

Remediation Status Report

Former Electro-Coatings, Inc. Facility



**1050 Marina Way South
Richmond, California 94804
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STATUS REPORT

prepared August 17, 1998

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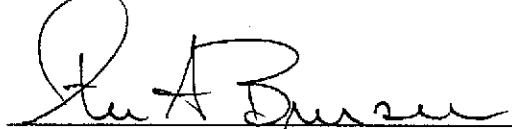
REMEDIATION STATUS REPORT

**FORMER ELECTRO-COATINGS, INC. FACILITY
1401 PARK AVENUE
1421 ASSOCIATES PROPERTY, 1421 PARK AVENUE
EMERYVILLE, CALIFORNIA**

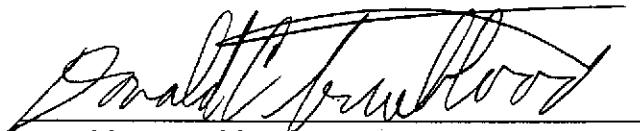
Prepared by

ARCADIS Geraghty & Miller, Inc.

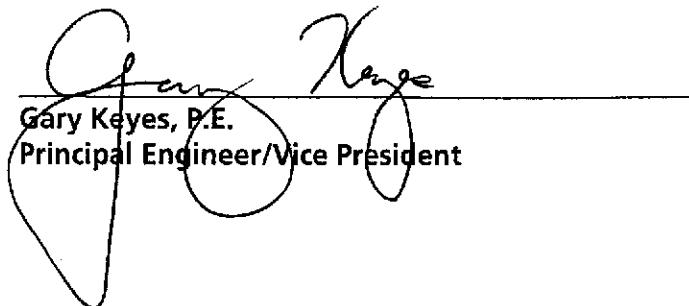
August 17, 1998



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1401 Park Avenue;
1421 Associates
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1421 Park Avenue,
Emeryville, California

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1.0 Introduction

This document presents the results-to-date of the remediation activities conducted by ARCADIS Geraghty & Miller, Inc. for Electro-Coatings, Inc. at the former Electro-Coatings, Inc. (ECI) facility at 1401 Park Avenue and at the 1421 Associates Property at 1421 Park Avenue, Emeryville, California. These results include data obtained from groundwater sampling activities at these sites in April 1998, May 1998, and July 1998.

The objective of the remediation activities is to address the presence of hexavalent chromium, [Cr(VI)] and trichloroethylene (TCE) present in the groundwater beneath the sites. The implemented remediation technology involves development of an *in-situ* biologically-induced reductive zone.

The scope of work for remediation activities at these sites was presented in a Geraghty & Miller work plan dated 17 March 1997. This work plan was presented as a follow-up to a 14 February 1997 meeting with the Regional Water Quality Control Board (RWQCB), San Francisco Bay Region. In that meeting, Geraghty & Miller presented the remediation approach outlined below, to which the RWQCB agreed. It was the consensus of those present at this meeting that the remediation approach could be implemented as soon as practicable. Those present at this meeting included Judy Garvens and Kent Garvens of ECI; Sumadhu Arigala and Ravi

Arulanantham of the RWQCB; Susan Hugo of the Alameda County Health Care Services Agency (ACHCSA); and Gary Keyes, Jeff Hawkins, and Steven Brussee of ARCADIS Geraghty & Miller.

2.0 Background

2.1 Site History

ECI purchased a pre-existing plating business at 1401 and 1421 Park Avenue, Emeryville, California, in 1963 from Industrial Hard Chrome Plating. As part of this transaction, ECI purchased the 1401 Park Avenue property and leased the 1421 Park Avenue Property. Industrial Hard Chrome Plating began operations at the sites in 1952. ECI performed hard chrome plating at the properties until 1989 but performed only nickel plating at the properties from 1989 to 1995.

TCE was used primarily at the 1421 site for the degreasing of metal parts; 1,1,1-trichloroethane (TCA) replaced TCE as a degreasing solvent at the sites in 1973. In 1992, the use of these solvents at the sites was discontinued and was replaced with a liquid-alkaline soak process. In April 1995 plating operations at the sites were discontinued; all associated equipment has since been removed.

In 1977 seven groundwater monitoring wells were installed on- and off-site and were sampled for total and hexavalent chromium. Chromium was detected in five of the seven wells. Between 1977

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and 1983 seventeen additional ground-water monitoring wells were installed on- and off-site and were sampled for total and hexavalent chromium. In 1985, fifteen of the twenty-four wells were sampled and analyzed for halogenated volatile organic compounds (HVOCS). The results of the 1985 sampling event indicated the presence of TCE in groundwater.

2.2 Site Groundwater Data

Data for these sites are presented in the attached Tables, Figures, and Charts.

- Table 1 presents a summary of groundwater elevation data.
- Table 2 presents a summary of groundwater analytical data for total and hexavalent chromium.
- Table 3 presents a summary of groundwater analytical data for HVOCS.
- A site plan showing the locations of the groundwater monitoring wells is presented as Figure 1.
- The most recent analytical results for hexavalent chromium and for TCE are presented graphically in Figures 2 and 3, respectively.
- The approximate locations of injection points are presented in Figure 4.
- Groundwater elevations and contours for the most recent sampling event are presented in Figure 5.

- Chart 1 depicts the average total and hexavalent chromium concentrations for on-site monitoring wells within the remediation area.
- Chart 2 depicts average HVOCS concentrations for on-site monitoring wells within the remediation area.

2.3 Pilot Study

ECI retained Geraghty & Miller in January 1995 to address the groundwater contamination issues at the site.

Geraghty & Miller implemented a pilot study at the site to evaluate an emerging technology as an alternative to conventional excavation and/or pump and treat approaches. The results of this pilot study were presented in a Geraghty & Miller document dated 9 October 1996. On the basis of the results of this pilot study and on the basis of the proceedings at the above-referenced meeting held at the RWQCB, the remediation technology presented below was implemented at the site.

3.0 *In-Situ* Reduction of Chromium VI and Chlorinated Hydrocarbons

3.1 Hexavalent Chromium and Chlorinated Hydrocarbons in Groundwater

Hexavalent chromium [Chromium VI; Cr(VI)] and chlorinated hydrocarbons are present in groundwater beneath the site. Groundwater monitoring has been conducted quarterly at the site since October 1995 by ARCADI Geraghty & Miller.

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The results of the quarterly sampling event conducted in April 1997 (the event immediately preceding the implementation of remediation) indicated concentrations of Cr(VI) in groundwater for on-site monitoring wells of up to 160,000 micrograms per liter ($\mu\text{g/L}$) (MW-5).

The results of this event also indicated concentrations of TCE of up to 17,000 $\mu\text{g/L}$ (MW-14).

3.2 *In-situ* Reduction of Cr(VI) and Chlorinated Hydrocarbons—Theoretical Basis

Cr(VI) in groundwater is not amenable to traditional *in-situ* bioremediation techniques such as bio-sparging, bioventing, or soil-vapor extraction. *Ex-situ* physical techniques such as pump and treat are long term, costly, and of limited effectiveness. Remediation by excavation and soils removal is also costly and fails to address the presence of Cr(VI) in groundwater.

ARCADIS Geraghty & Miller has developed a patented, innovative technique for the *in-situ* reduction of Cr(VI) in groundwater, known as *in-situ* bio-induced hexavalent chromium reduction. The operative principal of this technique is the development of an anaerobic, chemically reductive environment. This environment is developed by the injection of a proprietary ARCADIS

Geraghty & Miller remediation mixture into the vadose and saturated zones of the subsurface affected by Cr(VI).

Indigenous and introduced bacteria mediate the development of the reductive environment. The bacteria feed on sugars in the mixture depleting available dissolved oxygen (DO) as well as the most favored electron acceptors such as nitrate. The resulting subsurface environment favors the reduction of Cr(VI) by at least two methods (Suthersan, 1997):

- Biomass develops which is able to selectively utilize the Cr(VI) as an electron acceptor, and
- Biomass develops which reduces sulfates in the subsurface environment to sulfides which in turn react extracellularly with and reduce Cr(VI).

In the remediation process Cr(VI) is reduced to the far less toxic trivalent chromium [Cr(III)] which in turn forms relatively insoluble chromic hydroxide $[\text{Cr}(\text{OH})_3]$. The $\text{Cr}(\text{OH})_3$ precipitates out of the groundwater to become a permanent part of the soil matrix. At equilibrium, groundwater concentrations of $\text{Cr}(\text{OH})_3$ can be expected to be approximately 50 $\mu\text{g/L}$ (Suthersan, 1997). The oxidation of Cr(III) back to Cr(VI) is highly unlikely; oxidation by DO does not occur under normal aquifer conditions and other possible oxidation reactions are likewise not favored by normal aquifer conditions (Suthersan, 1997; USEPA, 1995; USEPA, 1997).

Chlorinated hydrocarbons such as TCE are also reduced under appropriate anaerobic conditions (Suthersan, 1997). These conditions include the develop-

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ment or presence of a consortium of anaerobic bacteria and the presence of primary substrate(s). TCE is then reductively dechlorinated to dichloroethylene, vinyl chloride, and finally to ethylene and/or ethane. Ethylene and ethane can in turn serve as primary substrates. For the chlorinated ethylene series of compounds, anaerobic reductive dechlorination occurs most easily for the most oxidized species (tetrachloroethylene [PCE]) and more slowly for the least oxidized species (vinyl chloride).

The subsurface environment created by the addition of ARCADIS Geraghty & Miller's remediation mixture to the saturated and vadose zones for the reduction of Cr(VI) also favors reductive dechlorination of TCE.

3.3 *In-situ* Reduction of Cr(VI) and Chlorinated Hydrocarbons—Empirical Basis

ARCADIS Geraghty & Miller has evaluated the suitability of this remediation approach in an on-site *in-situ* pilot study performed for ECI. The results of this pilot study are presented in a Geraghty & Miller report dated October 9, 1996. In the pilot study, a proprietary mixture was injected into selected on-site groundwater monitoring wells and into a drive-point well. The proprietary mixture includes water, simple sugars, an engineered additive of bio-nutrients, and a microbial inoculant.

During the pilot study, Cr(VI) concentrations in down-gradient on-site monitoring wells decreased by greater than

99%. The decreases in concentrations were first observed as soon as two months following injection and persisted beyond six months following injection. TCE concentrations in the monitoring well down-gradient of the drive-point injection well decreased by up to 96% over the 6-month term of the pilot study.

4.0 Scope of Work, Review

ARCADIS Geraghty & Miller has implemented an on-site *in-situ* bio-induced hexavalent chromium and TCE reduction remediation approach as outlined below.

4.1 Task 1 - Prefield Activities

Prior to the initiation of field activities, ARCADIS Geraghty & Miller obtained permits from the Zone 7 Water Agency, Alameda County, for the installation of temporary injection points. ARCADIS Geraghty & Miller also prepared a site-specific health and safety plan and made appropriate arrangements with subcontractors and vendors.

4.2 Task 2 - Preinjection Field Activities

ARCADIS Geraghty & Miller notified Underground Service Alert (USA) in advance of the installation of the temporary injection points to provide the required time for clearance of the injection point locations of underground utilities. We also contracted with an underground utilities locator service so as to avoid underground utilities and other detectable underground structures.

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4.3 Task 3 - Injection Point installation

ARCADIS Geraghty & Miller contracted with a drilling contractor to install temporary injection points. The injection points are in the approximate locations indicated on Figure 4.

Ninety-one temporary PVC injection points were installed at accessible areas throughout the site and within the 1401 Park Avenue building (Figure 4). At the time that the remediation program was initiated (April 1997), access to critical interior areas of the 1421 Associates Property at 1421 Park Avenue could not be achieved due to occupancy of this building.

4.4 Task 4 - Injection Activities

ARCADIS Geraghty & Miller prepared a proprietary mixture for injection into the temporary injection points. The proprietary mixture includes water, simple sugars, an engineered additive of bio-nutrients, and a microbial inoculant.

Two injection events have been completed at the site to date. The first of these events was completed in April 1997; the second of these events was completed in February 1998.

At each injection event, approximately 150 gallons of remediation mixture was injected into each of the injection points utilizing injection equipment designed by ARCADIS Geraghty & Miller.

The temporary injection points remain in place pending the completion of remediation at the site. However, a three-story structure has been erected at the 1421 Park Avenue address. Surface access for the injection points which are now beneath the footprint of this building have been re-routed by subsurface piping to locations west of the building. Due to damage to these points during construction of the building foundation, these points will be abandoned by pressure grouting. Replacement injection points will be located along the west boundary of the 1421 Park Avenue site.

5.0 Results and Discussion**5.1 Groundwater Monitoring**

ARCADIS Geraghty & Miller has performed quarterly groundwater monitoring events at the site according to a schedule derived from 24 March 1995 correspondence with the ACHCSA. The analytical results from the groundwater samples collected during these groundwater monitoring events are presented in Tables 2 and 3; copies of State-certified laboratory analytical reports are included with this document as Appendix A. The groundwater samples have been analyzed for Cr(VI), total chromium, and halogenated hydrocarbons according to the methods indicated on Tables 2 and 3.

5.2 Total and Hexavalent Chromium

The concentrations of total and hexavalent chromium detected in on-site groundwater monitoring wells have de-

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creased dramatically since the beginning of the remediation program. Chart 1 depicts the average concentrations for total and hexavalent chromium in on-site groundwater monitoring wells for the period beginning in February 1996 through the most recent quarterly monitoring event (July 1998).

- The average concentration of total chromium in these wells has decreased by approximately 98%, from 65,670 µg/L (March 1996) to 900 µg/L (July 1998).
- The average concentration of hexavalent chromium in these wells has decreased by approximately 99.9%, from 74,350 µg/L (March 1996) to 66 µg/L (July 1998).
- Many of the on-site groundwater monitoring wells with historic concentrations in excess of 100,000 µg/L hexavalent chromium are now non-detect for hexavalent chromium. In most cases, the detection limit for these analyses is 5.0 µg/L. However, according to Sequoia Analytical Laboratories, unspecified matrix interference raised the laboratory method detection limits for the July 1998 event in several samples to values as great as 500 µg/L.

The area at the south end of the 1401 and 1421 Park Avenue sites, represented by groundwater monitoring wells MW-5, MW-9, MW-13, and MW-14, has been the slowest to respond to remediation efforts. The total chromium concentrations in these monitoring wells have

decreased by as much as 4 orders of magnitude; however, the concentrations remain as high as 3,900 µg/L (MW-9). The hexavalent chromium concentrations in these groundwater monitoring wells have decreased by as much as 6 orders of magnitude (MW-5); however, due to the elevated laboratory method detection limits for the most recent sampling event (July 1998), the actual concurrent concentrations of hexavalent chromium in some of these wells cannot be determined. Prior sampling events with lower detection limits indicate that the concentrations of hexavalent chromium in monitoring wells MW-5 (October 1997), MW-9 (April 1998), and MW-14 (February 1997) may be less than 5.0 µg/L. During forthcoming groundwater sampling events, every effort will be made to obtain the lowest possible detection limits for both total and hexavalent chromium.

5.3 TCE

The concentrations of TCE detected in on-site groundwater monitoring wells have decreased substantially since the beginning of the remediation program. Chart 2 depicts the average concentrations for PCE, TCE, cis-1,2-DCE and vinyl chloride in four on-site groundwater monitoring wells within the remediation area. These four wells are selected because historical detections of TCE in these wells have been high and because they are located down-gradient of the former TCE degreasing area at the south end of the 1421 Park Avenue site.

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- The average concentration of TCE in these wells has decreased by approximately 85% from 3,040 µg/L (April 1995) to 380 µg/L in (July 1998).
- The average concentration of PCE in these wells has decreased and is approaching zero.
- The average concentration of biodegradation daughter products, of TCE (i.e., cis-1,2-DCE and vinyl chloride) have increased following the initiation of the remediation program at the site. As of the most recent quarterly groundwater monitoring event (July 1998), the concentrations of these biodegradation daughter products appear to be declining.

As indicated on Chart 2, a TCE concentration spike occurred in the samples obtained during the April 1997 groundwater monitoring event. The cause for this concentration spike is not immediately clear. However, the groundwater elevation depth-to-water data (Table 1) indicate an unusually high groundwater elevation occurring during the wet season of 1996-97. It is possible that the elevated groundwater table during this period washed the smear-zone of the subsurface (i.e., the capillary fringe), thereby liberating H VOCs formerly adhered to soil particles in the deeper vadose zone.

The smaller increase in TCE concentrations for the April 1998 groundwater sampling event may similarly be due to this soil washing effect and/or due to

increased infiltration as a result of the record-setting rainfall for this season. The groundwater elevation data (Table 1) likewise indicate a seasonally high groundwater elevation for the 1998 event.

5.4 Data Evaluation; Additional Notes on Analytical Data

The analytical data presented in Table 2 (i.e., Summary of Groundwater Analytical Data for Total and Hexavalent Chromium) indicate a marked decrease in the reported detections of hexavalent chromium for the 13 September 1996 groundwater sampling event. For each well sampled during this event, the reported detections of hexavalent chromium are approximately one order of magnitude less than the expected detections of hexavalent chromium based upon the reported detections for events preceding and following the September 1996 event. Inquiries made by ARCADIS Geraghty & Miller to Sequoia Analytical Laboratories were not able to determine the reason for these unexpectedly low detections. The data presented in Table 2 are as reported by the analytical laboratory. However, ARCADIS Geraghty & Miller believes that the actual concentrations of hexavalent chromium in groundwater are one order of magnitude (i.e., 10 fold) greater than reported by Sequoia.

The total and hexavalent chromium data for MW-16 for the July 1998 groundwater monitoring event indicate a marked decrease in the reported detec-

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tions of both total and hexavalent chromium. This is the only off-site groundwater monitoring well in which the reported detections were substantially decreased. MW-16 and all of the other off-site groundwater monitoring wells are not within the on-site groundwater remediation area. However, MW-16 is the off-site groundwater monitoring well which is closest to both the on-site remediation area and to the former drive-point injection well located near MW-10. The drive-point injection well was used by ARCADIS Geraghty & Miller in 1996-97 to evaluate this remediation technology in a 6-month pilot study. It is possible that the substantial decreases in reported detections of hexavalent chromium for MW-16 are a result of groundwater flow, from the on-site remediation and pilot study area, down-gradient towards MW-16.

To date, one group of samples have been collected from some of the on- and off-site groundwater monitoring wells (MW-1, MW-9, MW-10, MW-12, and MW-16) for evaluation of dissolved gases in groundwater. These gases include methane, ethane, and ethylene. It is expected that methane and ethane concentrations in on-site groundwater monitoring wells will increase as the primary substrates provided in ARCADIS Geraghty & Miller's remediation solution are utilized. However, it is not expected that ethylene will be produced as a result of primary substrate utilization. The concentration of ethylene in MW-1 (i.e., the background concentration), which is on-site but cross-

gradient of the remediation area, is below the laboratory method detection limit of 0.005 µg/L. The concentrations of ethylene reported for samples obtained from on-site groundwater monitoring wells within the remediation area range from 1.2 to approximately 238 µg/L. These data indicate that the reductive dechlorination process is proceeding through vinyl chloride to ethylene.

6.0 Conclusions

The total and hexavalent chromium results to date indicate that the in-situ bio-induced reductive zone technology is very successful in remediating the presence of total and hexavalent chromium in groundwater. The reductive zones created by this remediation approach have resulted in hexavalent chromium concentrations which approach the laboratory method detection limit of 5.0 µg/L. The average concentration of total chromium in groundwater is not likely to approach such a low value. ARCADIS Geraghty & Miller expects that the equilibrium concentration of total chromium in groundwater will be approximately 50 µg/L (Suthersan, 1997).

The analytical results for HVOCs detected in the on-site groundwater monitoring wells in the remediation area show high promise for continued remediation of HVOCs in groundwater. Average PCE and TCE concentrations have decreased across the site. Cis-1,2-DCE and vinyl chloride concentrations initially increased, but are now also showing decreases across the site. The presence

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of ethylene in groundwater provides a strong indication that the remediation process is fully dehalogenating the HVOCs in groundwater.

Electro-Coatings, Inc. and ARCADIS Geraghty & Miller are pleased with the success of the remediation program to date and are designing a phased implementation of the same remediation program for areas off-site and down-gradient of the 1401 and 1421 sites. Implementation of this off-site work is expected to begin in the Fall of 1998.

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Table 1: Summary of Groundwater Elevation Data
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Monitoring Well	Date Sampled	Depth-to-Water (feet)	Top of Casing (feet - MSL)	Groundwater Elevation (feet - MSL)
MW-1 (on-site)	19-Apr-95	Not Located		--
	12-Sep-96	6.15	15.19	9.04
	7-Apr-97	5.87		9.32
	29-Sep-97	9.08		6.11
	22-Apr-98	5.76		9.43
	27-Jul-98	5.89		9.30
MW-3A (on-site)	19-Apr-95	4.87	16.1	11.23
	19-Sep-95	5.70		10.40
	14-Dec-95	5.00		11.10
	6-Mar-96	4.73		11.37
	11-Jun-96	5.28		10.82
	12-Sep-96	5.47		10.63
	9-Dec-96	5.61		10.49
	7-Apr-97	5.05		11.05
	30-Jun-97	4.64		11.46
	29-Sep-97	5.50		10.60
	4-Dec-97	4.65		11.45
	22-Apr-98	4.65		11.45
	27-Jul-98	4.83		11.27
MW-3B (on-site)	19-Apr-95	6.76	16.3	9.54
	22-Apr-98	5.75		10.55
	27-Jul-98	6.08		10.22
MW-3C (on-site)	19-Apr-95	6.19	16.21	10.02

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Table 1: Summary of Groundwater Elevation Data

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Monitoring Well	Date Sampled	Depth-to-Water (feet)	Top of Casing (feet - MSL)	Groundwater Elevation (feet - MSL)
MW-4 <i>(on-site)</i>	19-Apr-95	6.52	14.29	7.77
	19-Sep-95	6.50		7.79
	14-Dec-95	5.36		8.93
	6-Mar-96	5.90		8.39
	11-Jun-96	6.39		7.90
	12-Sep-96	6.40		7.89
	9-Dec-96	5.78		8.51
	7-Apr-97	6.49		7.80
	30-Jun-97	6.49		7.80
	29-Sep-97	6.59		7.70
	1-Dec-97	5.37		8.92
	22-Apr-98	6.47		7.82
MW-5 <i>(on-site)</i>	27-Jul-98	6.54		7.75
	19-Apr-95	6.95	15.87	8.92
	30-Jun-97	6.84		9.03
	29-Sep-97	7.82		8.05
	22-Apr-98	6.50		9.37
MW-9 <i>(on-site)</i>	27-Jul-98	7.48		8.39
	19-Apr-95	6.67	16.03	9.36
	12-Sep-96	6.71		9.32
	7-Apr-97	6.90		9.13
	29-Sep-97	6.55		9.48
	1-Dec-97	4.83		11.20
	22-Apr-98	5.92		10.11
MW-10 <i>(on-site)</i>	27-Jul-98	6.13		9.90
	19-Apr-95	6.94	15.1	8.16
	29-Sep-97	7.10		8.00
	1-Dec-97	5.50		9.60
	22-Apr-98	6.62		8.48
	27-Jul-98	6.95		8.15

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Monitoring Well	Date Sampled	Depth-to-Water (feet)	Top of Casing (feet - MSL)	Groundwater Elevation (feet - MSL)
MW-11 (on-site)	19-Apr-95	6.38	15.94	9.56
	12-Sep-96	6.40		9.54
	7-Apr-97	6.56		9.38
	29-Sep-97	5.80		10.14
MW-12 (on-site)	19-Apr-95	6.52	16.04	9.52
	19-Sep-95	6.61		9.43
	14-Dec-95	5.12		10.92
	6-Mar-96	5.61		10.43
	11-Jun-96	6.46		9.58
	12-Sep-96	6.53		9.51
	9-Dec-96	5.76		10.28
	7-Apr-97	6.67		9.37
	30-Jun-97	6.19		9.85
	29-Sep-97	6.36		9.68
	1-Dec-97	4.66		11.38
	22-Apr-98	5.53		10.51
	27-Jul-98	5.94		10.10
MW-13 (on-site)	19-Apr-95	6.75	15.37	8.62
	19-Sep-95	6.94		8.43
	14-Dec-95	5.45		9.92
	6-Mar-96	5.94		9.43
	11-Jun-96	6.75		8.62
	12-Sep-96	6.80		8.57
	9-Dec-96	6.02		9.35
	7-Apr-97	6.92		8.45
	30-Jun-97	6.66		8.71
	29-Sep-97	6.87		8.50
	1-Dec-97	5.15		10.22
	22-Apr-98	6.31		9.06
	27-Jul-98	6.58		8.79

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Table 1: Summary of Groundwater Elevation Data

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Depth-to-Water (feet)	Top of Casing (feet - MSL)	Groundwater Elevation (feet - MSL)
MW-14 (on-site)	19-Apr-95	6.71	15.49	8.78
	12-Sep-96	6.74		8.75
	7-Apr-97	6.85		8.64
	29-Sep-97	6.60		8.89
	1-Dec-97	4.78		10.71
	27-Jul-98	6.92		8.57
MW-20 (on-site) (deep well)	19-Apr-95	2.78	14.93	12.15
	19-Sep-95	2.47		12.46
	14-Dec-95	2.95		11.98
	6-Mar-96	1.43		13.50
	11-Jun-96	2.29		12.64
	12-Sep-96	2.90		12.03
	7-Apr-97	2.63		12.30
	29-Sep-97	2.90		12.03
	22-Apr-98	1.77		13.16
	27-Jul-98	2.63		12.30

ARCADIS GERAGHTY & MILLER

Table 1: Summary of Groundwater Elevation Data
 Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Depth-to-Water (feet)	Top of Casing (feet - MSL)	Groundwater Elevation (feet - MSL)
MW-6 (off-site)	19-Apr-95	3.55	9.24	5.69
	19-Sep-95	3.72		5.52
	14-Dec-95	3.01		6.23
	6-Mar-96	3.31		5.93
	11-Jun-96	5.34		3.90
	12-Sep-96	3.60		5.64
	9-Dec-96	3.19		6.05
	7-Apr-97	3.64		5.60
	30-Jun-97	3.57		5.67
	29-Sep-97	3.56		5.68
	1-Dec-97	3.14		6.10
	22-Apr-98	3.51		5.73
	27-Jul-98	3.01		6.23
MW-8 (off-site)	19-Apr-95	5.50	16.42	10.92
	19-Sep-95	NL		--
MW-15 (off-site)	19-Apr-95	7.94	17.26	9.32
	19-Sep-95			
	19-Apr-95	4.57	12.08	7.51
	19-Sep-95	4.64		7.44
	14-Dec-95	4.28		7.80
	6-Mar-96	4.01		8.07
	11-Jun-96	4.50		7.58
	12-Sep-96	4.55		7.53
	9-Dec-96	3.98		8.10
	7-Apr-97	4.57		7.51
	30-Jun-97	4.55		7.53
	29-Sep-97	4.63		7.45
	1-Dec-97	3.51		8.57
	22-Apr-98	4.40		7.68
	27-Jul-98	4.49		7.59

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Table 1: Summary of Groundwater Elevation Data

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Depth-to-Water (feet)	Top of Casing (feet - MSL)	Groundwater Elevation (feet - MSL)
MW-17 (off-site)	19-Apr-95	4.48	12.76	8.28
	19-Sep-95	4.78		7.98
	14-Dec-95	3.31		9.45
	6-Mar-96	3.75		9.01
	11-Jun-96	4.55		8.21
	12-Sep-96	4.61		8.15
	9-Dec-96	3.89		8.87
	7-Apr-97	4.71		8.05
	30-Jun-97	4.55		8.21
	29-Sep-97	4.66		8.10
	1-Dec-97	3.49		9.27
	22-Apr-98	4.10		8.66
MW-18 (off-site)	19-Apr-95	4.79	13.57	8.78
	19-Sep-95	5.00		8.57
	14-Dec-95	3.48		10.09
	6-Mar-96	3.96		9.61
	11-Jun-96	4.86		8.71
	30-Jun-97	4.69		8.88
	29-Sep-97	5.01		8.56
	22-Apr-98	4.14		9.43
	27-Jul-98	4.54		9.03
MW-18A (off-site)	19-Apr-95	4.67	13.36	8.69
	19-Sep-95	5.76		7.60
	14-Dec-95	5.60		7.76
	6-Mar-96	3.86		9.50
	11-Jun-96	4.85		8.51
	30-Jun-97	5.08		8.28
	29-Sep-97	5.26		8.10
	22-Apr-98	4.15		9.21
	27-Jul-98	4.86		8.50

ARCADIS GERAGHTY& MILLER

Table 1: Summary of Groundwater Elevation Data

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Depth-to-Water (feet)	Top of Casing (feet - MSL)	Groundwater Elevation (feet - MSL)
MW-19 (off-site)	19-Apr-95	NL		NL
MW-21 (off-site)	19-Apr-95	NL		NL
MW-2	19-Apr-95	NL		NL
MW-7	19-Apr-95	NL		NL

NL = Monitoring well has not been located.

NM = Not measured

MSL = mean sea level

ARCADIS GERAGHTY& MILLER
Table 2: Summary of Groundwater Analytical Data - Total and Hexavalent Chromium

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Total Chromium (µg/L) (a)	Hexavalent Chromium (µg/L) (b)
MW-1 (on-site)	24-Aug-77	200	NA
	15-Sep-81	ND(<1)	NA
	11-Oct-81	1	NA
	24-Nov-81	2.5	NA
	21-Dec-81	32	NA
	26-Feb-85	ND(<20)	ND(<20)
	15-Nov-91	ND(<50)	50
	20-Apr-95	NL	NL
	13-Sep-96	330	ND(<5.0)
	8-Apr-97	320	ND(<5.0)
	Apr-97	On-Site Remediation Injection Event	
	1-Oct-97	ND(<10)	ND(<5.0)
	Feb-98	On-Site Remediation Injection Event	
	23-Apr-98	ND(<10)	ND(<5.0)
	28-Jul-98	ND(<10)	ND(<5.0)
MW-3A (on-site)	24-Aug-77	50	NA
	15-Sep-81	ND (<1)	NA
	11-Oct-81	ND (<1)	NA
	24-Nov-81	230	NA
	21-Dec-81	14	NA
	26-Feb-85	770	80
	29-Oct-91	130	ND (<500)
	20-Apr-95	36	ND (<5.0)
	19-Sep-95	65	ND (<5.0)
	14-Dec-95	110	7.5
	8-Mar-96	92	ND (<5.0)
	11-Jun-96	51	ND (<5.0)
	13-Sep-96	ND(<10)	ND (<5.0)
	11-Dec-96	13 (d)	ND (<5.0)
	7-Apr-97	14	ND (<5.0)
	Apr-97	On-Site Remediation Injection Event	
	30-Jun-97	67	5.0
	1-Oct-97	36	ND(<5.0)
	4-Dec-97	94	29
	Feb-98	On-Site Remediation Injection Event	
	23-Apr-98	43	ND(<5.0)
	28-Jul-98	210	62

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Table 2: Summary of Groundwater Analytical Data - Total and Hexavalent Chromium

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Total Chromium (µg/L) (a)	Hexavalent Chromium (µg/L) (b)
MW-3B (on-site) (deep well)	24-Aug-77	60	NA
	(c) 15-Sep-81	ND (<1)	NA
	11-Oct-81	480	NA
	24-Nov-81	2,000	NA
	21-Dec-81	190	NA
	29-Oct-91	110,000	100,000
	20-Apr-95	8,000	7,600
	22-Aug-95	13,000	12,000
	22-Aug-95	Pilot Test: 50 gallons of 100:1 into MW-11.	
	20-Oct-95	180	ND(<5.0)
	22-Dec-95	Pilot Test: 150 gallons innoc. 20:1 into MW-11.	
	4-Jan-96	Pilot Test: 150 gallons 20:1 into MW-11.	
	19-Jan-96	Pilot Test: 150 gallons 20:1 into MW-11.	
	1-Feb-96	Pilot Test: 150 gallons 20:1 into MW-11.	
	16-Feb-96	3,300	1,100
	Apr-97	On-Site Remediation Injection Event	
	Feb-98	On-Site Remediation Injection Event	
	23-Apr-98	340	ND(<5.0)
	28-Jul-98	150	ND(<5.0)
MW-3C (on-site)	24-Aug-77	18,000	NA
	15-Sep-81	30,000	NA
	11-Oct-81	28,000	NA
	24-Nov-81	22,000	NA
	21-Dec-81	17,000	NA
	26-Feb-85	7,250	6,300
	29-Oct-91	2,300	1,600
	20-Apr-95	1,400	ND (<5.0)
	Apr-97	On-Site Remediation Injection Event	
	Feb-98	On-Site Remediation Injection Event	

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Table 2: Summary of Groundwater Analytical Data - Total and Hexavalent Chromium

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Total Chromium (µg/L) (a)	Hexavalent Chromium (µg/L) (b)
MW-4 (on-site)	24-Aug-77	90,000	67,000
	15-Sep-81	57,000	NA
	11-Oct-81	61,000	NA
	24-Nov-81	56,000	NA
	21-Dec-81	55,000	NA
	26-Feb-85	59,000	59,000
	1-Jun-91	17,000	17,800
	11-Oct-91	22,000	22,000
	28-Jul-94	NA	6,300
	21-Apr-95	16,000	17,000
	19-Sep-95	14,000	15,000
	15-Dec-95	16,000	16,000
	8-Mar-96	16,000	23,000
	11-Jun-96	5,400	9,100
	13-Sep-96	14,000	1,400
	11-Dec-96	17,000 (d)	47,000
	8-Apr-97	13,000	16,000
	Apr-97	On-Site Remediation Injection Event	
	30-Jun-97	200	ND(<50)
	1-Oct-97	76	ND(<5.0)
	2-Dec-97	170	ND(<5.0)
	Feb-98	On-Site Remediation Injection Event	
	23-Apr-98	Access blocked by construction activity at 1421 Park Avenue.	
	28-Jul-98	110	ND(<5.0)
MW-5 (on-site)	24-Aug-77	360,000	295,000
	11-Oct-81	880,000	2,240
	24-Nov-81	610,000	NA
	21-Dec-81	280,000	NA
	26-Feb-85	480,000	480,000
	1-Jun-91	390,000	NA
	11-Oct-91	260,000	250,000
	28-Jul-94	NA	454,000
	21-Apr-95	140,000	160,000
	Apr-97	On-Site Remediation Injection Event	
	30-Jun-97	16,000	5,800
	1-Oct-97	4,400	ND(<5.0)
	Feb-98	On-Site Remediation Injection Event	
	23-Apr-98	Access blocked by construction activity at 1421 Park Avenue.	
	28-Jul-98	670	ND(<500)
MW-9 (on-site)	15-Jan-81	258,000	185,000
	26-Feb-85	892,000	877,000
	11-Oct-91	140,000	130,000
	21-Apr-95	66,000	70,000
	13-Sep-96	56,000	5,800
	7-Apr-97	74,000	76,000
	Apr-97	On-Site Remediation Injection Event	
	1-Oct-97	67,000	44,000
	2-Dec-97	5,900	6,800
	Feb-98	On-Site Remediation Injection Event	
	23-Apr-98	11,000	ND(<5.0)
	28-Jul-98	3,900	ND(<500)

ARCADIS GERAGHTY & MILLER
Table 2: Summary of Groundwater Analytical Data - Total and Hexavalent Chromium

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Total Chromium (µg/L) (a)	Hexavalent Chromium (µg/L) (b)
MW-10	15-Jan-81	17,000	14,000
(on-site) (c)	26-Feb-85	746,000	740,000
	11-Oct-91	490,000	450,000
	21-Apr-95	160,000	170,000
	21-Aug-95	Pilot Test: 25 gallons 4:1 into DP-1.	
		150,000	150,000
	20-Oct-95	78,000	86,000
	22-Dec-95	Pilot Test: 115 gallons innoc. 4:1 into DP-1.	
		16,000	23,000
	14-Mar-96	Pilot Test: 115 gallons innoc. 4:1 into DP-1.	
		11,000	ND(<50)
	8-Apr-97	6,500	ND(<5.0)
	Apr-97	On-Site Remediation Injection Event	
	1-Oct-97	640	14
	2-Dec-97	510	ND(<5.0)
	Feb-98	On-Site Remediation Injection Event	
	23-Apr-98	500	9
	28-Jul-98	240	ND(<500)
MW-11	14-Jan-81	129,000	115,000
(on-site) (c)	21-Jul-81	340	34
	26-Feb-85	2,440	2,410
	11-Oct-91	470	410
	20-Apr-95	420	950
	22-Aug-95	360	220
	22-Aug-95	Pilot Test: 50 gallons of 100:1.	
	20-Oct-95	90	ND(<5.0)
	22-Dec-95	Pilot Test: 150 gallons innoc. 20:1.	
	4-Jan-96	Pilot Test: 150 gallons 20:1.	
	19-Jan-96	Pilot Test: 150 gallons 20:1.	
	1-Feb-96	Pilot Test: 150 gallons 20:1.	
	16-Feb-96	430	ND(<5.0)
	13-Sep-96	170	6.0
	7-Apr-97	630	ND(<5.0)
	Apr-97	On-Site Remediation Injection Event	
	1-Oct-97	510	ND(<50)
	2-Dec-97	720	400
	Feb-98	On-Site Remediation Injection Event	

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Table 2: Summary of Groundwater Analytical Data - Total and Hexavalent Chromium

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Total Chromium (µg/L) (a)	Hexavalent Chromium (µg/L) (b)
MW-12	14-Jan-81	32,000	12,000
(on-site) (c)	26-Feb-85	240,000	240,000
	1-Jun-91	38,000	29,700
	11-Oct-91	44,000	39,000
	20-Apr-95	10,000	10,000
	19-Sep-95	18,000	19,000
	14-Dec-95	17,000	20,000
	22-Dec-95	Pilot Test: 330 gallons innoc. 10:1 into OW-1.	
	16-Feb-96	16,000	1,300
	11-Jun-96	130	16
	13-Sep-96	260	ND(<5.0)
	11-Dec-96	1,100 (d)	1,400
	7-Apr-97	2,000	690
	Apr-97	On-Site Remediation Injection Event	
	30-Jun-97	440	26
	1-Oct-97	170	ND(<5.0)
	2-Dec-97	100	ND(<5.0)
	Feb-98	On-Site Remediation Injection Event	
	23-Apr-98	150	ND(<5.0)
	28-Jul-98	69	ND(<500)
MW-13	14-Jan-81	381,000	325,000
(on-site)	26-Feb-85	676,000	676,000
	11-Oct-91	510,000	430,000
	28-Jul-94	230,000	130,000
	20-Apr-95	210,000	220,000
	19-Sep-95	200,000	210,000
	15-Dec-95	170,000	210,000
	8-Mar-96	170,000	200,000
	11-Jun-96	170,000	160,000
	13-Sep-96	160,000	13,000
	11-Dec-96	160,000 (d)	170,000
	7-Apr-97	150,000	160,000
	Apr-97	On-Site Remediation Injection Event	
	30-Jun-97	92,000	69,000
	1-Oct-97	63,000	40,000
	2-Dec-97	33,000	28,000
	Feb-98	On-Site Remediation Injection Event	
	23-Apr-98	7,900	2,500
	28-Jul-98	1,800	ND(<500)

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Table 2: Summary of Groundwater Analytical Data - Total and Hexavalent Chromium

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Total Chromium (µg/L) (a)	Hexavalent Chromium (µg/L) (b)
MW-14 (on-site)	26-Feb-85	654,000	632,000
	11-Oct-91	320,000	310,000
	21-Apr-95	130,000	140,000
	13-Sep-96	100,000	9,700
	8-Apr-97	93,000	100,000
	Apr-97	On-Site Remediation Injection Event	
	1-Oct-97	9,100	ND(<5.0)
	2-Dec-97	1,400	ND(<5.0)
	Feb-98	On-Site Remediation Injection Event	
	28-Jul-98	1,600	ND(<500)

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Table 2: Summary of Groundwater Analytical Data - Total and Hexavalent Chromium

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Total Chromium ($\mu\text{g/L}$) (a)	Hexavalent Chromium ($\mu\text{g/L}$) (b)
MW-20 (on-site) (deep well)	21-Jun-83	1,300	1,200
	11-Aug-83	90	40
	26-Feb-85	ND (<20)	ND (<20)
	11-Oct-91	ND (<50)	14
	21-Apr-95	ND (<10)	ND (<5.0)
	19-Sep-95	ND (<10)	ND (<5.0)
	15-Dec-95	22	ND (<5.0)
	8-Mar-96	22	ND (<5.0)
	11-Jun-96	96	ND (<0.0050)
	13-Sep-96	120	ND(5.0)
	7-Apr-97	55	ND(<5.0)
	Apr-97	On-Site Remediation Injection Event	
	1-Oct-97	ND(<10)	ND(<5.0)
	Feb-98	On-Site Remediation Injection Event	
	23-Apr-98	ND(<10)	ND(<5.0)
	28-Jul-98	ND(<10)	ND(<5.0)

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Table 2: Summary of Groundwater Analytical Data - Total and Hexavalent Chromium

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
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 Emeryville, California

Monitoring Well	Date Sampled	Total Chromium (µg/L) (a)	Hexavalent Chromium (µg/L) (b)
MW-6 (off-site)	15-Sep-81	630	NA
	11-Oct-81	80	NA
	24-Nov-81	790	NA
	21-Dec-81	630	NA
	26-Feb-85	3,330	3,300
	11-Oct-91	31,000	25,000
	28-Jul-94	NA	4,800
	20-Apr-95	39,000	40,000
	19-Sep-95	45,000	43,000
	14-Dec-95	35,000	50,000
	8-Mar-96	42,000	50,000
	11-Jun-96	41,000	44,000
	13-Sep-96	46,000	44,000
	11-Dec-96	45,000 (d)	54,000
	8-Apr-97	45,000	48,000
	30-Jun-97	44,000	43,000
	1-Oct-97	52,000	21,000
	2-Dec-97	50,000	46,000
	23-Apr-98	47,000	48,000
	28-Jul-98	47,000	55,000
MW-8 (off-site)	15-Sep-81	ND (<1)	NA
	11-Oct-81	2	NA
	24-Nov-81	3	NA
	21-Dec-81	70	NA
	26-Feb-85	ND (<20)	ND (<20)
	1-Jun-91	NA	NA
	11-Oct-91	ND (<50)	ND (<10)
	21-Apr-95	33	ND (<5.0)
MW-15 (off-site)	26-Feb-85	ND (<20)	ND (<20)
	1-Jun-91	30	NA
	11-Oct-91	ND (<50)	ND (<10)
	28-Jul-94	NA	ND (<10)
	21-Apr-95	ND (<10)	ND (<5.0)
MW-16 (off-site) (c)	26-Feb-85	460,000	460,000
	11-Oct-91	240,000	290,000
	28-Jul-94	120,000	320,000
	20-Apr-95	100,000	100,000
	19-Sep-95	83,000	87,000
	14-Dec-95	57,000	74,000
	8-Mar-96	73,000	83,000
	11-Jun-96	67,000	20,000
	13-Sep-96	60,000	6,400
	11-Dec-96	65,000 (d)	73,000
	8-Apr-97	57,000	64,000
	30-Jun-97	67,000	57,000
	1-Oct-97	67,000	27,000
	2-Dec-97	24,000	32,000
	23-Apr-98	56,000	54,000
	28-Jul-98	17,000	14,000

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ARCADIS GERAGHTY & MILLER
Table 2: Summary of Groundwater Analytical Data - Total and Hexavalent Chromium

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Total Chromium (µg/L) (a)	Hexavalent Chromium (µg/L) (b)
MW-17 (off-site)	26-Feb-85	90,000	38,200
	11-Oct-91	250,000	300,000
	28-Jul-94	190,000	200,000
	20-Apr-95	150,000	160,000
	19-Sep-95	170,000	180,000
	14-Dec-95	160,000	200,000
	8-Mar-96	140,000	150,000
	11-Jun-96	130,000	150,000
	13-Sep-96	130,000	12,000
	11-Dec-96	170,000 (d)	200,000
	8-Apr-97	160,000	160,000
	30-Jun-97	120,000	83,000
	1-Oct-97	91,000	52,000
	2-Dec-97	97,000	60,000
MW-18 (off-site)	23-Apr-98	85,000	10,000
	28-Jul-98	50,000	65,000
MW-18A (off-site)	26-Feb-85	60,500	55,000
	1-Jun-91	NA	NA
	11-Oct-91	31,000	24,000
	28-Jul-94	NA	NA
	22-Apr-95	24,000	23,000
	19-Sep-95	25,000	27,000
	14-Dec-95	20,000	22,000
	8-Mar-96	22,000	23,000
	11-Jun-96	19,000	17,000
	30-Jun-97	16,000	11,000
	1-Oct-97	20,000	14,000
	24-Apr-98	11,000	9,400
	28-Jul-98	12,000	5,000
MW-18B (off-site)	22-Jun-83	20	ND (<20)
	26-Feb-85	ND (<20)	ND (<20)
	11-Oct-91	ND (<50)	ND (<10)
	20-Apr-95	ND (<10)	ND (<5.0)
	19-Sep-95	ND (<10)	ND (<5.0)
	15-Dec-95	17	ND (<5.0)
	8-Mar-96	ND (<50)	ND (<5.0)
	11-Jun-96	38	ND (<0.0050)
	30-Jun-97	1,100	840
	1-Oct-97	490	430
	23-Apr-98	64	52
	28-Jul-98	59	55

Table 3: Summary of Groundwater Analytical Data - Halogenated Volatile Organic Compounds

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,2-DCA	Other Analytes	Methane	Ethane	Ethylene
		(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-6 (off-site)	11-Jun-85	ND(<0.5)	220	---	54	ND(<5)	ND(<5)	3.9	ND(<5)	---	---	---	---	---
	5-Nov-91	5.9	420	---	78	29	19	6.4	ND(<0.5)	---	---	---	---	---
	28-Jul-94	---	790	---	---	---	---	---	---	---	---	---	---	---
	20-Apr-95	ND(<10)	320	55	ND(<10)	34	ND(<20)	ND(<10)	ND(<10)	ND(<10)	CBz: 5.1	---	---	---
	19-Sep-95	6.4	210	48	12	46	13	ND(<5)	ND(<5)	ND(<5)	ND(<5)	---	---	---
	14-Dec-95	ND(<10)	400	53	ND(<10)	74	ND(<20)	ND(<10)	ND(<10)	ND(<10)	CBz: 5.1	---	---	---
	8-Mar-96	ND(<50)	290	ND(<50)	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	CBz: 5.1	---	---	---
	11-Jun-96	ND(<50)	300	ND(<50)	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	CBz: 5.1	---	---	---
	13-Sep-96	ND(<50)	480	ND(<50)	ND(<50)	64	ND(<100)	ND(<50)	ND(<50)	ND(<50)	CBz: 5.1	---	---	---
	11-Dec-96	ND(<50)	360	ND(<50)	ND(<50)	59	ND(<100)	ND(<50)	ND(<50)	ND(<50)	CBz: 5.1	---	---	---
	8-Apr-97	ND(<50)	420	52	ND(<50)	73	ND(<100)	ND(<50)	ND(<50)	ND(<50)	CBz: 5.1	---	---	---
	30-Jun-97	8.1	330	47	11	51	12	ND(<5.0)	ND(<5.0)	ND(<5.0)	CBz: 8.9	---	---	---
	1-Oct-97	6.2	220	49	9.7	37	13	2.6	ND(<2.5)	ND(<2.5)	CBz: 6.6	---	---	---
	2-Dec-97	6.4	260	44	7.6	43	ND(<10)	ND(<5.0)	ND(<5.0)	ND(<5.0)	CBz: 6.7	---	---	---
MW-8 (off-site)	19-May-98	4.3	330	45	12	50	13	4.6	1.3	1.4	1,2-DCBz: 0.56; CBz: 4.8; CFM: 1.4	---	---	---
	28-Jul-98	ND(<5.0)	200	59	7.0	24	ND(<10)	ND(<5.0)	ND(<5.0)	ND(<5.0)	CBz: 8.9	---	---	---
MW-15 (off-site)	10-Jun-85	18	46	---	19	ND(<1)	3	ND(<1)	1	---	---	---	---	---
	11-Jun-85	35	93	---	32	1	---	ND(<0.5)	1	---	---	---	---	---
	5-Nov-91	35	38	---	23	0.8	4.9	ND(<0.5)	1.8	---	---	---	---	---
	21-Apr-95	18	40	46	6.7	ND(<1.0)	16	ND(<1.0)	1.2	5.6	---	---	---	---
19-Sep-95		Not Located												
MW-15 (off-site)	13-Jun-85	ND(<50)	1,200	---	410	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---	---	---	---
	21-Nov-91	ND(<5)	650	---	220	ND(<5)	ND(<10)	ND(<5)	ND(<5)	---	---	---	---	---
	21-Apr-95	ND(<10)	300	88	130	ND(<10)	ND(<20)	ND(<10)	ND(<10)	ND(<10)	---	---	---	---
	19-Sep-95	Not Located												

Table 3: Summary of Groundwater Analytical Data - Halogenated Volatile Organic Compounds

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,2-DCA	Other Analytes (µg/L)	Methane (µg/L)	Ethane (µg/L)	Ethylene (µg/L)
		(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)				
MW-16 (off-site)	21-Mar-85	42	360	---	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---	---
	19-Nov-91	ND(<5)	19,000	---	2299	1,200	420	1,300	ND(<5)	---	---	---	---
	28-Jul-94	---	22,000	---	---	---	---	---	---	---	---	---	---
	20-Apr-95	13	10,000	2,400	67	390	300	180	28	ND(<10)	CBz: 12	---	---
	19-Sep-95	ND(<125)	7,800	2,500	190	590	730	190	ND(<125)	ND(<125)		---	---
	14-Dec-95	ND(<0.50)	11,000	2,300	100	620	460	140	26	ND(<0.50)		---	---
	8-Mar-96	ND(<200)	9,900	2,400	ND(<200)	460	ND(<400)	ND(<200)	ND(<200)	ND(<200)		---	---
	11-Jun-96	ND(<200)	9,700	2,100	ND(<200)	ND(<200)	440	ND(<200)	ND(<200)	ND(<200)		---	---
	13-Sep-96	ND(<1000)	11,000	2,200	ND(<1000)	ND(<1000)	ND(<2000)	ND(<1000)	ND(<1000)	ND(<1000)		---	---
	11-Dec-96	ND(<1000)	11,000	2,900	ND(<1000)	ND(<1000)	ND(<2000)	ND(<1000)	ND(<1000)	ND(<1000)		---	---
	8-Apr-97	ND(<1000)	15,000	2,900	ND(<1000)	ND(<1000)	ND(<2000)	ND(<1000)	ND(<1000)	ND(<1000)		---	---
	30-Jun-97	ND(<500)	24,000	4,100	ND(<500)	780	ND(<1000)	ND(<500)	ND(<500)	ND(<500)		---	---
	1-Oct-97	ND(<120)	11,000	2,200	ND(<120)	350	410	ND(<120)	ND(<120)	ND(<120)		---	---
	2-Dec-97	ND(<100)	5,300	1,100	ND(<100)	160	ND(<200)	ND(<100)	ND(<100)	ND(<100)		---	---
	22-Apr-98	---	---	---	---	---	---	---	---	---	92.7	0.830	5.3
	19-May-98	4.5	3,900	1,800	40	230	160	39	9.3	1.9	---	---	---
	28-Jul-98	ND(<100)	4,500	2,600	ND(<100)	270	ND(<200)	ND(<100)	ND(<100)	ND(<100)	---	---	---
MW-17 (off-site)	13-Jun-85	18	200	---	23	46	ND(<5)	22	ND(<5)	---	---	---	---
	19-Nov-91	8.9	460	---	54	54	420	30	7.8	---	---	---	---
	28-Jul-95	---	780	---	---	---	---	---	---	---	---	---	---
	20-Apr-95	ND(<10)	410	42	11	37	ND(<20)	ND(<10)	ND(<10)	ND(<10)	1,2-DCBz: 17; CBz: 31	---	---
	19-Sep-95	9.8	260	50	23	42	ND(<10)	11	ND(<5)	ND(<5)	1,2-DCBz: 28; CBz: 52	---	---
	14-Dec-95	13	360	24	ND(<10)	38	ND(<20)	ND(<10)	ND(<10)	ND(<10)	1,2-DCBz: 15; CBz: 27	---	---
	8-Mar-96	ND(<0.50)	310	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<100)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---
	11-Jun-96	ND(<0.50)	270	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<100)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---
	13-Sep-96	ND(<200)	1,900	ND(<200)	ND(<200)	410	ND(<400)	ND(<200)	ND(<200)	ND(<200)	---	---	---
	11-Dec-96	ND(<200)	450	ND(<200)	ND(<200)	ND(<200)	ND(<400)	ND(<200)	ND(<200)	ND(<200)	---	---	---
	8-Apr-97	ND(<200)	350	ND(<200)	ND(<200)	ND(<200)	ND(<400)	ND(<200)	ND(<200)	ND(<200)	---	---	---
	30-Jun-97	6.3	260	27	11	20	ND(<10)	ND(<5.0)	ND(<5.0)	ND(<5.0)	1,2-DCBz: 16; CBz: 28	---	---
	1-Oct-97	11	250	29	11	15	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	1,2-DCBz: 14; CBz: 23	---	---
	2-Dec-97	4.1	140	17	4.9	12	ND(<5.0)	ND(<2.5)	ND(<2.5)	ND(<2.5)	1,2-DCBz: 9.5; CBz: 14	---	---
	(b) 19-May-98	5.0	180	13	6.0	15	2.0	1.7	0.99	0.60	1,2-DCBz: 5.6; CBz: 7.7; CFM: 1.4	---	---
	28-Jul-98	ND(<5.0)	170	17	ND(<5.0)	11	ND(<10)	ND(<5.0)	ND(<5.0)	ND(<5.0)	1,2-DCBz: 6.4; CBz: 9.3	---	---

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Table 2: Summary of Groundwater Analytical Data - Total and Hexavalent Chromium

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	Total Chromium ($\mu\text{g/L}$) (a)	Hexavalent Chromium ($\mu\text{g/L}$) (b)
MW-2	24-Aug-77	60	NA
	15-Sep-81	ND(<1)	NA
	11-Oct-81	4	NA
	24-Nov-81	1.1	NA
	21-Dec-81	2	NA
	19-Apr-95	Not Located	
MW-7	19-Apr-95	Not Located	
MW-19	22-Jun-83	NA (<20)	NA (<20)
	26-Feb-85	20	20
	19-Apr-95	Not Located	
MW-21	21-Jun-83	20	ND (<20)
	26-Feb-85	40	ND (<20)
	19-Apr-95	Not Located	
OW-1	22-Aug-95	19,000	22,000
	22-Aug-95	Pilot Test: 50 gallons 100:1 into MW-11.	
	20-Oct-95	24,000	32,000
	22-Dec-95	Pilot Test: 330 gallons innoc. 10:1.	
	22-Dec-95	Pilot Test: 150 gallons innoc. 20:1 into MW-11.	
	4-Jan-96	Pilot Test: 150 gallons 20:1 into MW-11.	
	19-Jan-96	Pilot Test: 150 gallons 20:1 into MW-11.	
	1-Feb-96	Pilot Test: 150 gallons 20:1 into MW-11.	
OW-2	16-Feb-96	4,800	ND(<5.0)
	22-Aug-95	36,000	36,000
	22-Aug-95	Pilot Test: 50 gallons 100:1 into MW-11.	
	18-Sep-95	70,000	77,000
	20-Oct-95	51,000	58,000
	22-Dec-95	Pilot Test: 150 gallons innoc. 20:1 into MW-11.	
	4-Jan-96	Pilot Test: 150 gallons 20:1 into MW-11.	
	19-Jan-96	Pilot Test: 150 gallons 20:1 into MW-11.	
DP-1	1-Feb-96	Pilot Test: 150 gallons 20:1 into MW-11.	
	16-Feb-96	6,900	89
DP-1	20-Oct-95	10,000	6.1
	14-Mar-96	Pilot Test: 100 gallons innoc. 4:1.	

(a) Analysis by USEPA Method 200.7.

(b) Analysis by USEPA Method 7196.

(c) Denotes well that was part of the pilot study performed from August 1995 through February 1996.

(d) Laboratory indicates results are questionable due to samples being marked "preserved" which were not.

ND() Not detected; laboratory method detection limit in parentheses

 $\mu\text{g/L}$ Micrograms per liter

Data from August 1977 through July 1994 taken from groundwater monitoring reports by American

Environmental Management Corporation (January 27, 1992, and October 28, 1994).

Beginning April 20, 1995, laboratory analyses performed by Sequoia Analytical (Walnut Creek and Redwood City, California).

Table 3: Summary of Groundwater Analytical Data - Halogenated Volatile Organic Compounds

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,2-DCA	Other Analytes	Methane	Ethane	Ethylene
		($\mu\text{g/L}$) (a)	($\mu\text{g/L}$) (a)	($\mu\text{g/L}$) (a)	($\mu\text{g/L}$) (a)	($\mu\text{g/L}$) (a)	($\mu\text{g/L}$) (a)	($\mu\text{g/L}$) (a)	($\mu\text{g/L}$) (a)	($\mu\text{g/L}$) (a)	($\mu\text{g/L}$)	($\mu\text{g/L}$)	($\mu\text{g/L}$)	($\mu\text{g/L}$)
MW-1 (on-site)	21-Mar-85	21	33	---	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---	---	---
	15-Nov-91	0.6	11	---	4.8	0.5	ND(<1)	ND(<0.5)	1.6	---	---	---	---	---
	13-Sep-96	ND(<0.50)	14	1.9	ND(<0.50)	0.63	ND(<1.0)	ND(<0.50)	ND(<0.50)	0.78	---	---	---	---
	8-Apr-97	ND(<0.50)	13	1.2	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	Apr-97	On-site Remediation Injection Event												
	1-Oct-97	ND(<0.50)	16	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	Feb-98	On-site Remediation Injection Event												
	24-Apr-98	---	---	---	---	---	---	---	---	---	32.2	0.009	<.005	---
	19-May-98	ND(<0.50)	33	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	28-Jul-98	ND(<1.0)	28	6.0	ND(<1.0)	ND(<1.0)	ND(<2.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)	---	---	---	---
MW-3A (on-site) (deep well)	29-Oct-91	ND(<0.5)	ND(<0.5)	---	ND(<0.5)	ND(<0.5)	ND(<1)	ND(<0.5)	ND(<0.5)	---	---	---	---	---
	20-Apr-95	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<1.0)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---	---
	19-Sep-95	ND(<0.5)	0.56	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<1.0)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---	---
	14-Dec-95	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	11-Jun-96	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	13-Sep-96	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	11-Dec-96	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	7-Apr-97	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	Apr-97	On-site Remediation Injection Event												
	30-Jun-97	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
MW-3B (on-site)	1-Oct-97	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	4-Dec-97	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	Feb-98	On-site Remediation Injection Event												
	19-May-98	ND(<0.50)	1.2	0.68	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	28-Jul-98	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	29-Oct-91	6.8	650	---	45	13	6.4	ND(<0.5)	1.2	---	---	---	---	---
	20-Apr-95	ND(<10)	260	17	23	ND(<10)	ND(<20)	ND(<10)	ND(<10)	ND(<10)	---	---	---	---
	Apr-97	On-site Remediation Injection Event												
	Feb-98	On-site Remediation Injection Event												
	19-May-98	ND(<0.5)	2.1	13	1.5	1.5	2.9	ND(<0.50)	2.5	ND(<0.50)	---	---	---	---
	28-Jul-98	ND(<1.0)	8.2	58.0	5.8	16	4.8	1.0	8.4	1.2	---	---	---	---

Table 3: Summary of Groundwater Analytical Data - Halogenated Volatile Organic Compounds

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,2-DCA	Other Analytes	Methane	Ethane	Ethylene
		(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-3C (on-site)	11-Jun-85	1.7	150	---	23	ND(<0.5)	ND(<0.5)	2.4	ND(<0.5)	---	---	---	---	---
	21-Oct-91	1.7	180	---	26	61	18	34	5.4	---	---	---	---	---
	20-Apr-95	ND(<0.5)	30	11	ND(<0.5)	1.6	2.2	0.66	2.0	ND(<0.5)	---	---	---	---
	Apr-97	On-site Remediation Injection Event												
	Feb-98	On-site Remediation Injection Event												
	4-Nov-91	31	2,100	---	269	ND(<5)	10	ND(<5)	ND(<5)	---	---	---	---	---
MW-4 (on-site)	28-Jul-94	---	6,500	---	---	---	---	---	---	---	---	---	---	---
	21-Apr-95	ND(<50)	4,400	430	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	---	---	---	---
	19-Sep-95	65	3,500	590	92	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---	---
	15-Dec-95	27	2,900	330	44	ND(<10)	ND(<20)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	---	---	---
	8-Mar-96	84	3,100	360	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---	---
	11-Jun-96	ND(<100)	3,100	280	ND(<100)	ND(<100)	ND(<200)	ND(<100)	ND(<100)	ND(<100)	ND(<100)	---	---	---
	13-Sep-96	63	1,800	410	58	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---	---
	11-Dec-96	ND(<50)	1,600	260	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---	---
	8-Apr-97	ND(<50)	4,000	410	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---	---
	Apr-97	On-site Remediation Injection Event												
	30-Jun-97	ND(<50)	4,000	2,800	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	---	---	---	---
	1-Oct-97	ND(<25)	ND(<25)	1,300	45	ND(<25)	1,100	ND(<25)	ND(<25)	ND(<25)	ND(<25)	---	---	---
	2-Dec-97	ND(<25)	120	320	29	ND(<25)	1,300	ND(<25)	ND(<25)	ND(<25)	ND(<25)	---	---	---
	Feb-98	On-site Remediation Injection Event												
	19-May-98	Access blocked by construction activity at 1421 Park Avenue.												
	28-Jul-98	ND(<1.0)	1.2	17	13	ND(<1.0)	21	ND(<1.0)	ND(<1.0)	ND(<1.0)	---	---	---	---
MW-5 (on-site)	4-Nov-91	8.9	410	---	120	4.2	54	1.3	42	---	---	---	---	---
	21-Apr-95	10	210	31	13	ND(<5)	ND(<10)	ND(<5)	13	ND(<5)	---	---	---	---
	Apr-97	On-site Remediation Injection Event												
	30-Jun-97	14	190	32	20	ND(<5.0)	ND(<10)	ND(<5.0)	8.2	ND(<5.0)	---	---	---	---
	1-Oct-97	ND(<2.5)	36	210	19	ND(<2.5)	13	ND(<2.5)	9.1	2.7	---	---	---	---
	Feb-98	On-site Remediation Injection Event												
	19-May-98	ND(<2.5)	ND(<2.5)	7.1	11	ND(<2.5)	ND(<2.5)	ND(<2.5)	ND(<2.5)	ND(<2.5)	---	---	---	---
	28-Jul-98	ND(<0.50)	ND(<0.50)	3.1	5.0	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	CA: 1.9	---	---	---

Table 3: Summary of Groundwater Analytical Data - Halogenated Volatile Organic Compounds

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,2-DCA	Other Analytes	Methane	Ethane	Ethylene
		(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-9 (on-site)	13-Jun-85	26	700	---	31	ND(<5)	ND(<5)	ND(<5)	ND(<5)	---	---	---	---
	30-Oct-91	11	200	---	13	ND(<0.5)	ND(<1)	ND(<0.5)	1.3	---	---	---	---
	21-Apr-95	13	73	6.4	ND(<2)	ND(<2)	ND(<4)	ND(<2)	ND(<2)	ND(<2)	---	---	---
	13-Sep-96	75	ND(<50)	ND(<50)	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	---	---	---
	11-Dec-96	---	---	---	---	---	---	---	---	---	---	---	---
	7-Apr-97	15	95	8.8	2.5	ND(<2.5)	ND(<5.0)	7.1	ND(<2.5)	ND(<2.5)	---	---	---
	Apr-97	On-site Remediation Injection Event									13,103	<0.005	2.7
	1-Oct-97	9.6	57	8.8	2.5	ND(<1.2)	ND(<2.5)	4.8	3.9	1.3	---	---	---
	2-Dec-97	3.2	11	4.5	ND(<0.50)	ND(<0.50)	ND(<1.0)	2.5	5.2	ND(<0.50)	---	---	---
	Feb-98	On-site Remediation Injection Event									---	---	---
MW-10 (on-site)	24-Apr-98	---	---	---	---	---	---	---	---	---	13,103	<0.005	2.7
	19-May-98	38	99	ND(<25)	680	ND(<25)	1,700	150	190	ND(<25)	---	---	---
	28-Jul-98	ND(<100)	ND(<100)	4,100	100	ND(<100)	320	ND(<100)	ND(<100)	ND(<100)	---	---	---
	12-Jun-85	81	5,100	---	ND(<50)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---	---	---
	12-Jun-85	ND(<50)	12,000	---	600	ND(<50)	---	ND(<50)	ND(<50)	---	---	---	---
	7-Nov-91	ND(<50)	14,000	---	640	3,800	ND(<100)	6,500	ND(<50)	---	---	---	---
	21-Apr-95	ND(<100)	10,000	900	ND(<100)	1,200	ND(<200)	1,000	ND(<100)	ND(<100)	---	---	---
	8-Apr-97	ND(<500)	660	11,000	ND(<500)	680	ND(<1000)	ND(<500)	ND(<500)	ND(<500)	---	---	---
	Apr-97	On-site Remediation Injection Event									---	---	---
	1-Oct-97	ND(<120)	ND(<120)	5,900	ND(<120)	260	500	ND(<120)	ND(<120)	ND(<120)	---	---	---
19-May-98	2-Dec-97	ND(<120)	ND(<120)	6,600	ND(<120)	320	480	ND(<120)	ND(<120)	ND(<120)	---	---	---
	Feb-98	On-site Remediation Injection Event									2,363	1.7	237.9
	24-Apr-98	---	---	---	---	---	---	---	---	---	---	---	---
	28-Jul-98	ND(<10)	ND(<10)	390	17	ND(<10)	54	ND(<10)	ND(<10)	ND(<10)	CA: 28	---	---

Table 3: Summary of Groundwater Analytical Data - Halogenated Volatile Organic Compounds

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,2-DCA	Other Analytes	Methane	Ethane	Ethylene
		(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-11 (on-site)	12-Jun-85	5.3	19	---	3.4	ND(<0.5)	ND(<0.5)	1.3	ND(<0.5)	---	---	---	---	---
	15-Nov-91	1.5	10	---	3.1	ND(<0.5)	ND(<1)	ND(<0.5)	ND(<0.5)	---	---	---	---	---
	20-Apr-95	7.4	67	6.2	ND(<5)	ND(<5)	ND(<10)	ND(<5)	ND(<5)	ND(<5)	---	---	---	---
	13-Sep-96	0.73	6.0	3.6	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	0.6	1.0	---	---	---	---
	7-Apr-97	ND(<0.50)	1.1	9.7	4.1	ND(<0.50)	4.6	ND(<0.50)	0.73	ND(<0.50)	---	---	---	---
	Apr-97	On-site Remediation Injection Event												
	1-Oct-97	ND(<0.50)	8.4	25	8.3	ND(<0.50)	9.5	0.51	2.6	1.6	---	---	---	---
	2-Dec-97	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
Feb-98 On-site Remediation Injection Event														

Table 3: Summary of Groundwater Analytical Data - Halogenated Volatile Organic Compounds

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,2-DCA	Other Analytes (µg/L)	Methane (µg/L)	Ethane (µg/L)	Ethylene (µg/L)
		(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)				
MW-12 <i>(on-site)</i>	11-Nov-91	10	130	---	9	3.3	ND(<2)	4.6	1.3	---	---	---	---
	20-Apr-95	9.4	52	5.0	ND(<2.5)	9.0	ND(<5)	3.9	ND(<2.5)	ND(<2.5)	---	---	---
	19-Sep-95	14	67	9.1	3.8	1.5	ND(<2.5)	7.2	1.6	2.9	---	---	---
	15-Dec-95	ND(<10)	79	ND(<10)	ND(<10)	ND(<10)	ND(<20)	ND(<10)	ND(<10)	ND(<10)	---	---	---
	8-Mar-96	850	ND(<50)	ND(<50)	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	---	---	---
	11-Jun-96	ND(<1.0)	2.7	39	1.4	3.9	13	2.6	1.6	1.4	---	---	---
	13-Sep-96	2.3	23	15	1.5	12	ND(<1.0)	5.9	2.9	1.9	---	---	---
	11-Dec-96	5.0	55	11	0.83	6.2	ND(<1.0)	4.9	1.4	1.5	---	---	---
	7-Apr-97	6.2	65	17	ND(<5.0)	15	ND(<10)	ND(<5.0)	5.6	ND(<5.0)	---	---	---
	Apr-97	On-site Remediation Injection Event									1,904	2.3	1.2
Feb-98	30-Jun-97	8.5	47	7.6	1.5	4.6	ND(<2.0)	1.9	1.5	1.6	---	---	---
	1-Oct-97	8.1	20	6.7	1.8	ND(<0.50)	1.1	0.52	2.0	1.7	---	---	---
	2-Dec-97	2.9	5.6	0.97	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	0.57	ND(<0.50)	---	---	---
	24-Apr-98	---	---	---	---	---	---	---	---	---	CA: 1.2	---	---
19-May-98	ND(<0.50)	6.0	4.5	2.0	ND(<0.50)	2.4	ND(<0.50)	0.83	0.83	0.83	---	---	---
	28-Jul-98	ND(<0.50)	5.3	7.9	1.0	ND(<0.50)	1.2	ND(<0.50)	0.65	0.83	---	---	---

Table 3: Summary of Groundwater Analytical Data - Halogenated Volatile Organic Compounds

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	cis-1,2-DCE						trans-1,2-DCE			Vinyl Chloride			Other Analytes		
		PCE (µg/L) (a)	TCE (µg/L) (a)	1,2-DCE (µg/L) (a)	1,2-DCE (µg/L) (a)	1,1-DCE (µg/L) (a)	Vinyl Chloride (µg/L) (a)	1,1,1-TCA (µg/L) (a)	1,1-DCA (µg/L) (a)	1,2-DCA (µg/L) (a)	Methane (µg/L)	Ethane (µg/L)	Ethylene (µg/L)			
MW-13	8-Nov-91	8.9	630	---	89	6.8	20	ND(<5)	15	---	---	---	---			
(on-site)	28-Jul-94	---	770	---	---	---	---	---	---	---	---	---	---			
	20-Apr-95	8.9	360	70	16	ND(<5)	20	ND(<5)	14	ND(<5)	---	---	---			
	19-Sep-95	12.0	240	72	25	ND(<5)	42	ND(<5)	18	ND(<5)	---	---	---			
	15-Dec-95	ND(<10)	380	68	17	ND(<10)	ND(<20)	ND(<10)	ND(<10)	ND(<10)	---	---	---			
	8-Mar-96	ND(<50)	270	68	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---			
	11-Jun-96	ND(<50)	250	ND(<50)	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---			
	13-Sep-96	ND(<50)	430	84	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---			
	11-Dec-96	ND(<50)	250	56	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---			
	7-Apr-97	ND(<50)	280	62	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	---	---			
	Apr-97	On-site Remediation Injection Event														
	30-Jun-97	12	300	61	25	ND(<5.0)	30	ND(<5.0)	15	ND(<5.0)	---	---	---			
	1-Oct-97	15	250	100	24	ND(<5.0)	25	ND(<5.0)	13	ND(<5.0)	---	---	---			
	2-Dec-97	5.5	140	150	22	ND(<2.5)	35	ND(<2.5)	11	2.9	---	---	---			
	Feb-98	On-site Remediation Injection Event														
19-May-98	ND(<0.50)	1.2	29	4.4	ND(<0.5)	3.4	ND(<0.5)	6.1	0.67	---	---	---				
28-Jul-98	ND(<0.50)	9.3	9	3.2	ND(<0.5)	4.4	ND(<0.5)	3.1	0.90	CA: 2.2	---	---	---			

Table 3: Summary of Groundwater Analytical Data - Halogenated Volatile Organic Compounds

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,2-DCA	Other Analytes	Methane	Ethane	Ethylene
		(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-14 (on-site)	21-Mar-85	26	580	---	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---	---
	11-Nov-91	13	4,300	---	150	13	30	17	19	---	---	---	---	---
	21-Apr-95	ND(<10)	8,100	36	ND(<10)	ND(<10)	ND(<20)	ND(<10)	ND(<10)	ND(<10)	---	---	---	---
	13-Sep-96	ND(<1000)	4,700	ND(<1000)	ND(<1000)	ND(<1000)	ND(<2000)	ND(<1000)	ND(<1000)	ND(<1000)	---	---	---	---
	8-Apr-97	ND(<500)	17,000	ND(<500)	ND(<500)	ND(<500)	ND(<1000)	ND(<500)	ND(<500)	ND(<500)	---	---	---	---
	Apr-97	On-site Remediation Injection Event												
	1-Oct-97	ND(<25)	2,200	2,100	ND(<25)	ND(<25)	ND(<50)	ND(<25)	ND(<25)	ND(<25)	---	---	---	---
	2-Dec-97	ND(<25)	680	1,200	ND(<25)	ND(<25)	110	ND(<25)	ND(<25)	ND(<25)	---	---	---	---
	Feb-98	On-site Remediation Injection Event												
	19-May-98	ND(<13)	1,800	4,600	39	13	860	ND(<13)	ND(<13)	ND(<13)	---	---	---	---
MW-20 (deep well)	28-Jul-98	ND(<100)	1,500	5,100	ND(<100)	ND(<100)	1,200	ND(<100)	ND(<100)	ND(<100)	---	---	---	---
	15-Nov-91	ND(<0.5)	ND(<0.5)	---	ND(<0.5)	ND(<0.5)	ND(<1)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---	---
	21-Apr-95	ND(<0.5)	4	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<1.0)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---	---
	19-Sep-95	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<1.0)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---	---
	15-Dec-95	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	11-Jun-96	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	13-Sep-96	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	7-Apr-97	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
	Apr-97	On-site Remediation Injection Event												
	1-Oct-97	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---
19-May-98	Feb-98	On-site Remediation Injection Event												
	28-Jul-98	Access blocked by construction activity at 1421 Park Avenue.												
	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---	---

Table 3: Summary of Groundwater Analytical Data - Halogenated Volatile Organic Compounds

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,2-DCA	Other Analytes	Methane (µg/L)	Ethane (µg/L)	Ethylene (µg/L)
		(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)	(µg/L) (a)				
MW-18 (off-site)	12-Jun-85	32	430	---	140	ND(<0.5)	ND(<0.5)	52	ND(<0.5)	---	---	---	---
	12-Jun-85	ND(<50)	340	---	ND(<50)	ND(<50)	---	66	ND(<50)	---	---	---	---
	19-Nov-91	11	560	---	160	ND(<5)	30	23	ND(<5)	---	---	---	---
	22-Apr-95	ND(<10)	330	35	13	ND(<10)	ND(<20)	16	ND(<10)	ND(<10)	---	---	---
	19-Sep-95	14	200	34	20	ND(<5)	ND(<10)	16	ND(<5)	ND(<5)	---	---	---
	14-Dec-95	ND(<10)	280	18	ND(<10)	ND(<10)	ND(<20)	ND(<10)	ND(<10)	ND(<10)	---	---	---
	8-Mar-96	ND(<50)	200	ND(<50)	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	---	---	---
	11-Jun-96	ND(<50)	200	ND(<50)	ND(<50)	ND(<50)	ND(<100)	ND(<50)	ND(<50)	ND(<50)	---	---	---
	30-Jun-97	9.0	210	21	12	ND(<5.0)	ND(<10)	8.6	ND(<5.0)	ND(<5.0)	---	---	---
	1-Oct-97	11	200	25	13	ND(<2.5)	ND(<5.0)	9.3	ND(<2.5)	ND(<2.5)	---	---	---
MW-18A (off-site)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---
	13-Jun-85	ND(<0.5)	10	---	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---	---
	19-Nov-91	ND(<0.5)	ND(<0.5)	---	ND(<0.5)	ND(<0.5)	ND(<1)	ND(<0.5)	ND(<0.5)	---	---	---	---
	20-Apr-95	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<1.0)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---
	19-Sep-95	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<1.0)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---
	15-Dec-95	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---
	8-Mar-96	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---
	11-Jun-96	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---
13-Jun-97	ND(<0.50)	4.5	0.54	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---
	1-Oct-97	ND(<0.50)	3.0	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	CFM: 1.5	---	---
	28-Jul-98	ND(<0.50)	1.1	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<1.0)	ND(<0.50)	ND(<0.50)	ND(<0.50)	---	---	---

Table 3: Summary of Groundwater Analytical Data - Halogenated Volatile Organic Compounds

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
 1421 Associates Property, 1421 Park Avenue
 Emeryville, California

Monitoring Well	Date Sampled	PCE ($\mu\text{g/L}$) (a)	TCE ($\mu\text{g/L}$) (a)	cis-1,2-DCE ($\mu\text{g/L}$) (a)	trans-1,2-DCE ($\mu\text{g/L}$) (a)	1,1-DCE ($\mu\text{g/L}$) (a)	Vinyl Chloride ($\mu\text{g/L}$) (a)	1,1,1-TCA ($\mu\text{g/L}$) (a)	1,1-DCA ($\mu\text{g/L}$) (a)	1,2-DCA ($\mu\text{g/L}$) (a)	Other Analytes ($\mu\text{g/L}$)	Methane ($\mu\text{g/L}$)	Ethane ($\mu\text{g/L}$)	Ethylene ($\mu\text{g/L}$)
MW-2	15-Nov-91	Not Located												
MW-7	19-Apr-95	Not Located												
MW-19	21-Mar-85 19-Apr-95	23 Not Located	91	---	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	---	---	---	---
MW-21	13-Jun-85 19-Apr-95	ND(<50) Not Located	2,200	---	800	ND(<50)	ND(<50)	110	ND(<50)	---		---	---	---
TB-LB	2-Dec-97 19-May-98	ND(<0.50) ND(<0.50)	ND(<0.50) ND(<0.50)	ND(<0.50) ND(<0.50)	ND(<0.50) ND(<0.50)	ND(<0.50) ND(<0.50)	ND(<1.0) ND(<1.0)	ND(<0.50) ND(<0.50)	ND(<0.50) ND(<0.50)	ND(<0.50) ND(<0.50)	---	---	---	---

(a) Analyzed by USEPA Method 8010.

(b) Denotes well that was part of the pilot study performed from August 1995 through February 1996.

PCE Tetrachloroethylene

TCE Trichloroethylene

cis-1,2-DCE cis-1,2-Dichloroethylene

trans-1,2-DCE trans-1,2-Dichloroethylene

1,1-DCE 1,1-Dichloroethylene

1,1,1-TCA 1,1,1-Trichloroethane

1,1-DCA 1,1-Dichloroethane

1,2-DCA 1,2-Dichloroethane

CBz Chlorobenzene

1,2-DCBz 1,2-Dichlorobenzene

CFM Chloroform

CA Chloroethane

ND() Not detected; laboratory method detection limit in parentheses

TB-LB Trip blank-laboratory blank

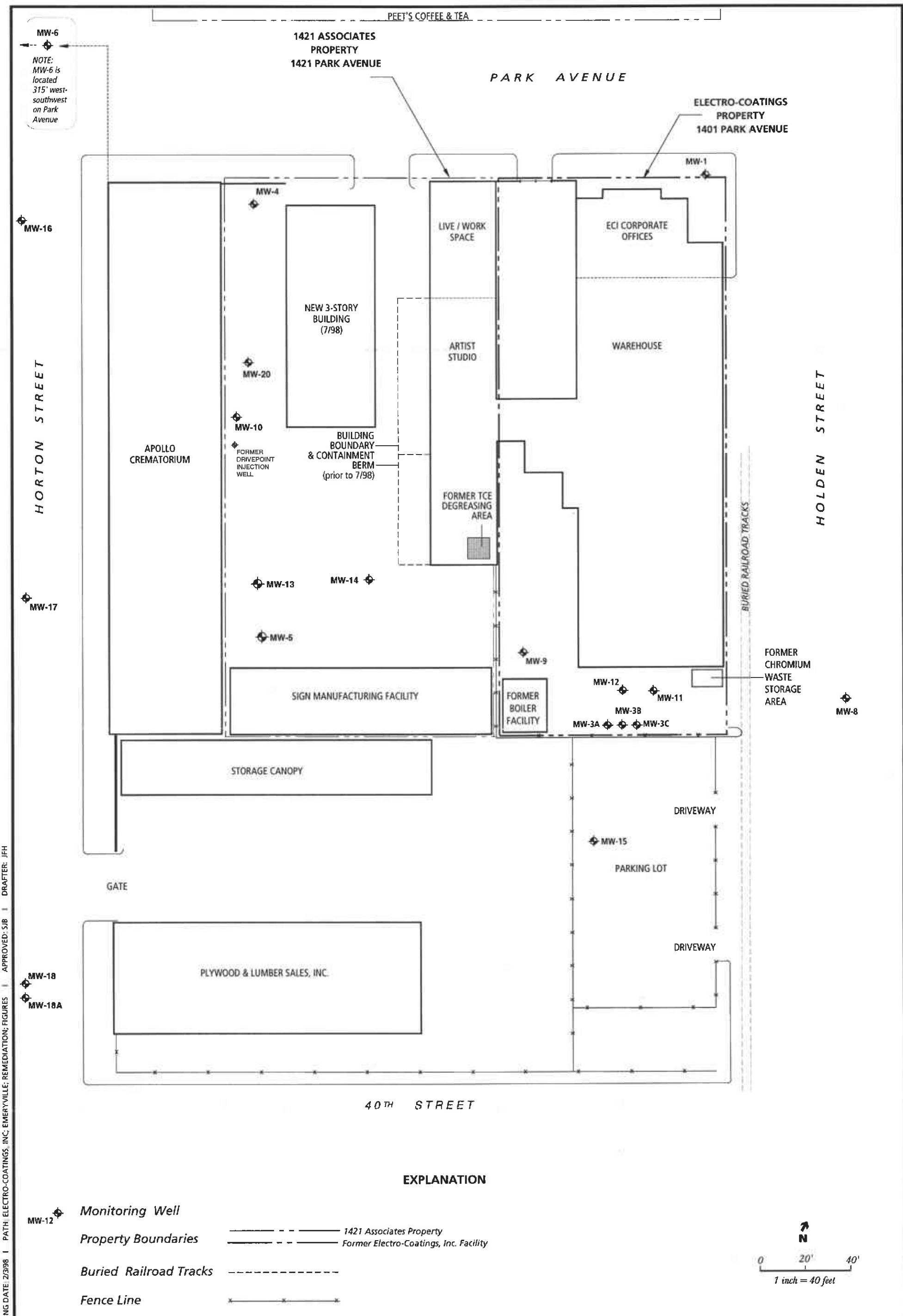
 $\mu\text{g/L}$ Micrograms per liter

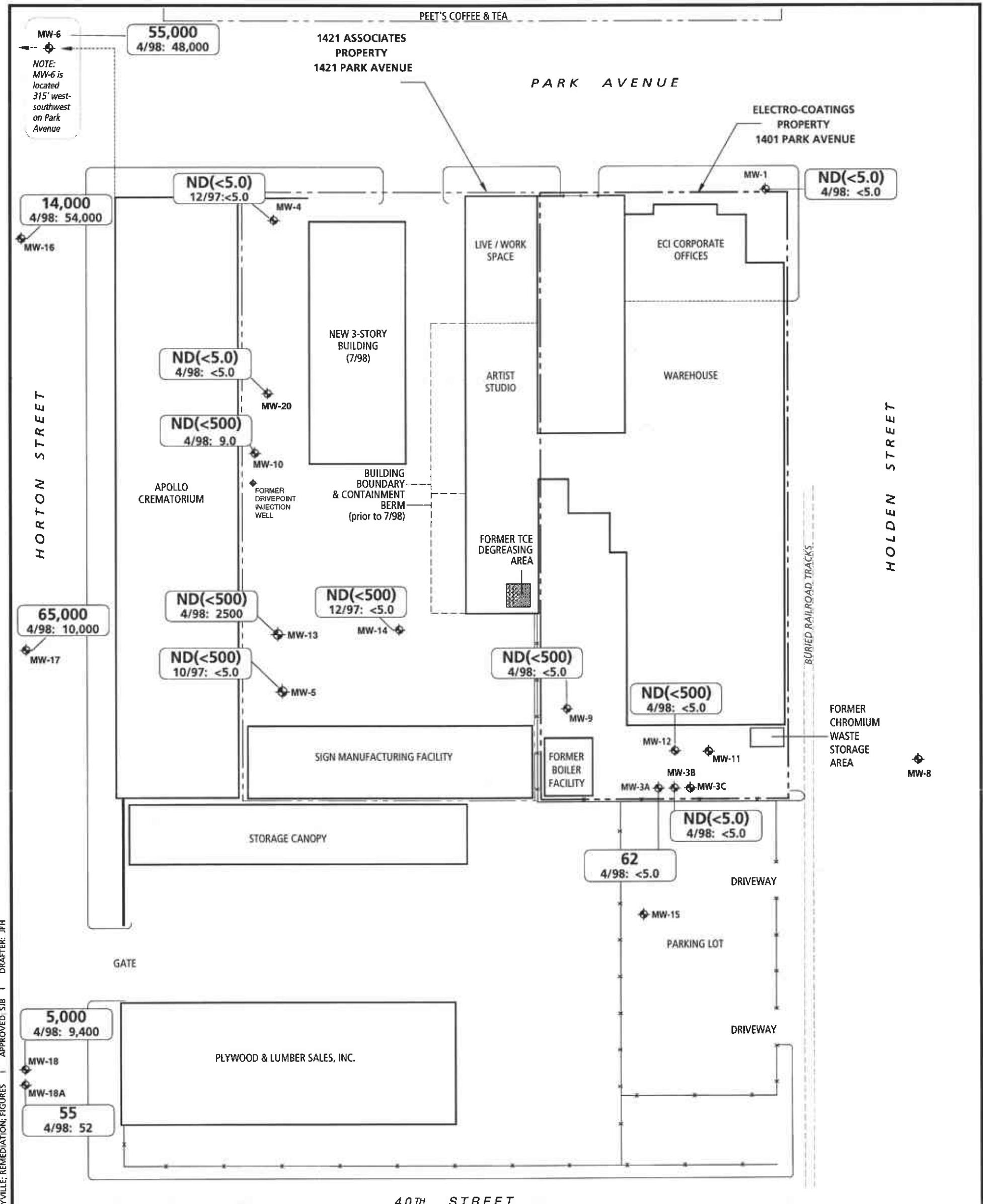
--- Not analyzed

Data from August 1977 through July 1994 taken from groundwater monitoring reports by American Environmental Management Corporation (January 27, 1992, and October 28, 1994).

Beginning April 20, 1995, laboratory analyses performed by Sequoia Analytical (Walnut Creek and Redwood City, California).

Methane, ethane, and ethylene analyses performed by Microseeps (Pittsburgh, Pennsylvania).





DRAFTER:	JFH
APPROVED:	SIB
REMEDIAL FIGURES:	
EMERYVILLE:	
PATH: ELECTRO-COATINGS, INC.	
RAWING DATE: 2/3/98	

EXPLANATION

- MW-12 Monitoring Well

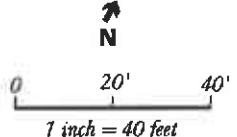
Property Boundaries 1421 Associates Property
Former Electro-Coatings, Inc. Facility

Buried Railroad Tracks

Fence Line

*Hexavalent chromium,
µg/L, July 1998.
ND = Not Detected.
Detection limit in ().*

- Previous monitoring results.



REFERENCE: ARCADIS GERAGHTY & MILLER FIELD MEASUREMENTS.

 **ARCADIS**
GERAGHTY & MILLER

HEXAVALENT CHROMIUM CONCENTRATIONS IN GROUNDWATER

Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
1421 Associates Property, 1421 Park Avenue
Emeryville, California

BASE REVISION
JULY 2, 1998
RC000304
FIGURE
2

200
5/98: 330

1421 ASSOCIATES
PROPERTY
1421 PARK AVENUE

PARK AVENUE

ELECTRO-COATINGS
PROPERTY
1401 PARK AVENUE

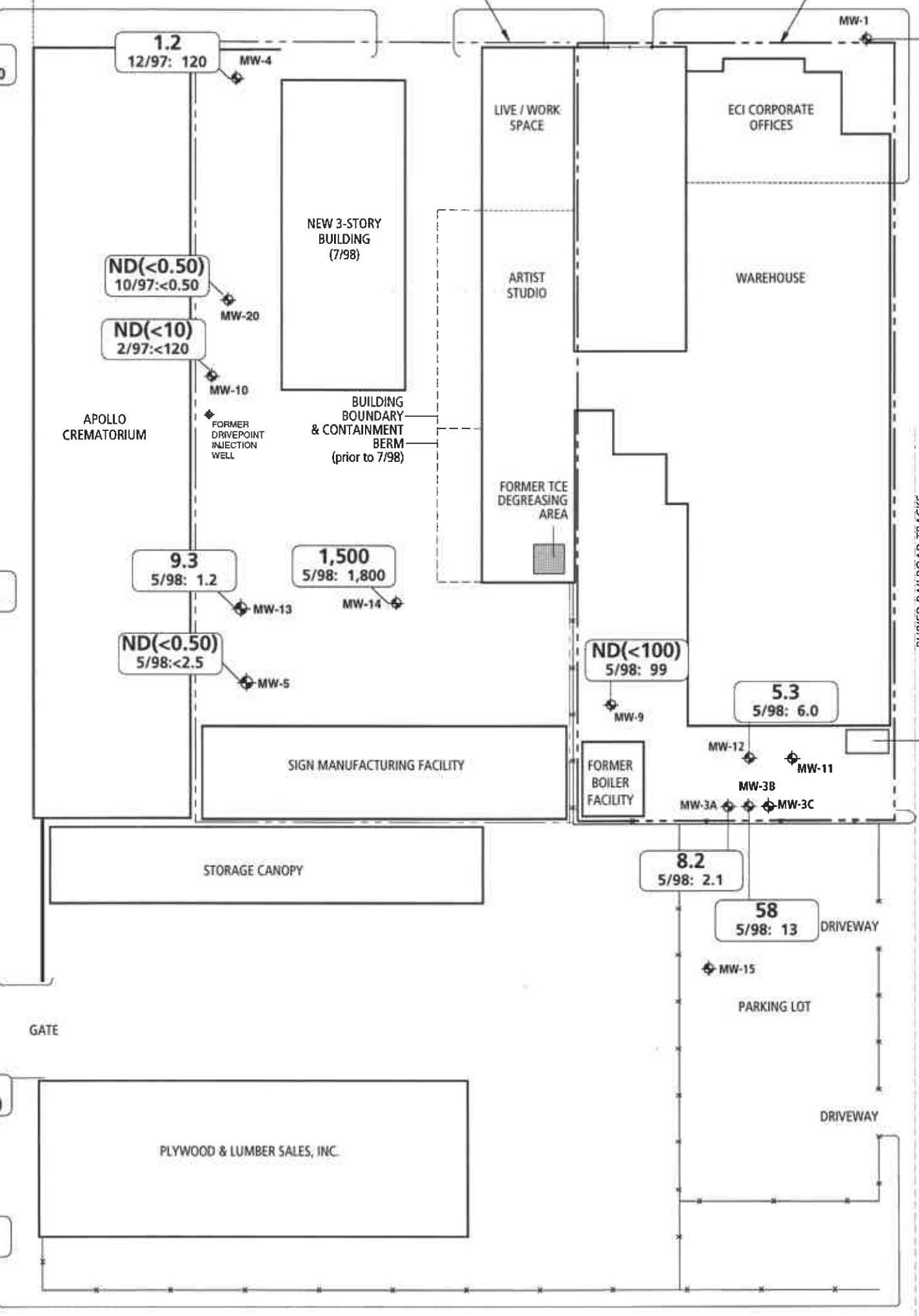
28
5/98: 33

NOTE:
MW-6 is
located
315' west-
southwest
on Park
Avenue

4,500
5/98: 3,900

HORTON STREET

HOLDEN STREET



HORTON STREET

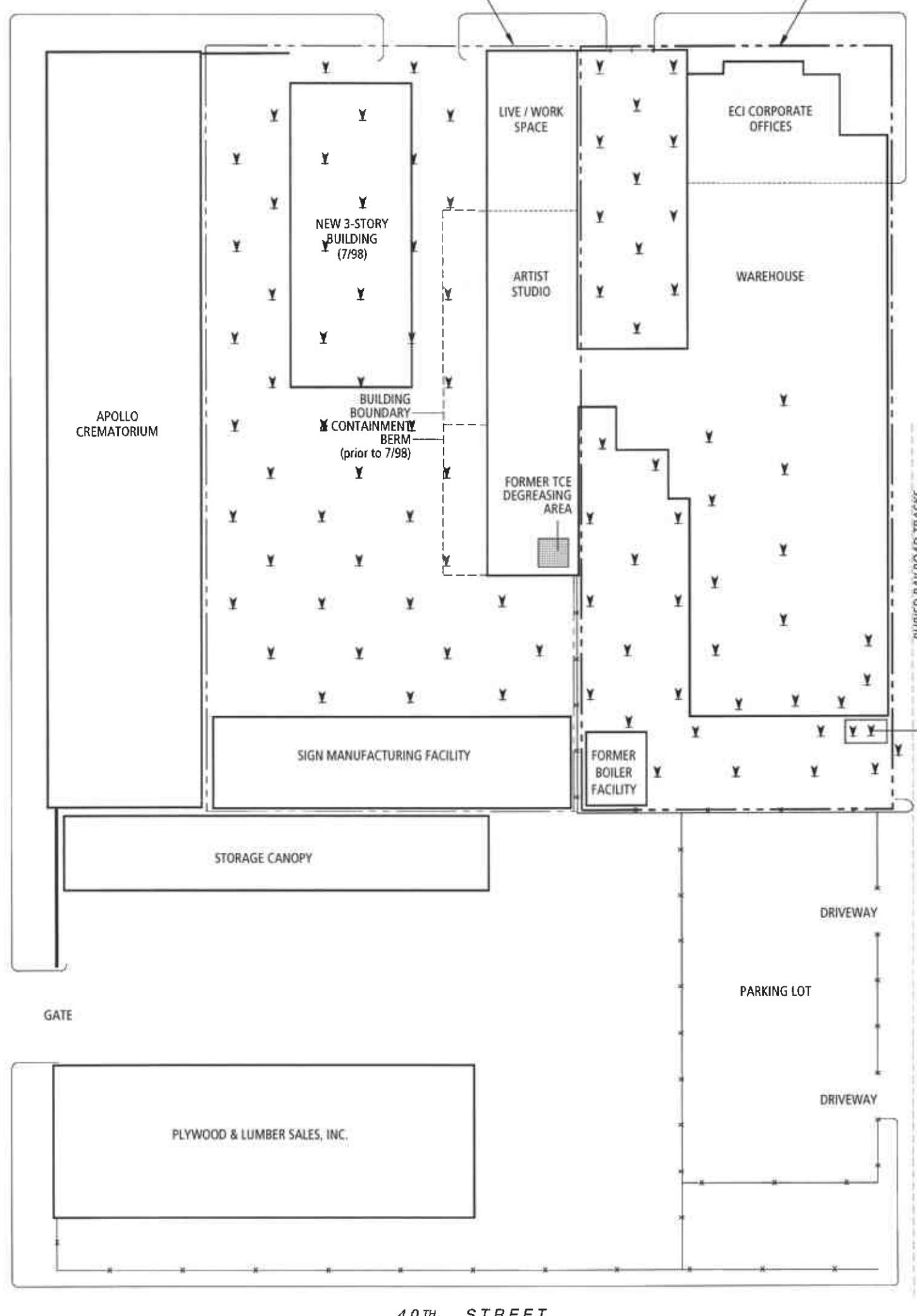
PARK AVENUE

HOLDEN STREET

PEET'S COFFEE & TEA

1421 ASSOCIATES
PROPERTY
1421 PARK AVENUE

ELECTRO-COATINGS
PROPERTY
1401 PARK AVENUE



EXPLANATION

MW-12 Monitoring Well

Property Boundaries 1421 Associates Property

Buried Railroad Tracks

Fence Line

Injection Point

0 20' 40'
1 inch = 40 feet

REFERENCE: ARCADIS GERAGHTY & MILLER FIELD MEASUREMENTS.



ARCADIS
GERAGHTY & MILLER

INJECTION POINT LOCATIONS
Former Electro-Coatings, Inc. Facility, 1401 Park Avenue
1421 Associates Property, 1421 Park Avenue
Emeryville, California

BASE REVISION

JULY 2, 1998

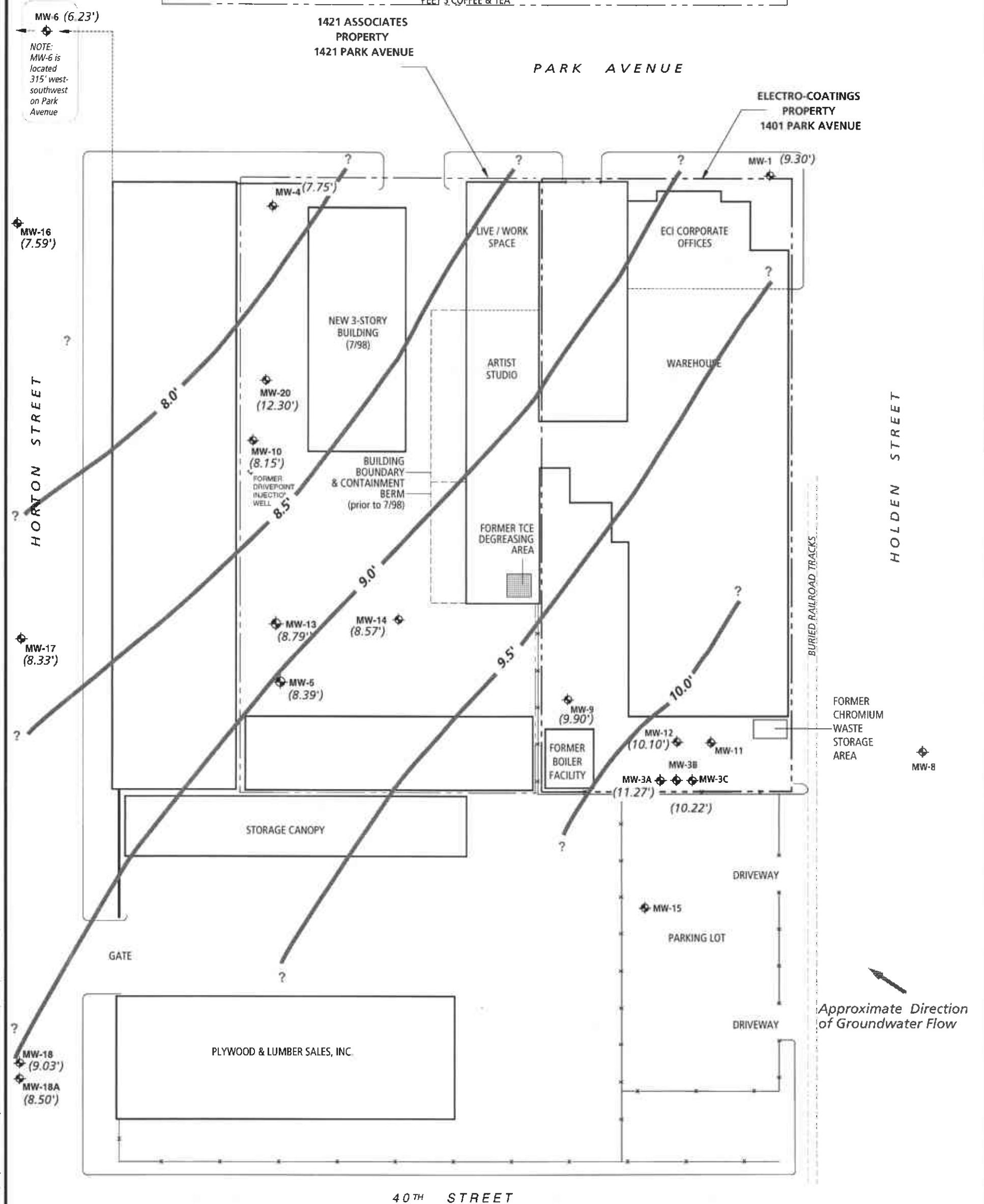
RC000304

FIGURE
4

1421 ASSOCIATES
PROPERTY
1421 PARK AVENUE

PARK AVENUE

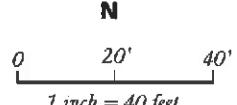
ELECTRO-COATINGS
PROPERTY
1401 PARK AVENUE

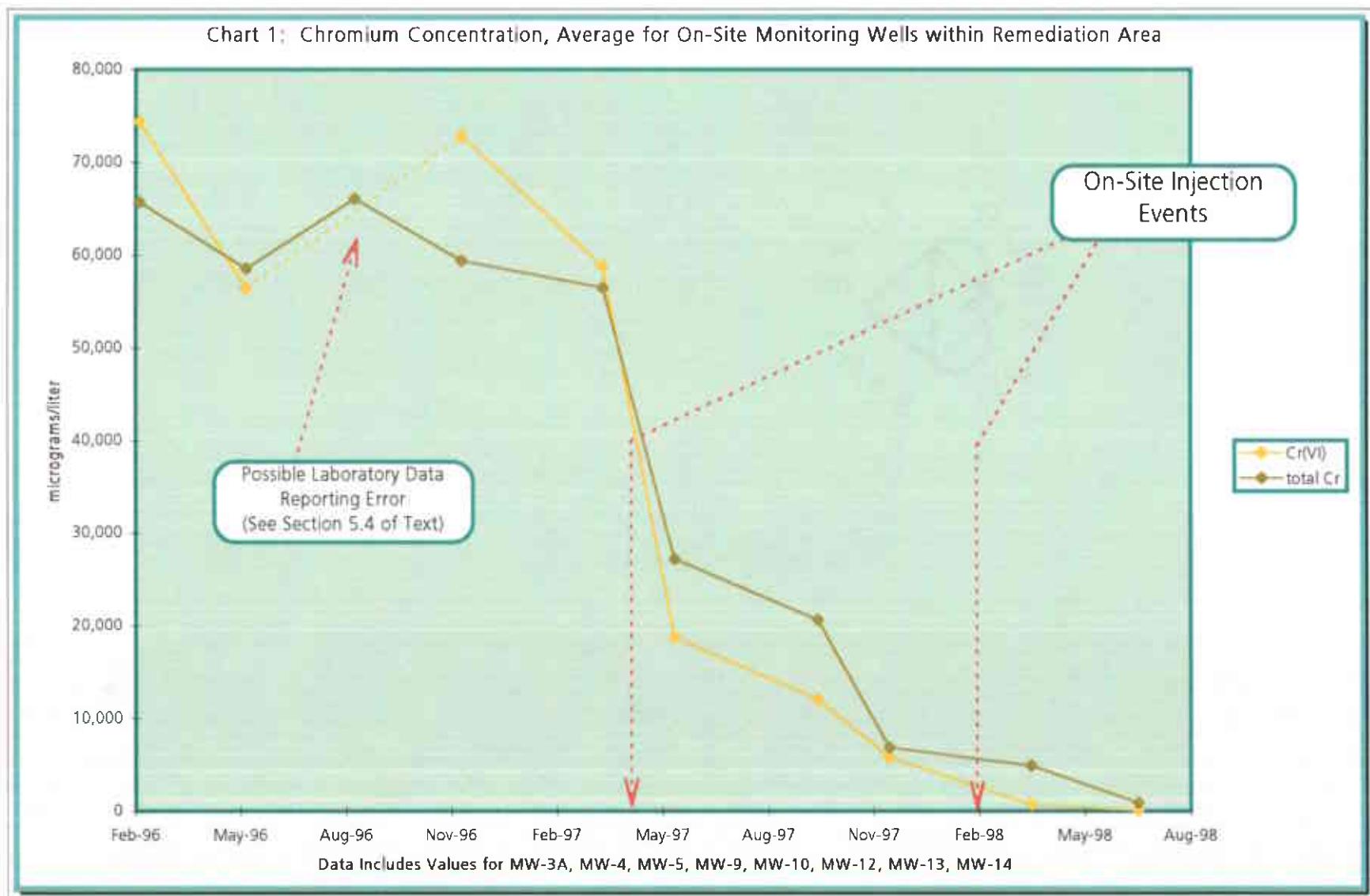


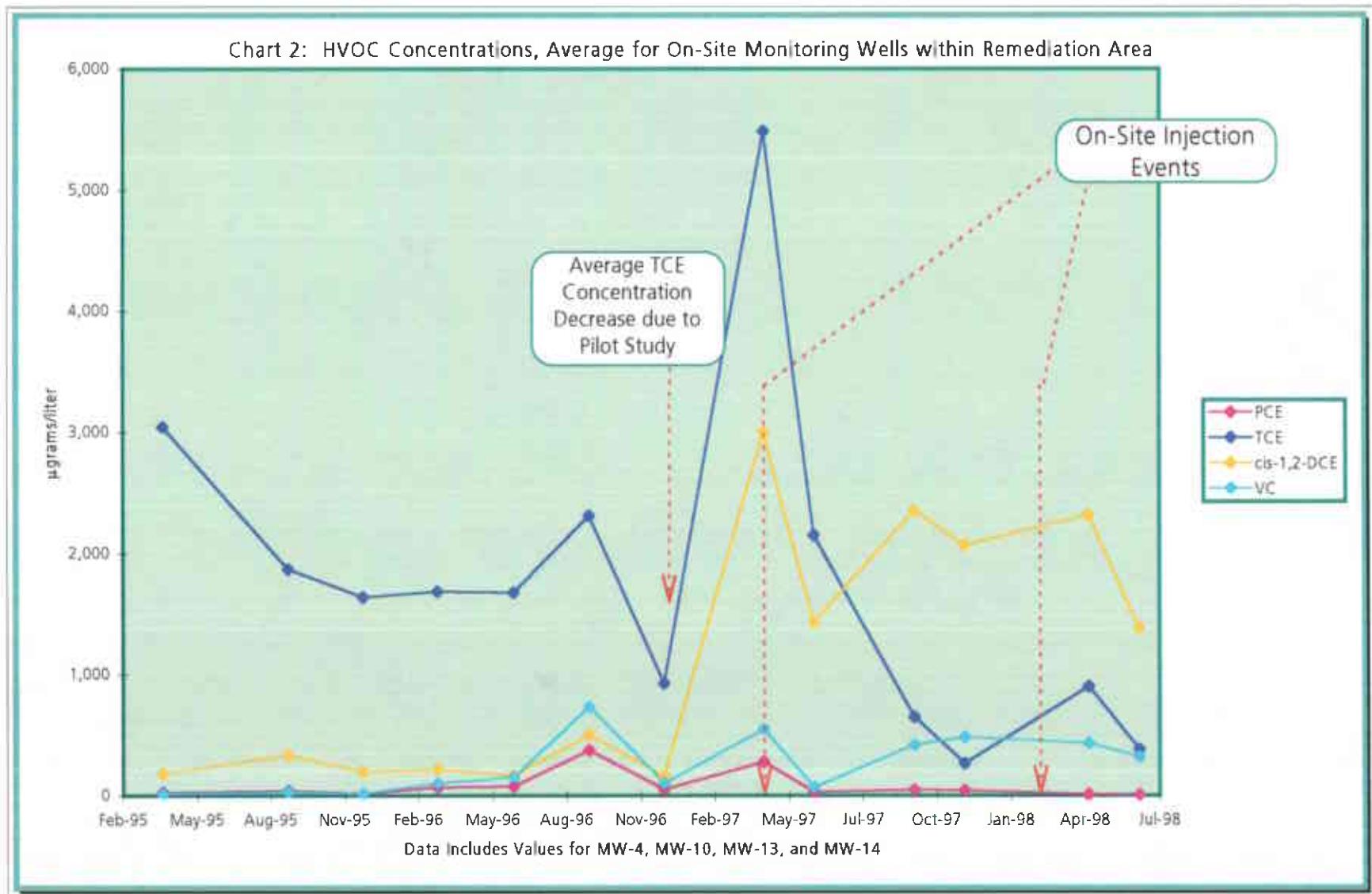
EXPLANATION

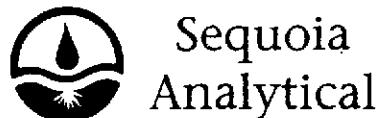
Groundwater Elevations,
measured July 27, 1998, in
feet above mean sea level.

Approximate location of
groundwater contours on
0.5' intervals, queried where
unknown (measured in feet
above mean sea level)









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FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Client Proj. ID: RC304.3/ECI-Emeryville
Lab Proj. ID: 9807G64

Sampled: 07/28/98
Received: 07/28/98
Analyzed: see below

Attention: Steven Brussee

Reported: 08/07/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9807G64-01 Sample Desc : LIQUID,MW-1				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.0050	N.D. N.D.
Lab No: 9807G64-02 Sample Desc : LIQUID,MW-3A				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.0050	0.21 0.062
Lab No: 9807G64-03 Sample Desc : LIQUID,MW-3B				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.0050	0.15 N.D.
Lab No: 9807G64-04 Sample Desc : LIQUID,MW-4				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.0050	0.11 N.D.
Lab No: 9807G64-05 Sample Desc : LIQUID,MW-5				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.50	0.67 N.D.
Lab No: 9807G64-06 Sample Desc : LIQUID,MW-6				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 5.0	47 55

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Client Proj. ID: RC304.3/ECI-Emeryville
Lab Proj. ID: 9807G64

Sampled: 07/28/98
Received: 07/28/98
Analyzed: see below

Attention: Steven Brussee

Reported: 08/07/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9807G64-07 Sample Desc : LIQUID,MW-9				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.50	3.9 N.D.
Lab No: 9807G64-08 Sample Desc : LIQUID,MW-10				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.50	0.24 N.D.
Lab No: 9807G64-09 Sample Desc : LIQUID,MW-12				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.50	0.069 N.D.
Lab No: 9807G64-10 Sample Desc : LIQUID,MW-13				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.50	1.8 N.D.
Lab No: 9807G64-11 Sample Desc : LIQUID,MW-14				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.50	1.6 N.D.

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



**Sequoia
Analytical**

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FAX (707) 792-0342

Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G64-01

Sampled: 07/28/98
Received: 07/28/98
Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080598OVOA09A
Instrument ID: GCHP09

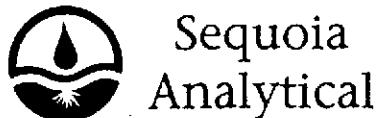
Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.0	N.D.
Bromoform	1.0	N.D.
Bromomethane	2.0	N.D.
Carbon Tetrachloride	1.0	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	1.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	1.0	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	1.0	N.D.
1,2-Dichloroethane	1.0	N.D.
1,1-Dichloroethene	1.0	N.D.
cis-1,2-Dichloroethene	1.0	6.0
trans-1,2-Dichloroethene	1.0	N.D.
1,2-Dichloropropane	1.0	N.D.
cis-1,3-Dichloropropene	1.0	N.D.
trans-1,3-Dichloropropene	1.0	N.D.
Methylene chloride	10	N.D.
1,1,2,2-Tetrachloroethane	1.0	N.D.
Tetrachloroethene	1.0	N.D.
1,1,1-Trichloroethane	1.0	N.D.
1,1,2-Trichloroethane	1.0	N.D.
Trichloroethene	1.0	28
Trichlorofluoromethane	1.0	N.D.
Vinyl chloride	2.0	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	70	130
4-Bromofluorobenzene	70	130
	Control Limits %	
	% Recovery	
	72	
	@@@@#@	

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



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Petaluma, CA 94954 (707) 792-1865 FAX (707) 792-0342

Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-3A
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G64-02

Sampled: 07/28/98
Received: 07/28/98

Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080598OVOA09A
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	70	130
4-Bromofluorobenzene	70	130
Control Limits %		% Recovery
		89
		@@@@@@@

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
Analytical**

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FAX (707) 792-0342

Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-3B
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G64-03

Sampled: 07/28/98
Received: 07/28/98

Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080698OVOA09A
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.0	N.D.
Bromoform	1.0	N.D.
Bromomethane	2.0	N.D.
Carbon Tetrachloride	1.0	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	1.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	1.0	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	1.0	8.4
1,2-Dichloroethane	1.0	1.2
1,1-Dichloroethene	1.0	16
cis-1,2-Dichloroethene	1.0	58
trans-1,2-Dichloroethene	1.0	5.8
1,2-Dichloropropane	1.0	N.D.
cis-1,3-Dichloropropene	1.0	N.D.
trans-1,3-Dichloropropene	1.0	N.D.
Methylene chloride	10	N.D.
1,1,2,2-Tetrachloroethane	1.0	N.D.
Tetrachloroethene	1.0	N.D.
1,1,1-Trichloroethane	1.0	1.0
1,1,2-Trichloroethane	1.0	N.D.
Trichloroethene	1.0	8.2
Trichlorofluoromethane	1.0	N.D.
Vinyl chloride	2.0	4.8
Surrogates		
1-Chloro-2-fluorobenzene	70	130
4-Bromofluorobenzene	70	130
Control Limits %		% Recovery
70		82
70		@@@@@@@

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
Analytical**

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FAX (916) 921-0100
FAX (707) 792-0342

Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G64-04

Sampled: 07/28/98
Received: 07/28/98
Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080598OVOA09A
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.0	N.D.
Bromoform	1.0	N.D.
Bromomethane	2.0	N.D.
Carbon Tetrachloride	1.0	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	1.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	1.0	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	1.0	N.D.
1,2-Dichloroethane	1.0	N.D.
1,1-Dichloroethene	1.0	N.D.
cis-1,2-Dichloroethene	1.0	17
trans-1,2-Dichloroethene	1.0	13
1,2-Dichloropropane	1.0	N.D.
cis-1,3-Dichloropropene	1.0	N.D.
trans-1,3-Dichloropropene	1.0	N.D.
Methylene chloride	10	N.D.
1,1,2,2-Tetrachloroethane	1.0	N.D.
Tetrachloroethene	1.0	N.D.
1,1,1-Trichloroethane	1.0	N.D.
1,1,2-Trichloroethane	1.0	N.D.
Trichloroethene	1.0	1.2
Trichlorofluoromethane	1.0	N.D.
Vinyl chloride	2.0	21
Surrogates		
1-Chloro-2-fluorobenzene	70	130
4-Bromofluorobenzene	70	130
	Control Limits %	
	% Recovery	
	76	
	@@@@@@@	

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
Analytical**

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Sacramento, CA 95834	(916) 921-9600	FAX (916) 921-0100
Petaluma, CA 94954	(707) 792-1865	FAX (707) 792-0342

Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-5
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G64-05

Sampled: 07/28/98
Received: 07/28/98

Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080598OVOA09A
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	1.9
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	3.1
trans-1,2-Dichloroethene	0.50	5.0
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	70	130
4-Bromo-2-fluorobenzene	70	130
	Control Limits %	% Recovery
		93
		@@@@@@@

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive
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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-6
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G64-06

Sampled: 07/28/98
Received: 07/28/98
Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080698OVOA09A
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	24
cis-1,2-Dichloroethene	5.0	59
trans-1,2-Dichloroethene	5.0	7.0
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	200
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	70	130
4-Bromofluorobenzene	70	130
	Control Limits %	
	% Recovery	
	85	
	@@@@@@@	

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-9
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G64-07

Sampled: 07/28/98
Received: 07/28/98
Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080698OVOA09A
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	200	N.D.
Carbon Tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	200	N.D.
Chloroform	100	N.D.
Chloromethane	200	N.D.
Dibromochloromethane	100	N.D.
1,2-Dichlorobenzene	100	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	4100
trans-1,2-Dichloroethene	100	100
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Methylene chloride	1000	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl chloride	200	320
Surrogates		
1-Chloro-2-fluorobenzene	70	130
4-Bromofluorobenzene	70	130
	Control Limits %	% Recovery
		94
		@@@@@@@

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
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680 Chesapeake Drive 404 N. Wiger Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954	(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865	FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342
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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-10
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G64-08

Sampled: 07/28/98
Received: 07/28/98
Analyzed: 08/07/98
Reported: 08/07/98

QC Batch Number: GC080698OVOA09A
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	10	N.D.
Bromoform	10	N.D.
Bromomethane	20	N.D.
Carbon Tetrachloride	10	N.D.
Chlorobenzene	10	N.D.
Chloroethane	20	28
Chloroform	10	N.D.
Chloromethane	20	N.D.
Dibromochloromethane	10	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
1,1-Dichloroethane	10	N.D.
1,2-Dichloroethane	10	N.D.
1,1-Dichloroethene	10	N.D.
cis-1,2-Dichloroethene	10	390
trans-1,2-Dichloroethene	10	17
1,2-Dichloropropane	10	N.D.
cis-1,3-Dichloropropene	10	N.D.
trans-1,3-Dichloropropene	10	N.D.
Methylene chloride	100	N.D.
1,1,2,2-Tetrachloroethane	10	N.D.
Tetrachloroethene	10	N.D.
1,1,1-Trichloroethane	10	N.D.
1,1,2-Trichloroethane	10	N.D.
Trichloroethene	10	N.D.
Trichlorofluoromethane	10	N.D.
Vinyl chloride	20	54
Surrogates		
1-Chloro-2-fluorobenzene	70	130
4-Bromofluorobenzene	70	130
	Control Limits %	% Recovery
		86
		@@@@@@@

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Siegley
Project Manager



**Sequoia
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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-12
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G64-09

Sampled: 07/28/98
Received: 07/28/98
Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080698OVOA09A
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	0.65
1,2-Dichloroethane	0.50	0.83
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	7.9
trans-1,2-Dichloroethene	0.50	1.0
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	5.3
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	1.2
Surrogates		
1-Chloro-2-fluorobenzene	70	130
4-Bromofluorobenzene	70	130
	Control Limits %	
	% Recovery	
	96	
	@@@@@@@	

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-13
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G64-10

Sampled: 07/28/98
Received: 07/28/98
Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080698OVOA09A
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	2.2
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	3.1
1,2-Dichloroethane	0.50	0.90
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	9.3
trans-1,2-Dichloroethene	0.50	3.2
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	9.3
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	4.4
Surrogates		
1-Chloro-2-fluorobenzene	70	130
4-Bromofluorobenzene	70	130
	Control Limits %	
	% Recovery	
	97	
	@@@@@@	

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
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Petaluma, CA 94954 (707) 792-1865 FAX (707) 792-0342

Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-14
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G64-11

Sampled: 07/28/98
Received: 07/28/98
Analyzed: 08/07/98
Reported: 08/07/98

QC Batch Number: GC080798OVOA24A
Instrument ID: GCHP24_2

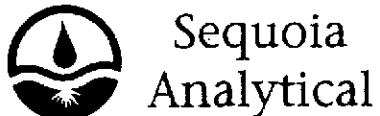
Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	200	N.D.
Carbon Tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	200	N.D.
Chloroform	100	N.D.
Chloromethane	200	N.D.
Dibromochloromethane	100	N.D.
1,2-Dichlorobenzene	100	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	5100
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Methylene chloride	1000	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	1500
Trichlorofluoromethane	100	N.D.
Vinyl chloride	200	1200
Surrogates		
1-Chloro-2-fluorobenzene	70	130
4-Bromofluorobenzene	70	130
	Control Limits %	% Recovery

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



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Petaluma, CA 94954 (707) 792-1865 FAX (707) 792-0342

Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville

Received: 07/28/98

Lab Proj. ID: 9807G64

Reported: 08/07/98

LABORATORY NARRATIVE

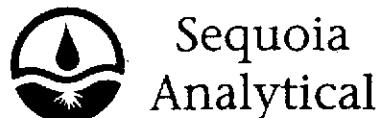
In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 20 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

Hexavalent Chromium: High dilutions required in samples due to matrix interference.

Samples are as follows: 9807G64-4 (MW-4)
9807G64-5 (MW-5)
9807G64-6 (MW-6)
9807G64-7 (MW-9)
9807G64-8 (MW-10)
9807G64-9 (MW-12)
9807G64-10 (MW-13)
9807G64-11 (MW-14)
9807G64-12 (MW-16)

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Client Proj. ID: RC304.3/ECI-Emeryville
Lab Proj. ID: 9807G65

Sampled: 07/28/98
Received: 07/28/98
Analyzed: see below

Attention: Steven Brussee

Reported: 08/07/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9807G65-12 Sample Desc : LIQUID,MW-16				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 5.0	17 14
Lab No: 9807G65-13 Sample Desc : LIQUID,MW-17				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 5.0	50 65
Lab No: 9807G65-14 Sample Desc : LIQUID,MW-18A				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.0050	0.059 0.055
Lab No: 9807G65-15 Sample Desc : LIQUID,MW-18				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 5.0	12 5.0
Lab No: 9807G65-16 Sample Desc : LIQUID,MW-20				
Chromium by ICP Chromium VI	mg/L	07/31/98 07/29/98	0.010 0.0050	N.D. N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-16
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G65-12

Sampled: 07/28/98
Received: 07/28/98

Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080698OVOA24A

Instrument ID: GCHP24_2

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	200	N.D.
Carbon Tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	200	N.D.
Chloroform	100	N.D.
Chloromethane	200	N.D.
Dibromochloromethane	100	N.D.
1,2-Dichlorobenzene	100	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	270
cis-1,2-Dichloroethene	100	2600
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Methylene chloride	1000	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	4500
Trichlorofluoromethane	100	N.D.
Vinyl chloride	200	N.D.
Surrogates		
1-Chloro-3-fluorobenzene	Control Limits % 70	% Recovery 97
4-Bromofluorobenzene	130	97
70	130	

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-17
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G65-13

Sampled: 07/28/98
Received: 07/28/98
Analyzed: 08/07/98
Reported: 08/07/98

QC Batch Number: GC080698OVOA24A
Instrument ID: GCHP24_2

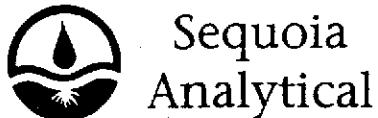
Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	9.3
Chloroethane	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	6.4
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	11
cis-1,2-Dichloroethene	5.0	17
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	170
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
Surrogates		
1-Chloro-3-fluorobenzene	Control Limits %	% Recovery
4-Bromofluorobenzene	70 130	99
	70 130	99

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-18A
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G65-14

Sampled: 07/28/98
Received: 07/28/98
Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080698OVOA24A
Instrument ID: GCHP24_2

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	1.1
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-3-fluorobenzene	70	130
4-Bromofluorobenzene	70	130

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-18
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G65-15

Sampled: 07/28/98
Received: 07/28/98

Analyzed: 08/07/98
Reported: 08/07/98

QC Batch Number: GC080698OVOA24A
Instrument ID: GCHP24_2

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	23
cis-1,2-Dichloroethene	5.0	13
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	6.7
1,1,1-Trichloroethane	5.0	6.2
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	190
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
Surrogates		
1-Chloro-3-fluorobenzene	Control Limits % 70	% Recovery 105
4-Bromofluorobenzene	70	130 105

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Sample Descript: MW-20
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9807G65-16

Sampled: 07/28/98
Received: 07/28/98
Analyzed: 08/06/98
Reported: 08/07/98

QC Batch Number: GC080698OVOA24A
Instrument ID: GCHP24_2

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Surrogates		
1-Chloro-3-fluorobenzene	70	130
4-Bromofluorobenzene	70	130
Control Limits %		
% Recovery		
		88
		88

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Proj. ID: RC304.3/ECI-Emeryville
Lab Proj. ID: 9807G65

Received: 07/28/98
Reported: 08/07/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 12 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

Hexavalent Chromium: High dilutions required in samples due to matrix interference.

Samples are as follows: 9807G65-13 (MW-17)
9807G65-15 (MW-18a)

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC304.3/ECI-Emeryville

QC Sample Group: 9807G65-12-16

Reported: Aug 7, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8010/8020, 601/602
Analyst: L. Kim

ANALYTE	1,1-DCE	TCE	Chlorobenzene	Benzene	Toluene	Chlorobenzene
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QC Batch #: GC0806980VOA24A

Sample No.: 9807E49-12

Date Prepared:	8/5/98	8/5/98	8/5/98	8/5/98	8/5/98	8/5/98
Date Analyzed:	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98
Instrument I.D.#:	gchp24.2	gchp24.2	gchp24.2	gchp24.2	gchp24.2	gchp24.2

Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	25	25	25	25	25	25

Matrix Spike, ug/L:	24	25	27	23	22	21
% Recovery:	96	100	108	92	88	84

Matrix						
Spike Duplicate, ug/L:	29	29	29	24	23	22
% Recovery:	116	116	116	96	92	88

Relative % Difference:	19	15	7.1	4.3	4.4	4.7
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RPD Control Limits:	0-50	0-50	0-50	0-50	0-50	0-50
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LCS Batch#: LCS080698A

Date Prepared:	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98
Date Analyzed:	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98
Instrument I.D.#:	gchp24.2	gchp24.2	gchp24.2	gchp24.2	gchp24.2	gchp24.2

Conc. Spiked, ug/L:	25	25	25	25	25	25
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Recovery, ug/L:	26	25	28	24	22	21
LCS % Recovery:	104	100	112	96	88	84

Percent Recovery Control Limits:

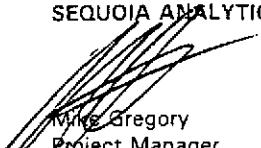
MS/MSD	60-140	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130	70-130

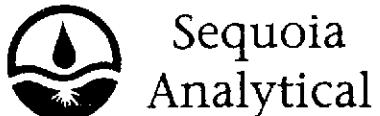
Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC304.3/ECI-Emeryville

QC Sample Group: 9807G64-01-11

Reported: Aug 7, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 7196
Analyst: M.MOORE

ANALYTE Hexavalent Chromium

QC Batch #: IN072998719600A

Sample No.: 9807G64-1
Date Prepared: 7/29/98
Date Analyzed: 7/29/98
Instrument I.D.#: MANUAL

Sample Conc., mg/L: N.D.
Conc. Spiked, mg/L: 0.50

Matrix Spike, mg/L: 0.45
% Recovery: 90

Matrix
Spike Duplicate, mg/L: 0.44
% Recovery: 88

Relative % Difference: 2.2

RPD Control Limits: 0-20

LCS Batch#: LCS072998

Date Prepared: 7/29/98
Date Analyzed: 7/29/98
Instrument I.D.#: MANUAL

Conc. Spiked, mg/L: 0.50

LCS Recovery, mg/L: 0.52
LCS % Recovery: 104

Percent Recovery Control Limits:

MS/MSD	75-125
LCS	80-120

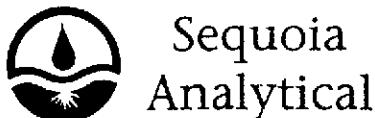
Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC304.3/ECI-Emeryville

QC Sample Group: 9807G65-12-15

Reported: Aug 7, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 7196
Analyst: M.MOORE

ANALYTE Hexavalent Chromium

QC Batch #: IN072998719600A

Sample No.: 9807G64-1
Date Prepared: 7/29/98
Date Analyzed: 7/29/98
Instrument I.D.#: MANUAL

Sample Conc., mg/L: N.D.
Conc. Spiked, mg/L: 0.50

Matrix Spike, mg/L: 0.45
% Recovery: 90

Matrix
Spike Duplicate, mg/L: 0.44
% Recovery: 88

Relative % Difference: 2.2

RPD Control Limits: 0-20

LCS Batch#: LCS072998

Date Prepared: 7/29/98
Date Analyzed: 7/29/98
Instrument I.D.#: MANUAL

Conc. Spiked, mg/L: 0.50

LCS Recovery, mg/L: 0.52
LCS % Recovery: 104

Percent Recovery Control Limits:

MS/MSD	75-125
LCS	80-120

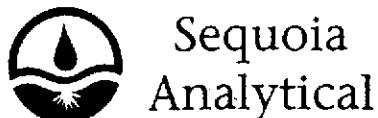
Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC304.3/ECI-Emeryville

QC Sample Group: 9807G65-16

Reported: Aug 7, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 7196
Analyst: M.MOORE

ANALYTE Hexavalent Chromium

QC Batch #: IN0729987196008

Sample No.: 9807G65-16
Date Prepared: 7/29/98
Date Analyzed: 7/29/98
Instrument I.D.#: MANUAL

Sample Conc., mg/L: N.D.
Conc. Spiked, mg/L: 0.50

Matrix Spike, mg/L: 0.45
% Recovery: 90

Matrix
Spike Duplicate, mg/L: 0.45
% Recovery: 90

Relative % Difference: 0.0

RPD Control Limits: 0-20

LCS Batch#: LCS072998

Date Prepared: 7/29/98
Date Analyzed: 7/29/98
Instrument I.D.#: MANUAL

Conc. Spiked, mg/L: 0.50

LCS Recovery, mg/L: 0.52
LCS % Recovery: 104

Percent Recovery Control Limits:

MS/MSD	75-125
LCS	80-120

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



**Sequoia
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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC304.3/ECI-Emeryville

QC Sample Group: 9807G64-01,02,04,05

Reported: Aug 7, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8010/601
Analyst: L. Kim

ANALYTE	1,1-DCE	TCE	Chlorobenzene
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QC Batch #: GC0805980VOA09A

Sample No.: 9807G64-01

Date Prepared:	8/5/98	8/5/98	8/5/98
Date Analyzed:	8/6/98	8/6/98	8/6/98
Instrument I.D.#:	gchp09	gchp09	gchp09

Sample Conc., ug/L:	N.D.	28	N.D.
Conc. Spiked, ug/L:	50	50	50

Matrix Spike, ug/L:	20	68	43
% Recovery:	40	80	86

Matrix			
Spike Duplicate, ug/L:	21	66	40
% Recovery:	42	76	80

Relative % Difference:	4.9	5.1	7.2
------------------------	-----	-----	-----

RPD Control Limits:	0-50	0-50	0-50
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LCS Batch#: VWBLK080598BSA

Date Prepared:	8/5/98	8/5/98	8/5/98
Date Analyzed:	8/5/98	8/5/98	8/5/98
Instrument I.D.#:	gchp09	gchp09	gchp09

Conc. Spiked, ug/L:	25	25	25
---------------------	----	----	----

Recovery, ug/L:	20	23	22
LCS % Recovery:	80	92	88

Percent Recovery Control Limits:

MS/MSD	70-140	70-140	70-140
LCS	65-135	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

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SEQUOIA ANALYTICAL

Mike Gregory

Project Manager



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC304.3/ECI-Emeryville

QC Sample Group: 9807G64-03,06-10

Reported: Aug 7, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8010/601
Analyst: L. Kim

ANALYTE 1,1-DCE TCE Chlorobenzene

QC Batch #: GC0806980VOA09A

Sample No.: 9807G64-01

Date Prepared:	8/5/98	8/5/98	8/5/98
Date Analyzed:	8/6/98	8/6/98	8/6/98
Instrument I.D.#:	gchp09	gchp09	gchp09

Sample Conc., ug/L:	N.D.	28	N.D.
Conc. Spiked, ug/L:	50	50	50

Matrix Spike, ug/L:	20	68	43
% Recovery:	40	80	86

Matrix Spike Duplicate, ug/L:	21	66	40
% Recovery:	42	76	80

Relative % Difference: 4.9 5.1 7.2

RPD Control Limits: 0-50 0-50 0-50

LCS Batch#: VWBLK080698BSA

Date Prepared:	8/6/98	8/6/98	8/6/98
Date Analyzed:	8/6/98	8/6/98	8/6/98
Instrument I.D.#:	gchp09	gchp09	gchp09

Conc. Spiked, ug/L:	25	25	25
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Recovery, ug/L:	18	21	20
LCS % Recovery:	72	84	80

Percent Recovery Control Limits:

MS/MSD	70-140	70-140	70-140
LCS	65-135	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

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Mike Gregory
Project Manager



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC304.3/ECI-Emeryville

QC Sample Group: 9807G64-11

Reported: Aug 7, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8010/8020, 601/602
Analyst: L. Kim

ANALYTE	1,1-DCE	TCE	Chlorobenzene	Benzene	Toluene	Chlorobenzene
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QC Batch #: GC0807980VOA24A

Sample No.: 9807E97-012

Date Prepared:	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98
Date Analyzed:	8/7/98	8/7/98	8/7/98	8/7/98	8/7/98	8/7/98
Instrument I.D. #:	gchp24.2	gchp24.2	gchp24.2	gchp24.2	gchp24.2	gchp24.2
Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	25	25	25	25	25	25
Matrix Spike, ug/L:	30	28	32	25	23	22
% Recovery:	120	112	128	100	92	88
Matrix						
Spike Duplicate, ug/L:	28	26	26	23	22	20
% Recovery:	112	104	104	92	88	80
Relative % Difference:	6.9	7.4	21	8.3	4.4	9.5
RPD Control Limits:	0-50	0-50	0-50	0-50	0-50	0-50

LCS Batch #: LCS080798A

Date Prepared:	8/7/98	8/7/98	8/7/98	8/7/98	8/7/98	8/7/98
Date Analyzed:	8/7/98	8/7/98	8/7/98	8/7/98	8/7/98	8/7/98
Instrument I.D. #:	gchp24.2	gchp24.2	gchp24.2	gchp24.2	gchp24.2	gchp24.2
Conc. Spiked, ug/L:	25	25	25	25	25	25
Recovery, ug/L:	25	25	26	24	22	21
LCS % Recovery:	100	100	104	96	88	84

Percent Recovery Control Limits:

MS/MSD	60-140	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

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SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC304.3/ECI-Emeryville
Matrix: Liquid

Work Order #: 9807G64 -01-11

Reported: Aug 7, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0730986010MDA	ME0730986010MDA	ME0730986010MDA	ME0730986010MDA
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3010	EPA 3010	EPA 3010	EPA 3010

Analyst:	C. Caoile	C. Caoile	C. Caoile	C. Caoile
MS/MSD #:	9807H3202	9807H3202	9807H3202	9807H3202
Sample Conc.:	N.D.	N.D.	N.D.	0.15
Prepared Date:	7/30/98	7/30/98	7/30/98	7/30/98
Analyzed Date:	7/30/98	7/30/98	7/30/98	7/30/98
Instrument I.D. #:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
Result:	1.1	1.1	1.1	1.2
MS % Recovery:	110	110	110	105
Dup. Result:	1.0	1.1	1.0	1.2
MSD % Recov.:	100	110	100	105
RPD:	9.5	0.0	9.5	0.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	BLK073098	BLK073098	BLK073098	BLK073098
Prepared Date:	7/30/98	7/30/98	7/30/98	7/30/98
Analyzed Date:	7/30/98	7/30/98	7/30/98	7/30/98
Instrument I.D. #:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
LCS Result:	1.0	1.1	1.0	1.0
LCS % Recov.:	100	110	100	100

MS/MSD	80-120	80-120	80-120	80-120
LCS	80-120	80-120	80-120	80-120
Control Limits				

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

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Arcadis-Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC304.3/ECI-Emeryville
Matrix: Liquid

Work Order #: 9807G65-12-16

Reported: Aug 7, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch #:	ME0730986010MDA	ME0730986010MDA	ME0730986010MDA	ME0730986010MDA
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3010	EPA 3010	EPA 3010	EPA 3010

Analyst:	C. Caoile	C. Caoile	C. Caoile	C. Caoile
MS/MSD #:	9807H3202	9807H3202	9807H3202	9807H3202
Sample Conc.:	N.D.	N.D.	N.D.	0.15
Prepared Date:	7/30/98	7/30/98	7/30/98	7/30/98
Analyzed Date:	7/30/98	7/30/98	7/30/98	7/30/98
Instrument I.D. #:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
Result:	1.1	1.1	1.1	1.2
MS % Recovery:	110	110	110	105
Dup. Result:	1.0	1.1	1.0	1.2
MSD % Recov.:	100	110	100	105
RPD:	9.5	0.0	9.5	0.0
RPD Limit:	0-20	0-20	0-20	0-20

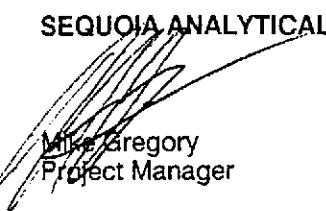
LCS #:	BLK073098	BLK073098	BLK073098	BLK073098
Prepared Date:	7/30/98	7/30/98	7/30/98	7/30/98
Analyzed Date:	7/30/98	7/30/98	7/30/98	7/30/98
Instrument I.D. #:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
LCS Result:	1.0	1.1	1.0	1.0
LCS % Recov.:	100	110	100	100

MS/MSD	80-120	80-120	80-120	80-120
LCS	80-120	80-120	80-120	80-120
Control Limits				

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SEQUOIA ANALYTICAL


Mike Gregory
Project Manager

Project Number/Name RC 304.3 / EC1Project Location EmeryvilleLaboratory SequoiaProject Manager Steven J. BrusseeSampler(s)/Affiliation Bart King / ARCADIS

ANALYSIS / METHOD / SIZE

TOTAL
CHROMATOGRAPHY
HEXAVALENT
CHROMIUM
FOOT

98-07-664/98-07-665

Sample ID/Location	Matrix	Date/Time Sampled	Lab ID	Remarks	Total
01 MW-1	L AS labeled		X	+ +	3
02 MW-3A			X	X	
03 MW-3B			X	X	
04 MW-4			+ X	+ +	
05 MW-5			X X	+ +	
06 MW-6			+ X	+ +	
07 MW-9			X X	+ +	
08 MW-10			X X	+ +	
09 MW-12			X X	+ +	
10 MW-13			X X	+ +	
11 MW-14			X X	+ +	
12 MW-16			X X	+ +	
13 MW-17			+ X	+ +	
14 MW-18			X X	+ +	
15 MW-18A			X X	+ +	
16 MW-20			X X	+ +	

Sample Matrix: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers 80Relinquished by: Rick A FijoOrganization: ARCADIS GERAGHTY & MILLERDate 7/28/98Time 2045

Seal Intact?

Received by:

Organization:

Date 1/1Time

Yes No N/A

Relinquished by:

Organization:

Date 1/1Time

Seal Intact?

Received by: ~S~Organization: SOL RWCDate 7/28/98Time 2045

Yes No N/A

Special Instructions/Remarks:

STANDARD TO DAY TESTDelivery Method: In Person Common Carrier Lab Courier Other

SPECIFY

SPECIFY



Sequoia
Analytical

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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Client Proj. ID: RC000304.0003/ECI/Emerville
Lab Proj. ID: 9804F04

Sampled: 04/23/98
Received: 04/23/98
Analyzed: see below

Attention: Steve Brussee

Reported: 05/12/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9804F04-01 Sample Desc : LIQUID,MW-1				
Chromium by ICP Chromium VI	mg/L	04/24/98 04/24/98	0.010 0.0050	N.D. N.D.
Lab No: 9804F04-02 Sample Desc : LIQUID,MW-3A				
Chromium by ICP Chromium VI	mg/L	04/24/98 04/24/98	0.010 0.0050	0.043 N.D.
Lab No: 9804F04-03 Sample Desc : LIQUID,MW-3B				
Chromium by ICP Chromium VI	mg/L	04/24/98 04/24/98	0.010 0.0050	0.340 N.D.
Lab No: 9804F04-04 Sample Desc : LIQUID,MW-6				
Chromium by ICP Chromium VI	mg/L	04/24/98 04/24/98	0.010 0.50	47 48
Lab No: 9804F04-05 Sample Desc : LIQUID,MW-9				
Chromium by ICP Chromium VI	mg/L	04/24/98 04/24/98	0.010 0.0050	11 N.D.
Lab No: 9804F04-06 Sample Desc : LIQUID,MW-10				
Chromium by ICP Chromium VI	mg/L	04/24/98 04/24/98	0.010 0.0050	0.50 0.0090

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



Sequoia
Analytical

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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Client Proj. ID: RC000304.0003/ECI/Emerville
Lab Proj. ID: 9804F04

Sampled: 04/23/98
Received: 04/23/98
Analyzed: see below

Attention: Steve Brussee

Reported: 05/12/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9804F04-07 Sample Desc : LIQUID,MW-12				
Chromium by ICP Chromium VI	mg/L mg/L	04/24/98 04/24/98	0.010 0.0050	0.150 N.D.
Lab No: 9804F04-08 Sample Desc : LIQUID,MW-13				
Chromium by ICP Chromium VI	mg/L mg/L	04/24/98 04/24/98	0.010 0.50	7.90 2.5
Lab No: 9804F04-09 Sample Desc : LIQUID,MW-16				
Chromium by ICP Chromium VI	mg/L mg/L	04/24/98 04/24/98	0.010 0.50	56 54
Lab No: 9804F04-10 Sample Desc : LIQUID,MW-17				
Chromium by ICP Chromium VI	mg/L mg/L	04/24/98 04/24/98	0.010 0.050	85 10
Lab No: 9804F04-11 Sample Desc : LIQUID,MW-18				
Chromium by ICP Chromium VI	mg/L mg/L	04/24/98 04/24/98	0.010 0.50	11 9.4

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



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1455 McDowell Blvd. North, Ste. D Petaluma, CA 94954 (707) 792-1865 FAX (707) 792-0342

Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Client Proj. ID: RC000304.0003/ECI/Emerville
Lab Proj. ID: 9804F06

Sampled: 04/23/98
Received: 04/23/98
Analyzed: see below

Attention: Steve Brussee

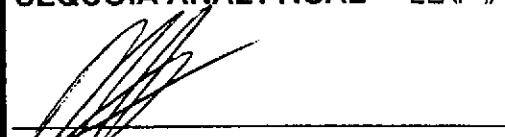
Reported: 05/12/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9804F06-12				
Sample Desc : LIQUID,MW-18A				
Chromium by ICP	mg/L	04/24/98	0.010	0.0640
Chromium VI	mg/L	04/24/98	0.0050	0.052
Lab No: 9804F06-13				
Sample Desc : LIQUID,MW-20				
Chromium by ICP	mg/L	04/24/98	0.010	N.D.
Chromium VI	mg/L	04/24/98	0.0050	N.D.

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager



Sequoia
Analytical

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Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Sample Descript: Water, MW-1
Analysis Method: EPA 5030/8010
Lab Number: 805-1583

Sampled: May 19, 1998
Received: May 20, 1998
Analyzed: May 27, 1998
Reported: Jun 1, 1998

QC Batch Number: GC052798801007A

Instrument ID: HP-7

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	.....
Bromoform.....	0.50	.....
Bromomethane.....	1.0	.....
Carbon tetrachloride.....	0.50	.....
Chlorobenzene.....	0.50	.....
Chloroethane.....	1.0	.....
Chloroform.....	0.50	.....
Chloromethane.....	1.0	.....
Dibromochloromethane.....	0.50	.....
1,3-Dichlorobenzene.....	0.50	.....
1,4-Dichlorobenzene.....	0.50	.....
1,2-Dichlorobenzene.....	0.50	.....
1,1-Dichloroethane.....	0.50	.....
1,2-Dichloroethane.....	0.50	.....
1,1-Dichloroethene.....	0.50	.....
cis-1,2-Dichloroethene.....	0.50	.....
trans-1,2-Dichloroethene.....	0.50	.....
1,2-Dichloropropane.....	0.50	.....
cis-1,3-Dichloropropene.....	0.50	.....
trans-1,3-Dichloropropene.....	0.50	.....
Methylene chloride.....	5.0	.....
1,1,2,2-Tetrachloroethane.....	0.50	.....
Tetrachloroethene.....	0.50	.....
1,1,1-Trichloroethane.....	0.50	.....
1,1,2-Trichloroethane.....	0.50	.....
Trichloroethene.....	0.50	33
Trichlorofluoromethane.....	0.50	.....
Vinyl chloride.....	1.0	.....
Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150.....
4-Bromofluorobenzene.....	50	150.....

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive	Redwood City, CA 94063	(650) 364-9600	FAX (650) 364-9233
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Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Sample Descript: Water, MW-3A
Analysis Method: EPA 5030/8010
Lab Number: 805-1584

Sampled: May 19, 1998
Received: May 20, 1998
Analyzed: May 28, 1998
Reported: Jun 1, 1998

QC Batch Number: GC052798801007A

Instrument ID: HP-7

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	N.D.
Bromoform.....	0.50	N.D.
Bromomethane.....	1.0	N.D.
Carbon tetrachloride.....	0.50	N.D.
Chlorobenzene.....	0.50	N.D.
Chloroethane.....	1.0	N.D.
Chloroform.....	0.50	N.D.
Chloromethane.....	1.0	N.D.
Dibromochloromethane.....	0.50	N.D.
1,3-Dichlorobenzene.....	0.50	N.D.
1,4-Dichlorobenzene.....	0.50	N.D.
1,2-Dichlorobenzene.....	0.50	N.D.
1,1-Dichloroethane.....	0.50	N.D.
1,2-Dichloroethane.....	0.50	N.D.
1,1-Dichloroethylene.....	0.50	N.D.
cis-1,2-Dichloroethene.....	0.50	0.68
trans-1,2-Dichloroethene.....	0.50	N.D.
1,2-Dichloropropane.....	0.50	N.D.
cis-1,3-Dichloropropene.....	0.50	N.D.
trans-1,3-Dichloropropene.....	0.50	N.D.
Methylene chloride.....	5.0	N.D.
1,1,2,2-Tetrachloroethane.....	0.50	N.D.
Tetrachloroethylene.....	0.50	N.D.
1,1,1-Trichloroethane.....	0.50	N.D.
1,1,2-Trichloroethane.....	0.50	N.D.
Trichloroethylene.....	0.50	1.2
Trichlorofluoromethane.....	0.50	N.D.
Vinyl chloride.....	1.0	N.D.
Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150.....
4-Bromofluorobenzene.....	50	150.....

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Project Manager



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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Sample Descript: Water, MW-3B
Analysis Method: EPA 5030/8010
Lab Number: 805-1585

Sampled: May 19, 1998
Received: May 20, 1998
Analyzed: May 28, 1998
Reported: Jun 1, 1998

QC Batch Number: GC052798801007A

Instrument ID: HP-7

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	N.D.
Bromoform.....	0.50	N.D.
Bromomethane.....	1.0	N.D.
Carbon tetrachloride.....	0.50	N.D.
Chlorobenzene.....	0.50	N.D.
Chloroethane.....	1.0	N.D.
Chloroform.....	0.50	N.D.
Chloromethane.....	1.0	N.D.
Dibromochloromethane.....	0.50	N.D.
1,3-Dichlorobenzene.....	0.50	N.D.
1,4-Dichlorobenzene.....	0.50	N.D.
1,2-Dichlorobenzene.....	0.50	N.D.
1,1-Dichloroethane.....	0.50	2.5
1,2-Dichloroethane.....	0.50	N.D.
1,1-Dichloroethylene.....	0.50	1.5
cis-1,2-Dichloroethene.....	0.50	13
trans-1,2-Dichloroethene.....	0.50	0.53
1,2-Dichloropropane.....	0.50	N.D.
cis-1,3-Dichloropropene.....	0.50	N.D.
trans-1,3-Dichloropropene.....	0.50	N.D.
Methylene chloride.....	5.0	N.D.
1,1,2,2-Tetrachloroethane.....	0.50	N.D.
Tetrachloroethylene.....	0.50	N.D.
1,1,1-Trichloroethane.....	0.50	N.D.
1,1,2-Trichloroethane.....	0.50	N.D.
Trichloroethylene.....	0.50	2.1
Trichlorofluoromethane.....	0.50	N.D.
Vinyl chloride.....	1.0	2.9
Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150.....
4-Bromofluorobenzene.....	50	150.....

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Project Manager



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Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID:	RC000304.0003, Electro-Coatings	Sampled:	May 19, 1998
Sample Descript:	Water, MW-5 *	Received:	May 20, 1998
Analysis Method:	EPA 5030/8260	Analyzed:	Jun 3, 1998
Lab Number:	805-1580	Reported:	Jun 8, 1998

QC Batch Number: MS0603988260S2A

Instrument ID: GC/MS-2

HALOGENATED VOLATILE ORGANICS (EPA 8260)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	2.5	N.D.
Bromoform.....	2.5	N.D.
Bromomethane.....	5.0	N.D.
Carbon tetrachloride.....	2.5	N.D.
Chlorobenzene.....	2.5	N.D.
Chloroethane.....	5.0	N.D.
Chloroform.....	2.5	N.D.
Chloromethane.....	5.0	N.D.
Dibromochloromethane.....	2.5	N.D.
1,3-Dichlorobenzene.....	2.5	N.D.
1,4-Dichlorobenzene.....	2.5	N.D.
1,2-Dichlorobenzene.....	2.5	N.D.
1,1-Dichloroethane.....	2.5	N.D.
1,2-Dichloroethane.....	2.5	N.D.
1,1-Dichloroethylene.....	2.5	N.D.
cis-1,2-Dichloroethylene.....	2.5	7.1
trans-1,2-Dichloroethylene.....	2.5	11
1,2-Dichloropropane.....	2.5	N.D.
cis-1,3-Dichloropropene.....	2.5	N.D.
trans-1,3-Dichloropropene.....	2.5	N.D.
Methylene chloride.....	25	N.D.
1,1,2,2-Tetrachloroethane.....	2.5	N.D.
Tetrachloroethylene.....	2.5	N.D.
1,1,1-Trichloroethane.....	2.5	N.D.
1,1,2-Trichloroethane.....	2.5	N.D.
Trichloroethylene.....	2.5	N.D.
Trichlorofluoromethane.....	2.5	N.D.
Vinyl chloride.....	5.0	N.D.
Surrogates	Control Limit %	% Recovery
Dibromofluoromethane.....	50	150.....
4-Bromofluorobenzene.....	50	150.....

Analyses reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL, #1271

Please Note:

* See Laboratory Narrative

Melissa A. Brewer
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Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Sample Descript: Water, MW-6
Analysis Method: EPA 5030/8010
Lab Number: 805-1586

Sampled: May 19, 1998
Received: May 20, 1998
Analyzed: May 28, 1998
Reported: Jun 1, 1998

QC Batch Number: GC052798801007A

Instrument ID: HP-7

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	N.D.
Bromoform.....	0.50	N.D.
Bromomethane.....	1.0	N.D.
Carbon tetrachloride.....	0.50	N.D.
Chlorobenzene.....	0.50	4.8
Chloroethane.....	1.0	N.D.
Chloroform.....	0.50	1.4
Chloromethane.....	1.0	N.D.
Dibromochloromethane.....	0.50	N.D.
1,3-Dichlorobenzene.....	0.50	N.D.
1,4-Dichlorobenzene.....	0.50	N.D.
1,2-Dichlorobenzene.....	0.50	0.56
1,1-Dichloroethane.....	0.50	1.3
1,2-Dichloroethane.....	0.50	1.4
1,1-Dichloroethene.....	0.50	50
cis-1,2-Dichloroethene.....	0.50	45
trans-1,2-Dichloroethene.....	0.50	12
1,2-Dichloropropane.....	0.50	N.D.
cis-1,3-Dichloropropene.....	0.50	N.D.
trans-1,3-Dichloropropene.....	0.50	N.D.
Methylene chloride.....	5.0	N.D.
1,1,2,2-Tetrachloroethane.....	0.50	N.D.
Tetrachloroethene.....	0.50	4.3
1,1,1-Trichloroethane.....	0.50	4.6
1,1,2-Trichloroethane.....	0.50	0.53
Trichloroethene.....	0.50	330
Trichlorofluoromethane.....	0.50	N.D.
Vinyl chloride.....	1.0	13
Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150
4-Bromofluorobenzene.....	50	150

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Project Manager



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Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID:	RC000304.0003, Electro-Coatings	Sampled:	May 19, 1998
Sample Descript:	Water, MW-9	Received:	May 20, 1998
Analysis Method:	EPA 5030/8010	Analyzed:	May 28, 1998
Lab Number:	805-1587	Reported:	Jun 1, 1998

QC Batch Number: GC052798801007A

Instrument ID: HP-7

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	25	N.D.
Bromoform.....	25	N.D.
Bromomethane.....	50	N.D.
Carbon tetrachloride.....	25	N.D.
Chlorobenzene.....	25	N.D.
Chloroethane.....	50	N.D.
Chloroform.....	25	N.D.
Chloromethane.....	50	N.D.
Dibromochloromethane.....	25	N.D.
1,3-Dichlorobenzene.....	25	N.D.
1,4-Dichlorobenzene.....	25	N.D.
1,2-Dichlorobenzene.....	25	N.D.
1,1-Dichloroethane.....	25	190
1,2-Dichloroethane.....	25	N.D.
1,1-Dichloroethylene.....	25	N.D.
cis-1,2-Dichloroethene.....	25	13,000
trans-1,2-Dichloroethene.....	25	680
1,2-Dichloropropane.....	25	N.D.
cis-1,3-Dichloropropene.....	25	N.D.
trans-1,3-Dichloropropene.....	25	N.D.
Methylene chloride.....	250	N.D.
1,1,2,2-Tetrachloroethane.....	25	N.D.
Tetrachloroethene.....	25	38
1,1,1-Trichloroethane.....	25	150
1,1,2-Trichloroethane.....	25	N.D.
Trichloroethene.....	25	99
Trichlorofluoromethane.....	25	N.D.
Vinyl chloride.....	50	1,700
Surrogates		
Dibromodifluoromethane.....	50	150.....
4-Bromofluorobenzene.....	50	150.....
	Control Limit %	% Recovery

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL, #1271

Please Note:
Revised report issued 6/18/98.

Melissa A. Brewer
Project Manager



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Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Sample Descript: Water, MW-12
Analysis Method: EPA 5030/8010
Lab Number: 805-1590

Sampled: May 19, 1998
Received: May 20, 1998
Analyzed: May 28, 1998
Reported: Jun 1, 1998

QC Batch Number: GC052798801007A

Instrument ID: HP-7

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	.....
Bromoform.....	0.50	.....
Bromomethane.....	1.0	.....
Carbon tetrachloride.....	0.50	.....
Chlorobenzene.....	0.50	.....
Chloroethane.....	1.0	.....
Chloroform.....	0.50	.....
Chloromethane.....	1.0	.....
Dibromochloromethane.....	0.50	.....
1,3-Dichlorobenzene.....	0.50	.....
1,4-Dichlorobenzene.....	0.50	.....
1,2-Dichlorobenzene.....	0.50	.....
1,1-Dichloroethane.....	0.50	0.83
1,2-Dichloroethane.....	0.50	0.83
1,1-Dichloroethene.....	0.50	.....
cis-1,2-Dichloroethene.....	0.50	4.5
trans-1,2-Dichloroethene.....	0.50	2.0
1,2-Dichloropropane.....	0.50	.....
cis-1,3-Dichloropropene.....	0.50	.....
trans-1,3-Dichloropropene.....	0.50	.....
Methylene chloride.....	5.0	.....
1,1,2,2-Tetrachloroethane.....	0.50	.....
Tetrachloroethene.....	0.50	.....
1,1,1-Trichloroethane.....	0.50	.....
1,1,2-Trichloroethane.....	0.50	.....
Trichloroethene.....	0.50	6.0
Trichlorofluoromethane.....	0.50	.....
Vinyl chloride.....	1.0	2.4
Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150.....
4-Bromofluorobenzene.....	50	150.....

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

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Project Manager



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Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Sample Descript: Water, MW-13
Analysis Method: EPA 5030/8010
Lab Number: 805-1589

Sampled: May 19, 1998
Received: May 20, 1998
Analyzed: May 28, 1998
Reported: Jun 1, 1998

QC Batch Number: GC052798801007A

Instrument ID: HP-7

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	N.D.
Bromoform.....	0.50	N.D.
Bromomethane.....	1.0	N.D.
Carbon tetrachloride.....	0.50	N.D.
Chlorobenzene.....	0.50	N.D.
Chloroethane.....	1.0	N.D.
Chloroform.....	0.50	N.D.
Chloromethane.....	1.0	N.D.
Dibromochloromethane.....	0.50	N.D.
1,3-Dichlorobenzene.....	0.50	N.D.
1,4-Dichlorobenzene.....	0.50	N.D.
1,2-Dichlorobenzene.....	0.50	N.D.
1,1-Dichloroethane.....	0.50	6.1
1,2-Dichloroethane.....	0.50	0.67
1,1-Dichloroethene.....	0.50	N.D.
cis-1,2-Dichloroethene.....	0.50	29
trans-1,2-Dichloroethene.....	0.50	4.4
1,2-Dichloropropane.....	0.50	N.D.
cis-1,3-Dichloropropene.....	0.50	N.D.
trans-1,3-Dichloropropene.....	0.50	N.D.
Methylene chloride.....	5.0	N.D.
1,1,2,2-Tetrachloroethane.....	0.50	N.D.
Tetrachloroethene.....	0.50	N.D.
1,1,1-Trichloroethane.....	0.50	N.D.
1,1,2-Trichloroethane.....	0.50	N.D.
Trichloroethene.....	0.50	1.2
Trichlorofluoromethane.....	0.50	N.D.
Vinyl chloride.....	1.0	3.4
Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150.....
4-Bromofluorobenzene.....	50	150.....

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Project Manager



**Sequoia
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Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Sample Descript: Water, MW-14
Analysis Method: EPA 5030/8260
Lab Number: 805-1581

Sampled: May 19, 1998
Received: May 20, 1998
Analyzed: Jun 1, 1998
Reported: Jun 8, 1998

QC Batch Number: MS0601988260S2A

Instrument ID: GC/MS-2

HALOGENATED VOLATILE ORGANICS (EPA 8260)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	13	.....
Bromoform.....	13	.....
Bromomethane.....	25	.....
Carbon tetrachloride.....	13	.....
Chlorobenzene.....	13	.....
Chloroethane.....	25	.....
Chloroform.....	13	.....
Chloromethane.....	25	.....
Dibromochloromethane.....	13	.....
1,3-Dichlorobenzene.....	13	.....
1,4-Dichlorobenzene.....	13	.....
1,2-Dichlorobenzene.....	13	.....
1,1-Dichloroethane.....	13	.....
1,2-Dichloroethane.....	13	.....
1,1-Dichloroethylene.....	13	13
cis-1,2-Dichloroethylene.....	13	4,600
trans-1,2-Dichloroethylene.....	13	39
1,2-Dichloropropane.....	13	.....
cis-1,3-Dichloropropene.....	13	.....
trans-1,3-Dichloropropene.....	13	.....
Methylene chloride.....	130	.....
1,1,2,2-Tetrachloroethane.....	13	.....
Tetrachloroethylene.....	13	.....
1,1,1-Trichloroethane.....	13	.....
1,1,2-Trichloroethane.....	13	.....
Trichloroethylene.....	13	1,800
Trichlorofluoromethane.....	13	.....
Vinyl chloride.....	25	860

Surrogates	Control Limit %	% Recovery
Dibromofluoromethane.....	50	150.....
4-Bromofluorobenzene.....	50	150.....

Analyses reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Project Manager



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Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Sample Descript: Water, MW-16
Analysis Method: EPA 5030/8010
Lab Number: 805-1591
Sampled: May 19, 1998
Received: May 20, 1998
Analyzed: May 28, 1998
Reported: Jun 1, 1998

QC Batch Number: GC052798801007A

Instrument ID: HP-7

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	.....
Bromoform.....	0.50	.....
Bromomethane.....	1.0	.....
Carbon tetrachloride.....	0.50	.....
Chlorobenzene.....	0.50	.....
Chloroethane.....	1.0	.....
Chloroform.....	0.50	.....
Chloromethane.....	1.0	.....
Dibromochloromethane.....	0.50	.....
1,3-Dichlorobenzene.....	0.50	.....
1,4-Dichlorobenzene.....	0.50	.....
1,2-Dichlorobenzene.....	0.50	.....
1,1-Dichloroethane.....	0.50	.....
1,2-Dichloroethane.....	0.50	.....
1,1-Dichloroethylene.....	0.50	.....
cis-1,2-Dichloroethene.....	0.50	.....
trans-1,2-Dichloroethene.....	0.50	.....
1,2-Dichloropropane.....	0.50	.....
cis-1,3-Dichloropropene.....	0.50	.....
trans-1,3-Dichloropropene.....	0.50	.....
Methylene chloride.....	5.0	.....
1,1,2,2-Tetrachloroethane.....	0.50	.....
Tetrachloroethene.....	0.50	.....
1,1,1-Trichloroethane.....	0.50	.....
1,1,2-Trichloroethane.....	0.50	.....
Trichloroethene.....	0.50	.....
Trichlorofluoromethane.....	0.50	.....
Vinyl chloride.....	1.0	.....
Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150.....
4-Bromofluorobenzene.....	50	150.....

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Please Note:

* Surrogate recovery was below control limits for 4-Bromofluorobenzene, although the tertiary surrogate, Dichlorofluorobenzene, was within control limits at 57%.

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Project Manager



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Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID:	RC000304.0003, Electro-Coatings	Sampled:	May 19, 1998
Sample Descript:	Water, MW-17	Received:	May 20, 1998
Analysis Method:	EPA 5030/8010	Analyzed:	May 28, 1998
Lab Number:	805-1592	Reported:	Jun 1, 1998

QC Batch Number: GC052798801007A

Instrument ID: HP-7

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	N.D.
Bromoform.....	0.50	N.D.
Bromomethane.....	1.0	N.D.
Carbon tetrachloride.....	0.50	N.D.
Chlorobenzene.....	0.50	7.7
Chloroethane.....	1.0	N.D.
Chloroform.....	0.50	1.4
Chloromethane.....	1.0	N.D.
Dibromochloromethane.....	0.50	N.D.
1,3-Dichlorobenzene.....	0.50	N.D.
1,4-Dichlorobenzene.....	0.50	0.68
1,2-Dichlorobenzene.....	0.50	5.6
1,1-Dichloroethane.....	0.50	0.99
1,2-Dichloroethane.....	0.50	0.60
1,1-Dichloroethene.....	0.50	15
cis-1,2-Dichloroethene.....	0.50	13
trans-1,2-Dichloroethene.....	0.50	6.0
1,2-Dichloropropane.....	0.50	N.D.
cis-1,3-Dichloropropene.....	0.50	N.D.
trans-1,3-Dichloropropene.....	0.50	N.D.
Methylene chloride.....	5.0	N.D.
1,1,2,2-Tetrachloroethane.....	0.50	N.D.
Tetrachloroethene.....	0.50	5.0
1,1,1-Trichloroethane.....	0.50	1.7
1,1,2-Trichloroethane.....	0.50	N.D.
Trichloroethene.....	0.50	180
Trichlorofluoromethane.....	0.50	N.D.
Vinyl chloride.....	1.0	2.0
Surrogates		
Control Limit %		
Dibromodifluoromethane.....	50	150
4-Bromofluorobenzene.....	50	150
% Recovery		
		80
		54

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Project Manager



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (650) 364-9600 FAX (650) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Sample Descript: Water, MW-18
Analysis Method: EPA 5030/8010
Lab Number: 805-1593
Sampled: May 19, 1998
Received: May 20, 1998
Analyzed: May 28, 1998
Reported: Jun 1, 1998

QC Batch Number: GC052798801007A

Instrument ID: HP-7

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	.....
Bromoform.....	0.50	.....
Bromomethane.....	1.0	.....
Carbon tetrachloride.....	0.50	.....
Chlorobenzene.....	0.50	.....
Chloroethane.....	1.0	.....
Chloroform.....	0.50	.....
Chloromethane.....	1.0	.....
Dibromochloromethane.....	0.50	.....
1,3-Dichlorobenzene.....	0.50	.....
1,4-Dichlorobenzene.....	0.50	.....
1,2-Dichlorobenzene.....	0.50	.....
1,1-Dichloroethane.....	0.50	.....
1,2-Dichloroethane.....	0.50	.....
1,1-Dichloroethylene.....	0.50	.....
cis-1,2-Dichloroethene.....	0.50	.....
trans-1,2-Dichloroethene.....	0.50	.....
1,2-Dichloropropane.....	0.50	.....
cis-1,3-Dichloropropene.....	0.50	.....
trans-1,3-Dichloropropene.....	0.50	.....
Methylene chloride.....	5.0	.....
1,1,2,2-Tetrachloroethane.....	0.50	.....
Tetrachloroethene.....	0.50	.....
1,1,1-Trichloroethane.....	0.50	.....
1,1,2-Trichloroethane.....	0.50	.....
Trichloroethene.....	0.50	.....
Trichlorofluoromethane.....	0.50	.....
Vinyl chloride.....	1.0	.....
Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150.....
4-Bromofluorobenzene.....	50	150.....

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Project Manager



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (650) 364-9600 FAX (650) 364-9233
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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Sample Descript: Water, TB-LB
Analysis Method: EPA 5030/8260
Lab Number: 805-1582

Sampled: May 19, 1998
Received: May 20, 1998
Analyzed: Jun 1, 1998
Reported: Jun 8, 1998

QC Batch Number: MS0601988260S2A

Instrument ID: GC/MS-2

HALOGENATED VOLATILE ORGANICS (EPA 8260)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	N.D.
Bromoform.....	0.50	N.D.
Bromomethane.....	1.0	N.D.
Carbon tetrachloride.....	0.50	N.D.
Chlorobenzene.....	0.50	N.D.
Chloroethane.....	1.0	N.D.
Chloroform.....	0.50	N.D.
Chloromethane.....	1.0	N.D.
Dibromochloromethane.....	0.50	N.D.
1,3-Dichlorobenzene.....	0.50	N.D.
1,4-Dichlorobenzene.....	0.50	N.D.
1,2-Dichlorobenzene.....	0.50	N.D.
1,1-Dichloroethane.....	0.50	N.D.
1,2-Dichloroethane.....	0.50	N.D.
1,1-Dichloroethene.....	0.50	N.D.
cis-1,2-Dichloroethene.....	0.50	N.D.
trans-1,2-Dichloroethene.....	0.50	N.D.
1,2-Dichloropropane.....	0.50	N.D.
cis-1,3-Dichloropropene.....	0.50	N.D.
trans-1,3-Dichloropropene.....	0.50	N.D.
Methylene chloride.....	5.0	N.D.
1,1,2,2-Tetrachloroethane.....	0.50	N.D.
Tetrachloroethene.....	0.50	N.D.
1,1,1-Trichloroethane.....	0.50	N.D.
1,1,2-Trichloroethane.....	0.50	N.D.
Trichloroethene.....	0.50	N.D.
Trichlorofluoromethane.....	0.50	N.D.
Vinyl chloride.....	1.0	N.D.
Surrogates	Control Limit %	% Recovery
Dibromofluoromethane.....	50	150.....
4-Bromofluorobenzene.....	50	150.....

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Please Note:

* See Laboratory Narrative

Melissa A. Brewer
Project Manager



ARCADIS GERAGHTY & MILLER

Laboratory Task Order No./P.O. No. _____

CHAIN-OF-CUSTODY RECORD

Page _____ of _____

Project Number/Name RC000304.0003 Electro-coatings

Project Location Emeryville, CA.

Laboratory

Project Manager Steven Brussee

Sampler(s)/Affiliation Arcadis, Geoghty & Miller

ANALYSIS / METHOD / SIZE

9805448

Sample Matrix: L = Liquid: S = Solid: A = Air

**Total No. of Bottles/
Containers**

Relinquished by: D. J. Apple Organization: AGFA Date 8/20/78 Time 1000 Seal Intact?

Received by: Karen W. Hales Organization: sequoia Date 5/20/78 Time 10:00 Yes No N/A

Relinquished by: Kent Veltkamp Organization: _____ Date 5/20/98 Time 1210
Received by: M. A. M. 5/20/98 Organization: SPCA Lincoln Date 5/20/98 Time 1310
Seal Intact? Yes No N/A

Received by: John Doe Organization: ABC Company Date 7/15/18 Time 10:30 Yes No N/A

Delivery Method: In Person

Common Carrier

Lab Courier

Other



**Sequoia
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(650) 364-9600 (510) 988-9600 (916) 921-9600	FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Matrix: Liquid

QC Sample Group: 8051583-593

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC052798	GC052798	GC052798
	801007A	801007A	801007A
Anal. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	N. Nelson	N. Nelson	N. Nelson
MS/MSD #:	8051583	8051583	8051583
Sample Conc.:	N.D.	33 µg/L	N.D.
Prepared Date:	5/27/98	5/27/98	5/27/98
Analyzed Date:	5/27/98	5/27/98	5/27/98
Instrument I.D.#:	HP-7	HP-7	HP-7
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L
Result:	19	53	22
MS % Recovery:	95	100	110
Dup. Result:	19	52	22
MSD % Recov.:	95	95	110
RPD:	0.0	1.9	0.0
RPD Limit:	0-25	0-25	0-25

LCS #:	LCS052798	LCS052798	LCS052798
Prepared Date:	5/27/98	5/27/98	5/27/98
Analyzed Date:	5/27/98	5/27/98	5/27/98
Instrument I.D.#:	HP-7	HP-7	HP-7
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L
LCS Result:	17	17	19
LCS % Recov.:	85	85	95

MS/MSD			
LCS	65-135	70-130	70-130

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Project Manager



ARCADIS GERAGHTY & MILLER

Laboratory Task Order No./P.O. No. _____

CHAIN-OF-CUSTODY RECORD

Page _____ of _____

Project Number/Name RC0003 04.0003 Electro-Coatings

Project Location Emeryville, CA.

Laboratory _____

Project Manager Steven Brussee

Sampler(s)/Affiliation Acadis, Geoghegan & Miller

Sample Matrix: L = Liquid; S = Solid; A = Air

**Total No. of Bottles/
Containers**

Relinquished by: <u>J. Payne</u>	Organization: <u>A Great</u>	Date <u>5/20/98</u>	Time <u>1000</u>	Seal Intact?
Received by: <u>Karen Pittsfield</u>	Organization: <u>Sequoia</u>	Date <u>5/20/98</u>	Time <u>1000</u>	Yes No N/A
Relinquished by: <u>Karen Pittsfield</u>	Organization: <u>Sequoia</u>	Date <u>5/20/98</u>	Time <u>1210</u>	Seal Intact?
Received by: <u>Diane</u>	Organization: <u>Sequoia</u>	Date <u>5/20/98</u>	Time <u>1210</u>	Yes No N/A

Special Instructions/Remarks:

Delivery Method: In Person

Common Carrier

~~Lab Courier~~

Other



Sequoia
Analytical

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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings

Received: May 20, 1998

Lab Number: 8051580-582

Reported: Jun 8, 1998

LABORATORY NARRATIVE

Sample Number: 805-1580
Sample I.D.: MW-5

The following analytes were present at levels below the reporting limit:

Chloroethane - 3.9 µg/L
1,2-Dichloroethane - 1.8 µg/L
Vinyl chloride - 3.9 µg/L

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(650) 364-9600 (510) 988-9600 (916) 921-9600	FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

Geraghty & Miller, Inc.
1050 Marina Way South
Richmond, CA 94804
Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
Matrix: Liquid

QC Sample Group: 8051580-582

Reported: Jun 8, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chlorobenzene
QC Batch#:	MS060398 8260S2A	MS060398 8260S2A	MS060398 8260S2A	MS060398 8260S2A	MS060398 8260S2A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	EPA 5030				
Analyst:	N. Nelson				
MS/MSD #:	8060339	8060339	8060339	8060339	8060339
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/3/98	6/3/98	6/3/98	6/3/98	6/3/98
Analyzed Date:	6/3/98	6/3/98	6/3/98	6/3/98	6/3/98
Instrument I.D. #:	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	51	50	52	51	60
MS % Recovery:	102	100	104	102	120
Dup. Result:	51	50	53	50	59
MSD % Recov.:	102	100	106	100	118
RPD:	0.0	0.0	1.9	2.0	1.7
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS060398	LCS060398	LCS060398	LCS060398	LCS060398
Prepared Date:	6/3/98	6/3/98	6/3/98	6/3/98	6/3/98
Analyzed Date:	6/3/98	6/3/98	6/3/98	6/3/98	6/3/98
Instrument I.D. #:	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	52	51	53	51	60
LCS % Recov.:	104	102	106	102	120

MS/MSD LCS Control Limits	65-135	70-130	70-130	70-130	70-130
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Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike; MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer
Project Manager



**Sequoia
Analytical**

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 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Geraghty & Miller, Inc.
 1050 Marina Way South
 Richmond, CA 94804
 Attention: Steven Brussee

Client Project ID: RC000304.0003, Electro-Coatings
 Matrix: Liquid

QC Sample Group: 8051580-582

Reported: Jun 8, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS060198	MS060198	MS060198	MS060198	MS060198
	8260S2A	8260S2A	8260S2A	8260S2A	8260S2A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	N. Nelson	N. Nelson	N. Nelson	N. Nelson	N. Nelson
MS/MSD #:	8052204	8052204	8052204	8052204	8052204
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/1/98	6/1/98	6/1/98	6/1/98	6/1/98
Analyzed Date:	6/1/98	6/1/98	6/1/98	6/1/98	6/1/98
Instrument I.D. #:	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	54	53	55	54	64
MS % Recovery:	108	106	110	108	128
Dup. Result:	48	47	49	48	56
MSD % Recov.:	96	94	98	96	112
RPD:	12	12	12	12	13
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS060198	LCS060198	LCS060198	LCS060198	LCS060198
Prepared Date:	6/1/98	6/1/98	6/1/98	6/1/98	6/1/98
Analyzed Date:	6/1/98	6/1/98	6/1/98	6/1/98	6/1/98
Instrument I.D. #:	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	50	48	49	48	59
LCS % Recov.:	100	96	98	96	118

MS/MSD				
LCS Control Limits	65-135	70-130	70-130	70-130

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
 Project Manager

MICROSEEPS



FILE NOTE

SUBJECT: Light Hydrocarbon Analysis of Water Samples

The VOA vials are removed from the refrigerator (4°C) and allowed to reach ambient temperature. Samples are prepared by withdrawing 30 cc of water from the bottom of the vial into a 50 cc Hamilton gas tight, locking syringe. Then 10 cc of helium is withdrawn from a reservoir and the syringe is locked. The syringe is then shaken for five minutes and allowed to equilibrate. With the syringe in a near vertical position, the headspace is injected through a septum-fitting into a 0.5 cc sample loop. The loop is allowed to equilibrate at 1 atmosphere pressure prior to switching the valve to place the sample loop into the carrier gas flow stream.

First, headspace concentrations of the analyzed gases are determined by comparison to the results of analysis of a gas standard. Subsequently, the headspace concentrations are converted to the dissolved water concentrations using Henry's Law.

Results of analysis and applicable quality control parameters are supplied on the attached data sheets.

THE RESULTS SUPPLIED ARE THE ORIGINAL DISSOLVED CONCENTRATIONS OF THE ANALYTES IN NG/L AS CALCULATED FROM DETERMINED HEADSPACE CONCENTRATIONS.

GM2064-982517

----- ARCADIS GERAGHTY & MILLER, INC. -----
 ----- PROJECT: RC000304.0003 -----
 ----- LOCATION: EMERYVILLE, CA -----
 ----- CONCENTRATIONS IN NANOGRAMS/LITER WATER -----

SAMPLE NAME	METHANE (ng/l)	ETHANE (ng/l)	ETHYLENE (ng/l)	FILE NAME	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED
MW-1 25' *	32171	9	<5	C16 29	04/24/98	04/28/98	05/06/98
MW-9 20' *	13102596	<5	2740	C16 32/P21 123	04/24/98	04/28/98	05/06/98
MW-10 20' *	2362763	1679	237897	C16 33/P21 124	04/24/98	04/28/98	05/06/98
MW-12 25' *	1903879	2257	1193	C16 34/P21 125	04/24/98	04/28/98	05/06/98
MW-16 20' *	92719	830	5307	C16 35	04/24/98	04/28/98	05/06/98

MDLs FOR
ABOVE SAMPLES

15 5 5

* SAMPLE VIAL WAS RECEIVED WITH A SEPTUMLESS CAP

06-May-98

ANALYST INITIALS AlREVIEW AS

GM2064-982517

**** QUALITY CONTROL ****

----- ARCADIS GERAGHTY & MILLER, INC. -----

----- PROJECT: RC000304.0003 -----

----- LOCATION: EMERYVILLE, CA -----

CONTINUING CALIBRATION CHECK

STANDARD: "M"

REFERENCE: C16 30

COMPOUND	KNOWN	RESULT	PERCENT
	(ppmv)	(ppmv)	DIFFERENCE
METHANE	10.00	10.11	1.10
ETHANE	1.00	1.01	1.00
ETHYLENE	1.00	1.02	2.00

LABORATORY BLANK RESULTS

BLANK: HE IN LOOP

REFERENCE: C16 31

COMPOUND	BLANK (ppmv)	LOWER DETECTION LIMIT
		(ppmv)
METHANE	ND	0.01
ETHANE	ND	0.01
ETHYLENE	ND	0.01

06-May-98

ANALYST INITIALS: MMREVIEW A3

MICROSEEPS, Inc.

220 William Pitt Way, Pittsburgh, PA 15238

Phone: (412) 826-5245 Fax: (412) 826-3433

CHAIN-OF-CUSTODY RECORD

Note: Enter proper letters in Requested Analyses columns below.

Note: If analysis D, E, or K is selected, scratch (option) NOT wanted.

Company Name: ARCADIS Geraghty & Miller
Address: 1050 Marina Way South, Richmond
Proj. Manager: STEVEN Brussee CA 94804
Proj. Location: Emeryville, CA
Proj. Number: RC000304.0003
Phone #: 510 233 3200 Fax #: 510 233 3204

* A	C1 -C4 <i>ethene & ethane</i>	G	Chlorinated HC
* B	Hydrogen & Helium	H	BTEX
* C	Permanent Gases (CH4, CO, CO2, N2, O2)	J	BTEX & C5 - C10
D	Mercury (Soil) or (Air **)	K	TPH (C5 - C10) or (C4 - C12)
E	TO-14 by GC/MS (Ambient) or (Source **)	L	C11 - C18
F	601 & 602 Compounds	Other	Specify below.

* An additional 22 ml vial of sample is required when requested in combination with another analysis.

*** * Available upon request.**

Results to :

Above, P.M.

Invoice to :

ABOVE

Relinquished by : <i>J. Payne</i>	Company : <i>Walters</i>	Date : <i>9-27-98</i>	Time : <i>4:30 P.M.</i>	Received by : <i>Walters</i>	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by : <i>John Camilleri</i>	Company : <i>Walters</i>	Date : <i>4-28-98</i>	Time : <i>1005</i>
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :



**Sequoia
Analytical**

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1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
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Petaluma, CA 94954

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(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F04-01

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	N.D.
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	60	130
4-Bromofluorobenzene	60	140

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
Analytical**

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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-3A
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F04-02

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

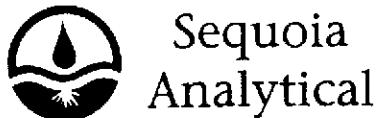
Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	N.D.
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	60	130
4-Bromofluorobenzene	60	140
Control Limits %		% Recovery
60		95
60		71

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-3B
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F04-03

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	N.D.
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	60	130
4-Bromofluorobenzene	60	140

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-6
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F04-04

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

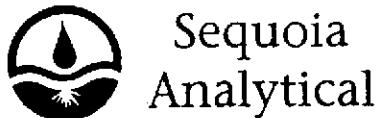
Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	N.D.
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	60	92
4-Bromofluorobenzene	60	66

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-9
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F04-05

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	1700
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	60	130
4-Bromofluorobenzene	60	140

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



**Sequoia
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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-10
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F04-06

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

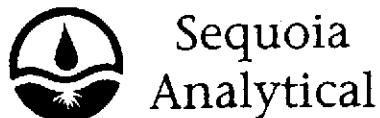
Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	3800
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	60	130
4-Bromofluorobenzene	60	140
Control Limits %		% Recovery
		93
		68

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-12
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F04-07

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	N.D.
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	60	130
4-Bromofluorobenzene	60	140

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



**Sequoia
Analytical**

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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-13
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F04-08

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

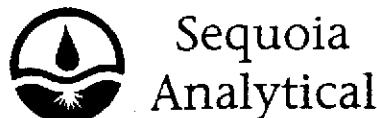
Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	N.D.
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	60	130
4-Bromofluorobenzene	60	140

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-16
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F04-09

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

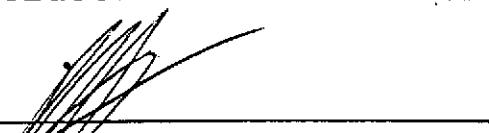
QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

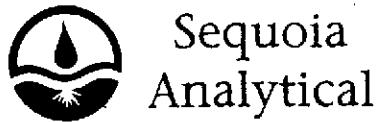
Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	1000
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	5400
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	60	130
4-Bromofluorobenzene	60	140

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



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Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100
Petaluma, CA 94954 (707) 792-1865 FAX (707) 792-0342

Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-17
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F04-10

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

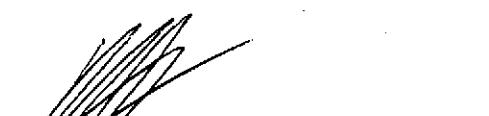
QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	N.D.
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	60	130
4-Bromofluorobenzene	60	140

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



**Sequoia
Analytical**

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Petaluma, CA 94954 (707) 792-1865 FAX (707) 792-0342

Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-18
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F04-11

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	N.D.
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	Control Limits % 60 130	% Recovery 86
4-Bromofluorobenzene	60 140	61

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



Sequoia
Analytical

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FAX (707) 792-0342

Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville

Received: 04/23/98

Lab Proj. ID: 9804F04

Reported: 05/12/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 18 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

8010: Samples were extracted as hazardous waste.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



Sequoia
Analytical

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FAX (707) 792-0342

Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: SJB

Client Project ID: RC000304.0003/ECI/Emeryville

QC Sample Group: 9804F04-01-11

Reported: May 12, 1998

QUALITY CONTROL DATA REPORT

Matrix: Solid
Method: EPA 8010
Analyst: M. McLachlan

ANALYTE	1,1-DCE	TCE	Chlorobenzene
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QC Batch #: GC0424980VOAEXA

Sample No.: 9804D8501
Date Prepared: 4/24/98 4/24/98 4/24/98
Date Analyzed: 5/1/98 5/1/98 5/1/98
Instrument I.D.#: gchp09 gchp09 gchp09

Sample Conc., mg/Kg: N.D. N.D. N.D.
Conc. Spiked, mg/Kg: 50 50 50

Matrix Spike, mg/Kg: 29 36 31
% Recovery: 58 72 62

Matrix Spike Duplicate, mg/Kg: 24 33 28
% Recovery: 48 66 56

Relative % Difference: 19 8.7 10

RPD Control Limits: 0-25 0-25 0-25

LCS Batch#: VSBLK042498BS

Date Prepared: 4/24/98 4/24/98 4/24/98
Date Analyzed: 4/24/98 4/24/98 4/24/98
Instrument I.D.#: gchp09 gchp09 gchp09

Conc. Spiked, mg/Kg: 50 50 50

Recovery, mg/Kg: 40 53 46
LCS % Recovery: 80 106 92

Percent Recovery Control Limits:

MS/MSD	65-135	70-130	70-130
LCS	65-135	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954	(650) 364-9600 (510) 988-9600 (916) 921-9600 (707) 792-1865	FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342
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Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-18A
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F06-12

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

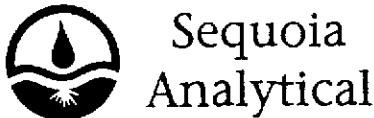
Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	N.D.
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	60	130
4-Bromofluorobenzene	60	140
Control Limits %		% Recovery
60		94
60		71

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



Sequoia
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FAX (707) 792-0342

Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804

Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Sample Descript: MW-20
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9804F06-13

Sampled: 04/23/98
Received: 04/23/98
Extracted: 04/24/98
Analyzed: 05/05/98
Reported: 05/12/98

QC Batch Number: GC042498OVOAEXA
Instrument ID: GCHP9

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	250	N.D.
Bromoform	250	N.D.
Bromomethane	500	N.D.
Carbon Tetrachloride	250	N.D.
Chlorobenzene	250	N.D.
Chloroethane	500	N.D.
2-Chloroethylvinyl ether	500	N.D.
Chloroform	250	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
1,1-Dichloroethane	250	N.D.
1,2-Dichloroethane	250	N.D.
1,1-Dichloroethene	250	N.D.
cis-1,2-Dichloroethene	250	N.D.
trans-1,2-Dichloroethene	250	N.D.
1,2-Dichloropropane	250	N.D.
cis-1,3-Dichloropropene	250	N.D.
trans-1,3-Dichloropropene	250	N.D.
Methylene chloride	2500	N.D.
1,1,2,2-Tetrachloroethane	250	N.D.
Tetrachloroethene	250	N.D.
1,1,1-Trichloroethane	250	N.D.
1,1,2-Trichloroethane	250	N.D.
Trichloroethene	250	N.D.
Trichlorofluoromethane	250	N.D.
Vinyl chloride	500	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	60	130
4-Bromofluorobenzene	60	140

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



Sequoia
Analytical

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FAX (707) 792-0342

Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: Steve Brussee

Client Proj. ID: RC000304.0003/ECI/Emerville
Lab Proj. ID: 9804F06

Received: 04/23/98
Reported: 05/12/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 6 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

8010: Samples were extracted as hazardous waste.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



Sequoia
Analytical

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FAX (707) 792-0342

Geraghty & Miller
1050 Marina Way South
Richmond, CA 94804
Attention: SJB

Client Project ID: RC000304.0003/ECI/Emeryville

QC Sample Group: 9804F06-12,13

Reported: May 12, 1998

QUALITY CONTROL DATA REPORT

Matrix: Solid
Method: EPA 8010
Analyst: M. McLachlan

ANALYTE	1,1-DCE	TCE	Chlorobenzene
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QC Batch #: GC0424980VOAEXA

Sample No.:	9804D8501		
Date Prepared:	4/24/98	4/24/98	4/24/98
Date Analyzed:	5/1/98	5/1/98	5/1/98
Instrument I.D. #:	gchp09	gchp09	gchp09

Sample Conc., mg/Kg:	N.D.	N.D.	N.D.
Conc. Spiked, mg/Kg:	50	50	50

Matrix Spike, mg/Kg:	29	36	31
% Recovery:	58	72	62

Matrix			
Spike Duplicate, mg/Kg:	24	33	28
% Recovery:	48	66	56

Relative % Difference:	19	8.7	10
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RPD Control Limits:	0-25	0-25	0-25
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LCS Batch #: VSBLK042498BS

Date Prepared:	4/24/98	4/24/98	4/24/98
Date Analyzed:	4/24/98	4/24/98	4/24/98
Instrument I.D. #:	gchp09	gchp09	gchp09

Conc. Spiked, mg/Kg:	50	50	50
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Recovery, mg/Kg:	40	53	46
LCS % Recovery:	80	106	92

Percent Recovery Control Limits:

MS/MSD	65-135	70-130	70-130
LCS	65-135	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



Sequoia
Analytical

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FAX (707) 792-0342

Geraghty & Miller
1050 Marina Way, South
Richmond, CA 94804
Attention: Steve Brussee

Client Project ID: RC000304.0003/ECI/Emeryville
Matrix: Liquid

Work Order #: 9804F04 -01-11; Reported: May 22, 1998

9804F06-12, 13

QUALITY CONTROL DATA REPORT

Analyte: Hexavalent Chromium

QC Batch #: IN042498719600A

Analy. Method: EPA 7196

Prep. Method: N.A.

Analyst: K. Sims

MS/MSD #: 9804F0613

Sample Conc.: N.D.

Prepared Date: 4/24/98

Analyzed Date: 4/24/98

Instrument I.D.#: MANUAL

Conc. Spiked: 0.50 mg/L

Result: 0.51

MS % Recovery: 102

Dup. Result: 0.51

MSD % Recov.: 102

RPD: 0.0

RPD Limit: 0-20

LCS #: LCS042498

Prepared Date: 4/24/98

Analyzed Date: 4/24/98

Instrument I.D.#: MANUAL

Conc. Spiked: 0.50 mg/L

LCS Result: 0.54

LCS % Recov.: 108

MS/MSD 75-125

LCS 80-120

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.



**Sequoia
Analytical**

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Geraghty & Miller
1050 Marina Way, South
Richmond, CA 94804
Attention: Steve Brussee

Client Project ID: RC000304.0003/ECI/Emeryville
Matrix: Liquid
Work Order #: 9804F04-01-11; 9804F06-12, 13
Reported: May 22, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0424986010MDA	ME0424986010MDA	ME0424986010MDA	ME0424986010MDA
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3010	EPA 3010	EPA 3010	EPA 3010

Analyst:	S. LaBarron	S. LaBarron	S. LaBarron	S. LaBarron
MS/MSD #:	9804E8303	9804E8303	9804E8303	9804E8303
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/24/98	4/24/98	4/24/98	4/24/98
Analyzed Date:	4/24/98	4/24/98	4/24/98	4/24/98
Instrument I.D. #:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
 Result:	1.1	1.1	1.0	1.1
MS % Recovery:	110	110	100	110
 Dup. Result:	1.1	1.1	1.1	1.1
MSD % Recov.:	110	110	110	110
 RPD:	0.0	0.0	9.5	0.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	BLK042498	BLK042498	BLK042498	BLK042498
Prepared Date:	4/24/98	4/24/98	4/24/98	4/24/98
Analyzed Date:	4/24/98	4/24/98	4/24/98	4/24/98
Instrument I.D. #:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
 LCS Result:	1.1	1.1	1.1	1.1
LCS % Recov.:	110	110	110	110

MS/MSD	80-120	80-120	80-120	80-120
LCS	80-120	80-120	80-120	80-120
Control Limits				

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

2

ARCADIS GERAGHTY & MILLER

Laboratory Task Order No./P.O. No. _____

48-04-F04 / F06

CHAIN-OF-CUSTODY RECORD

Page _____ of _____

Project Number/Name RC000304.0003
 Project Location ECI / EMERYVILLE
 Laboratory SEQUOIA
 Project Manager SJB
 Sampler(s)/Affiliation RK

Sample ID/Location	Matrix	Date/Time Sampled	Lab ID	ANALYSIS / METHOD / SIZE			Remarks	Total
				CHEMIST	HPLC	SOLID		
MW-1	L	AS labeled	01	X	X	X		5
MW-3A	L	Unlabeled	02	X	X	X		5
MW-3B	L	Unlabeled	03	X	X	X		5
MW-4	L	Unlabeled		X	X	X		5
MW-5	L	Unlabeled		X	X	X		5
MW-6	L	Unlabeled	04	X	X	X		5
MW-9	L	Unlabeled	05	X	X	X		5
MW-10	L	Unlabeled	06	X	X	X		5
MW-12	L	Unlabeled	07	X	X	X		5
MW-13	L	Unlabeled	08	X	X	X		5
MW-16	L	Unlabeled	09	X	X	X		5
MW-17	L	Unlabeled	10	X	X	X		5
MW-18	L	Unlabeled	11	X	X	X		5
MW-19A	L	Unlabeled	12	X	X	X		5
MW-20	L	Unlabeled	13	X	X	X		5

Sample Matrix: L = Liquid; S = Solid; A = Air

Total No. of Bottles/
Containers

75

Relinquished by: <u>Ron Keg</u>	Organization: <u>ARCADIS - GERAGHTY & MILLER</u>	Date <u>4/23/98</u>	Time <u>1830</u>	Seal Intact?
Received by:	Organization:	Date <u>4/23/98</u>	Time <u>1830</u>	Yes No N/A
Relinquished by: <u>Karen Leest</u>	Organization: <u>Sequoia</u>	Date <u>4/23/98</u>	Time <u>1830</u>	Seal Intact?
Received by: <u>Karen Leest</u>	Organization: <u>Sequoia</u>	Date <u>4/23/98</u>	Time <u>1830</u>	Yes No N/A

Special Instructions/Remarks:

Delivery Method: In Person Common Carrier Lab Courier Other

SPECIFY



ARCADIS GERAGHTY & MILLER

Laboratory Task Order No./P.O. No.

CHAIN-OF-CUSTODY RECORD

Page _____ of _____

Project Number/Name RC000304.0003 Electro-coating

Project Location Emeryville, CA

Laboratory.

Project Manager Steven Brussee

Sampler(s)/Affiliation Arcadis, Geoglypt & Miller

Sample Matrix: L = Liquid; S = Solid; A = Air

Total No. of Bottles/
Containers

Relinquished by:	Organization:	Date	Total No. of Bottles/Containers	
Received by:	Organization:	Date	Time	Seal Intact?
J. Paegle	A GOLF	5/20/98	1000	
Kent Peltola	sequoia	5/20/98	1000	Yes No N/A
Kent Peltola	Organization:	Date 5/20/98	Time 1210	Seal Intact?
Darlene	sequoia	5/20/98	1210	Yes No N/A
Special Instructions/Remarks:				

Special Instructions/Remarks:

Delivery Method: In Person

Common Carrier