14 U LB	*	*	*
Freon 11	7,300	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Freon 113	310,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Freon 12	2,100	µg/m3	*	*	*	*	*	3.2 J C%D	1.4 J C%D	1.5 J C%D	*	*	*
Freon 134a	NE	µg/m3	*	*	*	350 J >IC	*	4,400 J >IC	1,100 J >IC	1,300 J >IC	15 J >IC	61 J >IC	460 J >IC
Hexachlorobutadiene	0.86	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Methyl tert-butyl ether	74	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	41	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Naphthalene	0.56	µg/m3	*	*	*	*	*	*	*	*	3.4 U LB	9.2 U LB	2.6 U LB
Styrene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	3.2	µg/m3	*	*	*	*	*	*	*	*	*	*	0.14 U LB
Toluene	4,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*
trans-1,2-Dichloroethene	730	µg/m3	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	0.17	µg/m3	*	0.14 U LB	0.14 U LB	0.18 U LB	0.16 U LB	*	*	*	*	*	*
Vinyl chloride	1.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*

Table A14-4
Result Qualification and Associated Reason Codes - Soil Gas Residential, Phase 3 (November 2006)
AMCO Chemical Superfund Site, Oakland, California

Notes:
Results greater than the screening level are bolded
See Soil Gas Screening Level table for source of screening levels.

*	result not qualified for Quality Control outliers
FD	field duplicate
NE	not established
µg/m3	micrograms per cubic meter
J	estimated value
U	not detected at or above the reporting limit.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
>IC	Result greater than linear calibration range
C%D	Continuing calibration verification is outside control limit
LB	Laboratory blank concentration exceeds criteria
LCS	Laboratory Control Sample recovery is outside control limit
RSD	Initial calibration relative standard deviation exceeded
SI	Spectral Identification inconsistent with reference spectrum

Appendix A15
Phase 3 Soil Gas Probes, November 2006

APPENDIX A15

Phase 3 Soil Gas Probes, November 2006

A15.1 Summary

The following sections describe the samples collected during the Phase 3 Soil Gas Probes, November 2006 sampling event which occurred in November, 2006.

Soil Gas Probe Sampling: Samples were collected from Soil Gas Probes at twelve, non-residential permanent soil probes over four hour intervals on November 8, 2006. Certified Clean 4L Summa Canisters were used to collect sample for TO-15 and TO-15 SIM analyses. The appropriate methodology and method quality control requirements were followed. For the Residential Soil Gas Probes, the selected screening levels are 10 times the EPA Region 9 ambient air PRGs.

A15.2 Data Review and Validation Findings

Fourteen soil gas samples were collected using soil gas probes during November 2006. Table A15-1 presents a list of sample delivery groups, sample identifications, and validation levels for the soil gas samples. Table A15-2 presents the Tier 3 qualified results with accompanying reason code identifying the type of QC outlier. Results that are unqualified are not shown. Rejected results are shown in boxes.

The following section discusses the results qualified based on the Tier 3 validation of Phase 3 soil gas probe samples. The results were qualified for outliers associated with the following QC metrics: laboratory method blank, initial calibration, continuing calibration, target compound identification, and laboratory control sample.

A15.2.1 Laboratory Method Blank (Reason Code LB)

The following analytes in the samples from the indicated locations are estimated due to method blank contamination:

- Benzene in RSP-02, RSP-03, RSP-05, RSP-06, RSP-08, RSP-09-11-6, RSP-10, RSP-11, RSP-12, and RSP-11 duplicate
- Toluene in RSP-02, RSP-03, RSP-04, RSP-05, and RSP-11
- 1,2-Dichloroethane in RSP-11
- Trichloroethene in RSP-08
- cis-1,3-Dichloropropene in RSP-10, RSP-11 duplicate, and RSP-12

Where sample results are below the reporting limit but less than 5 times the blank concentration, the results are qualified as not detected, U, at the reporting limit. Where samples are above the reporting limit, but less than 5 times the blank

concentration, the results are qualified as not detected, U, at the concentration found.

A15.2.2 Initial Calibration (Reason Code RSD)

The initial calibration exceeded the ± 25% RSD control limit for benzene in the samples from the indicated locations:

- RSP-02, RSP-03, RSP-04, RSP-05, RSP-06, RSP 08, RSP-09, RSP-10, RSP-11, RSP-12, and RSP-11 duplicate

The results and quantitation limits were estimated, J/UJ.

A15.2.3 Continuing Calibration (Reason Code C%D)

The continuing calibration %D was above the 125% upper control limit for the following analytes in the samples from the indicated locations:

- Freon 12 in RSP-02, RSP-03, RSP-04, RSP-05, RSP-06, RSP-08,RSP-09, RSP-10, RSP-11, RSP-12, and RSP-11 duplicate
- Hexachlorobutadiene in RSP-06 and RSP-08
- Naphthalene in RSP-02, RSP-03, RSP-04, RSP-09, RSP-10, RSP-11, RSP-12, and RSP-11 duplicate

Detected results were estimated and flagged, J.

A15.2.4 Laboratory Control Sample (Reason Code LCS)

The laboratory control sample recovery was below the 20% lower control limit for the following analytes in the samples from the indicated locations:

- cis-1,3-Dichloropropene in RSP-02, RSP-03, RSP-04, RSP-05, RSP-06, RSP-08,RSP-09, RSP-10, RSP-11, RSP-12, and RSP-11 duplicate
- Hexachlorobutadiene in RSP-06 and RSP-08
- 1,2,4-Trimethylbenzene in RSP-01, RSP-07, and RSP-07 duplicate

Non-detected results were flagged as estimated, UJ.

A15.2.5 Target Compound Identification (Reason Code SI)

The following samples had mass spectrum and ion profiles missing the qualifying ion. Therefore, the detected results for the listed analytes were qualified as not detected at the RL and flagged U.

- Bromomethane in the samples from locations RSP-08, RSP-10, and RSP-11
- Chloromethane in the sample from location RSP-10

TABLE A15-1

Sample Delivery Group Reference - Soil Gas Probes, Phase 3 (November 2006)

AMCO Chemical Superfund Site, Oakland, California

SDG	Location ID	Sample Type	Sample ID	Validation Level
0611257A (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	RSP-02	N	RSP02-1106	Tier 3
	RSP-03	N	RSP03-1106	Tier 3
	RSP-04	N	RSP04-1106	Tier 3
	RSP-05	N	RSP05-1106	Tier 3
	RSP-06	N	RSP06-1106	Tier 3
	RSP-08	N	RSP08-1106	Tier 3
	RSP-09	N	RSP09-1106	Tier 3
	RSP-10	N	RSP10-1106	Tier 3
	RSP-11	N	RSP11-1106	Tier 3
	RSP-11	FD	RSP89-1106	Tier 3
	RSP-12	N	RSP12-1106	Tier 3
0611257B (Air Toxics)				
Volatile Organics, EPA Method TO-15				
	RSP-01	N	RSP01-1106	Tier 3
	RSP-07	N	RSP07-1106	Tier 3
	RSP-07	FD	RSP93-1106	Tier 3

Notes:

N regular sample

FD field duplicate

Table A15-2
Result Qualification and Associated Reason Codes - Soil Gas Probes, Phase 3 (November 2006)
AMCO Chemical Superfund Site, Oakland, California

		Sample Location	RSP-01	RSP-02	RSP-03	RSP-04	RSP-05	RSP-06	RSP-07	RSP-07	RSP-08	RSP-09	RSP-10	RSP-11	RSP-11	RSP-12
			10	10	10	10	10	10	10	10 (FD)	10	10	10	10	10 (FD)	10
		Sample Date	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006
Analyte	**Screening Level**	**Units**	**Analytical Results**													
Volatile Organic Compounds																
1,1,1-Trichloroethane	23,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2,2-Tetrachloroethane	0.33	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1,2-Trichloroethane	1.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethane	12	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,1-Dichloroethene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trichlorobenzene	37	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2,4-Trimethylbenzene	62	µg/m3	200 UJ LCS	*	*	*	*	*	74 UJ LCS	77 UJ LCS	*	*	*	*	*	*
1,2-Dibromoethane	0.034	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichlorobenzene	2,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,2-Dichloroethane	0.74	µg/m3	*	*	*	*	*	*	*	*	*	*	*	0.11 U LB	*	*
1,2-Dichloropropane	0.99	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3,5-Trimethylbenzene	62	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,3-Dichlorobenzene	1,100	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dichlorobenzene	3.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1,4-Dioxane (p-dioxane)	6.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Benzene	2.5	µg/m3	*	0.22 UJ RSD, LB	0.22 UJ RSD, LB	**22 J RSD**	11 UJ RSD, LB	4.3 UJ RSD, LB	*	*	0.22 UJ RSD, LB	0.22 UJ RSD, LB	0.22 UJ RSD, LB	0.22 UJ RSD, LB	0.22 UJ RSD, LB	0.39 UJ RSD, LB
Bromomethane	52	µg/m3	*	*	*	*	*	*	*	*	0.53 UJ SI	*	0.53 UJ SI	0.54 UJ SI	*	*
Carbon tetrachloride	1.3	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chlorobenzene	620	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroethane	23	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloroform	0.83	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Chloromethane	950	µg/m3	*	*	*	*	*	*	*	*	*	*	0.29 UJ SI	*	*	*
cis-1,2-Dichloroethene	370	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
cis-1,3-Dichloropropene	4.8	µg/m3	*	0.63 UJ LCS	0.64 UJ LCS	1.1 UJ LCS	30 UJ LCS	12 UJ LCS	*	*	0.62 UJ LCS	0.63 UJ LCS	0.62 UJ LCS	0.63 UJ LCS	0.64 UJ LCS	1.1 UJ LCS
Ethylbenzene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	0.12 U LB	*	0.12 U LB	0.21 U LB
Freon 11	7,300	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 113	310,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Freon 12	2,100	µg/m3	*	1 J C%D	0.5 J C%D	1.2 UJ C%D	33 UJ C%D	13 UJ C%D	*	*	1.1 J C%D	1.7 J C%D	1.7 J C%D	1.5 J C%D	1.2 J C%D	1.9 J C%D
Freon 134a	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hexachlorobutadiene	0.86	µg/m3	*	*	*	*	*	140 UJ C%D	*	*	7.2 UJ C%D	*	*	*	*	*
Methyl tert-butyl ether	74	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Methylene chloride	41	µg/m3	*	*	*	*	*	*	52 UJ FD	**150 J FD**	*	*	*	*	*	*
Naphthalene	0.56	µg/m3	*	3.6 UJ C%D	3.7 UJ C%D	6.4 UJ C%D	*	*	*	*	*	3.6 UJ C%D	3.6 UJ C%D	3.6 UJ C%D	3.7 UJ C%D	6.4 UJ C%D
Styrene	11,000	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	3.2	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Toluene	4,000	µg/m3	*	0.52 U LB	0.53 U LB	0.92 U LB	25 U LB	*	*	*	*	*	*	0.52 U LB	*	*
trans-1,2-Dichloroethene	730	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
trans-1,3-Dichloropropene	4.8	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	0.17	µg/m3	*	*	*	*	*	*	*	*	0.15 U LB	*	*	*	*	*
Vinyl chloride	1.1	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Xylenes, total	NE	µg/m3	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Table A15-2
Result Qualification and Associated Reason Codes - Soil Gas Probes, Phase 3 (November 2006)
AMCO Chemical Superfund Site, Oakland, California

Notes:
Results greater than the screening level are bolded
See Soil Gas Screening Level table for source of screening levels.

*	result not qualified for Quality Control outliers
FD	field duplicate
NE	not established
µg/m3	micrograms per cubic meter
J	estimated value
U	not detected at or above the reporting limit.
UJ	not detected at or above the reporting limit; the reporting limit is an estimate.
C%D	Continuing calibration verification is outside control limit
FD	Field duplicate exceeds relative percent difference criteria
LB	Laboratory blank concentration exceeds criteria
LCS	Laboratory Control Sample recovery is outside control limit
RSD	Initial calibration relative standard deviation exceeded
SI	Spectral Identification inconsistent with reference spectrum

Appendix B:
Second Quarter 2005 Data Review Memo
(EPA, 2006)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

September 25, 2006

MEMORANDUM

SUBJECT: Review of Preliminary Site Characterization Summary [Data Report], April 28, 2006, AMCO Chemical Superfund Site, Oakland, CA, QA Office Document Control Number DJCA0003RV1

FROM: Joe Eidelberg, Chemist
Quality Assurance Office, MTS-3

THROUGH: Eugenia McNaughton, Ph.D., Manager
Quality Assurance Office, MTS-3

TO: Brunilda Davila, Remedial Project Manager
Site Cleanup Section 4, SFD7-4

The QA Office has no objection to release of quarterly groundwater monitoring data reported in the subject report.

Previously, multiple quality assurance (QA) and quality control (QC) concerns were noted in data validation reviews performed by CH2M-Hill and a review of historical performance of A4 Analytical Laboratory by EPA. All outstanding concerns raised by these reviews have been addressed.

However, the 2005 2nd Quarter 2005 volatile organic compound (VOC) data is not consistent with the conceptual site model, nor data sets collected before or after the second quarter of 2005. After consultation with Glenn Bruck, an EPA hydrologist, and CH2M-Hill, the QA Office concurs that the total data set is of sufficiently documented quality for delineation of nature and extent of contaminants at AMCO Chemical Superfund Site.

Questions or comments concerning this memorandum can be directed to me at 972-3809.

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Appendix C:
Validation Reports (on CD-ROM)