GROUNDWATER MONITORING – ANNUAL EVENT
MARCH 2003
BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

by

Haley & Aldrich, Inc.
San Diego, California

for

Boeing Realty Corporation
Long Beach, California

File No. 28882-101
May 27, 2003

GROUNDWATER MONITORING
ANNUAL EVENT – MARCH 2003

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

Prepared for

BOEING REALTY CORPORATION
5760 KILROY AIRPORT WAY, SUITE 500
LONG BEACH, CALIFORNIA 90806

May 27, 2003

Prepared by

HALEY & ALDRICH, INC.
9040 Friars Road, Suite 220
San Diego, California 92108
(619) 280-9210

Jeff Reardon, RG
Senior Geologist

Scott P. Zachary
Project Manager

TABLE OF CONTENTS

		Page
LIST OF TABLES		**ii**
LIST OF FIGURES		**ii**
1.	**INTRODUCTION**	**1**
2.	**SITE BACKGROUND**	**2**
2.1	Site Location	2
2.2	Site History	2
2.3	Regional Geology and Hydrogeology	2
2.4	Site Geology and Hydrogeology	3
2.4.1	Geology	3
2.4.2	Hydrogeology	4
3.	**GROUNDWATER SAMPLING PROCEDURES**	**6**
3.1	Monitoring Plans	6
3.2	Field Procedures	7
3.3	Sample Naming	7
3.4	Groundwater Monitoring Program Variances	7
4.	**MONITORING AND SAMPLING RESULTS**	**8**
4.1	Groundwater Elevations	8
4.2	Groundwater Quality	8
5.	**QUALITY ASSURANCE/QUALITY CONTROL**	**11**
5.1	Field Quality Control Samples	11
5.1.1	Field Duplicates	11
5.1.2	Equipment Rinsate Blanks	11
5.1.3	Field Blanks	11
5.1.4	Trip Blanks	11
5.1.5	Data Validation and Laboratory QA/QC Samples	12
6.	**LIMITATIONS**	**13**
REFERENCES		**14**

BOE-C6-0007448

TABLES
FIGURES
APPENDIX A – Field Data
APPENDIX B – Analytical Reports and Chain-of-Custody Records (STL Los Angeles) Electronic Format on Compact Disc
APPENDIX C – Data Validation
APPENDIX D – Limitations

LIST OF TABLES

Table No.	Title
I	Well Information
II	Groundwater Elevations – March 2003
III	Historic Groundwater Elevations
IV	Volatile Organic Compounds by EPA 8260B – March 2003
V	Summary of Historic Volatile Organic Compounds
VI	Summary of Monitored Natural Attenuation Parameters

LIST OF FIGURES

Figure No.	Title
1	Site Location Plan
2	Site Plan Showing Groundwater Monitoring Wells Sampled in March 2003
3	Generalized Geologic Cross-Section
4	Groundwater Elevation Map – March 2003
5	Groundwater Elevation Hydrographs (a through i)
6	TCE Distribution in MBFB Groundwater – March 2003
7	TCE Concentration vs. Time (a through g)
8	1,1-DCE Distribution in MBFB Groundwater – March 2003
9	1,1-DCE vs. Time (a through g)

BOE-C6-0007449

1. INTRODUCTION

Haley & Aldrich, Inc. (H&A) has prepared this report on behalf of Boeing Realty Corporation (BRC) in order to document the Groundwater Monitoring Annual Event (2003 Annual event) conducted at the Former C-6 Facility in Los Angeles, California (Site).

The 2003 Annual event was conducted at the Site from March 24th to the 28th, 2003. The program included the following activities:

- Groundwater elevation measurements in 20 wells;
- Groundwater samples from 20 wells and subsequent analysis for volatile organic compounds (VOCs) by US Environmental Protection Agency (EPA) Method 8260B; and
- Monitored natural attenuation (MNA) parameter measurements in 20 wells for dissolved oxygen (DO), oxidation-reduction potential (ORP), pH, conductivity, and temperature.

This report provides documentation and discussion of the 2003 Annual event.

BOE-C6-0007450

2. SITE BACKGROUND

2.1 Site Location

The Site is located at 19503 South Normandie Avenue, in Los Angeles, California. The Site occupies approximately 170 acres in an area located between the cities of Torrance to the west, and Carson to the east.

The Site is bound on the north by 190th Street; on the east by Normandie Avenue; on the west by the former Industrial Light Metals (ILM) facility; and on the south by the former Montrose Chemicals facility and a residential area. A Site location plan is included as Figure 1; a Site plan as Figure 2.

2.2 Site History

The Site was reportedly used for the manufacturing of aircraft and aircraft parts for 40 years, between 1952 and 1992. Prior to that time, industrial use of the Site included aluminum and steel production. Before 1940, the Site was reportedly farmland. A limited amount of assembly and warehouse related activities continued through mid-2000. The Site is currently demolished, and in various stages of redevelopment.

Groundwater investigation activities began at the Site in 1987. Forty groundwater monitoring wells have been installed at the Site. Twenty of these 40 wells have since been removed as a result of redevelopment activities. Prefixes of Site groundwater monitoring wells include BL, DAC, WCC, TMW and XMW. Table I is a compilation of the groundwater monitoring well details.

2.3 Regional Geology and Hydrogeology

A description of the geology and hydrogeology of the region surrounding the Site is drawn from reports published by the U.S. Geological Survey (USGS) (Poland and others, 1959) and the California Department of Water Resources (DWR, 1961). Reference is also made to previous Site reports prepared by Kennedy/Jenks Consultants (Kennedy/Jenks Consultants, 2000).

The Site is located on a broad plain, at an approximate elevation of 52 feet above mean sea level (MSL). The DWR and USGS define this area as the Torrance Plain, a Pleistocene-age marine surface and subdivision of the West Coast Basin/Coastal Plain of Los Angeles and Orange Counties. The ground surface is generally flat, with an eastward gradient of approximately 20 feet per mile (less than one-half percent). Surface drainage is generally toward the Dominguez Channel, approximately one mile to the east. The Dominguez Channel flows southeastward toward the Los Angeles and Long Beach Harbors, in San Pedro Bay.

BOE-C6-0007451

The West Coast Basin includes a thick sequence (up to 13,000 feet) of marine and continental sediments (Miocene to Recent) deposited in a broad synclinal depression over a basement complex of igneous and metamorphic rocks. The uppermost sequence of deposits of interest within the West Coast Basin is as follows:

Youngest	Active Dune Sand
↑	Alluvium
	Older Dune Sand
↓	Lakewood Formation (upper Pleistocene)
Oldest	San Pedro Formation (lower Pleistocene)

The dune sands and alluvium are not present at the Site. The Lakewood Formation is mapped at the surface in the Site vicinity.

The Lakewood Formation (DWR, 1961) includes the upper Pleistocene deposits located in the sediments of the Los Angeles Coastal Plain area. These deposits are of marine and continental origin, and represent stream transport and sedimentation along the Pleistocene marine plain. In the Site area, the Lakewood Formation also may include the Semi-perched aquifer, the Bellflower Aquitard, and the Gage Aquifer. The Semi-perched aquifer includes deposits described as Terrace Cover (Poland and others, 1959). Based on correlations between Site stratagraphic and adjacent sites data, it appears that the Semi-perched aquifer is absent from the Site. The Bellflower Aquitard is a heterogeneous mixture of continental, marine, and wind-blown sediments, consisting mainly of clays with sandy and gravelly lenses (DWR, 1961). The elevation of the base of the Bellflower Aquitard is at about -100 feet MSL, or about 150 feet below ground surface (bgs) in the Site area. The Gage Aquifer is a water-bearing zone of fine to medium sand and gravel confined by the Bellflower Aquitard. It is reported to be approximately 40 feet thick in the Site area.

The Lakewood Formation is underlain by the Lower Pleistocene San Pedro Formation, which continues to approximately 1,000 feet bgs in the Site area. The major water-bearing zones within the San Pedro Formation are the Lynwood Aquifer and the Silverado Aquifer. These are reported in the Site area at approximately 300 and 500 feet bgs, respectively (DWR, 1961). The Silverado Aquifer is an important groundwater source in the Coastal Plain, and considered a source of drinking water (DWR, 1961).

2.4 Site Geology and Hydrogeology

2.4.1 Geology

Groundwater monitoring wells and soil borings drilled at the Site encountered the Lakewood Formation. Monitoring well borings were drilled from the ground surface to depths ranging from 79 to 140 feet bgs. The top 20 to 50 feet below the Site consisted of mainly fine-grained soils (predominantly silts and clays) that become thicker to the east. A sandy zone that dips downward to the east underlies the fine-grained soils. The sandy zone is generally 80 to 100 feet thick, and contains interbedded layers of fine-grained sediment that also dip down to the east.

BOE-C6-0007452

2.4.2 Hydrogeology

Groundwater samples from monitoring wells at the Site have been collected and analyzed on a regular basis since 1987. The uppermost groundwater at the Site appears to be under water table conditions at elevations of approximately –12 to –16 feet MSL (64 to 68 feet bgs). Regionally, this upper most groundwater appears to be within relatively permeable sediments of the predominantly fine-grained Bellflower Aquitard. Most of the monitoring wells completed in the Bellflower Aquitard are at or near the water table, with screened depths ranging from approximately 58 to 91 feet bgs. Two deeper wells, WCC-1D and WCC-3D, were completed in a deeper zone with screened depths from approximately 120 to 140 feet bgs. Both of these wells have since been abandoned (Table I).

The following primary hydrogeologic units were recognized in the general vicinity of the Site:

FORMATION	HYDROSTRATIGRAPHIC UNIT	
Lakewood Formation (Upper Pleistocene)	Bellflower Aquitard	Upper Bellflower Aquitard (UBF)
		Middle Bellflower Aquitard (MBF, MBFM, MBFC, MBFB/C)
		Lower Bellflower Aquitard (LBF)
	Gage Aquifer (GAGE)	
San Pedro (Lower Pleistocene)	Gage Lynwood Aquifer (GLA)	
	Lynwood Aquifer (LYNWOOD)	
	Unnamed Aquifer	
	Silverado Aquifer	

The relatively fine-grained Upper Bellflower Aquitard (UBF) is continuous across the area, but thins to the northwest. The UBF is comprised of laminated to massive yellowish brown muds, with local sands and fossiliferous zones. The UBF is found at the surface beneath the Site, and is approximately 70 feet thick. A generalized geologic cross-section is included as Figure 3.

The Middle Bellflower Aquitard (MBF) is a massive, light yellowish brown, fine to medium sand, with local muddy zones. An extensive mud layer, referred to as the Middle Bellflower Mud (MBFM), locally interrupts this sand. Where divided, the sand subunits are referred to as the B-Sand (MBFB) and C-Sand (MBFC). The top of the MBFB is found at an approximate elevation of -12 to -20 feet MSL (64 to 72 feet bgs) at the Site, and is generally from 25 feet to 40 feet thick. The MBFM is discontinuous across the area, and is comprised of laminated silts, layered silts, and very fine sands. Deeper borings at the former ILM facility and the Site do not always encounter the MBFM. The top of the MBFC is found at an approximate elevation of –45 to –55 feet MSL (97 to 107 feet bgs) at the Site (Figure 3).

The fine-grained Lower Bellflower Aquitard (LBF) is reported continuous across the area. The top of the LBF occurs at an approximate elevation of –62 to –98 feet MSL

BOE-C6-0007453

(114 to 150 feet bgs), and ranges in thickness from 10 to 25 feet thick (Figure 3). The LBF separates the Bellflower sands from the underlying Gage Aquifer. The Gage Aquifer in the Site vicinity is predominantly sand, and ranges in thickness from 40 to 78 feet. No monitoring wells have been drilled into the Gage Aquifer at the Site (Kennedy/Jenks Consultants, 2000).

BOE-C6-0007454

3. GROUNDWATER SAMPLING PROCEDURES

3.1 Monitoring Plans

The 2003 Annual event at the Site was conducted from March 24th to the 28th, 2003, by Tait Environmental Management, Inc. (TEM) field personnel. Work was conducted in accordance with the following documents:

- *Groundwater Monitoring Workplan 2003*, by Haley & Aldrich, Inc., dated 9 December 2002, approved by the Los Angeles Regional Water Quality Control Board (LARWQCB) on 23 January 2003.

- *Standard Operating Procedure, Groundwater Gauging and Sampling*, prepared by Tait Environmental Management, dated 9 September 2002.

Monitored natural attenuation sampling was conducted according to:

- *Standard Operating Procedures for Measuring Natural Attenuation Parameters at Boeing Realty Corporation Former C-6 Facility, Revision 1.0*, prepared by Haley & Aldrich, Inc. and England Geosystem Inc., dated January 9, 2001.

Activities performed during the Annual Groundwater Monitoring and Sampling event were as follows.

Groundwater Elevation Measurement

- Water levels were measured in 20 Site groundwater wells on the 24th and 25th of March 2003 (Table II).

- A groundwater elevation contour map was generated based on these measurements (Figure 4).

Well Purging, Sampling and Analysis

- At least 3 wetted casing volumes of water were purged with a submersible pump from each well.

- Purge water was monitored for pH, temperature, and specific conductivity stability.

- Purging was completed when a minimum of three wetted casing volumes were removed and three consecutive measurements of pH, temperature, and specific conductance were within 10% of each other, or after five casing volumes were purged.

- Groundwater samples were collected from the 20 wells with a submersible pump and analyzed for VOCs by EPA Method 8260B.

- QA/QC samples were also collected and analyzed for VOCs by EPA Method 8260B.

BOE-C6-0007455

Monitored Natural Attenuation (MNA) Parameters

- MNA parameters (DO, ORP, and pH) were measured in the field.

3.2 Field Procedures

Field procedures for this sampling event are outlined in the documents listed previously in Section 3.1.

3.3 Sample Naming

Groundwater samples were labeled in the following format, in accordance with the Boeing Data Management Plan (DMP) prepared by CH2Mhill, and dated January 2002 (CH2MHill, 2002):

For example: WCC_5S_WG032503_0001

Where:

WCC_5S = the groundwater monitoring well name
WG = Groundwater sample
032503 = date the sample was collected (mmddyy)
0001 = the number of samples taken from the well

3.4 Groundwater Monitoring Program Variances

Groundwater monitoring wells WCC-4S, WCC-12S and XMW-09 were scheduled for sampling during the Annual Monitoring Event; however, due to Site redevelopment construction activities, the groundwater monitoring wells could not be accessed by the sampling crew and equipment. Redevelopment construction activities should be nearly complete this fall, and WCC-4S and WCC-12S will be scheduled for sampling during the Semi-Annual Monitoring Event in October 2003. XMW-9 is a Montrose Chemical Company monitoring well, and will be sampled once construction activities in this area of the Site are complete and access to the well is feasible, also expected in the fall of 2003 for the October Semi-Annual Event.

BOE-C6-0007456

4. MONITORING AND SAMPLING RESULTS

4.1 Groundwater Elevations

Field sheets for the data collected by TEM are included in Appendix A. A summary of the groundwater elevations for the 2003 Annual event is presented in Table II.

During the 2003 Annual event, groundwater elevations at the Site ranged from –12.83 to –14.56 feet MSL, or approximately 65 feet bgs. Overall, groundwater elevations have increased up to approximately 0.39 feet compared to the values measured in September 2002, with the exception of well TMW-5, which decreased approximately 0.16 feet. Historic groundwater levels are presented in Table III and depicted in Figures 5a through 5i.

Figure 4 is a groundwater elevation contour map of the MBFB (B-Sand) water-bearing zone, generated using data collected from the 2003 Annual event. The average horizontal hydraulic gradient in the MBFB was calculated to be approximately 0.0008 to 0.0009 ft/ft to the south in March 2003, as compared to approximately 0.0010 to 0.0014 ft/ft to the south calculated for September 2002. Based on the groundwater elevation contours shown on Figure 4, the hydraulic gradient varies across the Site along the various flow vectors. The groundwater in the MBFB appears to generally flow in a southerly direction and converge on the Site.

Historic groundwater levels are presented in Table III. Hydrographs for the wells are included as Figures 5a through 5i. The low gradient is demonstrated in the hydrographs by the extremely close proximity of the hydrographs from individual wells.

4.2 Groundwater Quality

<u>VOC Results</u>

Results of VOC analysis by EPA Method 8260B for the 2003 Annual event, conducted in March 2003, are summarized in Table IV, and in Figures 6 through 9. Based on visual observations during well sampling, TEM recorded no indications of dense non-aqueous phase liquid (DNAPL) in any of the sampled wells. Based on a review of previous monitoring reports, general plume geometries for trichloroethene (TCE) and 1,1-dichloroethene (1,1-DCE) appear to be generally unchanged since 1999 (Haley & Aldrich, Inc. and England Geosystem Inc., 2001b and 2001c and Haley & Aldrich, Inc., June 2002 and November 2002).

Figure 6 shows the dissolved-phase TCE concentrations in the MBFB. TCE concentrations in groundwater samples have either generally decreased (some significantly) or minimally increased (less than 20%) in 16 of the 20 wells, compared to the September 2002 sampling event; however, TCE concentrations notably increased in samples from 4 of the 20 wells:

- TMW-1, from 520 to 860 µg/l;
- TMW-2, from 8,400 to 14,000 µg/l;
- TMW-9, from 260 to 900 µg/l; and
- WCC-5S, from 1.5 to 3.6 µg/l.

BOE-C6-0007457

Noteworthy decreases (greater than 20% variation from the previous sampling event) in TCE concentrations were observed in the samples collected from DAC-P1 (from 18,000 to 13,000 µg/l) and WCC-6S (from 2,000 to 400 µg/l). Concentration vs. time graphs for TCE in wells are included as Figures 7a through 7g.

Figure 8 shows the dissolved-phase 1,1-DCE concentrations in the MBFB. 1,1-DCE concentrations in groundwater samples have generally stayed the same or decreased in the monitored wells, with the following exceptions:

- TMW-4, from 660 to 1,200 µg/l;
- TMW-7, from 390 to 560 µg/l;
- TMW-8, from 3,100 to 3,900 µg/l; and
- TMW-9, from 35 to 240 µg/l.

It is important to note that 1,1-DCE has not been detected at DAC-P1, TMW-10, TMW-11 and TMW-14. Concentration vs. time graphs for 1,1-DCE in wells are included as Figures 9a through 9g.

Six wells were reported to have detectable concentrations of tetrachloroethene (PCE) up to 21 µg/l (BL-3). Five of the six samples with detected PCE concentrations are less than 6 µg/l; three of these concentrations were at low levels that could not be quantified by the laboratory, and are noted in Table IV with a "J" flag.

Concentrations of 1,1,1-trichloroethane (1,1,1-TCA) were not detected in 17 of the 20 wells sampled, and decreased in samples from the following three wells:

- TMW-2, from 1,400 to 1,300 µg/l;
- WCC-3S, from 670 to 96J µg/l; and
- WCC-6S, from 780 to 210 µg/l.

As in previous sampling events, some minor occurrences of VOCs other then those described above were detected, and are tabulated on Table IV. These VOCs occurrences included cis-1,2-DCE, chloroform, benzene, methyl ethyl ketone (MEK) and toluene, and are discussed below.

- Cis-1,2-DCE concentrations in groundwater generally remained the same (20% variances or less) in the 20 wells sampled, except in the following two wells: TMW-2 (from 14,000 to 4,700 µg/l) and WCC-3S (from 3,800 to 910 µg/l). These values are within the historical range of fluctuation for each well, as shown on Table V.

- Chloroform concentrations in groundwater samples generally remained the same (less than 20% variances) in the 20 wells sampled, except in the following two wells: TMW-2 and WCC-9S. Chloroform decreased in well TMW-2, from 240 to 110 µg/l, and in well WCC-9S, from 24 to 12 µg/l. These values are within historical range of fluctuation for each well, as shown on Table V.

BOE-C6-0007458

- Benzene concentrations in groundwater samples generally remained the same or decreased, except in well WCC-3S. Well WCC-3S was reported to have a benzene concentration that could not be quantified by the laboratory (46J µg/l). Benzene was not detected in well WCC-3S in the previous sampling event (<620 µg/l).

- MEK (2-butanone) was only detected in well TMW-14, at a concentration of 5.6 µg/l. In well TMW-2, MEK decreased from 140,000 µg/l to below laboratory detection limits (<1,200 µg/l) in March 2003. Well TMW-2 demonstrated a similar concentration change during the 2002 annual sampling event.

- Toluene concentrations remained high in three wells (Table V). WCC-3S, decreased from 43,000 to 9,600 µg/l; WCC-6S, increased from 2,500 to 7,700 µg/l; TMW-2, decreased from 5,200 to 710 µg/l.

Field MNA Parameters

Field monitoring of DO, ORP, and pH was conducted during the March 2003 monitoring and sampling event. A summary of the March 2003 MNA parameters is included in Table VI, and on the Field Data Sheets in Appendix A. These parameters are generally similar to the March 2002 annual sampling event data, and suggest that in-situ conditions have not changed. The distribution of DO and ORP suggests evidence of intrinsic biotransformation of VOCs in the potential source area near former Buildings 1, 2 and 36, as well as along the southern property boundary. It appears that DO has been depleted within the areas of TCE and 1,1-DCE-impacted groundwater. ORP is negative within the Building 1/36 area (WCC-3S and WCC-6S), suggesting anaerobic reducing conditions.

BOE-C6-0007459

5. QUALITY ASSURANCE/QUALITY CONTROL

5.1 Field Quality Control Samples

5.1.1 Field Duplicates

Two duplicate groundwater samples were analyzed for VOC concentrations from wells BL-3 and XMW-19. These results are included in Table IV. Duplicate laboratory data can be used to measure how well replicate measurements reproduce, and also to estimate overall method precision. Relative percent difference (RPD) is a measure of precision, and is calculated as follows:

$$(\text{Result 1} - \text{Result 2}) / \tfrac{1}{2} (\text{Result 1} + \text{Result 2}) * 100\%$$

The RPD will often vary with the concentration of analyte; RPD lessening as the concentration increases. If the variation is greater than plus or minus 15%, but less than 100%, the reported concentrations are up to standard. If the variation is greater than 100%, the data is subject to further evaluation (i.e., comparison with historic data from the well). The data from BL-3 and the BL-3 duplicat,e and from XMW-19 and the XMW-19 duplicate were reported to have RPDs less than or equal to 30%, which indicates that the reported concentrations are up to standard.

5.1.2 Equipment Rinsate Blanks

Two equipment rinsate blanks were collected during the sampling event after cleaning the sampling equipment with deionized water. These rinsate samples were analyzed for VOCs by EPA Method 8260B. VOCs were not detected in any of the equipment blank samples.

5.1.3 Field Blanks

Two field blanks were collected during the sampling event with laboratory-supplied water to check for contamination by sampling methodology. These field blank samples were analyzed for VOCs by EPA Method 8260B. An estimated concentration of acetone (3.3J µg/l) was detected below the contracting laboratory reporting limit (10 µg/l) in one of the field blanks, as shown on Table IV.

5.1.4 Trip Blanks

One laboratory-prepared trip blank was shipped to the laboratory each day to check for cross-contamination. The samples were analyzed for VOCs by EPA Method 8260B. Estimated concentrations of acetone (5.3J and 5.1J µg/l) were detected below the contracting laboratory reporting limit (10 µg/l) in two of the trip blanks. Concentrations of 2-butanone, methylene chloride and tetrahydrofuran were also reported in one of the trip blanks at concentrations of 39, 0.34J and 36 µg/l, respectively, as shown in Table IV.

BOE-C6-0007460

5.1.5 Data Validation and Laboratory QA/QC Samples

Final laboratory-certified reports and laboratory quality control procedures are included on the compact disc (CD) as Appendix B.

Tier II data validation was performed on 10% of the samples; Tier III data validation on 5% of the samples. Based on the data validation results, the data collected during this event is adequate for continued characterization and monitoring of VOCs in groundwater beneath the Site. Data validation results are provided in Appendix C. Appropriate data qualifiers, as determined by Laboratory Data Consultants, Inc. (LDC) (data validation subcontractor), have been included where appropriate.

BOE-C6-0007461

6. LIMITATIONS

The limitations of this report are included as Appendix D.

BOE-C6-0007462

REFERENCES

1. CH2MHill, 2002. "Data Management Plan, prepared for The Boeing Company." Revision 04, January 2002.

2. Haley & Aldrich, Inc. and England Geosystem, 2001a. "Standard Operating Procedures for Measuring Natural Attenuation Parameters at Boeing Realty Corporation Former C-6 Facility." Revision 1.0, January 9, 2001.

3. Haley & Aldrich, Inc. and England Geosystem, 2001b. "Groundwater Monitoring Report, Annual Event, January/February 2001, Boeing Realty Corporation Former C-6 Facility, Los Angeles, California." June 2001.

4. Haley & Aldrich, Inc. and England Geosystem, 2001c. "Groundwater Monitoring Report, Semi-Annual Event, June 2001, Boeing Realty Corporation Former C-6 Facility, Los Angeles, California." October 2001.

5. Haley & Aldrich, 2001. "Groundwater Monitoring Workplan 2001", dated December 20, 2001.

6. Haley & Aldrich, Inc., 2002. "Groundwater Monitoring Report, Annual Event, March 2002, Boeing Realty Corporation Former C-6 Facility, Los Angeles, California." June 2002.

7. Haley & Aldrich, Inc., 2002. "Groundwater Monitoring Report, Semi-Annual Event, September 2002, Boeing Realty Corporation Former C-6 Facility, Los Angeles, California." November 2002.

8. Kennedy/Jenks Consultants, 2000. "Groundwater Status Report," dated October 27, 2000.

9. Poland, J.F., Garnett, A.A., and Sinnott, A., 1959. "Geology, Hydrology and Chemical Characteristics of the Ground Waters in the Torrance-Santa Monica Area, California," USGS Water Supply Paper 1461.

10. Sate of California, Department of Water Resources (DWR), 1961. "Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County," Appendix A Ground Water Geology.

11. Tait Environmental Management, Inc., 2001. "Boeing Realty Corporation, Former C-6 Facility, Groundwater Monitoring Services, Standard Operating Procedures." January 11, 2001.

Z:\Projects\ENVIRONMENTAL\28882_C6ProjectMngmt\101\March 2003\c6.annual gw.report.051203.doc

BOE-C6-0007463

TABLES

Table I
Well Information
Boeing Realty Corporation Former C-6 Facility

ame	Easting	orthing	op of Casing Elevation (A L)	oring otal Depth (feet)	creen Depth Interval (feet)	Depth to op of Filter ac (feet)	Casing Diameter (inches)	Casing ype	lot i e	Drilled Date
WCC-1S	12738.89	13194.04	50.74	91	77-87	75	2	Sc e 40 C	0.020- c	3 25 1987
WCC-1D	12739.11	13181.09	50.69	140	120-140	114	4	Sc e 40 C	0.010- c	6 30 1989
WCC-2S	12234.27	13451.60	50.83	91	70-90	63	4	Sc e 40 C	0.010- c	10 28 1987
WCC-3S	12608.52	13238.90	51.12	92	69-89	64	4	Sc e 40 C	0.010- c	10 26 1987
WCC-3D	12583.61	13265.87	51.11	140	120-140	115	4	Sc e 40 C	0.010- c	6 27 1989
WCC-4S	12741.35	13075.30	49.62	92	70.5-90.5	65	4	Sc e 40 C	0.010- c	10 27 1987
WCC-5S	12963.90	12998.70	48.79	91	61-91	64	4	Sc e 40 C	0.010- c	11 24 1987
WCC-6S	12580.24	12953.10	51.30	91	60-90	54	4	Sc e 40 C	0.010- c	9 22 1989
WCC-7S	12730.37	12868.65	50.20	91	60-90	54	4	Sc e 40 C	0.010- c	6 8 1989
WCC-8S	12737.33	13318.92	50.87	90	59.5-89.5	54	4	Sc e 40 C	0.010- c	6 12 1989
WCC-9S	12928.87	12627.94	46.85	92	60-90	55	4	Sc e 40 C	0.010- c	9 21 1989
WCC-10S	11338.90	14038.98	58.17	91	60-90	54	4	Sc e 40 C	0.010- c	6 7 1989
WCC-11S	12744.01	13870.68	51.34	91	60-90	56	4	Sc e 40 C	0.010- c	9 13 1990
WCC-12S	12749.26	12715.21	46.92	92	60-90	55	4	Sc e 40 C	0.010- c	9 17 1990
D C- 1	11194.86	12988.63	52.75	90	60-90	55	4	Sc e 40 C	0.010- c	9 25 1989
W-1	12212.00	13143.49	56.46	91	66-86	64	2	Sc e 40 C	0.010- c	6 28 1998
W-2	12478.09	13161.38	56.38	92	67-87	62	2	Sc e 40 C	0.010- c	6 28 1998
W-3	11909.54	12315.47	51.36	87	62.5-82.5	60	2	Sc e 40 C	0.010- c	7 21 1998
W-4	12498.69	12334.70	52.18	84	58-78	56	2	Sc e 40 C	0.010- c	6 30 1998
W-5	12038.44	11931.45	53.32	89	64-84	63	2	Sc e 40 C	0.010- c	7 2 1998
W-6	12552.93	11936.32	56.30	93	67-87	66	2	Sc e 40 C	0.010- c	7 1 1998
W-7	12560.70	12701.25	52.52	91	65-85	63	2	Sc e 40 C	0.010- c	6 29 1998
W-8	12571.93	12812.42	53.99	90	61-81	59	2	Sc e 40 C	0.010- c	6 29 1998
W-9	12344.53	12740.05	52.75	85	60-80	58	2	Sc e 40 C	0.010- c	6 30 1998
W-10	12968.14	12170.61	47.48	85	60.5-80.5	58	2	Sc e 40 C	0.010- c	1 28 1999
W-11	12968.08	11423.04	47.41	83	58-78	55	2	Sc e 40 C	0.010- c	2 1 1999
W-12	12529.43	11402.90	51.67	89	63-83	60	2	Sc e 40 C	0.010- c	1 27 1999
W-13	11973.10	11416.11	50.89	85	60-80	58	2	Sc e 40 C	0.010- c	2 2 1999
W-14	11797.06	11416.11	58.16	90	65-85	63	2	Sc e 40 C	0.010- c	2 3 1999
W-15	11800.22	12165.10	55.23	92	62-87	60	2	Sc e 40 C	0.010- c	2 4 1999
W-16	11887.57	12904.74	55.73	88	61.5-81.5	60	2	Sc e 40 C	0.010- c	1 29 1999
W-17	11533.67	12604.45	-	87	62-82	59	2	Sc e 40 C	0.010- c	5 10 1999

Table I
Well Information
Boeing Realty Corporation Former C-6 Facility

ame	Easting	orthing	op of Casing Elevation (A L)	oring otal Depth (feet)	creen Depth Interval (feet)	Depth to op of Filter ac (feet)	Casing Diameter (inches)	Casing ype	lot i e	Drilled Date
-1	11218.52	13450.56	58.34	82	61.5-81.5	57	2	Sc e 40 C	0.010- c	2 2 1999
-2	11202.12	12546.32	58.15	82	61.5-81.5	57	2	Sc e 40 C	0.010- c	2 3 1999
-3	11207.79	11961.46	56.48	79	59-79	56	2	Sc e 40 C	0.010- c	2 8 1999
-4	11333.09	11087.39	-	79	58-78	55	2	Sc e 40 C	0.010- c	2 16 1999
-5	11397.77	13550.72	-	79	58-78	55	2	Sc e 40 C	0.010- c	2 4 1999
-6	11547.74	13063.70	-	79	58-78	55	2	Sc e 40 C	0.010- c	2 4 1999
-7	11569.25	12295.45	-	79	58-78	54	2	Sc e 40 C	0.010- c	2 8 1999
-8	11546.23	11321.84	-	81	60-80	57	2	Sc e 40 C	0.010- c	2 16 1999
e We										
W-09	12 654	11148.11	53.67	-	66-81	-	4	-	-	5 9 1989
W-18	12 287	11426.42	50.34	-	68-83	-	4	-	-	3 29 1990
W-19	12 968	11757.92	46.53	-	63-79	-	4	-	-	3 30 1990

1 c c e e ee

2 S e e Se e e - We e e e e c 19 2002 Se e e 13 2002 c e.
c e e e .

C
D e 05 27 03

Table II
Groundwater Elevations - March 2003
Boeing Realty Corporation Former C-6 Facility

ell	Date easured	Reference Elevation (feet A L)	otal Depth (feet)	Depth to ater (feet)	Ground ater Elevation (feet A L)
WCC-3S	3 25 2003	51.12	91.20	64.46	-13.34
WCC-4S	3 24 2003	49.62	89.90		
WCC-5S	3 24 2003	48.79	90.22	62.13	-13.34
WCC-6S	3 25 2003	51.30	88.81	64.58	-13.28
WCC-7S	3 24 2003	50.20	90.56	63.72	-13.52
WCC-9S	3 25 2003	46.85	89.57	60.51	-13.66
WCC-12S	3 25 2003	46.92	90.59		
D C- 1	3 24 2003	52.75	90.62	65.58	-12.83
W-1	3 24 2003	56.46	80.16	69.84	-13.38
W-2	3 25 2003	56.38	80.03	69.79	-13.41
W-4	3 24 2003	52.18	78.53	66.27	-14.09
W-5	3 24 2003	53.32	80.18	67.57	-14.25
W-6	3 24 2003	56.30	79.95	70.67	-14.37
W-7	3 24 2003	52.52	82.32	66.24	-13.72
W-8	3 24 2003	53.99	79.90	67.69	-13.70
W-9	3 24 2003	52.75	---	66.56	-13.81
W-10	3 24 2003	47.48	78.22	61.52	-14.04
W-11	3 24 2003	47.41	78.39	61.97	-14.56
W-14	3 24 2003	58.16	88.32	72.61	-14.45
W-15	3 24 2003	55.23	87.82	68.90	-13.67
-3	3 24 2003	56.48	82.00	70.35	-13.87
W-09	3 24 2003	53.67	---		
W-19	3 24 2003	46.53	---	60.87	-14.34

e
De W e e e e e e c
1 S e e Se e e - We e e e e c 19 2002 Se e e 13 2002 c e .
---- e
We cce e e e

C
D e 05 27 03

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
-1	3 6 1999	58.34	70.75	-12.41
-1	7 12 1999	58.34	70.72	-12.38
-1	1 14 2000	58.34	71.04	-12.70
-1	6 20 2000	58.34	71.20	-12.86
-1	1 15 2001	58.34	71.41	-13.07
-1	7 16 2001	58.34	71.03	-12.69
-2	3 6 1999	58.15	71.47	-13.32
-2	7 12 1999	58.15	71.32	-13.17
-2	1 14 2000	58.15	71.55	-13.40
-2	6 20 2000	58.15	71.66	-13.51
-2	1 15 2001	58.15	71.91	-13.76
-3	3 6 1999	59.33	73.22	-13.89
-3	7 12 1999	59.33	73.16	-13.83
-3	1 14 2000	59.33	73.41	-14.08
-3	6 20 2000	59.33	73.58	-14.25
-3	1 15 2001	59.33	73.70	-14.37
-3	3 21 2002	56.48	70.25	-13.77
-3	9 13 2002	56.48	70.42	-13.94
-3	3 24 2003	56.48	70.35	-13.87
-4	3 6 1999			-14.51
-4	7 12 1999			-14.43
-4	1 14 2000			-15.11
-5	3 6 1999			-12.52
-5	7 12 1999			-12.53
-5	1 14 2000			-12.87
-6	3 6 1999			-12.92
-6	7 12 1999			-12.83
-6	1 14 2000			-13.15
-7	3 6 1999			-13.57
-7	7 12 1999			-13.44
-7	1 14 2000			-14.41
-8	3 6 1999			-14.27
-8	7 12 1999			-14.29
-8	1 14 2000			-14.55
D C- 1	6 15 1992	52.75	70.51	-17.76
D C- 1	9 21 1992	52.75	70.63	-17.88
D C- 1	1 5 1993	52.75	70.77	-18.02
D C- 1	4 9 1993	52.75	70.21	-17.46
D C- 1	6 7 1993	52.75	70.13	-17.38
D C- 1	8 24 1993	52.75	69.78	-17.03
D C- 1	11 18 1993	52.75	69.51	-16.76
D C- 1	2 23 1994	52.75	69.49	-16.74
D C- 1	6 10 1994	52.75	69.35	-16.60
D C- 1	9 8 1994	52.75	69.23	-16.48
D C- 1	12 21 1994	52.75	69.00	-16.25
D C- 1	3 13 1995	52.75	69.16	-16.41

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
D C- 1	6 12 1995	52.75	68.69	-15.94
D C- 1	9 20 1995	52.75	68.41	-15.66
D C- 1	12 12 1995	52.75	68.41	-15.66
D C- 1	2 29 1996	52.75	68.15	-15.40
D C- 1	6 6 1996	52.75	67.77	-15.02
D C- 1	9 18 1996	52.75	67.63	-14.88
D C- 1	12 18 1996	52.75	67.42	-14.67
D C- 1	5 6 1997	52.75	66.95	-14.20
D C- 1	7 1 1997	52.75	66.78	-14.03
D C- 1	7 22 1997	52.75	66.76	-14.01
D C- 1	8 4 1997	52.75	66.73	-13.98
D C- 1	8 19 1997	52.75	66.66	-13.91
D C- 1	9 3 1997	52.75	66.68	-13.93
D C- 1	9 16 1997	52.75	66.66	-13.91
D C- 1	7 14 1998	52.75	66.03	-13.28
D C- 1	3 6 1999	52.75	65.62	-12.87
D C- 1	7 12 1999	52.75	65.47	-12.72
D C- 1	6 20 2000	52.75	65.76	-13.01
D C- 1	3 21 2002	52.75	65.52	-12.77
D C- 1	9 13 2002	52.75	65.64	-12.89
D C- 1	3 24 2003	52.75	65.58	-12.83
W-1	7 14 1998	51.24	64.65	-13.41
W-1	9 22 1998	51.24	64.80	-13.56
W-1	10 16 1998	51.24	64.61	-13.37
W-1	3 6 1999	51.24	64.76	-13.52
W-1	7 12 1999	51.24	64.48	-13.24
W-1	6 20 2000	51.24	64.89	-13.65
W-1	1 15 2001	51.24	65.00	-13.76
W-1	7 16 2001	51.24	64.55	-13.31
W-1	3 21 2002	56.51	69.57	-13.06
W-1	9 13 2002	56.46	69.97	-13.51
W-1	3 24 2003	56.46	69.84	-13.38
W-2	7 14 1998	51.18	64.60	-13.42
W-2	9 22 1998	51.18	64.67	-13.49
W-2	10 16 1998	51.18	64.58	-13.40
W-2	3 6 1999	51.18	64.59	-13.41
W-2	7 12 1999	51.18	64.48	-13.30
W-2	6 20 2000	51.18	64.64	-13.46
W-2	1 15 2001	51.18	64.93	-13.75
W-2	7 16 2001	51.18	64.52	-13.34
W-2	3 21 2002	56.42	69.55	-13.13
W-2	9 13 2002	56.38	69.89	-13.51
W-2	3 25 2003	56.38	69.79	-13.41
W-3	7 14 1998	51.07	65.24	-14.17
W-3	9 22 1998	51.07	65.25	-14.18
W-3	10 16 1998	51.07	65.13	-14.06

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
W-3	3 6 1999	51.07	65.21	-14.14
W-3	7 12 1999	51.07	64.98	-13.91
W-3	6 20 2000	51.07	65.19	-14.12
W-3	1 15 2001	51.07	65.41	-14.34
W-3	7 16 2001	51.07	64.93	-13.86
W-3	3 21 2002	51.36	65.06	-13.70
W-3	9 13 2002	51.36	65.25	-13.89
W-4	7 14 1998	50.35	64.75	-14.40
W-4	9 22 1998	50.35	64.78	-14.43
W-4	10 16 1998	50.35	64.61	-14.26
W-4	3 6 1999	50.35	64.63	-14.28
W-4	7 12 1999	50.35	64.38	-14.03
W-4	6 20 2000	50.35	64.61	-14.26
W-4	1 15 2001	50.35	64.87	-14.52
W-4	7 16 2001	50.35	64.45	-14.10
W-4	3 21 2002	52.27	68.18	-15.91
W-4	9 13 2002	52.18	66.44	-14.26
W-4	3 24 2003	52.18	66.27	-14.09
W-5	7 14 1998	50.12	64.74	-14.62
W-5	9 22 1998	50.12	64.79	-14.67
W-5	10 16 1998	50.12	64.60	-14.48
W-5	3 6 1999	50.12	64.71	-14.59
W-5	7 12 1999	50.12	64.45	-14.33
W-5	6 20 2000	50.12	64.67	-14.55
W-5	1 15 2001	50.12	64.90	-14.78
W-5	7 16 2001	50.12	64.50	-14.38
W-5	3 21 2002	53.40	67.52	-14.12
W-5	9 13 2002	53.32	67.41	-14.09
W-5	3 24 2003	53.32	67.57	-14.25
W-6	7 14 1998	50.13	64.84	-14.71
W-6	9 22 1998	50.13	64.86	-14.73
W-6	10 16 1998	50.13	64.69	-14.56
W-6	3 6 1999	50.13	64.68	-14.55
W-6	7 12 1999	50.13	64.55	-14.42
W-6	6 20 2000	50.13	64.59	-14.46
W-6	1 15 2001	50.13	64.93	-14.80
W-6	7 16 2001	50.13	64.57	-14.44
W-6	3 21 2002	56.35	70.61	-14.26
W-6	9 13 2002	56.30	70.83	-14.53
W-6	3 24 2003	56.30	70.67	-14.37
W-7	7 14 1998	51.12	65.10	-13.98
W-7	9 22 1998	51.12	65.15	-14.03
W-7	10 16 1998	51.12	65.03	-13.91
W-7	3 6 1999	51.12	65.06	-13.94
W-7	7 12 1999	51.12	64.90	-13.78
W-7	6 20 2000	51.12	65.15	-14.03

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
W-7	1 15 2001	51.12	65.29	-14.17
W-7	7 16 2001	51.12	64.87	-13.75
W-7	3 21 2002	52.52	66.07	-13.55
W-7	9 13 2002	52.52	66.36	-13.84
W-7	3 24 2003	52.52	66.24	-13.72
W-8	7 14 1998	51.06	64.91	-13.85
W-8	9 22 1998	51.06	64.94	-13.88
W-8	10 16 1998	51.06	64.85	-13.79
W-8	3 6 1999	51.06	64.90	-13.84
W-8	7 12 1999	51.06	64.71	-13.65
W-8	6 20 2000	51.06	64.98	-13.92
W-8	1 15 2001	51.06	65.12	-14.06
W-8	7 16 2001	51.06	64.70	-13.64
W-8	3 21 2002	51.06	67.49	-16.43
W-8	9 13 2002	53.99	67.81	-13.82
W-8	3 24 2003	53.99	67.69	-13.70
W-9	7 14 1998	51.21	65.29	-14.08
W-9	9 22 1998	51.21	65.26	-14.05
W-9	10 16 1998	51.21	65.14	-13.93
W-9	3 6 1999	51.21	65.08	-13.87
W-9	7 12 1999	51.21	64.91	-13.70
W-9	6 20 2000	51.21	65.22	-14.01
W-9	1 15 2001	51.21	65.41	-14.20
W-9	3 21 2002	52.75	66.32	-13.57
W-9	9 13 2002	52.75	66.58	-13.83
W-9	3 24 2003	52.75	66.56	-13.81
W-10	3 6 1999	47.52	61.77	-14.25
W-10	7 12 1999	47.52	60.61	-13.09
W-10	6 20 2000	47.52	61.57	-14.05
W-10	1 15 2001	47.52	61.96	-14.44
W-10	7 16 2001	47.52	61.54	-14.02
W-10	9 13 2002	47.48	61.60	-14.12
W-10	3 24 2003	47.48	61.52	-14.04
W-11	3 6 1999	47.47	62.28	-14.81
W-11	7 12 1999	47.47	61.97	-14.50
W-11	6 20 2000	47.47	62.10	-14.63
W-11	1 15 2001	47.47	62.43	-14.96
W-11	7 16 2001	47.47	62.06	-14.59
W-11	3 21 2002	47.41	60.89	-13.48
W-11	9 13 2002	47.41	62.02	-14.61
W-11	3 24 2003	47.41	61.97	-14.56
W-12	3 6 1999	50.85	65.73	-14.88
W-12	7 12 1999	50.85	65.54	-14.69
W-12	6 20 2000	50.85	65.82	-14.97
W-12	1 15 2001	50.85	66.02	-15.17
W-12	7 16 2001	50.85	64.47	-13.62

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
W-12	3 21 2002	51.67	66.25	-14.58
W-12	9 13 2002	51.67	66.40	-14.73
W-13	3 6 1999	50.91	65.68	-14.77
W-13	7 12 1999	50.91	65.51	-14.60
W-13	6 20 2000	50.91	65.82	-14.91
W-13	7 16 2001	50.91	65.57	-14.66
W-13	3 21 2002	50.89	65.49	-14.60
W-13	9 13 2002	50.89	65.49	-14.60
W-14	3 6 1999	58.21	72.91	-14.70
W-14	7 12 1999	58.21	72.67	-14.46
W-14	6 20 2000	58.21	72.96	-14.75
W-14	1 15 2001	58.21	73.21	-15.00
W-14	7 16 2001	58.21	72.85	-14.64
W-14	3 21 2002	58.16	72.69	-14.53
W-14	9 13 2002	58.16	72.72	-14.56
W-14	3 24 2003	58.16	72.61	-14.45
W-15	3 6 1999	55.26	69.30	-14.04
W-15	7 12 1999	55.26	68.90	-13.64
W-15	6 20 2000	55.26	69.30	-14.04
W-15	1 15 2001	55.26	69.52	-14.26
W-15	7 16 2001	55.26	69.18	-13.92
W-15	3 21 2002	55.23	68.88	-13.65
W-15	9 13 2002	55.23	69.03	-13.80
W-15	3 24 2003	55.23	68.90	-13.67
W-16	3 6 1999	50.91	63.80	-12.89
W-16	7 12 1999	50.91	63.54	-12.63
W-16	6 20 2000	50.91	63.77	-12.86
W-16	1 15 2001	50.91	64.05	-13.14
W-16	7 16 2001	50.91	67.27	-16.36
W-16	3 21 2002	55.73	68.06	-12.33
W-16	9 13 2002	55.73	68.44	-12.71
W-17	7 12 1999			-13.16
W-17	1 14 2000			-13.41
WCC-1D	10 18 1989	50.69	70.20	-19.51
WCC-1D	6 15 1992	50.69	70.24	-19.55
WCC-1D	9 21 1992	50.69	70.61	-19.92
WCC-1D	1 5 1993	50.69	70.30	-19.61
WCC-1D	4 9 1993	50.69	69.79	-19.10
WCC-1D	6 7 1993	50.69	69.69	-19.00
WCC-1D	8 24 1993	50.69	69.22	-18.53
WCC-1D	11 18 1993	50.69	69.03	-18.34
WCC-1D	2 23 1994	50.69	68.52	-17.83
WCC-1D	6 10 1994	50.69	68.16	-17.47
WCC-1D	9 8 1994	50.69	68.35	-17.66
WCC-1D	12 21 1994	50.69	68.24	-17.55
WCC-1D	3 13 1995	50.69	68.05	-17.36

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
WCC-1D	6 12 1995	50.69	67.48	-16.79
WCC-1D	9 20 1995	50.69	67.29	-16.60
WCC-1D	12 12 1995	50.69	67.00	-16.31
WCC-1D	2 29 1996	50.69	66.84	-16.15
WCC-1D	6 6 1996	50.69	66.42	-15.73
WCC-1D	9 18 1996	50.69	66.34	-15.65
WCC-1D	12 18 1996	50.69	66.03	-15.34
WCC-1D	5 6 1997	50.69	65.56	-14.87
WCC-1D	7 1 1997	50.69	65.51	-14.82
WCC-1D	7 22 1997	50.69	65.60	-14.91
WCC-1D	8 4 1997	50.69	65.54	-14.85
WCC-1D	8 19 1997	50.69	65.49	-14.80
WCC-1D	9 3 1997	50.69	65.53	-14.84
WCC-1D	9 16 1997	50.69	65.48	-14.79
WCC-1S	11 13 1987	50.74	72.37	-21.63
WCC-1S	10 18 1989	50.74	70.22	-19.48
WCC-1S	6 15 1992	50.74	69.94	-19.20
WCC-1S	9 21 1992	50.74	70.16	-19.42
WCC-1S	1 5 1993	50.74	70.08	-19.34
WCC-1S	4 9 1993	50.74	69.53	-18.79
WCC-1S	6 7 1993	50.74	69.49	-18.75
WCC-1S	8 24 1993	50.74	68.99	-18.25
WCC-1S	11 18 1993	50.74	68.74	-18.00
WCC-1S	2 23 1994	50.74	68.35	-17.61
WCC-1S	6 10 1994	50.74	67.97	-17.23
WCC-1S	9 8 1994	50.74	67.99	-17.25
WCC-1S	12 21 1994	50.74	67.86	-17.12
WCC-1S	3 13 1995	50.74	67.86	-17.12
WCC-1S	6 12 1995	50.74	67.27	-16.53
WCC-1S	9 20 1995	50.74	67.01	-16.27
WCC-1S	12 12 1995	50.74	66.79	-16.05
WCC-1S	2 29 1996	50.74	66.54	-15.80
WCC-1S	6 6 1996	50.74	66.21	-15.47
WCC-1S	9 18 1996	50.74	66.10	-15.36
WCC-1S	12 18 1996	50.74	65.77	-15.03
WCC-1S	5 6 1997	50.74	65.32	-14.58
WCC-1S	7 1 1997	50.74	65.25	-14.51
WCC-1S	7 22 1997	50.74	65.32	-14.58
WCC-1S	8 4 1997	50.74	65.27	-14.53
WCC-1S	8 19 1997	50.74	65.21	-14.47
WCC-1S	9 3 1997	50.74	65.27	-14.53
WCC-1S	9 16 1997	50.74	65.20	-14.46
WCC-2S	11 13 1987	50.83	70.55	-19.72
WCC-2S	10 18 1989	50.83	69.89	-19.06
WCC-2S	6 15 1992	50.83	69.98	-19.15
WCC-2S	9 21 1992	50.83	70.24	-19.41

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
WCC-2S	1 5 1993	50.83	70.34	-19.51
WCC-2S	4 9 1993	50.83	69.47	-18.64
WCC-2S	6 7 1993	50.83	69.46	-18.63
WCC-2S	8 24 1993	50.83	68.98	-18.15
WCC-2S	11 18 1993	50.83	68.70	-17.87
WCC-2S	2 23 1994	50.83	68.32	-17.49
WCC-2S	6 10 1994	50.83	67.90	-17.07
WCC-2S	9 8 1994	50.83	68.03	-17.20
WCC-2S	12 21 1994	50.83	68.00	-17.17
WCC-2S	3 13 1995	50.83	67.91	-17.08
WCC-2S	6 12 1995	50.83	67.20	-16.37
WCC-2S	9 20 1995	50.83	67.02	-16.19
WCC-2S	12 12 1995	50.83	66.69	-15.86
WCC-2S	2 29 1996	50.83	66.60	-15.77
WCC-2S	6 6 1996	50.83	66.09	-15.26
WCC-2S	9 18 1996	50.83	66.01	-15.18
WCC-2S	12 18 1996	50.83	65.65	-14.82
WCC-2S	5 6 1997	50.83	65.19	-14.36
WCC-3D	10 18 1989	51.42	70.80	-19.38
WCC-3D	6 15 1992	51.42	70.81	-19.39
WCC-3D	9 21 1992	51.42	71.13	-19.71
WCC-3D	1 5 1993	51.42	71.94	-20.52
WCC-3D	4 9 1993	51.42	70.29	-18.87
WCC-3D	6 7 1993	51.42	70.27	-18.85
WCC-3D	8 24 1993	51.42	69.82	-18.40
WCC-3D	11 18 1993	51.42	69.60	-18.18
WCC-3D	2 23 1994	51.42	69.42	-18.00
WCC-3D	6 10 1994	51.42	68.81	-17.39
WCC-3D	9 8 1994	51.42	68.89	-17.47
WCC-3D	12 21 1994	51.42	68.84	-17.42
WCC-3D	3 13 1995	51.42	68.69	-17.27
WCC-3D	6 12 1995	51.42	68.09	-16.67
WCC-3D	9 20 1995	51.42	67.89	-16.47
WCC-3D	12 12 1995	51.42	67.59	-16.17
WCC-3D	2 29 1996	51.42	67.37	-15.95
WCC-3D	6 6 1996	51.42	66.99	-15.57
WCC-3D	9 18 1996	51.42	66.92	-15.50
WCC-3D	12 18 1996	51.42	66.63	-15.21
WCC-3D	5 6 1997	51.42	66.14	-14.72
WCC-3D	7 1 1997	51.42	66.07	-14.65
WCC-3D	7 22 1997	51.42	66.15	-14.73
WCC-3D	8 4 1997	51.42	66.11	-14.69
WCC-3D	8 19 1997	51.42	66.03	-14.61
WCC-3D	9 3 1997	51.42	66.07	-14.65
WCC-3D	9 16 1997	51.42	66.05	-14.63
WCC-3D	9 22 1998	51.42	65.00	-13.58

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
WCC-3D	10 16 1998	51.42	64.95	-13.53
WCC-3D	3 6 1999	51.42	65.02	-13.60
WCC-3D	7 12 1999	51.42	64.91	-13.49
WCC-3D	6 20 2000	51.42	65.12	-13.70
WCC-3D	1 15 2001	51.16	65.01	-13.85
WCC-3D	7 16 2001	51.16	64.58	-13.42
WCC-3D	3 21 2002	51.11	64.19	-13.08
WCC-3S	11 13 1987	51.37	72.93	-21.56
WCC-3S	10 18 1989	51.37	70.79	-19.42
WCC-3S	6 15 1992	51.37	70.61	-19.24
WCC-3S	9 21 1992	51.37	70.89	-19.52
WCC-3S	1 5 1993	51.37	71.10	-19.73
WCC-3S	4 9 1993	51.37	70.20	-18.83
WCC-3S	6 7 1993	51.37	70.19	-18.82
WCC-3S	8 24 1993	51.37	69.73	-18.36
WCC-3S	11 18 1993	51.37	69.38	-18.01
WCC-3S	2 23 1994	51.37	69.04	-17.67
WCC-3S	6 10 1994	51.37	68.56	-17.19
WCC-3S	9 8 1994	51.37	68.68	-17.31
WCC-3S	12 21 1994	51.37	68.65	-17.28
WCC-3S	3 13 1995	51.37	68.59	-17.22
WCC-3S	6 12 1995	51.37	67.95	-16.58
WCC-3S	9 20 1995	51.37	67.74	-16.37
WCC-3S	12 12 1995	51.37	67.43	-16.06
WCC-3S	2 29 1996	51.37	67.30	-15.93
WCC-3S	6 6 1996	51.37	66.78	-15.41
WCC-3S	9 18 1996	51.37	66.78	-15.41
WCC-3S	12 18 1996	51.37	66.48	-15.11
WCC-3S	5 6 1997	51.37	66.00	-14.63
WCC-3S	7 1 1997	51.37	65.90	-14.53
WCC-3S	7 22 1997	51.37	66.01	-14.64
WCC-3S	8 4 1997	51.37	65.90	-14.53
WCC-3S	8 19 1997	51.37	65.89	-14.52
WCC-3S	9 3 1997	51.37	65.95	-14.58
WCC-3S	9 16 1997	51.37	65.90	-14.53
WCC-3S	7 14 1998	51.37	64.77	-13.40
WCC-3S	9 22 1998	51.37	64.85	-13.48
WCC-3S	10 16 1998	51.37	65.11	-13.74
WCC-3S	3 6 1999	51.37	64.82	-13.45
WCC-3S	7 12 1999	51.37	64.70	-13.33
WCC-3S	6 20 2000	51.37	64.84	-13.47
WCC-3S	1 15 2001	51.16	64.87	-13.71
WCC-3S	7 16 2001	51.16	64.45	-13.29
WCC-3S	3 21 2002	51.12	64.14	-13.02
WCC-3S	9 13 2002	51.12	64.54	-13.42
WCC-3S	3 25 2003	51.12	64.46	-13.34

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
WCC-4S	11 13 1987	50.07	71.84	-21.77
WCC-4S	10 18 1989	50.07	69.66	-19.59
WCC-4S	6 15 1992	50.07	69.29	-19.22
WCC-4S	9 21 1992	50.07	69.56	-19.49
WCC-4S	1 5 1993	50.07	69.41	-19.34
WCC-4S	4 9 1993	50.07	68.93	-18.86
WCC-4S	6 7 1993	50.07	68.85	-18.78
WCC-4S	8 24 1993	50.07	68.44	-18.37
WCC-4S	11 18 1993	50.07	68.23	-18.16
WCC-4S	2 23 1994	50.07	67.84	-17.77
WCC-4S	6 10 1994	50.07	67.39	-17.32
WCC-4S	9 8 1994	50.07	67.44	-17.37
WCC-4S	12 21 1994	50.07	67.38	-17.31
WCC-4S	3 13 1995	50.07	67.30	-17.23
WCC-4S	6 12 1995	50.07	66.68	-16.61
WCC-4S	9 20 1995	50.07	66.45	-16.38
WCC-4S	12 12 1995	50.07	66.23	-16.16
WCC-4S	2 29 1996	50.07	67.09	-17.02
WCC-4S	6 6 1996	50.07	65.63	-15.56
WCC-4S	9 18 1996	50.07	65.56	-15.49
WCC-4S	12 18 1996	50.07	65.26	-15.19
WCC-4S	5 6 1997	50.07	64.81	-14.74
WCC-4S	7 1 1997	50.07	64.73	-14.66
WCC-4S	7 22 1997	50.07	64.80	-14.73
WCC-4S	8 4 1997	50.07	64.76	-14.69
WCC-4S	8 19 1997	50.07	64.68	-14.61
WCC-4S	9 3 1997	50.07	64.76	-14.69
WCC-4S	9 16 1997	50.07	64.68	-14.61
WCC-4S	7 14 1998	50.07	63.63	-13.56
WCC-4S	9 22 1998	50.07	63.53	-13.46
WCC-4S	10 16 1998	50.07	63.56	-13.49
WCC-4S	3 6 1999	50.07	63.50	-13.43
WCC-4S	7 12 1999	50.07	63.40	-13.33
WCC-4S	6 20 2000	50.07	63.58	-13.51
WCC-4S	1 15 2001	49.65	63.48	-13.83
WCC-4S	7 16 2001	49.65	63.00	-13.35
WCC-4S	3 21 2002	49.62	62.81	-13.19
WCC-4S	9 13 2002	49.62	63.15	-13.53
WCC-5S	10 18 1989	48.74	68.44	-19.70
WCC-5S	6 15 1992	48.74	67.87	-19.13
WCC-5S	9 21 1992	48.74	68.16	-19.42
WCC-5S	1 5 1993	48.74	68.06	-19.32
WCC-5S	4 9 1993	48.74	67.57	-18.83
WCC-5S	6 7 1993	48.74	67.52	-18.78
WCC-5S	8 24 1993	48.74	67.12	-18.38
WCC-5S	11 18 1993	48.74	66.87	-18.13

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
WCC-5S	2 23 1994	48.74	66.52	-17.78
WCC-5S	6 10 1994	48.74	66.07	-17.33
WCC-5S	9 8 1994	48.74	66.07	-17.33
WCC-5S	12 21 1994	48.74	65.99	-17.25
WCC-5S	3 13 1995	48.74	65.93	-17.19
WCC-5S	6 12 1995	48.74	65.30	-16.56
WCC-5S	9 20 1995	48.74	65.09	-16.35
WCC-5S	12 12 1995	48.74	64.88	-16.14
WCC-5S	2 29 1996	48.74	64.76	-16.02
WCC-5S	6 6 1996	48.74	64.28	-15.54
WCC-5S	9 18 1996	48.74	64.21	-15.47
WCC-5S	12 18 1996	48.74	63.96	-15.22
WCC-5S	5 6 1997	48.74	63.55	-14.81
WCC-5S	7 1 1997	48.74	63.45	-14.71
WCC-5S	7 22 1997	48.74	63.51	-14.77
WCC-5S	8 4 1997	48.74	63.45	-14.71
WCC-5S	8 19 1997	48.74	63.39	-14.65
WCC-5S	9 3 1997	48.74	63.46	-14.72
WCC-5S	9 16 1997	48.74	63.38	-14.64
WCC-5S	9 22 1998	48.74	62.26	-13.52
WCC-5S	10 16 1998	48.74	62.20	-13.46
WCC-5S	3 6 1999	48.74	62.13	-13.39
WCC-5S	7 12 1999	48.74	61.99	-13.25
WCC-5S	6 20 2000	48.74	62.20	-13.46
WCC-5S	1 15 2001	48.84	62.47	-13.63
WCC-5S	7 16 2001	48.84	62.12	-13.28
WCC-5S	3 21 2002	48.79	61.93	-13.14
WCC-5S	9 13 2002	48.79	62.25	-13.46
WCC-5S	3 24 2003	48.79	62.13	-13.34
WCC-6S	10 18 1989	51.30	71.00	-19.70
WCC-6S	6 15 1992	51.30	70.70	-19.40
WCC-6S	9 21 1992	51.30	70.94	-19.64
WCC-6S	1 5 1993	51.30	70.80	-19.50
WCC-6S	4 9 1993	51.30	70.33	-19.03
WCC-6S	6 7 1993	51.30	70.27	-18.97
WCC-6S	8 24 1993	51.30	69.85	-18.55
WCC-6S	11 18 1993	51.30	69.62	-18.32
WCC-6S	2 23 1994	51.30	69.22	-17.92
WCC-6S	6 10 1994	51.30	68.78	-17.48
WCC-6S	9 8 1994	51.30	68.75	-17.45
WCC-6S	12 21 1994	51.30	68.75	-17.45
WCC-6S	3 13 1995	51.30	68.66	-17.36
WCC-6S	6 12 1995	51.30	68.05	-16.75
WCC-6S	9 20 1995	51.30	67.94	-16.64
WCC-6S	12 12 1995	51.30	67.60	-16.30
WCC-6S	2 29 1996	51.30	67.47	-16.17

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
WCC-6S	6 6 1996	51.30	67.06	-15.76
WCC-6S	9 18 1996	51.30	66.95	-15.65
WCC-6S	12 18 1996	51.30	66.65	-15.35
WCC-6S	5 6 1997	51.30	66.20	-14.90
WCC-6S	7 1 1997	51.30	66.09	-14.79
WCC-6S	7 22 1997	51.30	66.19	-14.89
WCC-6S	8 4 1997	51.30	66.14	-14.84
WCC-6S	9 16 1997	51.30	66.03	-14.73
WCC-6S	7 14 1998	51.30	64.99	-13.69
WCC-6S	9 22 1998	51.30	65.04	-13.74
WCC-6S	10 16 1998	51.30	65.07	-13.77
WCC-6S	3 6 1999	51.30	65.01	-13.71
WCC-6S	7 12 1999	51.30	64.85	-13.55
WCC-6S	6 20 2000	51.30	64.96	-13.66
WCC-6S	1 15 2001	51.32	65.27	-13.95
WCC-6S	7 16 2001	51.32	64.81	-13.49
WCC-6S	3 21 2002	51.30	64.56	-13.26
WCC-6S	9 13 2002	51.30	64.89	-13.59
WCC-6S	3 25 2003	51.30	64.58	-13.28
WCC-7S	10 18 1989	48.67	68.74	-20.07
WCC-7S	6 15 1992	48.67	68.30	-19.63
WCC-7S	9 21 1992	48.67	68.60	-19.93
WCC-7S	1 5 1993	48.67	68.43	-19.76
WCC-7S	4 9 1993	48.67	67.97	-19.30
WCC-7S	6 7 1993	48.67	67.90	-19.23
WCC-7S	8 24 1993	48.67	67.50	-18.83
WCC-7S	11 18 1993	48.67	67.27	-18.60
WCC-7S	2 23 1994	48.67	66.89	-18.22
WCC-7S	6 10 1994	48.67	66.49	-17.82
WCC-7S	9 8 1994	48.67	66.47	-17.80
WCC-7S	12 21 1994	48.67	66.41	-17.74
WCC-7S	3 13 1995	48.67	66.21	-17.54
WCC-7S	6 12 1995	48.67	65.70	-17.03
WCC-7S	9 20 1995	48.67	65.49	-16.82
WCC-7S	12 12 1995	48.67	65.26	-16.59
WCC-7S	2 29 1996	48.67	65.13	-16.46
WCC-7S	6 6 1996	48.67	64.68	-16.01
WCC-7S	9 18 1996	48.67	64.62	-15.95
WCC-7S	12 18 1996	48.67	64.31	-15.64
WCC-7S	5 6 1997	48.67	63.86	-15.19
WCC-7S	7 1 1997	48.67	63.79	-15.12
WCC-7S	7 22 1997	48.67	63.87	-15.20
WCC-7S	8 4 1997	48.67	63.82	-15.15
WCC-7S	8 19 1997	48.67	63.75	-15.08
WCC-7S	9 3 1997	48.67	63.82	-15.15
WCC-7S	9 16 1997	48.67	63.73	-15.06

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
WCC-7S	9 22 1998	48.67	62.56	-13.89
WCC-7S	10 16 1998	48.67	62.61	-13.94
WCC-7S	3 6 1999	48.67	62.25	-13.58
WCC-7S	7 12 1999	48.67	62.13	-13.46
WCC-7S	6 20 2000	48.67	62.34	-13.67
WCC-7S	1 15 2001	50.23	64.12	-13.89
WCC-7S	7 16 2001	50.23	63.70	-13.47
WCC-7S	3 21 2002	50.20	63.51	-13.31
WCC-7S	9 13 2002	50.20	63.82	-13.62
WCC-7S	3 24 2003	50.20	63.72	-13.52
WCC-8S	10 18 1989	50.87	70.22	-19.35
WCC-8S	6 15 1992	50.87	69.98	-19.11
WCC-8S	9 21 1992	50.87	70.21	-19.34
WCC-8S	1 5 1993	50.87	70.06	-19.19
WCC-8S	4 9 1993	50.87	69.56	-18.69
WCC-8S	6 7 1993	50.87	69.48	-18.61
WCC-8S	8 24 1993	50.87	69.06	-18.19
WCC-8S	11 18 1993	50.87	68.76	-17.89
WCC-8S	2 23 1994	50.87	68.36	-17.49
WCC-8S	6 10 1994	50.87	67.98	-17.11
WCC-8S	9 8 1994	50.87	68.01	-17.14
WCC-8S	12 21 1994	50.87	67.99	-17.12
WCC-8S	3 13 1995	50.87	68.16	-17.29
WCC-8S	6 12 1995	50.87	67.29	-16.42
WCC-8S	9 20 1995	50.87	67.03	-16.16
WCC-8S	12 12 1995	50.87	66.76	-15.89
WCC-8S	2 29 1996	50.87	66.63	-15.76
WCC-8S	6 6 1996	50.87	66.21	-15.34
WCC-8S	9 18 1996	50.87	66.14	-15.27
WCC-8S	12 18 1996	50.87	65.86	-14.99
WCC-8S	5 6 1997	50.87	65.43	-14.56
WCC-8S	7 1 1997	50.87	65.31	-14.44
WCC-8S	7 22 1997	50.87	65.37	-14.50
WCC-8S	8 4 1997	50.87	65.33	-14.46
WCC-8S	8 19 1997	50.87	65.26	-14.39
WCC-8S	9 3 1997	50.87	65.33	-14.46
WCC-8S	9 16 1997	50.87	65.26	-14.39
WCC-9S	10 18 1989	46.32	66.39	-20.07
WCC-9S	6 15 1992	46.32	65.76	-19.44
WCC-9S	9 21 1992	46.32	65.98	-19.66
WCC-9S	1 5 1993	46.32	65.88	-19.56
WCC-9S	4 9 1993	46.32	65.41	-19.09
WCC-9S	6 7 1993	46.32	65.41	-19.09
WCC-9S	8 24 1993	46.32	65.01	-18.69
WCC-9S	11 18 1993	46.32	64.74	-18.42
WCC-9S	2 23 1994	46.32	64.41	-18.09

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
WCC-9S	6 10 1994	46.32	64.95	-18.63
WCC-9S	09 08 1994	46.32	65.40	-19.08
WCC-9S	12 21 1994	46.32	63.83	-17.51
WCC-9S	03 13 1995	46.32	63.73	-17.41
WCC-9S	06 12 1995	46.32	63.11	-16.79
WCC-9S	09 20 1995	46.32	62.96	-16.64
WCC-9S	12 12 1995	46.32	62.71	-16.39
WCC-9S	02 29 1996	46.32	62.81	-16.49
WCC-9S	06 06 1996	46.32	62.18	-15.86
WCC-9S	09 18 1996	46.32	62.08	-15.76
WCC-9S	12 18 1996	46.32	61.79	-15.47
WCC-9S	05 06 1997	46.32	61.42	-15.10
WCC-9S	07 01 1997	46.32	61.32	-15.00
WCC-9S	07 22 1997	46.32	61.39	-15.07
WCC-9S	08 04 1997	46.32	61.32	-15.00
WCC-9S	08 19 1997	46.32	61.28	-14.96
WCC-9S	09 03 1997	46.32	61.33	-15.01
WCC-9S	09 16 1997	46.32	61.25	-14.93
WCC-9S	09 22 1998	46.32	60.24	-13.92
WCC-9S	10 16 1998	46.32	60.14	-13.82
WCC-9S	03 06 1999	46.32	60.17	-13.85
WCC-9S	07 12 1999	46.32	59.87	-13.55
WCC-9S	06 20 2000	46.32	60.02	-13.70
WCC-9S	01 15 2001	46.93	60.90	-13.97
WCC-9S	07 16 2001	46.93	60.54	-13.61
WCC-9S	03 21 2002	46.85	60.33	-13.48
WCC-9S	09 13 2002	46.85	60.90	-14.05
WCC-9S	03 25 2003	46.85	60.51	-13.66
WCC-10S	10 18 1989	51.29	69.71	-18.42
WCC-10S	6 15 1992	51.29	70.23	-18.94
WCC-10S	9 21 1992	51.29	70.62	-19.33
WCC-10S	1 5 1993	51.29	70.39	-19.10
WCC-10S	4 9 1993	51.29	69.71	-18.42
WCC-10S	6 7 1993	51.29	69.62	-18.33
WCC-10S	8 24 1993	51.29	69.12	-17.83
WCC-10S	11 18 1993	51.29	68.83	-17.54
WCC-10S	2 23 1994	51.29	68.36	-17.07
WCC-10S	6 10 1994	51.29	67.96	-16.67
WCC-10S	9 8 1994	51.29	68.32	-17.03
WCC-10S	12 21 1994	51.29	68.26	-16.97
WCC-10S	3 13 1995	51.29	67.85	-16.56
WCC-10S	6 12 1995	51.29	67.34	-16.05
WCC-10S	9 20 1995	51.29	67.18	-15.89
WCC-10S	12 12 1995	51.29	66.83	-15.54
WCC-10S	2 29 1996	51.29	66.51	-15.22
WCC-10S	6 6 1996	51.29	66.06	-14.77

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
WCC-10S	9 18 1996	51.29	65.97	-14.68
WCC-10S	5 6 1997	51.29	65.07	-13.78
WCC-10S	7 1 1997	51.29	65.03	-13.74
WCC-10S	7 22 1997	51.29	65.05	-13.76
WCC-10S	8 4 1997	51.29	65.02	-13.73
WCC-10S	8 19 1997	51.29	64.98	-13.69
WCC-10S	9 3 1997	51.29	65.01	-13.72
WCC-10S	9 16 1997	51.29	64.99	-13.70
WCC-10S	7 14 1998	51.29	63.82	-12.53
WCC-10S	3 6 1999	51.29	63.96	-12.67
WCC-10S	7 12 1999	51.29	63.92	-12.63
WCC-10S	6 20 2000	51.29	64.42	-13.13
WCC-10S	1 15 2001	58.17	71.37	-13.20
WCC-11S	6 15 1992	50.29	67.91	-17.62
WCC-11S	9 21 1992	50.29	69.10	-18.81
WCC-11S	1 5 1993	50.29	68.98	-18.69
WCC-11S	4 9 1993	50.29	68.42	-18.13
WCC-11S	6 7 1993	50.29	68.33	-18.04
WCC-11S	8 24 1993	50.29	67.89	-17.60
WCC-11S	11 18 1993	50.29	67.65	-17.36
WCC-11S	2 23 1994	50.29	67.25	-16.96
WCC-11S	6 10 1994	50.29	66.74	-16.45
WCC-11S	9 8 1994	50.29	66.87	-16.58
WCC-11S	12 21 1994	50.29	66.92	-16.63
WCC-11S	3 13 1995	50.29	66.77	-16.48
WCC-11S	6 12 1995	50.29	66.12	-15.83
WCC-11S	9 20 1995	50.29	65.88	-15.59
WCC-11S	12 12 1995	50.29	65.64	-15.35
WCC-11S	2 29 1996	50.29	65.48	-15.19
WCC-11S	6 6 1996	50.29	65.00	-14.71
WCC-11S	9 18 1996	50.29	64.93	-14.64
WCC-11S	12 18 1996	50.29	64.63	-14.34
WCC-11S	5 6 1997	50.29	64.17	-13.88
WCC-11S	7 1 1997	50.29	64.05	-13.76
WCC-11S	7 22 1997	50.29	64.13	-13.84
WCC-11S	8 4 1997	50.29	64.03	-13.74
WCC-11S	8 19 1997	50.29	64.03	-13.74
WCC-11S	9 3 1997	50.29	64.10	-13.81
WCC-11S	9 16 1997	50.29	64.04	-13.75
WCC-11S	9 22 1998	50.29	62.97	-12.68
WCC-11S	10 16 1998	50.29	62.97	-12.68
WCC-11S	3 6 1999	50.29	62.93	-12.64
WCC-11S	7 12 1999	50.29	62.82	-12.53
WCC-11S	6 20 2000	50.29	63.17	-12.88
WCC-11S	1 15 2001	51.37	64.32	-12.95
WCC-11S	7 16 2001	51.37	64.00	-12.63

Table III
Historic Groundwater Elevations
Boeing Realty Corporation Former C-6 Facility

ell	Date onitored	Reference Elevation (feet)	Depth to ater (feet)	Groundwater Elevation (feet L)
WCC-11S	3 21 2002	51.34	63.68	-12.34
WCC-11S	9 13 2002	51.34	64.20	-12.86
WCC-12S	6 15 1992	47.31	66.91	-19.60
WCC-12S	9 21 1992	47.31	67.21	-19.90
WCC-12S	1 5 1993	47.31	67.05	-19.74
WCC-12S	4 9 1993	47.31	66.57	-19.26
WCC-12S	6 7 1993	47.31	66.51	-19.20
WCC-12S	8 24 1993	47.31	66.09	-18.78
WCC-12S	11 18 1993	47.31	65.89	-18.58
WCC-12S	2 23 1994	47.31	65.44	-18.13
WCC-12S	6 10 1994	47.31	65.05	-17.74
WCC-12S	9 8 1994	47.31	65.10	-17.79
WCC-12S	12 21 1994	47.31	64.98	-17.67
WCC-12S	3 13 1995	47.31	64.94	-17.63
WCC-12S	6 12 1995	47.31	64.31	-17.00
WCC-12S	9 20 1995	47.31	64.10	-16.79
WCC-12S	12 12 1995	47.31	63.85	-16.54
WCC-12S	2 29 1996	47.31	63.71	-16.40
WCC-12S	6 6 1996	47.31	63.27	-15.96
WCC-12S	9 18 1996	47.31	63.19	-15.88
WCC-12S	12 18 1996	47.31	62.87	-15.56
WCC-12S	5 6 1997	47.31	62.46	-15.15
WCC-12S	7 1 1997	47.31	62.38	-15.07
WCC-12S	7 22 1997	47.31	62.44	-15.13
WCC-12S	8 4 1997	47.31	62.40	-15.09
WCC-12S	8 19 1997	47.31	62.34	-15.03
WCC-12S	9 3 1997	47.31	62.41	-15.10
WCC-12S	9 16 1997	47.31	62.33	-15.02
WCC-12S	7 14 1998	47.31	61.27	-13.96
WCC-12S	9 22 1998	47.31	61.37	-14.06
WCC-12S	10 16 1998	47.31	61.28	-13.97
WCC-12S	3 6 1999	47.31	61.20	-13.89
WCC-12S	7 12 1999	47.31	60.88	-13.57
WCC-12S	6 20 2000	47.31	61.16	-13.85
WCC-12S	1 15 2001	46.93	60.95	-14.02
WCC-12S	7 16 2001	46.93	60.64	-13.71
WCC-12S	3 21 2002	46.92	60.44	-13.52
WCC-12S	9 13 2002	46.92	60.70	-13.78

e

e

S e Se e e

C

D e 05 27 03

a le l
olatile rganic Compounds y E A ethod 6 - arch
oeing Realty Corporation Former C-6 Facility

ell	Date ampled	, , , - etra chloro ethane	, , - richloro ethane	, , , - etra chloro ethane	, , - richloro ethane	, , - richloro trifluoro ethane	, - Dichloro ethane	, - Dichloro ethene	, - Dichloro propene	, , - richloro en ene	, , - richloro propane	, , - richloro en ene	, , - rimethyl en ene	, -Di romo- -chloro propane	, - Di romo ethane	, - Dichloro en ene
03	03 27 03	12	12	12	12		12	**6**	12	12	12	12	12	25	12	12
03 D	03 27 03	12	12	12	12		12	**6**	12	12	12	12	12	25	12	12
D C 1	03 28 03	250	250	250	250	250	250	250	250	250	250	250	250	500	250	250
W 01	03 27 03	25	25	25	25		25		25	25	25	25	25	50	25	25
W 02	03 28 03	250		250	250	250	**5**		250	250	250	250	250	500	250	250
W 04	03 27 03	25	25	25			**5**		25	25	25	25	25	50	25	25
W 05	03 28 03	100	100	100	100	100	100	**6**	100	100	100	100	100	200	100	100
W 06	03 26 03	5	5	5	5		5	**6**	5	5	5	5	5	10	5	5
W 07	03 27 03	25	25	25	25			**56**	25	25	25	25	25	50	25	25
W 08	03 28 03	50	50	50	50	50	**6**		50	50	50	50	50	100	50	50
W 09	03 26 03	25	25	25	25		25		25	25	25	25	25	50	25	25
W 10	03 26 03	1	1	1	1		1	1	1	1	1	1	1	2	1	1
W 11	03 26 03	10	10	10	10		10	10	10	10	10	10	10	20	10	10
W 14	03 26 03	1	1	1	1		1	1	1	1	1	1	1	2	1	1
W 15	03 26 03	1	1	1	1		1	**5**	1	1	1	1		2	1	1
WCC 03S	03 27 03	100	**6**	100	100		**5**		100	100	100	100	100	200	100	100
WCC 05S	03 25 03	1	1	1	1	1	**6**		1	1	1	1	1	2	1	1
WCC 06S	03 25 03	120		120	120	120			120	120	120	120	120	250	120	120
WCC 07S	03 28 03	2.5	2.5	2.5		2.5			2.5	2.5	2.5	2.5	2.5	5	2.5	2.5
WCC 09S	03 26 03	1	1	1	1				1	1	1	1	1	2	1	1
W 19	03 28 03	2	2	2	2	2	2		2	2	2	2	2	4	2	2
W 19 D	03 28 03	2	2	2	2	2	2	2	2	2	2	2	2	4	2	2
uality Control Data																
032503 0001	03 25 03	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1
032603 0001	03 26 03	1	1	1	1		1	1	1	1	1	1	1	2	1	1
032703 0001	03 27 03	1	1	1	1		1	1	1	1	1	1	1	2	1	1
032803 0001	03 28 03	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1
e																
032703 0001	03 27 03	1	1	1	1		1	1	1	1	1	1	1	2	1	1
032803 0001	03 28 03	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1
e																
032703 0001	03 27 03	1	1	1	1		1	1	1	1	1	1	1	2	1	1
032803 0001	03 28 03	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1
Dec W e																
DW 032703 0001	03 27 03	1	1	1	1		1	1	1	1	1	1	1	2	1	1

e
e e
c e e

a le l
olatile rganic Compounds y E A ethod 6 - arch
oeing Realty Corporation Former C-6 Facility

ell	Date ampled	, -Dichloro ethane	, ,5-rimethyl en ene	, -Dichloro en ene	, -Dichloro en ene	, -Dichloro propane	- utanone	-Chloro ethyl vinyl ether	-Chloro toluene	-He anone	-Chloro toluene	- ethyl- -pentanone	Acetone	Acrolein	Acrylo nitrile	en ene
03	03 27 03	6.2	12	12	12	12	62	62	12	62	12	62	120	250	250	12
03 D	03 27 03	6.2	12	12	12	12	62	62	12	62	12	62	120	250	250	12
D C 1	03 28 03	120	250	250	250	250	1200	1200	250	1200	250	1200	2500	5000	5000	250
W 01	03 27 03	12	25	25	25	25	120	120	25	120	25	120	250	500	500	25
W 02	03 28 03	120	250	250	250	250	1200	1200	250	1200	250	1200	2500	5000	5000	250
W 04	03 27 03		25	25	25	25	120	120	25	120	25	120	250	500	500	25
W 05	03 28 03	50	100	100	100	100	500	500	100	500	100	500	1000	2000	2000	100
W 06	03 26 03	2.5	5	5	5	5	25	25	5	25	5	25	50	100	100	5
W 07	03 27 03	12	25	25	25	25	120	120	25	120	25	120	250	500	500	25
W 08	03 28 03	25	50	50	50	50	250	250	50	250	50	250	500	1000	1000	
W 09	03 26 03	12	25	25	25	25	120	120	25	120	25	120	250	500	500	25
W 10	03 26 03	0.5	1	1	1	1	5	5	1	5	1	5	10	20	20	1
W 11	03 26 03	5	10	10	10	10	50	50	10	50	10	50	**5**	200	200	10
W 14	03 26 03	0.5	1	1	1	1	**5 6**	5	1	5	1	5	10	20	20	1
W 15	03 26 03	0.5	1	1	1	1	5	5	1	5	1	5	10	20	20	1
WCC 03S	03 27 03	50	100	100	100	100	500	500	100	500	100	500	1000	2000	2000	**6**
WCC 05S	03 25 03	0.5	1	1	1	1	5	5	1	5	1	5	10	20	20	1
WCC 06S	03 25 03	**5**	120	120	120	120	620	620	120	620	120	620	1200	2500	2500	**6**
WCC 07S	03 28 03	1.2	2.5	2.5	2.5	2.5	12	12	2.5	12	2.5	12	25	50	50	2.5
WCC 09S	03 26 03	0.5	1	1	1	1	5	5	1	5	1	5	10	20	20	1
W 19	03 28 03	1	2	2	2	2	10	10	2	10	2	10	20	40	40	2
W 19 D	03 28 03	1	2	2	2	2	10	10	2	10	2	10	20	40	40	2
uality Control Data																
032503 0001	03 25 03	0.5	1	1	1	1		5	1	5	1	5	10	20	20	1
032603 0001	03 26 03	0.5	1	1	1	1	5	5	1	5	1	5	**5**	20	20	1
032703 0001	03 27 03	0.5	1	1	1	1	5	5	1	5	1	5	10	20	20	1
032803 0001	03 28 03	0.5	1	1	1	1	5	5	1	5	1	5	**5**	20	20	1
e																
032703 0001	03 27 03	0.5	1	1	1	1	5	5	1	5	1	5	10	20	20	1
032803 0001	03 28 03	0.5	1	1	1	1	5	5	1	5	1	5	10	20	20	1
e																
032703 0001	03 27 03	0.5	1	1	1	1	5	5	1	5	1	5		20	20	1
032803 0001	03 28 03	0.5	1	1	1	1	5	5	1	5	1	5	10	20	20	1
Dec W e																
DW 032703 0001	03 27 03	0.5	1	1	1	1	5	5	1	5	1	5	10	20	20	1

e
e e
c e e

a le l
olatile rganic Compounds y E A ethod 6 - arch
oeing Realty Corporation Former C-6 Facility

ell	Date ampled	romo en ene	romo chloro methane	romo dichloro methane	romo form	romo methane	Car on disulfide	Car on tetra chloride	Chloro en ene	Chloro ethane	Chloro form	Chloro methane	cis- , - Dichloro ethene	Di romo chloro methane	Dichloro difluoro methane	Ethyl en ene
03	03 27 03	12	12	12	12	25	12	6.2	12	25	12	25		12	12	12
03 D	03 27 03	12	12	12	12	25	12	6.2	12	25	12	25		12	12	12
D C 1	03 28 03	250	250	250	250	500	250	120	250	500	250	500		250	250	250
W 01	03 27 03	25	25	25	25	50	25	12	25	50	25	50	25	25	25	25
W 02	03 28 03	250	250	250	250	500	250	120	250	500		500		250	250	250
W 04	03 27 03	25	25	25	25	50	25	12	25	50		50		25	25	25
W 05	03 28 03	100	100	100	100	200	100	50	100	200	100	200		100	100	100
W 06	03 26 03	5	5	5	5	10	5	2.5	5	10		10	5	5	5	5
W 07	03 27 03	25	25	25	25	50	25	12	25	50	25	50		25	25	25
W 08	03 28 03	50	50	50	50	100	50	25	50	100	50	100		50	50	50
W 09	03 26 03	25	25	25	25	50	25	12	25	50	25	50		25	25	25
W 10	03 26 03	1	1	1	1	2	1	0.5	1	2		2	1	1		1
W 11	03 26 03	10	10	10	10	20	10		10	20		20	10	10	10	10
W 14	03 26 03	1	1	1	1	2	1		1	2		2	1	1	1	1
W 15	03 26 03	1	1	1	1	2	1	0.5	1	2		2		1	1	1
WCC 03S	03 27 03	100	100	100	100	200	100	50	100	200	100	200		100	100	100
WCC 05S	03 25 03	1	1	1	1	2	1	0.5	1	2	1	2		1	1	1
WCC 06S	03 25 03	120	120	120	120	250	120	62	120	250		250		120	120	120
WCC 07S	03 28 03	2.5	2.5	2.5	2.5	5	2.5	1.2	2.5	5	2.5	5		2.5	2.5	2.5
WCC 09S	03 26 03	1	1	1	1	2	1	0.5	1	2		2		1		1
W 19	03 28 03	2	2	2	2	4	2	1	2	4	**6**	4	**5**	2	2	2
W 19 D	03 28 03	2	2	2	2	4	2	1	2	4	**6**	4		2	2	2
uality Control Data																
032503 0001	03 25 03	1	1	1	1	2	1	0.5	1	2	1	2	1	1	1	1
032603 0001	03 26 03	1	1	1	1	2	1	0.5	1	2	1	2	1	1	1	1
032703 0001	03 27 03	1	1	1	1	2	1	0.5	1	2	1	2	1	1	1	1
032803 0001	03 28 03	1	1	1	1	2	1	0.5	1	2	1	2	1	1	1	1
e																
032703 0001	03 27 03	1	1	1	1	2	1	0.5	1	2	1	2	1	1	1	1
032803 0001	03 28 03	1	1	1	1	2	1	0.5	1	2	1	2	1	1	1	1
e																
032703 0001	03 27 03	1	1	1	1	2	1	0.5	1	2	1	2	1	1	1	1
032803 0001	03 28 03	1	1	1	1	2	1	0.5	1	2	1	2	1	1	1	1
Dec W e																
DW 032703 0001	03 27 03	1	1	1	1	2	1	0.5	1	2	1	2	1	1	1	1

e
e e
c e e

a le l
olatile rganic Compounds y E A ethod 6 - arch
oeing Realty Corporation Former C-6 Facility

ell	Date ampled	He a chloro utadiene	Iodo methane	Isopropyl ether	Isopropyl en ene	ethyl tert- utyl ether	ethylene chloride	n- utyl en ene	n- ropyl en ene	p-Isopropyl toluene	sec- utyl en ene	tyrene	t- utanol	ert- amyl methyl ether	ert- utyl ethyl ether	tert- utyl en ene
03	03 27 03	12	25	25	12	12	12	12	12	12	12	12	310	25	25	12
03 D	03 27 03	12	25	25	12	12	12	12	12	12	12	12	310	25	25	12
D C 1	03 28 03	250	500		250	250	250	250	250	250	250	250				250
W 01	03 27 03	25	50	50	25	25	25	25	25	25	25	25	620	50	50	25
W 02	03 28 03	250	500		250	250	250	250	250	250	250	250				250
W 04	03 27 03	25	50	50	25	25	25	25	25	25	25	25	620	50	50	25
W 05	03 28 03	100	200		100	100	100	100	100	100	100	100				100
W 06	03 26 03	5	10	10	5	5	5	5	5	5	5	5	120	10	10	5
W 07	03 27 03	25	50	50	25	25	25	25	25	25	25	25	620	50	50	25
W 08	03 28 03	50	100		50	50	50	50	50	50	50	50				50
W 09	03 26 03	25	50	50	25	25	25	25	25	25	25	25	620	50	50	25
W 10	03 26 03	1	2	2	1	1	1	1	1	1	1	1	25	2	2	1
W 11	03 26 03	10	20	20	10	10	10	10	10	10	10	10	250	20	20	10
W 14	03 26 03	1	2	2	1	1	1	1	1	1	1	1	25	2	2	1
W 15	03 26 03	1	2	2	1	1	1	1	1	1	1	1	25	2	2	1
WCC 03S	03 27 03	100	200	200	100	100	100	100	100	100	100	100	2500	200	200	100
WCC 05S	03 25 03	1	2	2	1	1	1	1	1	1	1	1	25	2	2	1
WCC 06S	03 25 03	120	250	250	120	120	120	120	120	120	120	120	3100	250	250	120
WCC 07S	03 28 03	2.5	5		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5				2.5
WCC 09S	03 26 03	1	2	2	1	1	1	1	1	1	1	1	25	2	2	1
W 19	03 28 03	2	4		2	2	2	2	2	2	2	2				2
W 19 D	03 28 03	2	4		2	2	2	2	2	2	2	2				2
uality Control Data																
032503 0001	03 25 03	1	2	2	1	1		1	1	1	1	1	25	2	2	1
032603 0001	03 26 03	1	2	2	1	1	1	1	1	1	1	1	25	2	2	1
032703 0001	03 27 03	1	2	2	1	1	1	1	1	1	1	1	25	2	2	1
032803 0001	03 28 03	1	2		1	1	1	1	1	1	1	1				1
e																
032703 0001	03 27 03	1	2	2	1	1	1	1	1	1	1	1	25	2	2	1
032803 0001	03 28 03	1	2		1	1	1	1	1	1	1	1				1
e																
032703 0001	03 27 03	1	2	2	1	1	1	1	1	1	1	1	25	2	2	1
032803 0001	03 28 03	1	2		1	1	1	1	1	1	1	1				1
Dec W e																
DW 032703 0001	03 27 03	1	2	2	1	1	1	1	1	1	1	1	25	2	2	1

e
e e
c e e

a le l
olatile rganic Compounds y E A ethod 6 - arch
oeing Realty Corporation Former C-6 Facility

ell	Date ampled	etra chloro ethene	etra hydro furan	oluene	trans-, - Dichloro ethene	richloro ethene	richloro fluoro methane	inyl acetate	inyl chloride	ylenes (total)
03	03 27 03		120	12	12		25	62	6.2	12
03 D	03 27 03		120	12	12		25	62	6.2	12
D C 1	03 28 03	250	2500	250	250		500	1200	120	250
W 01	03 27 03	25	250	25	25	**6**		120	12	25
W 02	03 28 03	250	2500				500	1200	120	250
W 04	03 27 03	25	250	25			50	120	12	25
W 05	03 28 03	100	1000	100	100		200	500	50	100
W 06	03 26 03	5	50	5	5	**6**	10	25	2.5	5
W 07	03 27 03	25	250	25			50	120	12	25
W 08	03 28 03	50	500	50	**6**		100	250	25	50
W 09	03 26 03	25	250	25	25		50	120	12	25
W 10	03 26 03		10	**5**	1		**5**	5	0.5	1
W 11	03 26 03	**5**	100	10	10		20	50	5	10
W 14	03 26 03	**6**	10		1		2	5	0.5	1
W 15	03 26 03	1	10	**5**	1	**6**	2	5	0.5	1
WCC 03S	03 27 03	100	1000	**6**		**5**	200	500	50	100
WCC 05S	03 25 03	1	10	1	1	**6**		5	0.5	1
WCC 06S	03 25 03	120	1200				250	620	62	120
WCC 07S	03 28 03	2.5	25	2.5	2.5		5	12	1.2	2.5
WCC 09S	03 26 03		10	1	1			5	0.5	1
W 19	03 28 03	2	20	2	2		4	10	1	2
W 19 D	03 28 03	**6**	20	2	2	**5**	4	10	1	2
uality Control Data										
032503 0001	03 25 03	1	**6**	1	1	1	2	5	0.5	1
032603 0001	03 26 03	1	10	1	1	1	2	5	0.5	1
032703 0001	03 27 03	1	10	1	1	1	2	5	0.5	1
032803 0001	03 28 03	1	10	1	1	1	2	5	0.5	1
e										
032703 0001	03 27 03	1	10	1	1	1	2	5	0.5	1
032803 0001	03 28 03	1	10	1	1	1	2	5	0.5	1
e										
032703 0001	03 27 03	1	10	1	1	1	2	5	0.5	1
032803 0001	03 28 03	1	10	1	1	1	2	5	0.5	1
Dec W e										
DW 032703 0001	03 27 03	1	10	1	1	1	2	5	0.5	1

e
e e
c e e

A C
Date 5

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell		Date ampled	, ,- DCA	, , - CA	, , - CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis- , -DCE	trans- , -DCE	E (- utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
CC-		3 27 1987								5										6				
		4 13 1987		6																55				
		11 12 1987		6						6					5					5				
	D	4 13 1988				5														6				
		7 13 1989	20	6						20			20	20	20			100			20			
		8 23 1989		30		5				30			30		30			100			30			
		11 18 1991																						
		6 17 1992	50	50					300	50			50	5	50	100		100			50			
		9 23 1992		6	1	5	1	1	5			1		1		5		5	1			1	1	1
		12 9 1992	30	30	30	5	30	30	100		30	30	30	30	30	100		100	30		30	30	30	30
		3 18 1993		5	2		2	2	10		5	5			5	10	10	5	2		2	2	2	5
		6 8 1993	20	20	20		20	20	400	5	20	20	20		20	400	100	200	20		20	20	20	20
		8 25 1993	20	20	40		20	20	400		20	20	20		20	400	40	200	20		20	20	20	20
		11 19 1993	20	20	40	6	20	20	400		20	20	20	5	20	400	100	200	20	6	20	20	20	20
		2 24 1994	20	20	40		20	20	400		20	20	20			400	100	200	20		20	20	20	20
		6 13 1994			20		10	10	200	10	10	10	10		6	200	50	100	10		10	10	30	10
		9 9 1994	40	40	80		40	40	800	40	40	40	40	40	40	800	200	400	40		40	40	120	40
		12 22 1994			40		20	20	400	5	20	20	20		6	400	100	200	20		20	20	40	20
		3 14 1995	20	20	40		20	20	400		20	20	20			400	100	200	20		20	20	40	20
		6 13 1995		20	40		20	20	400	5	20	20	20			400	100	200	20		20	20	20	20
		9 7 1995			5		5	5	10	5	5	5	6			10	5	10	5	6	5	5	5	5
		12 15 1995	6		2		2	2	2		2	2					2		2	6	2	2	4	2
		3 4 1996			20		20	20	40	20	20	20	20	5	5	40	20	40	20		20	20	40	20
		6 7 1996			5	5	5	5	10		5	5				10	5		5		5	5	5	5
		9 19 1996	50	50	50		50	50	500	50	250	50	50	50	6	500	50	500	50		50	50	50	50
	D	12 15 1996	6		2		2	2	2		2	2	6				2		2	56	2	2	4	2
		12 18 1996	50	50	50	6	50	50	500	50	250	50	50	50	50	500	50	500	50		50	50	50	50
	D	12 18 1996			50		50	50	500		250	50					50		50			50	50	50
		5 8 1997	50	50	50		50	50	500	50	250	50	50	50	6	500	50	500	50		50	50	50	50
		7 8 1997	50	50	50		50	50	500	50	250	50	50	50	50	500	50	500	50		50	50	50	50
		7 24 1997	50	50	50	6	50	50	500	50	250	50	50	50	50	500	50	500	50		50	50	50	50
		8 6 1997	50	50	50		50	50	500	50	250	50	50	50	6	500	50	500	50		50	50	50	50
		8 22 1997	50	50	50		50	50	500	50	250	50	50	50	66	500	50	500	50		50	50	50	50
		9 5 1997	50	50	50	5	50	50	500	50	250	50	50	50	6	500	50	500	50	5	50	50	50	50
		9 17 1997	50	50	50		50	50	500	50	250	50	50	50	6	500	50	500	50		50	50	50	50
	D	12 18 1997	50	50		6				50			50	50	50	500		500			50			
CC- D		7 25 1989	1	1		1				1			1		1			5						
		8 23 1989	1			1				1			1	1	1			5			1			
		11 15 1991																						
		6 15 1992	25	6		5			50	25			25	25	25	50		50			25			
	D	6 15 1992	25	6					50	25			25	25	25	50		65			25			
		9 22 1992	1		1		1	1	5	1	1	1	1		1	5		5	1		1	1	1	
		12 7 1992	1		1	6	1	1	5	1	1	1			1	5		5	1		1	1	1	1
	D	12 7 1992	1	6	1	5	1	1	5	1	1	1		1	1	5		5	1	6		1	1	1
		3 16 1993	2		2		2	2	10	2	5	5	2		2	10	10	5	2		2	2	2	5
		6 8 1993	10	14	20	5	10	10	200	10	10	10	10	10	10	200	20	100	10		10	10	10	10
	D	6 8 1993	4		8		4	4	80	4	4	4	4	4	4	80	10	40	4		4	4	4	4
		8 24 1993	2	6	4	5	2	2	40	2	2	2	2			40	4	20	2	6		2	2	2
		11 18 1993	2	6	4		2	2	40	2	2	2	2			40	10	20	2		2	2	2	2
		2 23 1994	2		4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	2	2
		6 10 1994	2		4		2	2	40	2	2	2	2	2	2	40	20	20	2		2	2	6	2
		9 8 1994	2	6	4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	6	2
		12 22 1994	2		4	6	2	2	40	2	2	2	2			40	10	20	2			2	4	2
		3 13 1995	4	4	8		4	4	80	4	4	4	4	4	4	80	20	40	4		4	4	8	4
		6 13 1995	2	2	4		2	2	40	2		2	2		2	40	10	20	2		2	2	2	2
		9 3 1995	5	5	5	5	5	5	10	5	5	5	5	5	5	10	5	10	5		5	5	5	5
		12 16 1995	2	2	2		2	2	2	2	2	2	2		2		2		2		2	2	4	2
		2 29 1996	5	5	5	5	5	5	10	5	5	5	5	5	5	10	5	10	5	5	5	5	10	5
	D	2 29 1996	5	5	5	5	5	5	10	5	5	5	5	5	5	10	5	10	5	5	5	5	10	5
		6 6 1996	5	5	5	5	5	5	10	5	5	5	5	5	5	10	5		5	5	5	5	5	5
		9 18 1996	1	1	1	1	1	1	10	1	5	1	1		1	10	1	10	1	5	1	1	1	1
	D	9 18 1996	1	0.5	1	1	1	1	10	0.5	5	1	1		1	10	1	10	1	6	1	1	1	1
		12 18 1996	1	1	1	1	1		10	1	5	1	1		1	10	1	10	1	5	1	1	1	1
		5 7 1997	1	1	1	1	1	1	10	1	5	1	1		1	10	1	10	1		1	1	1	1
		7 8 1997	1	1	1	1	1	1	10	1	5	1	1		1	10	1	10	1		1	1	1	1
		7 23 1997	1	1	1		1	1	10	1	5	1	1		1	10	1	10	1		5	1	1	1
		8 5 1997	1	1	1		1	1	10	1	5	1	1		1	10	1	10	1			1	1	1

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell		Date ampled	, ,-DCA	, , -CA	, , -CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis- , -DCE	trans- , -DCE	E (- utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
CC- D		8 20 1997	1	1	1	1	1	1	10	1	5	1	1	1	1	10	1	10	1	6	1	1	1	1
		9 4 1997	1		1	6	1	1	10	1	5	1	1	6	1	10	1	10	1	5		1	1	1
		9 17 1997	1		1	6	1	1	10	1	5	1	1	5	1	10	1	10	1		6	1	1	1
CC-		11 2 1987		5		5															6			
		11 12 1987																						
		7 13 1989	1	1		1				1			1	1	1			5		5	1			
		8 23 1989	1	1		1				1			1	1	1			5			1			
		11 19 1991																			5			
		6 16 1992	5	5					10	5			5	5	5	10		10			5			
		9 22 1992	1	1	1		1	1	5	1	1	1	1	1	1	5		5	1			1	1	1
	D	9 22 1992	1	1	1		1	1	5	1	1	1	1	1	1	5		5	1			1	1	1
		12 8 1992	1		1		1	1	6	1	1	1	1	1	1	5	5	5	1		1	1	1	1
	D	12 8 1992	2		1		1	1	5	1	1	1		1	1	5		5	1		1	1	1	1
		3 17 1993	2	2	2		2	2	10	2	5	5	2	2	2	10	10	5	2		2	2	2	5
	D	3 17 1993	2	2	2		2	2	10	2	5	5	2	2	2	10	10	5	2		2	2	2	5
		6 7 1993	2	2	4		2	2	40	2	2	2	2	2	2	40	4	20	2	5	2	2	2	2
		8 24 1993	2	2	4	6	2	2	40	2	2	2	2	2	2	40	4	20	2		2	2	2	2
		11 19 1993	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	2	2
		2 24 1994	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2	6	2	2	2	2
		6 10 1994	2	2	4		2	2	40	2	2	2	2	2	2	40	20	20	2		2	2	6	2
		9 8 1994	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2	5	2	2	6	2
		12 22 1994	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	4	2
		3 13 1995	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2	6	2	2	4	2
		6 12 1995	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	2	2
		9 6 1995	5	5	5	56	5	5	10	5	5	5	5	5	5	10	5	10	5		5	5	5	5
		12 15 1995	2	2	2	5	2	2	2	2	2	2	2	2	2		2		2	6	2	2	4	2
		3 1 1996	5	5	5	5	5	5	10	5	5	5	5	5	5	10	5	10	5		5	5	10	5
		6 6 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5		5		5	5	5	5
		9 19 1996	1	1	1		1		10	1	5	1	1	1	1	10	1	10	1		1	1	1	1
		12 18 1996	2	2	2		2	2	20	2	10	2	2		2	20	2	20	2		2	2	2	2
		5 7 1997	1	1	1		1	1	10	1	5	1	1		1	10	1	10	1	5	1	1	1	1
	D	5 7 1997	1	1	1		1	1	10	1	5	1	1		1	10	1	10	1		1	1	1	1
CC-		11 2 1987																5						
		11 12 1987		5																				
		7 13 1989	500	56						500			500	500	66			3000						
		8 23 1989	1000			56				1000			1000	1000	1000			5000		6	56			
		11 14 1991		6									5	55	55									
		6 17 1992	5000			5			30000	5000			5000	5000	5000	10000					5			
		9 23 1992	500		500		500	500	3000	500	500	500	500	500	500	3000			500		5	500	500	500
		12 9 1992	500	56	500		500	500	3000	500	500	500	500		6		500		500			500	500	500
		3 18 1993	65		55			10	50		25	25		65	6	50	50		10			10		25
	D	3 18 1993	5		6		5	10	50	6	25	25		6	6	50	50	5	10			10		25
		6 8 1993		5	200	6	100	100	2000		100	100	100	5		2000	200		100	6		100	100	100
		8 25 1993	5		800		400	400	8000	400	400	400	410	6	6	8000	800	5	400		6	400	400	400
	D	8 25 1993	56	5	5		6	10	200	5	10	10	10			66	50		10				5	10
		11 19 1993	6		200	6	200	200	4000		200	200	200			4000	1000		200		5	200	200	200
		2 24 1994		6	400	5	200	200	4000	200	200	200	200	5	6	4000	1000	5	200	5	5	200	200	200
		6 13 1994		6	400		200	200	4000	200	200	200	200		6	4000	1000		200			200	600	200
		9 9 1994	5		1000		500	500	10000	500	500	500	500		6	10000	2500	6	500	500		500	1500	500
	D	9 9 1994	56			5				500			500		6	10000		5		500				
		12 22 1994		6	400		200	200	4000		200	200	200	6	5	4000	1000		200		5	200	400	200
		3 14 1995	5		400		200	200	4000		200	200	200	6	6	4000	1000	6	200			200	400	200
		6 13 1995	5		800		400	400	8000	400	400	400	400	6	5	8000	2000	66	400			400	400	400
		9 7 1995			6			5			5	5	6	6	5	200		6	5					5
		12 16 1995	5					2	2		2	2	5				2		2	6				2
		3 4 1996			50		50	50	100		50	50	50			100	50		50		5	50	100	50
		9 19 1996	6	5	500		500	500	5000	500	2500	500	500	6	6	5000	500	5000	500	500		500	500	500
		12 19 1996			250	6	250	250	2500	250	1200	250	250		6	2500	250	2500	250	250		250	250	250
		5 8 1997			120	6	120	120	1200	120	620	120	120			1200	120	1200	120			120	120	120
	D	5 8 1997	250	5		6				250			50		250	2500		2500		250				
		7 8 1997	250		250		250	250	2500	250	1200	250	250		6	2500	250	2500	250			250	250	250
		7 24 1997	5		250		250	250	2500	250	1200	250	250			2500	250	2500	250			250	250	250
		8 6 1997		5	250		250	250	2500	250	1200	250	250		5	2500	250	2500	250	5		250	250	250
		8 22 1997			250	6	250	250	2500	250	1200	250	250	6	5	2500	250	2500	250			250	250	250
		9 5 1997	5	6	250		250	250	2500	250	1200	250	250			2500	250	2500	250	250		250	250	250
		9 18 1997		5	250		250	250	2500	250	1200	250	250	5	5	2500	250	2500	250	250		250	250	250

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell		Date ampled	, ,-DCA	, , -CA	, , -CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis-, -DCE	trans-, -DCE	E (-utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
CC-	D	9 18 1997		6	250		250	250	2500	250	1200	250	250	6	6	2500	250	2500	250	6		250	250	250
		9 23 1998			250			250			250	250	250				1250		250	250	5	250	500	250
		10 22 1998			250			250			250	250	250				1250		250		6	250	500	250
		3 6 1999	5		250		5	250		250	250	250	250		5		1250		250	6		250	500	250
		7 16 1999			250			250			250	250	250	6			1250		250		5	250	500	250
		6 26 2000	6		125	5	125				125	125	125	6			625		125			125	250	125
		2 3 2001	55		500			500	5000		500	250	500	6	5	2500	500		500	55		500	500	1000
		7 19 2001			200		100	200	2000		200	100			6	1000	200	6	200			200	5	400
	D	7 19 2001			200		100	200	2000		200	100				1000	200	6	200		5	200		400
		3 25 2002		6	620	6	310	620	6200	620	620	310	620		5	3100	620		620			620	620	1200
		3 27 2003	5	6	100		50	100	1000	6	100	50	100			500	100		100	5	6	100	100	200
CC- D		11 14 1991		6																				
		6 16 1992	5			5			30	5			5	5	5	10		10						
		9 22 1992	1		1		1	1	5	1	1	1	1	1	1	5		5	1		1	1	1	
		12 7 1992	1		1		1	1	5	1	1	1		1	1	5		5	1	5		1	1	1
		3 16 1993	6		2	5	2	2	10	2	5	5	2			10	10	5	2	5	6	2	2	5
	D	3 16 1993	6		2		2	2	10	2	5	5	2			10	10	5	2		6	2	2	5
		6 8 1993	2		4		2	2	40	2	2	2	2	2	2	40	4	20	2	6	2	2	2	2
		8 24 1993	2		4		2	2	40	2	2	2	2	2	2	40	4	20	2	5		2	2	2
		11 18 1993	2		4	6	2	2	40	2	2	2	2	2		40	10	20	2		6	2	2	2
	D	11 18 1993	4	6	8		4	4	80	4	4	4	4			80	20	40	4			4	4	4
		2 23 1994		5	8		4	4	80	4	4	4	4	4	4	80	20	40	4	5		4	4	4
	D	2 23 1994	4	5						4			4	4	4	80		40						
		6 13 1994	10		20		10	10	200	10	10	10	10	10	10	200	50	100	10	6	10	10	30	10
		9 9 1994	50	56	100		50	50	1000	50	50	50	50	50	50	1000	250	500	50		50	50	150	50
		12 21 1994		6		5	4	4	80	6	4	4	4	5		80	20	40	4	5	5	4	8	4
		3 14 1995	40		80		40	40	800	40	40	40	40	40	40	800	200	400	40			40	80	40
	D	3 14 1995	20		40		20	20	400	20	20	20	20	20	20	400	100	200	6			20	40	20
		6 13 1995	10		20		10	10	200	10	10	10	10	10	10	200	50	100	10			10	10	10
		9 7 1995			5		6	5	10		5	5	5	6		10	5		5	5		5		5
		12 16 1995	2		2		2	2	2	2	2	2	2		2		2		2			2	4	2
		3 4 1996	5		5	5	5	5	10	5	5	5	5	5	5	10	5	10	5		6	5	10	5
		6 7 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5		5	6		5	5	5
		9 19 1996	1		1	5	1	1	10	1	5	1	1		1	10	1	10	1	6		1	1	1
		12 19 1996		6	1		1		10	1	5	1	1	5	1	10	1	10	1			1	1	1
		5 8 1997	1		1		1	1	10	1	5	1	1		1	10	1	10	1	6		1	1	1
		7 8 1997	1	5	1		1	1	10	1	5	1	1		1	10	1	10	1			1	1	1
	D	7 8 1997	1	5	1		1	1	10	1	5	1	1		1	10	1	10	1	5	6	1	1	1
		7 24 1997	1		1	55	1	1	10	1	5	1	1		1	10	1	10	1			1	1	1
		8 6 1997	1		1		1	1	10	1	5	1	1		1	10	1	10	1	5		1	1	1
	D	8 6 1997	1	6	1		1	1	10	1	5	1	1		1	10	1	10	1	56		1	1	1
		8 22 1997	1		1	6	1	1	10	1	5	1	1		1	10	1	10	1			1	1	1
	D	8 22 1997	1		1	6	1	1	10	1	5	1	1		1	10	1	10	1			1	1	1
		9 5 1997	1	5	1	5		1	10	1	5	1	1		1	10	1	10	1	66		1	1	1
	D	9 5 1997	1		1		1	1	10	1	5	1	1		1	10	1	10	1	6		1	1	1
		9 18 1997	1		1	5	1	1	10	1	5	1	1		1	10	1	10	1			1	1	1
		9 28 1998	5		5		5	5		5	5	5	5		6		25		5	6	5	5	10	5
		10 21 1998	0.5	5	0.5	5	0.5	0.5		0.5	0.5	0.5	0.5		0.5		2.5		0.5			0.5	1	0.5
		3 5 1999	0.5	5	0.5		0.5	0.5		0.5	0.5	0.5	0.5		0.5		2.5		0.5			0.5	1	0.5
	D	3 5 1999	0.5		0.5		0.5	0.5		0.5	0.5	0.5	0.5		0.5		2.5		0.5			0.5	1	0.5
		7 16 1999	0.5	6	0.5		0.5	0.5		0.5	0.5	0.5	0.5		0.5		2.5		0.5	6		0.5	1	0.5
	D	7 16 1999	0.5	5	0.5		0.5	0.5		0.5	0.5	0.5	0.5		0.5		2.5		0.5	5		0.5	1	0.5
		6 26 2000	0.5	5	0.5	5	0.5			0.5	0.5	0.5	0.5		0.5		2.5		0.5			0.5	1	0.5
		2 3 2001	2	5	2		1	2	20	2	2	1	2		2	10		10	2			2		4
		3 21 2002	1	6	1		0.5	1		1	1	0.5	1		1	5	1		1			1	1	2
CC-		11 2 1987				6																		
		11 12 1987		5																6				
		7 13 1989	3							3			3		3						3			
		8 23 1989	5			6				5			5	5	5			20			5			
		11 18 1991																30						
		6 17 1992	25	25					150	25			25	25	25	50		50		5	25			
		9 23 1992	10		10		10	10	50	10	10	10		10	10	50		50	10		10	10	10	10
		12 8 1992	10		10		10	10	50	10	10	10			10	50	5	50	10	6	10	10	10	10
		3 17 1993			2		2	2	10	6	5	5	5		5	10	10	5	2		2	2	2	5
		6 8 1993	10		20		10	10	200	10	10	10	10		10	200	40	100	10		10	10	10	10
		8 25 1993	10	10	20		10	10	200	10	10	10	10	10	10	200	20	100	10		10	10	10	10

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell		Date ampled	, ,- DCA	, , - CA	, , - CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis- , -DCE	trans- , -DCE	E (- utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
CC-		11 19 1993			8	6	4	4	80		4	4	4	6	5	80	20	40	4			4	4	4
		2 24 1994	5		8		4	4	80	6	4	4	5			80	20	40	4		4	4	4	4
		6 14 1994	4	5	8		4	4	80	4	4	4	4		5	80	20	40	4		4	4	12	4
		9 9 1994	20	20	40		20	20	400	20	20	20	20	20	20	400	100	200	20		20	20	60	20
		12 22 1994	10	10	20	6	10	10	200	10	10	10	10	10	10	200	50	100	10	5	10	10	20	10
		3 14 1995								4			4		4	80		40		5	4			
		3 14 1995			8		4	4	80		4	4					20		4			4	8	4
		6 13 1995	6	6.6	13		6.6	6.6	130		6.6	6.6	6.6		6.6	130	33	66	6.6		6.6	6.6	6.6	6.6
		9 7 1995		6	5		5	5	10		5	5	6 5			10	5	10	5		5	5	5	5
		12 15 1995		2	2		2	2	2		2	2					2		2		2	2	4	2
		3 4 1996	5	5	5		5	5	10	5	5	5	5	6	6	10	5	10	5		5	5	10	5
		6 7 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5		5		5	5	5	5
		9 19 1996	25	25	25		25	25	250	25	120	25	25	25	25	250	25	250	25	6	25	25	25	25
		12 18 1996	25	25	25		25	25	250	25	120	25	25	25	25	250	25	250	25	6	25	25	25	25
		5 8 1997	12	12	12		12	12	120	12	62	12	12	12		120	12	120	12		12	12	12	12
		7 8 1997	25	25	25		25	25	250	25	120	25	25	25	25	250	25	250	25		25	25	25	25
		7 24 1997	25	25	25		25	25	250	25	120	25	25	25	25	250	25	250	25		25	25	25	25
		8 6 1997	25	25	25		25	25	250	25	120	25	25	25	25	250	25	250	25		56	25	25	25
		8 22 1997	25	25	25		25	25	250	25	120	25	25	25	25	250	25	250	25		25	25	25	25
		9 5 1997	25	25	25		25	25	250	25	120	25	25	25	25	250	25	250	25		25	25	25	25
		9 17 1997	25	25	25	6	25	25	250	25	120	25	25	25	25	250	25	250	25		25	25	25	25
		9 28 1998		2.5				2.5		2.5	2.5	2.5	5				12.5		2.5		2.5	2.5	5	2.5
		10 21 1998		5				5		5	5	5	6				25		5		5	5	10	5
		3 4 1999	10	10	10		10	10		10	10	10	10	10	5		50		10	6	10	10	20	10
		7 14 1999	10	10	10		10	10		10	10	10	10				50		10	5	10	10	20	10
		6 21 2000	10	10	10		10			10	10	10	10	10	10		50		10		10	10	20	10
		1 24 2001	50	50	50		25	50	500	50	50	25	50	50	5	250	50	250	50		50	50	50	100
		3 26 2002	25	25	25	6	12	25	250	25	25	12	25		5	120	25		25			25	25	50
CC-5		11 30 1987																						
		1 8 1988																						
		7 13 1989	1							1			1	6	1			1		5	1			
	D	7 13 1989	1							1			1	6	1			1		5	1			
		8 23 1989	1			1				1			1		1			1		5	1			
		11 19 1991																						
		6 15 1992	5	5					10	5			5	5	5	10		10			5			
		9 21 1992	1	1	1		1	1	5	1	1	1	1	1	1	5		5	1	5	1	1	1	
		12 7 1992	1	1	1		1	1	5	1	1	1	1	1	1	5		5	1	5	1	1	1	1
		3 16 1993	2	2	2		2	2	10	2	5	5	2	2	2	10	10	5	2		2	2	2	5
		6 7 1993	2	2	2		2	2	40	2	2	2	2	2	2	40	4	20	4		2	2	2	2
		8 24 1993	2	2	4		2	2	40	2	2	2	2	2	2	40	4	20	2	5	2	2	2	2
		11 18 1993	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	2	2
		2 23 1994	2	2	4		2	2	40	2		2	2	2	2	40	10	20	2		2	2	2	2
		6 10 1994	2	2	4	5	2	2	40	2	2	2	2	2	2	40	20	20	2		2	2	6	2
	D	6 10 1994	2	2	4	5	2	2	40	2	2	2	2	2	2	40	20	20	2		2	2	6	2
		9 8 1994	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	6	2
		12 21 1994	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	4	2
		3 13 1995	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	4	2
		6 12 1995	2	2	4		2	2	40	2		2	2	2	2	40	10	20	2		2	2	2	2
		9 6 1995	5	5	5		5	5	10	5	5	5	5	5	5	10	5	10	5	5	5	5	5	5
		12 12 1995	2	2	2	5	2	2	2	2	2	2	2	2	2		2		2		2	2	4	2
		2 29 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5	10	5	5	5	5	10	5
		6 6 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5	10	5	5	5	5	5	5
		9 18 1996	1	1	1		1		10	1	5	1	1	1	1	10	1	10	1		1	1	1	1
		12 17 1996	1	1	1		1		10	1	5	1	1	1	1	10	1	10	1		1	1	1	1
		5 7 1997	1	1	1		1		10	1	5	1	1	1	1	10	1	10	1		1	1	1	1
		7 2 1997	1	1	1		1	1	10	1	5	1	1	1	1	10	1	10	1		1	1	1	1
		7 23 1997	1	1	1		1	1	10	1	5	1	1	1	1	10	1	10	1			1	1	1
		8 5 1997	1		1		1		10	1	5	1	1		1	10	1	10	1			1	1	1
		8 20 1997	1	1	1		1	1	10	1	5	1	1	1	1	10	1	10	1		1	1	1	1
		9 4 1997	1	6	1		1	1	10	1	5	1	1	6	1	10	1	10	1			1	1	1
		9 16 1997	1		1		1	1	10	1	5	1	1	5	1	10	1	10	1			1	1	1
		9 28 1998	0.5	6	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5		2.5		0.5	5	0.5	0.5	1	0.5
		10 20 1998	0.5	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5		2.5		0.5		0.5	0.5	1	0.5
		3 4 1999	0.5	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5		2.5		0.5		0.5	0.5	1	0.5
		7 15 1999	0.5	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5		2.5		0.5		0.5	0.5	1	0.5
		6 22 2000	0.5	0.5	0.5	5	0.5			0.5	0.5	0.5	0.5	0.5	0.5		2.5		0.5		0.5	0.5	1	0.5
		1 23 2001	1	1	1	5	0.5	1	10	1	1	0.5	1	1	1	5	1	5	1			1	1	5

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell		Date ampled	, ,- DCA	, , - CA	, , - CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis- , -DCE	trans- , -DCE	E (- utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
CC-5		3 21 2002	1	1	1	6	0.5	1	10	1	1	0.5	6	1	1	5	1				5 5	1	1	6
		09 16 02	1	1	1	5	0.5	1	10	1	1	0.5	1	1	1	5	1	5		5		1	1	6
		03 25 03	6	1	1		0.5	1	10	1	1	0.5	1		1	5	1		1	6	1	1	1	
CC-6		10 6 1989								1			1					5			1			
		11 16 1991		5		5															5			
		6 17 1992	500			5			3000	500			500	500	500	6		6			5			
		9 23 1992			6	5	5	1		6	1	1				6	5	5	1			5	6	1
		12 9 1992		6	6		80	50	300		50	50	50						50		5	50	50	50
	D	12 9 1992	100			56	- -	100	600	100	100	100	100			5		500	10			10	100	100
		3 17 1993	5		10		- -	25	50		25	25	5	10			50		10			10		25
		6 8 1993	100		200	55	- -	100	2000	100	100	100	100	6			200		100			100	100	100
		8 25 1993	100		200	5	- -	100	2000	100	100	100	100	6		6	200		100			100	100	100
		11 19 1993			20		- - 5	10	200		10	10	10				50		10	6		10	10	10
		2 24 1994					- - 6	10		5	10	10					50		10				5	10
		6 13 1994			6	5	80	10	200	5	10	10		6			50		10			10	5	50
	D	6 13 1994	100	5	200	6	17	10	2000	100	10	100	100			2000	500	5	100		13000	100	300	100
		12 22 1994	200		400		200	200	4000	200	200	200	200	5	200	4000	1000		200		6	200	400	200
		3 14 1995			40		6	20	400	5	20	20	20	5	6	400	100		20			20	40	20
		6 13 1995			6		5	20	400		20	20				400	100	5	20	5		20	20	20
		9 7 1995	55					5	10	5	5	5					5		5	6		5		5
	D	9 7 1995						5	10	56	5	5					5		5	5	5	5		5
		12 16 1995			6			2	2	66	2	2		6	6		2		2			5		2
		3 4 1996		6	6		50	50	100	56	50	50	50				50	5	50			50	100	50
		6 7 1996			5			25	50	5	25	25	25			6	25		25		65	25	25	25
		9 19 1996	250		250		250	250	2500	250	1200	5	250		5	2500	250	2500	250			250	250	250
	D	9 19 1996		5	100		100	100	1000	100	500	100	100		6	1000	100	100	100			100	100	100
		12 19 1996	100	6	100		100	100	1000	100	500	100	100			1000	100	1000	100		6	100	100	100
	D	12 19 1996	100		100		100	100	1000	100	500	100	100			1000	100	1000	100	6		100	100	100
		5 9 1997	100		100	6	100	100	1000	100	500	100	100		100	1000	100	1000	100			100	100	100
	D	5 9 1997	100		100		100	100	1000	100	500	100	100			1000	100	1000	100			100	100	100
		7 8 1997	100		100	6	100	100	1000	100	500	100	100	5	100	1000	100	1000	100	5		100	100	100
		7 24 1997	100		100		100	100	1000	100	500	100	100	5	100	1000	100	1000	100		6	100	100	100
		8 6 1997	100	6	100		100	100	1000	100	500	100	100			1000	100	1000	100			100	100	100
		9 18 1997	100	5	100	55	100	100	1000	100	500	100	100		100	1000	100	1000	100	6		100	100	100
		9 23 1998	6		12.5		6	12.5		12.5	12.5	12.5	12.5				62.5		12.5	5	12.5	12.5	25	12.5
		10 22 1998			10			10			10	10	10				50		10		10	10	20	10
		3 6 1999			50	5		50		5	50	50	50	5			250		50	5	6	50	100	50
		7 16 1999			50			50		50	50	50	50				250		50		6	50	100	50
		6 26 2000	6	6	25	5	25				25	25	25				125		25	5		25	50	25
		1 22 2001			100	6	50	100	1000	100	100	50	100			500	100	500	100			100	100	200
		7 19 2001		5		5 6		5	50		5	2.5				25	5	25	5		6	6		10
		03 26 02			120		62	120	1200	6	120	62				620	120		120		5	120	120	250
		03 25 03			120		5	120	1200	6	120	62				620	120		120			120	120	250
CC-		7 13 1989	10			5				10			10	6				50			10			
		8 23 1989	30	66						30			30		30			100			30			
		11 18 1991																						
		6 17 1992	5	5					30	5			5	5	5	10		10		56	5			
		9 23 1992	5	5	5		5	5	30	5	5	5	5	5	5	30		30	5	5	5	5	5	5
		12 8 1992	5	5	5		5	5	30	5	5	5	5	5	5	30		30	5		5	5	5	5
		3 17 1993	2	2	2		2	2	10	2	5	5	2		2	10	10	5	2		2	2	5	5
		6 7 1993	2	2	4		2	2	40	2	2	2	2		2	40	4	20	2		2	2	2	2
		8 25 1993	4	4	8		4	4	80	4	4	4	4		4	80		40	4		4	4	4	4
		11 19 1993	2	2	4	56	2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	2	2
		2 24 1994	2	2	4	5	2	2	40	2	2	2	2	5	2	40	10	20	2		2	2	2	2
		6 13 1994	2	2	4	5	2	2	40	2	2	2	2	5	2	40	10	20	2		2	2	6	2
		9 8 1994		2	4	5	2	2	40	2	2	2	2	2	2	40	10	20	2	5	2	2	6	2
		12 22 1994	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	4	2
		3 14 1995	2	2	4	5	2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	4	2
		6 13 1995	2		4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	4	2
	D	6 13 1995	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	4	2
		9 7 1995	5	5	5	5	5	5	10	5	5	5	5	5	5	10	5	10	5		5	5	5	5
		12 15 1995	2	2	2		2	2	2	2	2	2	2	2	2		2		2		2	2	4	2
		3 1 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5	10	5		5	5	10	5
		6 7 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5	10	5		5	5	5	5
		9 19 1996	2	2	2		2	2	20	2	10	2	2	2	2	20	2	20	2	5	2	2	2	2
		12 18 1996	2	2	2		2	2	20	2	10	2	2	2	2	20	2	20	2		2	2	2	2

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell		Date ampled	, ,-DCA	, , -CA	, , -CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis- , -DCE	trans- , -DCE	E (- utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
CC-		5 8 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5	2.5	2.5	25	2.5	25	2.5		2.5	2.5	2.5	2.5
		7 2 1997	2	2	2		2	2	20	2	10	2	2	2	2	20	2	20	2	5	2	2	2	2
		7 24 1997	2	2	2	6	2	2	20	2	10	2	2	2	2	20	2	20	2			2	2	2
		8 6 1997	2	2	2		2	2	20	2	10	2	2	2	2	20	2	20	2	6		2	2	2
		8 21 1997	2	2	2		2	2	20	2	10	2	2	2	2	20	2	20	2		2	2	2	2
		9 4 1997		2.5	2.5		6	2.5	25	2.5	12	2.5	2.5	2.5	2.5	25	2.5	25	2.5	5		2.5	2.5	2.5
		9 17 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5	2.5	2.5	25	2.5	25	2.5	6		2.5	2.5	2.5
		9 28 1998		1.25				1.25		1.25	1.25	1.25	1.25	1.25	1.25		6.25		1.25	5	1.25	1.25	2.5	1.25
		10 21 1998		1				1		1	1	1	1		1		5		1		1	1	2	1
		3 4 1999	1	1	1	6	1	1		1	1	1	1		1		5		1		1	1	2	1
		7 14 1999	1	1	1		1	1		1	1	1	1		1		5		1		1	1	2	1
		6 22 2000		0.5			0.5			0.5	0.5	0.5	6		0.5		2.5		0.5		0.5	0.5	1	0.5
		1 24 2001	5	5	5		2.5	5	50	5	5	2.5	5	5	5	25	5	25	5			5	5	10
		3 25 2002		2	5		1	2	20	2	2	1	2	5	2	10	2		2			2	2	4
		3 28 2003		2.5			1.2	2.5	25	2.5	2.5	1.2	2.5		2.5	12	2.5		2.5		2.5	2.5	2.5	5
CC-		7 13 1989	5	6						5			5					30			5			
		8 23 1989	5							5			5		5			30			5			
		11 15 1991				6							5											
		6 17 1992	25						150	25			25	25	25	50		50			25			
	D	6 17 1992	50						300	50			50	50	50	100		100		6	50			
		9 23 1992	20		20		20	20	100	20	20	20		20		100		100	20		20	20	20	20
		12 8 1992	20		20		20	20	100		20	20				100		100	20	5	20	20	20	20
		3 17 1993			2		2	2	10	5	5	5		5	6	10	10	5	2	5	2	2	2	5
		6 8 1993	20		40		20	20	400	20	20	20	20	20		400	100	200	20		20	20	20	20
		8 25 1993	20		40		20	20	400	20	20	20	20	20	5	400	40	200	20		20	20	20	20
		2 24 1994	20		40		20	20	400	20	20	20	20	20	5	400	100	200	20		20	20	20	20
		6 13 1994	40		80		40	40	800	40	40	40	40	40		800	200	400	40		40	40	120	40
		9 9 1994	50		100	6	50	50	1000	50	50	50	50	50	50	1000	250	500	50		50	50	150	50
		12 22 1994	20		40		20	20	400	5	20	20	20	20		400	100	200	20		20	20	40	20
		3 14 1995	40		80	5	40	40	800	40	40	40	40	40		800	200	400	40	6	40	40	80	40
		6 13 1995	40	5	80		40	40	800	40	40	40	40	40	40	800	200	400	40		40	40	40	40
		9 7 1995			5		5	5	10		5	5		5		10	5	10	5		5	5	5	5
		12 15 1995	6		2		2	2	2		2	2	2				2		2		2	2	4	2
		3 1 1996	20		20	5	20	20	40	20	20	20	20	20		40	20	40	20		20	20	40	20
	D	3 1 1996	20		20	6	20	20	40	20	20	20	20	20		40	20	40	20		20	20	40	20
		6 7 1996			5		5	5	10	5	5	5				10	5		5		5	5	5	5
		9 19 1996	50	5	50		50	50	500	50	250	50	50	50	50	500	50	500	50		50	50	50	50
		11 19 1996	20		40		20	20	400		20	20	20	20	5	400	100	200	20		20	20	20	20
		12 18 1996	50	6	50		50	50	500	50	250	50	50	50	50	500	50	500	50		50	50	50	50
		5 8 1997	50	50	50	6	50	50	500	50	250	50	50	50	5	500	50	500	50	6	50	50	50	50
		7 8 1997	50	50	50		50	50	500	50	250	50	50	50	50	500	50	500	50		50	50	50	50
		7 24 1997	50	50	50	5	50	50	500	50	250	50	50	50	50	500	50	500	50		50	50	50	50
		8 6 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5	2.5	2.5	25	2.5	25	2.5	6		2.5	2.5	2.5
		8 22 1997	50	50	50		50	50	500	50	250	50	50	50	50	500	50	500	50		50	50	50	50
		9 5 1997	50	50	50	5	50	50	500	50	250	50	50	50	50	500	50	500	50	6	50	50	50	50
		9 17 1997	50	50	50	6	50	50	500	50	250	50	50	50	50	500	50	500	50		50	50	50	50
CC-		10 6 1989	1	1		1				1			1		1			5		5	1			
		11 19 1991																						
		6 15 1992	5	5					30	5			5	5	5	10		10			5			
		9 21 1992	1	1	1	6	1	1	5	1	1	1	6		1	5		5	1	5	1	1	1	1
		12 7 1992	1	1	1		1	1	5	1	1	1		1	1	5		5	1	5	1	1	1	1
		3 16 1993	2	2	2	6	2	2	10	2	5	5			2	10	10	5	2		2	2	2	5
		6 7 1993	2	2	4		2	2	40	2	2	2		2	2	40	4	20	2		2	2	2	2
	D	6 7 1993	2	2	4		2	2	40	2	2	2		20	20	40	4	20	2		2	2	2	2
		8 24 1993	2	2	4	5	2	2	40	2	2	2	2		2	40	4	20	2	6	2	2	2	2
		11 18 1993	2	2	4	5	2	2	40	2	2	2		2	2	40	10	20	2		2	2	2	2
		2 23 1994	2	2	4	4	2	2	40	2	2	2			2	40	10	20	2		2	2	4	2
		6 10 1994	2	2	4	4	2	2	40	2	2	2	5		2	40	20	20	2		2	2	6	2
		9 8 1994	2	2	4	4	2	2	40	2	2	2			2	40	10	20	2		2	2	6	2
		12 21 1994	2	2	4	4	2	2	40	2	2	2			2	40	10	20	2		2	2	4	2
	D	12 21 1994	2	2	4	4	2	2	40	2	2	2			2	40	10	20	2	6	2	2	4	2
		3 13 1995	2	2	4		2	2	40	2	2	2		2	2	40	10	20	2	56	2	2	4	2
		6 12 1995	2	2	4	4	2	2	40	2	2	2	6	2	2	40	10	20	2		2	2	4	2
	D	6 12 1995	2	2	4	4	2	2	40	2	2	2	6	2	2	40	10	20	2		2	2	4	2
		9 6 1995	5	5	5		5	5	10	5	5	5		5	5	10	5	10	5	6	5	5	5	5
		12 12 1995	2	2	2		2	2	2	2	2	2			2		2		2		2	2	4	2

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell		Date ampled	, ,- DCA	, , - CA	, , - CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis- , -DCE	trans- , -DCE	E (- utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
CC-		2 29 1996	5	5	5	5	5	5	10	5	5	5	5	5	5	10	5	10	5		5	5	10	5
		6 6 1996	5	5	5	5	5	5	10	5	5	5	5	5	5	10	5		5	5	5	5	5	5
		9 18 1996	1	1	1		1		10	1	5	1			1	10	1	10	1		1	1	1	1
		12 17 1996	1	1	1		1	5	10	1	5	1	5		1	10	1	10	1		1	1	1	1
		5 7 1997	1	1	1		1		10	1	5	1	5		1	10	1	10	1	6	1	1	1	1
		7 2 1997	1	1	1		1	1	10	1	5	1	1		6	10	1	10	1		1	1	1	1
		7 23 1997	1	1	1	6	1	1	10	1	5	1	1		6	10	1	10	1			1	1	1
		8 5 1997	1	1	1		1	1	10	1	5	1		6	1	10	1	10	1	5		1	1	1
	D	8 5 1997	1	1	1	5	1	1	10	1	5	1	1		1	10	1	10	1		6	1	1	1
		8 20 1997	1	1	1	6	1	1	10	1	5	1	1			10	1	10	1		1	1	1	1
		9 4 1997	1	1	1		1	1	10	1	5	1	1			10	1	10	1			1	1	1
		9 16 1997		1	1		1	1	10	1	5	1	1			10	1	10	1	5		1	1	1
	D	9 16 1997	1		1		1	1	10	1	5	1			1	10	1	10	1	5		1	1	1
		9 23 1998	1	5	1		1	1		1	1	1		1	1		5		1		1	1	2	1
		10 21 1998	0.5	0.5	0.5		1	0.5		0.5	0.5	0.5		0.5	0.5		2.5				0.5	0.5	1	0.5
		3 2 1999	0.5	0.5	0.5		1	0.5		0.5	0.5	0.5			0.5		2.5		0.5		0.5	0.5	1	0.5
		7 13 1999	0.5	0.5	0.5		1	0.5		0.5	0.5	0.5			0.5		2.5		0.5	56	0.5	0.5	1	0.5
		6 20 2000	0.5	0.5	0.5		0.5			0.5	0.5	0.5		0.5	0.5		2.5		0.5		0.5	0.5	1	0.5
		1 19 2001		1	1	6 5	0.5	1	10	1	1	0.5	6	1	1	5	1	5	1			1	1	5
		3 22 2002		1	1	5	0.5	1	10	1	1	0.5			1	5	1		1	5		1	1	5
		3 26 2003		1	1		0.5	1	10	1	1	0.5			1	5	1				1	1	1	
CC-		7 13 1989	1	1						1				1	1			5		6	1			
	D	7 13 1989	1	1						1				1	1			5			1			
		8 23 1989	1	1						1				1	1			5			1			
		11 20 1991																						
		6 16 1992	5	5					5	5			5	5	5			10			5			
		9 21 1992	1	1	1		1	1	5	1	1			1	1	5		5	1		1	1	1	1
	D	9 21 1992	1	1	1		1	1	5	1	1			1	1	5		5	1		1	1	1	1
		12 8 1992	1	1	1		1	1	5	1	1	1	5	1	1	5		5	1		1	1	1	1
		3 16 1993	2	2	2		2	2	10	2	5	5	6	2	2	10	10	5	2		2	2	2	5
		6 7 1993	2	2	4		2	2	40	2	2	2		2	2	40	4	20	2		2	2	2	2
		8 25 1993	2	2	4	4	2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	2	2
		11 19 1993	2	2	4		2	2	40	2	2	2		2	2	40	10	20	2		2	2	2	2
		2 23 1994	2	2	4		2	2	40	2	2	2	5	2	2	40	10	20	2		2	2	2	2
		6 10 1994	2	2	4		2	2	40	2	2	2		2	2	40	20	20	2		2	2	6	2
		9 8 1994	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	6	2
		12 22 1994			4		2	2	40		2	2					10		2			2	4	2
	D	12 22 1994	2	2	4		2	2	40	2	2	2		2	2	40	10	20	2		2	2	4	2
		3 13 1995	2	2	4		2	2	40	2	2	2		2	2	40	10	20			2	2	4	2
	D	3 13 1995	2	2	4		2	2	40	2	2	2		2	2	40	10	20	2		2	2	4	2
		6 12 1995	2	2	4		2	2	40	2		2		2	2		10	20	2		2	2	2	2
		9 6 1995	5	5	5		5	5	10	5		5	5	5	5	10	5	10	5	6	5	5	5	5
		12 16 1995	2	2	2		2	2	2	2	2	2		2	2		2		2	5	2	2	4	2
		3 1 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5	10	5		5	5	10	5
		6 6 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5		5		5	5	5	5
		9 19 1996	2	2	2		2	2	20	2	10	2	5	2	2	20	2	20	2		2	2	2	2
		5 7 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5		2.5	2.5	25	2.5	25	2.5	6	2.5	2.5	2.5	2.5
		7 2 1997	2	2	2	5	2	2	20	2	10	2	5	2	2	20	2	20	2		2	2	2	2
		7 23 1997	2	2	2	6	2	2	20	2	10	2		2	2	20	2	20	2	5		2	2	2
	D	7 23 1997	2	2	2	6	2	2	20	2	10	2		2	2	20	2	20	2	5		2	2	2
		8 5 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	6	2.5	2.5	25	2.5	25	2.5		5	2.5	2.5	2.5
		8 21 1997	2	2	2	5	2	2	20	2	10	2	6	2	2	20	2	20	2		2	2	2	2
		9 4 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5		2.5	2.5	25	2.5	25	2.5			2.5	2.5	2.5
		9 17 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5	2.5	2.5	25	2.5	25	2.5	5		2.5	2.5	2.5
		3 2 1999	0.5	0.5						0.5			5		0.5					5	0.5			
		4 8 1999	0.5	0.5	0.5		0.5	0.5		0.5	0.5		5		0.5		2.5		5	5	0.5	0.5	1	0.5
		7 14 1999	1	1			1	1		1	1	1	1		1		5		1		1	1	1	1
		6 22 2000		0.5	0.5		0.5			0.5	0.5			0.5	0.5		2.5			6	0.5	0.5	1	0.5
		1 18 2001	2.5	2.5	2.5		1.2	2.5	25	2.5	2.5	1.2	5	2.5	2.5	12	2.5	12	2.5		2.5	2.5	2.5	5
CC-		11 15 1991																						
		6 16 1992	5	5					10	5			5	5	5	10		10			5			
		9 21 1992	1	1	1		1	1	5	1	1	1	1		1	5		5	1		1	1	1	
		12 8 1992	1	1	1		1	1	5	1	1	1	1	6	1	5		5	1		1	1	1	1
		3 16 1993	2	2	2	5	2	2	10	2	5	5	2		2	10	10	5	2	6	2	2	2	5
		6 7 1993	2	2	4	6	2	2	40	2	2	2	2	5	2	40	4	20	2		2	2	2	2
		8 24 1993	2	2	4		2	2	40	2	2	2	2		2	40	4	20	2		2	2	2	2

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell		Date ampled	, ,-DCA	, , -CA	, , -CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis- , -DCE	trans- , -DCE	E (- utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
CC-		11 19 1993	2	2	4		2	2	40	2	2	2	2		2	40	10	20	2		2	2	2	2
	D	11 19 1993	2	2	4		2	2	40	2	2	2	2		2	40	10	20	2		2	2	2	4
		2 23 1994	2	2	4	6	2	2	40	2	2	2	2		2	40	10	20	2		2	2	2	2
		6 10 1994	2	2	4	6	2	2	40	2	2	2	2		2	40	20	20	2	5	2	2	6	2
		9 8 1994	2	2	4		2	2	40	2	2	2	2		2	40	10	20	2		2	2	6	2
	D	9 8 1994	2	2	4		2	2	40	2	2	2	2	5	2	40	10	20	2		2	2	6	2
		12 21 1994	2	5	4	6	2	2	40	2	2	2	2		2	40	10	20	2			2	4	2
		3 13 1995	2	2	4	6	2	2	40	2	2	2	2	5 6	2	40	10	20	2		2	2	4	2
		6 12 1995	2	2	4		2	2	40	2	2	2	2	6	2	40	10	20	2		2	2	2	2
		9 6 1995	5	5	5		5	5	10	5	5	5	5	5	5	10	5	10	5		5	5	5	5
	D	9 6 1995	5	5	5		5	5	10	5	5	5	5	5	5	10	5	10	5		5	5	5	5
		12 15 1995	2	2	2		2	2	2	2	2	2	2	5	2		2		2		2	2	4	2
		3 1 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5	10	5		5	5	10	5
		6 6 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5		5		5	5	5	5
	D	6 6 1996	5	5	5		5	5	10	5	5	5	5	5	5	10	5		5		5	5	5	5
		9 19 1996	5	5	5		5	5	50	5	25	5	5	5	5	50	5	50	5	5	5	5	5	5
		12 18 1996	2	2	2		2	2	20	2	10	2	2	6	2	20	2	20	2		2	2	2	2
		5 8 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5	5	2.5	25	2.5	25	2.5		2.5	2.5	2.5	2.5
		7 2 1997	2	2	2		2	2	20	2	10	2	2		2	20	2	20	2	6	2	2	2	2
		7 24 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5		2.5	25	2.5	25	2.5	5		2.5	2.5	2.5
		8 5 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5	5	2.5	25	2.5	25	2.5	6	5	2.5	2.5	2.5
		8 21 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5	5	2.5	25	2.5	25	2.5	5	2.5	2.5	2.5	2.5
		9 4 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5		2.5	25	2.5	25	2.5			2.5	2.5	2.5
	D	9 4 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5	5	2.5	25	2.5	25	2.5	5		2.5	2.5	2.5
		9 17 1997	2.5	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5		2.5	25	2.5	25	2.5	6		2.5	2.5	2.5
		9 28 1998	1		1	5	1	1		1	1	1	1	1	1		5		1		1	1	2	1
		10 21 1998	1	1	1	5	1	1		1	1	1	1		1		5		1		1	1	2	1
		3 4 1999	0.5	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	6	0.5		2.5		0.5		0.5	0.5	1	0.5
		7 14 1999	0.5	0.5	0.5		0.5	0.5		0.5	0.5				0.5		2.5				0.5	0.5	1	0.5
		6 22 2000	0.5	0.5	0.5		0.5			0.5	0.5	0.5	0.5		0.5		2.5		0.5		0.5	0.5	1	0.5
		1 23 2001	5	1	1		0.5	1	10	1	1	0.5				5	1	5	1	6		1	1	2
		3 22 2002		1	1	6	0.5	1	10	1	1	0.5	1		1	5	1		1		6	1	1	2
CC-		11 18 1991																						
		6 16 1992	5	5		5			10	5			5	5	5	10		10		66	5			
	D	6 16 1992	5	5		6			10	5			5	5	5	10		10			5			
		9 22 1992			1		1	1	5	1	1	1			1	5		5	1	5	1	1	1	
		12 8 1992	5	5	5	6	5	5	30	5	5	5	5	5	5	30		30	5	55	5	5	5	5
		3 17 1993		2	2		2	2	10	2	5	5				10	10	5	2		2	2	2	5
		6 7 1993		2	4		2	2	40	2	2	2	2	5	2	40	4	20	2		2	2	2	2
		8 25 1993	4	4	8		4	4	80	4	4	4	4	4	4	80	8	40	4			4	4	4
		11 19 1993		2	4	5	2	2	40	2	2	2	2	2	2	40	10	20	2		2	2	2	2
		2 24 1994		2	4		2	2	40	2	2	2	2		2	40	10	20	2		2	2	2	2
	D	2 24 1994		2	4		2	2	40	2	2	2	2		2	40	10	20	2		2	2	2	2
		6 13 1994	5	2	4		2	2	40	2	2	2		6	2	40	10	20	2		2	2	6	2
		9 9 1994	2	2	4		2	2	40	2	2	2	2	2	2	40	10	20	2	6	2	2	6	2
		12 22 1994		2	4	5	2	2	40	2	2	2	2		2	40	10	20	2		2	2	4	2
		3 14 1995		2	4	5	2	2	40	2	2	2		2	2	40	10	20	2		2	2	4	2
		6 12 1995		2	4		2	2	40	2	2	2		2	2	40	10	20	2		2	2	2	2
		9 6 1995		5	5	6	5	5	10	5		5	5	5	5	10	5	10	5		5	5	5	5
		12 15 1995		2	2		2	2	2	2	2	2			2		2		2		2	2	4	2
		3 1 1996		5	5		5	5	10	5	5	5	5	5	5	10	5	10	5	5	5	5	10	5
		6 7 1996		5	5		5	5	10	5	5	5	5	5	5	10	5		5		5	5	5	5
		9 19 1996	5	2	2		2	2	20	2	10	2		5	2	20	2	20	2	5	2	2	2	2
		12 18 1996	6	2	2		2	2	20	2	10	2		5	2	20	2	20	2	5	2	2	2	2
		5 8 1997	6	2.5	2.5		2.5	2.5	25	2.5	12	2.5	2.5	6	2.5	25	2.5	25	2.5	5	2.5	2.5	2.5	2.5
		7 2 1997		2	2		2	2	20	2	10	2	2		2	20	2	20	2		2	2	2	2
	D	7 2 1997		2	2		2	2	20	2	10	2	2		2	20	2	20	2		2	2	2	2
		7 23 1997		2	2		2	2	20	2	10	2	2		2	20	2	20	2			2	2	2
		8 6 1997		2	2		2	2	20	2	10	2	2		2	20	2	20	2			2	2	2
		8 21 1997		2	2.5		2.5	2.5	25	2	12	2.5			2	20	2.5	20	2.5		2	2.5	2.5	2.5
		9 4 1997		2.5	2.5		5	2.5	25	2.5	12	2.5	2.5		2.5	25		25				2.5	2.5	2.5
		9 17 1997		2.5	2.5			2.5	25	2.5	12	2.5	2.5		2.5	25	2.5	25	2.5	5		2.5	2.5	2.5
	D	9 17 1997			2.5		2.5	2.5	25		12	2.5					2.5		2.5			2.5	2.5	2.5
		9 23 1998		2.5	2.5			2.5		2.5	2.5	2.5			2.5	25	12.5	25		6	2.5	2.5	5	2.5
	D	9 23 1998		2.5						2.5			2.5	2.5	2.5	25		25						
		10 21 1998		2.5	2.5			2.5		2.5	2.5	2.5			2.5		12.5			5	2.5	2.5	5	2.5
		3 2 1999		0.5	0.5	6		0.5		0.5	0.5	0.5		5	0.5		2.5		5		0.5	0.5	1	0.5

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell		Date ampled	, ,- DCA	, , - CA	, , - CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis- , -DCE	trans- , -DCE	E (- utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
CC-		7 13 1999		0.5	0.5			0.5		0.5	0.5	0.5			0.5		2.5		6		0.5	0.5	1	0.5
		6 21 2000		0.5	0.5		0.5			0.5	0.5	0.5			0.5		2.5			6	0.5	0.5	1	0.5
		1 22 2001		2.5	2.5		1.2	2.5	25	2.5	2.5	1.2			2.5	12	2.5	12	2.5			2.5	2.5	5
		3 25 2002		2	2	5	1	2	20	2	2	1			2	10	2					2	2	4
DAC-		10 9 1989							1000															
		10 9 1989	200	200		200				200			5	200	200	1000		1000			200			
		6 17 1992	5	5		5			30	5					5	10		10			5			
		6 23 1992	1	1			1	1	5	5	1		5			5		5			1	1	1	
	D	6 23 1992	1	0.5			1	1	5	5	1		5			5		5			1	1	1	
		12 9 1992	500	500	500	300	500	500	3000	500	500	500	500	500	500	3000		3000	500		500	500	500	500
		3 18 1993	2		5		2	2	10	5	5	5		6		10	10				6	2	2	5
		6 8 1993	100	100	200	200	100	100	2000	100	100	100	100	100	100	2000	200	1000	100			100	100	100
		8 25 1993	200	200	400	400	200	200	4000	200	200	200	200	200	200	4000	400	2000	200			200	200	200
		11 19 1993	20	20	40	40	20	20	400	20	20	20	5		20	400	100	200	20		20	20	20	20
		2 24 1994	20	20	40	40	20	20	400	20	20	20			20	400	100	200	20		20	20	20	20
		6 13 1994	20	20	40	40	20	20	400	20	20	20	6		20	400	100	200	20		20	20	60	20
		9 9 1994	200	200	400	400	200	200	4000	200	200	200	200	200	200	4000	1000	2000	200		200	200	600	200
		12 22 1994	200	200	400	400	200	200	4000	200	200	200	200	200	200	4000	1000	2000	200		200	200	400	200
		3 14 1995	200	200	400	400	200	200	4000	200	200	200	200	200	200	4000	1000	2000	200		200	200	400	200
		6 13 1995	200	200	400	400	200	200	4000	200	200	200	200	200	200	4000	1000	2000	200		200	200	200	200
		9 7 1995	5	5	5		5	5	10	5	5	5			5	10	5	10			5	5	5	5
		12 16 1995					2	2	2	5	2	2	5		5		2				6	2	4	2
		3 4 1996	100	100	100		100	100	200	100	100	100	100		100	200	100	200	100	5	6	100	200	100
	D	3 4 1996			100		100	100	200		100	100					100		100			100	200	100
		6 7 1996	50	50	50		50	50	100	50	50	50	50	5	50	100	50		50			50	50	50
	D	6 7 1996	25	5	25		25	25	50	25	25	25		5	25	50	25		25			25	25	25
		9 19 1996	250	250	250	5	250	250	2500	250	1200	250	250	250	250	2500	250	2500	250	5		250	250	250
		12 19 1996	500	500	500	500	500	500	5000	500	2500	500	500	500	500	5000	500	5000	500	5	6	500	500	500
		5 9 1997	250	250	250	250	250	250	2500	250	1200	250	250	250	250	2500	250	2500	250	5	250	250	250	250
		7 8 1997	250	250	250	250	250	250	2500	250	1200	250	250	250	250	2500	250	2500	250		5	250	250	250
		7 24 1997	50	50	50	50	50	50	500	50	250	50	50	50	50	500	50	500	50			50	50	50
		8 6 1997	250	250	250	250	250	250	2500	250	1200	250	250	250	250	2500	250	2500	250	5	6	250	250	250
		8 22 1997	250	250	250		250	250	2500	250	1200	250	250	250	250	2500	250	2500	250			250	250	250
		9 5 1997	250	250	250		250	250	2500	250	1200	250	250	250	250	2500	250	2500	250	5		250	250	250
		9 18 1997	250	250	250	250	250	250		250	1200	250	250	250	250	2500	250	2500	250		5	250	250	250
		4 8 1999	50	50	50	50	50	50		50	50	50	50	6	50		250		50		50	50	100	50
		7 16 1999	125	125	125	125	125	125		125	125	125	125	125	125		6		125		125	125	250	125
		6 26 2000	50	50	50	50	50	50		50	50	50	50		50			50	50		50	50	100	50
		1 18 2001	250	250	250	200	120	250	250	250		120	250	250	250	1200	250	1200	250		250	250	250	500
		3 27 2002	250	250	250	250	120	250	2500	250	250	120	250		250	1200	250		250		250	250	250	500
		09 19 02	50	50	50	50	25	50	500	50	50	25			50	250	50	250	50		50	50	50	100
		03 28 03	250	250	250	250	120	250	2500	250	250	120	250		250	1200	250		250		250	250	250	500
-		7 15 1998	5		5		5	5		5	5	5		5	5		25		5	5	5	5	10	
		9 22 1998	5	5 6	5		5	5		5	5	5	5	5	5		25		5		5	5	10	5
		10 19 1998	2.5		2.5	6	2.5	2.5		2.5	2.5	2.5		2.5	2.5		12.5		2.5		2.5	2.5	5	
		3 5 1999	1.25		1.25		1.25	1.25		1.25	1.25	1.25		1.25	1.25		6.25		1.25		1.25	1.25	2.5	
		7 15 1999	2.5	2.5	2.5	6	2.5	2.5		2.5	2.5	2.5	2.5	2.5	2.5		12.5		2.5		2.5	2.5	5	
		6 23 2000	2.5	2.5	2.5		2.5			2.5	2.5	2.5	2.5	2.5	2.5		13		2.5	5	2.5	2.5	5	
		1 29 2001	5	5	5		2.5	5	50	5	5	2.5		5	5	25	5	25	5		5	5	5	6
		7 18 2001		1	1		0.5	1	10	1	1	0.5				5	66	5		6		1	1	
		3 25 2002	12	12	12		6.2	12	120	12	12	6.2	12	12	12	62	12		12	6		12	12	
		09 18 02	2	2	2		1	2	20	2	2	1		2	2	10	2			5	2	2	2	
	D	09 18 02	2	2	2		1	2	20	2	2	1	6	2	2	10	2	10		5	2	2	2	5
		03 27 03	25	25	25		12	25	250	25	25	12	25	25	25	120	25		25	6	25	25	25	
-		7 15 1998	250	6	250	6	250	250		250	250	250	5		6		1250		250		250	250	500	250
		9 23 1998	5	56	250		5	250		250	250	250			65		1250		250		250	250	500	250
		10 20 1998	6	5	125		6	125		125	125	125					625		125		125	125	250	125
		3 6 1999	6		125		6	125		125	125	125	5	66	6		625		125	6	125	125	250	125
		7 16 1999			125			125		125	125	125					6		125		125	125	250	125
		6 26 2000			100		100			100	100	100		5	5		500		100			100	200	100
		2 3 2001		6	250			250	250	250	250	120			5		5	1200	250		6	250	250	500
		7 18 2001			5			100	1000	56	100	50			5	5		6	100			100	100	200
		3 26 2002		65	250		120	250	2500	250	250	120				1200	250		250			250	250	500
		09 19 02			6			100	1000	66	100	50							100		5	100	100	200
		03 28 03	5		250		120	250	2500	250	250	120				1200	250		250			250	250	500

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell	Date ampled	, ,-DCA	, , -CA	, , -CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis- , -DCE	trans- , -DCE	E (- utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
-	7 31 1998	50	50	50		50	50		50	50	50	50	50	50		250		50		50	50	100	50
	9 22 1998	100	100	100	5	100	100		100	100	100	100	100	100		500		100		100	100	200	100
	10 20 1998	50	50	50		50	50		50	50	50	50	50	50		250		50		50	50	100	50
	3 5 1999	50	50	50		50	50		50	50	50	50	50	50		250		50		50	50	100	50
	7 15 1999	50	50	50		50	50		50	50	50	50	50	50		250		50		50	50	100	50
	6 22 2000	10	10	10	6	10			10	10	10	10		10		50		10	5	10	10	20	10
	1 29 2001	50	50	50	6	25	50	500	50	50	25	50	50	50	250	50	250	50			50	50	100
	7 19 2001		50		5	25	50	500	50	50	25	50		50	250	50	250	50			50	50	100
	3 26 2002	5	50	50		25	50	500	50	50	25	50	50	50	250	50		50		50	50	50	100
	09 19 02		5		6	5	10	100	10	10	5			10	50	10	50	10	5	10	10	10	20
-	7 14 1998	55	25		5	25	25		25	25	25	25		66		125		25		25	25	50	25
	9 22 1998						10		10	10	10			5		50		10	6	10	10	20	10
	10 20 1998	56				56	10			50	10					50		10		10	10	20	10
	3 4 1999	50	50	50		50	50		50	50	50	50	6	5		250		50		50	50	100	50
	7 15 1999				5		10		10	10	10			6		5		10	5	10	10	20	10
	6 22 2000		5	5		5			5	5	5					25		5		5	5		5
	1 29 2001		50	50			50	500	50	50	25				250	50	250	50		50	50	50	100
	7 17 2001		5	6	5		5	50	5	5	2.5			5	25	6	25	5			5	5	10
	3 26 2002		25	25			25	250	25	25	12		6		120	25		25		25	25	25	50
	09 18 02		5		66	6	5	50	5	5	2.5				25	5	25	5		5	5	5	10
	03 27 03	5	25				25	250	25	25	12				120	25		25		25	25	25	50
-5	7 14 1998	25	25	25	6	25	25		25	5	25	25	25	25		125		25		25	25	50	25
	9 22 1998	12.5	12.5	12.5		12.5	12.5		12.5	12.5	12.5		12.5	12.5		62.5		12.5	5	12.5	12.5	25	12.5
	10 19 1998	25	25	25	5	25	25		25	25	25		25	25		125		25	5	25	25	50	25
	3 4 1999	50	50	50	5	50	50		50	50	50	5	50	50		250		50	50	50	50	100	50
	7 14 1999	50	50						50			50	50	50						50			
	7 15 1999	2.5	2.5	2.5	6	2.5	2.5		2.5	2.5	2.5	56	2.5	2.5		12.5		2.5		2.5	2.5	2.5	2.5
	6 22 2000	13	13	13	65	13			13	13	13	13	13	13		63		13		13	13	25	13
	1 23 2001	50	50	50	6	25	50	500	50	50	25	5	50	50	250	50	250	50		50	50	50	100
	7 17 2001	5	10		6		10	100	10	10	5			10	50	10	50	10			10	10	20
	3 26 2002	50	50	50	5	25	50	500	50	50	25		50	50	250	50		50		50	50	50	100
	09 18 02	5	25	5	6	5	25	250	25	25	12	5		25	120	25	120	25		25	25	25	50
	03 28 03	100	100	100	6	50	100	1000	100	100	50	100		100	500	100		100		100	100	100	200
-6	7 14 1998	2.5	2.5	2.5	6	2.5	2.5		2.5	2.5	2.5	55		2.5		12.5		2.5		2.5	2.5	5	2.5
	9 22 1998	2.5	2.5	2.5		2.5	2.5		2.5	2.5	2.5	6	2.5	2.5		12.5		2.5		2.5	2.5	5	2.5
	10 19 1998	2.5	2.5	2.5		2.5	2.5		2.5	2.5	2.5	5	2.5	2.5		12.5		2.5		2.5	2.5	5	2.5
	3 4 1999	2.5	2.5	2.5		2.5	2.5		2.5	2.5	2.5	6	2.5	2.5		12.5		2.5		2.5	2.5	5	2.5
	6 22 2000	2.5	2.5	2.5	2.5	2.5			2.5	2.5	2.5		2.5	2.5				2.5	5	2.5	2.5	5.1	2.5
	1 29 2001	5	5	5		2.5	5	50	5	5	2.5		5	5	25	5	25	5			5	5	10
	7 17 2001		1	1		0.5	1	10	1	1	0.5	5	1	1	5	1	5	1	55	5	1	1	2
	3 26 2002	2	2	2	6	1	2	20	2	2	1		6	2	10	2		2	6	2	2	2	4
	09 18 02		1	1		0.5	1	10	1	1	0.5		1	1	5	1	5	1	5	1	1	1	2
	03 26 03	5	5	5	6	2.5	5	50	5	5	2.5		5	5	25	5		5	6	5	5	5	10
-	7 14 1998						12.5			12.5	12.5	6				62.5		12.5	5	12.5	12.5	25	12.5
	9 22 1998	6	12.5			6	12.5			12.5	12.5					62.5		12.5		12.5	12.5	25	12.5
	10 20 1998		10				10			10	10			65		50		10		10	10		10
	3 5 1999		12.5				12.5		6	12.5	12.5		5	5		62.5		12.5		12.5	12.5	25	12.5
	7 15 1999	6	12.5	12.5		6	12.5			12.5	12.5		6	5				12.5	5	12.5	12.5	25	12.5
	6 23 2000	10	10	10	5	10			10	10	10	10				50		10		10	10	20	10
	1 22 2001		25	25	6	12	25	250	25	25	12	5 5	6		120	25	120	25			25	25	50
	7 18 2001		5		56	5	5	50	5	5	2.5				25	5	25	5		5 6	5	5	10
	3 26 2002	5	25	25		12	25	250	25	25	12	25		25	120	25		25	6	25	25	25	50
	09 18 02		5	6		6	5	50	5	5	2.5			5	25	5	25	5		5	5	5	10
	03 27 03		25	25	56	12	25	250	25	25	12	25			120	25		25		25	25	25	50
-	7 15 1998	6				6	25		6	25	25					125		25	5	25	25	50	25
	9 22 1998		12.5	12.5			12.5			12.5	12.5		5			62.5		12.5	6	12.5	12.5	25	12.5
	10 20 1998		10	10			10			10	10	10		5		50		10		10	10	20	10
	3 5 1999	5	12.5			5	12.5			12.5	12.5					62.5		12.5		12.5	12.5	25	12.5
	7 15 1999	5	12.5		5	5	12.5			12.5	12.5	6				62.5		12.5		12.5	12.5	25	12.5
	6 23 2000	5	13							13	13	13		56		63		13		13	13	25	13
	1 25 2001		50	50		25	50	500	50	50	25	50	6	5	250	50	250	50	5		50	50	100
	7 18 2001	5	10	6			10	100		10	5	6		5	50	10	50	10	5	6	10	10	20

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell	Date ampled	, ,-DCA	, , -CA	, , -CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis- , -DCE	trans- , -DCE	E (- utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
-	03 26 02		50	50		25	50	500		50	25	50		55	250	50		50	6	50	50	50	100
	03 28 03	6	50	50		25	50	500		50	25	50		6	250	50		50		50	50	50	100
-	7 14 1998	1	1	1		1	1		1	1	1		1			5				1	1	2	1
	9 22 1998	1	1	1		1	1		1	1	1		1	1		5			5	1	1	1	1
	10 19 1998	2.5	2.5	2.5	5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	2.5		12.5		5		2.5	2.5	5	2.5
	3 4 1999	5	5	5		5	5		5	5	5	5	5	5		25		5	6	5	5	10	5
	7 14 1999	5	5	5		5	5		5	5	5	5	5	5		25		5		5	5	10	5
	6 23 2000	5	5	5		5			5	5	5	5	5	5		25		5		5	5	10	5
	1 29 2001	12	12	12		6.2	12	120	12	12	6.2	12	12	12	62	12	62	12	5		12	12	25
	3 26 2002	5	5	5	5	2.5	5	50	5	5	2.5	5		5	25	5		5	6	5	5	5	10
	3 26 2003	25	25	25		12	25	250	25	25	12	25		25	120	25		25		25	25	25	50
-	3 3 1999	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5		0.5	0.5		2.5				0.5	0.5	1	5
	7 13 1999	0.5	0.5	0.5	5	0.5	0.5		0.5	0.5	0.5		0.5	0.5		2.5				0.5	0.5	1	
	6 20 2000	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5		0.5	0.5		2.5				0.5	0.5	1	0.5
	1 19 2001	12	12	12	12.5	6.2	12	120	12	12	6.2		12	12	62	12	62	12	5		12	12	25
	5 10 2001	1		1	1	0.5		5	1	1	0.5		1	1	5	E			6	1	1	1	
	7 18 2001	1	1	1	1	0.5	1	10	1	1	0.5		1	1	5	6	5		6	1	1	1	
	3 21 2002	1	1	1	1	0.5	1	10	1	1	0.5		1	1	5	1				5 5	1	1	
	09 16 02	1	1	1	1	0.5	1	10	1	1	0.5		1	1	5	1	5				1	1	5
	03 26 03	1	1	1	1	0.5	1	10	1	1	0.5		1	1	5	1				5	1	1	5
-	3 3 1999	1.25	1.25	1.25	1.25		1.25		1.25	1.25			1.25	1.25		6.25				1.25	1.25	2.5	1.25
	7 13 1999	1.25	1.25	1.25	5	1.25	1.25		1.25	1.25		5	1.25	1.25		6.25				1.25	1.25	2.5	1.25
	6 20 2000	2.5	2.5	2.5	2.5	2.5			2.5	2.5	2.5		2.5	2.5		13		2.5		2.5	2.5	2.5	2.5
	1 24 2001	10	10	10	10	5	10	100	10	10	5		10	10	50	10	50	10			10	10	20
	7 17 2001	2	2	2	2	1	2	20	2	2			2	2	10	5	10	5			2	2	4
	3 22 2002	5	5	5	5	2.5	5	50	5	5			5	5	25	5		5		5	5	5	10
	09 17 02	1	1	1	1	0.5	1	10	1	1			1	1	5	1	5		5	1	1	1	2
	03 26 03	10	10	10	10	5	10	5	10	10			10	10	50	10		5		10	10	10	20
-	3 3 1999	10	10	10		10	10		20	10	10		10	10		50		5		10	10	20	10
	7 13 1999	10	10	10		10	10		20	10	10		10	10		50		10	6	10	10	20	10
	6 21 2000	10	10	10	5	10			10	10	10		10	10		50				10	10	20	10
	1 22 2001	25	25	25		12	25	250	25	25	12	5	25	25	120	25	120	25		25	25	25	50
	7 17 2001	5	5	5	6	2.5	5	50	5	5			5	5	25	5	25			6	5	5	10
	3 25 2002	20	20	20		10	20	200	20	20	10		20	20	100	20		20	5		20	20	40
	09 18 02	5	5	5		2.5	5	50	5	5	5	6	5	5	25	5	25			5	5	5	10
-	3 3 1999	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	6		0.5	0.5		2.5		5		0.5	0.5	1	0.5
	7 13 1999	0.5	0.5	0.5	6	0.5	0.5		0.5	0.5	5		0.5	0.5		2.5		5 6	6	0.5	0.5	1	0.5
	6 21 2000	0.5	0.5	0.5	0.5	0.5			0.5	0.5			0.5	0.5		2.5				0.5	0.5	1	0.5
	5 10 2001	1	6	1	1	1	2	20	2	6			1	1	10	6		2	6	1	1	2	2
	7 17 2001	1	1	1		0.5	1	10	1	1			1	1	5		5			1	1	1	2
	3 22 2002	1	1	1		0.5	1	10	1	1			1	1	5					1	1	1	2
-	3 3 1999	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5		6	0.5	0.5		2.5		5	5	0.5	0.5	1	0.5
	7 13 1999	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5			0.5	0.5		2.5				0.5	0.5	1	0.5
	6 21 2000	0.5	0.5	0.5	0.5	0.5			0.5	0.5		5	0.5	0.5		2.5					5		0.5
	1 25 2001	1	1	1		0.5	1	10	1	1		5	1	1	5		5	1		6	6		2
	7 18 2001	1	1	1	1	0.5	1	10	1	1	5	5	1	1	5		5			5	1	1	2
	3 22 2002	1	1	1	1	0.5	1	10	1	1			1	1	5	1				6	1	1	2
	09 16 02	1	1	1	1	0.5	1	10	1	1				1	5	1	5				1	1	2
	03 26 03	1	1	1	1	0.5	1	10	1	1			1	1	5 6	1		6			1	1	2
- 5	3 3 1999	0.5	0.5	0.5	6	0.5	0.5		0.5	0.5	0.5		0.5	0.5		2.5		0.5		0.5	0.5	1	0.5
	7 13 1999	0.5	0.5	0.5	5	0.5	0.5		0.5	0.5	0.5		0.5	0.5		2.5		0.5		0.5	0.5	1	0.5
	6 22 2000	0.5	0.5	0.5		0.5			0.5	0.5	0.5		0.5	0.5		2.5		0.5	5	0.5	0.5		0.5
	1 25 2001	1	1	1		0.5	1	10	1	1	0.5		1	1	5		5	1		5	6		2
	7 19 2001	1	1	1	5	0.5	1	10	1	1	0.5	5	1	1	5		5	1	5		1	1	2
	3 22 2002	1	1	1	6	0.5	1	10	1	1	0.5	5		1	5	1		1			1	1	2
	09 17 02	1	1	1	6	0.5	1	10	1	1	0.5	6 5	5	1	5		5	1	5		1	1	2
	03 26 03	1	1	1	5	0.5	1	10	1	1	0.5			1	5	1		1	6	5	1	1	2
- 6	3 6 1999	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5		2.5			5	0.5	0.5	1	0.5
	7 16 1999	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5		2.5				0.5	0.5	1	0.5
	6 22 2000			0.5		0.5				0.5	0.5					2.5		0.5			0.5	1	0.5

Table V
Summary of Historical Volatile Organic Compounds
Boeing Realty Corporation Former C-6 Facility

ell		Date ampled	, ,- DCA	, , - CA	, , - CA	, -DCE	, -DCA	Isopropyl en ene	Acetone	en ene	Car on disulfide	Car on tetra chloride	Chlorlo form	cis- , -DCE	trans- , -DCE	E (- utanone)	ethylene chloride	l	CE	CE	oluene	Ethyl en ene	ylenes (total)	richloro fluoro methane
- 6		6 26 2000	0.5	0.5						0.5			0.5	0.5	0.5						6			
		1 25 2001	1	1	1		0.5	1	10	1	1	0.5		1	1	5	1	5		5		6		2
		3 21 2002	1	1	1	1	0.5	5		1	1	0.5		1	1	5	1			6		1	1	2
		09 16 02	1	1	1	1	0.5	1	10	1	1	0.5	1	1	1	5		5			1	1	1	2
-		5 20 1999	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	5	0.5	0.5		2.5		0.5		0.5	0.5	1	0.5
		7 14 1999	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	6	0.5	0.5		2.5		0.5		0.5	0.5	1	0.5
		1 14 2000	0.5	0.5	0.5	0.5	0.5			0.5	0.5	0.5	6	0.5	0.5		2.5		0.5	5	1	0.5	1	0.5
L-		7 17 2001	1	1	1	1	0.5		10		1	0.5	1		1	5		5	1		6	1	1	2
	D	7 17 2001	5	1	1	1	0.5		10		1	0.5	1		1	5	6	5	1		6	1	1	2
L		3 26 2002	12	12	12	12	6.2	12	120	12	12	6.2	12	12	12	62	12				12	12	12	25
		3 27 2003	12	12	12	6	6.2	12	120	12	12	6.2	12		12	62	12				12	12	12	25
	D	3 27 2003	12	12	12	6	6.2	12	120	12	12	6.2	12		12	62	12				12	12	12	25
		3 21 2002	25	25	25	25	12	25	250	25	25	12		25	25	120	25		55		25	25	25	50
		3 27 2002	12	12	12		6.2	12	120	12	12	6.2	5	12	12	62	12		12		12	12	12	25
		3 22 2002	1	1	1	5	0.5	1	10	1	1	0.5		5	1	5	1				6	1	1	2
		3 28 2003	2	2	2		1	2	20	2	2	1	6	5	2	10	2		2		2	2	2	4
	D	3 28 2003	2	2	2	2	1	2	20	2	2	1	6		2	10	2		6	5	2	2	2	4

1 1-DC - 1 1-D c e e
1 1 1- C - 1 1 1- c e e
1 1 2- C - 1 1 2- c e e
1 1-DC - 1 1-D c e e e
1 2-DC - 1 2-D c e e e
c -1 2-DC - c -1 2-D c e e e
- e -e - e e
C - e c e e e
C - c e e e
D D c e e
c e e

C
D e 05 27 03

e c c. e 12 12 5 27 2003

Table VI
Summary of Monitored Natural Attenuation Parameters
Boeing Realty Corporation Former C-6 Facility

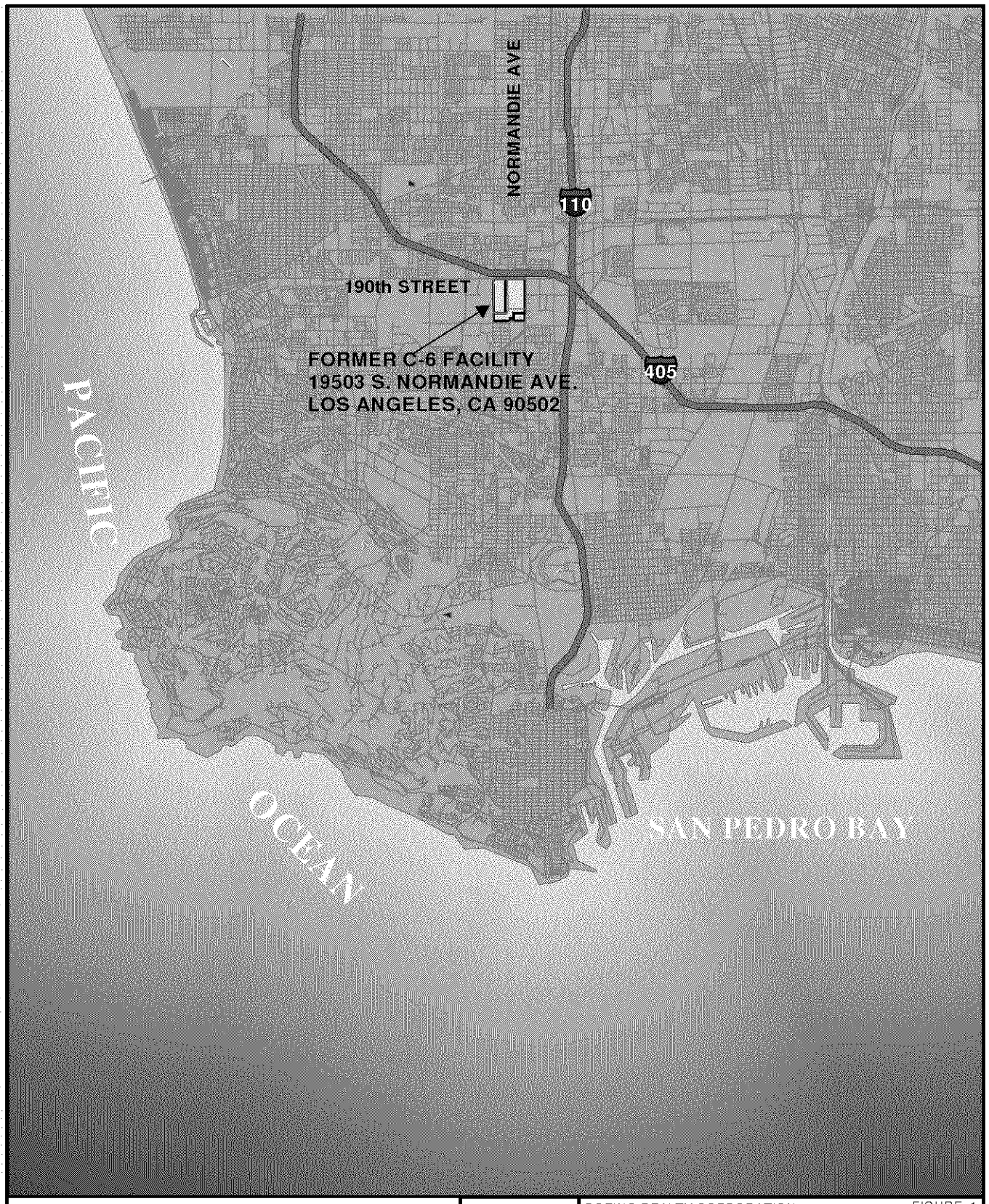
ell	Date ampled	D mg L	R m	pH	Conductivity ms cm	emperature C
WCC-3S	3 21 2002	0.10	-182	6.61	2.86	23.88
	3 27 2003	4.99	-85	6.57	1.35	26.63
WCC-4S	3 26 2002	3.63	-11	7.98	1.99	23.50
WCC-5S	3 21 2002	4.83	61	6.98	1.37	23.19
	9 16 2002	5.02	74	7.05	1.93	23.56
	3 25 2003	3.65	38	7.35	1.13	23.09
WCC-6S	3 26 2002	2.12	-137	7.89	2.20	24.00
	3 25 2003	3.16	-208	7.06	1.71	23.44
WCC-7S	3 25 2002	4.03	55	7.16	1.23	23.47
	3 28 2003	9.63	175	7.32	1.79	21.30
WCC-9S	3 22 2002	3.09	55	7.04	1.34	23.25
	3 26 2003	4.15	15	7.29	1.58	23.13
WCC-12S	3 25 2002	4.80	61	7.18	1.21	23.56
D C- 1	3 27 2002	5.77	82	7.16	2.00	23.40
	9 19 2002	5.58	60	7.34	2.33	23.87
	3 28 2003	9.98	86	7.16	2.44	22.10
W-1	3 25 2002	6.32	98	6.93	5.20	23.47
	9 18 2002	2.80	59	7.26	3.25	23.54
	3 27 2003	6.62	80	6.65	5.37	23.52
W-2	3 26 2002	2.28	-113	7.79	2.84	22.50
	9 19 2002	0.16	-169	6.74	3.43	23.91
	3 28 2003	11.59	--	6.94	2.69	22.80
W-4	3 26 2002	6.01	33	8.02	1.84	23.00
	9 18 2002	6.17	82	7.43	1.96	24.76
	3 27 2003	5.10	113	6.58	1.41	22.94
W-5	3 26 2002	6.53	-4	8.29	0.83	22.90
	9 18 2002	4.57	71	7.53	1.31	23.78
	3 28 2003	10.16	152	7.58	0.65	21.80
W-6	3 26 2002	7.37	139	6.56	1.62	22.60
	9 18 2002	4.52	89	7.50	1.93	22.76
	3 26 2003	6.07	120	7.42	1.61	22.84
W-7	3 26 2002	4.90	63	8.05	1.74	23.30
	9 18 2002	3.78	90	7.50	1.92	24.39
	3 27 2003	6.06	151	6.61	1.61	23.51
W-8	3 26 2002	2.99	-52	7.85	1.64	23.60
	3 28 2003	12.51	--	7.06	1.65	23.10
W-9	3 26 2002	6.21	36	8.15	1.29	23.40
	3 26 2003	5.66	124	7.45	1.52	23.64
W-10	3 21 2002	5.14	26	7.17	1.54	23.85
	9 16 2002	4.14	52	7.31	1.89	24.64
	3 26 2003	5.34	66	7.08	1.57	23.54
W-11	3 22 2002	2.27	56	6.92	1.81	23.60
	9 17 2002	2.76	63	7.08	1.92	25.07
	3 26 2003	4.46	54	7.05	1.65	23.72
W-14	3 22 2002	5.26	38	6.79	3.30	23.43
	9 16 2002	5.52	77	7.04	3.41	24.68
	3 26 2003	5.57	64	6.97	3.40	23.81
W-15	3 22 2002	3.29	-83	7.16	0.94	23.78
	9 17 2002	4.49	-5	7.44	1.40	24.94
	3 26 2003	4.34	7	7.22	1.17	24.32
-3	3 26 2002	7.77	115	7.58	3.30	23.40
	3 27 2003	7.32	83	6.36	2.75	23.18
W-09	3 21 2002	0.25	36	6.60	1.81	23.53
W-19	3 22 2002	4.39	24	7.04	1.56	23.47
	3 28 2003	12.38	142	7.29	1.65	23.60

e
D D e e
e c e
e e

c c e e e œ e e
C De ee ce

C
D e 05 27 03

FIGURES



N

2 1 0 2 Miles

28882-002

HALEY & ALDRICH

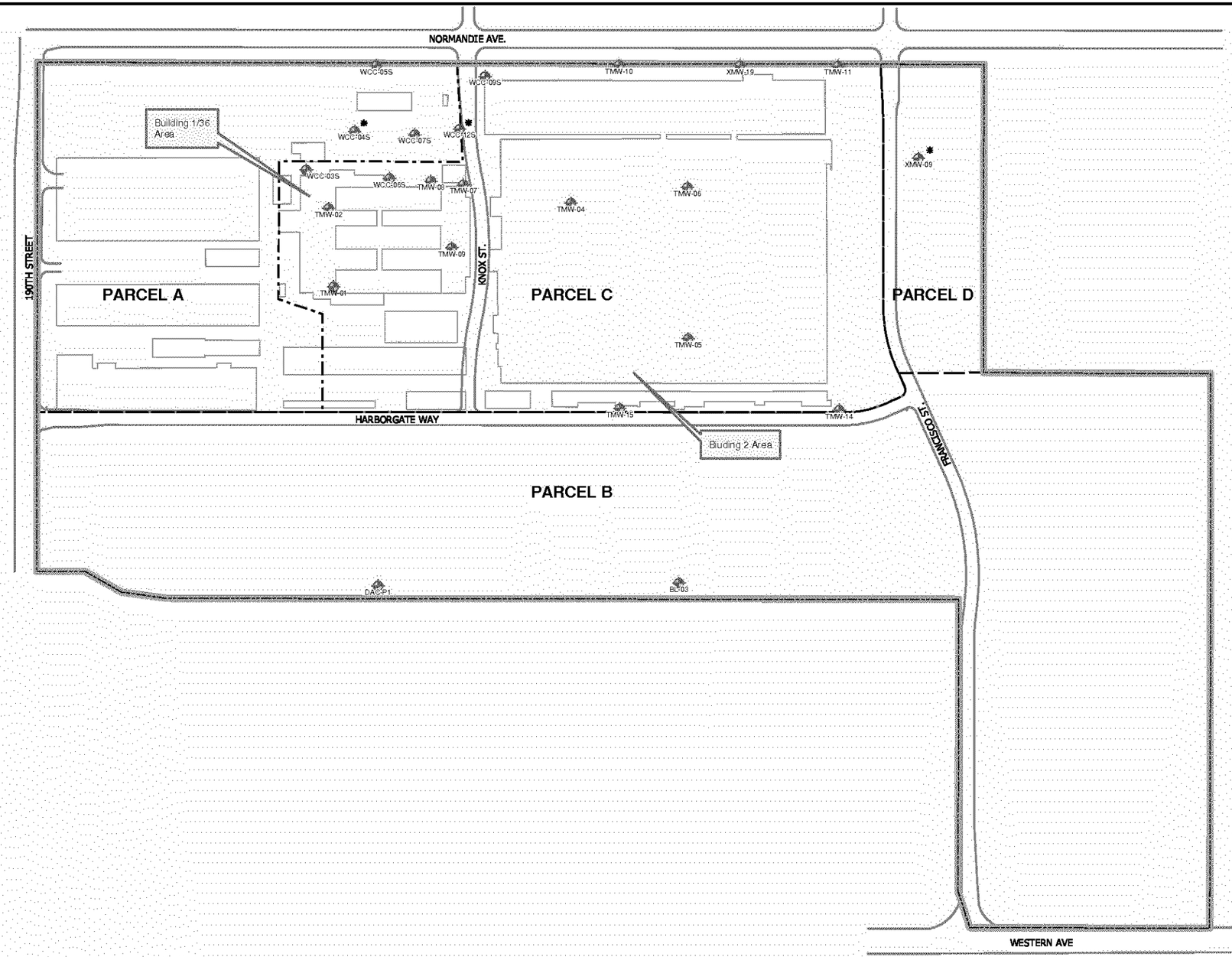
UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE 1

SITE LOCATION PLAN

SCALE AS SHOWN



Legend

WCC-6S — Groundwater Monitoring Well Location

TMW-02 — Groundwater Monitoring Well Sampled in March 2003

Property Boundary

Parcel Boundary

Former Building Location

* Groundwater Monitoring Well Inaccessible During Annual Sampling Event

N

All Locations and Dimensions are Approximate

0 250 500 1,000 Feet

HALEY & ALDRICH

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

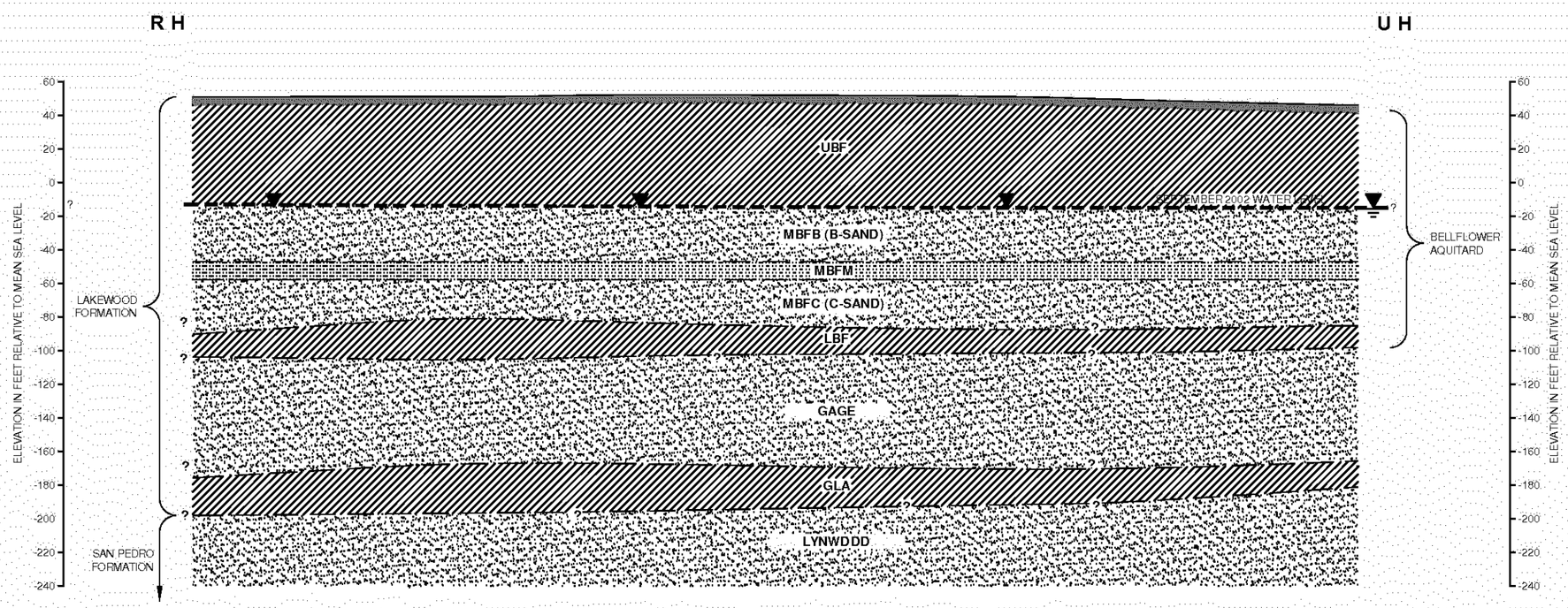
FIGURE 2

SITE PLAN SHOWING GROUND-WATER MONITORING WELL LOCATIONS - MARCH 2003

SCALE AS SHOWN

MAY 2003

28882-101

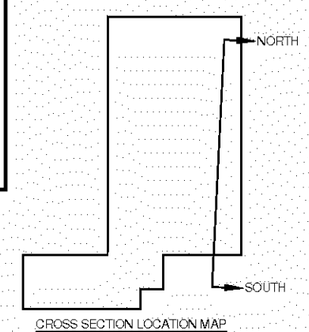


STRATIGRAPHIC UNITS

UBF	UPPER BELLFLOWER AQUITARD
MBFB	MIDDLE BELLFLOWER B SAND
MBFM	MIDDLE BELLFLOWER MUD
MBFC	MIDDLE BELLFLOWER C SAND
LBF	LOWER BELLFLOWER AQUITARD
GAGE	GAGE AQUIFER
GLA	GAGE-LYNWOOD AQUITARD
LYNWOOD	LYNWOOD AQUIFER

LEGEND

- HISTORIC - ARTIFICIAL FILL, SLABS, AND PAVEMENT OF VARYING DEPTHS
- HYDROSTRATIGRAPHIC UNIT BOUNDARY, DASHED WHERE INFERRED
- WATER LEVEL
- PREDOMINANTLY FINE-GRAINED CLAY, SILT, CLAYEY SAND
- PREDOMINANTLY SAND
- MUD



CROSS SECTION LOCATION MAP

0 400 800 FEET

APPROXIMATE HORIZONTAL SCALE

ALL DIMENSIONS AND LOCATIONS APPROXIMATE

HALEY & ALDRICH

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

EI G REAL C R RA I
F R ER C-6 FACILI
L A GELE , CALIF R IA

FIGURE

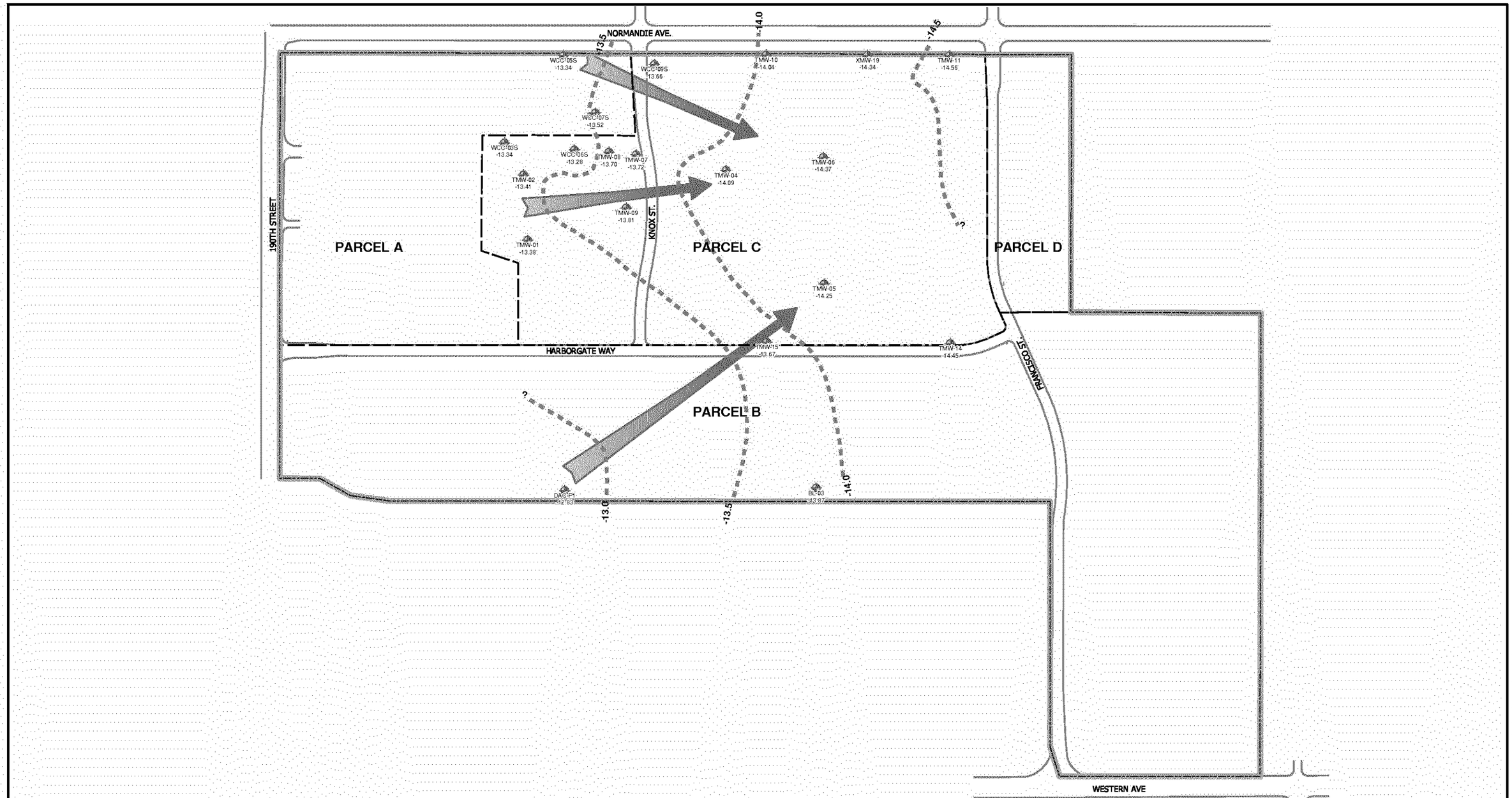
GE ERALI ED GE L GIC
CR - EC I

CALE A H

A

NOTE:
DATA FOR XLW-01 AND XEB-08 IS FROM DAMES AND MOORE, 1998 GROUNDWATER REMEDIAL INVESTIGATION REPORT

5 -AC



Legend

TMW-02 Groundwater Gauging Locations

Property Boundary

Parcel Boundary

Groundwater Elevation Contour (feet)

Groundwater Elevation Flow Direction

N

All Locations and Dimensions are Approximate

0 250 500 1,000 Feet

HALEY & ALDRICH

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE 4

GROUNDWATER ELEVATION MAP - MARCH 2003

SCALE AS SHOWN

MAY 2003

28882-101

FIGURE 5a - Groundwater Elevation Hydrographs
Former C-6 Facility
Los Angeles, California

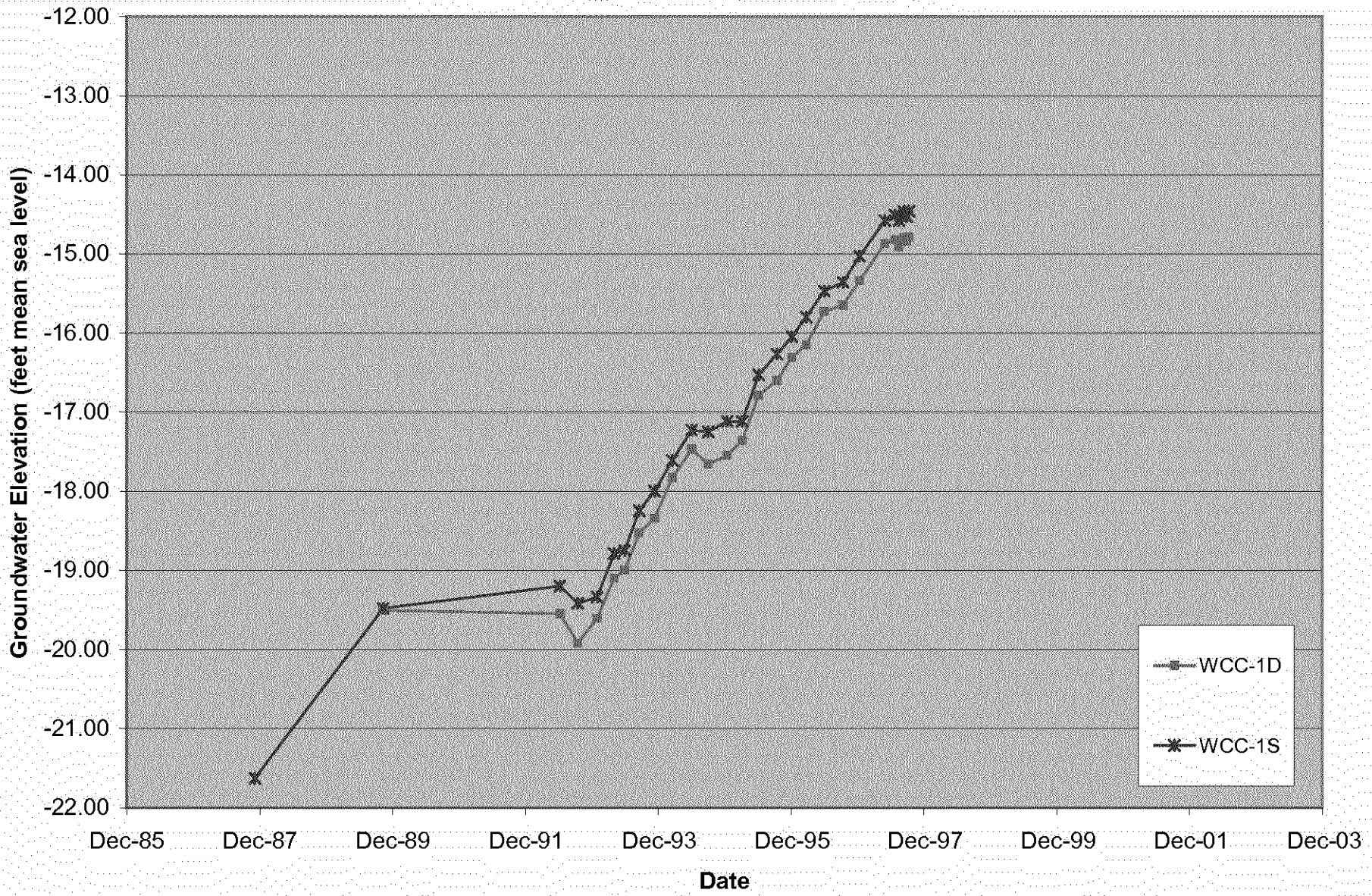


FIGURE 5 - Groundwater Elevation Hydrographs
Former C-6 Facility
Los Angeles, California

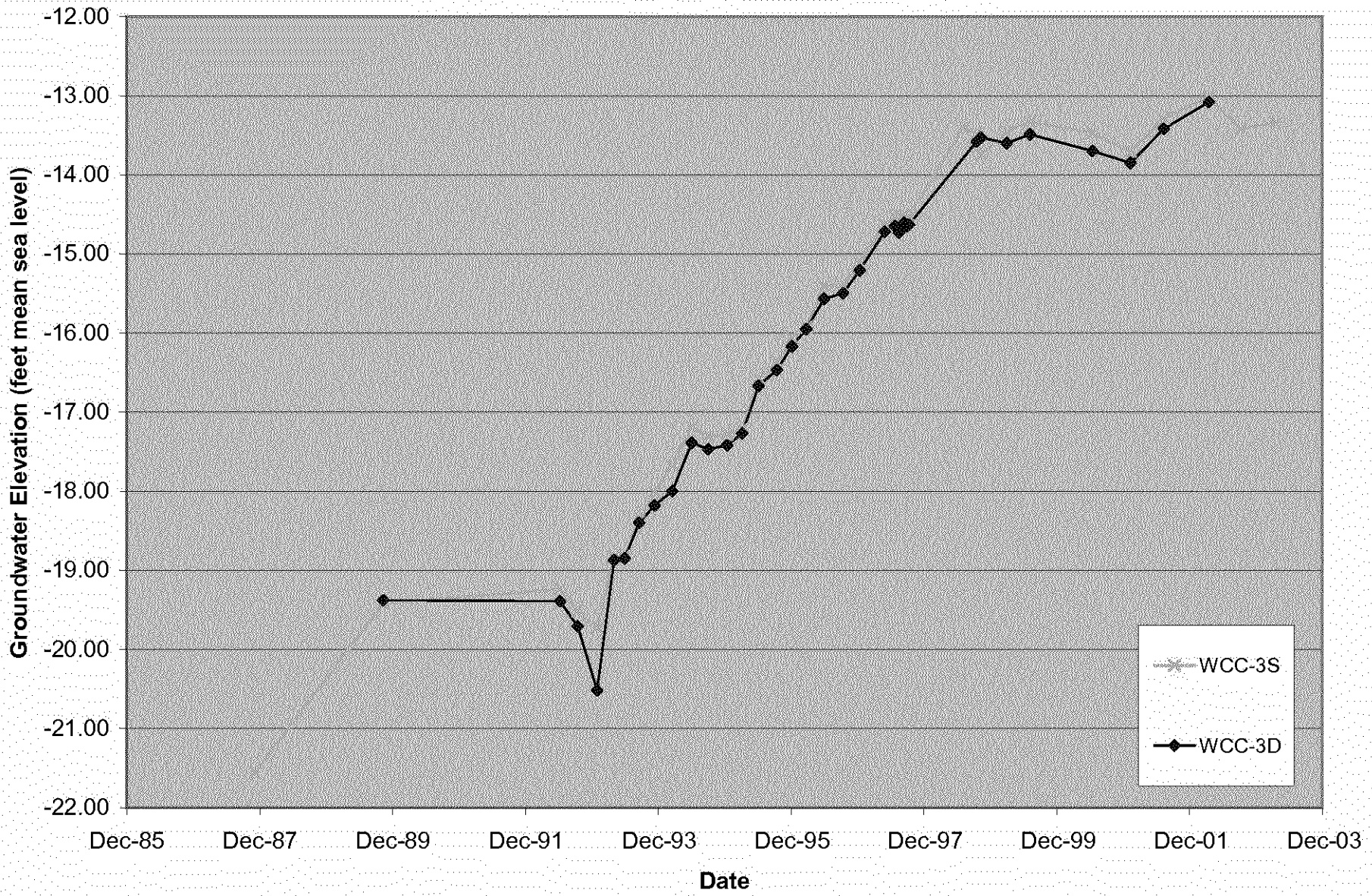


FIGURE 5c - Groundwater Elevation Hydrographs
Former C-6 Facility
Los Angeles, California

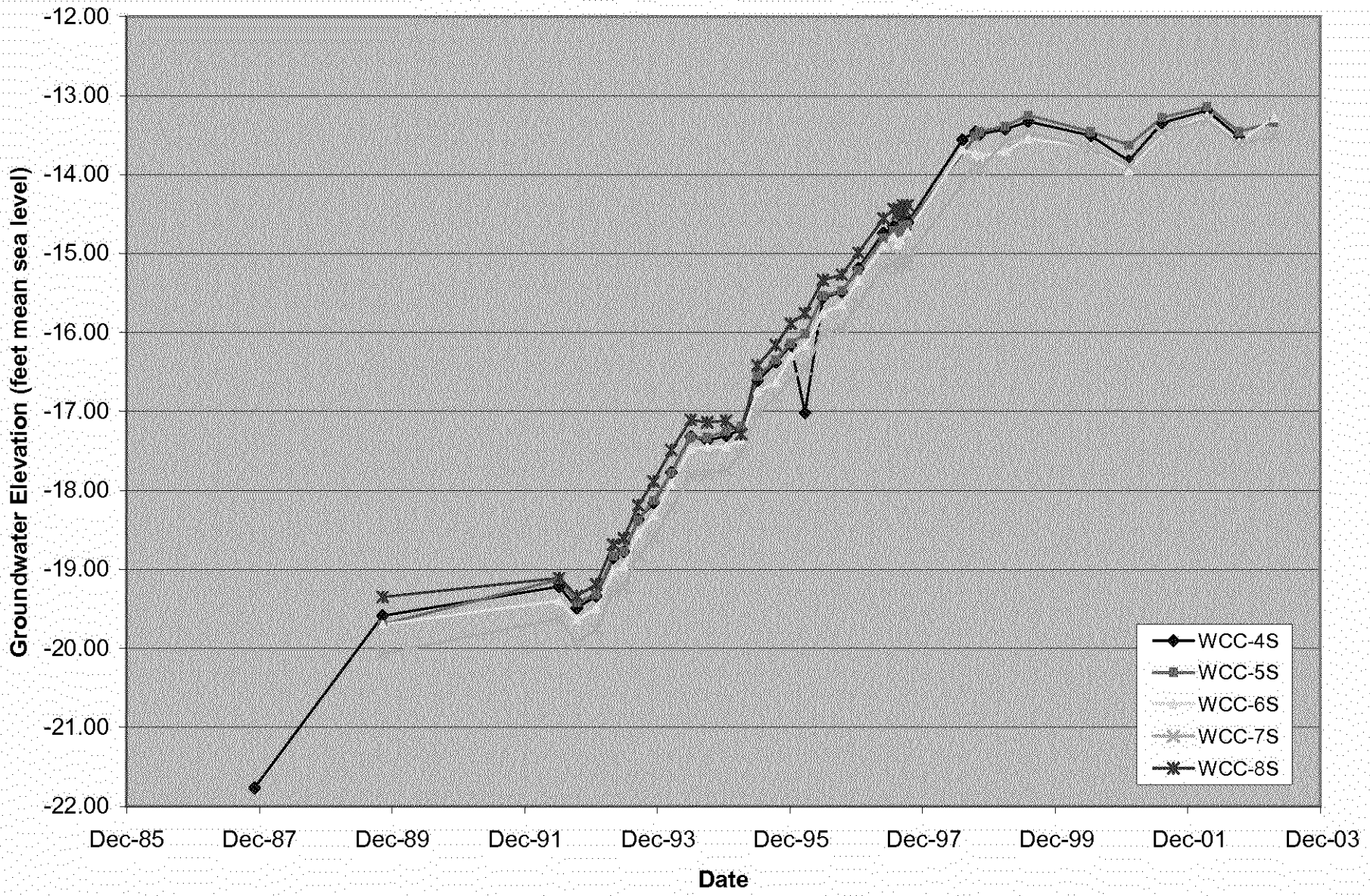


FIGURE 5d - Groundwater Elevation Hydrographs
Former C-6 Facility
Los Angeles, California

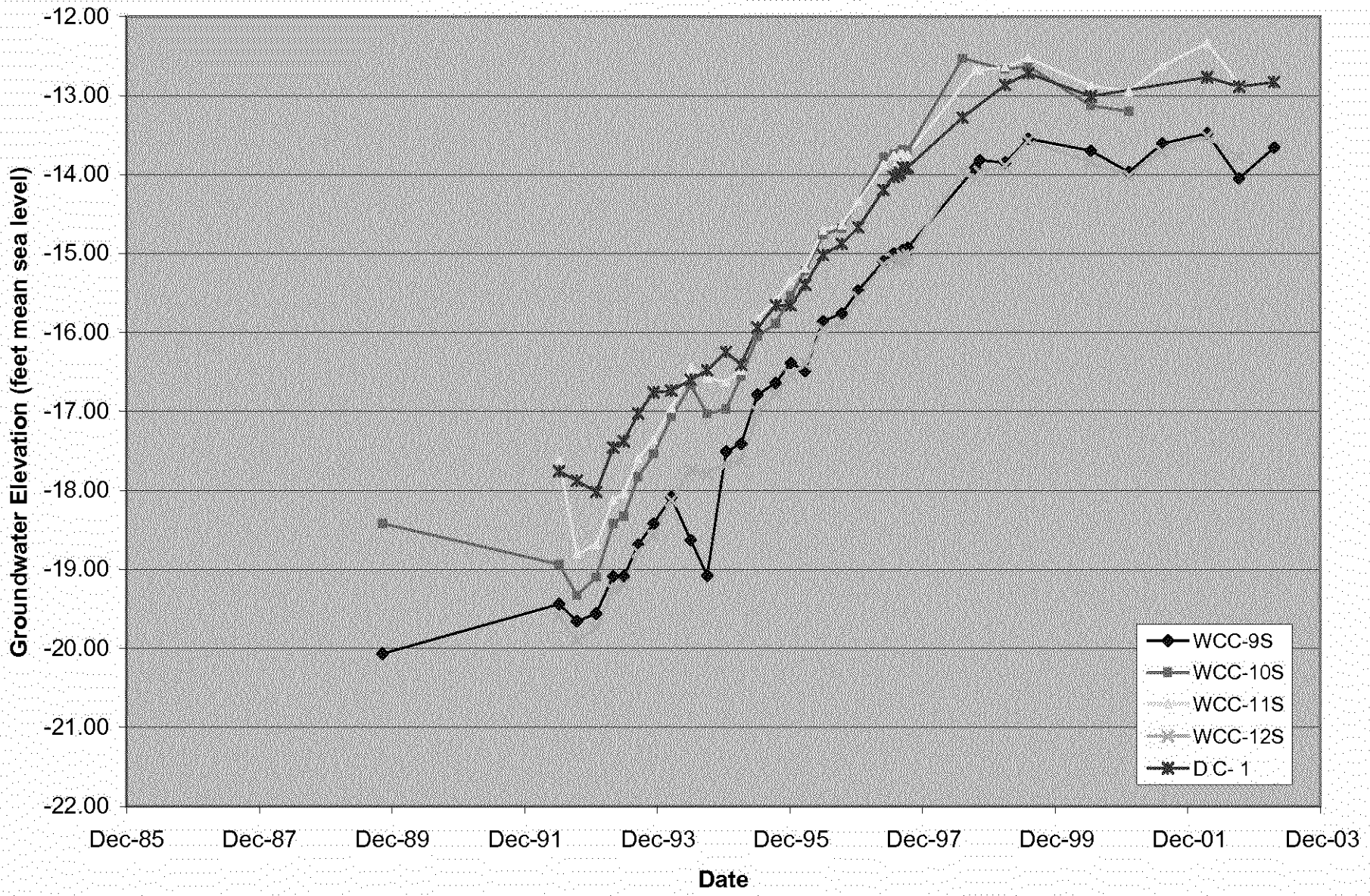


FIGURE 5e - Groundwater Elevation Hydrographs
Former C-6 Facility
Los Angeles, California

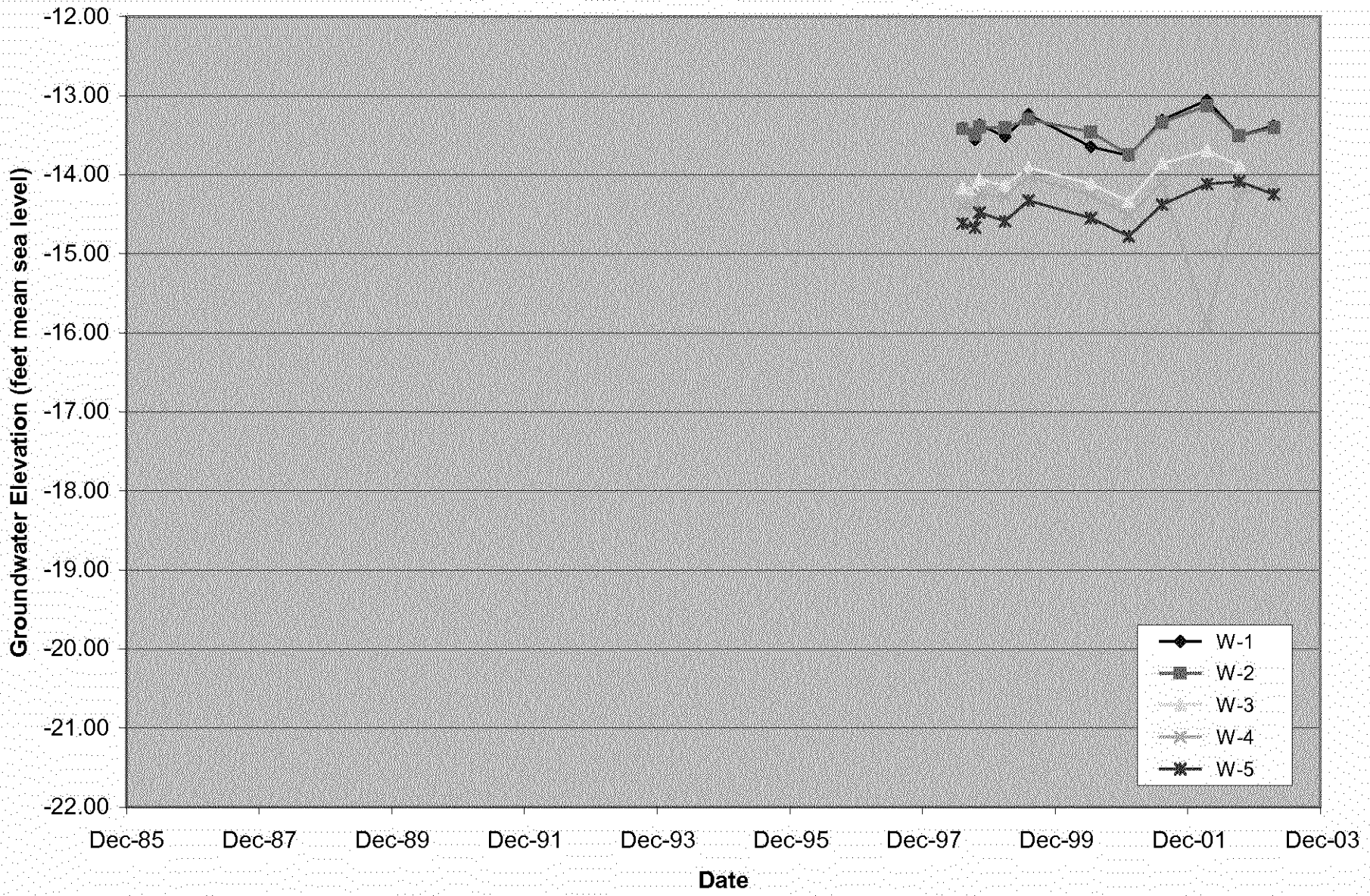


FIGURE 5f - Groundwater Elevation Hydrographs
Former C-6 Facility
Los Angeles, California

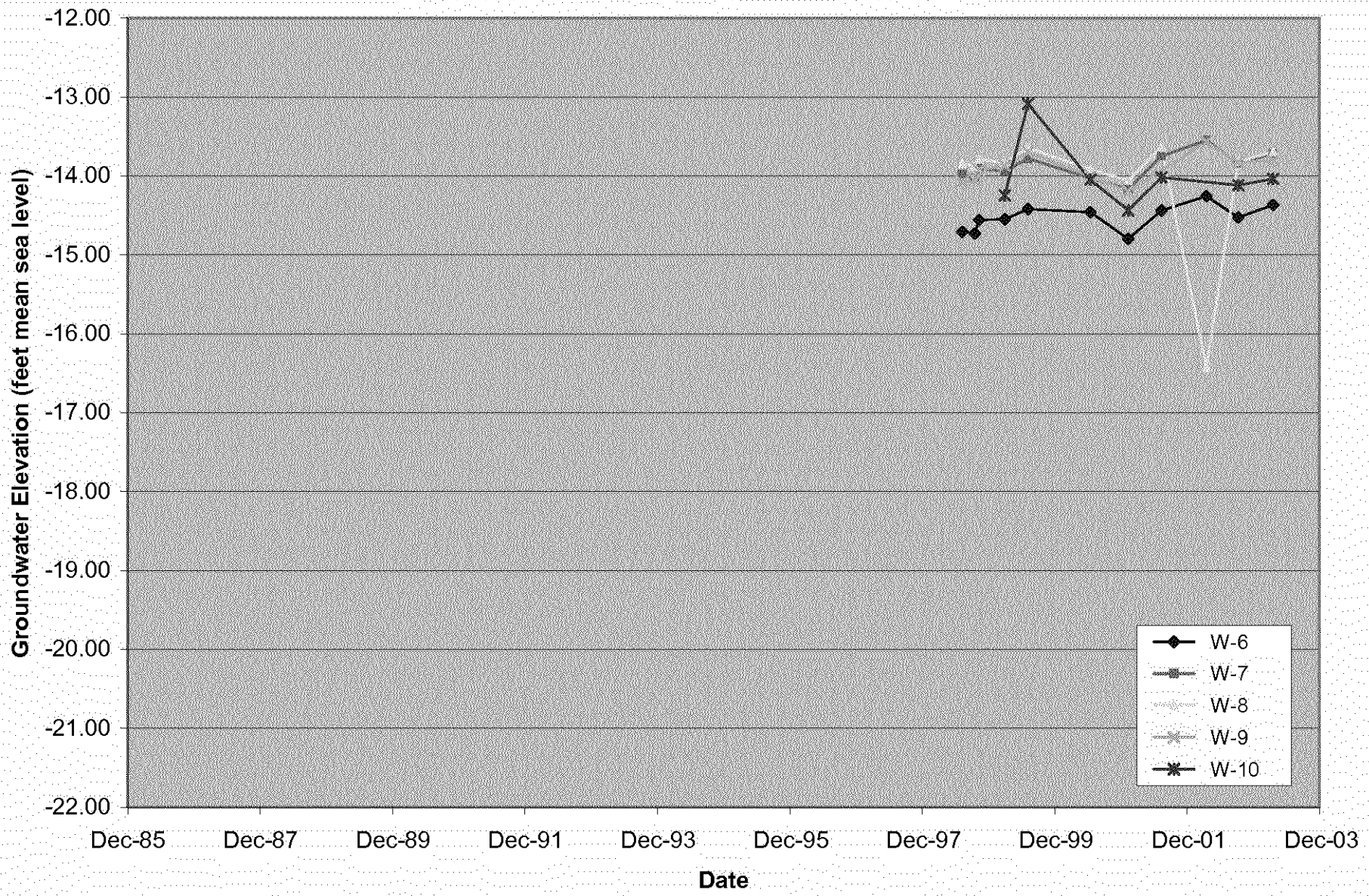


FIGURE 5g - Groundwater Elevation Hydrographs
Former C-6 Facility
Los Angeles, California

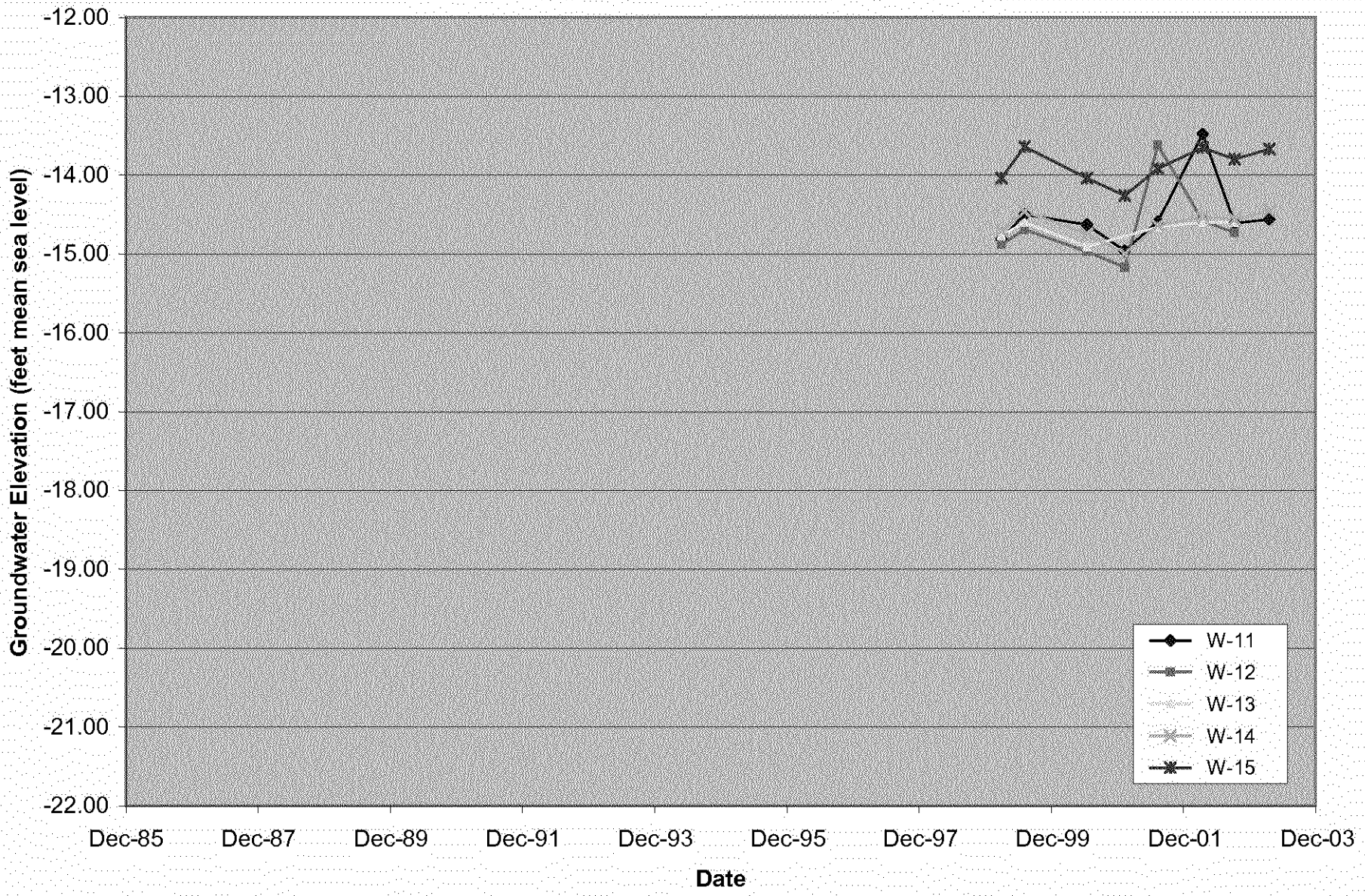


FIGURE 5h - Groundwater Elevation Hydrographs
Former C-6 Facility
Los Angeles, California

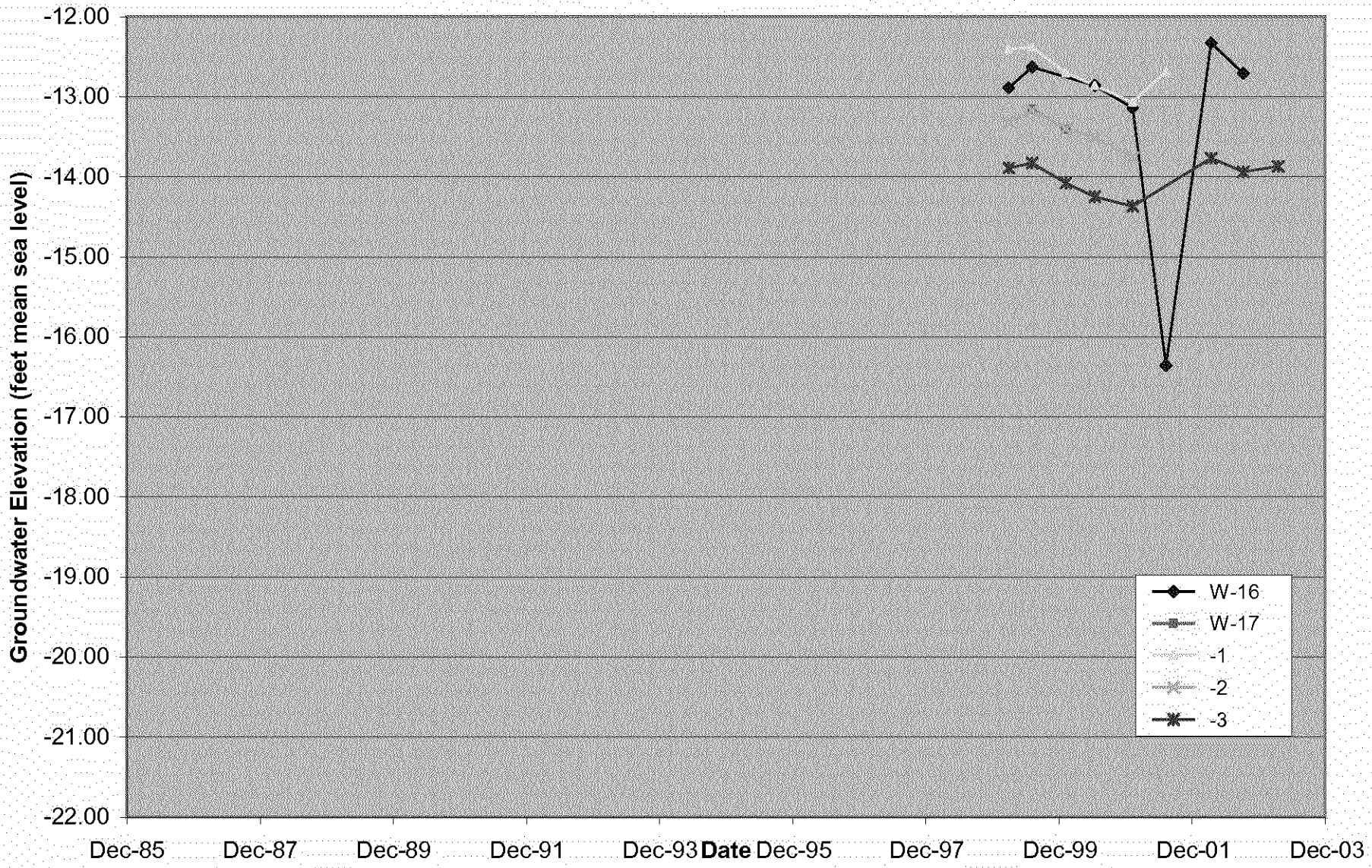
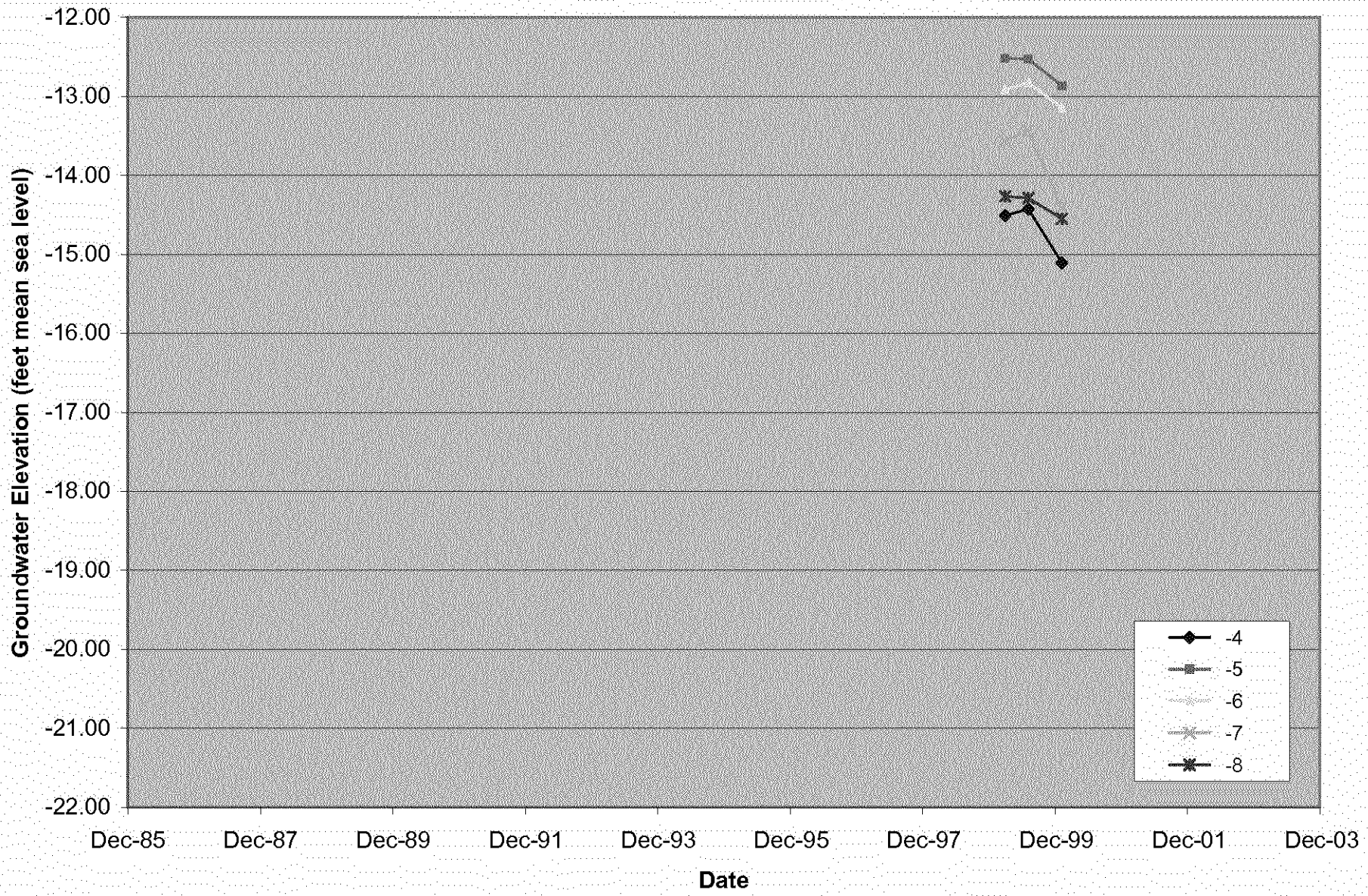
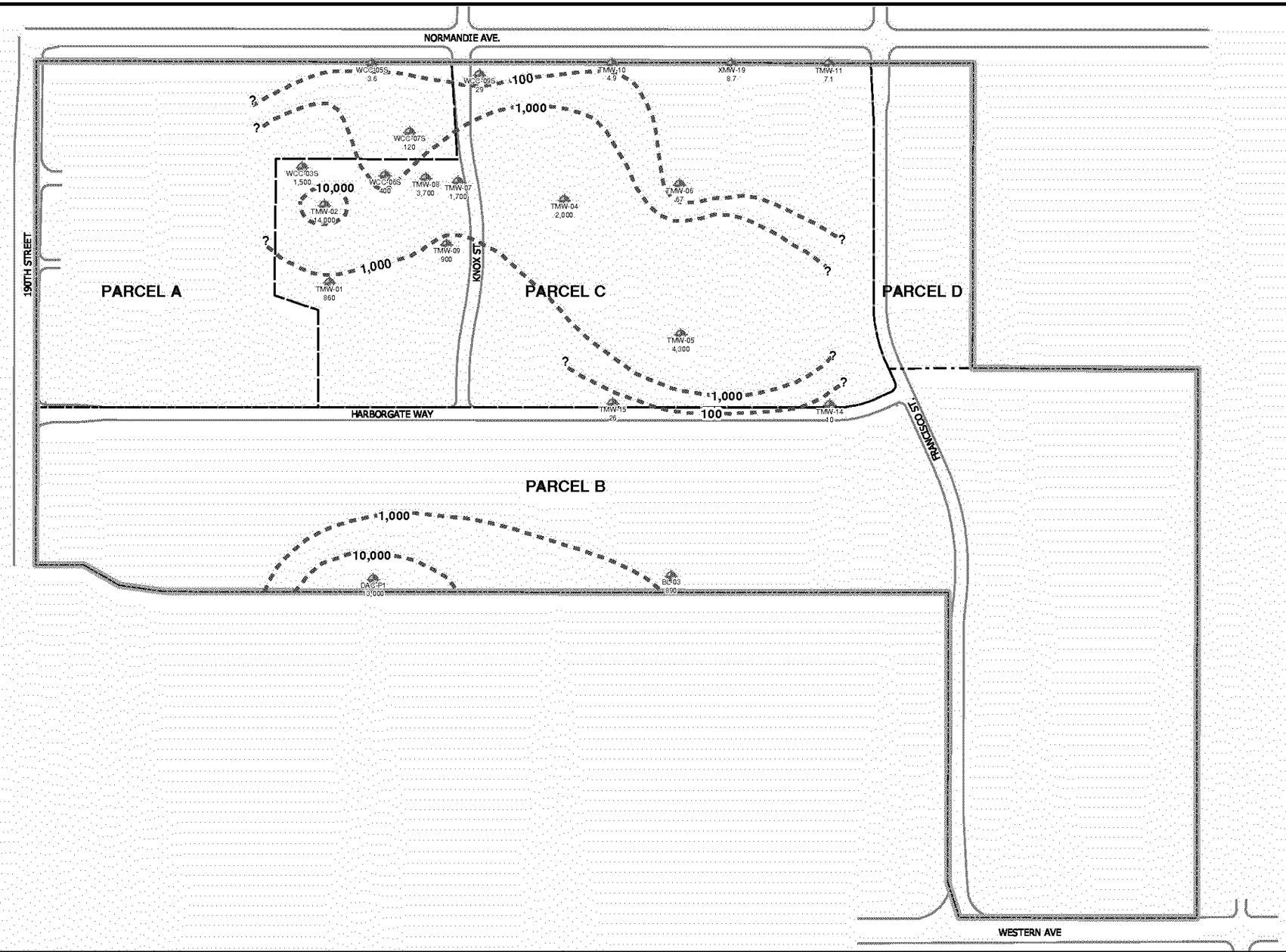


FIGURE 5i - Groundwater Elevation Hydrographs
Former C-6 Facility
Los Angeles, California





Legend

TMW-02 Groundwater Monitoring Well Sampled in March 2003

Property Boundary

Parcel Boundary

TCE Iso-Concentration Contour in ug/L

NOTE:
TCE = Trichloroethene
MBFB = Middle Bellflower B-sand

N

All Locations and Dimensions are Approximate

0 250 500 1,000 Feet

HALEY & ALDRICH

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE 6

TCE DISTRIBUTION IN MBFB GROUNDWATER - MARCH 2003

SCALE AS SHOWN

MAY 2003

28882-101

FIGURE a - CE Concentration vs ime
Former C-6 Facility
Los Angeles, California

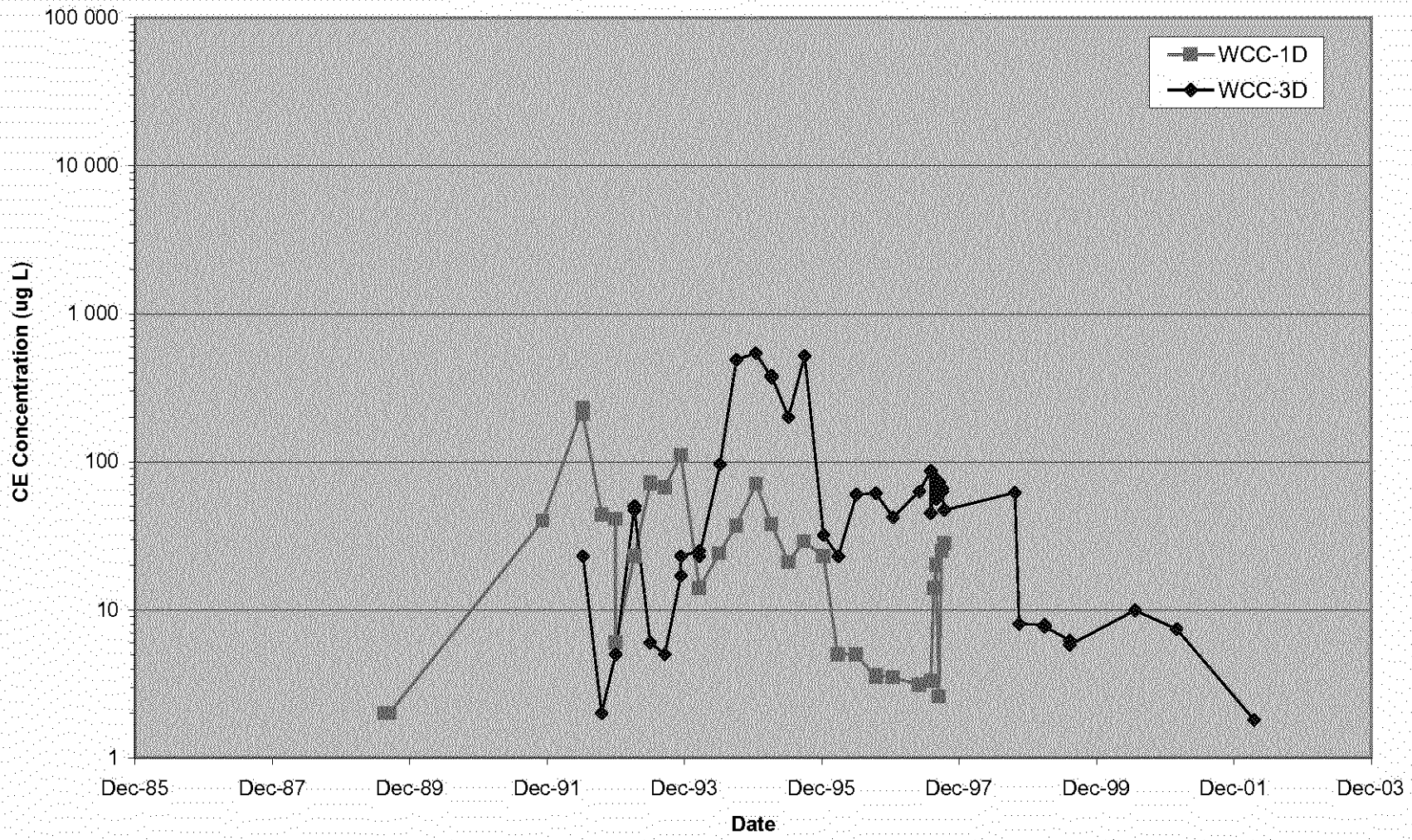


FIGURE - CE Concentration vs ime
Former C-6 Facility
Los Angeles, California

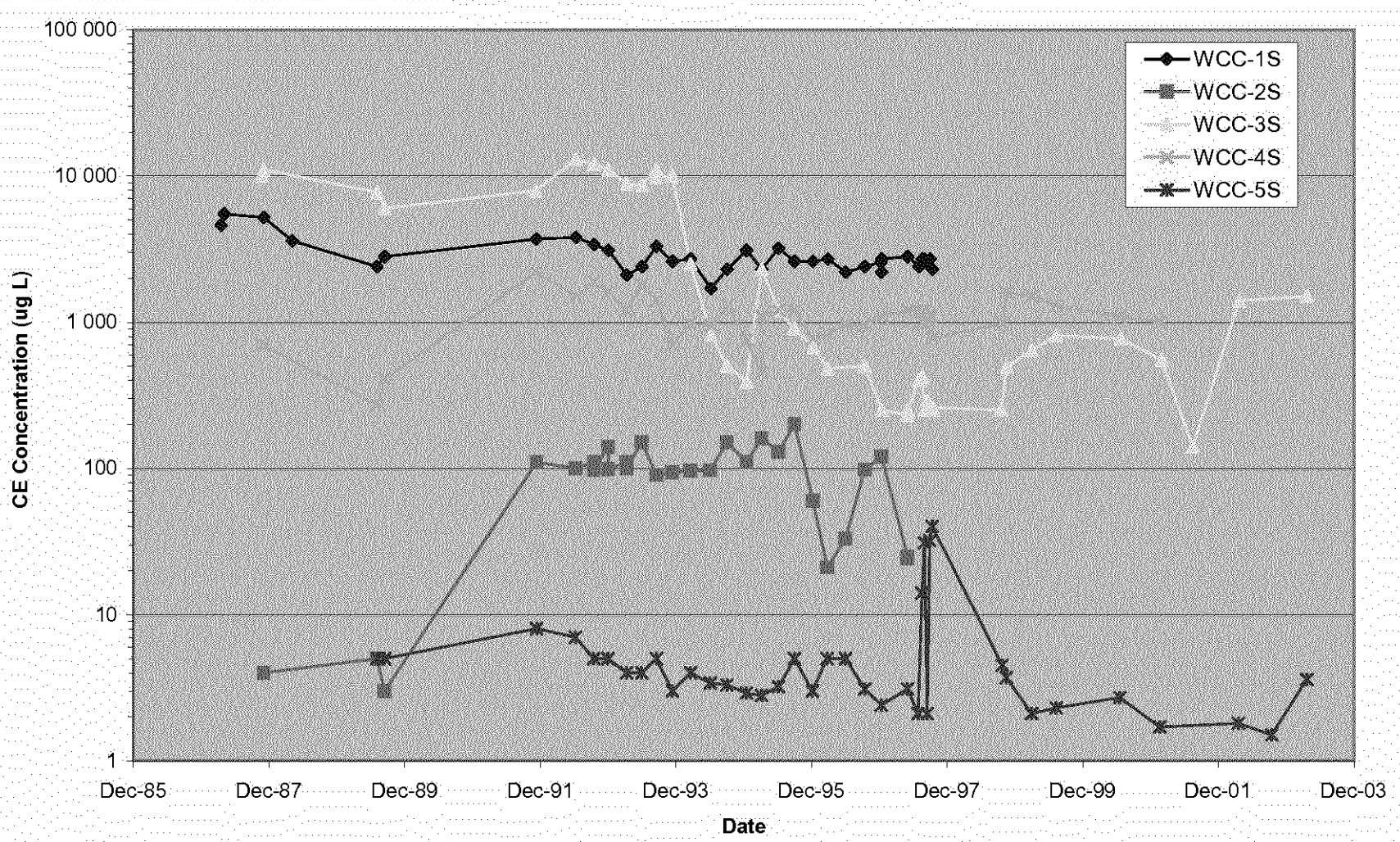


FIGURE c - CE Concentration vs ime
Former C-6 Facility
Los Angeles, California

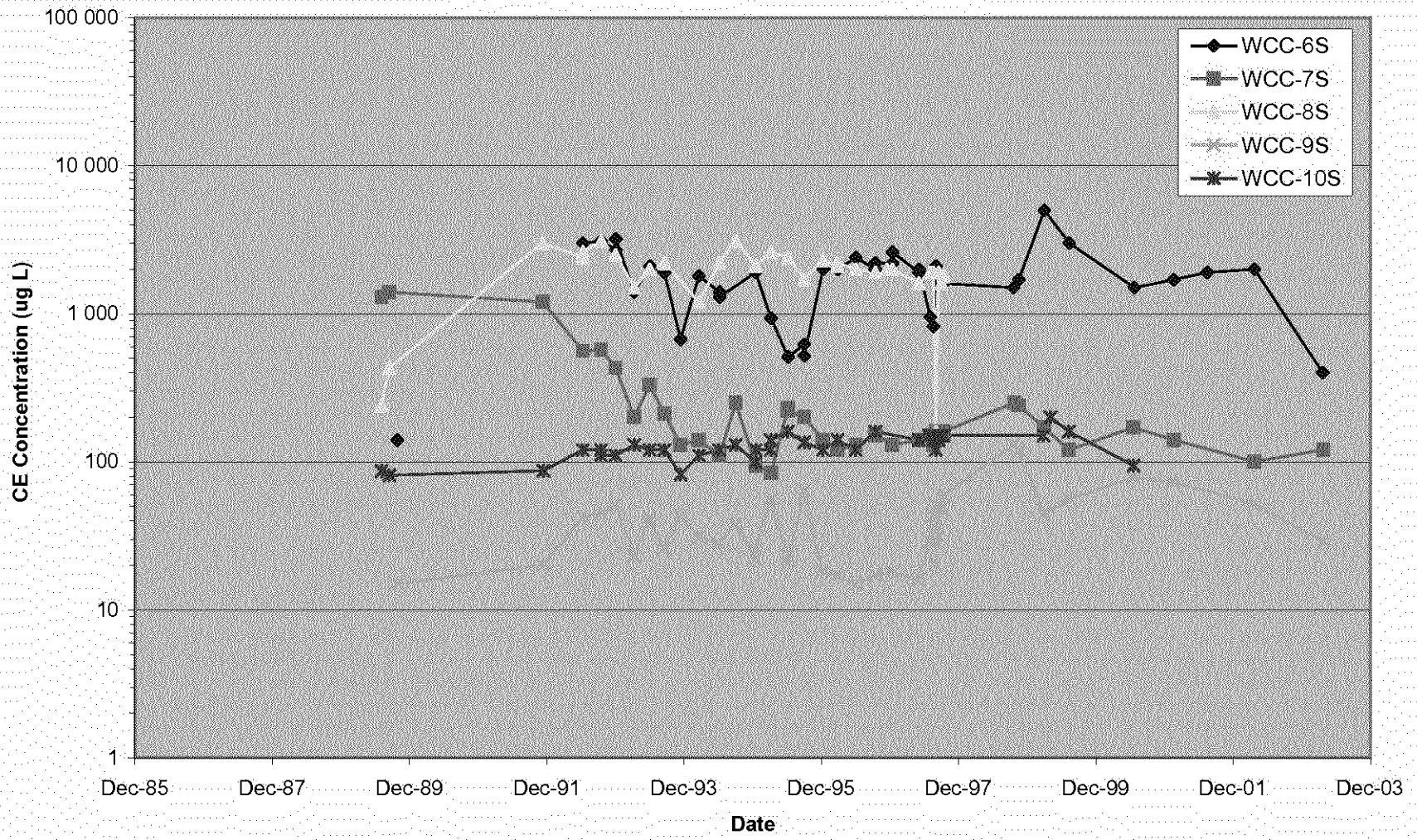


FIGURE d - CE Concentration vs ime
Former C-6 Facility
Los Angeles, California

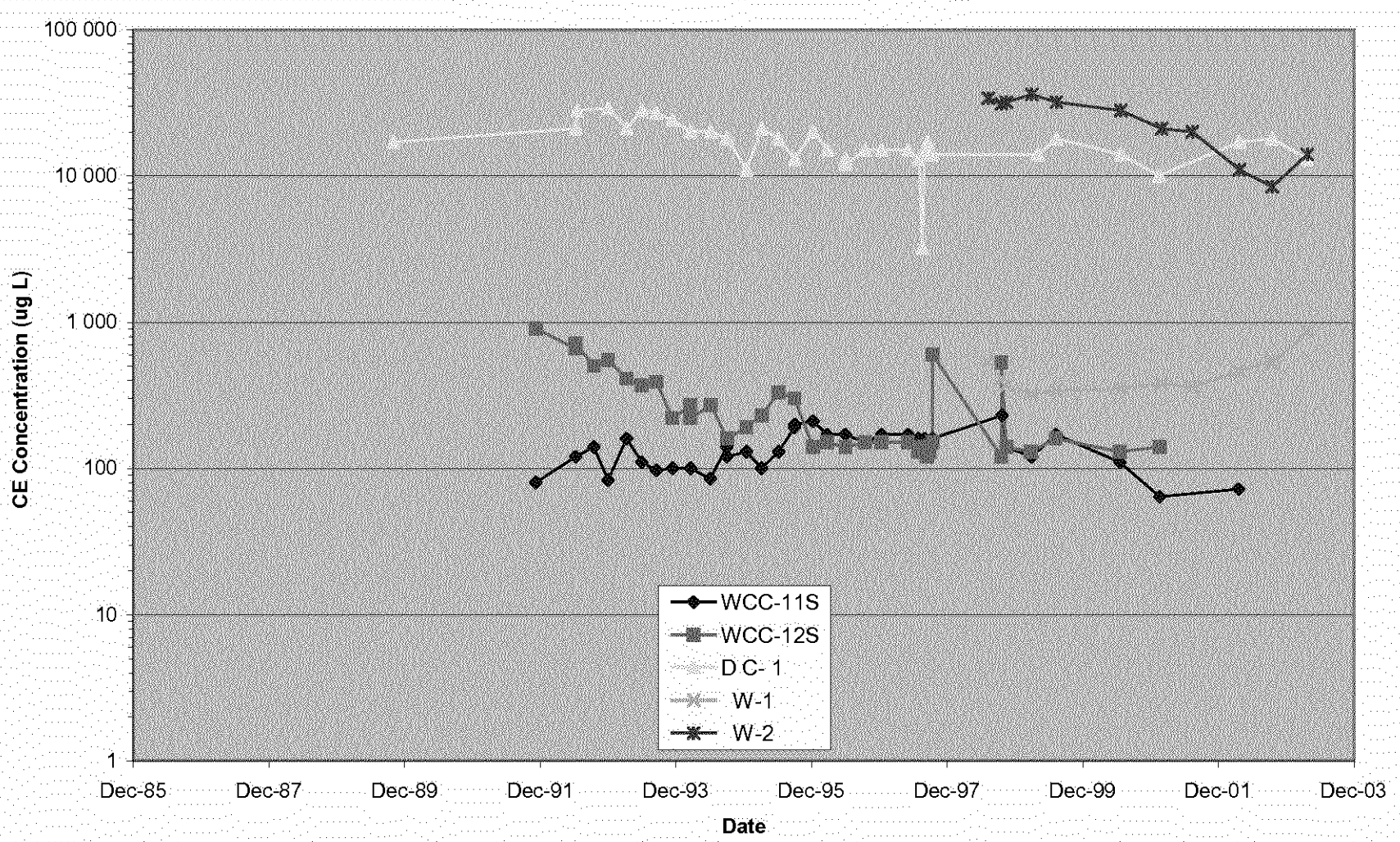


FIGURE e - CE Concentration vs ime
Former C-6 Facility
Los Angeles, California

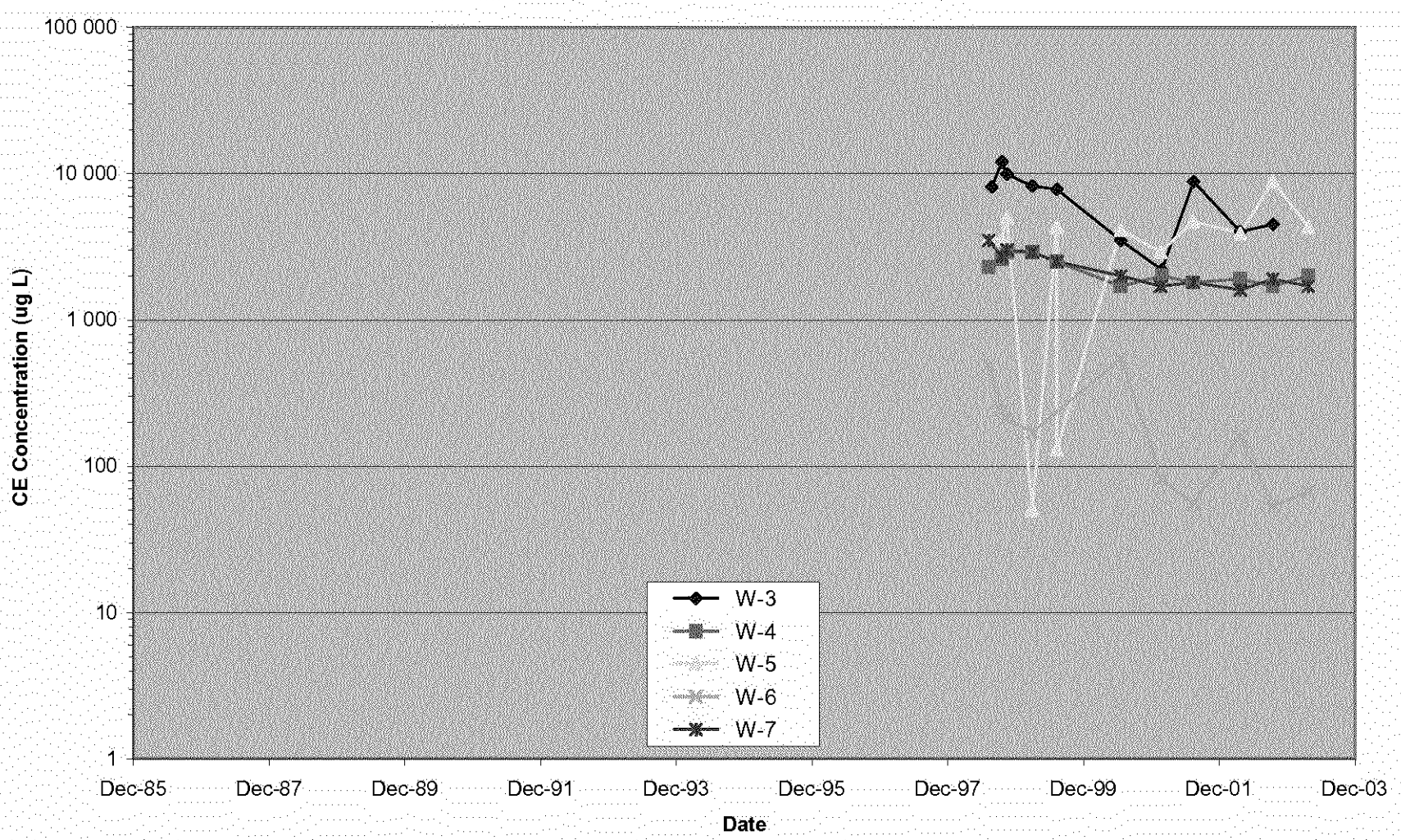


FIGURE f - CE Concentration vs ime
Former C-6 Facility
Los Angeles, California

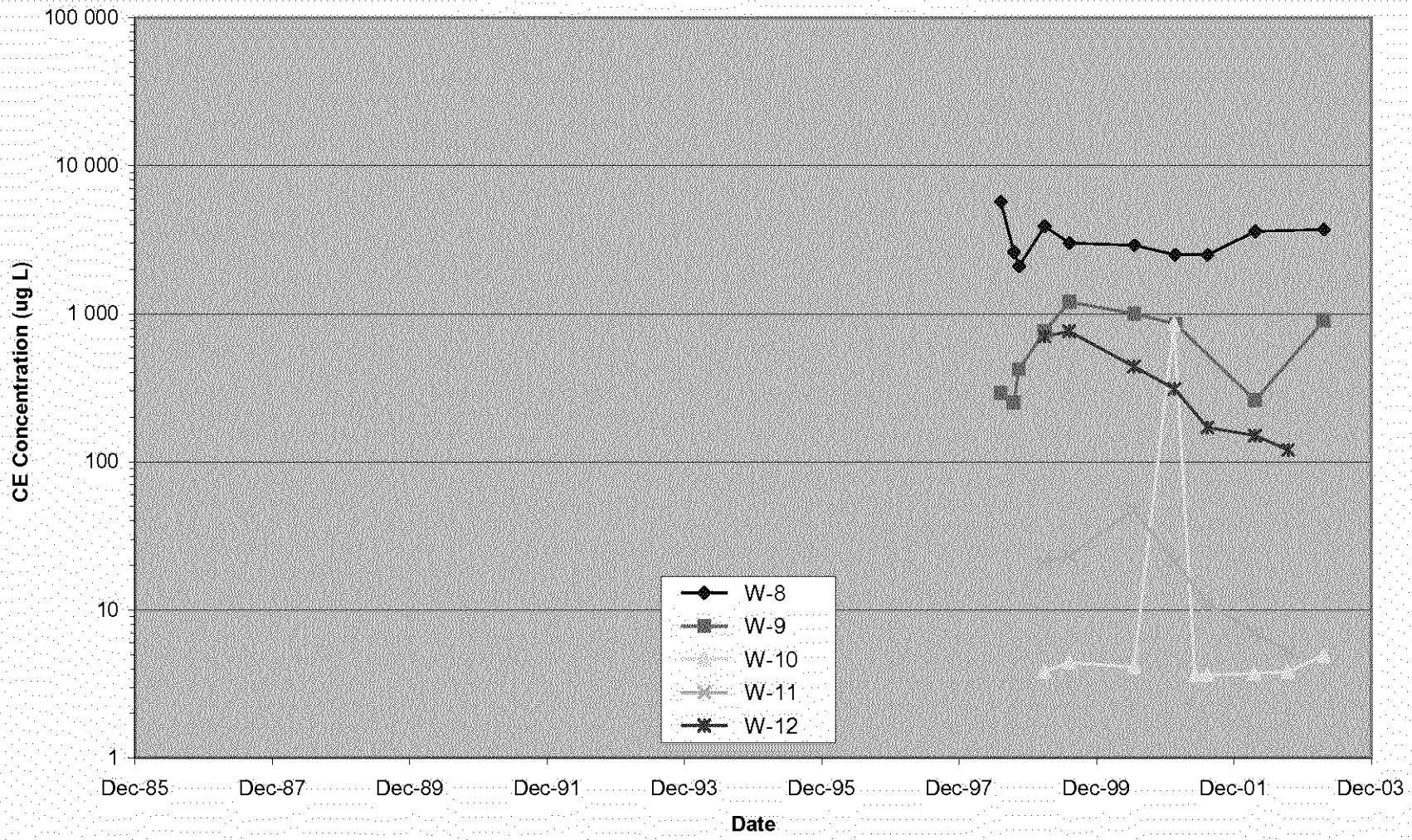
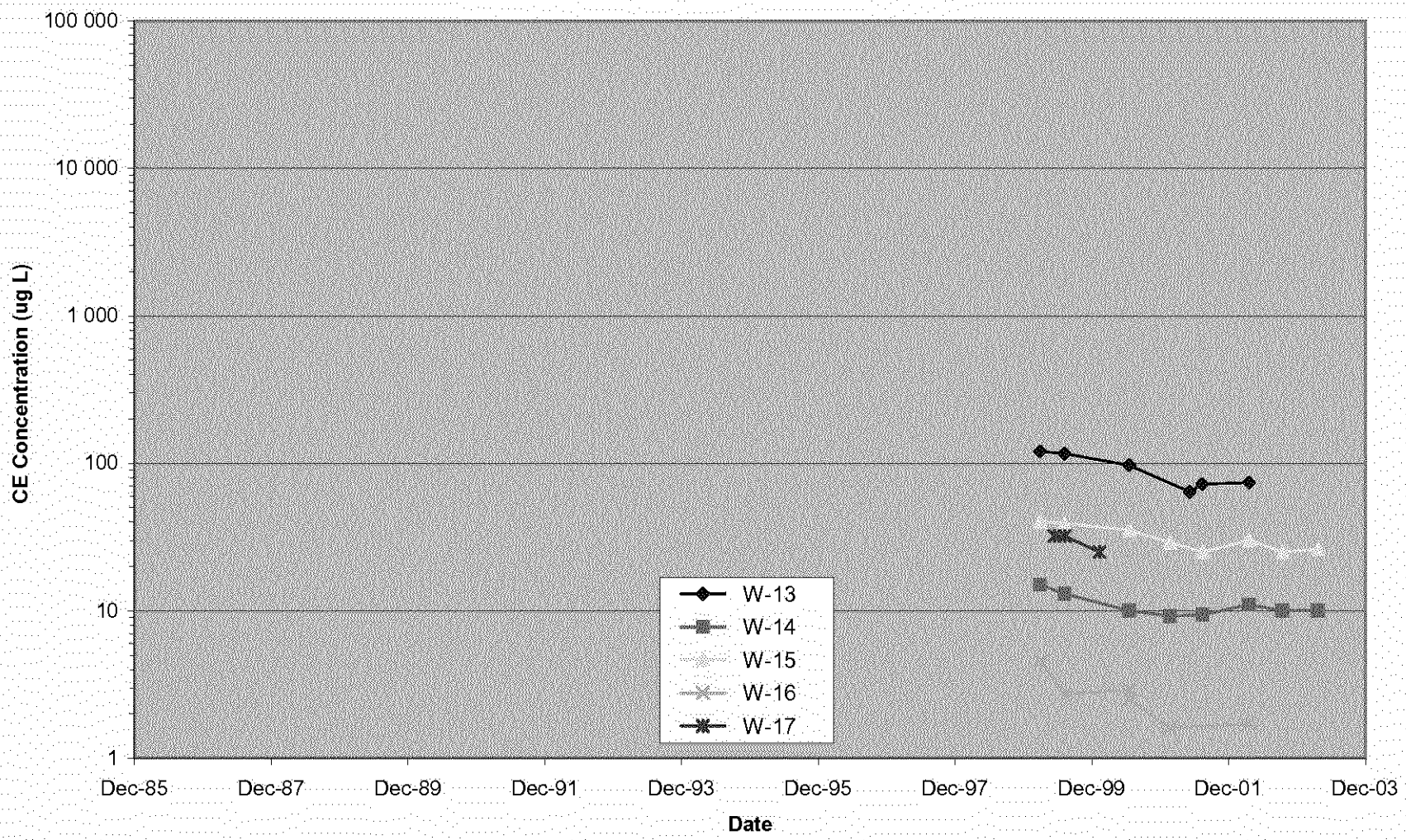
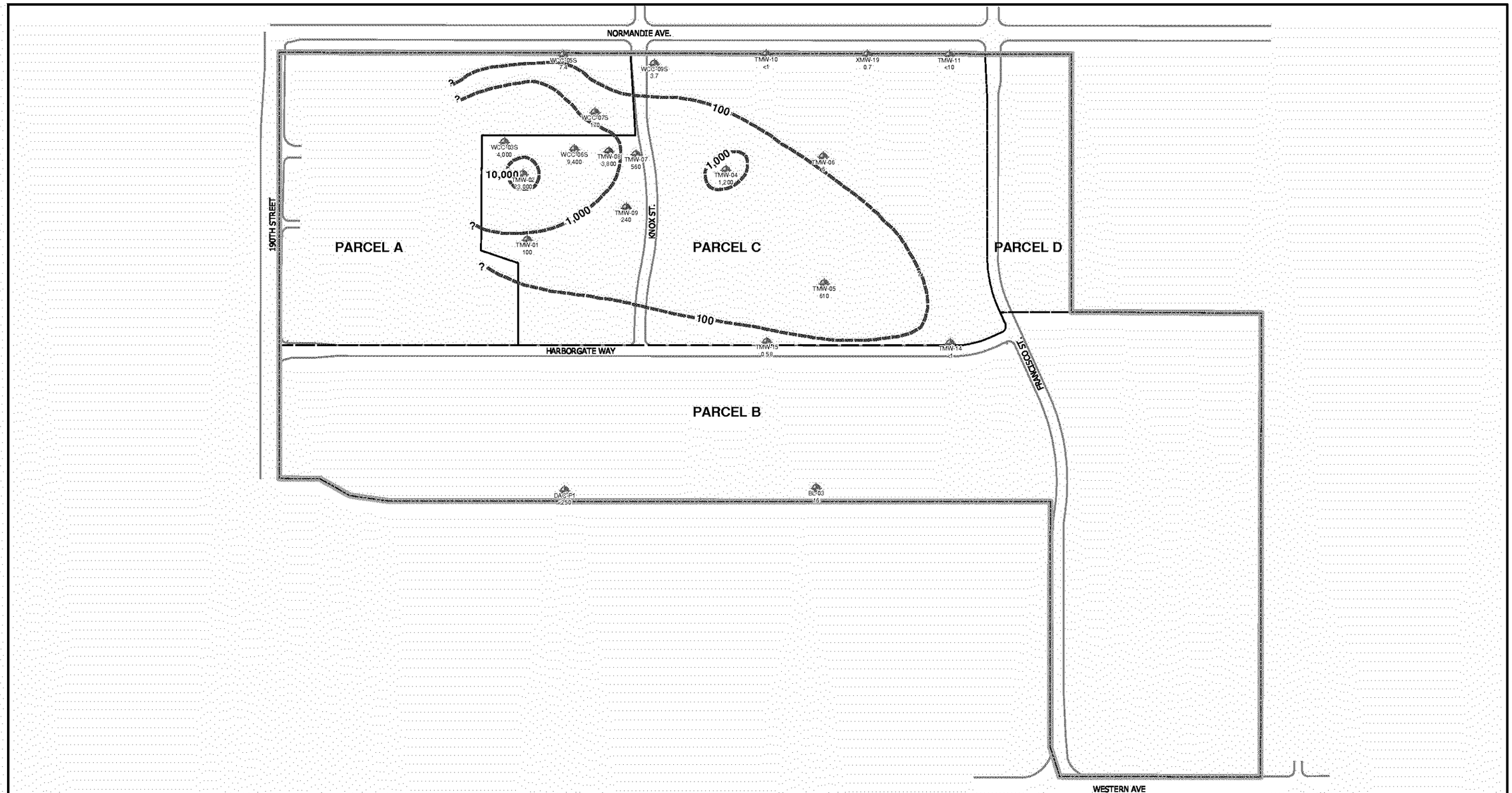


FIGURE g - CE Concentration vs ime
Former C-6 Facility
Los Angeles, California





Legend

TMW-02 Groundwater Monitoring Well Sampled in March 2003

Property Boundary

Parcel Boundary

1,1-DCE Iso-Concentration Contour in ug/L

NOTE:
1,1-DCE = 1,1- Dichloroethene
MBFB = Middle Bellflower B-Sand

N

All Locations and Dimensions are Approximate

0 250 500 1,000 Feet

HALEY & ALDRICH

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE 8

1,1-DCE DISTRIBUTION IN MBFB GROUNDWATER MARCH 2003

SCALE AS SHOWN

MAY 2003

28882-101

FIGURE a - , -DCE Concentration vs ime
Former C-6 Facility
Los Angeles, California

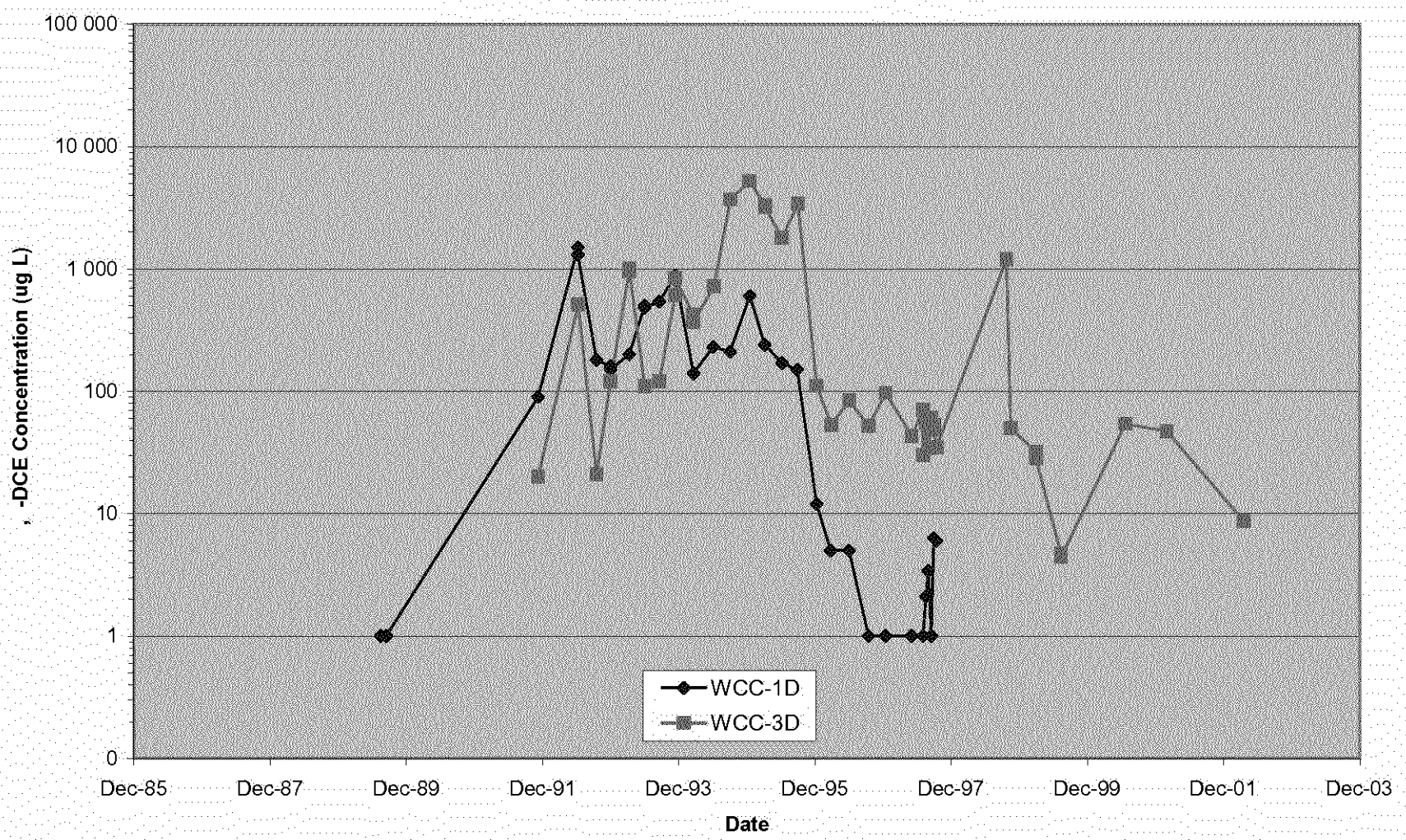


FIGURE - , -DCE Concentration vs ime
Former C-6 Facility
Los Angeles, California

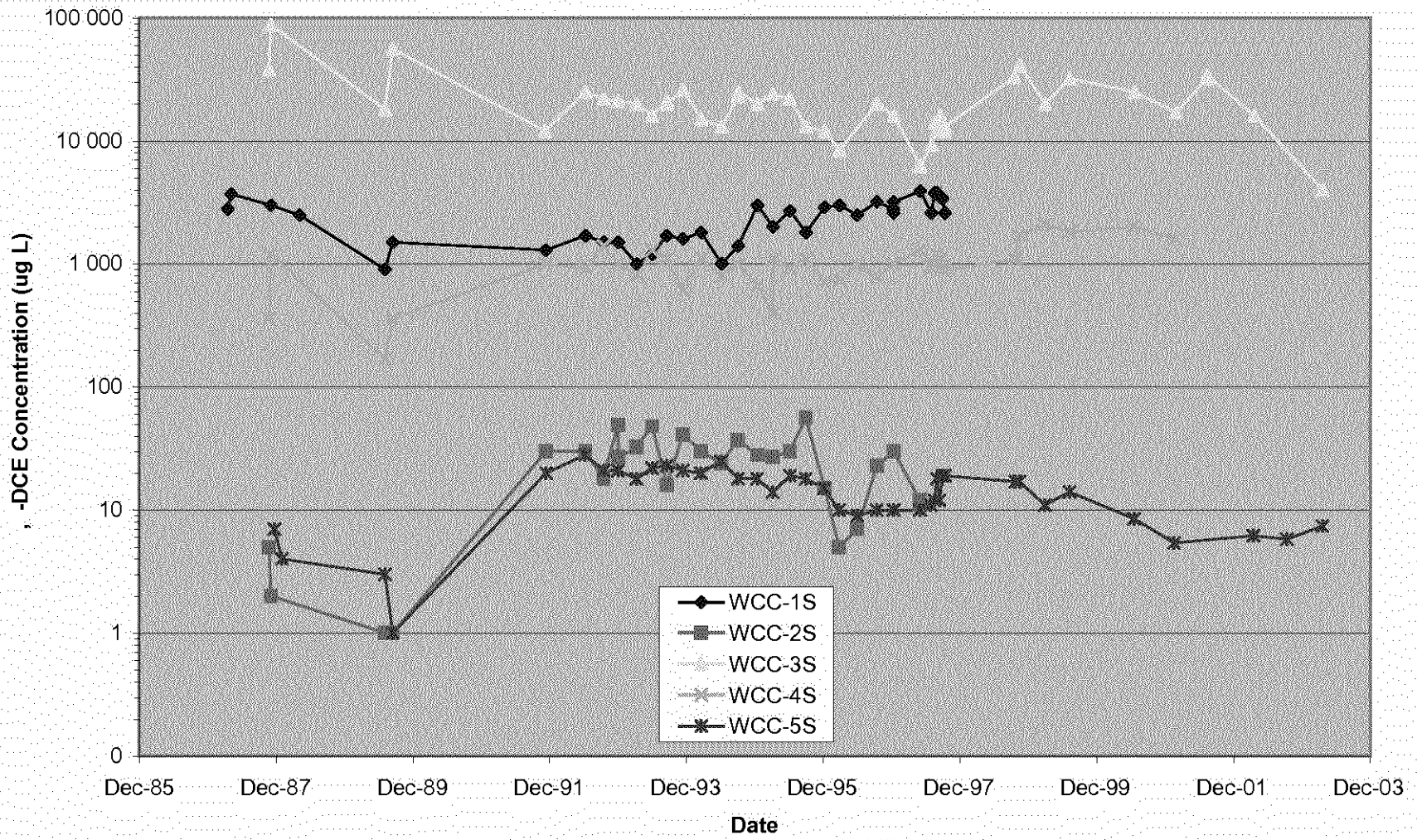


FIGURE c - , -DCE Concentration vs ime
Former C-6 Facility
Los Angeles, California

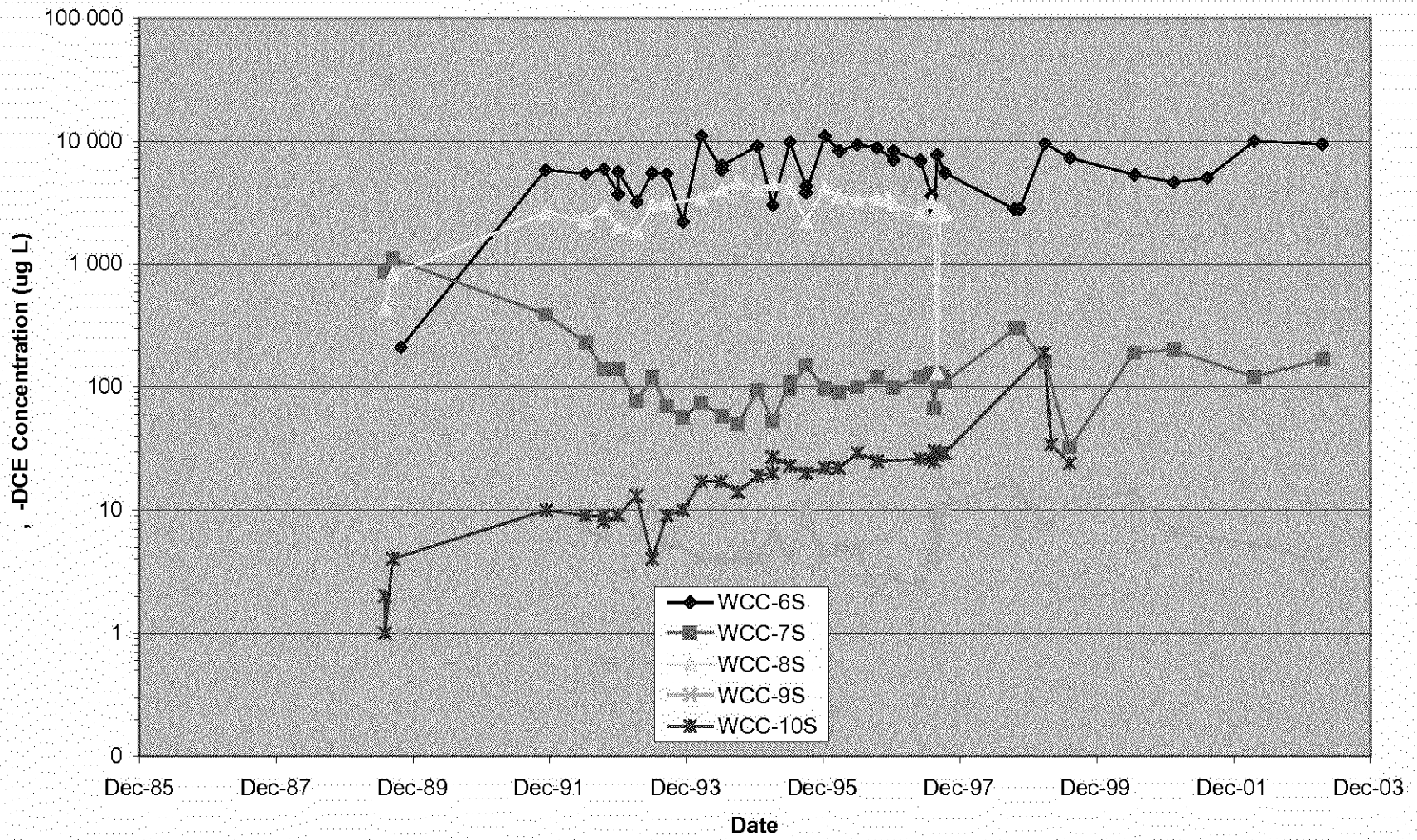


FIGURE d - , -DCE Concentration vs ime
Former C-6 Facility
Los Angeles, California

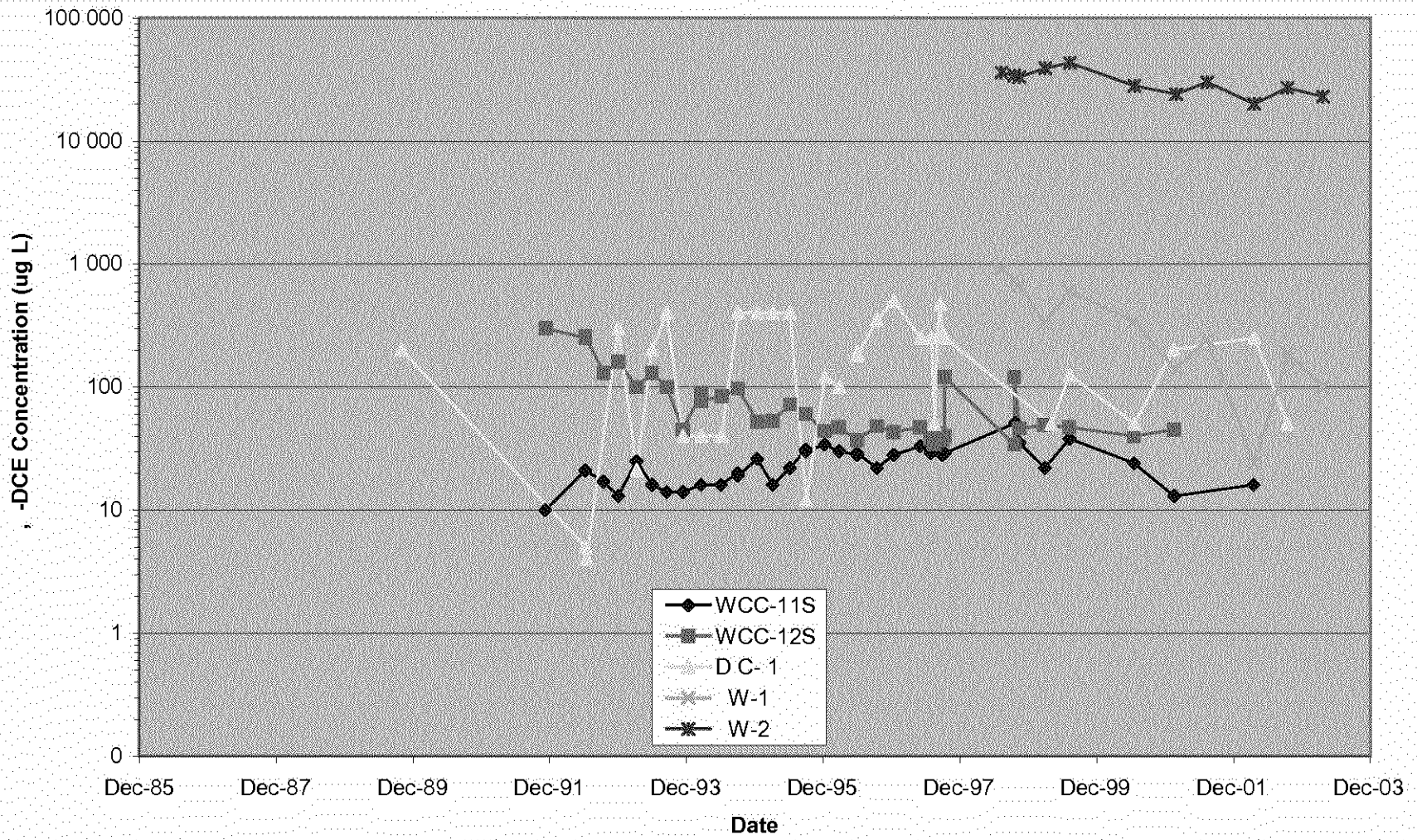


FIGURE e - , -DCE Concentration vs ime
Former C-6 Facility
Los Angeles, California

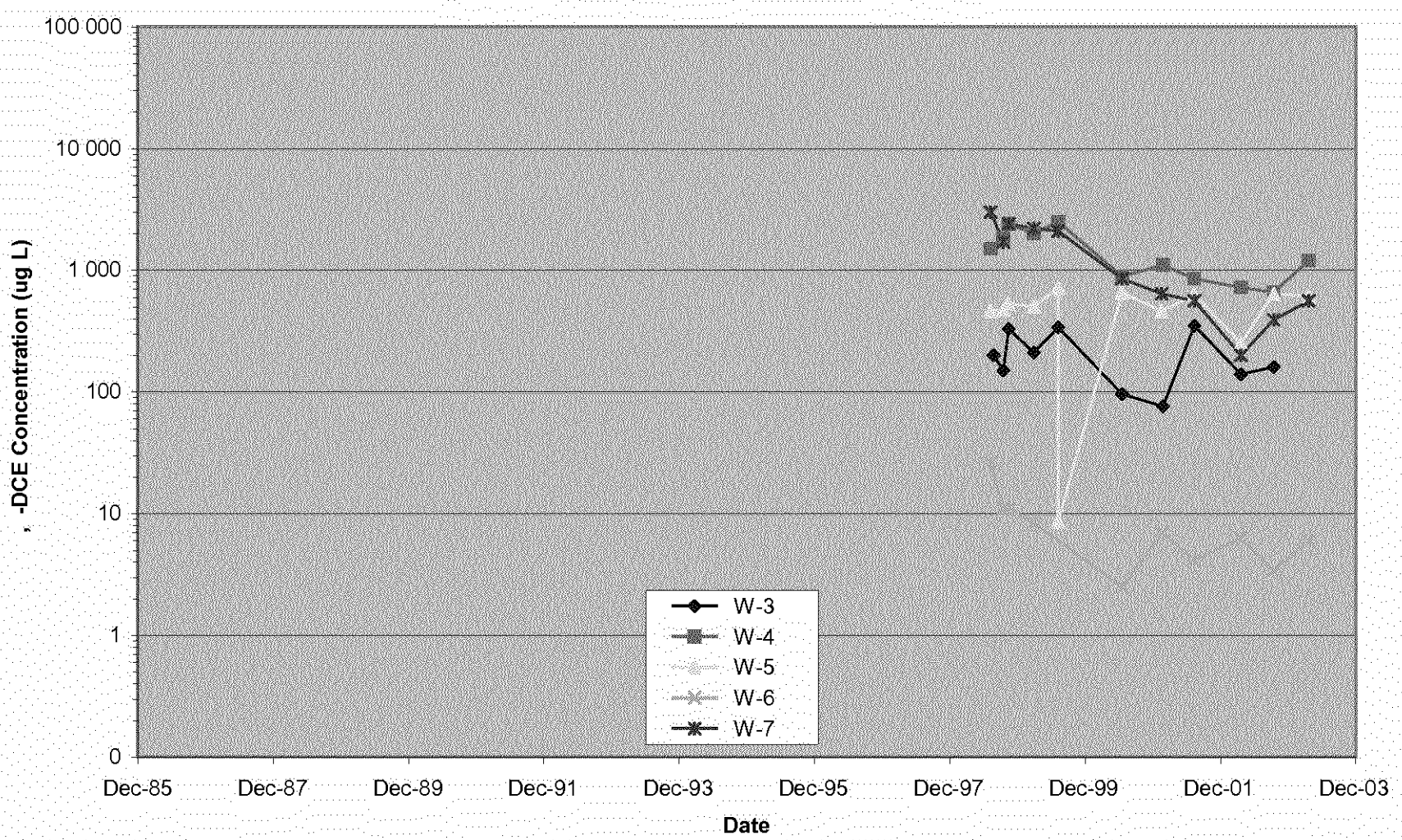


FIGURE f - , -DCE Concentration vs ime
Former C-6 Facility
Los Angeles, California

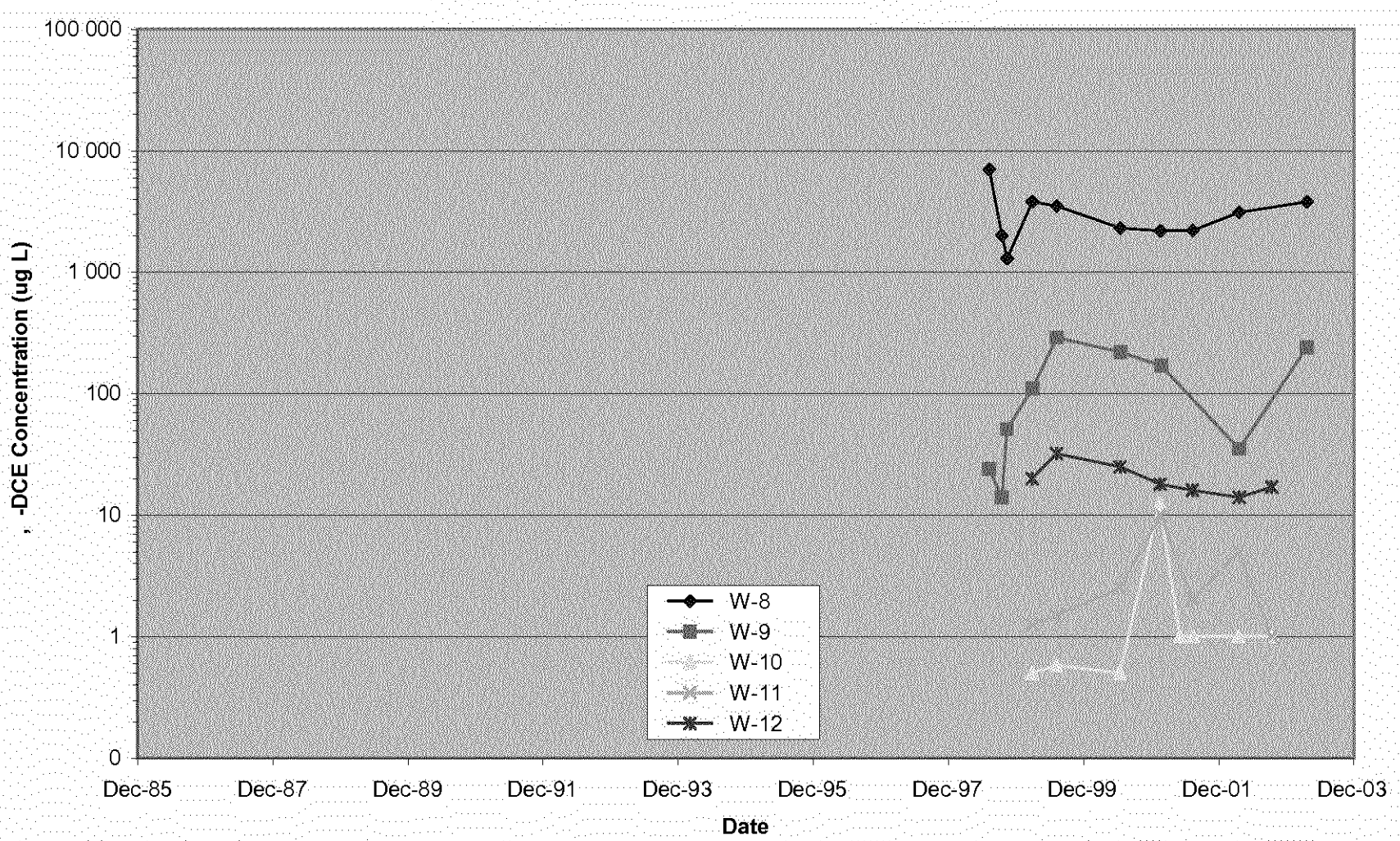
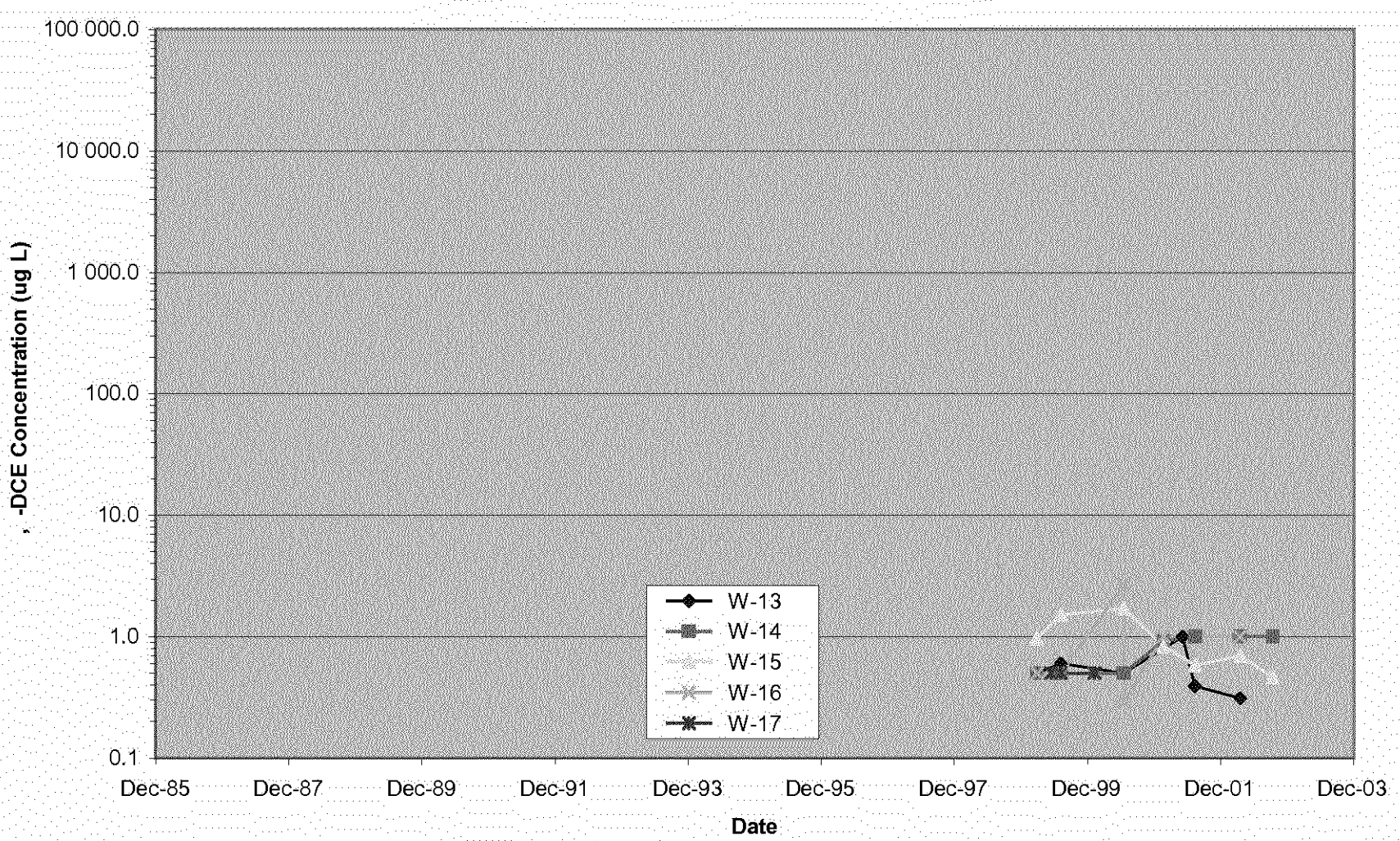


FIGURE g - , -DCE Concentration vs ime
Former C-6 Facility
Los Angeles, California



APPENDIX A

Field Data

March 2003 Annual Groundwater Monitoring Field Data Report

The Boeing Realty Corporation
Former C-6 Facility
Torrance, California

Prepared by:
Tait Environmental Management, Inc.

May 5, 2003

Tait Environmental Management, Inc.
Engineering • Environmental • Compliance

May 5, 2003

Ms. Stephanie M. Sibbett
Boeing Realty Corporation
3855 Lakewood Boulevard
Building 1A, MC D001-0097
Long Beach, CA 90846

Subject: Field Data Report for Annual Gauging and Sampling (March 2003) at the Boeing Realty Corporation, Former C-6 Facility, Torrance, California

Dear Ms. Sibbett:

This report is prepared to summarize and present the field data collected during the March 2003 Annual groundwater sampling and gauging activities conducted March 25-28, 2003 at the Boeing Realty Corporation (BRC), Former C-6 Facility, Torrance, California (Site). The groundwater gauging and sampling activities were performed in accordance with the following:

- *Groundwater Monitoring Work Plan 2003* by Haley & Aldrich, Inc., dated December 9, 2002 (File No. 28882-002).
- *Statement of Work for Evaluating of Natural Attenuation* by Exponent prepared for Ogden Environmental and Energy Services Co., dated January 10, 2001.
- *Standard Operating Procedures for Measuring Natural Attenuation Parameters* by England Geosystems and Haley & Aldrich, dated January 9, 2001.
- *Standard Operating Procedures, Groundwater Gauging and Sampling* by Tait Environmental Management, Inc., dated September 9, 2002.

The following is a brief summary of our field activities and observations:

- A total of 20 monitoring wells were gauged on March 25, 2003. Three (3) wells (WCC_4S, WCC_12S, and XMW_09) could not be gauged due to accessibility issues (See Groundwater Gauging Table, Appendix A).
- A total of 20 monitoring wells were purged and sampled between March 25-28, 2003. Three (3) of the 20 monitoring wells (TMW-6, TMW-11, & XMW-19) were purged and sampled for natural attenuation parameters.

- Three (3) wells could not be sampled due to accessibility issues. Monitoring well WCC_12S had been buried more than 4 feet below ground surface. Monitoring well WCC_4S was not sampled as the well was covered with trash/refuse and the entrance gate had been damaged and was in a closed position, not allowing access with the equipment. Monitoring well WCC_7S, which is located approximately 150 feet between WCC_12S and WCC_4S was sampled in order to obtain data for that area of the Site. Monitoring well XMW_09 is an off-site well not owned by BRC. This well was not sampled, as it had been paved over during previous construction activities in that area.

- A total of twenty (20) 55-gallon drums were filled with decontamination and purged groundwater and were labeled per the Haley & Aldrich IDW numbering scheme. The wells were left adjacent to each well and then later relocated to Lot 8.

Please call us if you have any questions or comments at (714) 560-8200. TEM is pleased to be of continued service to Boeing Realty Corporation.

Very Truly Yours,

Tait Environmental Management, Inc.

Scott Ek
Project Geologist

Attachments:

Appendix A: Well Gauging Data Sheets & Groundwater Sampling Data Sheets
Appendix B: Daily Field Reports
Appendix C: Instrument Calibration Sheets, QA/QC Sample Identification Forms, and Investigation Derived Waste Inventory Records

M:\TEM2\Clients\BOEING\Torrance C-6 Facility\March 2003 C-6 GW Monitoring\Field Data\FDR - March 2003 Annual Sampling Event.doc

March 2003 Annual Groundwater Monitoring Event
Groundwater Gauging Table

Boeing Realty Corporation
Former C-6 Facility
Torrance, California

Well ID	Date	Time	Diameter	Measurement Point	Depth to Water	Total Depth	Comments
BL-03	03/24/2003	9:13	2	TOC-Notch	70.35	80.93	Good condition, tubing in well, soft bottom.
DAC-P1	03/24/2003	10:10	4	TOC-Redmark	65.58	90.50	Good condition, tubing in well, soft bottom.
TMW-01	03/24/2003	10:40	2	TOC-Blackmark	69.84	84.61	Good condition, soft bottom.
TMW-02	03/25/2003	10:35	2	TOC-Bluemark	69.79	85.05	Very muddy bottom.
TMW-04	03/24/2003	8:46	2	TOC-Bluemark	66.27	80.23	Good condition, tubing in well, semi-soft bottom.
TMW-05	03/24/2003	9:00	2	TOC-Bluemark	67.57	83.09	Area surrounding well overgrown with shrubs, tubing in well, very soft bottom.
TMW-06	03/24/2003	8:53	2	TOC-Bluemark	70.67	85.80	Tubing in well, good condition; soft bottom.
TMW-07	03/24/2003	10:20	2	TOC-Blackmark	66.24	83.59	Good condition, soft bottom.
TMW-08	03/24/2003	10:25	2	TOC-Blackmark	67.69	82.53	Good condition, soft bottom.
TMW-09	03/24/2003	10:44	2	TOC-Blackmark	66.56	80.19	Above-ground well casing loose. Soft well bottom.
TMW-10	03/24/2003	9:22	2	TOC-Blackmark	61.52	77.90	Well box flooded, both bolts missing. Soft bottom.
TMW-11	03/24/2003	8:55	2	TOC-Blackmark	61.97	78.00	Good; Soft well bottom.
TMW-14	03/24/2003	9:55	2	TOC-Blackmark	72.61	87.70	Monument casing, no well cap; soft well bottom.

BOE-C6-0007535

March 2003 Annual Groundwater Monitoring Event
Groundwater Gauging Table

Boeing Realty Corporation
Former C-6 Facility
Torrance, California

Well ID	Date	Time	Diameter	Measurement Point	Depth to Water	Total Depth	Comments
TMW-15	03/24/2003	10:02	2	TOC-Blackmark	68.90	87.26	Monument casing, good condition; soft bottom.
WCC-12S	03/25/2003	---	4	---	---	---	Well not accessible. Wellhead is burried >4 feet below ground surface - Inacessible.
WCC-3S	03/25/2003	9:17	4	TOC-Blackmark	64.46	88.78	Very muddy bottom.
WCC-4S	03/24/2003	---	4	---	---	---	Well not accessible. Wellhead is covered with heavy refuse/trash - Inacessible.
WCC-5S	03/24/2003	10:15	4	TOC-Blackmark	62.13	89.86	Well overgrown with shrubery, soft bottom.
WCC-6S	03/25/2003	10:25	4	TOC-Blackmark	64.58	88.14	Very muddy bottom.
WCC-7S	03/24/2003	9:24	4	TOC-Blackmark	63.72	90.34	Good condition, soft bottom.
WCC-9S	03/25/2003	10:15	4	TOC-Blackmark	60.51	88.15	Very muddy bottom.
XMW-09	03/24/2003	---	4	---	---	---	Well paved over during construction - Inaccassible.
XMW-19	03/24/2003	NM	4	TOC-Blackmark	60.87	77.33	Good; Soft well bottom.

NOTES:
--- = Not Measured or No Information Available.
Depth to Water and Total Depth are in feet below measurement point.
Diameter in inches.

BOE-C6-0007536

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/26/03
Project No.: EM-2303	**Prepared By:** NC/CC
Well Identification: TMW_15	**Pump Intake Depth (ft-bmp):** ~78
Measurement Point Description: Top of Casing, Blackmark	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	68.91	87.39	18.48	ND	3	9

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	4	6	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition:

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
11:06	0.5	1.5	0.4	74.11	7.11	23.77	>990	0.91	5.75	+16	Very Silty
11:08	1	3	0.75	74.25	7.15	23.82	800	0.95	5.31	+19	Silty
11:10	1.5	4.5	0.75	74.00	7.16	24.06	540	1.10	4.63	+24	Slightly Silty
11:13	2	6	0.5	73.71	7.18	24.17	470	1.20	4.39	+17	Slightly Silty
11:16	2.5	7.5	0.5	73.53	7.20	24.24	300	1.23	4.33	+6	Clear
11:19	3	9	0.5	73.30	7.22	24.32	48	1.17	4.34	+7	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
11:02	11:19	0.5	9	3	72.61	72.61	11:25	TMW_15_WG032603_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/26/03
Project No.: EM-2303	**Prepared By:** NC/CC
Well Identification: TMW_14	**Pump Intake Depth (ft-bmp):** ~82
Measurement Point Description: Top of Casing, Blackmark	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	72.56	87.68	15.12	ND	2.5	7.5

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	4	6	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition:

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
10:00	0.5	1.25	0.6	72.94	6.97	23.91	880	3.70	6.37	+22	Very Silty
10:02	1	2.5	0.6	72.95	6.94	24.02	740	3.69	5.95	+26	Silty
10:04	1.5	3.75	0.6	72.88	6.94	24.15	330	3.60	5.60	+37	Clear
10:06	2	5	0.6	72.89	6.95	24.50	220	3.48	5.44	+49	Clear
10:08	2.5	6.25	0.6	73.10	6.96	24.01	95	3.51	5.66	+59	Clear
10:09	3	7.5	1.25	73.13	6.97	23.81	38	3.40	5.57	+64	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
9:58	10:09	0.68	7.5	3	75.58	73.13	10:12	TMW_14_WG032603_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/26/03
Project No.: EM-2303	**Prepared By:** NC/CC
Well Identification: TMW_11	**Pump Intake Depth (ft-bmp):** ~72
Measurement Point Description: Top of Casing, Blackmark	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	61.91	77.42	15.51	ND	2.5	7.5

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	4	6	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Good Condition, Solid Bottom

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
9:20	0.5	1.25	0.6	62.26	7.07	23.68	>990	1.66	6.15	+28	Very Silty
9:21	1	2.5	1.25	62.27	7.05	23.69	780	1.66	5.51	+34	Silty
9:22	1.5	3.75	1.25	62.28	7.05	23.74	420	1.66	5.04	+41	Clear
9:24	2	5	0.6	62.28	7.05	23.73	210	1.65	4.81	+46	Clear
9:25	2.5	6.25	1.25	62.28	7.05	23.71	87	1.65	4.64	+52	Clear
9:26	3	7.5	1.25	62.31	7.05	23.72	39	1.65	4.46	+54	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
9:18	9:26	0.9	7.5	3	65.01	62.31	9:30	TMW_11_WG032603_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/26/03
Project No.: EM-2303	**Prepared By:** NC/CC
Well Identification: TMW_10	**Pump Intake Depth (ft-bmp):** ~71
Measurement Point Description: Top of Casing, Blackmark	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	61.47	78.95	17.48	ND	3	9

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	4	6	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Good Condition, Solid Bottom

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
8:25	0.5	1.5	0.75	61.92	6.55	23.87	680	1.52	6.25	+26	Silty, No Odor
8:27	1	3	0.75	61.93	6.74	23.59	340	1.54	5.62	+33	Mostly Clear
8:29	1.5	4.5	0.75	61.97	6.86	23.53	160	1.55	5.41	+42	Clear
8:31	2	6	0.75	61.97	6.95	23.66	82	1.56	5.38	+48	Clear
8:32	2.5	7.5	1.5	61.97	7.03	23.55	46	1.57	5.36	+61	Clear
8:34	3	9	0.75	61.98	7.08	23.54	22	1.57	5.34	+66	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
8:23	8:34	0.8	9	3	64.97	61.98	8:40	TMW_10_WG032603_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/25/03
Project No.: EM-2303	**Prepared By:** NC/CC
Well Identification: WCC_6S	**Pump Intake Depth (ft-bmp):** ~75
Measurement Point Description: Top of Casing, Blackmark	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	64.88	88.00	23.12	ND	15	45

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	4	6	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition:

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
13:04	0.5	7.5	0.9	66.37	7.07	23.49	163	1.05	3.46	-181	Cloudy, No Odor
13:12	1	15	1.0	66.58	7.08	23.44	120	1.24	3.43	-200	Slightly Cloudy
13:19	1.5	22.5	1.1	66.58	7.06	23.40	89	1.48	3.45	-204	Clear
13:27	2	30	0.9	66.58	7.07	23.43	75	1.59	3.31	-207	Clear
13:34	2.5	37.5	1.1	66.58	7.06	23.43	54	1.66	3.23	-208	Clear
13:41	3	45	1.1	66.58	7.06	23.44	48	1.71	3.16	-208	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
12:54	13:41	0.96	45	3	69.50	66.58	13:45	WCC_6S_WG032503_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/25/03
Project No.: EM-2303	**Prepared By:** NC/CC
Well Identification: WCC_5S	**Pump Intake Depth (ft-bmp):** ~77
Measurement Point Description: Top of Casing, Blackmark	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	62.18	89.89	27.71	ND	18	54

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	4	6	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition:

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
11:09	0.5	9	1.5	62.99	7.32	23.12	8	0.99	3.73	-25	Clear, No Odor
11:13	1	18	2.25	62.99	7.29	23.11	5	1.00	4.42	-6	Clear, No Odor
11:18	1.5	27	1.8	62.98	7.29	23.16	4	1.16	4.02	+17	Clear, No Odor
11:23	2	36	1.5	62.99	7.32	23.09	4	1.13	3.80	+28	Clear, No Odor
11:27	2.5	45	2.25	63.00	7.34	23.09	4	1.13	3.73	+35	Clear, No Odor
11:31	3	54	2.25	63.00	7.35	23.09	4	1.13	3.65	+38	Clear, No Odor

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
11:03	11:31	1.9	54	3	67.72	63.00	11:35	WCC_5S_WG032503_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/26/03
Project No.: EM-2303	**Prepared By:** NC/CC
Well Identification: WCC_9S	**Pump Intake Depth (ft-bmp):** ~71
Measurement Point Description: Top of Casing, Blackmark	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	60.41	88.30	27.89	ND	18	54

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	4	6	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Good Condition, Solid Bottom

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
12:02	0.5	9	1.8	61.68	7.17	23.13	45	0.765	3.02	+14	Clear
12:06	1	18	2.3	61.73	7.20	23.09	48	1.37	4.47	+17	Clear
12:10	1.5	27	2.3	61.73	7.26	23.11	36	1.43	4.21	+18	Clear
12:14	2	36	2.3	61.71	7.25	23.09	23	1.49	4.15	+20	Clear
12:18	2.5	45	2.3	61.71	7.27	23.10	10	1.53	4.14	+17	Clear
12:22	3	54	2.3	61.67	7.29	23.13	10	1.58	4.15	+15	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
11:57	12:22	2.2	54	3	65.99	61.67	12:25	WCC_9S_WG032603_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/26/03
Project No.: EM-2303	**Prepared By:** NC/CC
Well Identification: TMW_6	**Pump Intake Depth (ft-bmp):** ~80
Measurement Point Description: Top of Casing, Bluemark	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	70.56	85.77	15.21	ND	2.5	7.5

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	4	6	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22, Solinst Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition:

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
13:43	0.5	1.25	0.4	70.67	7.37	22.87	770	1.59	8.24	+106	Silty
13:45	1	2.5	0.6	70.69	7.33	22.75	610	1.60	7.57	+95	Slightly Silty
13:47	1.5	3.75	0.6	70.73	7.36	22.56	430	1.60	6.85	+115	Clearing
13:48	2	5	1.25	70.73	7.35	22.66	160	1.60	6.65	+119	Clear
13:50	2.5	6.25	0.6	70.72	7.37	23.10	38	1.59	6.09	+117	Clear
13:52	3	7.5	0.6	70.72	7.42	22.84	22	1.61	6.07	+120	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
13:40	13:52	0.6	7.5	3	73.60	70.72	13:55	TMW_6_WG032603_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/26/03
Project No.: EM-2303	**Prepared By:** NC/CC
Well Identification: TMW_9	**Pump Intake Depth (ft-bmp):** ~76
Measurement Point Description: Top of Casing, Blackmark	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	66.36	80.83	13.72	ND	2.5	7.5

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	**2**	4	6	0.02	**0.16**	0.65	1.47

Field Equipment: Horiba U-22, Solinst Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition:

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
14:31	0.5	1.25	1.25	67.31	7.56	23.05	620	1.51	8.49	+155	Silty
14:33	1	2.5	0.6	67.17	7.53	22.99	390	1.51	7.71	+146	Slightly Silty
14:34	1.5	3.75	1.25	67.12	7.48	23.15	220	1.51	6.49	+132	Slightly Silty
14:36	2	5	0.6	67.04	7.47	23.17	140	1.52	6.01	+134	Clear
14:37	2.5	6.25	1.25	66.97	7.46	23.51	64	1.52	5.70	+127	Clear
14:39	3	7.5	0.6	66.91	7.45	23.64	42	1.52	5.66	+124	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
14:30	14:39	0.8	7.5	3	69.05	66.91	14:42	TMW_9_WG032603_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/27/03
Project No.: EM-2303	**Prepared By:** CC/SM
Well Identification: BL_3	**Pump Intake Depth (ft-bmp):** ~74
Measurement Point Description: Top of Casing, Notch	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	70.28	80.94	10.66	ND	1.71	5.10

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	4	6	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Good Condition, Solid Bottom

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
9:39	0.5	1	0.5	70.56	6.80	22.18	190	3.09	8.37	+63	Clear
9:41	1	2	1	70.48	6.53	22.40	140	2.85	7.62	+59	Clear
9:42	1.5	3	1	70.48	6.40	22.76	90	2.83	7.44	+74	Clear
9:43	2	4	1	70.47	6.42	23.23	65	2.81	7.40	+78	Clear
9:45	2.5	5	0.5	70.47	6.38	23.20	55	2.80	7.35	+81	Clear
9:47	3	6	0.5	70.47	6.36	23.18	48	2.75	7.32	+83	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
9:38	9:47	0.6	6	3	72.41	70.74	9:51	BL_3_WG032703_0001

Notes: Equipment Blank Collected (9:15): EB_TAIT032703_0001; Field Blank Collected (9:25): FB_TAIT032703_0001

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/27/03
Project No.: EM-2303	**Prepared By:** CC/SM
Well Identification: WCC_3S	**Pump Intake Depth (ft-bmp):** ~71
Measurement Point Description: Top of Casing	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	64.18	88.81	24.63	ND	16	48

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	4	6	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Soft Bottom

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
11:02	0.5	8	1.6	64.39	6.26	24.75	650	1.55	8.66	-103	Slightly Gray, Odor
11:09	1	16	1.2	64.42	6.15	23.90	420	1.42	8.13	-115	Clear
11:17	1.5	24	1	64.42	6.72	22.35	380	1.39	7.33	-110	Slightly Cloudy, Odor
11:25	2	32	1	64.37	6.66	23.50	210	1.36	5.69	-89	Slightly Cloudy, Odor
11:37	2.5	40	0.9	64.37	6.60	23.60	100	1.30	5.62	-88	Slightly Cloudy, Odor
11:45	3	48	1	64.47	6.57	26.63	45	1.35	4.99	-85	Slightly Cloudy, Odor

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
10:57	11:50	1	48	3	69.12	64.44	11:48	WCC_03S_WG032703_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/27/03
Project No.: EM-2303	**Prepared By:** CC/SM
Well Identification: TMW_1	**Pump Intake Depth (ft-bmp):** ~80
Measurement Point Description: Top of Casing, Bluemark	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	69.59	85.59	16	ND	2.5	7.5

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	**2**	4	6	0.02	**0.16**	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Good

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
13:03	0.5	1.25	0.6	70.16	6.39	25.27	---	5.75	8.4	+87	Cloudy
13:07	1	2.5	0.3	70.14	6.45	24.03	---	5.49	7.26	+87	Slightly Cloudy
13:09	1.5	3.75	0.4	70.14	6.51	23.95	---	5.48	6.89	+85	Slightly Cloudy
13:13	2	5	0.3	70.14	6.55	23.27	---	5.41	6.65	+81	Slightly Cloudy
13:15	2.5	6.25	0.6	70.14	6.61	23.21	---	5.39	6.61	+80	Slightly Cloudy
13:18	3	7.5	0.4	70.10	6.65	23.52	---	5.37	6.62	+80	Slightly Cloudy

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
13:01	13:18	0.4	7.5	3	72.79	70.10	13:20	TMW_1_WG032703_0001

Notes: Pump stopped at 13:04 and was re-started at 13:05.

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/27/03
Project No.: EM-2303	**Prepared By:** CC/SM
Well Identification: TMW_4	**Pump Intake Depth (ft-bmp):** ~72
Measurement Point Description: Top of Casing	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	66.04	80.24	14.2	ND	2.28	6.8

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	**2**	4	6	0.02	**0.16**	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Good, Soft Bottom

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
14:12	0.5	1.25	0.25	66.57	6.60	23.08	---	1.51	5.87	+124	Cloudy
14:15	1	2.5	0.4	66.40	6.64	23.00	---	1.49	5.45	+119	Cloudy
14:17	1.5	3.75	0.6	66.21	6.66	23.01	---	1.41	5.31	+115	Cloudy
14:19	2	5	0.6	66.13	6.69	22.99	---	1.40	5.24	+113	Cloudy
14:21	2.5	6.25	0.6	66.13	6.60	23.13	---	1.44	5.01	+111	Clear
14:24	3	7.5	0.6	66.56	6.58	22.94	---	1.41	5.10	+113	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
14:07	14:24	0.4	7.5	3.3	68.88	66.56	14:25	TMW_4_WG032703_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/27/03
Project No.: EM-2303	**Prepared By:** CC/SM
Well Identification: TMW_7	**Pump Intake Depth (ft-bmp):** ~78
Measurement Point Description: Top of Casing	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	65.97	83.59	17.62	ND	2.8	8.4

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	**2**	4	6	0.02	**0.16**	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Good, Soft Bottom

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
15:08	0.5	1.4	0.4	66.56	7.05	23.15	---	1.69	9.82	+186	Slightly Turbid
15:10	1	2.8	0.7	66.48	6.68	23.22	---	1.64	6.41	+174	Slightly Turbid
15:12	1.5	4.2	0.7	66.48	6.64	23.31	---	1.61	6.36	+168	Slightly Turbid
15:14	2	5.6	0.7	66.48	6.65	23.39	---	1.62	6.11	+155	Clear
15:16	2.5	7.0	0.7	66.46	6.63	23.45	---	1.62	6.08	+153	Clear
15:17	3	8.4	1.4	66.47	6.61	23.51	---	1.61	6.06	+151	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
15:04	15:19	0.6	8.4	3	69.49	66.47	15:19	TMW_7_WG032703_0001

Notes: Collected Equipment Blank (15:24): EB_TAIT032703_0002

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/28/03
Project No.: EM-2303	**Prepared By:** SM/CC
Well Identification: XMW_19	**Pump Intake Depth (ft-bmp):** ~70
Measurement Point Description: Top of Casing	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	60.87	77.33	16.46	ND	10.7	32.10

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	**4**	6	0.02	0.16	**0.65**	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Solid Bottom

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
10:53	0.5	5.35	2.68	61.23	7.40	23.9	>999	1.82	11.77	+155	Silty, No Odor
10:58	1	10.70	1.07	61.68	7.36	23.9	>999	1.67	11.50	+90	Silty, No Odor
11:01	1.5	16.05	1.78	61.15	7.27	23.8	>999	1.68	11.42	+136	Silty, No Odor
11:06	2	21.40	1.07	61.66	7.72	23.6	>999	1.66	11.82	+137	Silty, No Odor
11:12	2.5	26.75	0.89	61.66	7.30	23.7	241	1.64	12.11	+143	Silty, No Odor
11:15	3	32.10	1.67	61.61	7.29	23.6	244	1.65	12.38	+142	Silty, No Odor

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
10:51	11:15	1.34	32.10	3	64.16	61.61	11:25	XMW_19_WG032803_0001

Notes: Collected Duplicate @ 11:27: XWM_19_WG032803_0002. Collected Field Blank: FB_TAIT022803_0001

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/28/03
Project No.: EM-2303	**Prepared By:** SM/CC
Well Identification: TMW_08	**Pump Intake Depth (ft-bmp):** ~77
Measurement Point Description: Top of Casing	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	67.71	82.61	14.90	ND	2.38	7.14

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	**2**	4	6	0.02	**0.16**	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Soft Bottom

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
12:50	0.5	1.19	0.60	68.16	6.86	23.9	641	1.74	12.87	---	Cloudy, No Odor
12:52	1	2.38	0.60	68.20	7.02	23.2	185	1.63	12.90	---	Cloudy, No Odor
12:54	1.5	3.57	0.60	68.14	7.04	22.9	55	1.65	12.88	---	Clear
12:56	2	4.76	0.60	68.14	7.03	23.1	30	1.66	12.68	---	Clear
12:58	2.5	5.95	0.60	68.12	6.91	23.2	26	1.65	12.41	---	Clear
13:00	3	7.14	0.60	68.11	7.06	23.1	24	1.65	12.51	---	Clear

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
12:48	13:00	0.60	7.14	3	70.69	68.11	13:01	TMW_08_WG032803_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/28/03
Project No.: EM-2303	**Prepared By:** SM/CC
Well Identification: TMW_02	**Pump Intake Depth (ft-bmp):** ~80
Measurement Point Description: Top of Casing	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	69.94	85.09	15.15	ND	2.42	7.27

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	**2**	4	6	0.02	**0.16**	0.65	1.47

Field Equipment: Horiba U-22, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition:

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
15:59	0.5	1.21	0.61	72.92	6.76	24.7	275	2.61	11.72	---	Cloudy, Odor
14:02	1	2.42	0.61	72.94	6.90	23.4	279	2.65	12.25	---	Cloudy, Odor
14:04	1.5	3.63	0.61	72.21	6.87	23.0	312	2.65	12.18	---	Cloudy, Odor
14:06	2	4.84	0.61	72.17	7.02	23.0	156	2.75	11.83	---	Clear, Odor
14:08	2.5	6.05	0.61	72.07	6.87	23.0	98	2.66	11.64	---	Clear, Odor
14:10	3	7.27	0.61	72.07	6.94	22.8	6	2.69	11.59	---	Clear, Odor

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
13:57	14:10	0.61	7.27	3	72.97	72.07	14:11	TMW_02_WG032803_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/28/03
Project No.: EM-2303	**Prepared By:** SM/CC
Well Identification: TMW_05	**Pump Intake Depth (ft-bmp):** ~78
Measurement Point Description: Top of Casing	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	67.61	82.92	15.31	ND	2.45	7.35

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	**2**	4	6	0.02	**0.16**	0.65	1.47

Field Equipment: Hanna Water Parameter Meter, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Solid Bottom

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
15:06	0.5	1.23	0.21	67.78	7.43	23.2	271	0.95	11.21	+147	Cloudy, No Odor
15:16	1	2.45	0.41	67.85	7.71	22.4	114	0.91	11.16	+146	Cloudy, No Odor
15:19	1.5	3.69	0.41	67.87	7.76	22.3	97	0.67	11.05	+123	Cloudy, No Odor
15:21	2	4.92	0.62	67.71	7.75	20.5	39	0.61	11.85	+123	Clearing, No Odor
15:24	2.5	6.15	0.41	67.73	7.66	22.2	38	0.65	10.65	+141	Clearing, No Odor
15:26	3	7.38	0.62	67.71	7.58	21.8	21	0.65	10.16	+152	Clear, No Odor

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
15:00	15:26	0.28	7.38	3	70.67	67.71	15:26	TMW_05_WG032803_0001

Notes: 15:08 Pump Stopped, 15:15 Pump Re-Started.

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/28/03
Project No.: EM-2303	**Prepared By:** SM/CC
Well Identification: DAC_P1	**Pump Intake Depth (ft-bmp):** ~79
Measurement Point Description: Top of Casing	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	65.57	90.42	24.85	ND	16.15	48.75

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	**4**	6	0.02	0.16	**0.65**	1.47

Field Equipment: Hanna Water Parameter Meter, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Soft Bottom

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
16:22	0.5	8.13	1.16	67.93	7.03	23.0	39	2.42	10.35	+174	Clear, No Odor
16:27	1	16.25	1.62	68.12	7.17	22.6	61	2.26	9.55	+127	Clear, No Odor
16:32	1.5	24.39	1.63	68.21	7.11	22.6	44	2.36	9.38	+179	Clear, No Odor
16:40	2	32.52	1.0	68.32	7.12	22.6	0	2.38	9.34	+217	Clear, No Odor
16:46	2.5	40.65	1.4	68.30	7.13	22.4	0	2.61	9.71	+211	Clear, No Odor
16:53	3	48.75	1.2	68.33	7.16	22.1	0	2.44	9.98	+86	Clear, No Odor

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
16:15	16:55	1.2	48.75	3	70.54	68.33	16:53	DAC_P1_WG032803_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

Project Name: BRC, Former C-6 Facility (March 2003)	**Date:** 03/28/03
Project No.: EM-2303	**Prepared By:** SM/CC
Well Identification: WCC_7S	**Pump Intake Depth (ft-bmp):** ~72
Measurement Point Description: Top of Casing, Notch	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)
ND	63.71	90.43	26.72	ND	17.37	52.11

Well Diameter (in)				Gallons/Foot			
				0.75	2	4	6
0.75	2	4	6	0.02	0.16	0.65	1.47

Field Equipment: Hanna Water Parameter Meter, Solinst Water Level Meter

Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing

Well Condition: Soft Bottom, Well Requires New Expansion Cap

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
17:37	0.5	8.69	1.24	64.12	7.53	22.2	5	2.09	9.85	+174	Clear, No Odor
17:44	1	17.38	1.24	64.13	7.31	21.9	10	1.94	9.96	+136	Clear, No Odor
17:50	1.5	26.07	1.45	64.14	7.30	22.0	8	1.73	9.42	+179	Clear, No Odor
17:57	2	34.76	1.24	64.15	7.31	21.8	9	1.62	9.42	+197	Clear, No Odor
18:02	2.5	43.45	1.74	64.17	7.30	22.0	10	1.59	9.18	+153	Clear, No Odor
18:08	3	52.14	1.45	64.16	7.32	21.3	5	1.79	9.63	+175	Clear, No Odor

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
17:30	18:08	1.37	52.14	3	69.05	64.16	18:08	WCC_7S_WG032803_0001

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

DAILY FIELD REPORT

Project Name: March 2003 Sampling Boeing C-6 Torrance	**Project #:**	**Date:** 3/25/03
Personnel: NC/CC	**Sub Contractors:**	

Task: Sample groundwater wells per March 2003 Sampling protocol.

Time Arrived at Site:	**Time Left Site:**	**Total Hours at Site:**
Odometer (Start):	**Odometer (End):**	**Total Miles:**

Equipment List:

- [x] Solinst Water Level Meter Serial #: _____
- [ ] Solinst Water/Product Level Interface Meter Serial #: _____
- [x] Horiba U-22 Water Quality Meter Serial #: _____
- [ ] PID/FID Type: _____ Serial #: _____
- [x] Submbersible Pump Type: 2" Grundfos. Serial #: _____
- [x] Generator Type: _____ Serial #: _____
- [ ] Company Truck License #: _____
- [x] Other(s): Rediflow Var. Freq. ~~Met~~ NC Drive.

Desription of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

Arrived on site at 7:00 a.m
Conducted tailgate health and safety meeting
Set up decon station, decontaminated equipment

Client Signature (if applicable): _____ **Date:** _____

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Project Name: March 2003 Sampling Boeing C-6, Torrance	Project #: EM2303	Date: 3/25/03

Calibrated Horiba U-22, and Solinist

A.M.- Dug ~~up~~ NC to uncover buried wells and gauged.
Could not locate WCC-12S under dirt.
Removed tubing from TMW-2 to gauge.
NC Could not access WCC-4S due to materials/trash dumpster on top. Broken glass and metal pieces.

11:03 - start purging WCC-5S.
11:35- Collected sample NC WCC-5S_WG032503-0001.

12:54- start purge WCC-6S.
13:45 NC- collected sample WCC-6S-WG032503-0001

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

DAILY FIELD REPORT

Project Name: March 2003 Sampling BRCC-6, Torrance	**Project #:** EM2303	**Date:** 3/26/03
Personnel: NC / CC	**Sub Contractors:** NA	

Task: Sample groundwater wells per March 2003 GW Sampling protocol.

Time Arrived at Site:	**Time Left Site:**	**Total Hours at Site:**
Odometer (Start):	**Odometer (End):**	**Total Miles:**

Equipment List:

- [x] Solinst Water Level Meter Serial #: _____
- [ ] Solinst Water/Product Level Interface Meter Serial #: _____
- [x] Horiba U-22 Water Quality Meter Serial #: _____
- [ ] PID/FID Type: _____ Serial #: _____
- [x] Submbersible Pump Type: 2" Grundfos. Serial #: _____
- [x] Generator Type: _____ Serial #: _____
- [ ] Company Truck License #: _____
- [x] Other(s): Rediflow Var. Freq. Drive.

Desription of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

Arrived on site at 7:00 a.m.
Set up decon station, decontaminated equipment.
Conducted tailgate heath and safety meeting.

Client Signature (if applicable): _____ **Date:** _____

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Project Name: March ~~2003~~ Sampling BRCC-6, Torrance	Project #: EM2303	Date: 3/26/03

Calibrated Horiba U-22 and Solinist.
8:23 - start purge TMW-10
8:~~10~~ NC - Collected Sample TMW-10_WG032603_0001
9:18 - start purge TMW-11
9:30 - collected sample TMW-11-WG032603_0001.
9:58 - start purge TMW-14
10:12 - collected sample TMW-14_WG032603_0001
11:02 - start purge TMW-15
11:25 - collected sample TMW-15_WG032603_0001
11:57 - start purge WCC-9S.
unsafe to access well, trip hazard. Well box filled with mud up to top of casing. Well bottom very muddy.
12:25 - collected sample WCC-9S_WG032603_0001
13:40 - start purge TMW-6
13:55 - collected sample TMW-6_WG032603_0001
14:30 - start purge~~d~~ NC. TMW-9.
Well casing above ground is very loose and removable. Very difficult to keep upright, Needs repair.
14:42 - collected sample TMW-9_WG032603_0001

BOE-C6-0007560

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

DAILY FIELD REPORT

Project Name: Boeing C-C	**Project #:** EM2403	**Date:** 3/27/03
Personnel: Curt/Shelly	**Sub Contractors:** N/A	

Task: March 2003 Sampling

Time Arrived at Site: 0645	**Time Left Site:**	**Total Hours at Site:**
Odometer (Start):	**Odometer (End):**	**Total Miles:**

Equipment List:

- ☒ Solinst Water Level Meter Serial #: _____
- ☐ Solinst Water/Product Level Interface Meter Serial #: _____
- ☒ Horiba U-22 Water Quality Meter Serial #: _____
- ☐ PID/FID Type: _____ Serial #: _____
- ☒ Submbersible Pump Type: grundfos Serial #: _____
- ☒ Generator Type: portable Serial #: _____
- ☐ Company Truck License #: u-haul
- ☐ Other(s): _____

Desription of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

Sampled 5 wells, 2 EB's, 1 TB, 1 FB, 1 DW

Client Signature (if applicable): Curtis Conn **Date:** 3/27/03

Page ___ of ___

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Project Name:	Project #:	Date:

7:00AM Met at Starbucks

7:56am Finally found first Well, Conducted Safety meeting, calibrated equipment and set up for Day. Created labels etc. for EB+FB.

9:38 Started Purge BL3

9:50 Sampled

10:57 Started Purge WCC_03S. Access to Well Difficult.

11:48 Sampled WCC-03S

12:27 Arrived @ well TMW1. Well was challenging to find and Access was Difficult. Horiba's Turbidity Stopped working Properly.

13:01 Started Purging TMW1

13:05 Restarted Purging After generator ceased.

13:20 Sampled.

14:07 Started Purging TMW-4 - Turbidity not working

14:25 Sampled

15:04 Started Purge of TMW7

15:19 Sampled w/ a Duplicate on TMW7

16:00 Left Site for Day.

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

DAILY FIELD REPORT

Project Name: Boeing Torrance	**Project #:** Em2403	**Date:** 3/28/03
Personnel: SM/CC	**Sub Contractors:**	

Task: GW Sampling March 2003

Time Arrived at Site: 7:00AM	**Time Left Site:**	**Total Hours at Site:**
Odometer (Start):	**Odometer (End):**	**Total Miles:**

Equipment List:

- ☑ Solinst Water Level Meter Serial #: _____
- ☐ Solinst Water/Product Level Interface Meter Serial #: _____
- ☑ Horiba U-22 Water Quality Meter Serial #: _____
- ☐ PID/FID Type: _____ Serial #: _____
- ☑ Submbersible Pump Type: Grundfos Serial #: _____
- ☑ Generator Type: Portable Serial #: _____
- ☑ Company Truck License #: Rental
- ☑ Other(s): Hanna Water Meter

Desription of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

7:10AM - Returned to OC to Rent A Solinst from Geotech
10:15 - Safety AND Calibration
10:51 - After Locating well AND setting

Client Signature (if applicable): _____ **Date:** _____

Page ___ of ___

Tait Environmental Management, Inc.
Engineering • Environmental • Compliance

Project Name:	Project #:	Date:

up in the Ditch, started Purging.
11:25 Sampled XMW-19
12:48 Located TMW-08 and Started Purging
13:01 Sampled
13:57 Located TMW-02 and Started Purging.
(Locating the wells is time consuming with little landmarks)
14:11 Sampled
15:00 Purged TMW-05 and Had the water Meter Deliver
15:15 Restarted Pump after ceased
15:26 Sampled
16:15 Purged DAC-P1
16:53 Sampled
17:30 Started Purging WCC-7S. Well needs new CAP
18:08 Sampled
18:44 left site

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Instrument Calibration Sheet

Project Name: Boeing C-6 Torrance	Project #: EM 2303

Date	Time	Instrument Type	Instrument Serial No.	Calibration Method	Calibrated By	Remarks
3/25/03	7:23	Solinst	~~steel tape~~ 29483 NC	STEEL TAPE	NC	—
3/25/03	7:36	Horiba	2012002	UNIV. SOLUTION	NC	—
3/26/03	7:18	Solinst	29483	STEEL TAPE	NC	—
3/26/03	7:30	Horiba	2012002	UNV. SOL	NC	—
3/27/03	8:02	SOLINST	29483	Steel tape	SM	
3/27/03	8:36	Horiba	2012002	Unv. Solution	SM	
3/28/03	10:18	solinst	29483	steel tape	SM	
3/28/03	10:30	horiba	2012002	Univ. Solution	SM	

Tait Environmental Management, Inc.
Engineering • Environmental • Compliance

QA/QA Sample Identification Form

Project Name: BRC, Former C-6 Facility (March 2003 Sampling Event)	**Project #:** EM-2303

Date	Time	QA/QC Sample Type (Duplicate, Field Blank, Equipment Blank, Split)	Sample ID	Sample Location	Primary Sample Reference	Analytical Method(s)	Organic-Free Water Source and Reference	Name
3/25/03	NA	TRIP BLANK	TB_TAIT032503_0001	NA	NA	8260B	NA	NC/CC
3/26/03	NA	TRIP BLANK	TB_TAIT032603_0001	NA	NA	8260B	NA	NC/CC
3/27/03	9:45	EQUIPMENT BLANK	EB_TAIT032703_0001	BL3	NA	8260B	STL	SM/CC
3/27/03	9:25	FIELD BLANK	FB_TAIT032703_0001	BL3	NA	8260B	STL	SM/CC
3/27/03	15:19	DUPLICATE	TMW_7_WG032703_0002	TMW_7	TMW_7_WG032703_0001	8260B	NA	SM/CC
3/27/03	NA	TRIP BLANK	TB_TAIT032703_0001	NA	NA	8260B	NA	SM/CC
3/27/03	15:24	EQUIPMENT BLANK	EB_TAIT032703_0002	TMW_7	NA	8260B	STL	SM/CC
3/28/03	11:27	DUPLICATE	XMW_19_WG032803_0002	XMW-19	XMW19_WG032803_0001	8260B	NA	SM/CC
3/28/03	NA	TRIP BLANK	TB_TAIT032803_0001	NA	NA	8260B	NA	SM/CC
3/28/03	NA	FIELD BLANK	FB_TAIT032803_0001	XMW_19	NA	8260B	STL	SM/CC

Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Investigation Derived Waste (IDW) Inventory Record

Project Name: BRC, Former C-6 Facility (March 2003 Sampling)	**Project No.:** EM-2303

Accumulation Date	Drum/Bin	Identifier	Waste Origination	Contents	Container Location	Inventoried By	Labeled By
3/25/03	Drum	C6-IDW175-TA	WCC-5S	Ground Water	Lot 8	NC/CC	NC
3/25/03	Drum	C6-IDW176-TA	WCC-6S	Ground Water	Lot 8	NC/CC	NC
3/25/03	Drum	C6-IDW177-TA	TMW-10	Ground Water	Lot 8	NC/CC	NC
3/25/03	Drum	C6-IDW178-TA	TMW-11	Ground Water	Lot 8	NC/CC	NC
3/25/03	Drum	C6-IDW179-TA	TMW-14	Ground Water	Lot 8	NC/CC	NC
3/25/03	Drum	C6-IDW180-TA	TMW-15	Ground Water	Lot 8	NC/CC	NC
3/25/03	Drum	C6-IDW181-TA	WCC-9S	Ground Water	Lot 8	NC/CC	NC
3/26/03	Drum	C6-IDW182-TA	TMW-6	Ground Water	Lot 8	NC/CC	NC
3/26/03	Drum	C6-IDW183-TA	TMW-9	Ground Water	Lot 8	NC/CC	NC
3/27/03	Drum	C6-IDW184-TA	BL-03	Ground Water	Lot 8	NC/CC	NC
3/27/03	Drum	C6-IDW185-TA	WCC-3S	Ground Water	Lot 8	SM/CC	CC
3/27/03	Drum	C6-IDW186-TA	TMW-1	Ground Water	Lot 8	SM/CC	CC
3/27/03	Drum	C6-IDW187-TA	TMW-4	Ground Water	Lot 8	SM/CC	SM
3/27/03	Drum	C6-IDW188-TA	TMW-7	Ground Water	Lot 8	SM/CC	CC
3/28/03	Drum	C6-IDW189-TA	XMW-19	Ground Water	Lot 8	SM/CC	SM
3/28/03	Drum	C6-IDW190-TA	TMW-8	Ground Water	Lot 8	SM/CC	SM
3/28/03	Drum	C6-IDW191-TA	TMW-2	Ground Water	Lot 8	SM/CC	SM
3/28/03	Drum	C6-IDW192-TA	TMW-5	Ground Water	Lot 8	SM/CC	SM
3/28/03	Drum	C6-IDW193-TA	DAC-P1	Ground Water	Lot 8	SM/CC	SM
3/28/03	Drum	C6-IDW194-TA	WCC-7S	Ground Water	Lot 8	SM/CC	SM

APPENDIX B

Analytical Reports and Chain-of-Custody Records (CD)

ANALYTICAL REPORT

PROJECT NO. 05160-SEV002

Boeing C-6/Tait EM2303

Beth Breitenbach

SEVERN TRENT LABORATORIES, INC.

Diane Suzuki
Project Manager

April 3, 2003

ANALYTICAL REPORT

PROJECT NO. 05160-SEV002

Boeing C-6/Tait EM2303

CH2M Hill

SEVERN TRENT LABORATORIES, INC.

Diane Suzuki
Project Manager

April 3, 2003

ANALYTICAL REPORT

PROJECT NO. 05160-SEV002

Boeing C-6/Tait EM2303

Karen Adkison

Tait Environmental

SEVERN TRENT LABORATORIES, INC.

Diane Suzuki
Project Manager

April 3, 2003

EXECUTIVE SUMMARY - Detection Highlights

E3C310170

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
XMW_19_WG032803_0001 03/28/03 11:28 001				
1,1-Dichloroethene	0.70 J	2.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	0.75 J	2.0	ug/L	SW846 8260B
Chloroform	86	2.0	ug/L	SW846 8260B
Trichloroethene	8.7	2.0	ug/L	SW846 8260B
TMW_19_WG032803_0002 03/28/03 11:27 003				
cis-1,2-Dichloroethene	0.73 J	2.0	ug/L	SW846 8260B
Chloroform	86	2.0	ug/L	SW846 8260B
Trichloroethene	8.5	2.0	ug/L	SW846 8260B
Tetrachloroethene	0.60 J	2.0	ug/L	SW846 8260B
TMW_05_WG032803_0001 03/28/03 004				
1,1-Dichloroethene	610	100	ug/L	SW846 8260B
cis-1,2-Dichloroethene	41 J	100	ug/L	SW846 8260B
Trichloroethene	4300	100	ug/L	SW846 8260B
DAC_P1_WG032803_0001 03/28/03 16:53 005				
cis-1,2-Dichloroethene	89 J	250	ug/L	SW846 8260B
Trichloroethene	13000	250	ug/L	SW846 8260B
TB_TAIT032803_0001 03/28/03 008				
Acetone	5.1 J	10	ug/L	SW846 8260B
TMW_02_WG032803_0001 03/28/03 14:11 009				
1,1-Dichloroethene	23000	250	ug/L	SW846 8260B
trans-1,2-Dichloroethene	380	250	ug/L	SW846 8260B
1,1-Dichloroethane	1500	250	ug/L	SW846 8260B
cis-1,2-Dichloroethene	4700	250	ug/L	SW846 8260B
Chloroform	110 J	250	ug/L	SW846 8260B
1,1,1-Trichloroethane	1300	250	ug/L	SW846 8260B
Trichloroethene	14000	250	ug/L	SW846 8260B
Toluene	710	250	ug/L	SW846 8260B
TMW_08_WG032803_0001 03/28/03 13:01 010				
1,1-Dichloroethene	3800	50	ug/L	SW846 8260B
trans-1,2-Dichloroethene	76	50	ug/L	SW846 8260B
1,1-Dichloroethane	62	50	ug/L	SW846 8260B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E3C310170

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
TMW_08_WG032803_0001 03/28/03 13:01 010				
cis-1,2-Dichloroethene	94	50	ug/L	SW846 8260B
Benzene	27 J	50	ug/L	SW846 8260B
Trichloroethene	3700	50	ug/L	SW846 8260B
WCC_75_WG032803_0001 03/28/03 18:07 011				
1,1-Dichloroethene	170	2.5	ug/L	SW846 8260B
1,1-Dichloroethane	1.0 J	2.5	ug/L	SW846 8260B
cis-1,2-Dichloroethene	2.1 J	2.5	ug/L	SW846 8260B
Trichloroethene	120	2.5	ug/L	SW846 8260B
1,1,2-Trichloroethane	1.4 J	2.5	ug/L	SW846 8260B

METHODS SUMMARY

E3C310170

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E3C310170

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
FK3NK	001	XMW_19_WG032803_0001	03/28/03	11:28
FK3NT	002	EB_TAIT032803_0001	03/28/03	18:18
FK3N1	003	TMW_19_WG032803_0002	03/28/03	11:27
FK3N5	004	TMW_05_WG032803_0001	03/28/03	
FK3PA	005	DAC_P1_WG032803_0001	03/28/03	16:53
FK3PD	006	EB_TAIT032803_0002	03/28/03	
FK3PF	007	FB_TAIT032803_0001	03/28/03	11:09
FK3PJ	008	TB_TAIT032803_0001	03/28/03	
FK3PK	009	TMW_02_WG032803_0001	03/28/03	14:11
FK3PP	010	TMW_08_WG032803_0001	03/28/03	13:01
FK3PQ	011	WCC_75_WG032803_0001	03/28/03	18:07

NOTE(S):

- e c e e e e e e eee e e.
- c c e e e e e - e c c e e .
- e e D ee eece e e e .
- e e e ce ece e e e .
- e e ee e ee e e e c c e e
  e e e e ec e e ec c e e e c e .

TAIT ENVIRONMENTAL

Client Sample ID: XMW_19_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-001 **Work Order #...:** FK3NK1AA **Matrix.....:** WATER
Date Sampled...: 03/28/03 11:28 **Date Received..:** 03/31/03 11:28
Prep Date.....: 04/02/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3092335 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ug/L
Chloromethane	ND	4.0	ug/L
Chloroethane	ND	4.0	ug/L
Bromomethane	ND	4.0	ug/L
Trichlorofluoromethane	ND	4.0	ug/L
1,1,2-Trichlorotrifluoro-ethane	ND	2.0	ug/L
1,1-Dichloroethene	**0.70 J**	**2.0**	**ug/L**
Methylene chloride	ND	2.0	ug/L
Methyl tert-butyl ether	ND	2.0	ug/L
Carbon disulfide	ND	2.0	ug/L
Acetone	ND	20	ug/L
trans-1,2-Dichloroethene	ND	2.0	ug/L
1,1-Dichloroethane	ND	2.0	ug/L
2,2-Dichloropropane	ND	2.0	ug/L
cis-1,2-Dichloroethene	**0.75 J**	**2.0**	**ug/L**
Chloroform	**86**	**2.0**	**ug/L**
Bromochloromethane	ND	2.0	ug/L
1,1,1-Trichloroethane	ND	2.0	ug/L
2-Butanone	ND	10	ug/L
1,1-Dichloropropene	ND	2.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,2-Dibromoethane	ND	2.0	ug/L
Benzene	ND	2.0	ug/L
Trichloroethene	**8.7**	**2.0**	**ug/L**
Bromodichloromethane	ND	2.0	ug/L
4-Methyl-2-pentanone	ND	10	ug/L
Toluene	ND	2.0	ug/L
1,1,2-Trichloroethane	ND	2.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	2.0	ug/L
2-Hexanone	ND	10	ug/L
Dibromochloromethane	ND	2.0	ug/L
Chlorobenzene	ND	2.0	ug/L
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L
Ethylbenzene	ND	2.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L
Styrene	ND	2.0	ug/L
Bromoform	ND	2.0	ug/L

(Continued on next page)

TAIT ENVIRONMENTAL

Client Sample ID: XMW_19_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-001 **Work Order #...:** FK3NK1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	2.0	ug/L
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L
1,2,3-Trichloropropane	ND	2.0	ug/L
n-Propylbenzene	ND	2.0	ug/L
Bromobenzene	ND	2.0	ug/L
1,3,5-Trimethylbenzene	ND	2.0	ug/L
2-Chlorotoluene	ND	2.0	ug/L
4-Chlorotoluene	ND	2.0	ug/L
tert-Butylbenzene	ND	2.0	ug/L
1,2,4-Trimethylbenzene	ND	2.0	ug/L
sec-Butylbenzene	ND	2.0	ug/L
p-Isopropyltoluene	ND	2.0	ug/L
1,3-Dichlorobenzene	ND	2.0	ug/L
1,4-Dichlorobenzene	ND	2.0	ug/L
n-Butylbenzene	ND	2.0	ug/L
1,2-Dichlorobenzene	ND	2.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	4.0	ug/L
1,2,4-Trichloro-benzene	ND	2.0	ug/L
Hexachlorobutadiene	ND	2.0	ug/L
1,2,3-Trichlorobenzene	ND	2.0	ug/L
Acrolein	ND	40	ug/L
Acrylonitrile	ND	40	ug/L
Iodomethane	ND	4.0	ug/L
2-Chloroethyl vinyl ether	ND	10	ug/L
Tetrahydrofuran	ND	20	ug/L
Vinyl acetate	ND	10	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(75 - 130)
1,2-Dichloroethane-d4	106	(65 - 135)
Toluene-d8	110	(80 - 130)

NOTE(S):

e e . e e .

TAIT ENVIRONMENTAL

XMW_19_WG032803_0001

GC/MS Volatiles

Lot-Sample #: E3C310170-001 **Work Order #:** FK3NK1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

TAIT ENVIRONMENTAL

Client Sample ID: EB_TAIT032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-002 **Work Order #...:** FK3NT1AA **Matrix.....:** WATER
Date Sampled...: 03/28/03 18:18 **Date Received..:** 03/31/03 11:28
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092335 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
1,1,2-Trichlorotrifluoro-ethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Methyl tert-butyl ether	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
Acetone	ND	10	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Carbon tetrachloride	ND	0.50	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
Toluene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	0.50	ug/L
Tetrachloroethene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	0.50	ug/L
Xylenes (total)	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L

(Continued on next page)

TAIT ENVIRONMENTAL

Client Sample ID: EB_TAIT032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-002 **Work Order #...:** FK3NT1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2,4-Trichloro-benzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
Acrolein	ND	20	ug/L
Acrylonitrile	ND	20	ug/L
Iodomethane	ND	2.0	ug/L
2-Chloroethyl vinyl ether	ND	5.0	ug/L
Tetrahydrofuran	ND	10	ug/L
Vinyl acetate	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(75 - 130)
1,2-Dichloroethane-d4	103	(65 - 135)
Toluene-d8	108	(80 - 130)

TAIT ENVIRONMENTAL

EB_TAIT032803_0001

GC/MS Volatiles

Lot-Sample #: E3C310170-002 **Work Order #:** FK3NT1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

TAIT ENVIRONMENTAL

Client Sample ID: TMW_19_WG032803_0002

GC/MS Volatiles

Lot-Sample #...: E3C310170-003 **Work Order #...:** FK3N11AA **Matrix.....:** WATER
Date Sampled...: 03/28/03 11:27 **Date Received..:** 03/31/03 11:28
Prep Date.....: 04/02/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3092335 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ug/L
Chloromethane	ND	4.0	ug/L
Chloroethane	ND	4.0	ug/L
Bromomethane	ND	4.0	ug/L
Trichlorofluoromethane	ND	4.0	ug/L
1,1,2-Trichlorotrifluoro-ethane	ND	2.0	ug/L
1,1-Dichloroethene	ND	2.0	ug/L
Methylene chloride	ND	2.0	ug/L
Methyl tert-butyl ether	ND	2.0	ug/L
Carbon disulfide	ND	2.0	ug/L
Acetone	ND	20	ug/L
trans-1,2-Dichloroethene	ND	2.0	ug/L
1,1-Dichloroethane	ND	2.0	ug/L
2,2-Dichloropropane	ND	2.0	ug/L
cis-1,2-Dichloroethene	**0.73 J**	**2.0**	**ug/L**
Chloroform	**86**	**2.0**	**ug/L**
Bromochloromethane	ND	2.0	ug/L
1,1,1-Trichloroethane	ND	2.0	ug/L
2-Butanone	ND	10	ug/L
1,1-Dichloropropene	ND	2.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,2-Dibromoethane	ND	2.0	ug/L
Benzene	ND	2.0	ug/L
Trichloroethene	**8.5**	**2.0**	**ug/L**
Bromodichloromethane	ND	2.0	ug/L
4-Methyl-2-pentanone	ND	10	ug/L
Toluene	ND	2.0	ug/L
1,1,2-Trichloroethane	ND	2.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Tetrachloroethene	**0.60 J**	**2.0**	**ug/L**
2-Hexanone	ND	10	ug/L
Dibromochloromethane	ND	2.0	ug/L
Chlorobenzene	ND	2.0	ug/L
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L
Ethylbenzene	ND	2.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L
Styrene	ND	2.0	ug/L
Bromoform	ND	2.0	ug/L

(Continued on next page)

TAIT ENVIRONMENTAL

Client Sample ID: TMW_19_WG032803_0002

GC/MS Volatiles

Lot-Sample #...: E3C310170-003 **Work Order #...:** FK3N11AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	2.0	ug/L
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L
1,2,3-Trichloropropane	ND	2.0	ug/L
n-Propylbenzene	ND	2.0	ug/L
Bromobenzene	ND	2.0	ug/L
1,3,5-Trimethylbenzene	ND	2.0	ug/L
2-Chlorotoluene	ND	2.0	ug/L
4-Chlorotoluene	ND	2.0	ug/L
tert-Butylbenzene	ND	2.0	ug/L
1,2,4-Trimethylbenzene	ND	2.0	ug/L
sec-Butylbenzene	ND	2.0	ug/L
p-Isopropyltoluene	ND	2.0	ug/L
1,3-Dichlorobenzene	ND	2.0	ug/L
1,4-Dichlorobenzene	ND	2.0	ug/L
n-Butylbenzene	ND	2.0	ug/L
1,2-Dichlorobenzene	ND	2.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	4.0	ug/L
1,2,4-Trichloro-benzene	ND	2.0	ug/L
Hexachlorobutadiene	ND	2.0	ug/L
1,2,3-Trichlorobenzene	ND	2.0	ug/L
Acrolein	ND	40	ug/L
Acrylonitrile	ND	40	ug/L
Iodomethane	ND	4.0	ug/L
2-Chloroethyl vinyl ether	ND	10	ug/L
Tetrahydrofuran	ND	20	ug/L
Vinyl acetate	ND	10	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	96	(75 - 130)
1,2-Dichloroethane-d4	105	(65 - 135)
Toluene-d8	107	(80 - 130)

NOTE(S):

e e . e e .

TAIT ENVIRONMENTAL

TMW_19_WG032803_0002

GC/MS Volatiles

Lot-Sample #: E3C310170-003 **Work Order #:** FK3N11AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

TAIT ENVIRONMENTAL

Client Sample ID: TMW_05_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-004 **Work Order #...:** FK3N51AA **Matrix.....:** WATER
Date Sampled...: 03/28/03 **Date Received..:** 03/31/03 11:28
Prep Date.....: 04/02/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3092335 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	100	ug/L
Chloromethane	ND	200	ug/L
Chloroethane	ND	200	ug/L
Bromomethane	ND	200	ug/L
Trichlorofluoromethane	ND	200	ug/L
1,1,2-Trichlorotrifluoro-ethane	ND	100	ug/L
1,1-Dichloroethene	**610**	**100**	**ug/L**
Methylene chloride	ND	100	ug/L
Methyl tert-butyl ether	ND	100	ug/L
Carbon disulfide	ND	100	ug/L
Acetone	ND	1000	ug/L
trans-1,2-Dichloroethene	ND	100	ug/L
1,1-Dichloroethane	ND	100	ug/L
2,2-Dichloropropane	ND	100	ug/L
cis-1,2-Dichloroethene	**41 J**	**100**	**ug/L**
Chloroform	ND	100	ug/L
Bromochloromethane	ND	100	ug/L
1,1,1-Trichloroethane	ND	100	ug/L
2-Butanone	ND	500	ug/L
1,1-Dichloropropene	ND	100	ug/L
Carbon tetrachloride	ND	50	ug/L
1,2-Dibromoethane	ND	100	ug/L
Benzene	ND	100	ug/L
Trichloroethene	**4300**	**100**	**ug/L**
Bromodichloromethane	ND	100	ug/L
4-Methyl-2-pentanone	ND	500	ug/L
Toluene	ND	100	ug/L
1,1,2-Trichloroethane	ND	100	ug/L
1,2-Dichloroethane	ND	50	ug/L
Tetrachloroethene	ND	100	ug/L
2-Hexanone	ND	500	ug/L
Dibromochloromethane	ND	100	ug/L
Chlorobenzene	ND	100	ug/L
1,1,1,2-Tetrachloroethane	ND	100	ug/L
Ethylbenzene	ND	100	ug/L
Vinyl chloride	ND	50	ug/L
Xylenes (total)	ND	100	ug/L
Styrene	ND	100	ug/L
Bromoform	ND	100	ug/L

(Continued on next page)

TAIT ENVIRONMENTAL

Client Sample ID: TMW_05_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-004 **Work Order #...:** FK3N51AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	100	ug/L
1,1,2,2-Tetrachloroethane	ND	100	ug/L
1,2,3-Trichloropropane	ND	100	ug/L
n-Propylbenzene	ND	100	ug/L
Bromobenzene	ND	100	ug/L
1,3,5-Trimethylbenzene	ND	100	ug/L
2-Chlorotoluene	ND	100	ug/L
4-Chlorotoluene	ND	100	ug/L
tert-Butylbenzene	ND	100	ug/L
1,2,4-Trimethylbenzene	ND	100	ug/L
sec-Butylbenzene	ND	100	ug/L
p-Isopropyltoluene	ND	100	ug/L
1,3-Dichlorobenzene	ND	100	ug/L
1,4-Dichlorobenzene	ND	100	ug/L
n-Butylbenzene	ND	100	ug/L
1,2-Dichlorobenzene	ND	100	ug/L
1,2-Dibromo-3-chloro-propane	ND	200	ug/L
1,2,4-Trichloro-benzene	ND	100	ug/L
Hexachlorobutadiene	ND	100	ug/L
1,2,3-Trichlorobenzene	ND	100	ug/L
Acrolein	ND	2000	ug/L
Acrylonitrile	ND	2000	ug/L
Iodomethane	ND	200	ug/L
2-Chloroethyl vinyl ether	ND	500	ug/L
Tetrahydrofuran	ND	1000	ug/L
Vinyl acetate	ND	500	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(75 - 130)
1,2-Dichloroethane-d4	105	(65 - 135)
Toluene-d8	109	(80 - 130)

NOTE(S):

e e . e e .

TAIT ENVIRONMENTAL

TMW_05_WG032803_0001

GC/MS Volatiles

Lot-Sample #: E3C310170-004 **Work Order #:** FK3N51AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

TAIT ENVIRONMENTAL

Client Sample ID: DAC_P1_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-005 **Work Order #...:** FK3PA1AA **Matrix.....:** WATER
Date Sampled...: 03/28/03 16:53 **Date Received..:** 03/31/03 11:28
Prep Date.....: 04/02/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3092335 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	250	ug/L
Chloromethane	ND	500	ug/L
Chloroethane	ND	500	ug/L
Bromomethane	ND	500	ug/L
Trichlorofluoromethane	ND	500	ug/L
1,1,2-Trichlorotrifluoro-ethane	ND	250	ug/L
1,1-Dichloroethene	ND	250	ug/L
Methylene chloride	ND	250	ug/L
Methyl tert-butyl ether	ND	250	ug/L
Carbon disulfide	ND	250	ug/L
Acetone	ND	2500	ug/L
trans-1,2-Dichloroethene	ND	250	ug/L
1,1-Dichloroethane	ND	250	ug/L
2,2-Dichloropropane	ND	250	ug/L
cis-1,2-Dichloroethene	**89 J**	**250**	**ug/L**
Chloroform	ND	250	ug/L
Bromochloromethane	ND	250	ug/L
1,1,1-Trichloroethane	ND	250	ug/L
2-Butanone	ND	1200	ug/L
1,1-Dichloropropene	ND	250	ug/L
Carbon tetrachloride	ND	120	ug/L
1,2-Dibromoethane	ND	250	ug/L
Benzene	ND	250	ug/L
Trichloroethene	**13000**	**250**	**ug/L**
Bromodichloromethane	ND	250	ug/L
4-Methyl-2-pentanone	ND	1200	ug/L
Toluene	ND	250	ug/L
1,1,2-Trichloroethane	ND	250	ug/L
1,2-Dichloroethane	ND	120	ug/L
Tetrachloroethene	ND	250	ug/L
2-Hexanone	ND	1200	ug/L
Dibromochloromethane	ND	250	ug/L
Chlorobenzene	ND	250	ug/L
1,1,1,2-Tetrachloroethane	ND	250	ug/L
Ethylbenzene	ND	250	ug/L
Vinyl chloride	ND	120	ug/L
Xylenes (total)	ND	250	ug/L
Styrene	ND	250	ug/L
Bromoform	ND	250	ug/L

(Continued on next page)

TAIT ENVIRONMENTAL

Client Sample ID: DAC_P1_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-005 **Work Order #...:** FK3PA1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	250	ug/L
1,1,2,2-Tetrachloroethane	ND	250	ug/L
1,2,3-Trichloropropane	ND	250	ug/L
n-Propylbenzene	ND	250	ug/L
Bromobenzene	ND	250	ug/L
1,3,5-Trimethylbenzene	ND	250	ug/L
2-Chlorotoluene	ND	250	ug/L
4-Chlorotoluene	ND	250	ug/L
tert-Butylbenzene	ND	250	ug/L
1,2,4-Trimethylbenzene	ND	250	ug/L
sec-Butylbenzene	ND	250	ug/L
p-Isopropyltoluene	ND	250	ug/L
1,3-Dichlorobenzene	ND	250	ug/L
1,4-Dichlorobenzene	ND	250	ug/L
n-Butylbenzene	ND	250	ug/L
1,2-Dichlorobenzene	ND	250	ug/L
1,2-Dibromo-3-chloro-propane	ND	500	ug/L
1,2,4-Trichloro-benzene	ND	250	ug/L
Hexachlorobutadiene	ND	250	ug/L
1,2,3-Trichlorobenzene	ND	250	ug/L
Acrolein	ND	5000	ug/L
Acrylonitrile	ND	5000	ug/L
Iodomethane	ND	500	ug/L
2-Chloroethyl vinyl ether	ND	1200	ug/L
Tetrahydrofuran	ND	2500	ug/L
Vinyl acetate	ND	1200	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(75 - 130)
1,2-Dichloroethane-d4	107	(65 - 135)
Toluene-d8	110	(80 - 130)

NOTE(S):

e e . e e .

TAIT ENVIRONMENTAL

DAC_P1_WG032803_0001

GC/MS Volatiles

Lot-Sample #: E3C310170-005 **Work Order #:** FK3PA1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

TAIT ENVIRONMENTAL

Client Sample ID: EB_TAIT032803_0002

GC/MS Volatiles

Lot-Sample #...: E3C310170-006 **Work Order #...:** FK3PD1AA **Matrix.....:** WATER
Date Sampled...: 03/28/03 **Date Received..:** 03/31/03 11:28
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092335 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
1,1,2-Trichlorotrifluoro-ethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Methyl tert-butyl ether	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
Acetone	ND	10	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Carbon tetrachloride	ND	0.50	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
Toluene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	0.50	ug/L
Tetrachloroethene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	0.50	ug/L
Xylenes (total)	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L

(Continued on next page)

TAIT ENVIRONMENTAL

Client Sample ID: EB_TAIT032803_0002

GC/MS Volatiles

Lot-Sample #...: E3C310170-006 **Work Order #...:** FK3PD1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2,4-Trichloro-benzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
Acrolein	ND	20	ug/L
Acrylonitrile	ND	20	ug/L
Iodomethane	ND	2.0	ug/L
2-Chloroethyl vinyl ether	ND	5.0	ug/L
Tetrahydrofuran	ND	10	ug/L
Vinyl acetate	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	95	(75 - 130)
1,2-Dichloroethane-d4	99	(65 - 135)
Toluene-d8	107	(80 - 130)

TAIT ENVIRONMENTAL

EB_TAIT032803_0002

GC/MS Volatiles

Lot-Sample #: E3C310170-006 **Work Order #:** FK3PD1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

TAIT ENVIRONMENTAL

Client Sample ID: FB_TAIT032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-007 **Work Order #...:** FK3PF1AA **Matrix.....:** WATER
Date Sampled...: 03/28/03 11:09 **Date Received..:** 03/31/03 11:28
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092335 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
1,1,2-Trichlorotrifluoro-ethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Methyl tert-butyl ether	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
Acetone	ND	10	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Carbon tetrachloride	ND	0.50	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
Toluene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	0.50	ug/L
Tetrachloroethene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	0.50	ug/L
Xylenes (total)	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L

(Continued on next page)

TAIT ENVIRONMENTAL

Client Sample ID: FB_TAIT032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-007 **Work Order #...:** FK3PF1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2,4-Trichloro-benzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
Acrolein	ND	20	ug/L
Acrylonitrile	ND	20	ug/L
Iodomethane	ND	2.0	ug/L
2-Chloroethyl vinyl ether	ND	5.0	ug/L
Tetrahydrofuran	ND	10	ug/L
Vinyl acetate	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	95	(75 - 130)
1,2-Dichloroethane-d4	102	(65 - 135)
Toluene-d8	105	(80 - 130)

TAIT ENVIRONMENTAL

FB_TAIT032803_0001

GC/MS Volatiles

Lot-Sample #: E3C310170-007 **Work Order #:** FK3PF1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

TAIT ENVIRONMENTAL

Client Sample ID: TB_TAIT032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-008 **Work Order #...:** FK3PJ1AA **Matrix.....:** WATER
Date Sampled...: 03/28/03 **Date Received..:** 03/31/03 11:28
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092335 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
1,1,2-Trichlorotrifluoro-ethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Methyl tert-butyl ether	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
Acetone	**5.1 J**	**10**	**ug/L**
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Carbon tetrachloride	ND	0.50	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
Toluene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	0.50	ug/L
Tetrachloroethene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	0.50	ug/L
Xylenes (total)	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L

(Continued on next page)

TAIT ENVIRONMENTAL

Client Sample ID: TB_TAIT032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-008 **Work Order #...:** FK3PJ1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2,4-Trichloro-benzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
Acrolein	ND	20	ug/L
Acrylonitrile	ND	20	ug/L
Iodomethane	ND	2.0	ug/L
2-Chloroethyl vinyl ether	ND	5.0	ug/L
Tetrahydrofuran	ND	10	ug/L
Vinyl acetate	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	95	(75 - 130)
1,2-Dichloroethane-d4	101	(65 - 135)
Toluene-d8	109	(80 - 130)

NOTE(S):

e e . e e .

TAIT ENVIRONMENTAL

TB_TAIT032803_0001

GC/MS Volatiles

Lot-Sample #: E3C310170-008 **Work Order #:** FK3PJ1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

TAIT ENVIRONMENTAL

Client Sample ID: TMW_02_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-009 **Work Order #...:** FK3PK1AA **Matrix.....:** WATER
Date Sampled...: 03/28/03 14:11 **Date Received..:** 03/31/03 11:28
Prep Date.....: 04/02/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3092335 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	250	ug/L
Chloromethane	ND	500	ug/L
Chloroethane	ND	500	ug/L
Bromomethane	ND	500	ug/L
Trichlorofluoromethane	ND	500	ug/L
1,1,2-Trichlorotrifluoro-ethane	ND	250	ug/L
1,1-Dichloroethene	**23000**	**250**	**ug/L**
Methylene chloride	ND	250	ug/L
Methyl tert-butyl ether	ND	250	ug/L
Carbon disulfide	ND	250	ug/L
Acetone	ND	2500	ug/L
trans-1,2-Dichloroethene	**380**	**250**	**ug/L**
1,1-Dichloroethane	**1500**	**250**	**ug/L**
2,2-Dichloropropane	ND	250	ug/L
cis-1,2-Dichloroethene	**4700**	**250**	**ug/L**
Chloroform	**110 J**	**250**	**ug/L**
Bromochloromethane	ND	250	ug/L
1,1,1-Trichloroethane	**1300**	**250**	**ug/L**
2-Butanone	ND	1200	ug/L
1,1-Dichloropropene	ND	250	ug/L
Carbon tetrachloride	ND	120	ug/L
1,2-Dibromoethane	ND	250	ug/L
Benzene	ND	250	ug/L
Trichloroethene	**14000**	**250**	**ug/L**
Bromodichloromethane	ND	250	ug/L
4-Methyl-2-pentanone	ND	1200	ug/L
Toluene	**710**	**250**	**ug/L**
1,1,2-Trichloroethane	ND	250	ug/L
1,2-Dichloroethane	ND	120	ug/L
Tetrachloroethene	ND	250	ug/L
2-Hexanone	ND	1200	ug/L
Dibromochloromethane	ND	250	ug/L
Chlorobenzene	ND	250	ug/L
1,1,1,2-Tetrachloroethane	ND	250	ug/L
Ethylbenzene	ND	250	ug/L
Vinyl chloride	ND	120	ug/L
Xylenes (total)	ND	250	ug/L
Styrene	ND	250	ug/L
Bromoform	ND	250	ug/L

(Continued on next page)

TAIT ENVIRONMENTAL

Client Sample ID: TMW_02_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-009 **Work Order #...:** FK3PK1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	250	ug/L
1,1,2,2-Tetrachloroethane	ND	250	ug/L
1,2,3-Trichloropropane	ND	250	ug/L
n-Propylbenzene	ND	250	ug/L
Bromobenzene	ND	250	ug/L
1,3,5-Trimethylbenzene	ND	250	ug/L
2-Chlorotoluene	ND	250	ug/L
4-Chlorotoluene	ND	250	ug/L
tert-Butylbenzene	ND	250	ug/L
1,2,4-Trimethylbenzene	ND	250	ug/L
sec-Butylbenzene	ND	250	ug/L
p-Isopropyltoluene	ND	250	ug/L
1,3-Dichlorobenzene	ND	250	ug/L
1,4-Dichlorobenzene	ND	250	ug/L
n-Butylbenzene	ND	250	ug/L
1,2-Dichlorobenzene	ND	250	ug/L
1,2-Dibromo-3-chloro-propane	ND	500	ug/L
1,2,4-Trichloro-benzene	ND	250	ug/L
Hexachlorobutadiene	ND	250	ug/L
1,2,3-Trichlorobenzene	ND	250	ug/L
Acrolein	ND	5000	ug/L
Acrylonitrile	ND	5000	ug/L
Iodomethane	ND	500	ug/L
2-Chloroethyl vinyl ether	ND	1200	ug/L
Tetrahydrofuran	ND	2500	ug/L
Vinyl acetate	ND	1200	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(75 - 130)
1,2-Dichloroethane-d4	109	(65 - 135)
Toluene-d8	110	(80 - 130)

NOTE(S):

e e . e e .

TAIT ENVIRONMENTAL

TMW_02_WG032803_0001

GC/MS Volatiles

Lot-Sample #: E3C310170-009 **Work Order #:** FK3PK1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

TAIT ENVIRONMENTAL

Client Sample ID: TMW_08_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-010 **Work Order #...:** FK3PP1AA **Matrix.....:** WATER
Date Sampled...: 03/28/03 13:01 **Date Received..:** 03/31/03 11:28
Prep Date.....: 04/02/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3092335 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	50	ug/L
Chloromethane	ND	100	ug/L
Chloroethane	ND	100	ug/L
Bromomethane	ND	100	ug/L
Trichlorofluoromethane	ND	100	ug/L
1,1,2-Trichlorotrifluoro-ethane	ND	50	ug/L
1,1-Dichloroethene	**3800**	**50**	**ug/L**
Methylene chloride	ND	50	ug/L
Methyl tert-butyl ether	ND	50	ug/L
Carbon disulfide	ND	50	ug/L
Acetone	ND	500	ug/L
trans-1,2-Dichloroethene	**76**	**50**	**ug/L**
1,1-Dichloroethane	**62**	**50**	**ug/L**
2,2-Dichloropropane	ND	50	ug/L
cis-1,2-Dichloroethene	**94**	**50**	**ug/L**
Chloroform	ND	50	ug/L
Bromochloromethane	ND	50	ug/L
1,1,1-Trichloroethane	ND	50	ug/L
2-Butanone	ND	250	ug/L
1,1-Dichloropropene	ND	50	ug/L
Carbon tetrachloride	ND	25	ug/L
1,2-Dibromoethane	ND	50	ug/L
Benzene	**27 J**	**50**	**ug/L**
Trichloroethene	**3700**	**50**	**ug/L**
Bromodichloromethane	ND	50	ug/L
4-Methyl-2-pentanone	ND	250	ug/L
Toluene	ND	50	ug/L
1,1,2-Trichloroethane	ND	50	ug/L
1,2-Dichloroethane	ND	25	ug/L
Tetrachloroethene	ND	50	ug/L
2-Hexanone	ND	250	ug/L
Dibromochloromethane	ND	50	ug/L
Chlorobenzene	ND	50	ug/L
1,1,1,2-Tetrachloroethane	ND	50	ug/L
Ethylbenzene	ND	50	ug/L
Vinyl chloride	ND	25	ug/L
Xylenes (total)	ND	50	ug/L
Styrene	ND	50	ug/L
Bromoform	ND	50	ug/L

(Continued on next page)

TAIT ENVIRONMENTAL

Client Sample ID: TMW_08_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-010 **Work Order #...:** FK3PP1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	50	ug/L
1,1,2,2-Tetrachloroethane	ND	50	ug/L
1,2,3-Trichloropropane	ND	50	ug/L
n-Propylbenzene	ND	50	ug/L
Bromobenzene	ND	50	ug/L
1,3,5-Trimethylbenzene	ND	50	ug/L
2-Chlorotoluene	ND	50	ug/L
4-Chlorotoluene	ND	50	ug/L
tert-Butylbenzene	ND	50	ug/L
1,2,4-Trimethylbenzene	ND	50	ug/L
sec-Butylbenzene	ND	50	ug/L
p-Isopropyltoluene	ND	50	ug/L
1,3-Dichlorobenzene	ND	50	ug/L
1,4-Dichlorobenzene	ND	50	ug/L
n-Butylbenzene	ND	50	ug/L
1,2-Dichlorobenzene	ND	50	ug/L
1,2-Dibromo-3-chloro-propane	ND	100	ug/L
1,2,4-Trichloro-benzene	ND	50	ug/L
Hexachlorobutadiene	ND	50	ug/L
1,2,3-Trichlorobenzene	ND	50	ug/L
Acrolein	ND	1000	ug/L
Acrylonitrile	ND	1000	ug/L
Iodomethane	ND	100	ug/L
2-Chloroethyl vinyl ether	ND	250	ug/L
Tetrahydrofuran	ND	500	ug/L
Vinyl acetate	ND	250	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(75 - 130)
1,2-Dichloroethane-d4	107	(65 - 135)
Toluene-d8	109	(80 - 130)

NOTE(S):

e e . e e .

TAIT ENVIRONMENTAL

TMW_08_WG032803_0001

GC/MS Volatiles

Lot-Sample #: E3C310170-010 **Work Order #:** FK3PP1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

TAIT ENVIRONMENTAL

Client Sample ID: WCC_75_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-011 **Work Order #...:** FK3PQ1AA **Matrix.....:** WATER
Date Sampled...: 03/28/03 18:07 **Date Received..:** 03/31/03 11:28
Prep Date.....: 04/02/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3092335 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.5	ug/L
Chloromethane	ND	5.0	ug/L
Chloroethane	ND	5.0	ug/L
Bromomethane	ND	5.0	ug/L
Trichlorofluoromethane	ND	5.0	ug/L
1,1,2-Trichlorotrifluoro-ethane	ND	2.5	ug/L
1,1-Dichloroethene	**170**	**2.5**	**ug/L**
Methylene chloride	ND	2.5	ug/L
Methyl tert-butyl ether	ND	2.5	ug/L
Carbon disulfide	ND	2.5	ug/L
Acetone	ND	25	ug/L
trans-1,2-Dichloroethene	ND	2.5	ug/L
1,1-Dichloroethane	**1.0 J**	**2.5**	**ug/L**
2,2-Dichloropropane	ND	2.5	ug/L
cis-1,2-Dichloroethene	**2.1 J**	**2.5**	**ug/L**
Chloroform	ND	2.5	ug/L
Bromochloromethane	ND	2.5	ug/L
1,1,1-Trichloroethane	ND	2.5	ug/L
2-Butanone	ND	12	ug/L
1,1-Dichloropropene	ND	2.5	ug/L
Carbon tetrachloride	ND	1.2	ug/L
1,2-Dibromoethane	ND	2.5	ug/L
Benzene	ND	2.5	ug/L
Trichloroethene	**120**	**2.5**	**ug/L**
Bromodichloromethane	ND	2.5	ug/L
4-Methyl-2-pentanone	ND	12	ug/L
Toluene	ND	2.5	ug/L
1,1,2-Trichloroethane	**1.4 J**	**2.5**	**ug/L**
1,2-Dichloroethane	ND	1.2	ug/L
Tetrachloroethene	ND	2.5	ug/L
2-Hexanone	ND	12	ug/L
Dibromochloromethane	ND	2.5	ug/L
Chlorobenzene	ND	2.5	ug/L
1,1,1,2-Tetrachloroethane	ND	2.5	ug/L
Ethylbenzene	ND	2.5	ug/L
Vinyl chloride	ND	1.2	ug/L
Xylenes (total)	ND	2.5	ug/L
Styrene	ND	2.5	ug/L
Bromoform	ND	2.5	ug/L

(Continued on next page)

TAIT ENVIRONMENTAL

Client Sample ID: WCC_75_WG032803_0001

GC/MS Volatiles

Lot-Sample #...: E3C310170-011 **Work Order #...:** FK3PQ1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	2.5	ug/L
1,1,2,2-Tetrachloroethane	ND	2.5	ug/L
1,2,3-Trichloropropane	ND	2.5	ug/L
n-Propylbenzene	ND	2.5	ug/L
Bromobenzene	ND	2.5	ug/L
1,3,5-Trimethylbenzene	ND	2.5	ug/L
2-Chlorotoluene	ND	2.5	ug/L
4-Chlorotoluene	ND	2.5	ug/L
tert-Butylbenzene	ND	2.5	ug/L
1,2,4-Trimethylbenzene	ND	2.5	ug/L
sec-Butylbenzene	ND	2.5	ug/L
p-Isopropyltoluene	ND	2.5	ug/L
1,3-Dichlorobenzene	ND	2.5	ug/L
1,4-Dichlorobenzene	ND	2.5	ug/L
n-Butylbenzene	ND	2.5	ug/L
1,2-Dichlorobenzene	ND	2.5	ug/L
1,2-Dibromo-3-chloro-propane	ND	5.0	ug/L
1,2,4-Trichloro-benzene	ND	2.5	ug/L
Hexachlorobutadiene	ND	2.5	ug/L
1,2,3-Trichlorobenzene	ND	2.5	ug/L
Acrolein	ND	50	ug/L
Acrylonitrile	ND	50	ug/L
Iodomethane	ND	5.0	ug/L
2-Chloroethyl vinyl ether	ND	12	ug/L
Tetrahydrofuran	ND	25	ug/L
Vinyl acetate	ND	12	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(75 - 130)
1,2-Dichloroethane-d4	109	(65 - 135)
Toluene-d8	115	(80 - 130)

NOTE(S):

e e . e e .

TAIT ENVIRONMENTAL

WCC_75_WG032803_0001

GC/MS Volatiles

Lot-Sample #: E3C310170-011 **Work Order #:** FK3PQ1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

QC DATA ASSOCIATION SUMMARY

E3C310170

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 8260B		3092335	3092142
002	WATER	SW846 8260B		3092335	3092142
003	WATER	SW846 8260B		3092335	3092142
004	WATER	SW846 8260B		3092335	3092142
005	WATER	SW846 8260B		3092335	3092142
006	WATER	SW846 8260B		3092335	3092142
007	WATER	SW846 8260B		3092335	3092142
008	WATER	SW846 8260B		3092335	3092142
009	WATER	SW846 8260B		3092335	3092142
010	WATER	SW846 8260B		3092335	3092142
011	WATER	SW846 8260B		3092335	3092142

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E3C310170 **Work Order #...:** FK6861AA **Matrix.....:** WATER
MB Lot-Sample #: E3D020000-335

Prep Date.....: 04/01/03
Analysis Date..: 04/01/03 **Prep Batch #...:** 3092335

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,1,2-Trichlorotrifluoro-ethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	0.50	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	0.50	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	0.50	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E3C310170 **Work Order #...:** FK6861AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	SW846 8260B
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
Acrolein	ND	20	ug/L	SW846 8260B
Acrylonitrile	ND	20	ug/L	SW846 8260B
Iodomethane	ND	2.0	ug/L	SW846 8260B
2-Chloroethyl vinyl ether	ND	5.0	ug/L	SW846 8260B
Tetrahydrofuran	ND	10	ug/L	SW846 8260B
Vinyl acetate	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(75 - 130)
1,2-Dichloroethane-d4	98	(65 - 135)
Toluene-d8	111	(80 - 130)

NOTE(S):

Cc ee eee - e cc ee .

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E3C310170 **Work Order #...:** FK6861AC **Matrix.....:** WATER
LCS Lot-Sample#: E3D020000-335
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092335

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	113	(65 - 135)	SW846 8260B
Benzene	106	(75 - 125)	SW846 8260B
Trichloroethene	111	(75 - 135)	SW846 8260B
Toluene	106	(75 - 125)	SW846 8260B
Chlorobenzene	100	(75 - 125)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(75 - 130)
1,2-Dichloroethane-d4	104	(65 - 135)
Toluene-d8	114	(80 - 130)

NOTE(S):

Cc ee eee - e cc ee .
eec ee

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E3C310170 **Work Order #...:** FK6861AC **Matrix.....:** WATER
LCS Lot-Sample#: E3D020000-335
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092335

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	10.0	11.3	ug/L	113	SW846 8260B
Benzene	10.0	10.6	ug/L	106	SW846 8260B
Trichloroethene	10.0	11.1	ug/L	111	SW846 8260B
Toluene	10.0	10.6	ug/L	106	SW846 8260B
Chlorobenzene	10.0	10.0	ug/L	100	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(75 - 130)
1,2-Dichloroethane-d4	104	(65 - 135)
Toluene-d8	114	(80 - 130)

NOTE(S):

Cc ee e e e - e cc e e .
e e c ee

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E3C310170 **Work Order #...:** FK37A1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: E3C310212-001 FK37A1AD-MSD
Date Sampled...: 03/31/03 12:15 **Date Received..:** 03/31/03 17:45
Prep Date.....: 04/02/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3092335

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	116	(65 - 135)			SW846 8260B
	114	(65 - 135)	1.6	(0-25)	SW846 8260B
Benzene	112	(75 - 125)			SW846 8260B
	111	(75 - 125)	1.3	(0-25)	SW846 8260B
Trichloroethene	111	(75 - 135)			SW846 8260B
	112	(75 - 135)	0.72	(0-25)	SW846 8260B
Toluene	107	(75 - 125)			SW846 8260B
	106	(75 - 125)	0.47	(0-25)	SW846 8260B
Chlorobenzene	101	(75 - 125)			SW846 8260B
	102	(75 - 125)	0.98	(0-25)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(75 - 130)
	101	(75 - 130)
1,2-Dichloroethane-d4	109	(65 - 135)
	106	(65 - 135)
Toluene-d8	112	(80 - 130)
	112	(80 - 130)

NOTE(S):

Cc ee e e e - e cc e e .
e e c ee

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E3C310170 **Work Order #...:** FK37A1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: E3C310212-001 FK37A1AD-MSD
Date Sampled...: 03/31/03 12:15 **Date Received..:** 03/31/03 17:45
Prep Date.....: 04/02/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3092335

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	ND	10.0	11.6	ug/L	116		SW846 8260B
	ND	10.0	11.4	ug/L	114	1.6	SW846 8260B
Benzene	ND	10.0	11.2	ug/L	112		SW846 8260B
	ND	10.0	11.1	ug/L	111	1.3	SW846 8260B
Trichloroethene	4.1	10.0	15.2	ug/L	111		SW846 8260B
	4.1	10.0	15.3	ug/L	112	0.72	SW846 8260B
Toluene	ND	10.0	10.7	ug/L	107		SW846 8260B
	ND	10.0	10.6	ug/L	106	0.47	SW846 8260B
Chlorobenzene	ND	10.0	10.1	ug/L	101		SW846 8260B
	ND	10.0	10.2	ug/L	102	0.98	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(75 - 130)
	101	(75 - 130)
1,2-Dichloroethane-d4	109	(65 - 135)
	106	(65 - 135)
Toluene-d8	112	(80 - 130)
	112	(80 - 130)

NOTE(S):

Cc ee e e e - e cc e e .
e e c ee

APPENDIX C

Data Validation

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Haley & Aldrich, Inc.
9040 Friars Road, Suite 202
San Diego, CA 92108
ATTN: Ms. Beth Breitenbach

May 8, 2003

SUBJECT: Boeing C-6 Site, Data Validation

Dear Ms. Breitenbach,

Enclosed is the final validation report for the fraction listed below. This SDG was received on April 29, 2003. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 10208:

SDG #	**Fraction**
E3C260341	Volatiles

The data validation was performed under Tier 2 and Tier 3 guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996

Please feel free to contact us if you have any questions.

Sincerely,

Steven A. Ziliak
Senior Chemist

10208COV.wpd

Attachment 1

LDC #10208 (Haley & Aldrich, Inc.-San Diego / Boeing Site#C -6)

LDC	SDG#	DATE REC'D	DATE DUE	VOA (8260B)																															
Matrix	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	E3C260341	4-29-03	5-19-03	5	0																														
A	E3C260341	4-29-03	5-19-03	3	0																														
Total	TH			8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Shaded cells indicate Level IV validation (all other cels are Level III validation). Sample counts do not include MS, MSD, or DUP's.

10208ST.wpd

BRC Former C-6 Torrance Harbor Gateway
Data Validation Reports
LDC# 10208

Volatiles

LDC

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	BRC Former C-6 Torrance Harbor Gateway
Collection Date:	March 26, 2003
LDC Report Date:	May 8, 2003
Matrix:	Water
Parameters:	Volatiles
Validation Level:	Tier 2 & Tier 3
Laboratory:	Severn Trent Laboratories
Sample Delivery Group (SDG):	E3C260341

Sample Identification

TB_TAIT032603_0001
TMW_10_WG032603_0001**
TMW_11_WG032603_0001**
TMW_14_WG032603_0001**
TMW_15_WG032603_0001
WCC_9S_WG032603_0001
TMW_6_WG032603_0001
TMW_9_WG032603_0001
TMW_10_WG032603_0001MS
TMW_10_WG032603_0001MSD

**Indicates sample underwent a Tier 3 review

Introduction

This data review covers 10 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a Tier 3 review. A Tier 2 review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Tier 2 criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check data were reviewed for Tier 2/Tier 3 .

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
3/14/03	Acetone t-Butanol Acrylonitrile 2-Butanone Tetrahydrofuran Acrolein 2-Chloroethylvinyl ether	0.00999 (≥0.05) 0.00424 (≥0.05) 0.00893 (≥0.05) 0.02242 (≥0.05) 0.01225 (≥0.05) 0.00630 (≥0.05) 0.01667 (≥0.05)	All samples in SDG E3C260341	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

BOE-C6-0007622

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/26/03	Carbon disulfide	30.9	All samples in SDG E3C260341	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
3/26/03	Acrolein Acetone t-Butanol Acrylonitrile 2-Butanone Tetrahydrofuran 2-Chloroethylvinyl ether	0.00661 (≥0.05) 0.00962 (≥0.05) 0.00413 (≥0.05) 0.00831 (≥0.05) 0.01911 (≥0.05) 0.01309 (≥0.05) 0.01560 (≥0.05)	All samples in SDG E3C260341	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

BOE-C6-0007623

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a Tier 3 review was performed. Raw data were not evaluated for the samples reviewed by Tier 2 criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a Tier 3 review was performed. Raw data were not evaluated for the samples reviewed by Tier 2 criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a Tier 3 review was performed. Raw data were not evaluated for the samples reviewed by Tier 2 criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

Sample TB_TAIT032603_0001 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Compound	Concentration (ug/L)
TB_TAIT032603_0001	Acetone	5.3

BOE-C6-0007624

BRC Former C-6 Torrance Harbor Gateway
Volatiles - Data Qualification Summary - SDG E3C260341

SDG	Sample	Compound	Flag	A or P	Reason
E3C260341	TB_TAIT032603_0001 TMW_10_WG032603_0001** TMW_11_WG032603_0001** TMW_14_WG032603_0001** TMW_15_WG032603_0001 WCC_9S_WG032603_0001 TMW_6_WG032603_0001 TMW_9_WG032603_0001	Acetone t-Butanol Acrylonitrile 2-Butanone Tetrahydrofuran Acrolein 2-Chloroethylvinyl ether	J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
E3C260341	TB_TAIT032603_0001 TMW_10_WG032603_0001** TMW_11_WG032603_0001** TMW_14_WG032603_0001** TMW_15_WG032603_0001 WCC_9S_WG032603_0001 TMW_6_WG032603_0001 TMW_9_WG032603_0001	Carbon disulfide	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
E3C260341	TB_TAIT032603_0001 TMW_10_WG032603_0001** TMW_11_WG032603_0001** TMW_14_WG032603_0001** TMW_15_WG032603_0001 WCC_9S_WG032603_0001 TMW_6_WG032603_0001 TMW_9_WG032603_0001	Acrolein Acetone t-Butanol Acrylonitrile 2-Butanone Tetrahydrofuran 2-Chloroethylvinyl ether	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)

BRC Former C-6 Torrance Harbor Gateway
Volatiles - Laboratory Blank Data Qualification Summary - SDG E3C260341

No Sample Data Qualified in this SDG

10209A

TAIT ENVIRONMENTAL

Client Sample ID: TB_TAIT032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-001 Work Order #...: FKTJ11AA Matrix.....: WQ
Date Sampled...: 03/26/03 Date Received..: 03/26/03 17:45
Prep Date.....: 03/26/03 Analysis Date..: 03/26/03
Prep Batch #...: 3086224 Method.....: SW846 8260B

PARAMETER	RESULT		REPORTING LIMIT	UNITS
Acetone	**5.3 J**	J	**10**	**ug/L**
Benzene	ND		1.0	ug/L
Bromobenzene	ND		1.0	ug/L
Bromochloromethane	ND		1.0	ug/L
Bromoform	ND		1.0	ug/L
Bromomethane	ND		2.0	ug/L
Carbon tetrachloride	ND		0.50	ug/L
2-Butanone	ND	UJ	5.0	ug/L
n-Butylbenzene	ND		1.0	ug/L
sec-Butylbenzene	ND		1.0	ug/L
tert-Butylbenzene	ND		1.0	ug/L
Carbon disulfide	ND	UJ	1.0	ug/L
Chlorobenzene	ND		1.0	ug/L
Dibromochloromethane	ND		1.0	ug/L
Dichlorodifluoromethane	ND		1.0	ug/L
Bromodichloromethane	ND		1.0	ug/L
1,2-Dichloroethane	ND		0.50	ug/L
1,1-Dichloroethene	ND		1.0	ug/L
Chloroethane	ND		2.0	ug/L
Chloroform	ND		1.0	ug/L
Chloromethane	ND		2.0	ug/L
2-Chlorotoluene	ND		1.0	ug/L
4-Chlorotoluene	ND		1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND		2.0	ug/L
1,2-Dibromoethane	ND		1.0	ug/L
Iodomethane	ND		2.0	ug/L
Isopropyl ether	ND		2.0	ug/L
1,2-Dichlorobenzene	ND		1.0	ug/L
1,3-Dichlorobenzene	ND		1.0	ug/L
1,4-Dichlorobenzene	ND		1.0	ug/L
1,1-Dichloroethane	ND		1.0	ug/L
cis-1,2-Dichloroethene	ND		1.0	ug/L
trans-1,2-Dichloroethene	ND		1.0	ug/L
Vinyl chloride	ND		0.50	ug/L
2,2-Dichloropropane	ND		1.0	ug/L
t-Butanol	ND	UJ	25	ug/L
1,1-Dichloropropene	ND		1.0	ug/L
Tert-amyl methyl ether	ND		2.0	ug/L
Tert-butyl ethyl ether	ND		2.0	ug/L

(Continued on next page)

A
5-1(J)

TAIT ENVIRONMENTAL

Client Sample ID: TB_TAIT032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-001 Work Order #...: FKTJ11AA Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Ethylbenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
Methyl tert-butyl ether	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Xylenes (total)	ND	1.0	ug/L
Acrolein	ND UJ	20	ug/L
Acrylonitrile	ND UJ	20	ug/L
Vinyl acetate	ND	5.0	ug/L
Tetrahydrofuran	ND UJ	10	ug/L
2-Chloroethyl vinyl ether	ND UJ	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(75 - 130)
1,2-Dichloroethane d4	92	(65 - 135)
Toluene-d8	111	(80 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

5-8-03

TAIT ENVIRONMENTAL

Client Sample ID: TMW_10_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-002 **Work Order #...:** FKTJ51AA **Matrix.....:** WG
Date Sampled...: 03/26/03 08:40 **Date Received..:** 03/26/03 17:45
Prep Date.....: 03/26/03 **Analysis Date..:** 03/26/03
Prep Batch #...: 3086224 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND UJ	10	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
Carbon tetrachloride	ND	0.50	ug/L
2-Butanone	ND UJ	5.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon disulfide	ND UJ	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Dichlorodifluoromethane	**2.4**	**1.0**	**ug/L**
Bromodichloromethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	0.50	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	**3.2**	**1.0**	**ug/L**
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Iodomethane	ND	2.0	ug/L
Isopropyl ether	ND	2.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
Vinyl chloride	ND	0.50	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
t-Butanol	ND UJ	25	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L

(Continued on next page)

A
5/8/03

TAIT ENVIRONMENTAL

Client Sample ID: TMW_10_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-002 **Work Order #...:** FKTJ51AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Ethylbenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
Methyl tert-butyl ether	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	**1.0**	**1.0**	**ug/L**
Toluene	**0.58 J**	**1.0**	**ug/L**
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichlorobenzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	**4.9**	**1.0**	**ug/L**
Trichlorofluoromethane	**1.5 J**	**2.0**	**ug/L**
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Xylenes (total)	ND	1.0	ug/L
Acrolein	ND UJ	20	ug/L
Acrylonitrile	ND UJ	20	ug/L
Vinyl acetate	ND	5.0	ug/L
Tetrahydrofuran	ND UJ	10	ug/L
2-Chloroethyl vinyl ether	ND UJ	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	108	(75 - 130)
1,2 Dichloroethane-d4	98	(65 - 135)
Toluene-d8	119	(80 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

A
5-8-03

TAIT ENVIRONMENTAL

Client Sample ID: TMW_11_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-003 **Work Order #...:** FKTJ71AA **Matrix.....:** WG
Date Sampled...: 03/26/03 09:30 **Date Received..:** 03/26/03 17:45
Prep Date.....: 03/27/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3086224 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	**53 J** J	**100**	**ug/L**
Benzene	ND	10	ug/L
Bromobenzene	ND	10	ug/L
Bromochloromethane	ND	10	ug/L
Bromoform	ND	10	ug/L
Bromomethane	ND	20	ug/L
Carbon tetrachloride	**3.4 J**	**5.0**	**ug/L**
2-Butanone	ND UJ	50	ug/L
n-Butylbenzene	ND	10	ug/L
sec-Butylbenzene	ND	10	ug/L
tert-Butylbenzene	ND	10	ug/L
Carbon disulfide	ND UJ	10	ug/L
Chlorobenzene	ND	10	ug/L
Dibromochloromethane	ND	10	ug/L
Dichlorodifluoromethane	ND	10	ug/L
Bromodichloromethane	ND	10	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	10	ug/L
Chloroethane	ND	20	ug/L
Chloroform	**390**	**10**	**ug/L**
Chloromethane	ND	20	ug/L
2-Chlorotoluene	ND	10	ug/L
4-Chlorotoluene	ND	10	ug/L
1,2-Dibromo-3-chloro-propane	ND	20	ug/L
1,2-Dibromoethane	ND	10	ug/L
Iodomethane	ND	20	ug/L
Isopropyl ether	ND	20	ug/L
1,2-Dichlorobenzene	ND	10	ug/L
1,3-Dichlorobenzene	ND	10	ug/L
1,4-Dichlorobenzene	ND	10	ug/L
1,1-Dichloroethane	ND	10	ug/L
cis-1,2-Dichloroethene	ND	10	ug/L
trans-1,2-Dichloroethene	ND	10	ug/L
Vinyl chloride	ND	5.0	ug/L
2,2-Dichloropropane	ND	10	ug/L
t-Butanol	ND UJ	250	ug/L
1,1-Dichloropropene	ND	10	ug/L
Tert-amyl methyl ether	ND	20	ug/L
Tert-butyl ethyl ether	ND	20	ug/L

(Continued on next page)

A
5-8-03

TAIT ENVIRONMENTAL

Client Sample ID: TMW_11_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-003 **Work Order #...:** FKTJ71AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Ethylbenzene	ND	10	ug/L
Hexachlorobutadiene	ND	10	ug/L
2-Hexanone	ND	50	ug/L
Isopropylbenzene	ND	10	ug/L
p-Isopropyltoluene	ND	10	ug/L
Methylene chloride	ND	10	ug/L
4-Methyl-2-pentanone	ND	50	ug/L
Methyl tert-butyl ether	ND	10	ug/L
n-Propylbenzene	ND	10	ug/L
Styrene	ND	10	ug/L
1,1,1,2-Tetrachloroethane	ND	10	ug/L
1,1,2,2-Tetrachloroethane	ND	10	ug/L
Tetrachloroethene	**5.8 J**	**10**	**ug/L**
Toluene	ND	10	ug/L
1,2,3-Trichlorobenzene	ND	10	ug/L
1,2,4-Trichlorobenzene	ND	10	ug/L
1,1,1-Trichloroethane	ND	10	ug/L
1,1,2-Trichloroethane	ND	10	ug/L
Trichloroethene	**7.1 J**	**10**	**ug/L**
Trichlorofluoromethane	ND	20	ug/L
1,2,3-Trichloropropane	ND	10	ug/L
1,2,4-Trimethylbenzene	ND	10	ug/L
1,3,5-Trimethylbenzene	ND	10	ug/L
Xylenes (total)	ND	10	ug/L
Acrolein	ND UJ	200	ug/L
Acrylonitrile	ND UJ	200	ug/L
Vinyl acetate	ND	50	ug/L
Tetrahydrofuran	ND UJ	100	ug/L
2-Chloroethyl vinyl ether	ND UJ	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(75 - 130)
1,2-Dichloroethane-d4	92	(65 - 135)
Toluene-d8	116	(80 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

A
5-4-03

TAIT ENVIRONMENTAL

Client Sample ID: TMW_14_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-004 **Work Order #...:** FKTJ91AA **Matrix.....:** WG
Date Sampled...: 03/26/03 10:12 **Date Received..:** 03/26/03 17:45
Prep Date.....: 03/27/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3086224 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND UJ	10	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
Carbon tetrachloride	**1.8**	**0.50**	**ug/L**
2-Butanone	**5.6** J	**5.0**	**ug/L**
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon disulfide	ND UJ	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	0.50	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	**3.3**	**1.0**	**ug/L**
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Iodomethane	ND	2.0	ug/L
Isopropyl ether	ND	2.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
Vinyl chloride	ND	0.50	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
t-Butanol	ND UJ	25	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L

(Continued on next page)

A
J-4-03

TAIT ENVIRONMENTAL

Client Sample ID: TMW_14_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-004 Work Order #...: FKTJ91AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Ethylbenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4 Methyl-2-pentanone	ND	5.0	ug/L
Methyl tert-butyl ether	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	**1.6**	**1.0**	**ug/L**
Toluene	**0.33 J**	**1.0**	**ug/L**
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichlorobenzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	**10**	**1.0**	**ug/L**
Trichlorofluoromethane	ND	2.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Xylenes (total)	ND	1.0	ug/L
Acrolein	ND UJ	20	ug/L
Acrylonitrile	ND UJ	20	ug/L
Vinyl acetate	ND	5.0	ug/L
Tetrahydrofuran	ND UJ	10	ug/L
2-Chloroethyl vinyl ether	ND UJ	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(75 - 130)
1,2-Dichloroethane-d4	97	(65 - 135)
Toluene-d8	114	(80 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

A
J 8/05

TAIT ENVIRONMENTAL

Client Sample ID: TMW_15_WC032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-005 **Work Order #...:** FKTKA1AA **Matrix.....:** WG
Date Sampled...: 03/26/03 11:25 **Date Received..:** 03/26/03 17:45
Prep Date.....: 03/27/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3086224 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND UJ	10	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
Carbon tetrachloride	ND	0.50	ug/L
2-Butanone	ND UJ	5.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon disulfide	ND UJ	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	0.50	ug/L
1,1-Dichloroethene	**0.58 J**	**1.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Chloroform	**4.2**	**1.0**	**ug/L**
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Iodomethane	ND	2.0	ug/L
Isopropyl ether	ND	2.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene	**2.0**	**1.0**	**ug/L**
trans-1,2-Dichloroethene	ND	1.0	ug/L
Vinyl chloride	ND	0.50	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
t-Butanol	ND UJ	25	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L

(Continued on next page)

A
J 4/07

TAIT ENVIRONMENTAL

Client Sample ID: TMW_15_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-005 **Work Order #...:** FKTKA1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Ethylbenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
Methyl tert-butyl ether	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	**2.5**	**1.0**	**ug/L**
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichlorobenzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	**26**	**1.0**	**ug/L**
Trichlorofluoromethane	ND	2.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	**0.42 J**	**1.0**	**ug/L**
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Xylenes (total)	ND	1.0	ug/L
Acrolein	ND UJ	20	ug/L
Acrylonitrile	ND UJ	20	ug/L
Vinyl acetate	ND	5.0	ug/L
Tetrahydrofuran	ND UJ	10	ug/L
2-Chloroethyl vinyl ether	ND UJ	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(75 - 130)
1,2 Dichloroethane-d4	102	(65 - 135)
Toluene-d8	113	(80 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

A
J 8/03

TAIT ENVIRONMENTAL

Client Sample ID: WCC_9S_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-006 Work Order #...: FKTKD1AA Matrix.....: WG
Date Sampled...: 03/26/03 12:25 Date Received..: 03/26/03 17:45
Prep Date.....: 03/27/03 Analysis Date..: 03/27/03
Prep Batch #...: 3086224 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND UJ	10	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
Carbon tetrachloride	ND	0.50	ug/L
2-Butanone	ND UJ	5.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon disulfide	ND UJ	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Dichlorodifluoromethane	**0.48 J**	**1.0**	**ug/L**
Bromodichloromethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	0.50	ug/L
1,1-Dichloroethene	**3.7**	**1.0**	**ug/L**
Chloroethane	ND	2.0	ug/L
Chloroform	**12**	**1.0**	**ug/L**
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Iodomethane	ND	2.0	ug/L
Isopropyl ether	ND	2.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
1,1-Dichloroethane	**1.1**	**1.0**	**ug/L**
cis-1,2-Dichloroethene	**3.2**	**1.0**	**ug/L**
trans-1,2-Dichloroethene	ND	1.0	ug/L
Vinyl chloride	ND	0.50	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
t-Butanol	ND UJ	25	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L

(Continued on next page)

A
5-8-03

TAIT ENVIRONMENTAL

Client Sample ID: WCC_9S_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-006 **Work Order #...:** FKTKD1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Ethylbenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
Methyl tert-butyl ether	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	**0.31 J**	**1.0**	**ug/L**
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichlorobenzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	**29**	**1.0**	**ug/L**
Trichlorofluoromethane	**0.40 J**	**2.0**	**ug/L**
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Xylenes (total)	ND	1.0	ug/L
Acrolein	ND UJ	20	ug/L
Acrylonitrile	ND UJ	20	ug/L
Vinyl acetate	ND	5.0	ug/L
Tetrahydrofuran	ND UJ	10	ug/L
2-Chloroethyl vinyl ether	ND UJ	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(75 - 130)
1,2-Dichloroethane-d4	98	(65 - 135)
Toluene-d8	116	(80 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

A 5/16/03

TAIT ENVIRONMENTAL

Client Sample ID: TMW_6_WC032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-007 **Work Order #...:** FKTKH1AA **Matrix.....:** WG
Date Sampled...: 03/26/03 13:55 **Date Received..:** 03/26/03 17:45
Prep Date.....: 03/27/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3086224 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND UJ	50	ug/L
Benzene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	10	ug/L
Carbon tetrachloride	ND	2.5	ug/L
2-Butanone	ND UJ	25	ug/L
n-Butylbenzene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
tert-Butylbenzene	ND	5.0	ug/L
Carbon disulfide	ND UJ	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
Dichlorodifluoromethane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
1,2-Dichloroethane	ND	2.5	ug/L
1,1-Dichloroethene	**6.0**	**5.0**	**ug/L**
Chloroethane	ND	10	ug/L
Chloroform	**170**	**5.0**	**ug/L**
Chloromethane	ND	10	ug/L
2-Chlorotoluene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	10	ug/L
1,2-Dibromoethane	ND	5.0	ug/L
Iodomethane	ND	10	ug/L
Isopropyl ether	ND	10	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
cis-1,2-Dichloroethene	ND	5.0	ug/L
trans-1,2-Dichloroethene	ND	5.0	ug/L
Vinyl chloride	ND	2.5	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
t-Butanol	ND UJ	120	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
Tert-amyl methyl ether	ND	10	ug/L
Tert-butyl ethyl ether	ND	10	ug/L

(Continued on next page)

A 5453

TAIT ENVIRONMENTAL

Client Sample ID: TMW_G_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-007 **Work Order #...:** FKTKH1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Ethylbenzene	ND	5.0	ug/L
Hexachlorobutadiene	ND	5.0	ug/L
2-Hexanone	ND	25	ug/L
Isopropylbenzene	ND	5.0	ug/L
p-Isopropyltoluene	ND	5.0	ug/L
Methylene chloride	ND	5.0	ug/L
4-Methyl-2-pentanone	ND	25	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L
n-Propylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
Tetrachloroethene	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
1,2,3-Trichlorobenzene	ND	5.0	ug/L
1,2,4-Trichloro-benzene	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
Trichloroethene	**67**	**5.0**	**ug/L**
Trichlorofluoromethane	ND	10	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L
Acrolein	ND UJ	100	ug/L
Acrylonitrile	ND UJ	100	ug/L
Vinyl acetate	ND	25	ug/L
Tetrahydrofuran	ND UJ	50	ug/L
2-Chloroethyl vinyl ether	ND UJ	25	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(75 - 130)
1,2-Dichloroethane-d4	96	(65 - 135)
Toluene-d8	106	(80 - 130)

A 5-8-03

TAIT ENVIRONMENTAL

Client Sample ID: TMW_9_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-008 Work Order #...: FKTKJ1AA Matrix.....: WG
Date Sampled...: 03/26/03 14:42 Date Received..: 03/26/03 17:45
Prep Date.....: 03/27/03 Analysis Date..: 03/27/03
Prep Batch #...: 3086224 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND UJ	250	ug/L
Benzene	ND	25	ug/L
Bromobenzene	ND	25	ug/L
Bromochloromethane	ND	25	ug/L
Bromoform	ND	25	ug/L
Bromomethane	ND	50	ug/L
Carbon tetrachloride	ND	12	ug/L
2-Butanone	ND UJ	120	ug/L
n-Butylbenzene	ND	25	ug/L
sec-Butylbenzene	ND	25	ug/L
tert-Butylbenzene	ND	25	ug/L
Carbon disulfide	ND UJ	25	ug/L
Chlorobenzene	ND	25	ug/L
Dibromochloromethane	ND	25	ug/L
Dichlorodifluoromethane	ND	25	ug/L
Bromodichloromethane	ND	25	ug/L
1,2-Dichloroethane	ND	12	ug/L
1,1-Dichloroethene	**240**	**25**	**ug/L**
Chloroethane	ND	50	ug/L
Chloroform	ND	25	ug/L
Chloromethane	ND	50	ug/L
2-Chlorotoluene	ND	25	ug/L
4-Chlorotoluene	ND	25	ug/L
1,2-Dibromo-3-chloro-propane	ND	50	ug/L
1,2-Dibromoethane	ND	25	ug/L
Iodomethane	ND	50	ug/L
Isopropyl ether	ND	50	ug/L
1,2-Dichlorobenzene	ND	25	ug/L
1,3-Dichlorobenzene	ND	25	ug/L
1,4-Dichlorobenzene	ND	25	ug/L
1,1-Dichloroethane	ND	25	ug/L
cis-1,2-Dichloroethene	**11 J**	**25**	**ug/L**
trans-1,2-Dichloroethene	ND	25	ug/L
Vinyl chloride	ND	12	ug/L
2,2-Dichloropropane	ND	25	ug/L
t-Butanol	ND UJ	620	ug/L
1,1-Dichloropropene	ND	25	ug/L
Tert-amyl methyl ether	ND	50	ug/L
Tert-butyl ethyl ether	ND	50	ug/L

(Continued on next page)

A 5-18-03

TAIT ENVIRONMENTAL

Client Sample ID: TMW_9_WG032603_0001

GC/MS Volatiles

Lot-Sample #...: E3C260341-008 Work Order #...: FKTKJ1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Ethylbenzene	ND	25	ug/L
Hexachlorobutadiene	ND	25	ug/L
2-Hexanone	ND	120	ug/L
Isopropylbenzene	ND	25	ug/L
p-Isopropyltoluene	ND	25	ug/L
Methylene chloride	ND	25	ug/L
4-Methyl-2-pentanone	ND	120	ug/L
Methyl tert-butyl ether	ND	25	ug/L
n-Propylbenzene	ND	25	ug/L
Styrene	ND	25	ug/L
1,1,1,2-Tetrachloroethane	ND	25	ug/L
1,1,2,2-Tetrachloroethane	ND	25	ug/L
Tetrachloroethene	ND	25	ug/L
Toluene	ND	25	ug/L
1,2,3-Trichlorobenzene	ND	25	ug/L
1,2,4-Trichloro-benzene	ND	25	ug/L
1,1,1-Trichloroethane	ND	25	ug/L
1,1,2-Trichloroethane	ND	25	ug/L
Trichloroethene	**900**	**25**	**ug/L**
Trichlorofluoromethane	ND	50	ug/L
1,2,3-Trichloropropane	ND	25	ug/L
1,2,4-Trimethylbenzene	ND	25	ug/L
1,3,5-Trimethylbenzene	ND	25	ug/L
Xylenes (total)	ND	25	ug/L
Acrolein	ND UJ	500	ug/L
Acrylonitrile	ND UJ	500	ug/L
Vinyl acetate	ND	120	ug/L
Tetrahydrofuran	ND UJ	250	ug/L
2-Chloroethyl vinyl ether	ND UJ	120	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(75 - 130)
1,2-Dichloroethane-d4	95	(65 - 135)
Toluene-d8	110	(80 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

A 5-8-07

LDC #: 10208A1

SDG #: E3C260341

Laboratory: Severn Trent Laboratories, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level Tier 2/3

Date: 5/1/03

Page: 1 of 1

Reviewer: T

2nd Reviewer: A

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: ~~4/15/03~~ 3/26/03
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	
IV.	Continuing calibration	SW	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	Not reviewed for Tier II validation.
XII.	Compound quantitation/CRQLs	A	Not reviewed for Tier II validation.
XIII.	Tentitatively identified compounds (TICs)	N	Not reviewed for Tier II validation.
XIV.	System performance	A	Not reviewed for Teir II validation.
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	TB = 1.

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: ** Indicates sample underwent Tier III validation

MeOH

1	TB_TAIT032603_0001	11	3086224 MB	21		31	
2	TMW_10_WG032603_0001**	12		22		32	
3	TMW_11_WG032603_0001**	13		23		33	
4	TMW_14_WG032603_0001**	14		24		34	
5	TMW_15_WG032603_0001	15		25		35	
6	WCC_9S_WG032603_0001	16		26		36	
7	TMW_6_WG032603_0001	17		27		37	
8	TMW_9_WG032603_0001	18		28		38	
9	TMW_10_WG032603_0001MS	19		29		39	
10	TMW_10_WG032603_0001MSD	20		30		40	

10208A1W.wpd

LDC #: 102080 1
SDG #: 23C26034 1

VALIDATION FINDINGS CHECKLIST

Reviewer: a
2nd Reviewer: A

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?				
Were all samples analyzed within the 12 hour clock criteria?				
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?				
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?				
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?				
Did the initial calibration meet the curve fit acceptance criteria?				
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 0.05?				
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?				
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?				
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) $\geq$ 0.05?				
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			

LDC #: 10208A1
SDG #: E3C260341

VALIDATION FINDINGS CHECKLIST

Reviewer: 9
2nd Reviewer: h

Validation Area	Yes	No	NA	Findings/Comments
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?				
Were retention times within ± 30 seconds of the associated calibration standard?				
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	

LDC #: 10208A1
SDG #: E3C26074

VALIDATION FINDINGS CHECKLIST

Reviewer:
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
XVII. Field blanks				
Field blanks were identified in this SDG.	✓	✓		
Target compounds were detected in the field blanks.	✓			

LDC #: 10208A1
SDG #: E3C260341

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?_____
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/14/03	ICAL	F		0.00999	All + Blk	J/UJ/R *
			LLL		0.00424		
			~~GGGG~~		0.00893		
			M		0.02242		
			MMMM		0.01225		
			FFFF		0.00630		
			II		0.01667		
		* good response					

LDC #: 10208A1
SDG #: E3C26034 1

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: [signature]
2nd Reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
(Y) N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
(Y) N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/26/03	HS3525	4	30.9		All + Blk	J/UJ/A
			FFFF		0.00661		J/UJ/A *
			F		0.00962		↓
			LLL		0.00413		↓
			GGGG		0.00831		↓
			M		0.01911		↓
			HMMM		0.01309		↓
			II		0.01560		↓
		*good response					

CONCAL.1S

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	S. Trichloroethene	KK. Trichlorofluoromethane	CCC. tert-Butylbenzene	UUU. Benzyl chloride
B. Bromomethane	T. Dibromochloromethane	LL. Methyl-tert-butyl ether	DDD. 1,2,4-Trimethylbenzene	VVV. 4-Ethyltoluene
C. Vinyl choride**	U. 1,1,2-Trichloroethane	MM. 1,2-Dibromo-3-chloropropane	EEE. sec-Butylbenzene	WWW. Ethanol
D. Chloroethane	V. Benzene	NN. Diethyl ether	FFF. 1,3-Dichlorobenzene	XXX. Ethyl ether
E. Methylene chloride	W. trans-1,3-Dichloropropene	OO. 2,2-Dichloropropane	GGG. p-Isopropyltoluene	YYY. tert-Butanol
F. Acetone	X. Bromoform*	PP. Bromochloromethane	HHH. 1,4-Dichlorobenzene	ZZZ. tert-Butyl alcohol
G. Carbon disulfide	Y. 4-Methyl-2-pentanone	QQ. 1,1-Dichloropropene	III. n-Butylbenzene	AAAA. Ethyl tert-butyl ether
H. 1,1-Dichloroethene**	Z. 2-Hexanone	RR. Dibromomethane	JJJ. 1,2-Dichlorobenzene	BBBB. tert-Amyl methyl ether
I. 1,1-Dichloroethane*	AA. Tetrachloroethene	SS. 1,3-Dichloropropane	KKK. 1,2,4-Trichlorobenzene	CCCC. 1-Chlorohexane
J. 1,2-Dichloroethene, total	BB. 1,1,2,2-Tetrachloroethane*	TT. 1,2-Dibromoethane	LLL. Hexachlorobutadiene	DDDD. Isopropyl alcohol
K. Chloroform**	CC. Toluene**	UU. 1,1,1,2-Tetrachloroethane	MMM. Naphthalene	EEEE. Acetonitrile
L. 1,2-Dichloroethane	DD. Chlorobenzene*	VV. Isopropylbenzene	NNN. 1,2,3-Trichlorobenzene	FFFF. Acrolein
M. 2-Butanone	EE. Ethylbenzene**	WW. Bromobenzene	OOO. 1,3,5-Trichlorobenzene	GGGG. Acrylonitrile
N. 1,1,1-Trichloroethane	FF. Styrene	XX. 1,2,3-Trichloropropane	PPP. trans-1,2-Dichloroethene	HHHH. 1,4-Dioxane
O. Carbon tetrachloride	GG. Xylenes, total	YY. n-Propylbenzene	QQQ. cis-1,2-Dichloroethene	IIII. Isobutyl alcohol
P. Bromodichloromethane	HH. Vinyl acetate	ZZ. 2-Chlorotoluene	RRR. m,p-Xylenes	JJJJ. Methacrylonitrile
Q. 1,2-Dichloropropane**	II. 2-Chloroethylvinyl ether	AAA. 1,3,5-Trimethylbenzene	SSS. o-Xylene	KKKK. Propionitrile
R. cis-1,3-Dichloropropene	JJ. Dichlorodifluoromethane	BBB. 4-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	LLLL. t-Butanol

MMMM Tetrahydrofuran

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

COMPNDL.1SB

LDC #: 10208A1
SDG #: E3C26034

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Sample: 1 Field Blank / Trip Blank / Rinsate / Other _____ (circle one)

Compound	Concentration Units (µg/L)
F	5.3

Sample: _____ Field Blank / Trip Blank / Rinsate / Other _____ (circle one)

Compound	Concentration Units ( )

Sample: _____ Field Blank / Trip Blank / Rinsate / Other _____ (circle one)

Compound	Concentration Units ( )

FLDBLK.1SB

LDC #: 10208A1
SDG #: E3C26034

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (10 std)	Recalculated RRF (10 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/14/03	~~Methylene chloride~~ (1st internal standard)	0.54803	0.54803	0.54294	0.54294	5.750	5.750
			~~Trichlorethene~~ DA (2nd internal standard)	0.54110	0.54110	0.53884	0.53884	8.603	8.604
			~~Toluene~~ DDD (3rd internal standard)	2.68592	2.68592	2.77843	2.77843	4.320	4.320
2			Methylene chloride (1st internal standard)						
			Trichlorethene (2nd internal standard)						
			Toluene (3rd internal standard)						
3			Methylene chloride (1st internal standard)						
			Trichlorethene (2nd internal standard)						
			Toluene (3rd internal standard)						
4			Methylene chloride (1st internal standard)						
			Trichlorethene (2nd internal standard)						
			Toluene (3rd internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

INICLC.1SB

LDC #: 10208A1
SDG #: E3C26034

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	H53325	3/26/03	K ~~Methylene chloride~~ (1st internal standard)	0.54294	0.49381	0.49381	9.0	9.0
			AA ~~Trichlorethene~~ (2nd internal standard)	0.53884	0.52610	0.52610	2.4	2.4
			DDD ~~Toluene~~ (3rd internal standard)	2.77843	2.77987	2.77987	0.1	0.1
2			Methylene chloride (1st internal standard)					
			Trchlorethene (2nd internal standard)					
			Toluene (3rd internal standard)					
3			Methylene chloride (1st internal standard)					
			Trichlorethene (2nd internal standard)					
			Toluene (3rd internal standard)					
4			Methylene chloride (1st internal standard)					
			Trichlorethene (2nd internal standard)					
			Toluene (3rd internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

CONCLC.1SB

LDC #: 10208A1
SDG #: Z3C36034 1

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 2

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	10	11.8939	119	119	0
Bromofluorobenzene	↓	10.7643	108	108	↓
1,2-Dichloroethane-d4	↓	9.83630	98	98	↓
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

SURRCALC.1SB

LDC #: 10208A1
SDG #: E3C26034

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = | MSC - MSDC | * 2/(MSC + MSDC) MSC = Matrix spike percent recovery MSDC = Matrix spike duplicate percent recovery

MS/MSD sample: 9/10

Compound	Spike Added (µg/L)		Sample Concentration (µg/L)	Spiked Sample Concentration (µg/L)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-----	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	10	10	ND	11.2	10.7	112	112	107	107	4.3	4.6
Trichloroethene			4.9	15.1	14.8	103	102	99	99	2.4	2.0
Benzene			ND	10.6	10.5	106	106	105	105	0.56	0.95
Toluene			0.58	11.2	11.5	107	106	109	109	2.1	2.6
Chlorobenzene			ND	10.2	10.3	102	102	103	103	0.68	0.98

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

MSDCLC.1SB

LDC #: 10208A1
SDG #: E3C260341

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA

Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS = Laboraotry control sample percent recovery

LCSD = Laboretory control sample duplicate percent recovery

LCS ID: 3086224 LCS

Compound	Spike Added (µg/L)		Spiked Sample Concentration (µg/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	10	NA	10.5	NA	105	105				
Trichloroethene	↓	↓	10.2	↓	102	102				
Benzene	↓	↓	10.2	↓	102	102				
Toluene	↓	↓	10.9	↓	109	109				
Chlorobenzene	↓	↓	9.94	↓	99	99				

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LCSCLC.1SB

LDC #: 10208A1
SDG #: 63C26034 1

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [signature]
2nd reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. 3, K:

Conc. = (4675275)(10)(10) / (2189627)(0.54294)( )( )

= ~~393.265~~ 393.265 ug/L

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

RECALC.1SB

APPENDIX D

Limitations

LIMITATIONS

This report was prepared by Haley & Aldrich, Inc., under the professional direction and review of the registered professionals listed on the cover page. The work described herein was conducted in accordance with generally accepted professional engineering and geologic practice. No other warranty exists, either expressed or implied.

In addition to data collected by and observations made by Haley & Aldrich personnel, this report incorporates site conditions observed and described by others as reported in records available to Haley & Aldrich as of the date of report preparation. Haley & Aldrich relied—in part—on such data collected by others in the development of interpretations about environmental conditions at the Site. The accuracy, precision, or representative nature of data originally generated by others could not be independently verified by Haley & Aldrich and would be beyond the scope of this project.

In addition, the passage of time may result in changes in site conditions, technology, or economic conditions which could alter the findings and/or recommendations of the report.