ATTACHMENT WM-44D

SUPPLEMENTAL PHASE II
ENVIRONMENTAL SITE ASSESSMENT REPORT
PECHINEY CAST PLATE FACILITY

Vernon, California

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Pechiney Cast Plate Facility
City of Vernon, California

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TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1

2.0 BACKGROUND 2

3.0 SUPPLEMENTAL PHASE II ASSESSMENT OBJECTIVES AND SCOPE 2

4.0 SUPPLEMENTAL PHASE II ASSESSMENT ACTIVITIES 3
- 4.1 PRE-FIELD ACTIVITIES 4
  - 4.1.1 Site Health and Safety Plan 4
  - 4.1.2 Permits, Coordination, and Subcontractor Scheduling 4
  - 4.1.3 Utility Clearance 5
- 4.2 SAMPLING AND LABORATORY ANALYSES OF SOIL VAPOR, SOIL, AND GROUNDWATER 5
  - 4.2.1 Soil Vapor Sampling and Laboratory Analysis 5
  - 4.2.2 Soil and Groundwater Sampling 6
  - 4.2.3 Laboratory Analyses of Soil Samples 7
  - 4.2.4 Laboratory Analyses of Groundwater Samples 8
- 4.3 SOIL AND GROUNDWATER SAMPLING AND SAMPLE HANDLING PROCEDURES 8
  - 4.3.1 Sample Containers and Preservation 9
  - 4.3.2 Sample Labeling 9
  - 4.3.3 Sample Packaging, Shipment, and Chain-of-Custody 9
- 4.4 EQUIPMENT DECONTAMINATION 10
- 4.5 INVESTIGATION-DERIVED WASTE 10
- 4.6 BOREHOLE BACKFILL 10
- 4.7 SITE SURVEY 10

5.0 ANALYTICAL RESULTS 10
- 5.1 SOIL VAPOR ANALYTICAL RESULTS 11
- 5.2 SOIL ANALYTICAL RESULTS 11
  - 5.2.1 Volatile Organic Compounds 11
  - 5.2.2 Total Petroleum Hydrocarbons and Stoddard Solvent 12
  - 5.2.3 Polychlorinated Biphenyls 13
  - 5.2.4 Total Metals 13
- 5.3 GROUNDWATER ANALYTICAL RESULTS 13
  - 5.3.1 Volatile Organic Compounds 14
  - 5.3.2 Total Petroleum Hydrocarbons and Stoddard Solvent 14
- 5.4 CONCRETE ANALYTICAL RESULTS 15

6.0 FIELD AND LABORATORY QA/QC PROCEDURES AND RESULTS 15
- 6.1 QA/QC SAMPLES 15
  - 6.1.1 Field Quality Control Samples and Results 15
  - 6.1.2 Laboratory Quality Control Samples and Results for Soil and Groundwater 16
- 6.2 QA/QC PROCEDURES AND RESULTS FOR SOIL VAPOR 19

TABLE OF CONTENTS
(Continued)

7.0 DATA EVALUATION 20
7.1 VOLATILE ORGANIC COMPOUNDS 21
7.1.1 Soil Vapor 21
7.1.2 Soil 23
7.1.3 Groundwater 27
7.2 TOTAL PETROLEUM HYDROCARBONS AND STODDARD SOLVENT 28
7.3 METALS 29
7.4 POLYCHLORINATED BIPHENYLS 30
8.0 SUMMARY AND CONCLUSIONS 31
8.1 EXTENT OF VOCS AND STODDARD SOLVENT 32
8.1.1 Soil Vapor 33
8.1.2 Soil 33
8.1.3 Groundwater 34
8.2 EXTENT OF PCBS IN SOIL 35
8.3 EXTENT OF TOTAL PETROLEUM HYDROCARBONS IN SOIL 35
8.4 EXTENT OF METALS IN SOIL 36
8.5 CONCRETE 37
9.0 RECOMMENDATIONS 37
10.0 REFERENCES 39

TABLES

Table 1 Supplemental Phase II Boring and Sample Summary
Table 2 Analytical Results for Selected Volatile Organic Compounds in Soil Vapor
Table 3 Analytical Results for Selected Volatile Organic Compounds in Soil
Table 4 Analytical Results for Total Petroleum Hydrocarbons in Soil
Table 5 Analytical Results for Polychlorinated Biphenyls in Soil and Concrete
Table 6 Analytical Results for Metals in Soil
Table 7 Analytical Results for Selected Volatile Organic Compounds in Groundwater
Table 8 Analytical Results for Total Petroleum Hydrocarbons in Groundwater

FIGURES

Figure 1 Site Location Map
Figure 2 Historical Site Plan
Figure 3 Current Site Plan

TABLE OF CONTENTS
(Continued)

Figure 4a	Selected Volatile Organic Compounds in Soil Vapor, Buildings 106, 108, 110, & 112
Figure 4b	Selected Volatile Organic Compounds in Soil Vapor, Building 112A and Parcel 6
Figure 5	Selected Volatile Organic Compounds and Total Petroleum Hydrocarbons in Soil and Groundwater
Figure 6a	Total Polychlorinated Biphenyls in Soil and Concrete, Buildings 106, 108, 110, & 112
Figure 6b	Total Polychlorinated Biphenyls in Soil and Concrete, Buildings 104 & 112A

APPENDIXES

Appendix A	City of Vernon Health & Environmental Control Correspondence
Appendix B	Boring Logs
Appendix C	Laboratory Analytical Data and Chain of Custody Documentation

SUPPLEMENTAL PHASE II
ENVIRONMENTAL SITE ASSESSMENT REPORT ADDENDUM

Pechiney Cast Plate Facility
City of Vernon, California

1.0 INTRODUCTION

Geomatrix Consultants, Inc. (Geomatrix) has prepared this Supplemental Phase II Environmental Site Assessment (ESA) report addendum on behalf of Alcan, Inc. (Alcan) for the Pechiney Cast Plate Facility (the Vernon facility or site). The site is located at 3200 Fruitland Avenue at the southeastern corner of the intersection of Fruitland Avenue and Boyle Avenue in the City of Vernon, County of Los Angeles, California (Figure 1).

In June 2005, Geomatrix conducted a Phase I ESA (Geomatrix, 2005a) at the Vernon facility to assist Alcan to identify Recognized Environmental Conditions (RECs) as defined by ASTM International, Inc. (ASTM) E1527-00 for Phase I ESAs. In addition to RECs, Geomatrix identified historical RECs (HRECs) and potential other environmental conditions (OECs) at the site. Based on the findings of the Phase I ESA, several RECs and OECs were identified at the site. The HRECs represent environmental conditions "which in the past would have been considered a REC, but which may not likely be considered a REC currently." As such, HRECs were not further addressed in the Phase II assessment. The Phase I ESA (Geomatrix, 2005a) and Draft Phase II Work Plan (Work Plan; Geomatrix, 2005b) were submitted to H&EC. The report and Work Plan were approved by City of Vernon Health and Environmental Control (H&EC) on September 26, 2005. A copy of the approval memorandum from H&EC is provided in Appendix A of the Phase II report. The Phase II ESA was conducted during November and December 2005 to evaluate whether the RECs or OECs had resulted in releases to the subsurface. The findings of the Phase II ESA were submitted to H&EC on March 9, 2006 in the *Phase II Environmental Site Assessment, Pechiney Cast Plate Facility, Vernon, California* to H&EC on March 9, 2006.

Based on the findings of the Phase II ESA (Geomatrix, 2006), additional assessment was conducted in specific areas of the site to further characterize the extent of impacted soil and/or existing subsurface conditions. In a letter to H&EC dated March 9, 2006 (Appendix A), Geomatrix proposed to further characterize the extent and potential significance of chemicals of potential concern (COPC) exceeding screening levels in soil at the site and the potential

impacts to groundwater related to trichloroethene [TCE] detections in soil and soil vapor in Building 106. Under approval and direction from H&EC, the Supplemental Phase II assessment was commenced began on March 28, 2006 and was completed on April 24, 2006.

Based on the preliminary findings of the Supplemental Phase II ESA, a follow-up assessment was proposed to further characterize the extent of volatile organic compounds (VOCs) detected in soil, soil vapor, and groundwater in the north portion of the site. In a letter to H&EC dated May 9, 2006 (Appendix A), Geomatrix proposed additional sampling in Buildings 106, 108, and 112. Under approval and direction from H&EC, the additional work associated with the Supplemental Phase II assessment began on May 11, 2006 and was completed on May 24, 2006.

The Phase II and Supplemental work was conducted at the direction of the City of Vernon in accordance with the City of Vernon's Ordinance related to the closure of Pechiney's hazardous materials permit and the cleanup and removal of all hazardous materials from the site, which was stipulated in a March 28, 2006 letter from the City of Vernon H&EC. On July 26, 2006, the City of Vernon H&EC issued an order pertaining to the cleanup and removal of all hazardous materials from the site.

2.0 BACKGROUND

Site background information, including site description and history, geologic and hydrogeologic setting, previous assessments and identified COPCs, and findings and conclusions of the Phase II ESA, is included in the *Phase II Environmental Site Assessment Report, Pechiney Cast Plate Facility, Vernon, California* (Geomatrix, 2006). The objective of the Phase II was to assess the potential presence and concentrations of COPCs associated with the targeted RECs and OECs.

The demolition of the above-grade structures has been completed, and the below grade demolition is anticipated to begin in early 2007. The assessment findings will also be used to support the demolition program for the site.

3.0 SUPPLEMENTAL PHASE II ASSESSMENT OBJECTIVES AND SCOPE

The objectives of the Supplemental Phase II and follow-up assessment focused on further characterization of the extent of COPCs found in the subsurface at a number of site locations

identified during the Phase II assessment and near site features identified after the completion of the Phase II. The objectives of the Supplemental Phase II included:

- further assessment of the source of TCE and other VOCs detected in soil at former boring 14 and soil vapor at former sample points 2 through 16 in Buildings 106 and 108, and the potential impacts to groundwater;
- further assessment of the potential source of Stoddard solvent in soil in Building 106, and the potential impacts to groundwater near former boring 13;
- further assessment of the source and extent of polychlorinated byphenyls (PCBs) detected in soil in Building 104 at former borings 40, 41, and 73. Boring 40 is located near the current vertical pit and a formerly backfilled vertical pit. Borings 41 and 73 are adjacent to a saw.
- assessment of the presence of PCBs in soil in Building 104 near two recently identified former shallow vertical pits previously backfilled in place;
- further assessment of the lateral extent of metals in shallow soil near the former etch station in Building 112 near former boring 22 due to lead, and at Storm Water Outfall #6 near former boring 47 due to copper;
- assessment of the depth of the soil/gravel drainage area near Former Substation #8 and the concentrations of PCBs in these materials;
- further assessment of the extent of petroleum hydrocarbons (TPH) detected in soil adjacent to a sump in Building 112 near former boring 30;
- further assessment of the presence of hexavalent chromium (CrVI) and PCBs detected in soil near the cooling tower area near former boring 46; and
- assessment of the presence of TPH in soil near equipment trenches and pits adjacent to Mill #5 and the unnamed mill located in Building 112.

The scope of work proposed for addressing these objectives are outlined in Table 1 of this report. Field methods used to implement the Supplemental Phase II are described in the Preliminary Draft Supplemental Phase II Work Plan (Work Plan; Geomatrix, 2006b) and in Section 4 of this report.

4.0 SUPPLEMENTAL PHASE II ASSESSMENT ACTIVITIES

Geomatrix collected concrete, soil vapor, soil, and groundwater samples to provide data to assess subsurface conditions where Phase II ESA results indicated operations may have

impacted subsurface soils and/or groundwater. The rationale for sampling and a summary of the samples collected during this assessment are provided in Table 1. The following section describes procedures followed during the two phases of the Supplemental Phase II ESA.

4.1 PRE-FIELD ACTIVITIES

Prior to initiating field sampling, several pre-field activities were completed. Pre-field activities included the following steps.

- preparing a site-specific health and safety plan
- obtaining permits
- coordinating site access
- retaining and scheduling subcontractors
- conducting a geophysical survey for potential utilities and subsurface features at the planned subsurface sampling locations

The pre-field activities are summarized in the following subsections.

4.1.1 Site Health and Safety Plan

A site-specific health and safety plan (HASP) was prepared for the field activities performed by Geomatrix personnel. The procedures described in the HASP were used to manage potential risks to the personnel performing the sampling activities at the site.

4.1.2 Permits, Coordination, and Subcontractor Scheduling

As required by H&EC, permits were obtained for borings originally proposed to be drilled to a depth of 50 feet or greater. Site access and field logistics were coordinated with facility personnel, H&EC representatives, and subcontractors. American Analytics of Chatsworth, California conducted the direct push soil sampling and soil vapor sampling. Gregg Drilling and Testing, Inc. of Signal Hill, California performed the hollow-stem auger drilling for the deeper borings. American Integrated Services, Inc. (AIS) conducted the gravel sampling adjacent to former transformer 8. Analyses of soil vapor, soil, and groundwater samples were conducted by American Analytics.

4.1.3 Utility Clearance

Prior to initiating the field activities, Underground Service Alert (USA) was notified at least 48 hours prior to the start of subsurface work at the site. Goldak, Inc., of Glendale, California conducted a utility survey at the proposed subsurface boring locations prior to commencing field activities. Some boring locations were relocated during the field investigation based on the presence of utilities and subsurface structures (e.g., rebar and subgrade concrete slabs).

4.2 SAMPLING AND LABORATORY ANALYSES OF SOIL VAPOR, SOIL, AND GROUNDWATER

Shallow soil borings were drilled for the purposes of collecting soil and/or soil vapor samples. These borings were installed using direct-push methods (Table 1). In areas not accessible to the drilling equipment, shallow soil borings were drilled using hand auger methods. Deeper soil borings were advanced for purposes of assessing subsurface geologic conditions and collecting soil and groundwater samples. The deeper borings were drilled using hollow-stem auger methods.

Soil vapor, soil, and groundwater samples were collected during the Supplemental Phase II as described in the Preliminary Draft Supplemental Phase II Work Plan (Work Plan; Geomatrix, 2006b).

4.2.1 Soil Vapor Sampling and Laboratory Analysis

An expanded soil vapor survey was conducted in Buildings 106, 108, and 110 located within the northern portion of the site (Table 2; Figures 4a, 4b). The survey was used to assess the concentration and distribution of vapor-phase VOCs and Stoddard solvent. Temporary soil vapor points were installed at twenty-nine locations. Vapor samples were collected at each location from approximate depths of 5 and 15 feet below ground surface (bgs) (Table 2). Sample logs are included in Appendix B.

The soil vapor survey was conducted in general accordance with RWQCB's "Interim Guidance for Active Soil Gas Investigation," dated February 25, 1997; and the Department of Toxic Substances Control (DTSC) and RWQCB "Advisory-Active Soil Gas Investigations," dated January 28, 2003 (Joint Advisory).

Hydrated granular bentonite was used to achieve a seal at the surface of each temporary sampling probe. At each sample point, isopropyl alcohol (IPA) was used as an ambient air leak

detection compound by placing an IPA-soaked paper towel around the sample tubing above the surface bentonite seal.

A purge volume test was conducted at the beginning of the survey in accordance with the Joint Advisory and resulted in the selection of a 7-volume purge (Table 2), which was consistent with the purge volume used during the initial soil vapor survey conducted in 2005. Soil vapor samples were analyzed by American Analytics in an on-site mobile laboratory for the RWQCB target list of 23 VOCs and Stoddard solvent (in some areas) using gas chromatography/mass spectrometry (GC/MS) methods similar to EPA Test Method 8260B. The mobile laboratory instrument was calibrated against a Stoddard solvent standard to allow for quantitation and reporting of this compound.

After analysis of the soil vapor samples was completed at the site by the mobile laboratory, the vapor tubing was pulled from the surface at each location. The hydrated bentonite was removed from the upper 6-inches of the borehole and sealed with concrete or asphalt to match surrounding conditions.

4.2.2 Soil and Groundwater Sampling

The shallow soil sampling program included 26 borings drilled to depths between approximately 2.5 and 40 feet bgs. Soil samples were collected in accordance with the specifications outlined in the Work Plan (Geomatrix, 2006a). Soil samples were analyzed for the suite of compounds listed in Table 1. In most cases, the shallow soil borings were completed using a Geoprobe™ direct push rig and/or hand auger equipment; borings that encountered refusal with the direct push rig were completed using hollow stem auger drilling methods.

Fourteen deeper soil borings (greater than 50 feet bgs) were drilled using hollow stem auger methods. Three soil borings 115, 116, and 135 were drilled to a depth of approximately 50 feet bgs in Buildings 104 and 106. Six soil borings 94, 95, 96, 97, 99, and 127b were drilled to a depth of approximately 80 feet bgs in Buildings 104 and 112. The five other deeper soil borings 125, 126, 132, 133, and 134 were drilled to a depth of approximately 150 feet bgs in Buildings 106, 108, and 112. Groundwater samples were collected from soil borings 125, 126, 132, 133, and 134.

Soil boring 125 was advanced to groundwater, but the hydropunch tool failed to collect a groundwater sample. An alternate sampling method was implemented by setting a new temporary well casing into the borehole through the augers. A groundwater sample was collected from the temporary well casing using a new disposal bailer. A new temporary well casing was set into the borehole through the augers, and a groundwater sample was collected from the temporary well casing using a new disposal bailer. Groundwater samples were transferred from the bailer directly into laboratory-provided sample containers. This sampling method was used to collect groundwater samples from borings 126, 132, 133, and 134.

Based on field data consisting of photoionization detector (PID) readings, additional soil samples, which were originally submitted to the analytical laboratory on "hold," were selected for analysis. The soil samples collected from borings 93, 115, and 116 were analyzed for VOCs.

Soil borings 100, 101, and 105 through 109 were relocated in the field due to subsurface obstructions (e.g., subgrade concrete slabs and rebar) encountered while hand augering/drilling during the Supplemental Phase II field investigation. The new boring locations were placed as close as feasible to the original locations.

4.2.3 Laboratory Analyses of Soil Samples

The suite of analyses for each soil sample collected during this investigation is summarized in Table 1. Based on the previous Phase II results (and historical or current operations) at each area investigated, soil samples were analyzed for one of more of the following parameters.

- VOCs using EPA Method 8260B/5035
- TPH with carbon chain speciation (TPHcc; carbon chains of C6 – C44) using EPA Test Method 8015B Modified
- Title 22 California Assessment Manual (CAM) 17 Metals using EPA Test Methods 6010B/6020/7000A
- CrVI using EPA Test Method 7199

As stated in the Work Plan, soil samples were selected to be analyzed for semi-volatile organic compounds (SVOCs) if found to contain TPH at concentrations exceeding 2000 mg/kg. However, the detected TPH concentrations in soil were below 2000 mg/kg during the

Supplemental Phase II, so additional soil analyses for SVOCs were not conducted. In addition, two concrete cores were analyzed for PCBs using EPA Method 8082.

Soil samples for VOC analysis were collected using cut syringes for field sample preservation in accordance with EPA Method 5035. Soil samples were preserved in the field using pre-weighed laboratory sample containers with methanol preservative and laboratory grade water. At the beginning of the Phase II investigation, a sodium sulfate preservative was tested on a soil sample; however, the preservative resulted in a reaction with the soil (e.g., fizzing, effervescing). Based on this reaction, the sodium sulfate preservative was replaced with laboratory-grade de-ionized water. Samples were packaged, labeled, and placed in an ice-filled chest.

Soil samples from some areas of the site were also analyzed for Stoddard solvent, a COPC found at the site. Because Stoddard solvent is not typically reported using EPA Method 8260B, the laboratory evaluated its results against a Stoddard solvent calibration standard.

4.2.4 Laboratory Analyses of Groundwater Samples

The suite of analyses for each groundwater sample collected during this investigation is summarized in Table 1. Based on the historical or current operations at each area investigated, groundwater samples were analyzed as follows:

- VOCs using EPA Method 8260B/5035;
- TPHcc (carbon chains of C6 – C44) using EPA Test Method 8015B Modified;

Groundwater samples were collected using disposable polyethylene bailers. Groundwater samples, once packaged and labeled, were placed in an ice-filled chest.

Groundwater samples from some areas of the site also were analyzed for Stoddard solvent, a COPC found at the site. Because Stoddard solvent is not typically reported using EPA Method 8260B, the laboratory evaluated its results against a Stoddard solvent calibration standard.

4.3 SOIL AND GROUNDWATER SAMPLING AND SAMPLE HANDLING PROCEDURES

During the Supplemental Phase II ESA, soil and groundwater sample handling procedures were implemented. The specific elements of these procedures are described in the following subsections.

4.3.1 Sample Containers and Preservation

Soil samples were collected in acetate liners, new 6-inch stainless steel sleeves, or glass jars (glass jars were not used for samples being analyzed for VOCs or SVOCs). Groundwater samples were collected using a disposable polyethylene bailer. Clean, pre-packaged sample containers provided by the laboratory or drilling subcontractor(s) were used for sample containment.

No preservatives were required for soil samples collected and submitted for PCBs, TPH, or metals analyses. Soil samples for VOC analysis were collected in cut syringes and preserved in the field using EPA Method 5035 protocols. Preservatives were required for groundwater samples collected and submitted for VOC analyses. No preservatives were required for soil samples submitted for PCBs or TPH analyses.

4.3.2 Sample Labeling

Each sample was assigned a sample-specific identification code linking the sample to descriptive information recorded in field documents. A separate label was affixed to each sample container. The site-specific sample identification code consisted of the following components:

Digits 1 & 2: Sequential sample location number (01, 02, 03, etc.)

Digits 3 & 4: Two letter code, describing the type of sample (SV = soil vapor sample, SS = soil sample, CS = concrete sample, HS = groundwater sample)

Digits 5, 6 (&7): Two- to three-digit number describing the sampling depth (5.0 = 5.0 feet below ground surface (bgs), 10.5 = 10.5 feet bgs, etc.).

As an example, a sample labeled 94-SS-10.5 would represent a soil sample collected from sample location number 94, at a depth of 10.5 feet bgs.

4.3.3 Sample Packaging, Shipment, and Chain-of-Custody

Soil, groundwater, and field QA/QC samples were collected and remained sealed within sampling containers until analyzed by the laboratory. Ice contained in resealable plastic bags was placed in an ice chest along with the samples to keep them chilled. The condition of samples was inspected prior to shipment. Chain-of-custody procedures were followed to document field tracking of sample custody. Chain-of-custody records were completed for each shipping container.

4.4 EQUIPMENT DECONTAMINATION

Re-usable drilling and sampling equipment were cleaned between each use. Downhole equipment including hand augers, direct push rods, and drive samplers were first cleaned using a non-phosphate detergent and potable water, then with de-ionized water and a brush, then they were rinsed in a two-stage de-ionized water rinse and air dried. Augers and split-spoon samplers were steam cleaned/pressure washed. Used decontamination wash and rinse water was temporarily stored in 5-gallon buckets, then transferred to a sealed 55-gallon labeled drum at the end of each day.

4.5 INVESTIGATION-DERIVED WASTE

Decontamination water, soil cuttings, and concrete cores were temporarily stored on-site in DOT-approved 55-gallon labeled drums.

4.6 BOREHOLE BACKFILL

Shallow soil borings and soil vapor sample locations were backfilled with granular bentonite, and the bentonite was hydrated in place with potable water. The top of each boring was patched to match existing surface conditions. In accordance with H&EC protocols, the seven deeper soil borings were destroyed by being backfilled with cement bentonite grout through the drilling augers to approximately 10 to 15 feet below ground surface, followed by approximately 10 to 15 feet of native soil. Concrete was used at the ground surface to match existing surface conditions.

4.7 SITE SURVEY

On May 22 and May 24, 2006, Calvada Surveying, Inc., of Corona, California, surveyed the sample locations. The soil borings and soil vapor locations were surveyed with respect to a nearby benchmark and tied to the existing site grid (northing and easting coordinates) in North American Datum of 1983 (NAD 83). Ground surface elevations were measured at each location with respect to mean sea level in North American Vertical Datum of 1988 (NAVD 88). The borings and soil vapor locations were plotted on the site map (Figure 4) and survey data are included in Appendix B with the soil boring logs.

5.0 ANALYTICAL RESULTS

This section presents a summary of the analytical results of the samples collected during the Supplemental Phase II ESA. Laboratory analytical results are summarized in Tables 2 through

8. Copies of the laboratory reports and chain-of-custody documents for the samples are presented in Appendix C.

5.1 SOIL VAPOR ANALYTICAL RESULTS

Sixty-two soil vapor samples (excluding duplicate samples) were collected from 29 sampling locations and analyzed for VOCs and Stoddard solvent (Table 2). All sixty-two soil vapor samples had reported concentrations of one or more VOCs. A summary of the frequency of detection and the reported concentration range of each compound detected in soil vapor during this assessment is provided below (duplicate sample results are not included).

Compounds in Soil Vapor	Frequency of Detection	Detected Concentration Range in Soil Vapor (micrograms per liter [µg/l])
chloroform	5 out of 62 samples	0.39 – 2.5
1,1-dichloroethene (1,1-DCE)	13 out of 62 samples	0.60 – 22
tetrachloroethene (PCE)	53 out of 62 samples	0.13 – 650
toluene	1 out of 62 samples	4.7
1,1,1-trichloroethane (1,1,1-TCA)	7 out of 62 samples	0.15 – 13
TCE	59 out of 62 samples	0.25 – 1900
Stoddard solvent	5 out of 62 samples	10 – 18

TCE and PCE were the most frequently detected VOCs at the site. The sample locations where these compounds were detected in soil vapor are shown on Figure 4a and 4b, along with the previous Phase II results.

Forty of the 59 samples with reported detections of TCE were collected inside or adjacent to Buildings 106, 108, and 112.

5.2 SOIL ANALYTICAL RESULTS

Soil samples were analyzed for VOCs, TPHcc, Stoddard solvent, PCBs, and/or metals. The results of these analyses are presented below.

5.2.1 Volatile Organic Compounds

Eighty soil samples were analyzed for VOCs using EPA Method 8260B/5035 (Table 3). A summary of the frequency of detection and the reported concentration range of each VOC detected in soil is provided below.

Compounds in Soil	Frequency of Detection	Detected Concentration Range in Soil (micrograms per kilogram [µg/kg])
benzene	10 out of 80 samples	2.8 – 1600
n-butylbenzene (n-BB)	2 out of 80 samples	26 – 35
1,2-dichloroethane (1,2-DCA)	5 out of 80 samples	10 – 220
1,1-DCE	3 out of 80 samples	5.0 – 8.4
ethylbenzene	9 out of 80 samples	2.4 – 210
isopropylbenzene	2 out of 80 samples	11 – 15
naphthalene	3 out of 80 samples	20 – 260
n-propylbenzene (n-PB)	5 out of 80 samples	5.7 – 53
PCE	16 out of 80 samples	9.3 – 260
toluene	11 out of 80 samples	3.1 – 1500
TCE	36 out of 80 samples	7.4 – 3800
1,3,5-trimethylbenzene (1,3,5-TMB)	5 out of 80 samples	8.7 – 120
1,2,4-trimethylbenzene (1,2,4-TMB)	5 out of 80 samples	7.7 – 470
m,p-xylenes	13 out of 80 samples	2.2 – 940
o-xylene	11 out of 80 samples	2.1 – 450

The sample locations where these compounds were detected in soil are shown on Figure 5, along with the previous Phase II results.

5.2.2 Total Petroleum Hydrocarbons and Stoddard Solvent

Twenty-three soil samples were analyzed for TPHcc using EPA Method 8015M and 80 samples were analyzed for Stoddard solvent using EPA Method 8260B/5035 (Table 4). The carbon chains were broken into the light (C6 – C12), middle (C12 – C22), and heavy (C22 – C44) hydrocarbon ranges. A summary of the frequency of detections and reported concentration range of each range of petroleum hydrocarbons and Stoddard solvent is provided below.

Petroleum Hydrocarbon Range	Frequency of Detection	Detected Concentration Range in Soil (mg/kg)
middle hydrocarbon range	4 out of 23 samples	6.7 – 626.6
heavy hydrocarbon range	4 out of 23 samples	119.2 – 1216.4
Stoddard solvent	11 out of 80 samples	0.60 – 8.1

The sample locations where petroleum hydrocarbons were detected in soil are shown on Figure 5, along with the previous Phase II results.

5.2.3 Polychlorinated Biphenyls

A total of 124 soil samples were analyzed for PCBs using EPA Method 8082 (Table 5). Detected PCBs included Aroclor 1248. A summary of the frequency of detection and the reported concentration range of total PCBs detected in these samples is provided below.

Compound	Frequency of Detection	Detected Concentration Range (µg/kg)
Soil (Aroclor 1248)	13 out of 124 samples	260 – 2,000,000

The sample locations where PCBs were detected in soil are shown on Figures 6a and 6b, along with the previous Phase II results.

5.2.4 Total Metals

Thirty-six soil samples and one sediment sample (from the sump located adjacent to boring location 107) were analyzed for total metals using EPA Test Methods 6010B/7000 and 7471A (Table 6). Sixteen soil samples were analyzed for CrVI using EPA Method 7199. A summary of the frequency of detection and the reported concentration range of detected metals in the soil samples (including the sediment sample from the sump at boring location 107) is provided below.

Metals in Soil	Frequency of Detection	Detected Concentration Range in Soil (mg/kg)
arsenic (As)	8 out of 36 samples	1.3 – 16
barium (Ba)	20 out of 36 samples	95 – 190
cadmium (Cd)	1 out of 36 samples	5.0
chromium (Cr)	20 out of 36 samples	14 – 180
cobalt (Co)	20 out of 36 samples	6.6 – 12
copper (Cu)	20 out of 36 samples	19 – 1300
lead (Pb)	20 out of 36 samples	8.0 – 3000
molybdenum (Mo)	1 out of 36 samples	17
nickel (Ni)	20 out of 36 samples	6.1 – 160
vanadium (V)	19 out of 36 samples	33 – 55
zinc (Zn)	20 out of 36 samples	48 – 2100
mercury (Hg)	13 out of 36 samples	0.023 – 0.38

5.3 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were analyzed for VOCs, TPHcc, and/or Stoddard solvent. The results of these analyses are presented in the following subsections.

5.3.1 Volatile Organic Compounds

Six groundwater samples were analyzed for VOCs using EPA Method 8260M (Table 7). A summary of the frequency of detection and the reported concentration range of each VOC detected in groundwater is provided below.

Compounds in Groundwater	Frequency of Detection	Detected Concentration Range in Groundwater (micrograms per liter [µg/l])
benzene	2 out of 6 samples	2.8 – 3.3
chloroform	2 out of 6 samples	0.57 – 1.8
1,2-DCA	2 out of 6 samples	4.5 – 6.0
1,1-DCE	1 out of 6 samples	1.2
ethylbenzene	2 out of 6 samples	0.85 – 14
PCE	4 out of 6 samples	0.95 – 4.6
toluene	2 out of 6 samples	2.9 – 29
TCE	6 out of 6 samples	72 – 420
m,p-xylenes	2 out of 6 samples	3.9 – 56
o-xylene	2 out of 6 samples	2.0 – 25

The sample locations where these compounds were detected in groundwater are shown on Figure 5.

5.3.2 Total Petroleum Hydrocarbons and Stoddard Solvent

Five groundwater samples were analyzed for TPHcc using EPA Method 8015M and six samples were analyzed for Stoddard solvent using EPA Method 8260M/5035 (Table 8). The carbon chains were broken into the light (C6 - C12), middle (C12 - C22), and heavy (C22 - C44) hydrocarbon ranges. A summary of the frequency of detections and reported concentration range of each range of petroleum hydrocarbons and Stoddard solvent is provided below.

Petroleum Hydrocarbon Range	Frequency of Detection	Detected Concentration Range in Groundwater (µg/l)
light hydrocarbon range	1 out of 5 samples	250
middle hydrocarbon range	4 out of 5 samples	81 – 398
heavy hydrocarbon range	4 out of 5 samples	73 – 365
Stoddard solvent	3 out of 6 samples	180 – 870[(a)]

Note: According to the analytical laboratory, sample results do not resemble Stoddard solvent (see Table 8).

The sample locations where petroleum hydrocarbons and Stoddard solvent were detected in groundwater are shown on Figure 5.

5.4 CONCRETE ANALYTICAL RESULTS

Two concrete samples were analyzed for PCBs using EPA Method 8082. PCBs were not detected at or above the laboratory reporting limits in the concrete samples. The sample locations where the concrete cores were collected are shown on Figure 6b.

6.0 FIELD AND LABORATORY QA/QC PROCEDURES AND RESULTS

As part of the Supplemental Phase II ESA, specified QA/QC procedures were used during sampling and laboratory analysis. These activities are described in the following subsections along with the summary of the QA/QC results.

6.1 QA/QC SAMPLES

Several types of QA/QC samples were taken to evaluate the quality of the data obtained during and following sampling. The types of field and laboratory QA/QC samples are described in the following subsections.

6.1.1 Field Quality Control Samples and Results

The field QA/QC samples collected during the implementation of the Supplemental Phase II ESA included the following:

- Trip Blank Samples- Trip blanks were included to evaluate the potential for cross-contamination of VOC samples during transport. One trip blank was submitted with each sample cooler containing samples to be analyzed for VOCs and/or Stoddard solvent. The blanks were prepared by the analytical laboratory. Sample numbers for trip blanks were labeled as "TP-date" or “TB-date,” followed by a consecutive two-digit number (if needed) indicating trip blank sample each day (e.g., TP-040106-01, TB-05172006). VOCs and/or Stoddard solvent were not detected in the trip blank samples analyzed.

- Equipment Blank Samples- Equipment blanks primarily provide a check on possible contamination from sampling instruments used to collect and transfer samples from the point of collection into sample containers. Equipment blanks were prepared by pouring laboratory provided de-ionized water over the decontaminated sample equipment and collecting the water in the appropriate containers. Equipment blanks were collected at a rate of one per 20 sampling events (5 percent). At a minimum, one equipment blank was collected each day soil samples were collected. Of the equipment blanks analyzed, low concentrations of ethylbenzene; o-xylenes; and

m,p-xylenes were detected in the blank samples. These compounds were not detected in the soil or groundwater samples collected on the same day. A summary of the equipment blanks with these compounds detected include:

- Equipment blank EQ-05172006-1 (collected May 17, 2006) had detections of ethylbenzene; o-xylenes; and m,p-xylenes at 0.82, 1.5, and 2.0 µg/l, respectively.
- Equipment blank EQ-05172006-2 (collected May 17, 2006) had detections of ethylbenzene; o-xylenes; and m,p-xylenes at 0.51, 1.4, and 1.6 µg/l, respectively.
- Equipment blank EQ-05222006-1 (collected May 22, 2006) had detections of ethylbenzene; o-xylenes; and m,p-xylenes at 0.61, 1.2, and 1.6 µg/l, respectively.
- Equipment blank EQ-05222006-2 (collected May 22, 2006) had detections of ethylbenzene; o-xylenes; and m,p-xylenes at 0.69, 1.2, and 1.6 µg/l, respectively.

In addition, temperature blanks were placed in each cooler shipped to the laboratory. Temperature blanks were provided by the laboratory and were used to obtain a representative temperature of the cooler upon laboratory receipt. Soil and groundwater samples were contained in separate ice-chilled coolers and submitted to the laboratory under chain-of-custody procedures. With the exception of one sample shipment (cooler temperature 1º Centigrade), sample cooler temperatures were within laboratory acceptable ranges (reported between 2º and 6º Centigrade).

6.1.2 Laboratory Quality Control Samples and Results for Soil and Groundwater

The soil and groundwater samples collected during the Supplemental Phase II ESA were analyzed by a laboratory certified for the test methods by the California Department of Health Services (DHS) Environmental Laboratory Accreditation Program (ELAP). The laboratory analyses were conducted in accordance with procedures outlined in the USEPA SW-846 test methods manual, and samples were analyzed within the method required holding times, with the exception of the following.

- Sample 114-SS-1.6 (collected April 6, 2006) was analyzed outside the EPA-recommended hold time for mercury.

- Sample 125-HS-150 (collected April 11, 2006) was analyzed for TPH carbon chain outside the EPA-recommended hold time to confirm the absence of Stoddard solvent.

Laboratory QC acceptance criteria that were applied to the samples analyzed during the Supplemental Phase II ESA met SW-846 requirements. Four types of laboratory QC samples were used to account for variability and evaluate potential contamination in various stages of the analytical process. Laboratory QC samples included matrix spike/matrix spike duplicates (MS/MSD), method blanks, surrogate spike recoveries (as appropriate for each analytical method), and laboratory control samples/laboratory control sample duplicates (LCS/LCSD). The percent recoveries (%R) and relative percent differences (RPDs) for the LCS/LCSD and MS/MSD, laboratory control spike (LCS) samples, and surrogate spike samples were within laboratory acceptable limits with the following exceptions.

- MS/MSD %R and RPD were reported within acceptable limits with the exception of the MS %R for barium and copper, which were above acceptable limits for soil samples collected on April 3, 2006, April 4, 2006, and April 5, 2006. The associated MS/MSD RPD and LCS recoveries for these data were within acceptable limits and no data were qualified.

- LCS/LCSD recoveries were within acceptable limits with the following exceptions.

    - LCS %R for methylene chloride was above acceptable limits for soil samples collected on April 10, 2006, April 12, 2006, and April 13, 2006. The associated LCS/LCSD and/or the MS/MSD %R or RPDs were within acceptable limits. No data were qualified.

    - LCS %R for 1,1,2,2-tetrachloroethane was above acceptable limits for soil and groundwater samples collected on May 17, 2006, May 18, 2006, and May 22, 2006. No MS/MSD samples were analyzed. The associated LCS/LCSD RPDs were within acceptable limits, and no data were qualified.

    - LCSD %R for methylene chloride was above acceptable limits for soil and groundwater samples collected on May 18, 2006. No MS/MSD samples were analyzed. The associated LCS %R and/or RPDs were within acceptable limits, and no data were qualified.

    - LCSD %R for methylene chloride was above acceptable limits for soil samples collected on May 19, 2006. No MS/MSD samples were analyzed. The associated LCS/LCSD RPDs were within acceptable limits. No data were qualified.

- LCS %R for 1,1,2,2-tetrachloroethane was above acceptable limits for soil and groundwater samples collected on May 22, 2006. The associated LCS/LCSD and MS/MSD RPDs were within acceptable limits, and no data were qualified.

- Surrogate spike recoveries were reported within acceptable limits with the following exceptions.

  - The sample surrogate spike recovery for PCBs in soil samples 98-SS-10.5 and 98-SS-30.5 (collected April 5, 2006) were below the acceptable limits (zero percent) due to sample dilution required for high analyte concentration and/or matrix interference. For these samples, either the LCS/LCSD and/or the MS/MSD %R or RPDs were within acceptable limits, and no data were qualified.

  - The sample surrogate spike recovery for PCBs in soil sample 100-SS-2.0 (collected April 5, 2006) was below the acceptable limit (zero percent) due to sample dilution and/or matrix interference. For this sample, either the LCS/LCSD and/or the MS/MSD %R or RPDs were within acceptable limits, and no data were qualified.

  - The sample surrogate spike recoveries for PCBs in the laboratory blank sample associated with equipment blanks EQ-040506-01 (collected April 5, 2006) and EQ-040606-01 (collected April 6, 2006) were below the acceptable limits. The sample surrogate recoveries and LCS/LCSD recoveries associated with the equipment blank were within acceptable limits, and no data were qualified.

  - The sample surrogate spike recovery for PCBs in soil sample 94-SS-10.5 (collected April 6, 2006) was below the acceptable limit (zero percent) due to sample dilution and/or matrix interference. For these samples, either the LCS/LCSD and/or the MS/MSD %R or RPDs were within acceptable limits, and no data were qualified.

  - The sample surrogate spike recovery for PCBs in soil samples 95-SS-10.5 and 95-SS-20.5 (collected April 6, 2006) were below the acceptable limit (zero percent) due to sample dilution and/or matrix interference. For these samples, either the LCS/LCSD and/or the MS/MSD %R or RPDs were within acceptable limits, and no data were qualified.

  - The sample surrogate spike recoveries for toluene in soil sample 125-SS-50.5 and dibromofluoromethane in soil sample 125-SS-120.5 (collected April 10, 2006) were below the acceptable limits. For these samples, either the LCS/LCSD and/or the MS/MSD %R and RPDs were within acceptable limits, and no data were qualified.

6.2 QA/QC PROCEDURES AND RESULTS FOR SOIL VAPOR

Soil vapor samples were analyzed for the list of 23 target VOCs and Stoddard solvent by gas chromatography/mass spectrometry (GC/MS) using EPA Method 8260B modified for soil vapor. Initial and daily mid-point calibrations were included with the analyses.

During the survey, the mobile laboratory included surrogate spike compound recoveries, laboratory blank samples, laboratory LCS, and laboratory duplicate samples in general accordance with the Joint Advisory. Laboratory QA/QC sample results are listed below.

- Surrogate spike recoveries were reported within laboratory acceptable limits for each vapor sample.
- No compounds were detected in the laboratory blank samples.
- LCS %Rs were reported within laboratory acceptable limits with the following exceptions.
    - LCS %R for cis-1,2-DCE was above acceptable limits for soil vapor samples collected on May 15, 2006. The surrogate spike recoveries were within acceptable limits, and no data were qualified.
    - LCS %R for 1,1-DCA, trans-1,2-DCE, and cis-1,2-DCE were above acceptable limits for soil vapor samples collected on May 16, 2006. The surrogate spike recoveries were within acceptable limits, and no data were qualified.
- Laboratory duplicate samples were analyzed daily from vapor samples collected at the site. RPDs for these samples range from 4.91 percent (TCE) to 78.6 percent (PCE). No data were qualified.

During the soil vapor survey, the following field QA/QC samples were collected and analyzed.

- Ambient air blanks were collected and analyzed during each day of sampling. No VOCs or Stoddard solvent was detected in the ambient air samples.
- IPA was used as the ambient air leak check compound at each soil vapor sample location. IPA was not detected in the soil vapor samples during this investigation.
- Duplicate soil vapor samples were collected at a frequency of 10 percent of the total samples collected. The RPDs for the primary and duplicate samples with VOC detections ranged between 4.3 and 79.1 percent.

Reporting limits for target soil vapor compounds were consistent with the Joint Advisory reporting limits of 1.0 µg/l, with a few exceptions. Higher reporting limits were obtained because some compounds, such as TCE, had concentrations greater than the calibration range and required dilution. In these cases, it was required that the samples be analyzed again to obtain a compound concentration within the range of the instrument calibration. Soil vapor analytical results that exceeded the calibration range were qualified as estimated concentrations outside the range of calibration with an "E" qualifier (Table 2).

7.0 DATA EVALUATION

Soil data collected during the Supplemental Phase II ESA were evaluated using a stepped screening process to evaluate the potential for groundwater impacts and potential dermal exposures to shallow soil containing COPCs. The potential for groundwater impacts and/or potential dermal exposure related to COPCs detected in soil was evaluated using three guidelines.

- Screening levels from the May 1996 Los Angeles RWQCB Interim Site Assessment and Cleanup Guidebook (RWQCB Guidebook, 1996, and updated May 2004)
- United States EPA Region IX Industrial Preliminary Remediation Goals (PRGs)
- Soil Screening Levels with a Dilution Attenuation Factor of 20 (SSLs)

Concentrations of metals in soil were compared to California background concentrations and waste characterization criteria. The screening levels used to evaluate the soil analytical data are included with the Supplemental Phase II ESA results listed on Tables 4 through 6.

Groundwater data collected during the Supplemental Phase II assessment were compared to U.S. EPA Maximum Contaminant Levels (MCLs). The screening levels used to evaluate the groundwater analytical data are included with the Supplemental Phase II ESA results listed on Tables 7 and 8.

The data evaluation included a comparison of the Supplemental Phase II soil sample results to the following regulatory screening levels.

- RWQCB Guidebook for petroleum hydrocarbons and aromatic hydrocarbons (BTEX compounds) in soil. The selected screening levels were taken from Table 4-1 assuming a sand lithology and a depth to groundwater of 150 feet.

- USEPA Region IX Industrial PRGs for VOCs, PCBs, and metals (EPA, 2004).
- USEPA Soil Screening Levels (SSLs) with a Dilution Attenuation Factor of 20 (DAF20) for VOCs and metals, where available (EPA, 2004).
- California Background Concentrations of Trace and Major Elements in California Soil (Bradford, et. al., March 1996).
- California Code of Regulations, Title 22, Total Threshold Limit Concentration (TTLC) and Soluble Threshold Limit Concentration (STLC) for metals (waste characterization), where applicable.

The soil vapor results were compared to the California Environmental Protection Agency (Cal-EPA) office of Environmental Health Hazards Assessment (OEHHA) California Human Health Screening Levels (CHHSLs) for a limited number of chemicals (OEHHA, 2005). The CHHSLs for soil vapor were developed to be protective of exposure to chemicals moving through the subsurface to indoor air. Comparison of soil vapor analytical results with industrial CHHSLs can indicate whether further assessment, including consideration of site-specific subsurface conditions and future land use, may be necessary to evaluate the potential indoor air exposure pathway.

The groundwater results were compared to USEPA Maximum Contaminant Levels.

7.1 VOLATILE ORGANIC COMPOUNDS

The following subsections provide a summary of the soil vapor results and the soil screening evaluation for VOCs in soil samples.

7.1.1 Soil Vapor

A soil vapor survey was expanded from the initial 2005 Phase II survey in Buildings 106, 108, 110, and 112, and also within the northern portion of Building 104 adjacent to Building 110. Chlorinated VOCs were detected in soil vapor samples collected from the aforementioned areas. Stoddard solvent was detected in soil vapor samples collected in Building 112 and along the north edge of Building 112 (outside). The soil vapor results are summarized below and listed in Table 2.

<u>Building 104</u>

Sampling locations 92 and 93, located inside Building 104, were selected for soil vapor sampling (Figure 4a). TCE was detected at sampling locations 92 and 93 at concentrations

ranging from 0.58 to 2.4 µg/l. PCE was detected at sampling locations 92 and 93 at concentrations ranging from 0.47 to 0.66 µg/l. Of these compounds, the concentrations of TCE and PCE in soil vapor were above the respective CHHSL of 1.8 µg/l and 0.60 µg/l for industrial sites at sample location 92.

Fuel-related VOCs and Stoddard solvent were not detected in soil vapor in this building.

Building 106 (Inside and Outside)

Sampling location 130, located inside Building 106, and seven other sampling locations, 79 through 84 and 131 located outside of Building 106, were selected for soil vapor sampling (Figure 4a). TCE was detected at all eight sampling locations at concentrations ranging from 73 to 1900 µg/l. PCE was detected at all eight sampling locations at concentrations ranging from 7.2 to 120 µg/l. 1,1-DCE was detected at sampling location 130 located inside Building 106, and at sampling locations 79, 81, 82, 84, and 131, located outside Building 106, at concentrations ranging from 0.78 to 22 µg/l. Toluene was detected at sampling location 130, located inside Building 106, at a concentration of 4.1 µg/l. The compound 1,1,1-TCA was detected at sampling location 130, located inside Building 106, and at sampling locations 81 and 82, located outside Building 106, at concentrations ranging from 4.1 to 13 µg/l. Stoddard solvent was not detected at or above the laboratory reporting limit in soil vapor inside or outside of this building. The concentrations of TCE and PCE in soil vapor were above their respective CHHSLs of 1.8 and 0.60 µg/l for industrial sites at all the aforementioned locations.

Building 108 (Inside and Outside)

Sampling locations 85 through 91, 144, and 146, all located inside Building 108, as well as sampling locations 78 and 136, located outside of Building 108, were selected for soil vapor sampling (Figure 4a). TCE was detected at all eleven sampling locations at concentrations ranging from 1.2 to 740 µg/l. PCE was detected at all eleven sampling locations at concentrations ranging from 0.14 to 650 µg/l. Chloroform was detected at four sampling locations, 86, 87, 144, and 146 located inside Building 108, at concentrations ranging from 0.39 to 2.5 µg/l. 1,1-dichloroethene was detected at sampling location 86, located inside Building 108, and at sampling location 136, located outside Building 108, at concentrations ranging from 0.60 to 1.5 µg/l. Of these compounds, the concentrations of TCE and/or PCE in soil vapor were above the respective CHHSL of 1.8 µg/l and 0.60 µg/l for industrial sites at sample locations 78, 85, 86, 87, 88, 89, 90, 91, 136, 144, and 146. Sampling locations 89 and 90 were found to be above the CHHSL for PCE but not for TCE.

Stoddard solvent was not detected at or above the laboratory reporting limit in soil vapor inside or outside of this building.

Building 112 (Inside and Outside)

Sampling locations 140, 141, 142, 143, and 145, located inside Building 112, and sampling locations 137, 138, and 139, located outside of Building 112, were selected for soil vapor sampling (Figure 4a). TCE was detected at all eight sampling locations at concentrations ranging from 0.25 to 130 µg/l. PCE was detected at all five sampling locations inside Building 112 and at two of the three sampling locations outside of Building 112 at concentrations ranging from 0.13 to 4.1 µg/l. The concentrations of TCE and/or PCE in soil vapor were above the respective CHHSL of 1.8 µg/l and 0.60 µg/l for industrial sites at sample locations 137, 138, 140, 141, 142, 143, and 145. Sampling locations 138 and 140 were found to be above the CHHSL for TCE but not for PCE.

Stoddard solvent was detected at sampling location 140 inside Building 112 and at all three sampling locations outside of Building 112 at concentrations ranging from 10 to 18 µg/l. Fuel-related VOCs were not detected in soil vapor inside or outside of this building.

7.1.2 Soil

Eighty of the soil samples collected from Buildings 104, 106, 108, and 112 were analyzed for VOCs (Table 3) to further assess the source and extent of VOCs detected in soil at former borings 13 and 14 and in soil vapor in this portion of the Site. The concentrations of VOCs detected in these soil samples were below the screening levels (i.e., Industrial PRGs, SSLs, and RWQCB Screening Criteria), with the exception of TCE in 17 soil samples, PCE in 10 soil samples, benzene in three soil samples, and 1,2-DCA in three soil samples. Borings with detected concentrations of VOCs above the screening levels are summarized below.

Boring 125 was advanced to groundwater to a depth of 150.5 feet bgs in the southern portion of Building 106 near former boring 13 (Figure 5). Benzene and 1,2-DCA were detected above one or more screening levels in soil samples collected at depths of 50.5, 61, and 80.5 feet bgs (Table 3) as described below.

- Benzene exceeded the Industrial PRG (1400 µg/kg) at a concentration of 1600 µg/kg at a depth of 61 feet bgs.

- Benzene exceeded the SSL (30 µg/kg) and the RWQCB Screening Criteria (46 µg/kg) at concentrations and depths of:
    - 720 µg/kg at 50.5 feet bgs and
    - 31 µg/kg at 80.5 feet bgs.
- 1,2-DCA exceed the SSL (20 µg/kg) at concentrations and depths of:
    - 200 µg/kg at 50.5 feet bgs,
    - 220 µg/kg at 61 feet bgs, and
    - 26 µg/kg at 80.5 feet bgs.

At boring 125, other VOCs detected below the screening levels included the following.

- TCE – 8.3 to 21 µg/kg
- benzene – 27 µg/kg
- 1,2-DCA – 10 to 17 µg/kg
- ethylbenzene – 3.9 to 210 µg/kg
- isopropylbenzene – 15 µg/kg
- naphthalene – 20 to 260 µg/kg
- n-propylbenzene – 5.7 to 53 µg/kg
- toluene – 9.4 to 1500 µg/kg
- 1,3,5-TMB – 8.7 to 120 µg/kg
- 1,2,4-TMB – 7.7 to 470 µg/kg
- m,p-xylenes – 8.2 to 940 µg/kg
- o-xylene – 6.2 to 450 µg/kg

Boring 126 was advanced to groundwater to a depth of 150 feet bgs in the northern portion of Building 106 near former boring 14 (Figure 5). TCE and PCE were the only VOCs detected above the screening levels (Table 3), as described below.

- TCE exceeded the SSL (60 µg/kg) at concentrations and depths of:
    - 3800 µg/kg at 53 feet bgs,
    - 160 µg/kg at 66 feet bgs,
    - 260 µg/kg at 85.5 feet bgs,
    - 1100 µg/kg at 105.5 feet bgs,
    - 940 µg/kg at 120.8 feet bgs, and
    - 510 µg/kg at 135.3 feet bgs.
- PCE exceeded the SSL (60 µg/kg) at concentrations and depths of:
    - 210 µg/kg at 53 feet bgs,
    - 160 µg/kg at 66 feet bgs,
    - 190 µg/kg at 75.5 feet bgs,
    - 190 µg/kg at 85.5 feet bgs,
    - 250 µg/kg at 95.5 feet bgs,
    - 260 µg/kg at 105.5 feet bgs,
    - 160 µg/kg at 115.5 feet bgs,
    - 130 µg/kg at 120.8 feet bgs, and
    - 100 µg/kg at 135.3 feet bgs.

At boring 126, other VOCs detected below the screening levels included the following.

- TCE – 24 to 35 µg/kg
- benzene – 4.0 µg/kg
- 1,1-DCE – 8.4 µg/kg

Boring 132 was advanced to 150 feet bgs in the northern portion of Building 108 (Figure 5). TCE was the only VOC detected above the screening level (Table 3), as described below.

- TCE exceeded the SSL (60 µg/kg) at concentrations and depths of:
    - 240 µg/kg at 26 feet bgs,
    - 280 µg/kg at 36 feet bgs,
    - 670 µg/kg at 46 feet bgs,
    - 2700 µg/kg at 51 feet bgs, and
    - 120 µg/kg at 105 feet bgs.

At boring 132, other VOCs detected below the screening levels included the following.

- TCE – 11 to 40 µg/kg
- PCE – 11 to 42 µg/kg
- 1,1-DCE – 5.5 µg/kg

Boring 133 was advanced to 152 feet bgs in the southern portion of Building 108 (Figure 5). TCE was the only VOC detected above the screening level (Table 3), as described below.

- TCE exceeded the SSL (60 µg/kg) at concentrations and depths of:
    - 75 µg/kg at 11 feet bgs,
    - 65 µg/kg at 41 feet bgs, and
    - 130 µg/kg at 56 feet bgs.

At boring 133, TCE also was detected below the screening levels at concentrations ranging from 9.5 to 39 µg/kg.

Boring 135 was advanced to 53 feet bgs in the central portion of Building 106 (Figure 5). TCE and PCE were the only VOCs detected above the screening levels (Table 3), as described below.

- TCE exceeded the SSL (60 µg/kg) at concentrations and depths of:
    - 120 µg/kg at 21 feet bgs,

  - 2000 µg/kg at 51 feet bgs, and
  - 1200 µg/kg at 52.5 feet bgs.
- PCE exceeded the SSL (60 µg/kg) at 94 µg/kg at a depth of 51 feet bgs.

At boring 135, other VOCs detected below the screening levels included the following.

- TCE – 31 to 44 µg/kg
- PCE – 9.3 to 53 µg/kg
- benzene – 6.2 to 14 µg/kg
- 1,1-dichloroethene – 5.0 µg/kg
- ethylbenzene – 2.4 to 4.5 µg/kg
- toluene – 3.1 to 8.5 µg/kg
- m,p-xylenes – 2.2 to 17 µg/kg
- o-xylene – 2.1 to 5.5 µg/kg

Boring 134 was advanced to 152 feet bgs in the northern portion of Building 112 (Figure 5). No VOCs were detected above the screening levels (Table 3). TCE was detected below the screening levels at concentrations ranging from 7.4 to 39 µg/kg. No other VOCs were detected at or above the laboratory reporting limits.

Aromatic VOCs were detected in soil at concentrations at or above the laboratory reporting limits but below their screening levels at boring locations 96, 115, and 116 in Building 104.

7.1.3 Groundwater

Six groundwater samples collected from soil borings advanced to groundwater in Buildings 104, 106, 108, and 112 were analyzed for VOCs (Table 7) to assess the potential VOC impacts to groundwater near former borings 13 and 14. These samples were collected from borings 125, 126, 132, 133, and 134. The concentrations of VOCs detected in these groundwater samples were below the MCLs, with the exception of TCE and 1,2-DCA. TCE was detected in the six groundwater samples at concentrations between 72 and 420 µg/l. The compound 1,2-DCA was detected at a concentration of 6.0 µg/l in the initial hydropunch sample from boring 125. The second groundwater sample collected from boring 125 contained

1,2-DCA at a concentration of 4.5 µg/l, which is below the MCL. Other VOCs detected in the groundwater samples at concentrations below the MCLs are listed below.

- PCE – 0.95 to 4.6 µg/l
- 1,1-DCE – 1.2 µg/l
- 1,2-DCA – 4.5 and 6.0 µg/l
- chloroform – 1.8 µg/l)

One groundwater sample from boring 126 also contained the following.

- benzene – 2.8 and 3.3 µg/l
- ethylbenzene – 14 µg/l
- toluene – 29 µg/l
- total xylenes – 81 µg/l

Although there are no MCLs for petroleum hydrocarbons in groundwater, these compounds were detected in groundwater beneath Building 106 at concentrations between 73 and 398 µg/l.

7.2 TOTAL PETROLEUM HYDROCARBONS AND STODDARD SOLVENT

Twenty-three soil samples collected from Buildings 104, 106, 108, and 112A were analyzed for TPHcc (Table 4). The concentrations of light, middle, and heavy hydrocarbons reported in the soil samples were below their RWQCB screening levels. Although reported concentrations are below the screening levels, petroleum hydrocarbon compounds were detected in soil at boring 107 located adjacent to the sump in Building 112A, in the sediment from within the sump, and at borings 121 and 122 adjacent to a sump feature located between columns D45 and E45 near former boring 30. Two borings advanced near the sump, borings 120 and 123, did not contain detectable concentrations of total petroleum hydrocarbons.

Eighty soil samples were analyzed for Stoddard solvent. Stoddard solvent was detected in 10 of the 80 soil samples at concentrations ranging from 0.60 to 13 mg/kg (Table 4). Although the hydrocarbons were detected within the range consistent with Stoddard solvent, the laboratory indicated the finger print was more indicative of a degraded gasoline.

7.3 METALS

Eleven soil samples collected from Buildings 112, 112A, and stormwater outfall #6 were analyzed for total metals (Table 6). The concentrations of metals in the soil samples were below the screening levels for metals listed in Table 6, with the exception of several soil samples from seven borings. The metals results from the seven borings are described below.

- Boring 129 was advanced in the area of a former etch station, along the east wall of Building 112 near former boring 22, and did not contain lead above the screening levels. However, soil collected at a depth of 3.5 feet bgs contained arsenic at a concentration of 1.3 mg/kg, which exceeds the Industrial PRG of 0.25 mg/kg. The arsenic concentrations are below the California maximum background level of 11 mg/kg. Two other borings, 127A and 128 advanced near former boring 22, did not contain lead or arsenic above the screening levels.

- Boring 107 was advanced adjacent to a sump feature located between columns D54 and H54 in Building 112A. Soil collected at a depth of 7.3 feet bgs contained arsenic at a concentration of 1.3 mg/kg, which exceeds the Industrial PRG of 0.25 mg/kg. Lead was detected at a concentration equivalent to 10 times the STLC for lead of 50 mg/kg. This sample was further tested for the leachable concentrations of lead using the Waste Extraction Test method. Lead was detected at 0.24 mg/l and 0.51 mg/l (STLC duplicate analysis; Table 6), which is below the STLC criterion for hazardous waste for lead at 5.0 mg/l. Sediment within the sump sample 107-SM-2.7 contained arsenic at 2.8 mg/kg, cadmium at 5.0 mg/kg, chromium at 180 mg/kg, copper at 1300 mg/kg, lead at 3000 mg/kg, molybdenum at 17 mg/kg, nickel at 160 mg/kg, and zinc at 2100 mg/kg. These reported concentrations exceed one or more of the screening levels listed in Table 6. The concentrations of chromium, copper, and lead are greater than 10 times their STLCs. This sample was further tested for the leachable concentrations of chromium, copper, and lead using the Waste Extraction Test method. Chromium was detected at 1.7 mg/l, which is below the STLC for chromium of 5 mg/l. Copper was detected at 86 mg/l, which exceeds STLC criteria for hazardous waste for copper of 25 mg/l. Lead was detected at 190 mg/l, which exceeds STLC criteria for hazardous waste for lead of 5 mg/l.

- Borings 108, 109, and 111 were advanced near trenches and pits in Building 112 adjacent to Mill #5 and the unnamed mill. Some of the soil samples collected from these borings contained arsenic at concentrations which exceed the Industrial PRG of 0.25 mg/kg. The arsenic concentrations are below the California maximum background level of 11 mg/kg.

- Borings 113 and 114 were advanced near storm water outfall #6 and former boring 47. Copper was not detected in soil samples above the screening levels. However, soil collected at a depth of 5.5 feet bgs in boring 113 contained arsenic at a concentration of 16 mg/kg, which exceeds the Industrial PRG of 0.25 mg/kg and

California maximum background level of 11 mg/kg. Soil collected at a depth of 1.1 feet bgs in boring 114 contained arsenic at a concentration of 4.2 mg/kg, which exceeds the Industrial PRG, but is below the California maximum background level. Boring 112 also advanced in the area of former boring 46 did not contain arsenic above the screening levels.

In addition, 16 soil samples collected from borings 104, 105, and 106 near former boring 46 located adjacent to the hot well of the cooling tower were analyzed for CrVI. CrVI was not detected at or above the laboratory reporting limit in any of the samples.

7.4 POLYCHLORINATED BIPHENYLS

During this assessment, PCBs Aroclor 1248 and 1260 were detected in soil samples collected in Buildings 104 and 112A. Based on toxicity of Aroclor 1248 and 1260, the PRG for Aroclor 1254 (744 µg/kg) was used in the screening evaluation. PCBs were detected above the Industrial PRG in soil from five borings, 94, 95, 98, 100, and 127B (Figure 6b). The PCB results from these five borings are described below.

PCBs were detected in soil above the screening level at borings 94, 95, 98, and 27B advanced in the vicinity of former boring 40 and around the current and former vertical pits containing hydraulic rams.

- Aroclor 1248 exceeded the Industrial PRG (720 µg/kg) at concentrations and depths of:
    - 3500 µg/kg at 10.5 feet bgs in boring 94
    - 77,000 µg/kg at 10.5 feet bgs in boring 95
    - 2,000,000 µg/kg at 20.5 feet bgs in boring 95
    - 44,000 µg/kg at 10.5 feet bgs in boring 98
    - 12,000 µg/kg at 30.5 feet bgs in boring 98
    - 1200 µg/kg at 21.0 feet bgs in boring 127B

Aroclor 1248 was detected below the Industrial PRG at depths of approximately 30.5 and 40.5 feet bgs in boring 95 and at 11 and 31 feet bgs in boring 127B. PCBs were not detected in soil at borings 96, 97, or 99, which were also advanced to further assess the extent of PCBs in soil associated with former boring 40 and around the current and former vertical pits containing hydraulic rams.

PCBs were detected above the screening level at boring 100, which was advanced along the southwest side of the saw in Building 104 near former boring 41 and 73. Aroclor 1248 was detected in soil only at a depth of 1.5 feet bgs at 74,000 µg/kg (Table 5).

PCBs were not detected in soil at borings 101/101B, 102, and 103 also advanced to further assess the extent of PCBs near formers borings 41 and 73. In addition, PCBs were not detected at or above the laboratory reporting limits in the two concrete core samples collected from boring locations 100 and 101.

PCBs were not detected in soil samples collected near the two recently identified former shallow vertical pits that were previously backfilled in place within Building 104 near borings 115, 116, 117, 118, and 119. These pits are located in the northwest corner of the building. Additionally, no PCBs were detected below the surface of the gravel trench associated with former substation 8 at sample location 124.

However, PCBs were detected in soil at concentrations below the Industrial PRG at one location. Aroclor 1260 was detected at 460 µg/kg in the sediment sample collected from the sump at sampling location 107 (Building 112A; Figure 6b).

In addition, 16 soil samples collected from borings 104, 105, and 106 near former boring 46, adjacent to the hot well of the cooling tower, were analyzed for PCBs. PCBs were not detected in the soil samples at or above the laboratory reporting limit.

8.0 SUMMARY AND CONCLUSIONS

This Supplemental Phase II ESA was designed to further assess the extent of COPCs detected in soil above the screening levels at a number of locations at the site. The objectives were to:

- further assess the source of TCE and other VOCs detected in soil at former boring 14 and soil vapor at former sample points 2 through 16 in Buildings 106 and 108, and evaluate the potential impacts to groundwater;
- further assess the potential source of Stoddard solvent in soil in Building 106 and the potential impacts to groundwater near former boring 13;
- further assess the source and extent of PCBs detected in soil in Building 104 at former borings 40, 41, and 73. Boring 40 is located near the current vertical pit and a formerly backfilled vertical pit. Borings 41 and 73 are adjacent to a saw.

- assess the presence of PCBs in soil in Building 104 near the recently identified shallow vertical pits. These pits are located in the northwest corner of the building.
- further assess the lateral extent of lead in shallow soil at the former etch station in Building 112 near former boring 22, and the lateral extent of copper in shallow soil at Storm Water Outfall #6 near former boring 47;
- assess the depth of the soil/gravel drainage area near Former Substation #8 and the concentrations of PCBs in these materials;
- further assess the extent of TPH detected in soil adjacent to a sump in Building 112 near former boring 30;
- further assess the extent of CrVI and PCBs detected in soil in the vicinity of the cooling tower and former boring 46; and
- assess the presence of TPH in soil near equipment trenches and pits in Building 112 adjacent to Mill #5 and the Unnamed mill.

Based on the soil and groundwater investigation results, the following subsections summarize Geomatrix's findings and conclusions as they relate to the investigation objectives and potential requirements for additional characterization and/or remediation of the site.

8.1 EXTENT OF VOCS AND STODDARD SOLVENT

Two of the objectives of the Supplemental ESA were 1) to further assess the source and extent of TCE and other VOCs detected in soil at former boring 14 and soil vapor at former sample points 2 through 16 in Buildings 106 and 108, and their potential impacts to groundwater, and 2) to further assess the source of Stoddard solvent in soil in Building 106, and its potential impacts to groundwater near former boring 13. Based on the data collected during the Phase II ESA and the Supplemental Phase II ESA, TCE and PCE, among other VOCs, were detected in soil vapor, soil, and groundwater within the northwestern portion of the site in Buildings 106, 108, and 112. In addition, aromatic VOCs, including benzene, were detected in soil and groundwater in the southern portion of Building 106. Based on the data, the source of chlorinated VOCs is likely a former operation that was located in the northwest corner of Building 106. The source of the aromatic VOCs in soil within the southern portion of Buildings 106 is likely related to a former truck maintenance area where drums containing gasoline were stored during the construction of the extrusion facility (Ursic 1999). Based on the data collected during each phase of the ESA, no further assessment is needed to

characterize the potential source area and to develop a remedial approach for the VOCs detected beneath the northwestern portion of the site.

8.1.1 Soil Vapor

Chlorinated VOCs were detected in soil vapor at concentrations between 0.13 µg/l and 1900 µg/l, with the highest concentrations reported for TCE. TCE exhibited the highest frequency of detection. The samples containing the highest reported concentration of TCE in soil vapor were from 15 feet bgs in three soil vapor samples. Two samples were collected just outside the building adjacent to the northwest corner of Building 106 during the Supplemental Phase II ESA at sample locations 81 and 82 (Figure 4a). The other sample was collected inside Building 106 at former sample point 12 during the initial Phase II ESA. The highest concentration of PCE reported in soil vapor was inside Building 108 at a depth of 15 feet bgs at boring 86 (Figure 4a). Other chlorinated VOCs detected in soil vapor included chloroform, 1,1-DCE, toluene, and 1,1,1-TCA. The lateral extent of TCE in the soil vapor was assessed to the east, southwest, and south of the northwestern corner of the Building 106, as shown on Figure 4a.

If the Cal-EPA CHHSLs are considered, some reported concentrations of PCE and TCE in certain soil vapor samples associated with Buildings 104, 106, 108, and 112 exceed the industrial CHHSLs (0.6 µg/l for PCE and 1.8 µg/l for TCE).

In addition, Stoddard solvent was detected in soil vapor at concentrations between 10 µg/l and 18 µg/l at four sample locations near Building 112. The samples containing Stoddard solvent were collected at 15 feet bgs at boring 140, 5 feet bgs at boring 137, 5 and 15 feet bgs at boring 138, and 15 feet bgs at boring 139 (Figure 4a).

8.1.2 Soil

The chlorinated VOCs TCE and PCE were detected in soil at concentrations between 7.4 and 3800 µg/kg, with the highest concentrations reported for TCE at depths of 53 feet bgs at boring 126 located in Building 106. TCE and PCE were detected above their SSLs in soil beneath Building 106 at borings 126 and 135. TCE was detected above the SSL in soil beneath Building 108 at borings 132 and 133. Buildings 106 and 108 are located adjacent to each other in the northern portion of the site, and the detection of TCE and PCE in soil in these areas is consistent with the soil vapor results obtained in Buildings 106 and 108. The presence of TCE ranging from depths of 11 feet bgs in boring 133 in Building 108 to 135.3 feet bgs in

boring 126 in Building 106 suggests that the source of the VOCs found in soil and groundwater are likely from an on-site source formerly located in the northwest corner of Building 106.

In Building 106, benzene was detected above the SSL, Industrial PRG, and LARWQCB Screening Criteria for sand 100 feet above groundwater (LARWQCB Screening Criteria), and 1,2-DCA was detected above the SSL in boring 125 located near former boring 13. Other VOCs were detected in soil at the site but at concentrations below their SSLs, Industrial PRGs, and LARWQCB Screening Criteria. Additional assessment of the areas where VOCs were detected below the aforementioned screening levels does not appear necessary at this time. However, soil in these areas would need to be considered with respect to soil management during demolition.

Stoddard solvent was detected at concentrations ranging between 0.60 and 13 mg/kg. The highest concentration of Stoddard solvent was detected at boring 125 in Building 106, in the vicinity of boring 13 (Figure 5). According to the analytical laboratory, the Stoddard solvent detected at boring 125 may actually be a light hydrocarbon fuel like gasoline (Table 4). A similar observation was reported by the laboratory for the reported Stoddard solvent detections in soil at boring 126 (Table 4). At the north side of Building 104, Stoddard solvent was detected in soil at borings 96, 115, and 116; however, the detection may be more consistent with the character of a light hydrocarbon fuel like gasoline.

8.1.3 Groundwater

The chlorinated VOCs, TCE and PCE, were detected in groundwater at concentrations between 0.95 and 420 µg/l, with the highest concentrations reported for TCE at boring 126 located in the northwest corner of Building 106. TCE was detected above the MCL in groundwater beneath Building 106 at borings 125 and 126, beneath Building 108 at borings 132 and 133, and beneath Building 112 at boring 134. Buildings 106, 108, and 112 are adjacent to each other in the northern portion of the site, and the detection of TCE in groundwater in these areas of the site is consistent with the soil and soil vapor results obtained in the northwestern portion of the site. The VOC compound 1,2-DCA was detected above the MCL in groundwater beneath Building 106 at boring 125.

Total petroleum hydrocarbons were also detected in the grab groundwater samples at concentrations ranging between 73 and 398 µg/l, with the highest concentration reported for the

middle hydrocarbon range (C12-C22 range). MCLs have not been established for total petroleum hydrocarbons.

Stoddard solvent was detected at concentrations ranging between 180 and 870 µg/l. The highest concentration of Stoddard solvent was detected at boring 125 in Building 106, in the vicinity of former boring 13 (Figure 5). However, the analytical laboratory identified the Stoddard solvent detection at boring 125 as possibly a light hydrocarbon fuel resembling gasoline. In addition, the laboratory identified the Stoddard solvent detection at boring 126 as inconsistent with a fuel pattern that would be characteristic of Stoddard solvent. MCLs have not been established for Stoddard solvent.

8.2 EXTENT OF PCBS IN SOIL

Another objective of the Supplemental Phase II ESA was to further assess the source and extent of PCBs detected in soil in the following locations: beneath Building 104 in the vicinity of the existing vertical pit; in the vicinity of a recently identified former vertical pit that was backfilled in place near former boring 40; near two recently identified former shallow vertical pits previously backfilled in place; and near former borings 41 and 73, which are adjacent to a saw. During the Supplemental Phase II ESA, PCBs were detected in soil at concentrations ranging between 260 and 2,000,000 µg/kg (0.260 and 2000 mg/kg). The highest concentrations of PCBs in soil were detected at 20.5 feet at boring 95 located in the vicinity of the vertical pit in Building 104. PCBs were detected above their screening levels in soil at five boring locations within Building 104, borings 94, 95, 98, 100, and 127b (Figure 6b). The detection of PCBs above screening levels in soil in the vicinity of the existing and former vertical pits and saw in Building 104 indicate former operations in these areas have impacted soil. The data collected during each phase of the ESA is sufficient to assess the potential source area and to develop a remedial approach for the PCBs detected in soil within Building 104.

PCBs were not detected at 5 feet bgs within the soil/gravel drainage area near former substation #8, or in the vicinity of the hot well of the cooling tower.

8.3 EXTENT OF TOTAL PETROLEUM HYDROCARBONS IN SOIL

Additional objectives of the Supplemental Phase II ESA included further assessment of the extent of TPH detected in soil adjacent to a sump in Building 112 at former boring 30, and assessment of the presence of TPH in soil near equipment trenches and pits in Building 112 adjacent to Mill #5 and the unnamed mill. Total petroleum hydrocarbons were detected at

concentrations ranging between 6.7 and 1216.4 mg/kg, with the highest concentration reported for the heavy hydrocarbon range (C22-C44 range) at boring 122. Petroleum hydrocarbons were detected at concentrations below the RWQCB screening levels for the protection of groundwater. The soil near the sumps in the vicinity of former boring 30 and boring 107 was assessed during the ESA for the extent of TPH.

8.4 EXTENT OF METALS IN SOIL

Another objective of the Supplemental Phase II ESA was to further assess the lateral extent of lead in shallow soil near the former etch station in Building 112 at former boring 22, copper in shallow soil at Storm Water Outfall #6 near former boring 47, and metals in shallow soil at the equipment pits and sumps in Building 112A. Of the metals detected in soil samples collected near the former etch station, storm water outfall #6, and the equipment pits and sumps, only arsenic and lead were detected at concentrations above their industrial PRGs of 0.25 and 800 mg/kg, respectively. Arsenic exceeded its PRG at boring 129 near the former etch station in Building 112, at borings 113 and 114 near storm water outfall #6, and at borings 107, 108, 109, and 111 in Building 112A. Although the arsenic concentrations are above the industrial PRG, the PRG is well below the maximum California background concentration for naturally occurring arsenic in California soil at 11 mg/kg. However, at boring location 113, adjacent to storm water outfall #6, arsenic was detected at 16 mg/kg, which exceeded the maximum California background level of 11 mg/kg. The detections of arsenic in soil at these boring locations do not indicate a need for further assessment.

In addition, a sediment sample from a sump, adjacent to boring 107, located in Building 112A was tested for metals. The sediment sample contained cadmium, chromium, copper, lead, molybdenum, nickel, and zinc at concentrations above various regulatory levels. The detection of these metals in the sediment at this sump location does not indicate the need for further assessment.

At boring 107 in Building 112A, lead was detected at 50 mg/kg in soil at a depth of 7.3 feet bgs, which met the criteria of 50 mg/kg for ten times the STLC.

Samples with total concentrations of one or more metals exceeding 10 times their STLC criteria were further analyzed using the STLC Waste Extraction Test Method. Based on the results of these tests, sediment within the sump adjacent to boring 107 needs to be further evaluated in

terms of waste classification and may need to be classified as hazardous waste if sediment is removed from the sump.

8.5 CONCRETE

PCBs were not detected at or above the laboratory reporting limits in concrete surface samples collected from boring locations 100 and 101 in Building 104 (Table 5).

9.0 RECOMMENDATIONS

Based on the data collected during the Phase II and Supplemental Phase II ESA, five areas were identified as impacted by one or more COPCs at concentrations above the screening criteria described in Section 6. Although the screening criteria are not intended to be clean-up levels, they may be used to evaluate the potential need for further action, which may include assessment, analysis, or remediation. Clean-up levels may differ from screening levels based on site-specific considerations (e.g., redevelopment, future land use, etc.), regulatory requirements, or other factors.

The Phase II and Supplemental Phase II results indicate that soil remediation will likely be required by the City H&EC in the areas where COPCs were detected at concentrations above the screening levels.

- Northern Portion of Buildings 106, 108 and 112 - TCE was detected in soil vapor, soil, and groundwater in the northwestern portion of the site. Although the extent of TCE (and other VOCs) in the subsurface has not been fully assessed off-site to the northwest, the data collected to date indicate that a source of VOCs was likely present in the northwest corner of Building 106.

- Southern Portion of Building 106 - Aromatic VOCs, primarily benzene, were detected in soil and groundwater in the southern portion of the building at borings 125 and 135.

- Existing and Former Vertical Pits Building 104 - PCBs were detected in soil to a depth of 31 feet bgs at boring 98 and at depths between 10 and 21 feet bgs at borings 40, 94, and 95.

- Saw in Building 104 - PCBs were detected in soil to a depth of 3 feet bgs at borings 41, 73, and 110b.

- Near Outfall #6 - Copper and lead were detected at a depth of 6.2 feet bgs at former boring 47 and arsenic was detected at a depth of 5.5 feet bgs at boring 113.

- Near the former etch station - Lead was detected in soil at a depth of 2.2 feet bgs.

Other areas of the site where COPCs were detected at concentrations below the screening levels will need to be taken into account during the handling of the soil for the below demolition program planned for the site.

10.0 REFERENCES

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TABLES

TABLE 1

SUPPLEMENTAL PHASE II BORING AND SAMPLE SUMMARY
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Boring Designation	Supplemental Phase II Area Key	Building	Supplemental Phase II Environmental Site Assessment	Drilling Method	Laboratory Analyses						
					Soil Vapor (EPA Method 8260B) - VOCs and Stoddard Solvent	Volatile Organic Compounds (EPA Method 8260B/5035)	Polychlorinated Biphenyls (EPA Method 8082)	Total Petroleum Hydrocarbons with Carbon Chain Speciation (8015B Modified)	TPH as Stoddard Solvent (EPA 8260M/5035)	Metals (EPA Method 6010B/6020/7000A)	Hexavalent Chromium (EPA Method 7199)
Buildings 106/108/112: VOC-impacted soil and soil vapor, area of boring #14 (soil vapor results will be used to select additional soil boring locations, if necessary)											
78	12b	NW Site Boundary/106	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #14.	Direct-Push	5.0', 15.0'	--[(a)]	--	--	--	--	--
79	12b	NW Site Boundary/106	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #14.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
80	12b	NW Site Boundary/106	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #14.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
81	12b	NW Site Boundary/106	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #14.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
82	12b	NW Site Boundary/106	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #14.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
83	12b	NW Site Boundary/106	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #14.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
84	12b	NW Site Boundary/106	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #14.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
85	12b	Building 108	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #14.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
86	12b	Building 108	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #14.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
87	12b	Building 108	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #14.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
88	12b	Building 108	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #14.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
125	12a	Building 106	Assess vertical extent of Stoddard solvent and VOCs in soil and groundwater near boring #13.	Hollow-Stem Auger	--	50.5', 61.0', 71.0', 80.5', 91.0', 101.0', 111.0', 121.0', 131.0', 135.5', 142.0', 149.0' (groundwater), 150.0' (groundwater)	--	150.0' (groundwater)	50.5', 61.0', 71.0', 80.5', 91.0', 101.0', 111.0', 121.0', 131.0', 135.5', 142.0', 149.0' (groundwater), 150.0' (groundwater)	--	--
126	12a	Building 106	Assess vertical extent of VOCs in soil and groundwater near boring #14.	Hollow-Stem Auger	--	53.0', 66.0', 75.5', 85.5', 95.5', 105.5', 115.5', 120.75', 135.25', 150.0' (groundwater)	--	150.0' (groundwater)	53.0', 66.0', 75.5', 85.5', 95.5', 105.5', 115.5', 120.8', 135.3', 150.0' (groundwater)	--	--
130	12b	Building 106	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #15.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--

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Boring Designation	Supplemental Phase II Area Key	Building	Supplemental Phase II Environmental Site Assessment	Drilling Method	Laboratory Analyses						
					Soil Vapor (EPA Method 8260B) - VOCs and Stoddard Solvent	Volatile Organic Compounds (EPA Method 8260B/5035)	Polychlorinated Biphenyls (EPA Method 8082)	Total Petroleum Hydrocarbons with Carbon Chain Speciation (8015B Modified)	TPH as Stoddard Solvent (EPA 8260M/5035)	Metals (EPA Method 6010B/6020/7000A)	Hexavalent Chromium (EPA Method 7199)
131	12b	NW Site Boundary/106	Assess source location of VOCs (TCE, PCE, etc.) detected near boring #16.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
132	12a	Building 108	Located ~ 175 feet east of boring #126. Proposed to assess vertical and lateral extent of VOCs in soil and groundwater in the northern portion of the Site.	Hollow-Stem Auger	--	10.75', 26.0', 36.0', 46.0', 51.0', 60.5', 70.5', 81.0', 91.0', 105.0', 120.5', 130.5', 140.0', 150.0' (groundwater)	--	150.0' (groundwater)	10.75', 26.0', 36.0', 46.0', 51.0', 60.5', 70.5', 81.0', 91.0', 105.0', 120.5', 130.5', 140.0', 150.0' (groundwater)	--	--
133	12a	Building 108	Located ~ 250 feet southeast of boring #126. Proposed to assess vertical and lateral extent of VOCs in soil and groundwater in the northern portion of the Site.	Hollow-Stem Auger	--	11.0', 21.0', 30.75', 41.0', 56.0', 61.0', 70.75', 80.5', 86.0', 95.0', 105.5', 115.0', 125.5', 135.25', 150.0' (groundwater)	--	150.0' (groundwater)	11.0', 21.0', 30.75', 41.0', 56.0', 61.0', 70.75', 80.5', 86.0', 95.0', 105.5', 115.0', 125.5', 135.25', 150.0' (groundwater)	--	--
134	12a	Building 112	Located ~ 340 feet east of boring #126. Proposed to assess vertical and lateral extent of VOCs in soil and groundwater in the northern portion of the Site.	Hollow-Stem Auger	--	11.0', 20.5', 31.0', 41.0', 51.0', 60.5', 70.5', 80.5', 90.5', 100.25', 110.5', 121.0', 130.5', 149.5' (groundwater)	--	149.5' (groundwater)	11.0', 20.5', 31.0', 41.0', 51.0', 60.5', 70.5', 80.5', 90.5', 100.25', 110.5', 121.0', 130.5', 149.5' (groundwater)	--	--
135	12a	Building 106	Located ~ 150 feet east of boring #126. Proposed to assess vertical and lateral extent of VOCs in soil between borings #125 and #126.	Hollow-Stem Auger	--	11.0', 21.0', 31.0', 40.5', 51.0', 52.5'	--	--	11.0', 21.0', 31.0', 40.5', 51.0', 52.5'	--	--
136	12b	Northern Site Boundary/108	Assess the lateral extent of the VOCs (TCE, PCE, etc.) in soil vapor in the northern portion of the Site east of boring #126.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
137	12b	Northern Site Boundary/112	Assess the lateral extent of the VOCs (TCE, PCE, etc.) in soil vapor in the northern portion of the Site east of boring #126.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
138	12b	Northern Site Boundary/112	Assess the lateral extent of the VOCs (TCE, PCE, etc.) in soil vapor in the northern portion of the Site east of boring #126.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
139	12b	Northern Site Boundary/112	Assess the lateral extent of the VOCs (TCE, PCE, etc.) in soil vapor in the northern portion of the Site east of boring #126.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
140	12b	Building 112	Assess the lateral extent of the VOCs (TCE, PCE, etc.) in soil vapor in the northern portion of the Site east of boring #126.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
141	12b	Building 112	Assess the lateral extent of the VOCs (TCE, PCE, etc.) in soil vapor in the northern portion of the Site east of boring #126.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--

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Vernon, California

Boring Designation	Supplemental Phase II Area Key	Building	Supplemental Phase II Environmental Site Assessment	Drilling Method	Laboratory Analyses						
					Soil Vapor (EPA Method 8260B) - VOCs and Stoddard Solvent	Volatile Organic Compounds (EPA Method 8260B/5035)	Polychlorinated Biphenyls (EPA Method 8082)	Total Petroleum Hydrocarbons with Carbon Chain Speciation (8015B Modified)	TPH as Stoddard Solvent (EPA 8260M/5035)	Metals (EPA Method 6010B/6020/7000A)	Hexavalent Chromium (EPA Method 7199)
142	12b	Building 112	Assess the lateral extent of the VOCs (TCE, PCE, etc.) in soil vapor in the northern portion of the Site east of boring #126.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
143	12b	Building 112	Assess the lateral extent of the VOCs (TCE, PCE, etc.) in soil vapor in the northern portion of the Site east of boring #126.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
144	12b	Building 108	Assess the lateral extent of the VOCs (TCE, PCE, etc.) in soil vapor in the northern portion of the Site east of boring #126.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
145	12b	Building 108	Assess the lateral extent of the VOCs (TCE, PCE, etc.) in soil vapor in the northern portion of the Site east of boring #126.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
146	12b	Building 108	Assess the lateral extent of the VOCs (TCE, PCE, etc.) in soil vapor in the northern portion of the Site east of boring #126.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
Building 104: PCB-impacted soil near former backfilled and current vertical pits (boring 40) and saw (borings 41, 73, & 74)											
94	27	Building 104	Assess vertical/lateral extent of PCBs in soil in the vicinity of vertical pits near boring #40.	Hollow-Stem Auger	--	51.0'	10.5', 21.0', 31.0', 41.0', 51.0', 61.0', 71.0', 81.0'	--	51.0'	--	--
95	27	Building 104	Assess vertical/lateral extent of PCBs in soil in the vicinity of vertical pits near boring #40.	Hollow-Stem Auger	--	--	10.5', 20.5', 30.5', 40.5', 50.5', 60.5', 70.5', 80.5'	--	--	--	--
96	27	Building 104	Assess vertical/lateral extent of PCBs in soil in the vicinity of vertical pits near boring #40.	Hollow-Stem Auger	--	51.0', 56.0'	11.0', 21.0', 31.0', 41.0', 51.0', 61.0', 71.0', 80.5'	--	51.0', 56.0'	--	--
97	27	Building 104	Assess vertical/lateral extent of PCBs in soil in the vicinity of vertical pits near boring #40.	Hollow-Stem Auger	--	--	9.5', 20.5', 30.5', 40.5', 50.5', 60.5', 70.5', 80.5'	--	--	--	--
98	27	Building 104	Assess vertical/lateral extent of PCBs in soil in the vicinity of vertical pits near boring #40.	Hollow-Stem Auger	--	--	10.5', 20.5', 30.5'	--	--	--	--
99	27	Building 104	Assess vertical/lateral extent of PCBs in soil in the vicinity of vertical pits near boring #40.	Hollow-Stem Auger	--	30.5', 40.5', 50.5', 70.5', 80.5'	10.5', 20.5', 30.5', 40.5', 50.5', 60.5', 70.5', 80.5'	--	30.5', 40.5', 50.5', 70.5', 80.5'	--	--
100	19	Building 104	Assess vertical/lateral extent of PCBs in soil near boring #73.	Hand Auger/ Direct Push	--	--	0-0.3" (concrete), 1.5', 6.0' (100b)	--	--	--	--
101	19	Building 104	Assess vertical/lateral extent of PCBs in soil near boring #73.	Hand Auger/ Direct Push	--	--	0-0.3" (concrete), 1.8', 6.0' (101b)	--	--	--	--
102	19	Building 104	Assess vertical/lateral extent of PCBs in soil near boring #73.	Hand Auger	--	--	1.3', 5.5'	--	--	--	--
103	19	Building 104	Assess vertical/lateral extent of PCBs in soil near boring #73.	Hand Auger	--	--	1.8', 6.0'	--	--	--	--
127b	27	Building 104	Assess vertical/lateral extent of PCBs in soil in the vicinity of vertical pit near boring #40.	Hollow-Stem Auger	--	--	11.0', 21.0', 31.0', 41.0', 51.0', 61.0', 71.0', 81.0'	--	--	--	--

TABLE 1

SUPPLEMENTAL PHASE II BORING AND SAMPLE SUMMARY
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Boring Designation	Supplemental Phase II Area Key	Building	Supplemental Phase II Environmental Site Assessment	Drilling Method	Laboratory Analyses						
					Soil Vapor (EPA Method 8260B) - VOCs and Stoddard Solvent	Volatile Organic Compounds (EPA Method 8260B/5035)	Polychlorinated Biphenyls (EPA Method 8082)	Total Petroleum Hydrocarbons with Carbon Chain Speciation (8015B Modified)	TPH as Stoddard Solvent (EPA 8260M/5035)	Metals (EPA Method 6010B/6020/7000A)	Hexavalent Chromium (EPA Method 7199)
Building 104: PCB-impacted soil near two former shallow vertical pits (~ 20 feet) (backfilled)											
115	18	Building 104	Assess the former presence of PCBs in soils due to operation of pits.	Hollow-Stem Auger	--	26.0', 30.0', 49.5'	6.0', 11.0', 16.0', 21.0', 26.0', 30.0', 36.0', 41.0', 45.5', 48.0', 49.5'	--	26.0', 30.0', 49.5'	--	--
116	18	Building 104	Assess the former presence of PCBs in soils due to operation of pits.	Hollow-Stem Auger	--	50.5'	6.0', 11.0', 16.0', 21.0', 26.0', 31.0', 36.0', 41.0', 46.0', 50.5'	--	50.5'	--	--
117	27	Building 104	Assess the former presence of PCBs in soils due to operation of pits.	Hollow-Stem Auger	--	35.5'	6.0', 11.0', 16.0', 21.0', 26.0', 31.0', 35.5', 41.0'	--	35.5'	--	--
118	27	Building 104	Assess the former presence of PCBs in soils due to operation of pits.	Hollow-Stem Auger	--	31.0'	6.0', 11.0', 16.0', 21.0', 26.0', 31.0', 36.0', 41.0'	--	31.0'	--	--
119	27	Building 104	Assess the former presence of PCBs in soils due to operation of pits.	Hollow-Stem Auger	--	--	6.0', 11.0', 16.0', 21.0', 26.0', 31.0', 36.0', 41.0'	--	--	--	--
Building 106/108: Stoddard solvent detection at 45 feet (boring #13)											
89	12b	Building 106	Assess source location of Stoddard solvent detected in boring #13.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
90	12b	Building 108	Assess source location of Stoddard solvent detected in boring #13.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
91	12b	Building 110	Assess source location of Stoddard solvent detected in boring #13.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
92	12b	Building 104	Assess source location of Stoddard solvent detected in boring #13.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
93	12b	Building 104	Assess source location of Stoddard solvent detected in boring #13.	Direct-Push	5.0', 15.0'	--	--	--	--	--	--
Cooling Tower Area: Extent of CrVI and PCBs detected in soil at 21 feet											
104	21/22	Cooling Tower	Assess vertical/lateral extent of PCBs and metals (including CrVI) in soil (although PCBs and CrVI did not exceed screening levels, need to assess source and extent of PCBs and CrVI in soil detected at approximately 21 feet at boring #46).	Direct-Push	--	--	24.3', 29.0'	--	--	--	24.3', 29.0'
105	21/22	Cooling Tower	Assess vertical/lateral extent of PCBs and metals (including CrVI) in soil (although PCBs and CrVI did not exceed screening levels, need to assess source and extent of PCBs and CrVI in soil near boring #46).	Direct-Push/ Hollow-Stem Auger	--	--	2.5', 8.3', 13.0', 18.3', 23.0', 29.0', 34.0'	--	--	--	2.5', 8.3', 13.0', 18.3', 23.0', 29.0', 34.0'
106	21/22	Cooling Tower	Assess vertical/lateral extent of PCBs and metals (including CrVI) in soil (although PCBs and CrVI did not exceed screening levels, need to assess source and extent of PCBs and CrVI in soil near boring #46).	Hollow-Stem Auger	--	--	5.0', 9.0', 14.0', 19.0', 24.0', 29.0', 34.0'	--	--	--	5.0', 9.0', 14.0', 19.0', 24.0', 29.0', 34.0'

TABLE 1

SUPPLEMENTAL PHASE II BORING AND SAMPLE SUMMARY
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Boring Designation	Supplemental Phase II Area Key	Building	Supplemental Phase II Environmental Site Assessment	Drilling Method	Laboratory Analyses						
					Soil Vapor (EPA Method 8260B) - VOCs and Stoddard Solvent	Volatile Organic Compounds (EPA Method 8260B/5035)	Polychlorinated Biphenyls (EPA Method 8082)	Total Petroleum Hydrocarbons with Carbon Chain Speciation (8015B Modified)	TPH as Stoddard Solvent (EPA 8260M/5035)	Metals (EPA Method 6010B/6020/7000A)	Hexavalent Chromium (EPA Method 7199)
Building 112A: Sludge in sump											
107	9	Building 112A	Assess sludge material in sump	Hand Auger	--	--	2.7'	2.7'	--	2.7'	--
			Assess sludge material in sump and vertical extent of potential impacts to soil near sump.	Hand Auger/ Direct-Push	--	--	4.5', 7.3'	4.5', 7.3'	--	4.5', 7.3'	--
Building 112A: Potential impacts to soil from oil-filled trenches											
108	9	Building 112A	Assess potential impacts to soil near #5 Mill.	Hand Auger/ Direct Push	--	--	--	5.3', 7.3'	--	5.3', 7.3'	--
109	9	Building 112A	Assess potential impacts to soil near #5 Mill.	Direct-Push	--	--	--	5.3', 7.3'	--	5.3', 7.3'	--
110	9	Building 112A	Assess potential impacts to soil near 1st unnamed mill (adjacent to #5 Mill).	Hand Auger	--	--	--	2.5', 6.5'	--	2.5', 6.5'	--
111	9	Building 112A	Assess potential impacts to soil near 2nd unnamed mill (adjacent to 1st unnamed mill).	Direct-Push	--	--	--	2.5', 7.3'	--	2.5', 7.3'	--
Stormwater Outfall #6 (For Demolition Only)											
112	26	Stormwater Outfall #6	Assess lateral/vertical extent of copper in soil (copper was above background concentration in sample collected from 6.2 feet bgs).	Direct-Push	--	--	--	--	--	5.5'	--
113	26	Stormwater Outfall #6	Assess lateral/vertical extent of copper in soil (copper was above background concentration in sample collected from 6.2 feet bgs).	Direct-Push	--	--	--	--	--	5.5'	--
114	26	Stormwater Outfall #6	Assess lateral/vertical extent of copper in soil (copper was above background concentration in sample collected from 6.2 feet bgs).	Hand Auger	--	--	--	--	--	1.1'	--
Former Etch Station (For Demolition Only)											
127a	2	Building 112	Assess lateral/vertical extent of lead at Former Etch Station (lead detected above the STLC at 2.6 feet bgs).	Hand Auger	--	--	--	--	--	2.0', 6.0'	--
128	2	Building 112	Assess lateral/vertical extent of lead at Former Etch Station (lead detected above the STLC at 2.6 feet bgs).	Hand Auger	--	--	--	--	--	2.0', 6.0'	--
129	2	Building 112	Assess lateral/vertical extent of lead at Former Etch Station (lead detected above the STLC at 2.6 feet bgs).	Hand Auger	--	--	--	--	--	1.5', 3.5'	--
Sump located in Building 112A (boring #30)											
120	9	Building 112A	Assess lateral/vertical extent of TPH detected in boring #30 near vault in Shop Area (TPH detected at depths up to 9.6 feet bgs).	Direct-Push	--	--	--	10.0', 15.0', 20.5'	--	--	--

TABLE 1

SUPPLEMENTAL PHASE II BORING AND SAMPLE SUMMARY
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Boring Designation	Supplemental Phase II Area Key	Building	Supplemental Phase II Environmental Site Assessment	Drilling Method	Laboratory Analyses						
					Soil Vapor (EPA Method 8260B) - VOCs and Stoddard Solvent	Volatile Organic Compounds (EPA Method 8260B/5035)	Polychlorinated Biphenyls (EPA Method 8082)	Total Petroleum Hydrocarbons with Carbon Chain Speciation (8015B Modified)	TPH as Stoddard Solvent (EPA 8260M/5035)	Metals (EPA Method 6010B/6020/7000A)	Hexavalent Chromium (EPA Method 7199)
121	9	Building 112A	Assess lateral/vertical extent of TPH detected in boring #30 near vault in Shop Area (TPH detected at depths up to 9.6 feet bgs).	Direct-Push	--	--	--	10.0', 15.25', 20.0'	--	--	--
122	9	Building 112A	Assess lateral/vertical extent of TPH detected in boring #30 near vault in Shop Area (TPH detected at depths up to 9.6 feet bgs).	Direct-Push	--	--	--	9.5', 14.5', 20.0'	--	--	--
123	9	Building 112A	Assess lateral/vertical extent of TPH detected in boring #30 near vault in Shop Area (TPH detected at depths up to 9.6 feet bgs).	Direct-Push	--	--	--	10.0', 15.3', 20.5'	--	--	--
Former Substation #8											
124	25	Outside/ Substation	Assess vertical extent of PCBs in gravel strip near Substation #8 (PCBs detected in boring #39 at 2.2 feet bgs).	Bobcat Excavator	--	--	5.0'	--	--	--	--

Notes:
(a) -- = not analyzed.

Geomatrix

TABLE 2

ANALYTICAL RESULTS FOR SELECTED VOLATILE ORGANIC COMPOUNDS IN SOIL VAPOR
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per liter (µg/L)

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	Volatile Organic Compounds by EPA Method 8260M																										
				Benzene	**2-Butanone (MEK)**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**	**Dichlorodifluoromethane**	**1,1-Dichloroethane**	**1,2-Dichloroethane**	**1,1-Dichloroethylene**	**trans-1,2-Dichloroethylene**	**cis-1,2-Dichloroethylene**	**Ethylbenzene**	**Isopropanol**	**Methylene Chloride**	**Stoddard Solvent**	**1,1,1,2-Tetrachloroethane**	**1,1,2,2-Tetrachloroethane**	**Tetrachloroethylene (PCE)**	**Toluene**	**1,1,2-Trichloroethane**	**1,1,1-Trichloroethane**	**Trichloroethylene (TCE)**	**Trichlorofluoromethane**	**1,1,2-Trichloro-1,2,2-trifluoroethane**	**Vinyl chloride**	**o-Xylene**	**m,p-Xylenes**
California Shallow Soil Gas Human Health Screening Levels (Vapor Intrusion) for Commercial/Industrial Land Use[b]				0.12	NE[c]	0.08	NE	NE	NE	NE	0.17	NE	88.7	44.4	NE	NE	NE	NE	NE	NE	**0.60**	378	NE	2790	**1.8**	NE	NE	0.04	879	887
Building 106/108 (inside and outside)																														
78-SV-5	4/20/2006	5.0	Soil Vapor	<5.0[d]	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**40**	<5.0	<25	<5.0	<5.0	<5.0
78-SV-15	4/20/2006	15.0	Soil Vapor	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<10	<200	<2.0	<2.0	**6.2**	<2.0	<2.0	<2.0	**140**	<2.0	<10	<2.0	<2.0	<2.0
79-SV-5	4/20/2006	5.0	Soil Vapor	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<10	<200	<2.0	<2.0	**8.0**	<2.0	<2.0	<2.0	**130**	<2.0	<10	<2.0	<2.0	<2.0
79-SV-15	4/20/2006	15.0	Soil Vapor	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.5	<2.0	<2.0	<2.0	<20	<10	<200	<2.0	<2.0	**22**	<2.0	<2.0	<2.0	**420**	<2.0	<10	<2.0	<2.0	<2.0
80-SV-5	4/19/2006	5.0	Soil Vapor	<10	<100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<50	<1000	<10	<10	**30**	<10	<10	<10	**550**	<10	<50	<10	<10	<10
80-SV-15	4/19/2006	15.0	Soil Vapor	<10	<100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<50	<1000	<10	<10	**49**	<10	<10	<10	**900**	<10	<50	<10	<10	<10
81-SV-5	4/19/2006	5.0	Soil Vapor	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	9.0	<1.0	<1.0	<1.0	<10	<5.0	<100	<1.0	<1.0	**48**	<1.0	<1.0	4.3	**640E**[e]	<1.0	<5.0	<1.0	<1.0	<1.0
RR-81-SV-5	4/20/2006	5.0	Soil Vapor	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	14	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	**110**	<5.0	<5.0	8.0	**1400**	<5.0	<25	<5.0	<5.0	<5.0
81-SV-15	4/19/2006	15.0	Soil Vapor	<10	<100	<10	<10	<10	<10	<10	<10	19	<10	<10	<10	<100	<50	<1000	<10	<10	**120**	<10	<10	10	**1900**	<10	<50	<10	<10	<10
82-SV-5	4/24/2006	5.0	Soil Vapor	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	12	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	**49**	<5.0	<5.0	7.0	**970**	<5.0	<25	<5.0	<5.0	<5.0
82-SV-15	4/24/2006	15.0	Soil Vapor	<10	<100	<10	<10	<10	<10	<10	<10	22	<10	<10	<10	<100	<50	<1000	<10	<10	**120**	<10	<10	13	**1900**	<10	<50	<10	<10	<10
83-SV-5	4/19/2006	5.0	Soil Vapor	<10	<100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<50	<1000	<10	<10	**13**	<10	<10	<10	**170**	<10	<50	<10	<10	<10
83-SV-15	4/24/2006	15.0	Soil Vapor	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	**29**	<5.0	<5.0	<5.0	**360**	<5.0	<25	<5.0	<5.0	<5.0
84-SV-5	4/19/2006	5.0	Soil Vapor	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<10	<5.0	<100	<1.0	<1.0	**11**	<1.0	<1.0	<1.0	**100**	<1.0	<5.0	<1.0	<1.0	<1.0
84-SV-15	4/24/2006	15.0	Soil Vapor	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.9	<2.0	<2.0	<2.0	<20	<10	<200	<2.0	<2.0	**25**	<2.0	<2.0	<2.0	**250**	<2.0	<10	<2.0	<2.0	<2.0
84-SV-15-DUP[f]	4/24/2006	15.0	Soil Vapor	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.1	<2.0	<2.0	<2.0	<20	<10	<200	<2.0	<2.0	**13**	<2.0	<2.0	<2.0	**210**	<2.0	<10	<2.0	<2.0	<2.0
85-SV-5	4/18/2006	5.0	Soil Vapor	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**88**	<5.0	<25	<5.0	<5.0	<5.0
85-SV-15	4/18/2006	15.0	Soil Vapor	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<10	<200	<2.0	<2.0	**13**	<2.0	<2.0	<2.0	**350**	<2.0	<10	<2.0	<2.0	<2.0
86-SV-5-PV1	4/18/2006	5.0	Soil Vapor	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<5.0	<100	<1.0	<1.0	**15**	<1.0	<1.0	<1.0	**310**	<1.0	<5.0	<1.0	<1.0	<1.0
86-SV-5-PV3	4/18/2006	5.0	Soil Vapor	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	**20**	<5.0	<5.0	<5.0	**360**	<5.0	<25	<5.0	<5.0	<5.0
86-SV-5-PV7	4/18/2006	5.0	Soil Vapor	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	**22**	<5.0	<5.0	<5.0	**420**	<5.0	<25	<5.0	<5.0	<5.0
86-SV-15-PV1	4/18/2006	15.0	Soil Vapor	<1.0	<10	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	--[g]	<10	<5.0	<100	--	--	--	--	--	<1.0	**290**	<1.0	<5.0	<1.0	--	--
86-SV-15-PV3	4/18/2006	15.0	Soil Vapor	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	**11**	<5.0	<5.0	<5.0	**440**	<5.0	<25	<5.0	<5.0	<5.0
86-SV-15-PV7	4/18/2006	15.0	Soil Vapor	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	**650**	<5.0	<5.0	<5.0	**27**	<5.0	<25	<5.0	<5.0	<5.0
87-SV-5	4/18/2006	5.0	Soil Vapor	<2.0	<20	<2.0	<2.0	2.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<10	<200	<2.0	<2.0	**28**	<2.0	<2.0	<2.0	**600**	<2.0	<10	<2.0	<2.0	<2.0
87-SV-15	4/18/2006	15.0	Soil Vapor	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	**32**	<5.0	<5.0	<5.0	**740**	<5.0	<25	<5.0	<5.0	<5.0
88-SV-5	4/18/2006	5.0	Soil Vapor	<4.0	<40	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<40	<20	<400	<4.0	<4.0	**15**	<4.0	<4.0	<4.0	**310**	<4.0	<20	<4.0	<4.0	<4.0
88-SV-15	4/18/2006	15.0	Soil Vapor	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	**18**	<5.0	<5.0	<5.0	**390**	<5.0	<25	<5.0	<5.0	<5.0
88-SV-15-DUP	4/18/2006	15.0	Soil Vapor	<5.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<25	<500	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	**280**	<5.0	<25	<5.0	<5.0	<5.0
89-SV-5	4/19/2006	5.0	Soil Vapor	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<5.0	<100	<1.0	<1.0	**1.1**	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
89-SV-15	4/19/2006	15.0	Soil Vapor	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<1.0	<20	<0.20	<0.20	**1.3**	<0.20	<0.20	<0.20	1.5	<0.20	<1.0	<0.20	<0.20	<0.20
90-SV-5	4/19/2006	5.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	**0.97**	<0.10	<0.10	<0.10	1.2	<0.10	<0.50	<0.10	<0.10	<0.10

Geomatrix

TABLE 2

ANALYTICAL RESULTS FOR SELECTED VOLATILE ORGANIC COMPOUNDS IN SOIL VAPOR
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per liter (µg/L)

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	Volatile Organic Compounds by EPA Method 8260M																										
				Benzene	2-Butanone (MEK)	Carbon Tetrachloride	Chloroethane	Chloroform	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	cis-1,2-Dichloroethylene	Ethylbenzene	Isopropanol	Methylene Chloride	Stoddard Solvent	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethylene (PCE)	Toluene	1,1,2-Trichloroethane	1,1,1-Trichloroethane	Trichloroethylene (TCE)	Trichlorofluoromethane	1,1,2-Trichloro-1,2,2-trifluoroethane	Vinyl chloride	o-Xylene	m,p-Xylenes
California Shallow Soil Gas Human Health Screening Levels (Vapor Intrusion) for Commercial/Industrial Land Use[b]				0.12	NE[c]	0.08	NE	NE	NE	NE	0.17	NE	88.7	44.4	NE	NE	NE	NE	NE	NE	**0.60**	378	NE	2790	**1.8**	NE	NE	0.04	879	887
90-SV-15	4/19/2006	15.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	0.14	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10
91-SV-5	4/19/2006	5.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	**0.73**	<0.10	<0.10	<0.10	**2.0**	<0.10	<0.50	<0.10	<0.10	<0.10
91-SV-15	4/19/2006	15.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	**1.1**	<0.10	<0.10	<0.10	**4.8**	<0.10	<0.50	<0.10	<0.10	<0.10
91-SV-15-DUP	4/19/2006	15.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	**1.2**	<0.10	<0.10	<0.10	**4.6**	<0.10	<0.50	<0.10	<0.10	<0.10
130-SV-5	4/20/2006	5.0	Soil Vapor	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	8.2	<2.0	<2.0	<2.0	<20	<10	<200	<2.0	<2.0	**49**	4.7	<2.0	4.1	**730**	<2.0	<10	<2.0	<2.0	2.0
130-SV-15	4/20/2006	15.0	Soil Vapor	<10	<100	<10	<10	<10	<10	<10	<10	15	<10	<10	<10	<100	<50	<1000	<10	<10	**95**	<10	<10	<10	**1500**	<10	<50	<10	<10	<10
131-SV-5	4/20/2006	5.0	Soil Vapor	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.78	<0.50	<0.50	<0.50	<5.0	<2.5	<50	<0.50	<0.50	**7.2**	<0.50	<0.50	<0.50	**73**	<0.50	<2.5	<0.50	<0.50	<0.50
131-SV-15	4/20/2006	15.0	Soil Vapor	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	<1.0	<1.0	<1.0	<10	<5.0	<100	<1.0	<1.0	**18**	<1.0	<1.0	<1.0	**200**	<1.0	<5.0	<1.0	<1.0	<1.0
SG136@5	5/16/2006	5.0	Soil Vapor	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<1.0	<20	<0.20	<0.20	**0.93**	<0.20	<0.20	<0.20	**18**	<0.20	<1.0	<0.20	<0.20	<0.20
SG136@15	5/16/2006	15.0	Soil Vapor	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.60	<0.50	<0.50	<0.50	<5.0	<2.5	<50	<0.50	<0.50	**7.2**	<0.50	<0.50	<0.50	**130**	<0.50	<2.5	<0.50	<0.50	<0.50
SG144@5	5/15/2006	5.0	Soil Vapor	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<1.0	<20	<0.20	<0.20	0.35	<0.20	<0.20	<0.20	**13**	<0.20	<1.0	<0.20	<0.20	<0.20
SG144@15	5/15/2006	15.0	Soil Vapor	<0.20	<2.0	<0.20	<0.20	0.51	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<1.0	<20	<0.20	<0.20	**4.1**	<0.20	<0.20	0.24	**82**	<0.20	<1.0	<0.20	<0.20	<0.20
SG146@5	5/15/2006	5.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	0.39	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	**2.4**	<0.10	<0.10	0.15	**38**	<0.10	<0.50	<0.10	<0.10	<0.10
SG146@5-DUP	5/15/2006	5.0	Soil Vapor	<0.20	<2.0	<0.20	<0.20	0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<1.0	<20	<0.20	<0.20	**2.9**	<0.20	<0.20	<0.20	**54**	<0.20	<1.0	<0.20	<0.20	<0.20
SG146@15	5/15/2006	15.0	Soil Vapor	<0.50	<5.0	<0.50	<0.50	0.81	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<2.5	<50	<0.50	<0.50	**3.4**	<0.50	<0.50	<0.50	**92**	<0.50	<2.5	<0.50	<0.50	<0.50
Building 104																														
92-SV-5	4/20/2006	5.0	Soil Vapor	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.4**	<1.0	<5.0	<1.0	<1.0	<1.0
92-SV-15	4/20/2006	15.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	0.47	<0.10	<0.10	<0.10	0.87	<0.10	<0.50	<0.10	<0.10	<0.10
92-SV-15-DUP	4/20/2006	15.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	**0.66**	<0.10	<0.10	<0.10	1.3	<0.10	<0.50	<0.10	<0.10	<0.10
93-SV-5	4/24/2006	5.0	Soil Vapor	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	<5.0	<1.0	<1.0	<1.0
93-SV-15	4/24/2006	15.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	0.53	<0.10	<0.10	<0.10	0.58	<0.10	<0.50	<0.10	<0.10	<0.10
Building 112 (inside and outside)																														
SG137@5	5/16/2006	5.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	18	<0.10	<0.10	0.34	<0.10	<0.10	<0.10	**8.3**	<0.10	<0.50	<0.10	<0.10	<0.10
SG137@15	5/16/2006	15.0	Soil Vapor	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<1.0	<20	<0.20	<0.20	**1.8**	<0.20	<0.20	<0.20	**39**	<0.20	<1.0	<0.20	<0.20	<0.20
SG137@15-DUP	5/16/2006	15.0	Soil Vapor	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<1.0	<20	<0.20	<0.20	**0.78**	<0.20	<0.20	<0.20	**26**	<0.20	<1.0	<0.20	<0.20	<0.20
SG138@5	5/16/2006	5.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	14	<0.10	<0.10	0.13	<0.10	<0.10	<0.10	1.0	<0.10	<0.50	<0.10	<0.10	<0.10
SG138@15	5/16/2006	15.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	14	<0.10	<0.10	0.30	<0.10	<0.10	<0.10	**5.4**	<0.10	<0.50	<0.10	<0.10	<0.10
SG139@5	5/16/2006	5.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.25	<0.10	<0.50	<0.10	<0.10	<0.10
SG139@15	5/16/2006	15.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	16	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10
SG140@5	5/15/2006	5.0	Soil Vapor	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<2.5	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**3.1**	<0.50	<2.5	<0.50	<0.50	<0.50
SG140@15	5/15/2006	15.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	10	<0.10	<0.10	0.31	<0.10	<0.10	<0.10	**5.4**	<0.10	<0.50	<0.10	<0.10	<0.10
SG141@5	5/16/2006	5.0	Soil Vapor	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<1.0	<20	<0.20	<0.20	0.22	<0.20	<0.20	<0.20	**5.5**	<0.20	<1.0	<0.20	<0.20	<0.20
SG141@15	5/16/2006	15.0	Soil Vapor	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<1.0	<20	<0.20	<0.20	**0.81**	<0.20	<0.20	<0.20	**21**	<0.20	<1.0	<0.20	<0.20	<0.20
SG142@5	5/15/2006	5.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	0.26	<0.10	<0.10	<0.10	**3.8**	<0.10	<0.50	<0.10	<0.10	<0.10

Geomatrix

TABLE 2

ANALYTICAL RESULTS FOR SELECTED VOLATILE ORGANIC COMPOUNDS IN SOIL VAPOR
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Results shown in micrograms per liter (µg/L)

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	Volatile Organic Compounds by EPA Method 8260M																										
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California Shallow Soil Gas Human Health Screening Levels (Vapor Intrusion) for Commercial/Industrial Land Use[b]				0.12	NE[c]	0.08	NE	NE	NE	NE	0.17	NE	88.7	44.4	NE	NE	NE	NE	NE	NE	**0.60**	378	NE	2790	**1.8**	NE	NE	0.04	879	887
SG142@15	5/15/2006	15.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	**0.66**	<0.10	<0.10	<0.10	**14**	<0.10	<0.50	<0.10	<0.10	<0.10
SG143@5	5/15/2006	5.0	Soil Vapor	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<1.0	<20	<0.20	<0.20	**3.3**	<0.20	<0.20	<0.20	**74**	<0.20	<1.0	<0.20	<0.20	<0.20
SG143@15	5/15/2006	15.0	Soil Vapor	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<5.0	<100	<1.0	<1.0	**4.1**	<1.0	<1.0	<1.0	**130**	<1.0	<5.0	<1.0	<1.0	<1.0
SG145@5	5/15/2006	5.0	Soil Vapor	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<1.0	<20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	1.7	<0.20	<1.0	<0.20	<0.20	<0.20
SG145@15	5/15/2006	15.0	Soil Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	0.48	<0.10	<0.10	<0.10	**9.1**	<0.10	<0.50	<0.10	<0.10	<0.10
Ambient Air																														
Ambient Air	4/18/2006	NA[h]	Vapor	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
Ambient Air	4/19/2006	NA	Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10
Ambient Air	4/20/2006	NA	Vapor	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
Ambient Air	4/24/2006	NA	Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10
Ambient Air	5/15/2006	NA	Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10
Ambient Air	5/16/2006	NA	Vapor	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.50	<10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10

Notes:
(a) feet bgs = feet below ground surface.
(b) Reference: Appendix 1, OEHHA Target Indoor Air Concentrations and Soil Gas Screening Numbers for Existing Buildings under Residential and Industrial/Commercial Land Uses.
(c) NE = not established.
(d) < = sample result is less than the laboratory reporting limit shown.
(e) E = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate; therefore, the sample was reanalyzed (see sample results RR-81-SV-5).
(f) DUP = duplicate sample.
(g) -- = not analyzed. Due to instrument failure during the analysis of sample 86-SV-15-PV1, the compounds identified as not analyzed were not reported by the lab. The purge volume test was re-run on sample location 86-SV-5.
(h) NA = not applicable.

Geomatrix

TABLE 3

ANALYTICAL RESULTS FOR SELECTED VOLATILE ORGANIC COMPOUNDS IN SOIL
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per kilogram (µg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	Volatile Organic Compounds by EPA Method 8260B/5035																														
				Acetone	Benzene	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	Carbon Disulfide	Chloroethane	1,4-Dichlorobenzene	1,3-Dichlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	cis-1,2-Dichloroethylene	Ethylbenzene	Isopropylbenzene	Methyl-tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Tetrachloroethylene (PCE)	Toluene	1,1,1-Trichloroethane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Trichloroethylene (TCE)	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Vinyl chloride	Xylenes, m-, p-	Xylene, o-
Industrial PRGs[b] (µg/kg)				54,000,000	**1400**	110,000,000	240,000	220,000	720,000	6500	7900	600,000	600,000	6000	600	410,000	230,000	150,000	400,000	2,000,000	70,000	4200	240,000	1300	520,000	1,200,000	220,000	NE[c]	6500	70,000	170,000	750	420,000	
SSLs Dilution Attenuation Factor at 20 (DAF20)[d] (µg/kg)				16,000	**30**	NE	NE	NE	32,000	NE	2000	NE	17,000	23,000	**20**	60	700	400	13,000	NE	NE	84,000	NE	**60**	12,000	2000	5000	NE	**60**	NE	NE	10	210,000	
LARWQCB Screening Criteria (µg/kg) for sand 100 feet above groundwater[e]				NE	**46**	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	9860	NE	50	NE	NE	NE	2570	NE	NE	NE	NE	NE	NE	NE	28,000	
Building 104																																		
94-SS-51.0	4/6/2006	51.0	Soil	<50[f]	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
96-SS-51.0	4/14/2006	51.0	Soil	<50	7.3	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	20	<5.0	<5.0	<10	6.8	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	26	<5.0	<5.0	2.7	<2.0
96-SS-56.0	4/14/2006	56.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
99-SS-30.5	4/5/2006	30.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
99-SS-40.5	4/5/2006	40.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
99-SS-50.5	4/5/2006	50.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
99-SS-70.5	4/5/2006	70.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
99-SS-80.5	4/5/2006	80.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
115-SS-26.0	4/7/2006	26.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
115-SS-30.0	4/7/2006	30.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
115-SS-49.5	4/7/2006	49.5	Soil	<50	2.8	<50	26	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	8.3	<5.0	5.8	<5.0	<5.0	<5.0	<5.0	31	95	<5.0	76	3.1
116-SS-50.5	4/13/2006	50.5	Soil	<50	7.1	<50	35	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	4.4	11	<5.0	24	31	<5.0	27	<5.0	<5.0	<5.0	<5.0	110	350	<5.0	360	37
117-SS-36.0	4/7/2006	35.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
118-SS-31.0	4/7/2006	31.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
Buildings 106/108																																		
125-SS-50.5	4/10/2006	50.5	Soil	<50	**720**	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**200**	<5.0	<5.0	<5.0	210	15	<5.0	260	53	<5.0	1400	<5.0	<5.0	<5.0	<5.0	120	470	<5.0	940	450
125-SS-61.0	4/10/2006	61.0	Soil	<50	**1600**	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**220**	<5.0	<5.0	<5.0	190	<5.0	<5.0	20	5.7	<5.0	1500	<5.0	<5.0	<5.0	<5.0	8.7	39	<5.0	780	280
125-SS-71.0	4/10/2006	71.0	Soil	<50	27	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	17	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	9.4	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8.2	6.2
125-SS-80.5	4/10/2006	80.5	Soil	<50	**31**	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**26**	<5.0	<5.0	<5.0	3.9	<5.0	<5.0	<10	<5.0	<5.0	20	<5.0	<5.0	<5.0	<5.0	<5.0	7.7	<5.0	21	11
125-SS-91.0	4/10/2006	91.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
125-SS-101.0	4/10/2006	101.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
125-SS-111.0	4/10/2006	111.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	21	<5.0	<5.0	<5.0	<2.0	<2.0
125-SS-120.5	4/10/2006	121.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	8.3	<5.0	<5.0	<5.0	<2.0	<2.0
125-SS-131.0	4/10/2006	131.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
125-SS-135.5	4/10/2006	135.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
125-SS-142.0	4/10/2006	142.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
126-SS-53.0	4/12/2006	53.0	Soil	<50	4.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8.4	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	**210**	<2.0	<5.0	<5.0	<5.0	**3800**	<5.0	<5.0	<5.0	<2.0	<2.0
126-SS-65.0	4/12/2006	66.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	**160**	<2.0	<5.0	<5.0	<5.0	**160**	<5.0	<5.0	<5.0	<2.0	<2.0
126-SS-75.0	4/12/2006	75.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	**190**	<2.0	<5.0	<5.0	<5.0	24	<5.0	<5.0	<5.0	<2.0	<2.0
126-SS-85.0	4/12/2006	85.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	**190**	<2.0	<5.0	<5.0	<5.0	**260**	<5.0	<5.0	<5.0	<2.0	<2.0
126-SS-95.0	4/12/2006	95.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	**250**	<2.0	<5.0	<5.0	<5.0	35	<5.0	<5.0	<5.0	<2.0	<2.0
126-SS-106.0	4/12/2006	105.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	**260**	<2.0	<5.0	<5.0	<5.0	**1100**	<5.0	<5.0	<5.0	<2.0	<2.0
126-SS-116.0	4/12/2006	115.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	**160**	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0

TABLE 3

ANALYTICAL RESULTS FOR SELECTED VOLATILE ORGANIC COMPOUNDS IN SOIL
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per kilogram (µg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	Volatile Organic Compounds by EPA Method 8260B/5035																														
				Acetone	Benzene	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	Carbon Disulfide	Chloroethane	1,4-Dichlorobenzene	1,3-Dichlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	cis-1,2-Dichloroethylene	Ethylbenzene	Isopropylbenzene	Methyl-tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Tetrachloroethylene (PCE)	Toluene	1,1,1-Trichloroethane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Trichloroethylene (TCE)	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Vinyl chloride	Xylenes, m-, p-	Xylene, o-
Industrial PRGs[b] (µg/kg)				54,000,000	**1400**	110,000,000	240,000	220,000	720,000	6500	7900	600,000	600,000	6000	600	410,000	230,000	150,000	400,000	2,000,000	70,000	4200	240,000	1300	520,000	1,200,000	220,000	NE[c]	6500	70,000	170,000	750	420,000	
SSLs Dilution Attenuation Factor at 20 (DAF20)[d] (µg/kg)				16,000	**30**	NE	NE	NE	32,000	NE	2000	NE	17,000	23,000	**20**	60	700	400	13,000	NE	NE	84,000	NE	**60**	12,000	2000	5000	NE	**60**	NE	NE	10	210,000	
LARWQCB Screening Criteria (µg/kg) for sand 100 feet above groundwater[e]				NE	**46**	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	9860	NE	50	NE	NE	NE	2570	NE	NE	NE	NE	NE	NE	NE	28,000	
126-SS-121.0	4/12/2006	120.8	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	**130**	<2.0	<5.0	<5.0	<5.0	**940**	<5.0	<5.0	<5.0	<2.0	<2.0
126-SS-136.0	4/12/2006	135.3	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	**100**	<2.0	<5.0	<5.0	<5.0	**510**	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-11.25	5/17/2006	10.75	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-26.5	5/17/2006	26.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	11	<2.0	<5.0	<5.0	<5.0	**240**	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-36.5	5/17/2006	36.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	18	<2.0	<5.0	<5.0	<5.0	**280**	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-46.5	5/17/2006	46.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	20	<2.0	<5.0	<5.0	<5.0	**670**	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-51.5	5/17/2006	51.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.5	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	42	<2.0	<5.0	<5.0	<5.0	**2700**	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-61.0	5/17/2006	60.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	28	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-71.0	5/17/2006	70.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	40	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-81.5	5/17/2006	81.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	11	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-91.5	5/17/2006	91.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-105.5	5/17/2006	105.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	**120**	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-121.0	5/17/2006	120.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-131.0	5/17/2006	130.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
132-SS-140.5	5/17/2006	140.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-11.5	5/18/2006	11.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	**75**	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-21.5	5/18/2006	21.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	39	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-31.25	5/18/2006	30.8	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	13	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-41.5	5/18/2006	41.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	**65**	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-56.5	5/18/2006	56.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	**130**	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-61.5	5/18/2006	61.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-71.25	5/18/2006	70.8	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-81.0	5/18/2006	80.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	27	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-86.5	5/18/2006	86.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	17	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-95.5	5/18/2006	95.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-106.0	5/18/2006	105.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	9.5	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-115.5	5/18/2006	115.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-126.0	5/18/2006	125.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
133-SS-135.75	5/18/2006	135.3	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
135-SS-11.5	5/19/2006	11.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	4.5	<5.0	<5.0	<10	<5.0	<5.0	8.5	<5.0	<5.0	<5.0	31	<5.0	<5.0	<5.0	17	5.5
135-SS-21.5	5/19/2006	21.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	9.3	3.1	<5.0	<5.0	<5.0	**120**	<5.0	<5.0	<5.0	5.7	2.1
135-SS-31.5	5/19/2006	31.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	44	<5.0	<5.0	<5.0	2.2	<2.0
135-SS-41.0	5/19/2006	40.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3.1	<5.0	<5.0	<10	<5.0	<5.0	5.7	<5.0	<5.0	<5.0	40	<5.0	<5.0	<5.0	11	4.0
135-SS-51.5	5/19/2006	51.0	Soil	<50	14	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	<5.0	<5.0	2.4	<5.0	<5.0	<10	<5.0	**94**	4.5	<5.0	<5.0	<5.0	**2000**	<5.0	<5.0	<5.0	9.7	3.7

TABLE 3

ANALYTICAL RESULTS FOR SELECTED VOLATILE ORGANIC COMPOUNDS IN SOIL
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per kilogram (µg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	Volatile Organic Compounds by EPA Method 8260B/5035																														
				Acetone	Benzene	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	Carbon Disulfide	Chloroethane	1,4-Dichlorobenzene	1,3-Dichlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	cis-1,2-Dichloroethylene	Ethylbenzene	Isopropylbenzene	Methyl-tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Tetrachloroethylene (PCE)	Toluene	1,1,1-Trichloroethane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Trichloroethylene (TCE)	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Vinyl chloride	Xylenes, m-, p-	Xylene, o-
Industrial PRGs[b] (µg/kg)				54,000,000	**1400**	110,000,000	240,000	220,000	720,000	6500	7900	600,000	600,000	6000	600	410,000	230,000	150,000	400,000	2,000,000	70,000	4200	240,000	1300	520,000	1,200,000	220,000	NE[c]	6500	70,000	170,000	750	420,000	
SSLs Dilution Attenuation Factor at 20 (DAF20)[d] (µg/kg)				16,000	**30**	NE	NE	NE	32,000	NE	2000	NE	17,000	23,000	**20**	60	700	400	13,000	NE	NE	84,000	NE	**60**	12,000	2000	5000	NE	**60**	NE	NE	10	210,000	
LARWQCB Screening Criteria (µg/kg) for sand 100 feet above groundwater[e]				NE	**46**	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	9860	NE	50	NE	NE	NE	2570	NE	NE	NE	NE	NE	NE	NE	28,000	
135-SS-53.0	5/19/2006	52.5	Soil	<50	6.2	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3.4	<5.0	<5.0	<10	<5.0	53	6.2	<5.0	<5.0	<5.0	**1200**	<5.0	<5.0	<5.0	12	4.8
Building 112																																		
134-SS-11.5	5/22/2006	11.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-21.0	5/22/2006	20.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-31.5	5/22/2006	31.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	22	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-41.5	5/22/2006	41.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-51.5	5/22/2006	51.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	39	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-61.5	5/22/2006	60.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-71.0	5/22/2006	70.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-81.0	5/22/2006	80.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-91.0	5/22/2006	90.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-100.75	5/22/2006	100.3	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-111.0	5/22/2006	110.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	7.4	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-121.5	5/22/2006	121.0	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	14	<5.0	<5.0	<5.0	<2.0	<2.0
134-SS-131.0	5/22/2006	130.5	Soil	<50	<2.0	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<10	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<2.0
Trip Blanks																																		
TP-040106-01	4/10/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50
TP-04120601	4/12/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50
TP-041306-01	4/13/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50
TB-05172006	5/17/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50
TB-051806-1	5/18/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50
TB-05222006	5/22/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50
Equipment Blanks																																		
EQ-040106-01	4/10/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50
EQ-040106-02	4/10/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50
EQ-041306-01	4/13/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50
EQ-05172006-1	5/17/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.82	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.0	1.5
EQ-05172006-2	5/17/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.51	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	1.4
EQ-05222006-1	5/22/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.61	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	1.2
EQ-05222006-2	5/22/2006	NA	Water	<10	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.69	<0.50	<2.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	1.2

Notes:
(a) feet bgs = feet below ground surface.
(b) Industrial PRG = EPA Region IX Preliminary Remediation Goal for Industrial Soil, October 2004
(c) NE = not established.
(d) SSLs = Soil Screening Levels, Migration to Groundwater, EPA Region IX Preliminary Remediation Goal, October 2004

TABLE 3

ANALYTICAL RESULTS FOR SELECTED VOLATILE ORGANIC COMPOUNDS IN SOIL
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per kilogram (µg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	Volatile Organic Compounds by EPA Method 8260B/5035																													
				Acetone	Benzene	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	Carbon Disulfide	Chloroethane	1,4-Dichlorobenzene	1,3-Dichlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	cis-1,2-Dichloroethylene	Ethylbenzene	Isopropylbenzene	Methyl-tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Tetrachloroethylene (PCE)	Toluene	1,1,1-Trichloroethane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Trichloroethylene (TCE)	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Vinyl chloride	Xylenes, m-, p-	Xylene, o-
Industrial PRGs[b] (µg/kg)				54,000,000	**1400**	110,000,000	240,000	220,000	720,000	6500	7900	600,000	600,000	6000	600	410,000	230,000	150,000	400,000	2,000,000	70,000	4200	240,000	1300	520,000	1,200,000	220,000	NE[c]	6500	70,000	170,000	750	420,000	
SSLs Dilution Attenuation Factor at 20 (DAF20)[d] (µg/kg)				16,000	**30**	NE	NE	NE	32,000	NE	2000	NE	17,000	23,000	**20**	60	700	400	13,000	NE	NE	84,000	NE	**60**	12,000	2000	5000	NE	**60**	NE	NE	10	210,000	
LARWQCB Screening Criteria (µg/kg) for sand 100 feet above groundwater[e]				NE	**46**	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	9860	NE	50	NE	NE	NE	2570	NE	NE	NE	NE	NE	NE	NE	28,000	

(e) SAND at 100 feet above groundwater assuming groundwater at 150 feet
(f) < = sample result is less than the laboratory reporting limit shown
(g) NA = not applicable.
BOLD = concentration exceeds one or more Screening Level(s)

Geomatrix

TABLE 4

ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS IN SOIL
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in milligrams per kilogram (mg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	TPH as Stoddard Solvent (5035) (EPA 8260M/5035)	TPH Carbon Chain by EPA Method 8015M		
					C6-C12	C12-C22	C22-C44
					Light Hydrocarbon Range	Middle Hydrocarbon Range	Heavy Hydrocarbon Range
LARWQCB Screening Criteria (mg/kg) for soil between 20 and 150 feet above groundwater				NE[b]	500	1,000	10,000
Building 104							
94-SS-51.0	4/6/2006	51.0	Soil	<0.50[c]	--[d]	--	--
96-SS-51.0	4/14/2006	51.0	Soil	2.4[e]	--	--	--
96-SS-56.0	4/14/2006	56.0	Soil	<0.50	--	--	--
99-SS-30.5	4/5/2006	30.5	Soil	<0.50	--	--	--
99-SS-40.5	4/5/2006	40.5	Soil	<0.50	--	--	--
99-SS-50.5	4/5/2006	50.5	Soil	<0.50	--	--	--
99-SS-70.5	4/5/2006	70.5	Soil	<0.50	--	--	--
99-SS-80.5	4/5/2006	80.5	Soil	<0.50	--	--	--
115-SS-26.0	4/7/2006	26.0	Soil	<0.50	--	--	--
115-SS-30.0	4/7/2006	30.0	Soil	<0.50	--	--	--
115-SS-49.5	4/7/2006	49.5	Soil	5.3[e]	--	--	--
116-SS-50.5	4/13/2006	50.5	Soil	8.1[e]	--	--	--
117-SS-36.0	4/7/2006	35.5	Soil	<0.50	--	--	--
118-SS-31.0	4/7/2006	31.0	Soil	<0.50	--	--	--
Building 106							
125-SS-50.5	4/10/2006	50.5	Soil	13[e]	--	--	--
125-SS-61.0	4/10/2006	61.0	Soil	6.5[e]	--	--	--
125-SS-71.0	4/10/2006	71.0	Soil	<0.50	--	--	--
125-SS-80.5	4/10/2006	80.5	Soil	<0.50	--	--	--
125-SS-91.0	4/10/2006	91.0	Soil	<0.50	--	--	--
125-SS-101.0	4/10/2006	101.0	Soil	<0.50	--	--	--
125-SS-111.0	4/10/2006	111.0	Soil	<0.50	--	--	--
125-SS-120.5	4/10/2006	121.0	Soil	<0.50	--	--	--
125-SS-131.0	4/10/2006	131.0	Soil	<0.50	--	--	--
125-SS-135.5	4/10/2006	135.5	Soil	<0.50	--	--	--
125-SS-142.0	4/10/2006	142.0	Soil	<0.50	--	--	--
126-SS-53.0	4/12/2006	53.0	Soil	3.9[f]	--	--	--
126-SS-65.0	4/12/2006	66.0	Soil	<0.50	--	--	--
126-SS-75.0	4/12/2006	75.5	Soil	<0.50	--	--	--
126-SS-85.0	4/12/2006	85.5	Soil	0.60[f]	--	--	--
126-SS-95.0	4/12/2006	95.5	Soil	<0.50	--	--	--
126-SS-106.0	4/12/2006	105.5	Soil	1.8[f]	--	--	--
126-SS-116.0	4/12/2006	115.5	Soil	<0.50	--	--	--
126-SS-121.0	4/12/2006	120.7	Soil	1.3[f]	--	--	--
126-SS-136.0	4/12/2006	135.3	Soil	0.96[f]	--	--	--
135-SS-11.5	5/19/2006	11.0	Soil	<0.50	--	--	--

TABLE 4

ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS IN SOIL
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in milligrams per kilogram (mg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	TPH as Stoddard Solvent (5035) (EPA 8260M/5035)	TPH Carbon Chain by EPA Method 8015M		
					C6-C12	C12-C22	C22-C44
					Light Hydrocarbon Range	Middle Hydrocarbon Range	Heavy Hydrocarbon Range
LARWQCB Screening Criteria (mg/kg) for soil between 20 and 150 feet above groundwater				NE[b]	500	1,000	10,000
135-SS-21.5	5/19/2006	21.0	Soil	<0.50	--	--	--
135-SS-31.5	5/19/2006	31.0	Soil	<0.50	--	--	--
135-SS-41.0	5/19/2006	40.5	Soil	<0.50	--	--	--
135-SS-51.5	5/19/2006	51.0	Soil	<0.50	--	--	--
135-SS-53.0	5/19/2006	52.5	Soil	<0.50	--	--	--
Building 108							
132-SS-11.25	5/17/2006	10.75	Soil	<0.50	--	--	--
132-SS-26.5	5/17/2006	26.0	Soil	<0.50	--	--	--
132-SS-36.5	5/17/2006	36.0	Soil	<0.50	--	--	--
132-SS-46.5	5/17/2006	46.0	Soil	<0.50	--	--	--
132-SS-51.5	5/17/2006	51.0	Soil	<0.50	--	--	--
132-SS-61.0	5/17/2006	60.5	Soil	<0.50	--	--	--
132-SS-71.0	5/17/2006	70.5	Soil	<0.50	--	--	--
132-SS-81.5	5/17/2006	81.0	Soil	<0.50	--	--	--
132-SS-91.5	5/17/2006	91.0	Soil	<0.50	--	--	--
132-SS-105.5	5/17/2006	105.0	Soil	<0.50	--	--	--
132-SS-121.0	5/17/2006	120.5	Soil	<0.50	--	--	--
132-SS-131.0	5/17/2006	130.5	Soil	<0.50	--	--	--
132-SS-140.5	5/17/2006	140.0	Soil	<0.50	--	--	--
133-SS-11.5	5/18/2006	11.0	Soil	<0.50	--	--	--
133-SS-21.5	5/18/2006	21.0	Soil	<0.50	--	--	--
133-SS-31.25	5/18/2006	30.8	Soil	<0.50	--	--	--
133-SS-41.5	5/18/2006	41.0	Soil	<0.50	--	--	--
133-SS-56.5	5/18/2006	56.0	Soil	<0.50	--	--	--
133-SS-61.5	5/18/2006	61.0	Soil	<0.50	--	--	--
133-SS-71.25	5/18/2006	70.8	Soil	<0.50	--	--	--
133-SS-81.0	5/18/2006	80.5	Soil	<0.50	--	--	--
133-SS-86.5	5/18/2006	86.0	Soil	<0.50	--	--	--
133-SS-95.5	5/18/2006	95.0	Soil	<0.50	--	--	--
133-SS-106.0	5/18/2006	105.5	Soil	<0.50	--	--	--
133-SS-115.5	5/18/2006	115.0	Soil	<0.50	--	--	--
133-SS-126.0	5/18/2006	125.5	Soil	<0.50	--	--	--
133-SS-135.75	5/18/2006	135.3	Soil	<0.50	--	--	--
Building 112A							
107-SM-2.7	4/4/2006	2.7	Sump sediment	--	<1.0	626.6	913
107-SS-5.0	4/4/2006	4.5	Soil	--	<1.0	<1.0	<1.0

TABLE 4

ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS IN SOIL
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in milligrams per kilogram (mg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	TPH as Stoddard Solvent (5035) (EPA 8260M/5035)	TPH Carbon Chain by EPA Method 8015M		
					C6-C12	C12-C22	C22-C44
					Light Hydrocarbon Range	Middle Hydrocarbon Range	Heavy Hydrocarbon Range
LARWQCB Screening Criteria (mg/kg) for soil between 20 and 150 feet above groundwater				NE[b]	500	1,000	10,000
107-SS-8.0	4/5/2006	7.3	Soil	--	<1.0	37.2	143
108-SS-5.8	4/4/2006	5.3	Soil	--	<1.0	<1.0	<1.0
108-SS-8.0	4/5/2006	7.3	Soil	--	<1.0	<1.0	<1.0
109-SS-5.8	4/4/2006	5.3	Soil	--	<1.0	<1.0	<1.0
109-SS-8.0	4/5/2006	7.3	Soil	--	<1.0	<1.0	<1.0
110-SS-3.0	4/5/2006	2.5	Soil	--	<1.0	<1.0	<1.0
110-SS-7.0	4/5/2006	6.5	Soil	--	<1.0	<1.0	<1.0
111-SS-3.0	4/5/2006	2.5	Soil	--	<1.0	<1.0	<1.0
111-SS-8.0	4/5/2006	7.3	Soil	--	<1.0	<1.0	<1.0
120-SS-10.7	4/3/2006	10.0	Soil	--	<1.0	<1.0	<1.0
120-SS-15.7	4/3/2006	15.0	Soil	--	<1.0	<1.0	<1.0
120-SS-21.0	4/3/2006	20.5	Soil	--	<1.0	<1.0	<1.0
121-SS-10.5	4/4/2006	10.0	Soil	--	<1.0	6.7	119.2
121-SS-16.0	4/4/2006	15.3	Soil	--	<1.0	<1.0	<1.0
121-SS-21.0	4/4/2006	20.0	Soil	--	<1.0	<1.0	<1.0
122-SS-10.35	4/4/2006	9.5	Soil	--	<1.0	401.1	1216.4
122-SS-15.5	4/4/2006	14.5	Soil	--	<1.0	<1.0	<1.0
122-SS-21.0	4/4/2006	20.0	Soil	--	<1.0	<1.0	<1.0
123-SS-11.0	4/3/2006	10.0	Soil	--	<1.0	<1.0	<1.0
123-SS-16.0	4/3/2006	15.3	Soil	--	<1.0	<1.0	<1.0
123-SS-21.0	4/3/2006	20.5	Soil	--	<1.0	<1.0	<1.0
134-SS-11.5	5/22/2006	11.0	Soil	<0.50	--	--	--
134-SS-21.0	5/22/2006	20.5	Soil	<0.50	--	--	--
134-SS-31.5	5/22/2006	31.0	Soil	<0.50	--	--	--
134-SS-41.5	5/22/2006	41.0	Soil	<0.50	--	--	--
134-SS-51.5	5/22/2006	51.0	Soil	<0.50	--	--	--
134-SS-61.5	5/22/2006	60.5	Soil	<0.50	--	--	--
134-SS-71.0	5/22/2006	70.5	Soil	<0.50	--	--	--
134-SS-81.0	5/22/2006	80.5	Soil	<0.50	--	--	--
134-SS-91.0	5/22/2006	90.5	Soil	<0.50	--	--	--
134-SS-100.75	5/22/2006	100.3	Soil	<0.50	--	--	--
134-SS-111.0	5/22/2006	110.5	Soil	<0.50	--	--	--
134-SS-121.5	5/22/2006	121.0	Soil	<0.50	--	--	--
134-SS-131.0	5/22/2006	130.5	Soil	<0.50	--	--	--
Trip Blanks							
TP-040106-01	4/10/2006	NA[g]	Water	<100	--	--	--
TP-041206-01	4/12/2006	NA	Water	<100	--	--	--

TABLE 4

ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS IN SOIL
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in milligrams per kilogram (mg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	TPH as Stoddard Solvent (5035) (EPA 8260M/5035)	TPH Carbon Chain by EPA Method 8015M		
					C6-C12	C12-C22	C22-C44
					Light Hydrocarbon Range	Middle Hydrocarbon Range	Heavy Hydrocarbon Range
LARWQCB Screening Criteria (mg/kg) for soil between 20 and 150 feet above groundwater				NE[b]	500	1,000	10,000
TP-041306-01	4/13/2006	NA	Water	<100	--	--	--
TB-05172006	5/17/2006	NA	Water	<100	--	--	--
TB-051806-1	5/18/2006	NA	Water	<100	--	--	--
TB-05222006	5/22/2006	NA	Water	<100	--	--	--
Equipment Blanks							
EQ-040106-01	4/10/2006	NA	Water	<100	--	--	--
EQ-040106-02	4/10/2006	NA	Water	<100	--	--	--
EQ-041306-01	4/13/2006	NA	Water	<100	--	--	--
EQ-05172006-1	5/17/2006	NA	Water	<100	--	--	--
EQ-05172006-2	5/17/2006	NA	Water	<100	--	--	--
EQ-05222006-1	5/22/2006	NA	Water	<100	--	--	--
EQ-05222006-2	5/22/2006	NA	Water	<100	--	--	--

Notes:
(a) feet bgs = feet below ground surface.
(b) NE = not established.
(c) < = sample result is less than the laboratory reporting limit shown.
(d) -- = not analyzed.
(e) According to the analytical laboratory, chromatogram shows the presence of a light hydrocarbon fuel resembling gasoline.
(f) According to the analytical laboratory, sample results do not display a fuel pattern.
(g) NA = not analyzed.

Geomatrix

TABLE 5

ANALYTICAL RESULTS FOR POLYCHLORINATED BIPHENYLS IN SOIL AND CONCRETE
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per kilogram (µg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	PCBs by EPA Method 8082						
				Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
Industrial PRGs[b] (µg/kg)				21,246	NE[c]	NE	NE	NE	744	NE
Building 104										
94-SS-10.5	4/6/2006	10.5	Soil	<2000[d]	<2000	<2000	<2000	**3500**	<2000	<2000
94-SS-21.0	4/6/2006	21.0	Soil	<200	<200	<200	<200	<200	<200	<200
94-SS-31.0	4/6/2006	31.0	Soil	<200	<200	<200	<200	<200	<200	<200
94-SS-41.0	4/6/2006	41.0	Soil	<200	<200	<200	<200	<200	<200	<200
94-SS-51.0	4/6/2006	51.0	Soil	<200	<200	<200	<200	<200	<200	<200
94-SS-61.0	4/6/2006	61.0	Soil	<200	<200	<200	<200	<200	<200	<200
94-SS-71.0	4/6/2006	71.0	Soil	<200	<200	<200	<200	<200	<200	<200
94-SS-81.0	4/6/2006	81.0	Soil	<200	<200	<200	<200	<200	<200	<200
95-SS-10.5	4/6/2006	10.5	Soil	<20,000	<20,000	<20,000	<20,000	**77,000**	<20,000	<20,000
95-SS-20.5	4/6/2006	20.5	Soil	<400,000	<400,000	<400,000	<400,000	**2,000,000**	<400,000	<400,000
95-SS-30.5	4/6/2006	30.5	Soil	<200	<200	<200	<200	260	<200	<200
95-SS-40.5	4/6/2006	40.5	Soil	<200	<200	<200	<200	580	<200	<200
95-SS-50.5	4/6/2006	50.5	Soil	<200	<200	<200	<200	<200	<200	<200
95-SS-60.5	4/6/2006	60.5	Soil	<200	<200	<200	<200	<200	<200	<200
95-SS-70.5	4/6/2006	70.5	Soil	<200	<200	<200	<200	<200	<200	<200
95-SS-80.5	4/6/2006	80.5	Soil	<200	<200	<200	<200	<200	<200	<200
96-SS-11.0	4/14/2006	11.0	Soil	<200	<200	<200	<200	<200	<200	<200
96-SS-21.0	4/14/2006	21.0	Soil	<200	<200	<200	<200	<200	<200	<200
96-SS-31.0	4/14/2006	31.0	Soil	<200	<200	<200	<200	<200	<200	<200
96-SS-41.0	4/14/2006	41.0	Soil	<200	<200	<200	<200	<200	<200	<200
96-SS-51.0	4/14/2006	51.0	Soil	<200	<200	<200	<200	<200	<200	<200
96-SS-61.0	4/14/2006	61.0	Soil	<200	<200	<200	<200	<200	<200	<200
96-SS-71.0	4/14/2006	71.0	Soil	<200	<200	<200	<200	<200	<200	<200
96-SS-80.5	4/14/2006	80.5	Soil	<200	<200	<200	<200	<200	<200	<200
97-SS-9.5	4/5/2006	9.5	Soil	<200	<200	<200	<200	<200	<200	<200
97-SS-20.5	4/5/2006	20.5	Soil	<200	<200	<200	<200	<200	<200	<200
97-SS-30.5	4/5/2006	30.5	Soil	<200	<200	<200	<200	<200	<200	<200
97-SS-40.5	4/5/2006	40.5	Soil	<200	<200	<200	<200	<200	<200	<200
97-SS-50.5	4/5/2006	50.5	Soil	<200	<200	<200	<200	<200	<200	<200
97-SS-60.5	4/5/2006	60.5	Soil	<200	<200	<200	<200	<200	<200	<200
97-SS-70.5	4/5/2006	70.5	Soil	<200	<200	<200	<200	<200	<200	<200
97-SS-80.5	4/5/2006	80.5	Soil	<200	<200	<200	<200	<200	<200	<200

TABLE 5

ANALYTICAL RESULTS FOR POLYCHLORINATED BIPHENYLS IN SOIL AND CONCRETE
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per kilogram (µg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	PCBs by EPA Method 8082						
				Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
Industrial PRGs[b] (µg/kg)				21,246	NE[c]	NE	NE	NE	744	NE
98-SS-10.5	4/5/2006	10.5	Soil	<20,000	<20,000	<20,000	<20,000	**44,000**	<20,000	<20,000
98-SS-20.5	4/5/2006	20.5	Soil	<200	<200	<200	<200	<200	<200	<200
98-SS-30.5	4/5/2006	30.5	Soil	<10,000	<10,000	<10,000	<10,000	**12,000**	<10,000	<10,000
127-SS-11.0[e]	4/14/2006	11.0	Soil	<200	<200	<200	<200	580	<200	<200
127-SS-21.0	4/14/2006	21.0	Soil	<200	<200	<200	<200	**1200**	<200	<200
127-SS-31.0	4/14/2006	31.0	Soil	<200	<200	<200	<200	330	<200	<200
127-SS-41.0	4/14/2006	41.0	Soil	<200	<200	<200	<200	<200	<200	<200
127-SS-51.0	4/14/2006	51.0	Soil	<200	<200	<200	<200	<200	<200	<200
127-SS-61.0	4/14/2006	61.0	Soil	<200	<200	<200	<200	<200	<200	<200
127-SS-71.0	4/14/2006	71.0	Soil	<200	<200	<200	<200	<200	<200	<200
127-SS-81.0	4/14/2006	81.0	Soil	<200	<200	<200	<200	<200	<200	<200
99-SS-10.5	4/5/2006	10.5	Soil	<200	<200	<200	<200	<200	<200	<200
99-SS-20.5	4/5/2006	20.5	Soil	<200	<200	<200	<200	<200	<200	<200
99-SS-30.5	4/5/2006	30.5	Soil	<200	<200	<200	<200	<200	<200	<200
99-SS-40.5	4/5/2006	40.5	Soil	<200	<200	<200	<200	<200	<200	<200
99-SS-50.5	4/5/2006	50.5	Soil	<200	<200	<200	<200	<200	<200	<200
99-SS-60.5	4/5/2006	60.5	Soil	<200	<200	<200	<200	<200	<200	<200
99-SS-70.5	4/5/2006	70.5	Soil	<200	<200	<200	<200	<200	<200	<200
99-SS-80.5	4/5/2006	80.5	Soil	<200	<200	<200	<200	<200	<200	<200
115-SS-6.0	4/7/2006	6.0	Soil	<200	<200	<200	<200	<200	<200	<200
115-SS-11.0	4/7/2006	11.0	Soil	<200	<200	<200	<200	<200	<200	<200
115-SS-16.0	4/7/2006	16.0	Soil	<200	<200	<200	<200	<200	<200	<200
115-SS-21.0	4/7/2006	21.0	Soil	<200	<200	<200	<200	<200	<200	<200
115-SS-26.0	4/7/2006	26.0	Soil	<200	<200	<200	<200	<200	<200	<200
115-SS-30.0	4/7/2006	30.0	Soil	<200	<200	<200	<200	<200	<200	<200
115-SS-36.0	4/7/2006	36.0	Soil	<200	<200	<200	<200	<200	<200	<200
115-SS-41.0	4/7/2006	41.0	Soil	<200	<200	<200	<200	<200	<200	<200
115-SS-45.5	4/7/2006	45.5	Soil	<200	<200	<200	<200	<200	<200	<200
115-SS-48.0	4/7/2006	48.0	Soil	<200	<200	<200	<200	<200	<200	<200
115-SS-49.5	4/7/2006	49.5	Soil	<200	<200	<200	<200	<200	<200	<200
116-SS-6.0	4/13/2006	6.0	Soil	<200	<200	<200	<200	<200	<200	<200
116-SS-11.0	4/13/2006	11.0	Soil	<200	<200	<200	<200	<200	<200	<200
116-SS-16.0	4/13/2006	16.0	Soil	<200	<200	<200	<200	<200	<200	<200

TABLE 5

ANALYTICAL RESULTS FOR POLYCHLORINATED BIPHENYLS IN SOIL AND CONCRETE
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per kilogram (µg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	PCBs by EPA Method 8082						
				Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
Industrial PRGs[b] (µg/kg)				21,246	NE[c]	NE	NE	NE	744	NE
116-SS-21.0	4/13/2006	21.0	Soil	<200	<200	<200	<200	<200	<200	<200
116-SS-26.0	4/13/2006	26.0	Soil	<200	<200	<200	<200	<200	<200	<200
116-SS-31.0	4/13/2006	31.0	Soil	<200	<200	<200	<200	<200	<200	<200
116-SS-36.0	4/13/2006	36.0	Soil	<200	<200	<200	<200	<200	<200	<200
116-SS-41.0	4/13/2006	41.0	Soil	<200	<200	<200	<200	<200	<200	<200
116-SS-46.0	4/13/2006	46.0	Soil	<200	<200	<200	<200	<200	<200	<200
116-SS-50.5	4/13/2006	50.5	Soil	<200	<200	<200	<200	<200	<200	<200
117-SS-6.0	4/7/2006	6.0	Soil	<200	<200	<200	<200	<200	<200	<200
117-SS-11.0	4/7/2006	11.0	Soil	<200	<200	<200	<200	<200	<200	<200
117-SS-16.0	4/7/2006	16.0	Soil	<200	<200	<200	<200	<200	<200	<200
117-SS-21.0	4/7/2006	21.0	Soil	<200	<200	<200	<200	<200	<200	<200
117-SS-26.0	4/7/2006	26.0	Soil	<200	<200	<200	<200	<200	<200	<200
117-SS-31.0	4/7/2006	31.0	Soil	<200	<200	<200	<200	<200	<200	<200
117-SS-36.0	4/7/2006	35.5	Soil	<200	<200	<200	<200	<200	<200	<200
117-SS-41.0	4/7/2006	41.0	Soil	<200	<200	<200	<200	<200	<200	<200
118-SS-6.0	4/7/2006	6.0	Soil	<200	<200	<200	<200	<200	<200	<200
118-SS-11.0	4/7/2006	11.0	Soil	<200	<200	<200	<200	<200	<200	<200
118-SS-16.0	4/7/2006	16.0	Soil	<200	<200	<200	<200	<200	<200	<200
118-SS-21.0	4/7/2006	21.0	Soil	<200	<200	<200	<200	<200	<200	<200
118-SS-26.0	4/7/2006	26.0	Soil	<200	<200	<200	<200	<200	<200	<200
118-SS-31.0	4/7/2006	31.0	Soil	<200	<200	<200	<200	<200	<200	<200
118-SS-36.0	4/7/2006	36.0	Soil	<200	<200	<200	<200	<200	<200	<200
118-SS-41.0	4/7/2006	41.0	Soil	<200	<200	<200	<200	<200	<200	<200
119-SS-6.0	4/7/2006	6.0	Soil	<200	<200	<200	<200	<200	<200	<200
119-SS-11.0	4/7/2006	11.0	Soil	<200	<200	<200	<200	<200	<200	<200
119-SS-16.0	4/7/2006	16.0	Soil	<200	<200	<200	<200	<200	<200	<200
119-SS-21.0	4/7/2006	21.0	Soil	<200	<200	<200	<200	<200	<200	<200
119-SS-26.0	4/7/2006	26.0	Soil	<200	<200	<200	<200	<200	<200	<200
119-SS-31.0	4/7/2006	31.0	Soil	<200	<200	<200	<200	<200	<200	<200
119-SS-36.0	4/7/2006	36.0	Soil	<200	<200	<200	<200	<200	<200	<200
119-SS-41.0	4/7/2006	41.0	Soil	<200	<200	<200	<200	<200	<200	<200

TABLE 5

ANALYTICAL RESULTS FOR POLYCHLORINATED BIPHENYLS IN SOIL AND CONCRETE
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per kilogram (µg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	PCBs by EPA Method 8082						
				Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
Industrial PRGs[b] (µg/kg)				21,246	NE[c]	NE	NE	NE	744	NE
100-SS-2.0	4/5/2006	1.5	Soil	<20,000	<20,000	<20,000	<20,000	**74,000**	<20,000	<20,000
100b-SS-6.9	4/24/2006	6.0	Soil	<200	<200	<200	<200	<200	<200	<200
100-CS-0.3	4/11/2006	0.0	Concrete	<200	<200	<200	<200	<200	<200	<200
101-SS-1.8	4/6/2006	1.3	Soil	<200	<200	<200	<200	380	<200	<200
101b-SS-6.8	4/24/2006	6.0	Soil	<200	<200	<200	<200	<200	<200	<200
101-CS-0.3	4/11/2006	0.0	Concrete	<200	<200	<200	<200	<200	<200	<200
102-SS-1.8	4/5/2006	1.3	Soil	<200	<200	<200	<200	<200	<200	<200
102-SS-6.0	4/5/2006	5.5	Soil	<200	<200	<200	<200	<200	<200	<200
103-SS-2.3	4/5/2006	1.8	Soil	<200	<200	<200	<200	<200	<200	<200
103-SS-6.5	4/5/2006	6.0	Soil	<200	<200	<200	<200	<200	<200	<200
Building 112A										
107-SM-2.7	4/4/2006	2.7	Sump sediment	<200	<200	<200	<200	<200	<200	460
107-SS-5.0	4/4/2006	4.5	Soil	<200	<200	<200	<200	<200	<200	<200
107-SS-8.0	4/5/2006	7.3	Soil	<200	<200	<200	<200	<200	<200	<200
Cooling Tower										
104-SS-25.0	4/7/2006	24.3	Soil	<200	<200	<200	<200	<200	<200	<200
104-SS-30.0	4/7/2006	29.0	Soil	<200	<200	<200	<200	<200	<200	<200
105-SS-3.0	4/6/2006	2.5	Soil	<200	<200	<200	<200	<200	<200	<200
105-SS-9.3	4/6/2006	8.3	Soil	<200	<200	<200	<200	<200	<200	<200
105-SS-14.0	4/6/2006	13.0	Soil	<200	<200	<200	<200	<200	<200	<200
105-SS-19.0	4/6/2006	18.3	Soil	<200	<200	<200	<200	<200	<200	<200
105-SS-24.0	4/6/2006	23.0	Soil	<200	<200	<200	<200	<200	<200	<200
105-SS-29.0	4/13/2006	29.0	Soil	<200	<200	<200	<200	<200	<200	<200
105-SS-34.0	4/13/2006	34.0	Soil	<200	<200	<200	<200	<200	<200	<200
106-SS-5.0	4/13/2006	5.0	Soil	<200	<200	<200	<200	<200	<200	<200
106-SS-9.0	4/13/2006	9.0	Soil	<200	<200	<200	<200	<200	<200	<200
106-SS-14.0	4/13/2006	14.0	Soil	<200	<200	<200	<200	<200	<200	<200
106-SS-19.0	4/13/2006	19.0	Soil	<200	<200	<200	<200	<200	<200	<200
106-SS-24.0	4/13/2006	24.0	Soil	<200	<200	<200	<200	<200	<200	<200
106-SS-29.0	4/13/2006	29.0	Soil	<200	<200	<200	<200	<200	<200	<200
106-SS-33.0	4/13/2006	34.0	Soil	<200	<200	<200	<200	<200	<200	<200

TABLE 5

ANALYTICAL RESULTS FOR POLYCHLORINATED BIPHENYLS IN SOIL AND CONCRETE
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per kilogram (µg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	PCBs by EPA Method 8082						
				Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
Industrial PRGs[b] (µg/kg)				21,246	NE[c]	NE	NE	NE	744	NE
Near Substation #8										
124-SS-5.0	4/7/2006	5.0	Soil	<200	<200	<200	<200	<200	<200	<200
Equipment Blanks										
EQ-040506-01	4/5/2006	NA[f]	Water	<10	<10	<10	<10	<10	<10	<10
EQ-040606-01	4/6/2006	NA	Water	<10	<10	<10	<10	<10	<10	<10
EB-040706-01	4/7/2006	NA	Water	<10	<10	<10	<10	<10	<10	<10
EQ-041306-01	4/13/2006	NA	Water	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
EQ-041406-01	4/14/2006	NA	Water	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:
(a) feet bgs = feet below ground surface.
(b) Industrial PRGs = EPA Region IX Preliminary Remediation Goals for Industrial Soil, October 2004.
(c) NE = not established.
(d) < = sample result is less than the laboratory reporting limit shown.
(e) Sample number duplicated for 127. Sample collected on 4/14/06 was taken from boring 127B advanced in Building 104.
(f) NA = not applicable.
BOLD = concentrations exceed Industrial PRGs.

TABLE 6

ANALYTICAL RESULTS FOR METALS IN SOIL
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in milligrams per kilogram (mg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	Total Metals by EPA Method 6010B/7000																					
									Cr[g]				Cu[j]		Pb[k]								Zn[r]		
				Sb[b]	As[c]	Ba[d]	Be[e]	Cd[f]	Total	STLC	Cr(VI)[h]	Co[i]	Total	STLC	Total	STLC	Mo[l]	Ni[m]	Se[n]	Ag[o]	Ti[p]	V[q]	Total	STLC	Hg[s]
TTLC[t] (mg/kg)				500	500	10,000	75	100	2,500	NA[u]	500	8,000	2,500	NA	**1,000**	NA	3,500	2,000	100	500	700	2,400	5,000	NA	20
10 x STLC[v] (mg/kg)				150	50	1,000	7.5	10	**50**	NA	50	800	**250**	NA	**50**	NA	3,500	200	10	50	70	240	2,500	NA	2.0
STLC (mg/L)				15	5.0	100	0.75	1.0	NA	5.0	5.0	80	NA	**25**	NA	**5.0**	350	20	1.0	5.0	7.0	24	NA	250	0.2
Industrial PRGs[w] (mg/kg)				410	**0.25**	67,000	1,900	450	450	NA	64	1,900	41,000	NA	**800**	NA	5,100	20,000	5,100	5,100	67	1,000	100,000	NA	310
SSLs Dilution Attenuation Factor at 20 (DAF20)[x] (mg/kg)				5.0	29	1,600	63	8.0	**38**	NA	38	NA	NA	NA	NA	NA	NA	**130**	5.0	34	NA	6,000	12,000	NA	NA
California Background[y] (maximum concentration in mg/kg)				1.95	**11**	1,400	2.7	**1.7**	1,579	NA	NE[z]	46.9	**96.4**	NA	**97.1**	NA	**9.6**	509	0.43	8.3	1.1	288	**236**	NA	0.9
Building 112 (Former Etch Station)																									
127-SS-2.5[aa]	4/4/2006	2.0	Soil	<10[bb]	<0.50	110	<1.0	<1.0	15	--[cc]	--	8.6	22	--	9.9	--	<5.0	7.6	<0.50	<1.0	<5.0	37	57	--	<0.020
127-SS-6.5	4/4/2006	6.0	Soil	<10	<0.50	120	<1.0	<1.0	14	--	--	7.9	20	--	15	--	<5.0	6.5	<0.50	<1.0	<5.0	33	56	--	<0.020
128-SS-2.5	4/4/2006	2.0	Soil	<10	<0.50	130	<1.0	<1.0	17	--	--	9.5	27	--	12	--	<5.0	9.3	<0.50	<1.0	<5.0	39	64	--	0.023
128-SS-6.5	4/4/2006	6.0	Soil	<10	<0.50	100	<1.0	<1.0	14	--	--	7.4	19	--	8.0	--	<5.0	6.4	<0.50	<1.0	<5.0	33	48	--	<0.020
129-SS-1.8	4/5/2006	1.5	Soil	<10	<0.50	140	<1.0	<1.0	19	--	--	10	27	--	16	--	<5.0	9.3	<0.50	<1.0	<5.0	45	70	--	0.043
129-SS-4.3	4/5/2006	3.5	Soil	<10	**1.3**	120	<1.0	<1.0	20	--	--	9.8	27	--	22	--	<5.0	9.8	<0.50	<1.0	<5.0	40	68	--	0.037
Building 112A																									
107-SM-2.7	4/4/2006	2.7	Sump sediment	<10	**2.8**	190	<1.0	**5.0**	**180**	1.7	--	8.1	**1300**	**86**	**3000**	**190**	17	160	<0.50	<1.0	<5.0	<10	2100	--	0.041
107-SS-5.0	4/4/2006	4.5	Soil	<10	<0.50	110	<1.0	<1.0	14	--	--	7.9	20	--	10	--	<5.0	6.6	<0.50	<1.0	<5.0	37	53	--	<0.020
107-SS-8.0	4/5/2006	7.3	Soil	<10	**1.3**	140	<1.0	<1.0	17	--	--	8.6	28	--	**50**	0.24/0.51[dd]	<5.0	8.1	<0.50	<1.0	<5.0	38	110	--	0.063
108-SS-5.8	4/4/2006	5.3	Soil	<10	<0.50	120	<1.0	<1.0	14	--	--	8.1	20	--	9.7	--	<5.0	7.2	<0.50	<1.0	<5.0	35	54	--	<0.020
108-SS-8.0	4/5/2006	7.3	Soil	<10	**2.2**	110	<1.0	<1.0	16	--	--	8.2	76	--	21	--	<5.0	6.7	<0.50	<1.0	<5.0	40	64	--	0.032
109-SS-5.8	4/4/2006	5.3	Soil	<10	<0.50	190	<1.0	<1.0	24	--	--	12	35	--	16	--	<5.0	12	<0.50	<1.0	<5.0	55	82	--	<0.020
109-SS-8.0	4/5/2006	7.3	Soil	<10	**6.1**	120	<1.0	<1.0	16	--	--	8.3	22	--	34	--	<5.0	7.0	<0.50	<1.0	<5.0	38	67	--	<0.020
110-SS-3.0	4/5/2006	2.5	Soil	<10	<0.50	140	<1.0	<1.0	17	--	--	9.6	26	--	12	--	<5.0	8.8	<0.50	<1.0	<5.0	40	67	--	0.38
110-SS-7.0	4/5/2006	6.5	Soil	<10	<0.50	140	<1.0	<1.0	18	--	--	10	26	--	13	--	<5.0	8.8	<0.50	<1.0	<5.0	42	70	--	0.033
111-SS-3.0	4/5/2006	2.5	Soil	<10	<0.50	160	<1.0	<1.0	19	--	--	11	29	--	12	--	<5.0	11	<0.50	<1.0	<5.0	44	68	--	0.029
111-SS-8.0	4/5/2006	7.3	Soil	<10	**4.5**	130	<1.0	<1.0	18	--	--	9.2	22	--	34	--	<5.0	8.1	<0.50	<1.0	<5.0	39	76	--	0.074
Stormwater Outfall #6																									
112-SS-6.0	4/3/2006	5.5	Soil	<10	<0.50	150	<1.0	<1.0	14	--	--	7.4	28	--	12	--	<5.0	7.0	<0.50	<1.0	<5.0	27	54	--	0.026
113-SS-6.0	4/3/2006	5.5	Soil	<10	**16**	120	<1.0	<1.0	14	--	--	7.9	25	--	28	--	<5.0	6.4	<0.50	<1.0	<5.0	36	68	--	0.031
114-SS-1.6	4/6/2006	1.1	Soil	<10	**4.2**	95	<1.0	<1.0	14	--	--	6.6	21	--	29	--	<5.0	6.1	<0.50	5.0	<5.0	29	69	--	0.051[ee]

TABLE 6

ANALYTICAL RESULTS FOR METALS IN SOIL
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in milligrams per kilogram (mg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	Total Metals by EPA Method 6010B/7000																					
									Cr[g]				Cu[j]		Pb[k]								Zn[r]		
				Sb[b]	As[c]	Ba[d]	Be[e]	Cd[f]	Total	STLC	Cr(VI)[h]	Co[i]	Total	STLC	Total	STLC	Mo[l]	Ni[m]	Se[n]	Ag[o]	Ti[p]	V[q]	Total	STLC	Hg[s]
TTLC[t] (mg/kg)				500	500	10,000	75	100	2,500	NA[u]	500	8,000	2,500	NA	**1,000**	NA	3,500	2,000	100	500	700	2,400	5,000	NA	20
10 x STLC[v] (mg/kg)				150	50	1,000	7.5	10	**50**	NA	50	800	**250**	NA	**50**	NA	3,500	200	10	50	70	240	2,500	NA	2.0
STLC (mg/L)				15	5.0	100	0.75	1.0	NA	5.0	5.0	80	NA	**25**	NA	**5.0**	350	20	1.0	5.0	7.0	24	NA	250	0.2
Industrial PRGs[w] (mg/kg)				410	**0.25**	67,000	1,900	450	450	NA	64	1,900	41,000	NA	**800**	NA	5,100	20,000	5,100	5,100	67	1,000	100,000	NA	310
SSLs Dilution Attenuation Factor at 20 (DAF20)[x] (mg/kg)				5.0	29	1,600	63	8.0	**38**	NA	38	NA	NA	NA	NA	NA	NA	**130**	5.0	34	NA	6,000	12,000	NA	NA
California Background[y] (maximum concentration in mg/kg)				1.95	**11**	1,400	2.7	**1.7**	1,579	NA	NE[z]	46.9	**96.4**	NA	**97.1**	NA	**9.6**	509	0.43	8.3	1.1	288	**236**	NA	0.9
Cooling Tower																									
104-SS-25.0	4/7/2006	24.3	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
104-SS-30.0	4/7/2006	29.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
105-SS-3.0	4/6/2006	2.5	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
105-SS-9.3	4/6/2006	8.3	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
105-SS-14.0	4/6/2006	13.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
105-SS-19.0	4/6/2006	18.3	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
105-SS-24.0	4/6/2006	23.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
105-SS-29.0	4/13/2006	29.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
105-SS-34.0	4/13/2006	34.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
106-SS-5.0	4/13/2006	5.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
106-SS-9.0	4/13/2006	9.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
106-SS-14.0	4/13/2006	14.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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TABLE 6

ANALYTICAL RESULTS FOR METALS IN SOIL
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in milligrams per kilogram (mg/kg) for soil and micrograms per liter (µg/L) for water

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	Total Metals by EPA Method 6010B/7000																				
									Cr[g]				Cu[j]		Pb[k]								Zn[r]		
				Sb[b]	As[c]	Ba[d]	Be[e]	Cd[f]	Total	STLC	Cr(VI)[h]	Co[i]	Total	STLC	Total	STLC	Mo[l]	Ni[m]	Se[n]	Ag[o]	Ti[p]	V[q]	Total	STLC	Hg[s]
TTLC[t] (mg/kg)				500	500	10,000	75	100	2,500	NA[u]	500	8,000	2,500	NA	**1,000**	NA	3,500	2,000	100	500	700	2,400	5,000	NA	20
10 x STLC[v] (mg/kg)				150	50	1,000	7.5	10	**50**	NA	50	800	**250**	NA	**50**	NA	3,500	200	10	50	70	240	2,500	NA	2.0
STLC (mg/L)				15	5.0	100	0.75	1.0	NA	5.0	5.0	80	NA	**25**	NA	**5.0**	350	20	1.0	5.0	7.0	24	NA	250	0.2
Industrial PRGs[w] (mg/kg)				410	**0.25**	67,000	1,900	450	450	NA	64	1,900	41,000	NA	**800**	NA	5,100	20,000	5,100	5,100	67	1,000	100,000	NA	310
SSLs Dilution Attenuation Factor at 20 (DAF20)[x] (mg/kg)				5.0	29	1,600	63	8.0	**38**	NA	38	NA	NA	NA	NA	NA	NA	**130**	5.0	34	NA	6,000	12,000	NA	NA
California Background[y] (maximum concentration in mg/kg)				1.95	**11**	1,400	2.7	**1.7**	1,579	NA	NE[z]	46.9	**96.4**	NA	**97.1**	NA	**9.6**	509	0.43	8.3	1.1	288	**236**	NA	0.9
106-SS-19.0	4/13/2006	19.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
106-SS-24.0	4/13/2006	24.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
106-SS-29.0	4/13/2006	29.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
106-SS-33.0	4/13/2006	34.0	Soil	--	--	--	--	--	--	--	<0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Equipment Blanks																									
EQ-041306-01	4/13/2006	NA	Water	--	--	--	--	--	--	--	<0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EB-040606-01	4/6/2006	NA	Water	--	--	--	--	--	--	--	<0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(a) feet bgs = feet below ground surface.
(b) Sb = Antimony
(c) As = Arsenic
(d) Ba = Barium
(e) Be = Beryllium
(f) Cd = Cadmium
(g) Cr = Total Chromium
(h) Cr(VI) = Hexavalent Chromium
(i) Co = Cobalt
(j) Cu = Copper
(k) Pb = Lead
(l) Mo = Molybdenum
(m) Ni = Nickel
(n) Se = Selenium
(o) Ag = Silver
(p) Ti = Thallium
(q) V = Vanadium
(r) Zn = Zinc
(s) Hg = Mercury (analyzed using EPA Test Method 7471A).
(t) TTLC = Total Threshold Limit Concentration values; California Code of Regulations, Title 22, Chapter II, Article 3.
(u) NA = not applicable.
(v) STLC = Soluble Threshold Limit Concentration in mg/L; California Code of Regulations, Title 22, Chapter II, Article 3.
(w) Industrial PRGs = EPA Region IX Preliminary Remediation Goals for Industrial Soil, October 2004.
(x) SSLs = Soil Screening Levels, Migration to Groundwater, EPA Region IX Preliminary Remediation Goal, October 2004.
(y) Kearney Foundation of Soil Science, Background Concentrations of Trace and Major Elements in California Soils, Division of Agriculture and Natural Resources, University of California, March 1996.
(z) NE = not established.
(aa) Sample number duplicated for 127. Sample collected on 4/14/06 was taken from boring 127A advanced in Building 112.
(bb) < = sample result is less than the laboratory reporting limit shown.
(cc) -- = not analyzed.
(dd) Lead STLC results for sample 107-SS-8.0 were run twice by the analytical laboratory. The second result, 0.51, was outside the EPA recommended holding time.
(ee) sample analyzed outside the EPA recommended holding time.
BOLD = concentration exceeds one or more Screening Level(s).

TABLE 7

ANALYTICAL RESULTS FOR SELECTED VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per liter (µg/L)

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	Volatile Organic Compounds by EPA Method 8260M																									
				Benzene	2-Butanone (MEK)	Carbon Tetrachloride	Chloroethane	Chloroform	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	cis-1,2-Dichloroethylene	Ethylbenzene	Methylene Chloride	Stoddard Solvent	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethylene (PCE)	Toluene	1,1,2-Trichloroethane	1,1,1-Trichloroethane	Trichloroethylene (TCE)	Trichlorofluoromethane	1,1,2-Trichloro-1,2,2-trifluoroethane	Vinyl chloride	o-Xylene	m,p-Xylenes
U.S. EPA Maximum Contaminant Levels (µg/l)[b]				5.0	NE[c]	5.0	NE	NE	NE	NE	5.0	7.0	100	70	700	NE	NE	NE	NE	5.0	1000	5.0	200	5.0	NE	NE	2.0	10,000 (total)	
Building 106																													
125-HS-149	4/11/2006	149	Water	2.8	<10[d]	<0.50	<0.50	<0.50	<0.50	<0.50	**6.0**	<0.50	<0.50	<0.50	0.85	<5.0	180[e]	<0.50	<0.50	<0.50	2.9	<0.50	<0.50	**72**	<0.50	<0.50	<0.50	2.0	3.9
125-HS-150	4/11/2006	150	Water	3.3	<10	<0.50	<0.50	<0.50	<0.50	<0.50	4.5	<0.50	<0.50	<0.50	14	<5.0	870[e]	<0.50	<0.50	0.95	29	<0.50	<0.50	**110**	<0.50	<0.50	<0.50	25	56
126-HS-149	4/12/2006	150	Water	<0.50	<10	<0.50	<0.50	0.57	<0.50	<0.50	<0.50	1.2	<0.50	<0.50	<0.50	<5.0	440[f]	<0.50	<0.50	4.6	<0.50	<0.50	<0.50	**420**	<0.50	<0.50	<0.50	<0.50	<1.0
Building 108																													
132-HS-150	5/17/2006	150	Water	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<100	<0.50	<0.50	1.8	<0.50	<0.50	<0.50	**150**	<0.50	<0.50	<0.50	<0.50	<1.0
133-HS-150	5/18/2006	150	Water	<0.50	<10	<0.50	<0.50	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<100	<0.50	<0.50	1.5	<0.50	<0.50	<0.50	**150**	<0.50	<0.50	<0.50	<0.50	<1.0
Building 112																													
134-HS-149.5	5/22/2006	149.5	Water	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**110**	<0.50	<0.50	<0.50	<0.50	<1.0

Notes:
(a) feet bgs = feet below ground surface.
(b) Maximum Contaminant Levels = United States Environmental Protection Agency Maximum Contaminant Levels, September 2003.
(c) NE = not established.
(d) < = sample result is less than the laboratory reporting limit shown.
(e) According to the analytical laboratory, chromatogram shows the presence of a light hydrocarbon fuel resembling gasoline.
(f) According to the analytical laboratory, sample results do not display a fuel pattern.

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TABLE 8

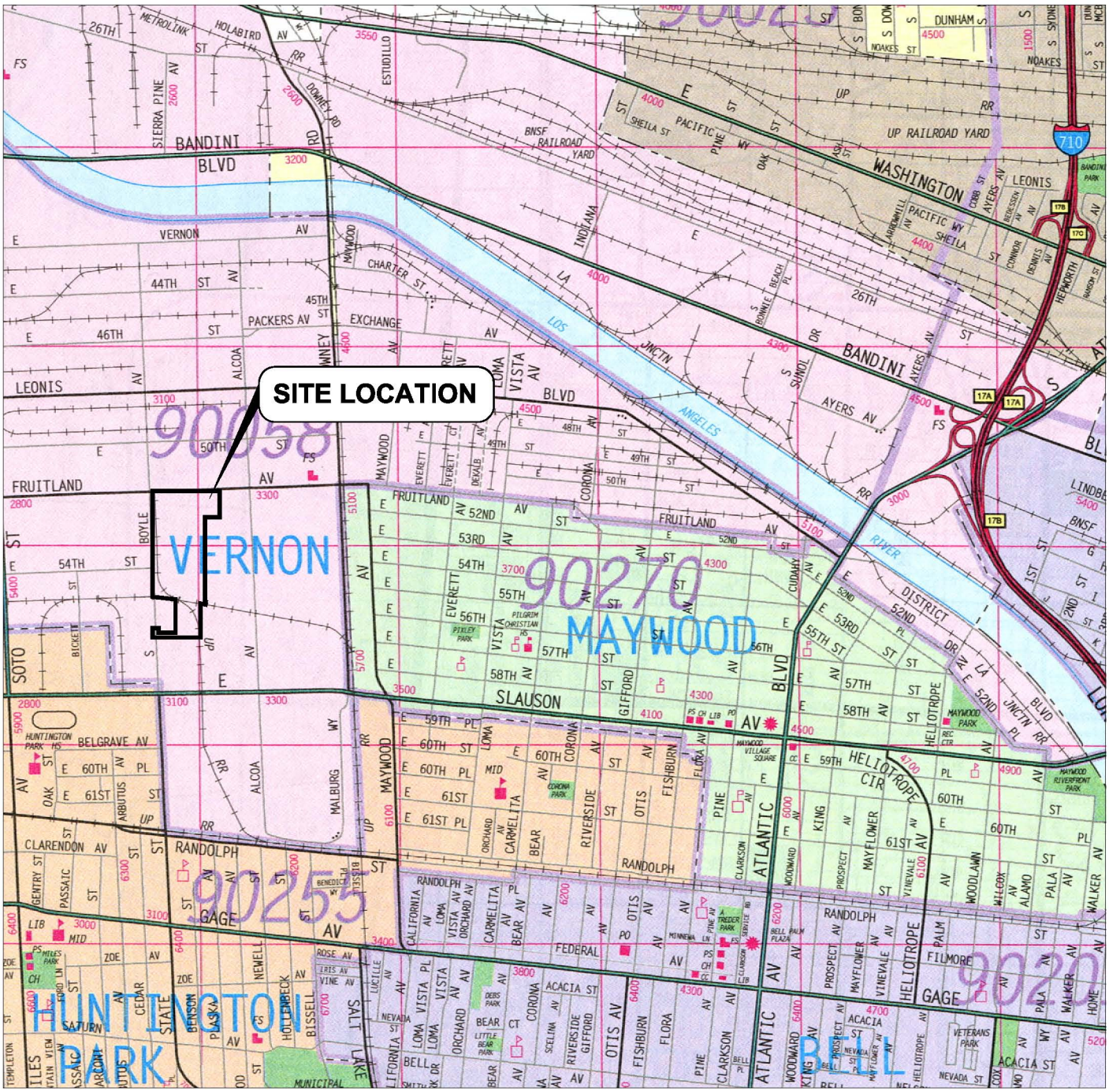
ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS IN GROUNDWATER
SUPPLEMENTAL PHASE II ESA
Pechiney Cast Plate Facility
Vernon, California

Results shown in micrograms per liter (µg/L)

Sample Identification	Sample Date	Approximate Sample Depth (feet bgs)[a]	Sample Matrix	TPH as Stoddard Solvent (EPA 8260M/5035)	TPH Carbon Chain by EPA Method 8015M[b]		
					C6-C12	C12-C22	C22-C44
					Light Hydrocarbon Range	Middle Hydrocarbon Range	Heavy Hydrocarbon Range
U.S. EPA Maximum Contaminant Levels (µg/l)[c]				NE[d]	NE	NE	NE
Building 106							
125-HS-149	4/11/2006	149	Water	180[e]	--[f]	--	--
125-HS-150	4/11/2006	150	Water	870[e]	250	398	365
126-HS-149	4/12/2006	150	Water	440[g]	--	--	--
126-HS-150	4/12/2006	150	Water	--	<10[h]	158	73
Building 108							
132-HS-150	5/17/2006	150	Water	<100	<10	81	162
133-HS-150	5/18/2006	150	Water	<100	<10	144	141
Building 112							
134-HS-149.5	5/22/2006	149.5	Water	<100	<10	<10	<10

Notes:
(a) feet bgs = feet below ground surface.
(b) Results for TPH carbon chain were reported by the analytical laboratory in milligrams per liter. The results shown have been converted into micrograms per liter.
(c) Maximum Contaminant Levels = United States Environmental Protection Agency Maximum Contaminant Levels, September 2003.
(d) NE = not established.
(e) According to the analytical laboratory, chromatogram shows the presence of a light hydrocarbon fuel resembling gasoline.
(f) -- = not analyzed.
(g) According to the analytical laboratory, sample results do not display a fuel pattern.
(h) < = sample result is less than the laboratory reporting limit shown.

FIGURES



N

0 1000 2000

APPROXIMATE SCALE IN FEET

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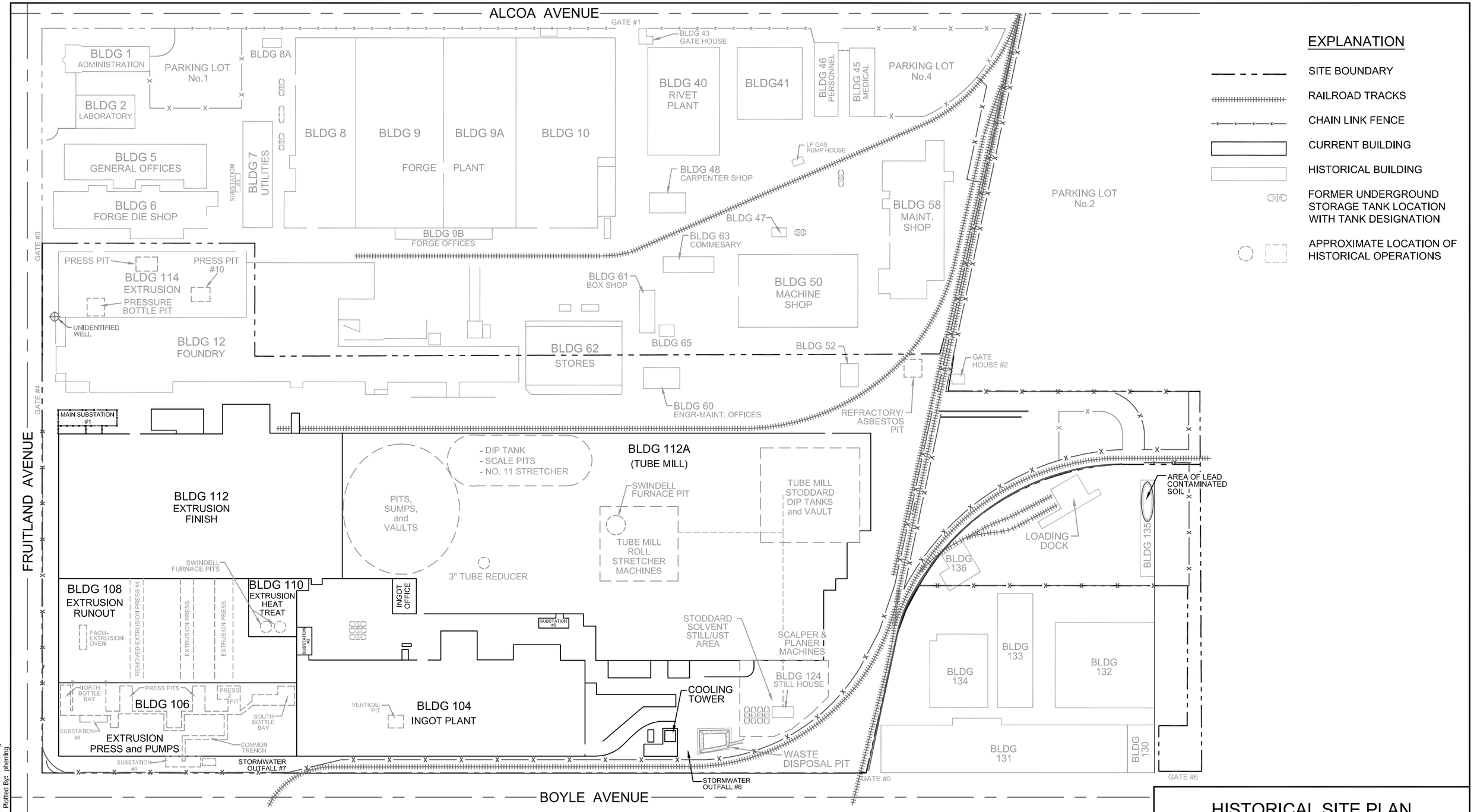
GEOMATRIX

SITE LOCATION MAP

PECHINEY CAST PLATE
Vernon Facility, 3200 Fruitland Avenue
Vernon, California

Figure By	Project No.
jrw	10627
Date	Figure
8/31/05	1

Filepath: Y:\10627.000.0\acad\PechineyPlate\LocationMap.dwg
Plot Time: Aug 31, 2005 - 3:56pm, Plotted By: pherring



HISTORICAL SITE PLAN

PECHINEY CAST PLATE FACILITY
3200 Fruitland Avenue
Vernon, California

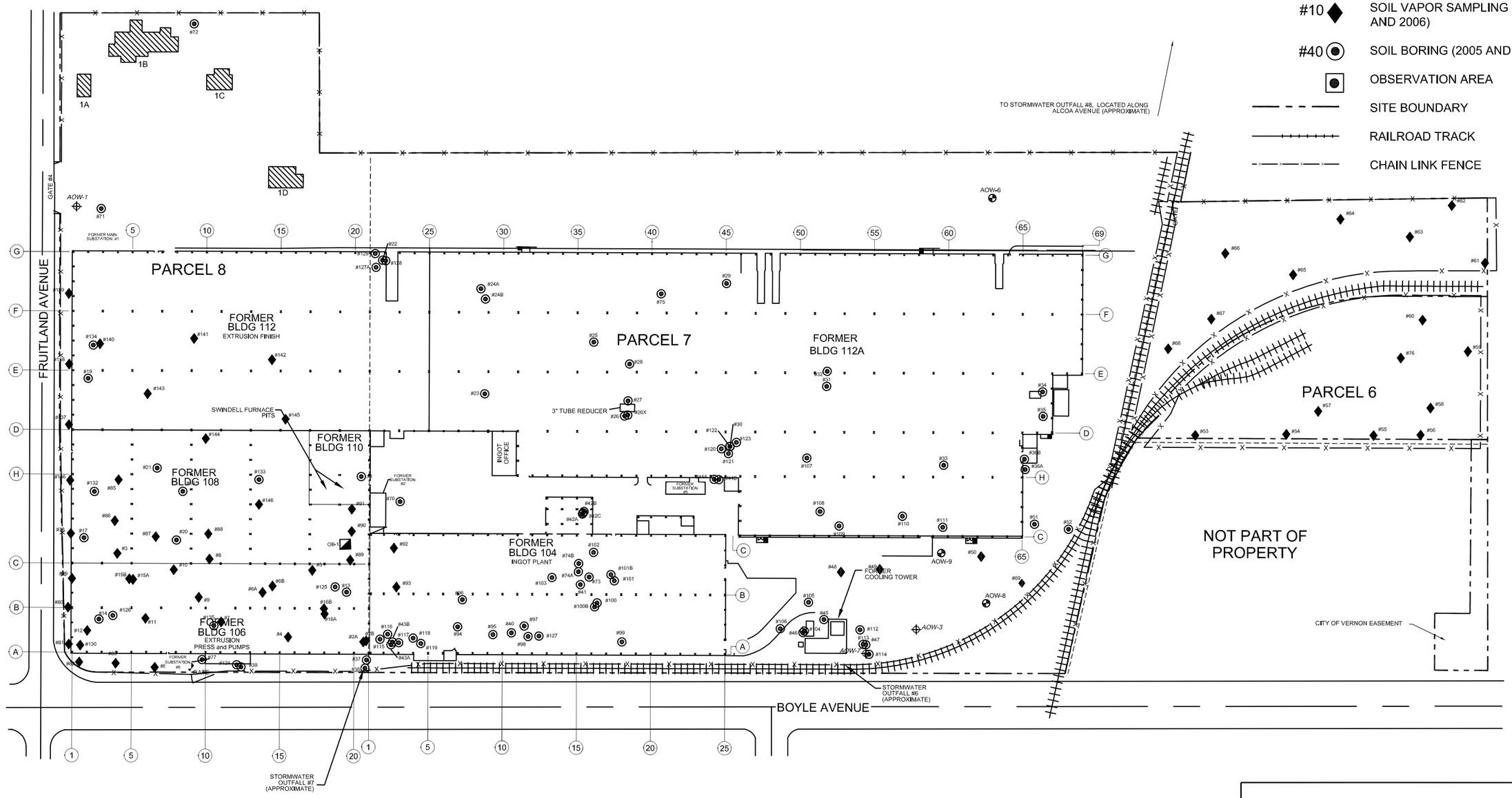
GEOMATRIX	Figure By jrw	Project No. 10627	Figure 2
	Date 03/09/06		

SITE PLAN PROVIDED BY PECHINEY CAST PLATE, INC., AND BASED ON AN ALUMINUM COMPANY OF AMERICA "WORKS GENERAL-MAP" FIGURE DATED SEPT 16,1969. ADDITIONAL HISTORICAL FEATURES BASED ON DOCUMENT REVIEW.

NOTE:

1. SITE BOUNDARY IS APPROXIMATE.

Filepath: Y:\10627.000.0\acad\SITE Plan-Historical.dwg
Plot Time: Dec 19, 2006 - 5:27pm, Plotted By: pherring



BASEMAP MODIFIED FROM PECHINEY CAST PLATE, INC. SITE PLAN DATED O8 JAN 02, GERAGHTY & MILLER, INC. "GROUNDWATER ELEVATION AND VOLATILE ORGANIC COMPOUND CONCENTRATIONS DECEMBER 8, 1994" FIGURE DATED 2-2-95, ALUMINUM COMPANY OF AMERICA "WORKS GENERAL-MAP" FIGURE DATED 10-10-84, AND LOS ANGELES COUNTY ASSESSOR'S OFFICE PARCEL MAP 6310 / SHEET 8 DATED 11-5-58.

NOTE:

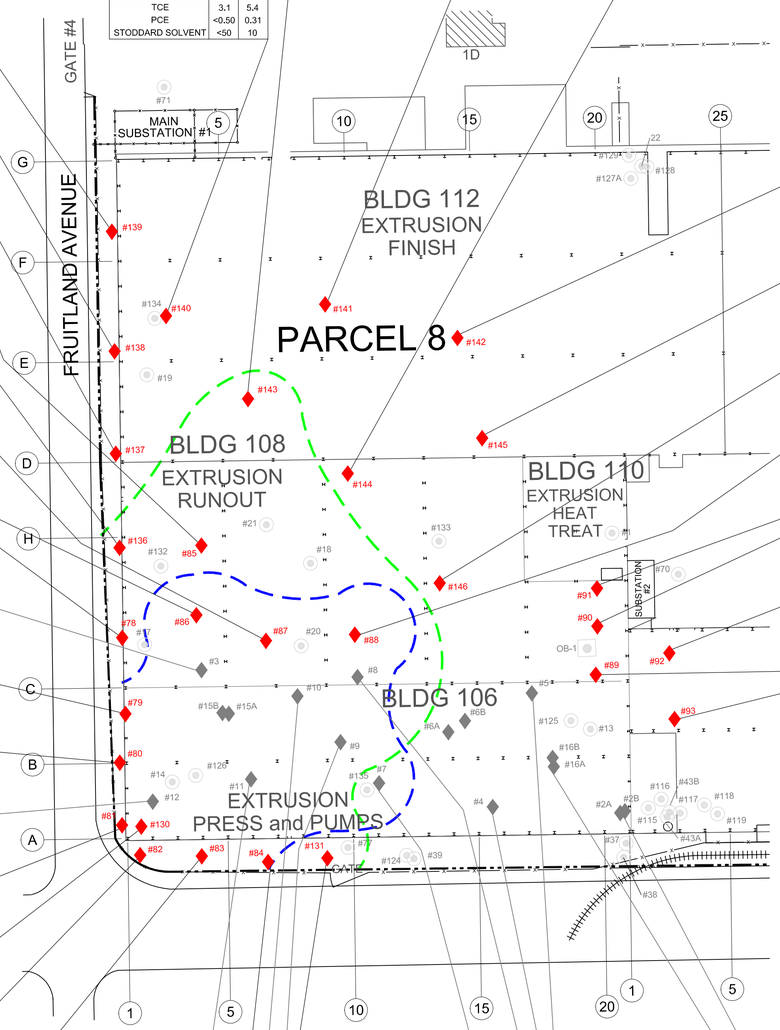
SITE BOUNDARY AND GROUNDWATER MONITORING WELL LOCATIONS ARE APPROXIMATE.

Approximate Scale in Feet
0 70 140
0 21 42
Approximate Scale in Meters

CURRENT SITE PLAN
PECHINEY CAST PLATE FACILITY
3200 Fruitland Avenue
Vernon, California

By: SBN	Date: 12/19/06	Project No. 10627
Geomatrix		Figure 3

Plot Date: 12/19/06 - 5:47pm, Plotted by: pherring
Drawing Path: Y:□10627.000.0□acad□, Drawing Name: current site plan 121906.dwg



#139		
ANALYTE	5.0'	15.0'
TCE	0.25	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	16

# 138		
ANALYTE	5.0'	15.0'
TCE	1.0	5.4
PCE	0.13	0.30
STODDARD SOLVENT	14	14

#137			
ANALYTE	5.0'	15.0'	15.0' DUP
TCE	8.3	39	26
PCE	0.34	1.8	0.78
STODDARD SOLVENT	18	<20	<20

#85		
ANALYTE	5.0'	15.0'
TCE	88	350
PCE	<5.0	13
STODDARD SOLVENT	<500	<200

#136		
ANALYTE	5.0'	15.0'
TCE	18	130
PCE	0.93	7.2
STODDARD SOLVENT	<20	<50

#87		
ANALYTE	5.0'	15.0'
TCE	600	740
PCE	28	32
STODDARD SOLVENT	<200	<500

#86						
	PV1	PV3	PV7	PV1	PV3	PV7
ANALYTE	5.0'	5.0'	5.0'	15.0'	15.0'	15.0'
TCE	310	360	420	290	440	27
PCE	15	20	22	--	11	650
STODDARD SOLVENT	<100	<500	<500	<100	<500	<500

#78		
ANALYTE	5.0'	15.0'
TCE	40	140
PCE	<5.0	6.2
STODDARD SOLVENT	<500	<200

#3		
ANALYTE	5.0'	15.0'
TCE	780	1400
PCE	28	46
STODDARD SOLVENT	<200	<500

#79		
ANALYTE	5.0'	15.0'
TCE	130	420
PCE	8.0	22
STODDARD SOLVENT	<200	<200

#80		
ANALYTE	5.0'	15.0'
TCE	550	900
PCE	30	49
STODDARD SOLVENT	<1000	<1000

#12			
ANALYTE	5.0'	5.0' DUP	15.0'
TCE	1200	1200	1600
PCE	44	38	68
STODDARD SOLVENT	<100	<500	<1000

#81		
ANALYTE	5.0'	15.0'
TCE	1400	1900
PCE	110	120
STODDARD SOLVENT	<500	<1000

#130		
ANALYTE	5.0'	15.0'
TCE	730	1500
PCE	49	95
STODDARD SOLVENT	<200	<1000

#82		
ANALYTE	5.0'	15.0'
TCE	970	1900
PCE	49	120
STODDARD SOLVENT	<500	<1000

#83		
ANALYTE	5.0'	15.0'
TCE	170	360
PCE	13	29
STODDARD SOLVENT	<1000	<500

#140		
ANALYTE	5.0'	15.0'
TCE	3.1	5.4
PCE	<0.50	0.31
STODDARD SOLVENT	<50	10

#143		
ANALYTE	5.0'	15.0'
TCE	74	130
PCE	3.3	4.1
STODDARD SOLVENT	<20	<100

#141		
ANALYTE	5.0'	15.0'
TCE	5.5	21
PCE	0.22	0.81
STODDARD SOLVENT	<20	<20

#144		
ANALYTE	5.0'	15.0'
TCE	13	82
PCE	0.35	4.1
STODDARD SOLVENT	<20	<20

#142		
ANALYTE	5.0'	15.0'
TCE	3.8	14
PCE	0.26	0.66
STODDARD SOLVENT	<10	<10

#145		
ANALYTE	5.0'	15.0'
TCE	1.7	9.1
PCE	<0.20	0.48
STODDARD SOLVENT	<20	<10

#146			
ANALYTE	5.0'	5.0' DUP	15.0'
TCE	38	54	92
PCE	2.4	2.9	3.4
STODDARD SOLVENT	<10	<20	<50

#88			
ANALYTE	5.0'	15.0'	15.0' DUP
TCE	310	390	280
PCE	15	18	10
STODDARD SOLVENT	<400	<500	<500

#91			
ANALYTE	5.0'	15.0'	15.0' DUP
TCE	2.0	4.8	4.6
PCE	0.73	1.1	1.2
STODDARD SOLVENT	<10	<10	<10

#90		
ANALYTE	5.0'	15.0'
TCE	1.2	<0.10
PCE	0.97	0.14
STODDARD SOLVENT	<10	<10

#92			
ANALYTE	5.0'	15.0'	15.0' DUP
TCE	2.4	0.87	1.3
PCE	<1.0	0.47	0.66
STODDARD SOLVENT	<100	<10	<10

#89		
ANALYTE	5.0'	15.0'
TCE	<1.0	1.5
PCE	1.1	1.3
STODDARD SOLVENT	<100	<20

#93		
ANALYTE	5.0'	15.0'
TCE	1.5	0.58
PCE	<1.0	0.53
STODDARD SOLVENT	<100	<10

#11		
ANALYTE	5.0'	15.0'
TCE	350	1100
PCE	<5.0	40
STODDARD SOLVENT	<500	<500

#84			
ANALYTE	5.0'	15.0'	15.0' DUP
TCE	100	250	210
PCE	11	25	13
STODDARD SOLVENT	<100	<200	<200

#10		
ANALYTE	5.0'a	15.0'
TCE	490	1100
PCE	<10	29
STODDARD SOLVENT	<1000	<500

#9				
	PV1	PV3	PV7	
ANALYTE	5.0'	5.0'	5.0'	15.0'
TCE	150	220	310	590
PCE	2.4	3.6	8.0	12
STODDARD SOLVENT	<100	<100	<100	<100

#131		
ANALYTE	5.0'	15.0'
TCE	73	200
PCE	7.2	18
STODDARD SOLVENT	<50	<100

#7		
ANALYTE	5.0'a	15.0'a
TCE	220	75
PCE	<5.0	<5.0
STODDARD SOLVENT	<500	<500

#5		
ANALYTE	5.0'a	15.0'
TCE	4.2	14
PCE	<0.50	<0.50
STODDARD SOLVENT	<50	<50

#16		
ANALYTE	5.0'	15.0'
TCE	3.4	5.6
PCE	0.94	2.0
STODDARD SOLVENT	<20	<100

#2		
ANALYTE	5.0'a	15.0'a
TCE	<0.50	<0.50
PCE	<0.50	<0.50
STODDARD SOLVENT	<50	<50

#4		
ANALYTE	5.0'a	15.0'
TCE	14	5.7
PCE	1.1	<0.50
STODDARD SOLVENT	<50	<50

#8		
ANALYTE	5.0'a	15.0'a
TCE	130	160
PCE	<1.0	<4.0
STODDARD SOLVENT	<100	<400

EXPLANATION

- #140 Soil vapor sampling point, 2006
- #10 Soil vapor sampling point, 2005
- #40 Soil boring, 2005 and 2006
- 20 B Column and row numbering system for footings
- Site boundary
- Approximate 100 µg/l iso-concentration for TCE @ 5 feet in soil vapor
- Approximate 100 µg/l iso-concentration for TCE @ 15 feet in soil vapor
- Railroad track (at grade)
- Chain link fence
- Railroad track (buried)
- BLDG Building
- Observation area
- 5.0' Sample depth at feet below ground surface
- TCE Trichloroethene
- PCE Tetrachloroethene
- <2.0 Sample result is less than the reporting limit shown
- DUP Duplicate sample
- -- Not analyzed

NOTES:

1. All locations are approximate.
2. VOC samples analyzed using EPA Test Method 8260M.
3. VOC sample results reported in micrograms per liter (µg/l).

Approximate Scale in Feet

0 30 60

0 9 18

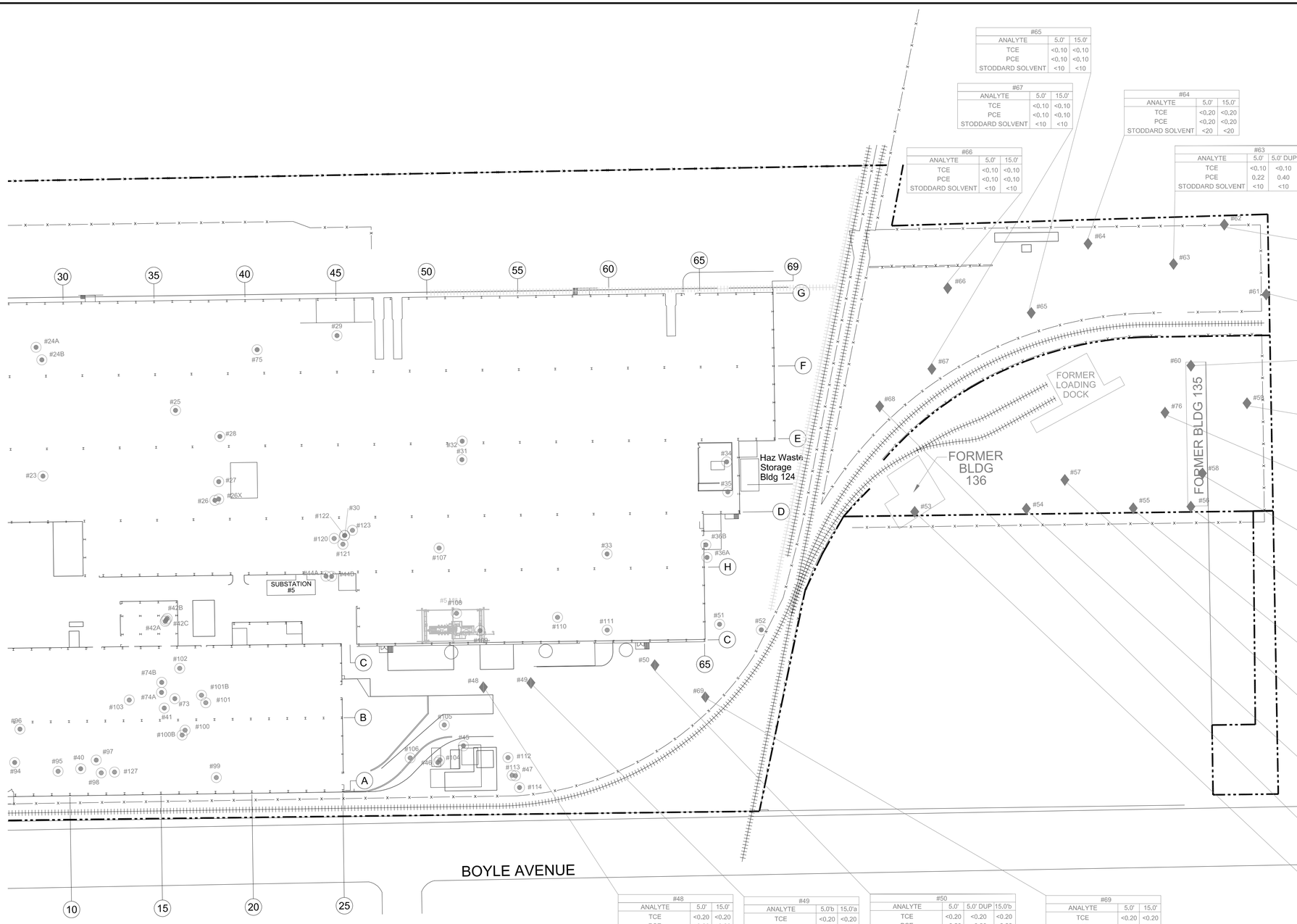
Approximate Scale in Meters

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002, Geraghty & Miller, Inc. "Groundwater Elevation and Volatile Organic Compound Concentrations December 8, 1994" figure dated February 2, 1995, Aluminum Company of America "Works General-MPA" figure dated October 10, 1984, and Los Angeles County Assessor's Office Parcel Map 6310/Sheet 8 dated November 5, 1958.

SELECTED VOLATILE ORGANIC COMPOUNDS IN SOIL VAPOR, BUILDINGS 106,108,110, & 112
APRIL - MAY 2006
PECHINEY CAST PLATE FACILITY
3200 Fruitland Avenue
Vernon, California

By: kle	Date:11/28/06	Project No. 10627
Geomatrix		Figure 4a

Plot Date: 12/19/06 - 5:23pm, Plotted by: pherring
Drawing Path: V:\10627.000\Dwg\6_Drawing Name: VOC_SOIL_1206_ONE.dwg



#65		
ANALYTE	5.0'	15.0'
TCE	<0.10	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	<10

#67		
ANALYTE	5.0'	15.0'
TCE	<0.10	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	<10

#64		
ANALYTE	5.0'	15.0'
TCE	<0.20	<0.20
PCE	<0.20	<0.20
STODDARD SOLVENT	<20	<20

#66		
ANALYTE	5.0'	15.0'
TCE	<0.10	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	<10

#63			
ANALYTE	5.0'	5.0' DUP	15.0'
TCE	<0.10	<0.10	<0.10
PCE	0.22	0.40	<0.10
STODDARD SOLVENT	<10	<10	<10

#62		
ANALYTE	5.0'	15.0'
TCE	<0.20	<0.20
PCE	<0.20	<0.20
STODDARD SOLVENT	<20	<20

#61		
ANALYTE	5.0'	15.0'
TCE	<0.10	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	<10

#60		
ANALYTE	5.0'	15.0'
TCE	<0.10	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	<10

#59			
ANALYTE	5.0'	15.0'	15.0' DUP
TCE	<0.10	<0.10	<0.10
PCE	<0.10	<0.10	<0.10
STODDARD SOLVENT	<10	<10	<10

#76		
ANALYTE	5.0'	15.0'
TCE	<0.10	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	<10

#58		
ANALYTE	5.0'	15.0'
TCE	<0.10	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	<10

#56		
ANALYTE	5.0'	15.0'
TCE	<0.10	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	<10

#55		
ANALYTE	5.0'	15.0'
TCE	<0.10	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	<10

#57		
ANALYTE	5.0'	15.0'
TCE	<0.10	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	<10

#54		
ANALYTE	5.0'	15.0'
TCE	<0.10	<0.10
PCE	<0.10	<0.10
STODDARD SOLVENT	<10	<10

#68			
ANALYTE	5.0'	15.0'	15.0' DUP
TCE	<0.10	<0.10	<0.10
PCE	<0.10	<0.10	<0.10
STODDARD SOLVENT	<10	<10	<10

#53			
ANALYTE	5.0'	15.0'	15.0' DUP
TCE	<0.10	<0.10	<0.10
PCE	<0.10	<0.10	<0.10
STODDARD SOLVENT	<10	<10	<10

#48		
ANALYTE	5.0'	15.0'
TCE	<0.20	<0.20
PCE	<0.20	<0.20
STODDARD SOLVENT	<20	<20

#49		
ANALYTE	5.0'b	15.0'a
TCE	<0.20	<0.20
PCE	<0.20	<0.20
STODDARD SOLVENT	<20	<20

#50			
ANALYTE	5.0'	5.0' DUP	15.0'b
TCE	<0.20	<0.20	<0.20
PCE	<0.20	<0.20	<0.20
STODDARD SOLVENT	530	830	720

#69		
ANALYTE	5.0'	15.0'
TCE	<0.20	<0.20
PCE	<0.20	<0.20
STODDARD SOLVENT	<20	<20

EXPLANATION

- #10 Soil vapor sampling point, 2005
- #40 Soil boring, 2005 and 2006
- (20) (B) Column and row numbering system for footings
- Site boundary
- Railroad track (at grade)
- Chain link fence
- Railroad track (buried)
- BLDG Building
- Observation area
- 5.0' Sample depth at feet below ground surface
- TCE Trichloroethene
- PCE Tetrachloroethene
- <2.0 Sample result is less than the reporting limit shown
- DUP Duplicate sample
- -- Not analyzed

NOTES:

1. All locations are approximate.
2. VOC samples analyzed using EPA Test Method 8260M.
3. VOC sample results reported in micrograms per liter (µg/l).

Approximate Scale in Feet: 0 30 60

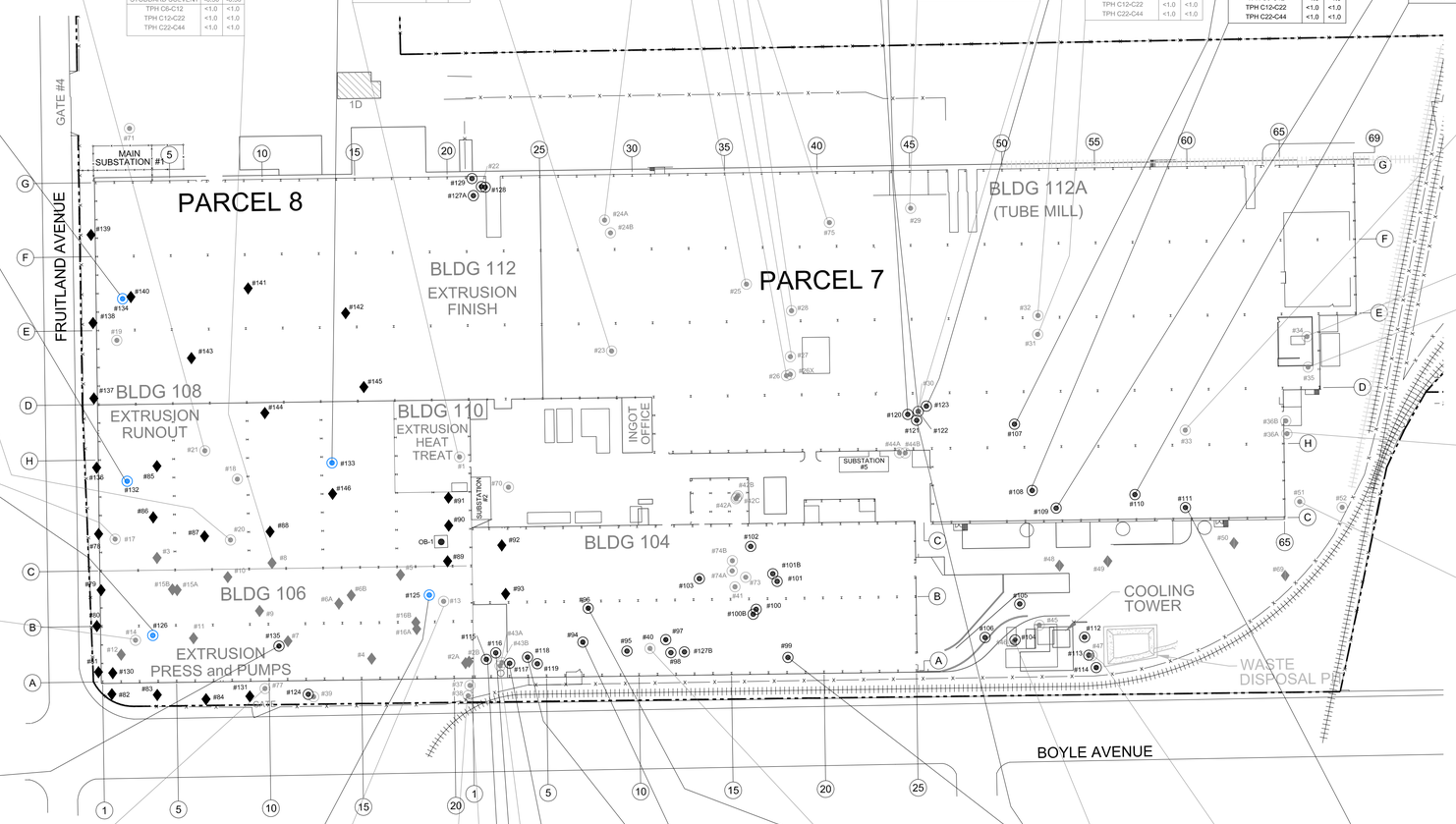
Approximate Scale in Meters: 0 9 18

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002, Geraghty & Miller, Inc. "Groundwater Elevation and Volatile Organic Compound Concentrations December 8, 1994" figure dated February 2, 1995, Aluminum Company of America "Works General-MPA" figure dated October 10, 1984, and Los Angeles County Assessor's Office Parcel Map 6310/Sheet 8 dated November 5, 1958.

SELECTED VOLATILE ORGANIC COMPOUNDS IN SOIL VAPOR, BUILDING 112A AND PARCEL 6
APRIL - MAY 2006
PECHINEY CAST PLATE FACILITY
3200 Fruitland Avenue
Vernon, California

By: SBN	Date:11/20/06	Project No. 10627
Geomatrix		Figure 4b

Plot Date: 12/19/06 - 5:20pm, Plotted by: pherring
Drawing Path: Y:\10627.000\Acad\, Drawing Name: VOC_SOIL_1208_TWO.dwg



#133													
ANALYTE	11.0'	21.0'	30.8'	41.0'	56.0'	61.0'	70.8'	80.5'	86.0'	95.0'	105.5'	115.0'	125.5'	135.3'	150.0'
TCE	75	39	13	65	130	<5.0	<5.0	27	17	<5.0	9.5	<5.0	<5.0	<5.0	150
PCE	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1.5
BENZENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
TOLUENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
ETHYLBENZENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
TOTAL XYLENES	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
STODDARD SOLVENT	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<100
TPH C6-C12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<10
TPH C12-C22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	144
TPH C22-C44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	141

#134														
ANALYTE	11.0'	20.5'	31.0	41.0'	51.0'	60.5'	70.5'	80.5'	90.5'	100.3'	110.5'	121.0'	130.5'	149.5'
TCE	<5.0	<5.0	22	<5.0	39	<5.0	<5.0	<5.0	<5.0	<5.0	7.4	14	<5.0	110
PCE	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.50
BENZENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
TOLUENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
ETHYLBENZENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
TOTAL XYLENES	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
STODDARD SOLVENT	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<100
TPH C6-C12	--	--	--	--	--	--	--	--	--	--	--	--	--	<10
TPH C12-C22	--	--	--	--	--	--	--	--	--	--	--	--	--	<10
TPH C22-C44	--	--	--	--	--	--	--	--	--	--	--	--	--	<10

#132														
ANALYTE	10.8'	26.0'	36.0'	46.0'	51.0'	60.5'	70.5'	81.0'	91.0'	105.0'	120.5'	130.5'	140.0'	150.0'
TCE	<5.0	240	280	670	2700	28	40	11	<5.0	120	<5.0	<5.0	<5.0	150
PCE	<5.0	11	18	20	42	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1.8
BENZENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
TOLUENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
ETHYLBENZENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
TOTAL XYLENES	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
STODDARD SOLVENT	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<100
TPH C6-C12	--	--	--	--	--	--	--	--	--	--	--	--	--	<10
TPH C12-C22	--	--	--	--	--	--	--	--	--	--	--	--	--	81
TPH C22-C44	--	--	--	--	--	--	--	--	--	--	--	--	--	162

#20		
ANALYTE	6.5'	10.5'
TCE	7.9	32
PCE	<5.0	<5.0
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#17		
ANALYTE	2.7'	6.3'
TCE	92	94
PCE	5.0	7.2
BENZENE	<2.0	<2.0
TOLUENE	<2.0	2.5
ETHYLBENZENE	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50

#126										
ANALYTE	53.0'	66.0'	75.5'	85.5'	95.5'	105.5'	115.5'	120.70'	135.25'	150.0'
TCE	3800	160	24	260	35	1100	<5.0	940	510	420
PCE	210	160	190	190	250	260	160	130	100	4.6
BENZENE	4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
TOLUENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
ETHYLBENZENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.50
TOTAL XYLENES	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
STODDARD SOLVENT	3.9	<0.50	<0.50	0.60	<0.50	1.8	<0.50	1.3	0.96	440
TPH C6-C12	--	--	--	--	--	--	--	--	--	<10
TPH C12-C22	--	--	--	--	--	--	--	--	--	158
TPH C22-C44	--	--	--	--	--	--	--	--	--	73

#14							
ANALYTE	6.5'	11.5'	21.5'	31.5'	43.5'	46.5'	48.5'
TCE	83	53	280	81	39	3700	2200
PCE	8.4	<5.0	12	<5.0	<5.0	59	61
BENZENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TOLUENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
TPH C6-C12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH C12-C22	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH C22-C44	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

#21		
ANALYTE	6.8'	10.0'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#8		
ANALYTE	5.5'	16.1'
TCE	<5.0	18
PCE	<5.0	<5.0
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#1		
ANALYTE	3.0'	6.5'
TCE	<5.0	<5.0
PCE	<5.0	<5.0
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#26		
ANALYTE	5.2'	8.8'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#25		
ANALYTE	4.8'	8.7'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#24		
ANALYTE	2.7'	7.5'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#23		
ANALYTE	5.0'	9.0'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#120			
ANALYTE	10.0'	15.0'	20.5'
TPH C6-C12	<1.0	<1.0	<1.0
TPH C12-C22	<1.0	<1.0	<1.0
TPH C22-C44	<1.0	<1.0	<1.0

#27		
ANALYTE	4.8'	9.0'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#28		
ANALYTE	5.0'	8.8'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#75		
ANALYTE	4.8'	8.9'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#122			
ANALYTE	9.5'	14.5'	20.0'
TPH C6-C12	<1.0	<1.0	<1.0
TPH C12-C22	401.1	<1.0	<1.0
TPH C22-C44	1216.4	<1.0	<1.0

#29		
ANALYTE	2.8'	6.7'
TCE	<5.0	<5.0
PCE	<5.0	<5.0
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#30			
ANALYTE	[3.5']	6.3'	9.6'
TCE	<5.0	<5.0	<5.0
PCE	<5.0	<5.0	<5.0
BENZENE	<2.0	<2.0	<2.0
TOLUENE	3.5	<2.0	2.1
ETHYLBENZENE	<2.0	<2.0	<2.0
TOTAL XYLENES	2.6	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50	<0.50
TPH C6-C12	<1.0	<1.0	<1.0
TPH C12-C22	2.3	111	195.3
TPH C22-C44	19.8	588	853.2

[ ] SUMP SAMPLE

#123			
ANALYTE	10.0'	15.3'	20.5'
TPH C6-C12	<1.0	<1.0	<1.0
TPH C12-C22	<1.0	<1.0	<1.0
TPH C22-C44	<1.0	<1.0	<1.0

#32		
ANALYTE	2.0'	6.5'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#31		
ANALYTE	1.8'	6.4'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#107			
ANALYTE	[2.7']	4.5'	7.3'
TPH C6-C12	<1.0	<1.0	<1.0
TPH C12-C22	626.6	<1.0	37.2
TPH C22-C44	913	<1.0	143

[ ] SUMP SAMPLE

#108		
ANALYTE	5.3'	7.3'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#109		
ANALYTE	5.3'	7.3'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#110		
ANALYTE	2.5'	6.5'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#33		
ANALYTE	2.8'	6.8'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#34			
ANALYTE	3.1'	6.9'	11.1'
TCE	<5.0	<5.0	<500
PCE	<5.0	<5.0	<500
BENZENE	<2.0	<2.0	<200
TOLUENE	<2.0	2.5	<200
ETHYLBENZENE	<2.0	<2.0	<200
TOTAL XYLENES	<2.0	<2.0	1660
STODDARD SOLVENT	1.6	<0.50	890
TPH C6-C12	9.6	<1.0	420
TPH C12-C22	77.5	<1.0	365.3
TPH C22-C44	185.2	<1.0	<1.0

#35		
ANALYTE	2.7'	7.1'
TCE	<5.0	<5.0
PCE	<5.0	<5.0
BENZENE	<2.0	<2.0
TOLUENE	5.7	4.8
ETHYLBENZENE	<2.0	<2.0
TOTAL XYLENES	2.5	<2.0
STODDARD SOLVENT	<0.50	<0.50
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#36		
ANALYTE	2.3'	7.5'
TCE	<5.0	--
PCE	<5.0	--
BENZENE	<2.0	--
TOLUENE	4.6	--
ETHYLBENZENE	<2.0	--
TOTAL XYLENES	2.9	--
STODDARD SOLVENT	<0.50	--
TPH C6-C12	<1.0	<1.0
TPH C12-C22	83.9	<1.0
TPH C22-C44	81.5	<1.0

#51		
ANALYTE	3.0'	6.9'
TCE	<5.0	<5.0
PCE	<5.0	<5.0
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#135						
ANALYTE	11.0'	21.0'	31.0'	40.5'	51.0'	52.5'
TCE	31	120	44	40	2000	1200
PCE	<5.0	9.3	<5.0	<5.0	94	53
BENZENE	<2.0	<2.0	<2.0	<2.0	14	6.2
TOLUENE	8.5	3.1	<2.0	5.7	4.5	6.2
ETHYLBENZENE	4.5	<2.0	<2.0	3.1	2.4	3.4
TOTAL XYLENES	22.5	7.8	2.2	15.0	13.4	16.8
STODDARD SOLVENT	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

#77		
ANALYTE	5.7'	16.3'
TCE	16	10
PCE	<5.0	<5.0
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#125													
ANALYTE	50.5'	61.0'	71.0'	80.5'	91.0'	101.0'	111.0'	121.0'	131.0'	135.5'	142.0'	149.0'	150.0'
TCE	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	21	8.3	<5.0	<5.0	<5.0	72	110
PCE	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.50	0.95
BENZENE	720	1600	27	31	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.8	3.3
TOLUENE	1400	1500	9.4	20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.9	29
ETHYLBENZENE	210	190	<2.0	3.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	0.85	14
TOTAL XYLENES	1390	1060	14.4	32	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	5.9	81
STODDARD SOLVENT	13	6.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	180	870
TPH C6-C12	--	--	--	--	--	--	--	--	--	--	--	--	250
TPH C12-C22	--	--	--	--	--	--	--	--	--	--	--	--	398
TPH C22-C44	--	--	--	--	--	--	--	--	--	--	--	--	365

#38		
ANALYTE	8.1'	16.0'
TCE	<5.0	<5.0
PCE	<5.0	<5.0
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50

#37		
ANALYTE	8.1'	16.1'
TCE	<5.0	<5.0
PCE	<5.0	<5.0
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50

#13						
ANALYTE	6.5'	11.5'	21.5'	31.5'	41.5'	46.5'
TCE	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
PCE	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
BENZENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TOLUENE	<2.0	<2.0	<2.0	<2.0	<2.0	3.9
ETHYLBENZENE	<2.0	<2.0	<2.0	<2.0	<2.0	8.6
TOTAL XYLENES	<2.0	<2.0	<2.0	<2.0	<2.0	89
STODDARD SOLVENT	<0.50	<0.50	<0.50	<0.50	<0.50	1.7
TPH C6-C12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH C12-C22	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH C22-C44	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

#115			
ANALYTE	26.0'	31.0'	49.5'
TCE	<5.0	<5.0	<5.0
PCE	<5.0	<5.0	<5.0
BENZENE	<2.0	<2.0	2.8
TOLUENE	<2.0	<2.0	5.8
ETHYLBENZENE	<2.0	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0	79.1
STODDARD SOLVENT	<0.50	<0.50	5.3

#116	
ANALYTE	50.5'
TCE	<5.0
PCE	<5.0
BENZENE	7.1
TOLUENE	27
ETHYLBENZENE	4.4
TOTAL XYLENES	397
STODDARD SOLVENT	8.1

#117	
ANALYTE	35.5'
TCE	<5.0
PCE	<5.0
BENZENE	<2.0
TOLUENE	<2.0
ETHYLBENZENE	<2.0
TOTAL XYLENES	<2.0
STODDARD SOLVENT	<0.50

#43		
ANALYTE	2.5'	7.5'
TCE	<5.0	<5.0
PCE	<5.0	<5.0
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
TOTAL XYLENES	<2.0	6.0
STODDARD SOLVENT	<0.50	<0.50
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#118	
ANALYTE	31.0'
TCE	<5.0
PCE	<5.0
BENZENE	<2.0
TOLUENE	<2.0
ETHYLBENZENE	<2.0
TOTAL XYLENES	<2.0
STODDARD SOLVENT	<0.50

#94	
ANALYTE	51.0'
TCE	<5.0
PCE	<5.0
BENZENE	<2.0
TOLUENE	<2.0
ETHYLBENZENE	<2.0
TOTAL XYLENES	<2.0
STODDARD SOLVENT	<0.50

#96		
ANALYTE	51.0'	56.0'
TCE	<5.0	<5.0
PCE	<5.0	<5.0
BENZENE	7.3	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	20.0	<2.0
TOTAL XYLENES	2.7	<2.0
STODDARD SOLVENT	2.4	<0.50

#40					
ANALYTE	31.5'	41.5'	51.5'	61.5'	71.5'
TPH C6-C12	<1.0	<1.0	<1.0	<1.0	<1.0
TPH C12-C22	<1.0	<1.0	<1.0	<1.0	<1.0
TPH C22-C44	<1.0	<1.0	<1.0	<1.0	<1.0

#46		
ANALYTE	3.0'	6.5'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	29.9	<1.0
TPH C22-C44	182.5	<1.0

#47		
ANALYTE	6.2'	11.0'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	15.5	<1.0

#111		
ANALYTE	2.5'	7.3'
TPH C6-C12	<1.0	<1.0
TPH C12-C22	<1.0	<1.0
TPH C22-C44	<1.0	<1.0

#121			
ANALYTE	10.0'	15.3'	20.0'
TPH C6-C12	<1.0	<1.0	<1.0
TPH C12-C22	6.7	<1.0	<1.0
TPH C22-C44	119.2	<1.0	<1.0

#99					
ANALYTE	30.5'	40.5'	50.5'	70.5'	80.5'
TCE	<5.0	<5.0	<5.0	<5.0	<5.0
PCE	<5.0	<5.0	<5.0	<5.0	<5.0
BENZENE	<2.0	<2.0	<2.0	<2.0	<2.0
TOLUENE	<2.0	<2.0	<2.0	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0	<2.0	<2.0	<2.0
TOTAL XYLENES	<2.0	<2.0	<2.0	<2.0	<2.0
STODDARD SOLVENT	<0.50	<0.50	<0.50	<0.50	<0.50

EXPLANATION

- #78 Soil vapor sampling point, 2006
- #10 Soil vapor sampling point, 2005
- #125 Soil boring with groundwater samples, 2006
- #109 Soil boring, 2006
- #40 Soil boring, 2005
- (20) (B) Column and row numbering system for footings
- Site boundary
- Railroad track (at grade)
- Chain link fence
- Railroad track (buried)
- BLDG Building
- Observation area
- 2.7' Sample depth at feet below ground surface
- TCE Trichloroethene
- PCE Tetrachloroethene
- TPH Total Petroleum Hydrocarbons
- C6-C12 Gasoline range
- C12-C22 Diesel range
- C22-C44 Waste oil range
- <2.0 Sample result is less than the reporting limit shown
- -- Not analyzed
- 150.5' Groundwater results

NOTES:

1. All locations are approximate.
2. VOC samples and Stoddard Solvent samples analyzed using EPA Test Method 8260B/5035. TPH samples analyzed using EPA Test Method 8015M.
3. VOC sample results reported in micrograms per kilogram (µg/kg) for soil and micrograms per liter (µg/l) for water.
4. Stoddard Solvent and TPH sample results reported in milligrams per kilogram (mg/kg) for soil and micrograms per liter (µg/l) for water.

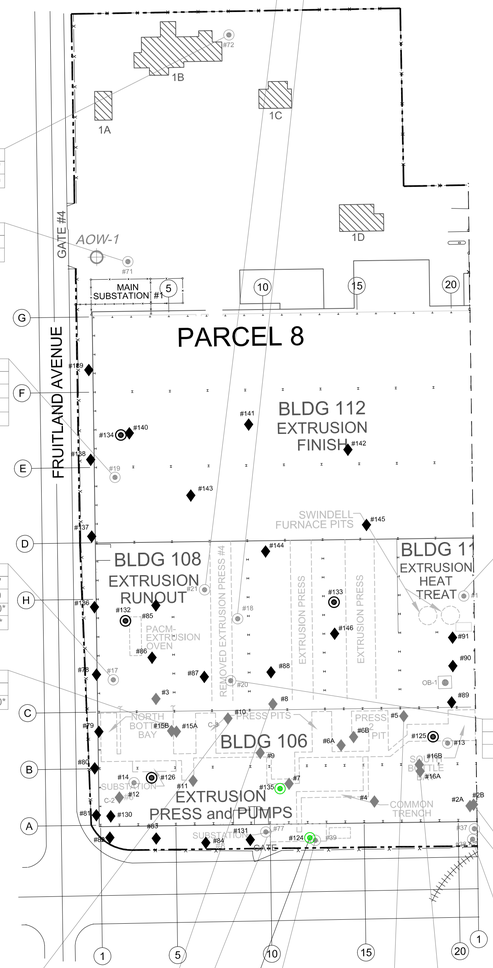
0 40 80
0 12 24
Approximate Scale in Meters

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002, Geraghty & Miller, Inc. "Groundwater Elevation and Volatile Organic Compound Concentrations December 8, 1994" figure dated February 2, 1995, Aluminum Company of America "Works General-MPA" figure dated October 10, 1984, and Los Angeles County Assessor's Office Parcel Map 6310/Sheet 8 dated November 5, 1958.

SELECTED VOLATILE ORGANIC COMPOUNDS AND TOTAL PETROLEUM HYDROCARBONS IN SOIL & GROUNDWATER
APRIL - MAY 2006
PECHINEY CAST PLATE FACILITY
3200 Fruitland Avenue
Vernon, California

By: SBN	Date:11/20/06	Project No. 10627
Geomatrix		Figure 5

Plot Date: 12/19/06 - 5:20pm, Plotted by: pherring
Drawing Path: Y:\10627.000\Acad\, Drawing Name: SPG_soil_1206 data v3.dwg



#21		
ANALYTE	6.8'	10.0'
PCBs	<20	<20
PCBs (T. CONCRETE)	7200*	

#18	
ANALYTE	2.8'
PCBs	<20
PCBs (T. CONCRETE)	<200
PCBs (B. CONCRETE)	610*

#72		
ANALYTE	10.8'	20.8'
PCBs	<200	<200

#71			
ANALYTE	2.3'	6.3'	11.1'
PCBs	570**	<100	140*

#19	
ANALYTE	2.8'
PCBs	<20
PCBs (T. CONCRETE)	1800*
PCBs (B. CONCRETE)	830*

#17		
ANALYTE	2.7'	6.3'
PCBs	<20	<20
PCBs (T. CONCRETE)	2200*	
PCBs (B. CONCRETE)	100*	

#15	
ANALYTE	
PCBs (T. CONCRETE)	1100*

#1		
ANALYTE	3.0'	6.5'
PCBs	<20	<20

#20		
ANALYTE	6.5'	10.5'
PCBs	<200	<200

#2	
ANALYTE	3.2'
PCBs	<200
PCBs (T. CONCRETE)	7200*
PCBs (B. CONCRETE)	150*

#37		
ANALYTE	8.1'	16.1'
PCBs	<100	<20

#38		
ANALYTE	8.1'	16.0'
PCBs	680*	<20

#10	
ANALYTE	2.7'
PCBs	350*
PCBs (T. CONCRETE)	32,000*
PCBs (B. CONCRETE)	180*

#8		
ANALYTE	5.5'	16.1'
PCBs	88*	62*

#16	
ANALYTE	
PCBs (T. CONCRETE)	11,000*

#5	
ANALYTE	
PCBs (T. CONCRETE)	<2000

#77		
ANALYTE	5.7'	16.3'
PCBs	<20	<20

#124	
ANALYTE	5.0'
PCBs	<200

#39			
ANALYTE	2.2'	6.3'	11.0'
PCBs	6700*	<20	<20

EXPLANATION

- #78 Soil vapor sampling point, 2006
- #10 Soil vapor sampling point, 2005
- #124 Soil boring, 2006
- #134 Soil boring with groundwater sample, 2006
- #40 Soil boring, 2005
- 20 B Column and row numbering system for footings
- Site boundary
- Railroad track (at grade)
- Chain link fence
- Railroad track (buried)
- BLDG Building
- Observation area
- 6.0' Sample depth at feet below ground surface
- <2.0 Sample result is less than the reporting limit shown
- -- Not analyzed
- T. CONCRETE Top of concrete sample
- B. CONCRETE Bottom of concrete sample
- J Estimated concentration
- * Aroclor-1248
- ** Aroclor-1260

NOTES:

1. All locations are approximate.
2. Samples analyzed using EPA method 8082.
3. Sample results reported in micrograms per kilogram (mg/kg).

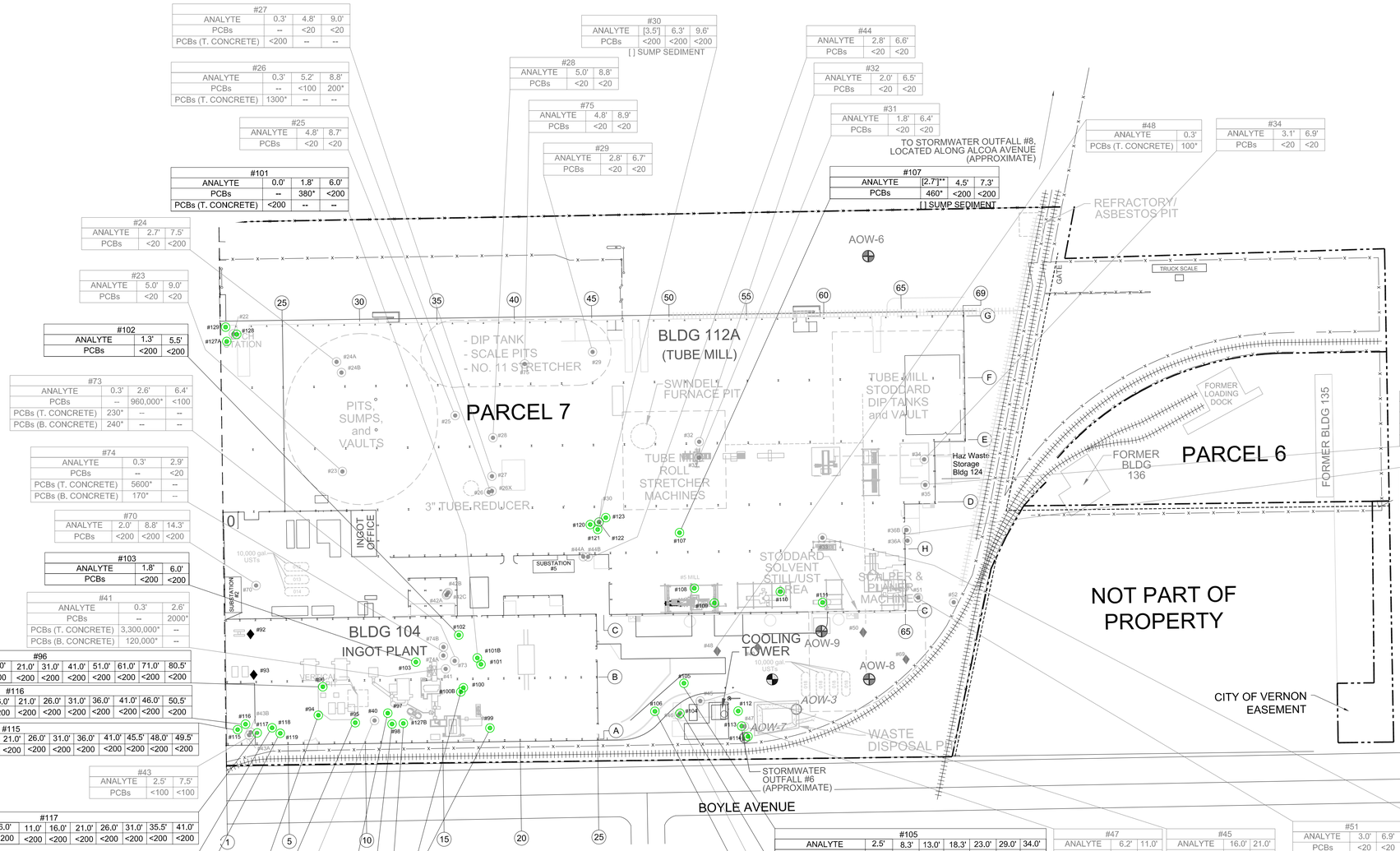
Approximate Scale in Feet
0 40 80
0 12 24
Approximate Scale in Meters

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002, Geraghty & Miller, Inc. "Groundwater Elevation and Volatile Organic Compound Concentrations December 8, 1994" figure dated February 2, 1995, Aluminum Company of America "Works General-MPA" figure dated October 10, 1984, and Los Angeles County Assessor's Office Parcel Map 6310/Sheet 8 dated November 5, 1958.

TOTAL POLYCHLORINATED BIPHENYLS
IN SOIL & CONCRETE, BUILDINGS 106,108,110, & 112
APRIL - MAY 2006
PECHINEY CAST PLATE FACILITY
3200 Fruitland Avenue
Vernon, California

By: SBN	Date:11/20/06	Project No. 10627
Geomatrix		Figure 6a

Plot Date: 12/19/06 - 5:19pm, Plotted by: pherring
Drawing Path: Y:\10627.000\Acad\, Drawing Name: pcb_1206_data_A.dwg



#27			
ANALYTE	0.3'	4.8'	9.0'
PCBs	--	<20	<20
PCBs (T. CONCRETE)	<200	--	--

#26			
ANALYTE	0.3'	5.2'	8.8'
PCBs	--	<100	200*
PCBs (T. CONCRETE)	1300*	--	--

#25		
ANALYTE	4.8'	8.7'
PCBs	<20	<20

#101			
ANALYTE	0.0'	1.8'	6.0'
PCBs	--	380*	<200
PCBs (T. CONCRETE)	<200	--	--

#24		
ANALYTE	2.7'	7.5'
PCBs	<20	<200

#23		
ANALYTE	5.0'	9.0'
PCBs	<20	<20

#102		
ANALYTE	1.3'	5.5'
PCBs	<200	<200

#73			
ANALYTE	0.3'	2.6'	6.4'
PCBs	--	960,000*	<100
PCBs (T. CONCRETE)	230*	--	--
PCBs (B. CONCRETE)	240*	--	--

#74		
ANALYTE	0.3'	2.9'
PCBs	--	<20
PCBs (T. CONCRETE)	5600*	--
PCBs (B. CONCRETE)	170*	--

#70			
ANALYTE	2.0'	8.8'	14.3'
PCBs	<200	<200	<200

#103		
ANALYTE	1.8'	6.0'
PCBs	<200	<200

#41		
ANALYTE	0.3'	2.6'
PCBs	--	2000*
PCBs (T. CONCRETE)	3,300,000*	--
PCBs (B. CONCRETE)	120,000*	--

#96								
ANALYTE	11.0'	21.0'	31.0'	41.0'	51.0'	61.0'	71.0'	80.5'
PCBs	<200	<200	<200	<200	<200	<200	<200	<200

#116										
ANALYTE	6.0'	11.0'	16.0'	21.0'	26.0'	31.0'	36.0'	41.0'	46.0'	50.5'
PCBs	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200

#115											
ANALYTE	6.0'	11.0'	16.0'	21.0'	26.0'	31.0'	36.0'	41.0'	45.5'	48.0'	49.5'
PCBs	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200

#43		
ANALYTE	2.5'	7.5'
PCBs	<100	<100

#117								
ANALYTE	6.0'	11.0'	16.0'	21.0'	26.0'	31.0'	35.5'	41.0'
PCBs	<200	<200	<200	<200	<200	<200	<200	<200

#118								
ANALYTE	6.0'	11.0'	16.0'	21.0'	26.0'	31.0'	36.0'	41.0'
PCBs	<200	<200	<200	<200	<200	<200	<200	<200

#119								
ANALYTE	6.0'	11.0'	16.0'	21.0'	26.0'	31.0'	36.0'	41.0'
PCBs	<200	<200	<200	<200	<200	<200	<200	<200

#94								
ANALYTE	10.5'	21.0'	31.0'	41.0'	51.0'	61.0'	71.0'	81.0'
PCBs	3500*	<200	<200	<200	<200	<200	<200	<200

#95								
ANALYTE	10.5'	20.5'	30.5'	40.5'	50.5'	60.5'	70.5'	80.5'
PCBs	77,000*	2,000,000*	260*	580*	<200	<200	<200	<200

#40									
ANALYTE	8.5'	11.5'	21.5'	26.5'	31.5'	41.5'	51.5'	61.5'	66.5	71.5'
PCBs	440,000J*	5,700J*	2,000,000J*	280J*	710*	440*	520*	400*	<100J	490*

#30			
ANALYTE	[3.5']	6.3'	9.6'
PCBs	<200	<200	<200

[ ] SUMP SEDIMENT

#28		
ANALYTE	5.0'	8.8'
PCBs	<20	<20

#75		
ANALYTE	4.8'	8.9'
PCBs	<20	<20

#29		
ANALYTE	2.8'	6.7'
PCBs	<20	<20

#44		
ANALYTE	2.8'	6.6'
PCBs	<20	<20

#32		
ANALYTE	2.0'	6.5'
PCBs	<20	<20

#31		
ANALYTE	1.8'	6.4'
PCBs	<20	<20

#107			
ANALYTE	[2.7']**	4.5'	7.3'
PCBs	460*	<200	<200

[ ] SUMP SEDIMENT

#48	
ANALYTE	0.3'
PCBs (T. CONCRETE)	100*

#34		
ANALYTE	3.1'	6.9'
PCBs	<20	<20

#35			
ANALYTE	0.3'	2.7'	7.1'
PCBs	--	<20	<20
PCBs (T. CONCRETE)	<200	--	--
PCBs (B. CONCRETE)	<100	--	--

#36			
ANALYTE	0.3'	2.3'	7.5'
PCBs	--	<20	<200
PCBs (T. CONCRETE)	<200	--	--

#99								
ANALYTE	10.5'	20.5'	30.5'	40.5'	50.5'	60.5'	70.5'	80.5'
PCBs	<200	<200	<200	<200	<200	<200	<200	<200

#100			
ANALYTE	0.0'	1.5'	6.0'
PCBs	--	74,000*	<200
PCBs (T. CONCRETE)	<200	--	--

#127b								
ANALYTE	11.0'	21.0'	31.0'	41.0'	51.0'	61.0'	71.0'	81.0'
PCBs	580*	1200*	330*	<200	<200	<200	<200	<200

#98			
ANALYTE	10.5'	20.5'	30.5'
PCBs	44,000*	<200	12,000*

#97								
ANALYTE	9.5'	20.5'	30.5'	40.5'	50.5'	60.5'	70.5'	80.5'
PCBs	<200	<200	<200	<200	<200	<200	<200	<200

#105							
ANALYTE	2.5'	8.3'	13.0'	18.3'	23.0'	29.0'	34.0'
PCBs	<200	<200	<200	<200	<200	<200	<200

#104		
ANALYTE	24.3'	29.0'
PCBs	<200	<200

#46		
ANALYTE	16.0'	21.1'
PCBs	<20	730*

#106							
ANALYTE	5.0'	9.0'	14.0'	19.0'	24.0'	29.0'	34.0'
PCBs	<200	<200	<200	<200	<200	<200	<200

#47		
ANALYTE	6.2'	11.0'
PCBs	<200	<200

#45		
ANALYTE	16.0'	21.0'
PCBs	<20	<20

#51		
ANALYTE	3.0'	6.9'
PCBs	<20	<20

#33		
ANALYTE	2.8'	6.8'
PCBs	<20	<20

EXPLANATION

- #78 Soil vapor sampling point, 2006
- #10 Soil vapor sampling point, 2005
- #115 Soil boring, 2006
- #40 Soil boring, 2005
- (20) (B) Column and row numbering system for footings
- Site boundary
- Railroad track (at grade)
- Chain link fence
- Railroad track (buried)
- BLDG Building
- Observation area
- 6.0' Sample depth at feet below ground surface
- <2.0 Sample result is less than the reporting limit shown
- -- Not analyzed
- T. CONCRETE Top of concrete sample
- B. CONCRETE Bottom of concrete sample
- J Estimated concentrations
- * Aroclor-1248
- ** Aroclor-1260
- PCBs Polychlorinated Biphenyls

NOTES:

1. All locations are approximate.
2. Samples analyzed using EPA method 8082.
3. Sample results reported in micrograms per kilogram (mg/kg).

Approximate Scale in Feet: 0, 40, 80

Approximate Scale in Meters: 0, 12, 24

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002, Geraghty & Miller, Inc. "Groundwater Elevation and Volatile Organic Compound Concentrations December 8, 1994" figure dated February 2, 1995, Aluminum Company of America "Works General-MPA" figure dated October 10, 1984, and Los Angeles County Assessor's Office Parcel Map 6310/Sheet 8 dated November 5, 1958.

TOTAL POLYCHLORINATED BIPHENYLS
IN SOIL & CONCRETE, BUILDINGS 104 AND 112A
APRIL - MAY 2006
PECHINEY CAST PLATE FACILITY
3200 Fruitland Avenue
Vernon, California

By: SBN	Date:11/20/06	Project No. 10627
Geomatrix		Figure 6b

Plot Date: 12/19/06 - 5:18pm, Plotted by: pherring
Drawing Path: Y:\10627\00\0acad\, Drawing Name: pcb_1206_data_B.dwg