AVOCET
ENVIRONMENTAL, INC.

December 16, 2008 Project No. 1155.006

Ms. Jennifer L. Wiley, PG, CEM
THE BOEING COMPANY
Environment, Health & Safety –
Environmental Remediation
4501 Conant Street, M/C D851-0097
Long Beach, California 90808

Field Data Report
December 2008 Groundwater Sampling and Analysis Plan
Quarterly/Semiannual Monitoring at Building 1/36 Area
Quarterly/Semiannual Monitoring at Building 2 Area
Waste Discharge Requirements Order No. R4-2007-0040
Boeing Corporate Real Estate Former C-6 Facility
Los Angeles, California

Dear Ms. Wiley:

This report has been prepared by Avocet Environmental, Inc. (Avocet) to summarize and present the field data collected during the December 2008 groundwater monitoring event at the Boeing Corporate Real Estate (CRE) Former C-6 Facility in Los Angeles, California. The December 2008 monitoring included sampling for the Building 1/36 Waste Discharge Requirements (WDR) and Building 2 WDR programs. The monitoring was conducted pursuant to and in accordance with the following:

Avocet Environmental, Inc., November 21, 2008, Technical Memorandum, December 2008 Groundwater Sampling and Analysis Plan, Quarterly/Semiannual Monitoring at Building 1/36 Area, Quarterly/Semiannual Monitoring at Building 2 Area, Waste Discharge Requirements Order No. R4-2007-0040, Boeing Corporate Real Estate Former C-6 Facility, Los Angeles, California (Attachment 1).

California Regional Water Quality Control Board, Los Angeles Region (LARWQCB), August 22, 2008, Approval of Revised Monitoring and Reporting Program CI-9310, Individual Waste Discharge Requirements Order No. R4-2007-0040, Boeing Corporate Real Estate, Former C-6 Facility, 19503 South Normandie, Los Angeles, California (File No. 95-036; SLIC No. 0410; Site ID No. 1846000).

Avocet Environmental, Inc., February 4, 2008, 2008 Groundwater Monitoring Work Plan, Boeing Former C-6 Facility, 19503 South Normandie Avenue, Los Angeles, California.

16 Technology Drive, Suite 154 ▪ Irvine, California 92618-2327
Phone 949.296.0977 ▪ Fax 949.296.0978
www.avocetenv.com

Field activities performed during the December 2008 monitoring event are discussed in the following sections. Figures 1 and 2 (Attachment 1) present the locations of the groundwater monitoring wells included in the programs.

GROUNDWATER SAMPLING ACTIVITIES

Groundwater monitoring in December 2008 was conducted in accordance with Revised Monitoring and Reporting Program CI-9310 (MRP), which is part of Individual WDR Order No. R4-2007-0040 (August 22, 2008). Collectively, the two programs call for fluid level measurement and sample collection from 21 wells, as follows:

Quarterly/Semiannual Building 2 WDR Monitoring - In accordance with the revised MRP, six wells were gauged for fluid levels and sampled. These six wells consist of the four Group B Wells (CMW026, IRZCMW002, IRZCMW003, and MWC024), the one Group C Well (CMW002), and the one Group D Well (IRZCMW001). A map showing the Building 2 WDR well locations is provided in Figure 1 (Attachment 1).

Quarterly/Semiannual Building 1/36 WDR Monitoring – Pursuant to the revised MRP, 15 wells in the Former Building 1/36 area were gauged for fluid levels and all 15[1] wells sampled. The 15 wells include the four Group A Wells (AW0064UB through AW0067UB), the eight Group B Wells (AW0075UB, AW0076UB, AW0077UB, EWB002, AW0055UB, AW0073C, WCC06S, and AW0074UB), the Group C Wells (TMW_07 and WCC_12S) and the Group D Well (MWB006). A map showing the WDR wells located in the Building 1/36 Area is provided in Figure 2 (Attachment 1).

All wells were also inspected for any damage or missing materials and described on field data forms. Field data forms are included in Attachment 2.

Fifteen Building 1/36 WDR wells and six Building 2 WDR wells were purged and sampled on December 2 and 3, 2008 using dedicated or portable low-flow bladder pumps and flow-through cells. All WDR wells were purged for sampling using low-flow (0.20-0.25 liters/minute) methods. For all of the WDR monitoring wells, ferrous iron testing was performed using a HACH DR/890 Colorimeter. The flow-through cell dissolved oxygen measurements were confirmed in approximately 10 percent of the wells using a CHEMetrics Inc. test kit. The field instruments were calibrated by EQUIPCO prior to the event and the calibration data sheets are included in Attachment 2.

All of the wells scheduled for water level measurement were gauged for depth to water on December 2, 2008 (Building 1/36 Area wells) and December 3, 2008 (Building 2 Area wells) using a Solinst electronic water level sounder. The wells were also inspected for any damage or missing materials. Apart from two missing well caps (AW0065UB and EWB002) and one missing bolt (IRZCMW003), the wells were in good condition.

[1] Per Camp Dresser & McKee (electronic mail dated November 21, 2008); this includes sampling of the Group A2 and B2 amendment wells. Sampling of the Group A2 and B2 wells is not required by the revised MRP.

At the completion of purging, groundwater samples were collected in laboratory supplied containers, properly labeled, identified on the chain-of-custody, and submitted to TestAmerica Laboratory, an appropriately certified environmental testing laboratory located in Irvine, California. A normal 10-day turn-around time was requested for the lab analyses. For the WDR wells, groundwater samples were analyzed for one or more of the following:

- Volatile organic compounds (VOCs) by EPA Method 8260B,
- Total organic carbon (TOC) by EPA Method 9060,
- Volatile fatty acids (VFAs) by IC Method 8M23G (subcontracted by TestAmerica to Microseeps, Inc., Pittsburg, PA),
- Dissolved gases (ethane, ethene, and methane) by RSK 175 (subcontracted by TestAmerica to Air Technology Laboratory, Inc., City of Industry, CA),
- Dissolved minerals (sulfate, nitrate, nitrite, and chloride) by EPA Method 300 Series,
- Total Alkalinity by EPA Method 310,
- Quantitative polymerase chain reaction (qPCR) analysis for DHC 16S rRNA gene and functional genes tceA, bvcA, and vcrA (subcontracted by TestAmerica to North Wind, Inc., Pocatello, ID, (four Building 2, group B wells only), and
- Total dissolved solids (TDS) by EPA Method 160.1 (for the group C and D wells only).

Purge water (approximately 30 gallons) was placed in one appropriately labeled 55-gallon drum located adjacent to the treatment compound. The analytical results will be used to profile the purge water for transport to an appropriate off-site facility for treatment and disposal. Management, containerization, staging, profiling, and transportation will be conducted in accordance with procedures established by Boeing CRE.

If you have any questions regarding this report or require additional information, please do not hesitate to call.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.

Michael A. Rendina

Michael A. Rendina, C.Hg.
Principal

MAR:sh
Attachments:
Attachment 1: December 2008 Groundwater Sampling and Analysis Plan
Attachment 2: Field Data Forms

S:\Projects\1155 Boeing Former C-6 Facility\Groundwater Monitoring\December 2008\Field Data Report\FDR_December 2008 121608.docx

Attachment 1

December 2008 Groundwater Sampling and Analysis Plan

AVOCET
ENVIRONMENTAL, INC.

AVOCET
ENVIRONMENTAL, INC.

November 21, 2008 Project No. 1155.006

Ms. Jennifer Wiley, P.G. (via electronic mail only)
THE BOEING COMPANY
Environment, Health & Safety –
Environmental Remediation
4501 East Conant Street, M/C D851-0097
Long Beach, California 90808

Technical Memorandum
December 2008 Groundwater Sampling and Analysis Plan
Quarterly/Semiannual Monitoring at Building 1/36 Area
Quarterly/Semiannual Monitoring at Building 2 Area
Waste Discharge Requirements Order No. R4-2007-0040
Boeing Corporate Real Estate Former C-6 Facility
Los Angeles, California

Dear Ms. Wiley:

This memorandum has been prepared by Avocet Environmental, Inc. (Avocet) and presents the sampling and analysis plan (SAP) for the December 2008 groundwater monitoring event at Boeing Corporate Real Estate's (CRE's) Former C-6 Facility in Los Angeles, California. This monitoring is being conducted pursuant to and in accordance with California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) *Approval of Revised Monitoring and Reporting Program CI-9310, Individual Waste Discharge Requirements (WDR) Order No. R4-2007-0040* (the WDR Order) issued August 22, 2008. Under the revised WDR Order, the December 2008 MRP includes sample collection in two areas of the site in response to two separate bioremediation pilot tests: 1) quarterly/semiannual sampling of wells at the Former Building 1/36 Biorecirculation Pilot Test wells, and 2) quarterly/semiannual sampling of the Former Building 2 Periodic Slug Injection wells.

Field Activities

Ground water monitoring conducted in December of 2008 will include the Building 2 and Building 1/36 WDR groundwater monitoring programs. The Building 2 and Building 1/36 WDR groundwater monitoring programs are summarized in Tables 1 and 2, respectively. Maps showing the well locations are provided in Figures 1 through 2. Collectively, the two programs call for fluid level measurement and sample collection from 21 wells, as follows:

Quarterly/Semiannual Building 2 WDR Monitoring - In accordance with the revised MRP, six wells are to be monitored at the Former Building 2 area. These six wells consist of the four Group B Wells (CMW026, IRZCMW002, IRZCMW003, and MWC024), the one Group C Well (CMW002), and the one Group D Well (IRZCMW001). Each of these wells will be gauged for

16 Technology Drive, Suite 154 ▪ Irvine, California 92618-2327
Phone 949.296.0977 ▪ Fax 949.296.0978
www.avocetenv.com

water level and sampled. A list of the WDR wells to be monitored, broken out by Group, is provided in Table 1. A map showing the Building 2 WDR well locations is provided in Figure 1.

Quarterly/Semiannual Building 1/36 WDR Monitoring – Pursuant to the revised MRP, 15 wells in the Former Building 1/36 area will be gauged for fluid levels and all 15[1] wells will be sampled. The 15 wells scheduled for sampling include the four Group A Wells (AW0064UB through AW0067UB), the eight Group B Wells (AW0075UB, AW0076UB, AW0077UB, EWB002, AW0055UB, AW0073C, WCC06S, and AW0074UB), the Group C Wells (TMW_07 and WCC_12S) and the Group D Well (MWB006). A list of the WDR wells to be monitored, broken out by Group, is provided in Table 2. A map showing the WDR wells located in the Building 1/36 Area is provided in Figure 2.

The scope of work will include all tasks associated with collecting the field measurements and laboratory samples required to comply with the WDR Order and 2008 Work Plan. In brief, these activities will include water level measurements, groundwater well purging and sampling, and sample analyses. Additional activities such as pre-field documentation, waste management, and reporting are addressed in the Work Plan. Specifically, the December 2008 groundwater monitoring activities will include the following:

- Prior to any disturbance, depth to groundwater will be measured to the nearest one-hundredth of a foot in each of the 21 wells using a Solinst (or equivalent) well sounder. Monitoring well vapor concentrations will be measured with a photoionization detector (PID) following removal of the well cap. All water level measurements will be collected within a single 24-hour period using calibrated water level sounders. Water levels in wells with submerged screens that are noted to be under pressure upon removal of the well cap will be allowed time to stabilize prior to water level gauging.
- Groundwater samples are scheduled for collection from 21 WDR wells (Tables 1 and 2) during the December 2008 monitoring event. Prior to sampling, the wells will be purged using low-flow methods to assure representative samples are collected from the formation. During purging, the flow rate at each location will be maintained between 0.1 and 0.5 L/min, dependent on site-specific and well-specific factors as drawdown is not to exceed 0.3 feet in any well.
- During well purging, biogeochemical parameters including pH, temperature, electric conductivity (EC), dissolved oxygen (DO), and oxygen-reduction potential (ORP) will be periodically measured using a flow-thru cell and QED multiparameter meter or equivalent. In addition, turbidity will be measured using a Lamotte 2020 turbidimeter; ferrous iron (Fe(II)) will be measured using a Hach DR890 Colorimeter; and approximately ten percent of the dissolved oxygen measurements will be confirmed using a CHEMetrics, Inc. test kit.

[1] Per Camp Dresser & McKee (electronic mail dated November 21, 2008); this includes sampling of the Group A2 and B2 amendment wells. Sampling of the Group A2 and B2 wells is not required by the revised MRP.

Purging will continue until three consecutive measurements are within +/-0.2 for pH, +/-3% for EC, +/-10% for DO, and +/-20 mV for ORP (ATSM, 2002).

- At the completion of purging, groundwater samples will be collected in laboratory-supplied containers, labeled in accordance with Boeing's Data Management Plan (CH2M Hill, 2007), placed on ice in a cooler, identified on the chain-of-custody, and submitted to appropriately-certified environmental testing laboratories.

Samples collected from the Building 2 and Building 1/36 WDR wells will be analyzed for one or more of the following as detailed in Tables 1 and 2:

- volatile organic compounds (EPA Method 8260B);
- total organic carbon (EPA 9060);
- volatile fatty acids by IC Method 8M23G (Microseeps, Inc., Pittsburg, PA);
- dissolved hydrocarbon gases (ethene, ethane, and methane by RSK 175);
- total alkalinity (EPA Method 310.1);
- anions (sulfate, nitrate, nitrite, and chloride by EPA Method 300 Series);
- total dissolved solids (EPA Method 160.1); and
- Quantitative Polymerase Chain Reaction (qPCR) analysis for DHC 16S rRNA gene and functional genes tceA, bvcA, and vcrA (North Wind, Inc., Pocatello, ID).

Closing Remarks

Ground water monitoring is scheduled to commence at the site on Tuesday, December 2, 2008. Avocet Environmental, Inc. appreciates the opportunity to be of service to Boeing Corporate Real Estate. If you have any questions, please do not hesitate to call.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.

Michael A. Rendina

Michael A. Rendina, P.G.
Principal

MAR:sh
Enclosure

cc: Mr. Joe Weidmann – Haley & Aldrich
Mr. Ravi Subramanian - CDM

\\server2\shared\Projects\1155 Boeing Former C-6 Facility\Groundwater Monitoring\SAP Dec 08 1155\Technical Memorandum SAP B136-B2 Dec2008_081114.doc

Tables

AVOCET
ENVIRONMENTAL, INC.

Table 1
December 2008 Former Building 2 WDR Groundwater Monitoring Program
Boeing CRE Former C-6 Facility,
Los Angeles, California

Well Information			Field Program				Laboratory Program								Comments
Well Name	Sampling Group	Hydrostratigraphic Unit	Total Select VOCs Concentration (µg/l)	Sampling Order	Water Level Measurement	Field Parameters	VOCs EPA 8260B	TOC EPA 9060 Modified	Volatile Fatty Acids IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene RSK 175	Alkalinity EPA 310.1	Anions (NO_3, NO_2, Cl, SO_4) EPA 300.0	Total Dissolved Solids EPA 160.1	DHC 16S rRNA gene and functional genes tceA, bvcA, and vcrA: by qPCR analysis (North Wind)	
Group A Wells															
IRZC0001 & IRZC0003 through IRZC0020	A	C-Sand	-	-											Not accessible/required for monitoring
Group B Wells															
CMW026	B	C-Sand	802	1	x	x	x	x	x	x	x	x	-	x	Month 5, (Q2/SA1) WDR Monitoring
IRZCMW002	B	C-Sand	1,115	2	x	x	x	x	x	x	x	x	-	x	Month 5, (Q2/SA1) WDR Monitoring
IRZCMW003	B	C-Sand	10,417	6	x	x	x	x	x	x	x	x	-	x	Month 5, (Q2/SA1) WDR Monitoring
MWC024	B	C-Sand	2,757	4	x	x	x	x	x	x	x	x	-	x	Month 5, (Q2/SA1) WDR Monitoring
Group C Wells															
CMW002	C	C-Sand	9,308	5	x	x	x	x	x	x	x	x	x	x	Month 5, (Q2/SA1) WDR Monitoring
Group D Well															
IRZCMW001	D	C-Sand	1,753	3	x	x	x	x	x	x	x	x	x	x	Month 5, (Q2/SA1) WDR Monitoring
Quality Control Samples															
Duplicates (1 per 20 wells)							x (est. 1)								
Trip Blanks (1 per cooler)							x (est. 1)								
			Totals:		6	6	8	6	6	6	6	6	2	6	

Notes: Field Parameters = pH, DO, ORP, EC, temp, turb, and ferrous iron.
pH = Potential of Hydrogen
DO = Dissolved Oxygen
ORP = Oxidation Reduction Potential
EC = Electrical Conductivity
Temp = Temperature
Turb = Turbidity
µg/l = Micrograms per liter
Q2 = Second Quarterly sampling event, per WDR
VOCs = Volatile organic compounds
EPA = U.S. Environmental Protection Agency
TOC = Total Organic Carbon
DHGs = Dissolved hydrocarbon gases
NO_3 = Nitrate, NO_2 = Nitrite, Cl = Chloride, SO_4 = Sulfate
DHC = *dehalococcoides spp.* strains
qPCR = Quantitative Polymerase Chain Reaction
NA = Not applicable - well equipped with dedicated pump and tubing.
SA1 = First Semi-annual sampling event, per WDR

VOCs for Total Select VOCs Concentration include PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, VC, and Chloroform (most recent through June 2008).

AVOCET ENVIRONMENTAL, INC.

Table 2
December 2008 Building 1/36 WDR Groundwater Monitoring Program
BCRE Former C-6 Facility,
Los Angeles, California

Well Information			Field Program				Laboratory Program								Comments
Well Name	Sampling Group	Hydrostratigraphic Unit	Total VOCs Concentration (µg/l)	Sampling Order	Water Level Measurement	Field Parameters	VOCs EPA 8260B	TOC EPA 9060 Modified	Volatile Fatty Acids IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene RSK 175	Alkalinity EPA 310.1	Anions (NO_3, NO_2, Cl, SO_4) EPA 300.0	Total Dissolved Solids EPA 160.1	DHC 16S rRNA gene and functional genes tceA, bvcA, and vcrA: by qPCR analysis (North Wind)	
Group A Wells															
AW0066UB	A1	B-Sand	1,249	4	x	x	x	x	x	x	x	x	-	x	Q4/SA2 WDR Monitoring
AW0067UB	A1	B-Sand	1,697	6	x	x	x	x	x	x	x	x	-	x	Q4/SA2 WDR Monitoring
AW0064UB	A2	B-Sand	32,139	11	x	x	x	x	x	x	x	x	-	x	non-WDR sampling
AW0065UB	A2	B-Sand	1,854	7	x	x	x	x	x	x	x	x	-	x	non-WDR sampling
Group B Wells															
AW0075UB	B1	B-Sand	37,125	13	x	x	x	x	x	x	x	x	-	x	Q4/SA2 WDR Monitoring
AW0076UB	B1	B-Sand	35,265	12	x	x	x	x	x	x	x	x	-	x	Q4/SA2 WDR Monitoring
AW0077UB	B1	B-Sand	2,730	10	x	x	x	x	x	x	x	x	-	x	Q4/SA2 WDR Monitoring
EWB002	B1	B-Sand	2,314	9	x	x	x	x	x	x	x	x	-	x	Q4/SA2 WDR Monitoring
AW0055UB	B1	B-Sand	37,474	14	x	x	x	x	x	x	x	x	-	x	Q4/SA2 WDR Monitoring
AW0073C	B1	B-Sand	1,450	5	x	x	x	x	x	x	x	x	-	x	Q4/SA2 WDR Monitoring
WCC_06S	B2	B-Sand	400	2	x	x	x	x	x	x	x	x	-	x	non-WDR sampling
AW0074UB	B2	C-Sand	2,000	8	x	x	x	x	x	x	x	x	-	x	non-WDR sampling
Group C Wells															
TMW_07	C	B-Sand	1124	3	x	x	x	x	x	x	x	x	x	x	Q4/SA2 WDR Monitoring
WCC_12S	C	B-Sand	62	1	x	x	x	x	x	x	x	x	x	x	Q4/SA2 WDR Monitoring
Group D Well															
MWB006	D	B-Sand	991,900	15	x	x	x	x	x	x	x	x	x	x	Q4/SA2 WDR Monitoring
Quality Control Samples															
Duplicates (1 per 20 wells)							x (est. 1)								
Rinsate Blanks (1 per day)							x (est. 1)								
Trip Blanks (1 per cooler)							x (est. 2)								
				Totals:	15	15	14	15	15	15	15	15	3	15	

Notes: Field Parameters = pH, DO, ORP, EC, temp, turb, and ferrous iron.
pH = Potential of Hydrogen
DO = Dissolved Oxygen
ORP = Oxidation Reduction Potential
EC = Electrical Conductivity
Temp = Temperature
Turb = Turbidity
µg/l = Micrograms per liter

VOCs = Volatile organic compounds
EPA = U.S. Environmental Protection Agency
TOC = Total Organic Carbon
DHGs = Dissolved hydrocarbon gases
NO_3 = Nitrate, NO_2 = Nitrite, Cl = Chloride, SO_4 = Sulfate
DHC = *dehalococcoides spp.* strains
qPCR = Quantitative Polymerase Chain Reaction
Q4 = Fourth Quarterly sampling event, per WDR
SA2 = Second Semi-annual sampling event, per WDR

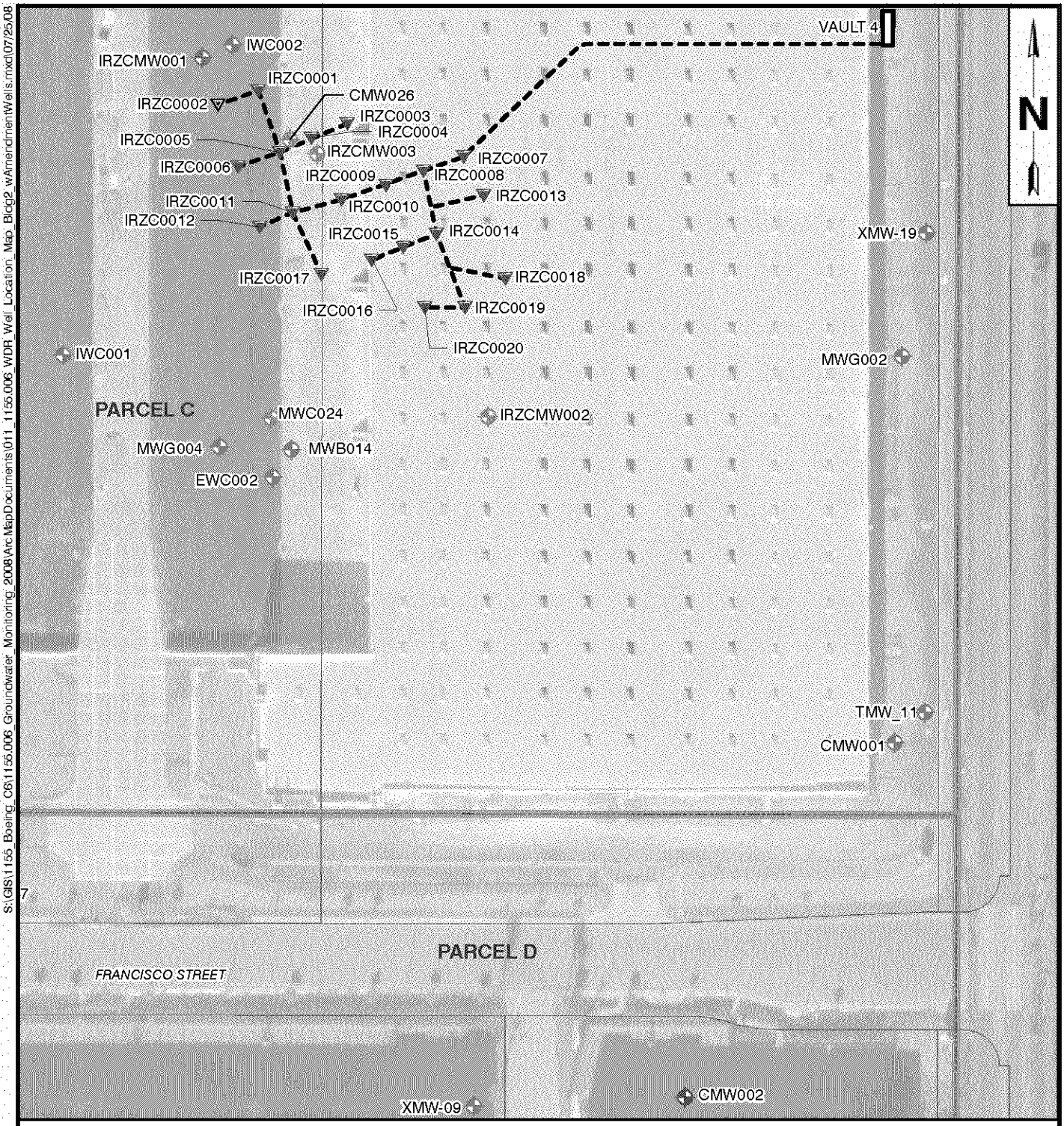
Total VOCs Concentration - B1 Wells March 2008 monitoring.

AVOCET ENVIRONMENTAL, INC.

Figures

AVOCET
ENVIRONMENTAL, INC.

S:\GIS\1155_Boeing_C6\1155.006_Groundwater_Monitoring_2008\ArcMapDocuments\011_1155.006_WDR_Well_Location_Map_Bldg2_wAmendmentWells.mxd\07/25/08



LEGEND

- WDR Amendment Point
- Non-WDR Amendment Point
- Group B WDR Monitoring Well
- Group C WDR Monitoring Well
- Group D WDR Monitoring Well
- Non-WDR Groundwater Monitoring Well
- Amendment Well Piping System

0 100 200

SCALE

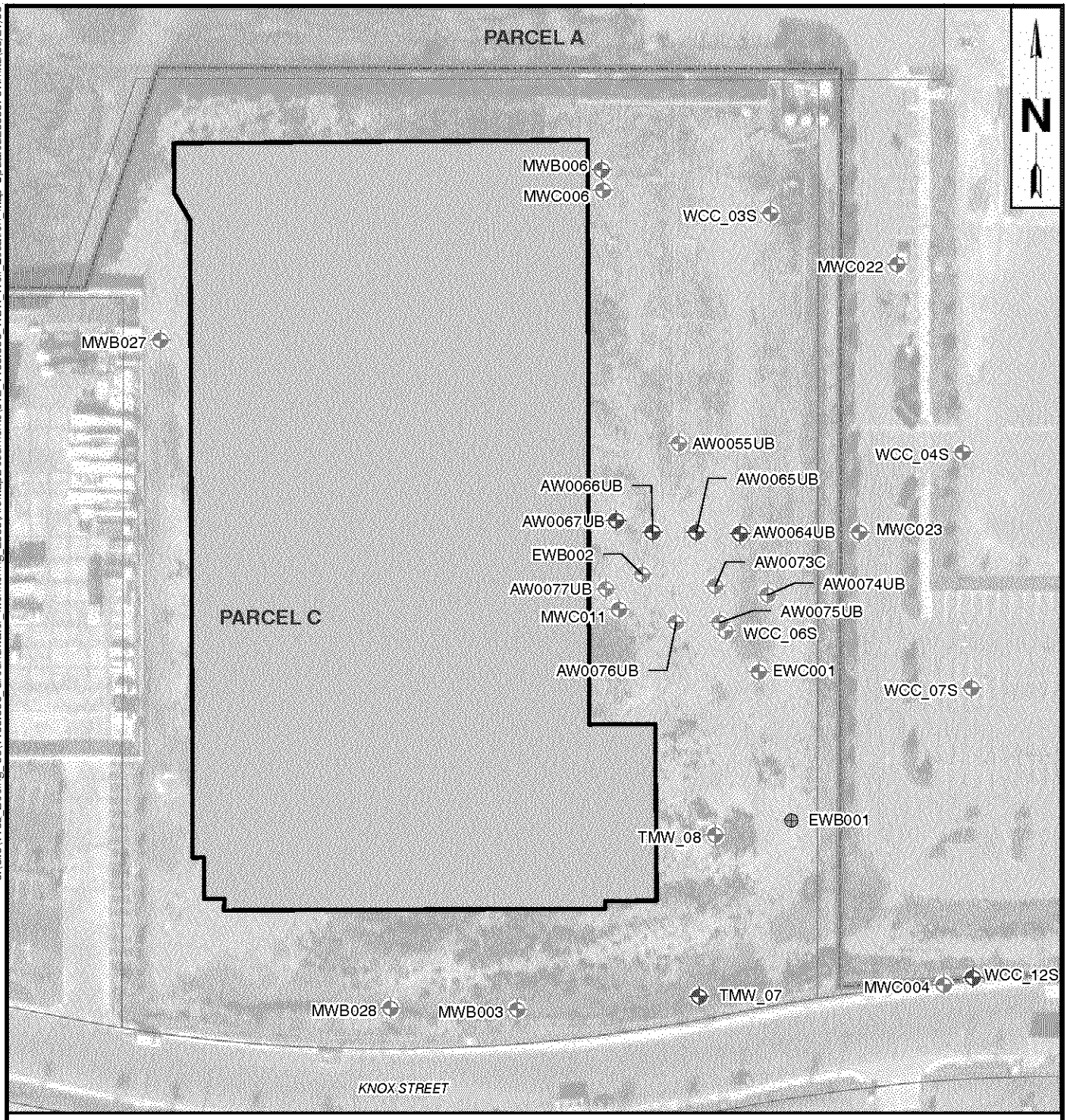
FIGURE 1

WDR WELL LOCATION MAP
FORMER BUILDING 2 AREA

BOEING CORPORATE REAL ESTATE
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

S:\GIS\1155_Boeing_C6\1155.006_Groundwater_Monitoring_2008\ArcMapDocuments\012_1155.006_WDR_Well_Location_Map-Updated20080731.mxd\08/21/08



LEGEND

- Group A WDR Monitoring Well
- Group B WDR Monitoring Well
- Group C WDR Monitoring Well
- Group D WDR Monitoring Well
- Non-WDR Groundwater Monitoring Well
- Pilot Test Groundater Extraction Well
- 1451 Knox St.
- Parcel Boundary

0 100 200

SCALE

FIGURE 2

WDR WELL LOCATION MAP
FORMER BUILDING 1/36 AREA

BOEING CORPORATE REAL ESTATE
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

Attachment 2

Field Data Forms

AVOCET
ENVIRONMENTAL, INC.

AVOCET ENVIRONMENTAL, INC.

Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 December 2008 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.006

Location: Long Beach, CA **Field Personnel:** BCB **Date:** 12/2/08

Field Conditions:

	Well ID	Previous Measurement Date	Previous Depth to Water	Previous Total Depth	Date	Time	Well Diameter	PID (ppm)	Measurement Point	Depth to Water	Depth to Water #2	Comments/Well Conditon
•	AW0055UB	09/22/08	59.91	89.00	12/2/08	0827	2"	91.6	TOC-N	59.98		Good
• -	AW0064UB	09/22/08	58.73	88.50		0839	2"	18.5	TOC-N	58.74		"
• -	AW0065UB	09/22/08	59.09	88.50		0844	2"	2.4	TOC-N	59.17		No well cap
• -	AW0066UB	09/22/08	59.54	89.50		0942	2"	4.5	TOC-N	59.49		Good
• -	AW0067UB	09/22/08	59.52	90.00		0954	2"	4.9	TOC-N	59.81		"
*	AW0073C	09/22/08	59.89	116.00		0850	2"	0.3	TOC-N	59.87		"
•	AW0074UB	09/22/08	59.16	90.00		0959	2"	5.5	TOC-N	59.22		"
*	AW0075UB	09/22/08	59.72	89.00					TOC-N			
*	AW0076UB	09/22/08	60.20	89.00					TOC-N			
*	AW0077UB	09/22/08	60.38	85.50					TOC-N			
*	EWB002	09/22/08	60.21	90.00					TOC-N			
• -	MWB006	09/22/08	60.46	90.00					TOC-N			
•	TMW_07	09/22/08	60.61	0.00					TOC-N			
• -	WCC_06S	09/22/08	58.85	0.00					TOC-N			
	WCC_12S	09/22/08	57.90	0.00					TOC-N			

Explanation

- requires portable low flow pump

* pumps are bagged & placed in system compound

• completed

AVOCET ENVIRONMENTAL, INC.

Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 December 2008 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.006

Location: Long Beach, CA **Field Personnel:** _____ **Date:** _____

Field Conditions: _____

Well ID	Previous Measurement Date	Previous Depth to Water	Previous Total Depth	Date	Time	Well Diameter	PID (ppm)	Measurement Point	Depth to Water	Depth to Water #2	Comments/Well Conditon
AW0055UB	09/22/08	59.91	89.00					TOC-N			
AW0064UB	09/22/08	58.73	88.50					TOC-N			
AW0065UB	09/22/08	59.09	88.50					TOC-N			
AW0066UB	09/22/08	59.54	89.50					TOC-N			
AW0067UB	09/22/08	59.52	90.00					TOC-N			
AW0073C	09/22/08	59.89	116.00					TOC-N			
AW0074UB	09/22/08	59.16	90.00					TOC-N			
AW0075UB	09/22/08	59.72	89.00	12/2/08	0830	2"	60.32	TOC-N	59.83	59.83	Good
AW0076UB	09/22/08	60.20	89.00	12/2/08	0843	2"	25.4	TOC-N	60.32	60.32	Good
AW0077UB	09/22/08	60.38	85.50	12/2/08	0851	2"	1.7	TOC-N	60.62	60.62	Good
EWB002	09/22/08	60.21	90.00	12/2/08	0900	6"	6.7	TOC-N	60.32	60.32	Good/missing cap
MWB006	09/22/08	60.46	90.00	12/2/08	0912	4"	0.3	TOC-N	60.29	60.29	Good
TMW_07	09/22/08	60.61	0.00	12/2/08	0925	2"	0.2	TOC-N	60.77	60.77	Good
WCC_06S	09/22/08	58.85	0.00	12/2/08	0839	4"	3.9	TOC-N	59.06	59.06	Good
WCC_12S	09/22/08	57.90	0.00	12/2/08	0930	4"	0.7	TOC-N	58.01	58.01	Good

AVOCET ENVIRONMENTAL, INC.

Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 December 2008 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.006

Location: Long Beach, CA **Field Personnel:** BCB **Date:** 12/3/08

Field Conditions:

Well ID	Previous Measurement Date	Previous Depth to Water	Previous Total Depth	Date	Time	Well Diameter	PID (ppm)	Measurement Point	Depth to Water	Depth to Water #2	Comments/Well Conditon
CMW002	09/22/08	60.77	124.00	12/3/08	0805	4"	2.1	TOC-N	63.28		Good
CMW026	09/22/08	59.15	117.00					TOC-N			
IRZCMW001	09/22/08	59.27	117.00		0910	4"	0.0	TOC-N	59.15		
IRZCMW002	09/22/08	63.40	121.00		1157	4"	0.2	TOC-N	60.65		
IRZCMW003	09/22/08	59.29	117.00					TOC-N			
MWC024	09/22/08	59.38	121.00		1025	4"	22.6	TOC-N	59.24		

AVOCET ENVIRONMENTAL, INC.

Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 December 2008 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.006

Location: Long Beach, CA **Field Personnel:** _____ **Date:** _____

Field Conditions: _____

Well ID	Previous Measurement Date	Previous Depth to Water	Previous Total Depth	Date	Time	Well Diameter	PID (ppm)	Measurement Point	Depth to Water	Depth to Water #2	Comments/Well Conditon
CMW002	09/22/08	60.77	124.00					TOC-N			
CMW026	09/22/08	59.15	117.00	12/3/08	1153	4"	0.2	TOC-N	59.12	59.12	ok
IRZCMW001	09/22/08	59.27	117.00					TOC-N			
IRZCMW002	09/22/08	63.40	121.00					TOC-N			
IRZCMW003	09/22/08	59.29	117.00	12/3/08	1121	4"	2.1 ppm	TOC-N	59.23	59.23	missing bolt
MWC024	09/22/08	59.38	121.00					TOC-N			

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		**Date:** 12/2/08	
Project No.: 1146.053		**Prepared by:** BCB	
Well Identification: AW0055UB		**Weather:** Overcast / Cool	
Measurement Point Description: TOC-N		**Pump Intake:** 60 5	**Screen:** 69 - 89

A	B	C	D = C - B	E = B - A	G = D x F	H = 20 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—	59.98	89		—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED, Dedicated Low-flow

Purge Method: Micropurge

Well Condition:

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-24-08					22.78	3.16	0.14	6.49	-110	30.5	
1111	10/5 s @	—	~250	59.98	21.43	3.27	0.61	6.57	-218	18.2	colorless
1114	↓	750	↓	60.11	21.79	3.26	0.38	6.50	-238	11.1	"
1117		1500		60.13	21.75	3.27	0.39	6.51	-237	5.21	"
1120		2250		60.15	21.76	3.25	0.37	6.50	-235	2.01	"
1123		3000		60.15	21.78	3.25	0.37	6.49	-232	1.13	"
1126		3750		60.16	21.77	3.24	0.35	6.51	-234	0.52	"

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1111	1126	~250	~3.75	N/A	NA	60.16	1126	AW0055UB_WG200812 02 _01

Notes: (units) [stabilization criteria]

Ferrous Iron = 1.12

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		Date: 12/2/08	
Project No.: 1146.053		Prepared by: BCB	
Well Identification: AW0074UB		Weather: Overcast / Cool	
Measurement Point Description: TOC-N		Pump Intake: 60S	Screen: 70 - 90

A	B	C	D = C - B	E = B - A	G = D x F	H = 20 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—	59.22	90		—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Missing blue plastic cap (low flow well cap)

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 08-06-08					22.64	2.92	0.52	6.44	-112	0.27	
1159	10/5s@ 55psi	—	~[redacted]250	59.22	22.18	2.74	3.66	6.77	-148	22.4	colorless
1202	↓	750	750	59.19	22.34	3.55	0.45	6.44	-212	7.74	"
1205		1500	1500	59.18	22.32	3.28	0.30	6.49	-214	2.95	light yellow
1208		2250	2250	59.17	22.35	3.21	0.28	6.50	-213	1.11	"
1211		3000	3000	59.16	22.	3.09	0.29	6.47	-212	0.97	"
1213	↓	3750	3750	59.15	22.	3.01	0.29	6.49	-212	0.44	"

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1159	1213	~250	3.75	N/A	NA	59.15	1213	AW0074UB_WG200812 02 _01

Notes: (units) [stabilization criteria]

Ferrous Iron = 1.47

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		Date: 12/2/08	
Project No.: 1146.053		Prepared by: BCB	
Well Identification: TMW_07		Weather: Overcast / Cool	
Measurement Point Description: TOC-N		Pump Intake: 60s	Screen: 65 - 85

A	B	C	D = C - B	E = B - A	G = D x F	H = 20 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—	60.58	85		—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	(2)	4	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED, Dedicated Low-flow

Purge Method: Micropurge

Well Condition:

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-24-08					22.62	1.559	6.22	7.35	9	1.54	
1255	10/5s@60psi	—	~250	60.58	21.65	3.74	4.84	6.98	-97	0.76	colorless
1258	↓	750	↓	60.62	22.17	1.70	6.33	7.06	-57	0.94	"
1301		1500		60.60	22.20	1.70	6.61	7.05	-52	1.12	"
1304		2250		60.61	22.21	1.70	6.65	7.06	-50	1.17	"
1307		3000		60.61	22.	1.70	6.67	7.06	-46	1.21	"
1310	—	3750	—	60.61	22.12	1.70	6.71	7.06	-43	1.29	"

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1255	1310	~250	~3.75	N/A	NA	60.61	1310	TMW_07_WG200812 02 _01

Notes: (units) [stabilization criteria]

Ferrous Iron = 0.97

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		**Date:** 12/2/08	
Project No.: 1146.053		**Prepared by:** EMC	
Well Identification: WCC-6S		**Weather:** cloudy	
Measurement Point Description: TOC-N		**Pump Intake:** 60'	**Screen:**

A	B	C	D = C - B	E = B - A	G = D x F	H = 25 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—	59.06	90	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) =	0.75	2	4	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED

Purge Method: Micropurge — Micropurge

Well Condition: OK

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
1005	CPM-4	~~100~~	200	59.06	19.73	3.91	10.36	6.33	-195	69.2	cloudy
1008		600		59.21	21.66	3.86	6.95	6.71	-185	48.7	s. cloudy
1011		1200		59.20	21.89	3.86	6.63	6.84	-180	40.2	s. cloudy
1014		1800		59.20	21.95	3.86	3.51	6.89	-179	46.2	"
1017		2400		59.21	22.00	3.86	3.15	6.94	-172	45.4	"
1020		3000		59.21	22.01	3.86	3.16	6.95	-171	45.5	"
1023		3600		59.20	22.02	3.85	3.17	6.94	-172	45.2	"

EMC

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1005	1023	200 mL	3600	N/A	NA	59.20	1030	WCC_6S.WG20081202_01

Notes: (units) [stabilization criteria] 1.67 Ferrous iron D.O 3.54

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008	Date: 12/2/08
Project No.: 1146.053	Prepared by: Tmc
Well Identification: AW0066UB	Weather: cloudy
Measurement Point Description: TOC	Pump Intake: 80 / Screen: 69.5 - 89.5

A	B	C	D = C - B	E = B - A	G = D x F	H = 25 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—	59.49	—	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) =	0.75	2	4	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
1040	CPM-1	0	200	59.49	22.06	3.95	2.16	6.61	-16	124	Cloudy
1043		600		59.62	22.17	4.11	1.84	6.21	-72	136	
1046		1200		59.61	22.18	5.36	1.76	6.29	-70	256	
1049		1800		59.62	22.20	5.41	1.75	6.32	-69	261	
1052		2400		59.61	22.19	5.40	1.70	6.31	-70	272	
1055		3000		59.60	22.20	5.39	1.71	6.32	-69	271	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1040	1055	200	3000	N/A	NA	59.60	1105	AW0066UB_WG200B1205_01

Notes: (units) [stabilization criteria] Ferrous Iron 1.15 D.O. 1.93

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		Date: 12/2/08	
Project No.: 1146.053		Prepared by: EMG	
Well Identification: AW0065UB		Weather: cloudy	
Measurement Point Description: TOC		Pump Intake: 20.5'	Screen: 68.5 - 88.5

A	B	C	D = C - B	E = B - A	G = D x F	H = 20 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—	59.17	—	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED, Portable Low-flow

Purge Method: Micropurge

Well Condition: missing cap

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-24-08					22.71	3.49	0.58	6.25	-85	663	
1210	CPM: 4	0	200	59.17	21.77	4.27	3.49	5.91	-87	343	cloudy
1213		600		59.42	22.20	3.50	0.52	6.39	-162	2000+	
1216		1200		59.41	22.13	3.51	0.38	6.47	-170	1942	
1219		1800		59.40	22.15	3.50	0.30	6.50	-178	1941	
1222		2400		59.40	22.17	3.51	0.29	6.51	-180	1965	
1225		3000		59.41	22.18	3.49	0.28	6.50	-181	1982	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1210	1225	200	3000	N/A	NA	59.41	1235	AW0065UB_WG200812 02_01

Notes: (units) [stabilization criteria] Ferrous Iron 1.02

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		Date: 12/2/08	
Project No.: 1146.053		Prepared by: GMC	
Well Identification: AW0067UB		Weather: Cloudy	
Measurement Point Description:		Pump Intake: COS	Screen: 70-90

A	B	C	D = C - B	E = B - A	G = D x F	H = 25 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—	59.76	—	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) =	0.75	2	4	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
1130	CPM-4	0	200	59.76	21.27	5.74	4.68	5.37	-47	634	Cloudy
1133		600		59.91	21.96	6.05	0.87	4.99	-59	595	
1136		1200		59.90	22.47	6.06	0.53	4.96	-64	572	
1139		1800		59.91	22.51	6.07	0.47	4.97	-65	585	
1142		2400		59.89	22.50	6.09	0.43	5.01	-64	596	
1145		3000		59.90	22.51	6.07	0.41	5.01	-65	587	
1148		3600		59.90	22.50	6.08	0.40	5.00	-64	596	

GMC

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1130	1148	200	3600	N/A	NA	59.90	1154	AW0067UB.WG20081202.01

Notes: (units) [stabilization criteria] Ferrous Iron 1.52

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		**Date:** 12/2/08	
Project No.: 1146.053		**Prepared by:** [illegible]	
Well Identification: AW0064UB		**Weather:** Cloudy	
Measurement Point Description: TOC		**Pump Intake:** CDS	**Screen:** 68.5 - 88.5

A	B	C	D = C - B	E = B - A	G = D x F	H = 20 x F	I = (top screen-B) x F	
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 Casing Volume** (gallons)	**Screen Volume** (gallons)	**Above Screen Volume** (gal.)	**Total Purge Volume** (gal.)
NA	58.80	—	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: QED, Portable Low-flow
Purge Method: Micropurge
Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-24-08					22.55	3.07	0.36	6.67	-109	207	
1249	CPM-4	0	200	58.80	21.67	2.95	4.03	6.83	-104	701	cloudy
1252	↓	600	↓	58.92	22.21	3.67	1.46	6.49	-109	245	↓
1255		1200		58.97	22.14	3.93	1.27	6.51	-114	109	
1258		1800		58.96	22.25	3.89	1.37	6.52	-116	93.8	
1301		2400		58.95	22.18	3.83	1.56	6.53	-104	86.1	
1304		3000		58.96	22.18	3.81	1.57	6.52	-102	81.3	
1307	↓	3600	↓	58.96	22.19	3.82	1.59	6.53	-101	81.4	↓
[illegible]											

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1249	1307	200	3600	N/A	NA	58.96	1315	AW0064UB_WG200812 02 _01

Notes: (units) [stabilization criteria] Ferrous Iron 1.26

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		Date: 12/2/08	
Project No.: 1146.053		Prepared by: Zmc	
Well Identification: MWB006		Weather: Cloudy	
Measurement Point Description: TOC		Pump Intake: COS	Screen: 65 - 90

A	B	C	D = C - B	E = B - A	G = D x F	H = 25 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—		—	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED, Portable Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-24-08					24.78	7.58	0.14	6.3	-94	54.8	
1325	CPM-4	0	200	60.29	23.04	7.52	3.22	6.39	-73	65	S. Cloudy
1328		600		60.41	23.68	7.49	1.27	6.06	-75	29.0	
1331		1200		60.42	23.99	7.58	2.12	6.04	-74	23.8	
1334		1800		60.43	24.01	7.58	4.03	6.10	-63	31.0	
1337		2400		60.44	24.03	7.58	4.02	6.12	-62	31.2	
1340		3000		60.43	24.02	7.56	4.03	6.12	-63	31.1	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1325	1340	200	3000	N/A	NA	60.43	1350	MWB006_WG200812 02 _01

Notes: (units) [stabilization criteria] Ferrous Iron 2.13

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		Date: 12/3/08	
Project No.: 1146.053		Prepared by: BCB	
Well Identification: IRZCMW001		Weather: Overcast / Cool	
Measurement Point Description: TOC-N		Pump Intake: 60'	Screen: 92 - 117

A	B	C	D = C - B	E = B - A	G = D x F	H = 25 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—	59.15	117	57.85	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	(4)	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-23-08					22.77	1.261	0.36	7.01	-50	3.6	
0925	10/5s @65psi	—	250	59.15	21.35	1.480	3.43	6.71	-132	1.32	colorless
0928	↓	750	↓	59.17	22.22	1.325	0.78	7.03	-214	2.03	"
0931		1500		59.17	22.25	1.326	0.31	7.07	-182	2.17	"
0934		2250		59.18	22.31	1.327	0.20	7.08	-160	2.34	"
0937		3000		59.20	22.33	1.327	0.18	7.08	-155	1.11	"
0940	↓	3750	↓	59.22	22.34	1.327	0.17	7.08	-152	0.21	"

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0925	0940	250	3.75	N/A	NA	59.22	0940	IRZCMW001_WG200812 03 _01

DUP: IRZCMW001_WG200812 03 _02

DRUM NO:

Notes: (units) [stabilization criteria]

Dups collected

Ferrous Iron = 0.27

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		Date: 12/3/08	
Project No.: 1146.053		Prepared by: BCB	
Well Identification: IRZCMW002		Weather: Overcast / Cool	
Measurement Point Description: TOC-N		Pump Intake: 105	Screen: 96 - 121

A	B	C	D = C - B	E = B - A	G = D x F	H = 25 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—	63.28	121	57.72	—	N/A	N/A	N/A	N/A

	Gallons/Foot				
Well Diameter (inches) = 4	0.75	2	4	6	
F - Gallons per foot of casing	0.02	0.16	0.65	1.47	

Field Equipment: QED, Dedicated Low-flow
Purge Method: Micropurge
Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-23-08					21.24	1.86	0.39	6.35	-70	2.9	
0820	10/5s @75psi	—	250	63.28	20.92	1.92	1.33	6.49	-175	3.07	colorless
0823	↓	750	↓	63.55	21.09	1.92	0.89	6.50	-200	2.23	"
0826		1500		63.67	21.13	1.89	0.58	6.52	-199	1.73	light yellow
0829		2250		63.69	21.14	1.88	0.57	6.52	-196	1.95	"
0832		3000		63.71	21.14	1.87	0.57	6.53	-195	1.87	"
0835		3750		63.73	21.13	1.87	0.56	6.54	-192	1.92	"

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0820	0835	~250	~3.75	N/A	NA	63.73	0835	IRZCMW002_WG200812 03 _01

Notes: (units) [stabilization criteria]

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		Date: 12/3/08	
Project No.: 1146.053		Prepared by: BCB	
Well Identification: MWC024		Weather: Clearing / Warm	
Measurement Point Description: TOC-N		Pump Intake: 105	Screen: 96 - 121

A	B	C	D = C - B	E = B - A	G = D x F	H = 25 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—	59.24	121	61.76	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	(4)	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-23-08					22.2	1.402	0.35	6.99	27	7.1	
1111	10/5s @ 70psi	—	~250	59.24	23.37	1.451	1.28	7.19	-37	1.99	colorless
1114		750		59.25	22.89	1.436	0.45	7.10	-34	2.24	"
1117		1500		59.	22.71	1.427	0.23	7.09	-29	2.51	"
1120		2250		59.	22.70	1.422	0.19	7.08	-29	2.11	"
1123		3000		59.	22.71	1.420	0.15	7.07	-28	2.35	"
1126		3750		59.	22.71	1.417	0.12	7.07	-27	2.59	"

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1111	1126	~250	~3.75	N/A	NA		1126	MWC024_WG200812 03 _01

Notes: (units) [stabilization criteria]

Ferrous Iron 0.0

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		Date: 12/3/08	
Project No.: 1146.053		Prepared by: DCB	
Well Identification: CMW002		Weather: Clear / Warm	
Measurement Point Description: TOC-N		Pump Intake: CQS	Screen: 99 - 124

A	B	C	D = C - B	E = B - A	G = D x F	H = 25 x F	I = (top screen-B) x F	
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 Casing Volume (gallons)	Screen Volume (gallons)	Above Screen Volume (gal.)	Total Purge Volume (gal.)
—	60.65	124	63.35	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	(4)	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-23-08					23.1	0.981	0.34	7	-39	4.1	
1200	10/5s @ 75psi	—	~250	60.65	21.57	1.036	0.19	7.20	-111	0.99	colorless
1203	↓		↓	60.65	21.58	1.036	0.17	7.19	-119	1.37	"
1206				60.65	21.58	1.037	0.20	7.19	-124	1.91	"
1209				60.67	21.59	1.038	0.25	7.18	-132	2.22	"
1212				60.67	21.59	1.038	0.22	7.17	-141	2.46	"
1215	⊥		⊥	60.67	21.60	1.037	0.18	7.17	-159	2.75	"

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1200	1215	~250	3.75	N/A	NA	60.67	1215	CMW002_WG200812 03 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

Ferrous Iron 0.15

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		**Date:** 12/3/08	
Project No.: 1146.053		**Prepared by:** MMC	
Well Identification: IRZCMW003		**Weather:** Sunny	
Measurement Point Description: TOC		**Pump Intake:** CDS	**Screen:** 92 - 117

A	B	C	D = C - B	E = B - A	G = D x F	H = 25 x F	I = (top screen-B) x F	
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 Casing Volume** (gallons)	**Screen Volume** (gallons)	**Above Screen Volume** (gal.)	**Total Purge Volume** (gal.)
—	59.23	—	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: QED, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: O/C

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-23-08					21.73	0.95	0.24	7.21	-34	5	
1126	CPM-4	0	200	59.23	23.54	2.05	3.31	6.70	-103	65.9	cloudy
1129		600		59.32	22.52	1.436	3.78	6.77	-92	5.8	clear
1132		1200		59.36	22.53	0.493	0.20	7.15	-91	38	clear
1135		1800		59.35	21.53	0.492	0.18	7.17	-87	2.6	clear
1138		2400		59.36	21.54	0.490	0.20	7.18	-79	3.4	
1140		3000		59.36	21.53	0.490	0.19	7.17	-78	3.8	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1126	1140	200	3000	N/A	NA	59.36	1148	IRZCMW003_WG200812 03 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		**Date:** 12/03/08	
Project No.: 1146.053		**Prepared by:** MC	
Well Identification: CMW026		**Weather:** Sunny	
Measurement Point Description: TOC		**Pump Intake:** 105	**Screen:** 92 - 117

A	B	C	D = C - B	E = B - A	G = D x F	H = 25 x F	I = (top screen-B) x F	
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 Casing Volume** (gallons)	**Screen Volume** (gallons)	**Above Screen Volume** (gal.)	**Total Purge Volume** (gal.)
	59.12				N/A	N/A	N/A	N/A

	Gallons/Foot				
Well Diameter (inches) = 4	0.75	2	4	6	**Field Equipment:** QED, Dedicated Low-flow
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	**Purge Method:** Micropurge
					Well Condition:

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-23-08					21.94	2.63	0.2	6.67	-132	3.8	
1153	CPM-4	0	200	59.12	21.91	2.56	0.65	7.13	-119	3.5	clear
1156		600		59.21	21.85	2.33	0.15	6.90	-119	9.6	clear
1159		1200		59.23	21.93	2.36	0.11	6.90	-123	9.5	clear
1202		1800		59.24	21.94	2.36	0.09	6.92	-130	4.2	
1205		2400		59.23	21.93	2.35	0.10	6.95	-128	3.1	
1208		3000		59.23	21.94	2.36	0.10	6.98	-129	3.9	
1211		3600		59.23	21.95	2.36	0.09	6.97	-130	4.0	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1153	1211	200	3600	N/A	NA	59.23	1220	CMW026_WG200812~~03~~ _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		**Date:** 12/3/08	
Project No.: 1146.053		**Prepared by:** GMC	
Well Identification: AW0073C		**Weather:** Cloudy	
Measurement Point Description: TOC		**Pump Intake:** 205	**Screen:** 96 - 116

A	B	C	D = C - B	E = B - A	G = D x F	H = 20 x F	I = (top screen-B) x F	
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 Casing Volume** (gallons)	**Screen Volume** (gallons)	**Above Screen Volume** (gal.)	**Total Purge Volume** (gal.)
	60.05				N/A	N/A	N/A	N/A

	Gallons/Foot				
Well Diameter (inches) = 2	0.75	2	4	6	**Field Equipment:** QED, Dedicated Low-flow
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	**Purge Method:** Micropurge
					Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-24-08					22.99	0.757	0.18	7.38	-138	4.72	
0800	CPM-4	0	200	60.05	20.01	1.50	6.04	7.16	61	117	clear
0803	↓	600	↓	60.21	21.37	0.851	3.97	7.18	88	93.6	cloudy
0806		1200		60.24	21.42	0.850	2.53	7.13	-51	112.9	cloudy
0809		1800		60.23	21.35	0.889	0.83	6.99	-104	68.6	cloudy
0812		2400		60.25	21.35	0.889	0.78	6.99	-111	55.7	cloudy
0815		3000		60.24	21.36	0.890	0.77	6.98	-110	55.8	↓
0818	↓	3600	↓	60.25	21.36	0.891	0.77	6.95	-112	56.0	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0800	0818	200	3600	N/A	NA	60.25	0825	AW0073C_WG200812 03_01

Notes: (units) [stabilization criteria] Ferrous Iron - 1.46

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		**Date:** 12/3/08	
Project No.: 1146.053		**Prepared by:** GMC	
Well Identification: AW0075UB		**Weather:** Cloudy	
Measurement Point Description: TOC		**Pump Intake:** 60.50	**Screen:** 69 - 89

A	B	C	D = C - B	E = B - A	G = D x F	H = 20 x F	I = (top screen-B) x F	
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 Casing Volume** (gallons)	**Screen Volume** (gallons)	**Above Screen Volume** (gal.)	**Total Purge Volume** (gal.)
	59.83				N/A	N/A	N/A	N/A

	Gallons/Foot				
Well Diameter (inches) = 2	0.75	~~2~~ 3	4	6	
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	

Field Equipment: QED, Dedicated Low-flow
Purge Method: Micropurge
Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-24-08					23.11	3.06	0.05	6.54	-165	3.1	
1020	CFM-4	0	200	59.83	22.39	2.70	0.35	6.86	-98	215	cloudy
1023		600		60.01	22.15	2.93	0.61	6.55	-107	125	cloudy
1026		1200		60.04	22.11	2.94	0.37	6.52	-115	103	cloudy
1029		1800		60.04	22.13	2.94	0.31	6.51	-118	77.4	cloudy
1032		2400		60.05	22.07	3.01	0.24	6.49	-122	42.5	cloudy
1035		3000		60.04	22.10	3.09	0.20	6.47	-124	7.9	cloudy
1038		3600		60.05	22.11	3.10	0.18	6.47	-125	6.8	cloudy
1042		4200		60.04	22.11	3.09	0.17	6.48	-124	5.4	cloudy

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1020	1042	200	4200	N/A	NA	60.04	1050	AW0075UB_WG200812 03 _01

Notes: (units) [stabilization criteria] Ferrous Iron 1.92

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		**Date:** 12/3/08	
Project No.: 1146.053		**Prepared by:** [illegible]	
Well Identification: AW0076UB		**Weather:** Cloudy	
Measurement Point Description: TOC		**Pump Intake:** 60S	**Screen:** 69 - 89

A	B	C	D = C - B	E = B - A	G = D x F	H = 20 x F	I = (top screen-B) x F	
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 Casing Volume** (gallons)	**Screen Volume** (gallons)	**Above Screen Volume** (gal.)	**Total Purge Volume** (gal.)
—	60.32	—	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	~~2~~ 3	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: QED, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-24-08					22.97	3.78	0.03	6.75	-166	3.94	
0945	CPM-4	0	200	60.32	22.10	3.05	3.72	6.81	-130	128	cloudy
0948		600		60.41	21.84	3.75	0.73	6.60	-140	47.5	s cloudy
0951		1200		60.42	21.88	3.81	0.26	6.58	-142	20.6	s cloudy
0954		1800		60.45	21.89	3.83	0.14	6.58	-150	4.6	clear
0957		2400		60.44	21.90	3.82	0.12	6.58	-152	5.1	clear
1000		3000		60.44	21.89	3.81	0.09	6.58	-151	3.9	
1003		3600		60.43	21.88	3.82	0.10	6.59	-150	3.8	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0945	1003	200	3600	N/A	NA	60.43	1010	AW0076UB_WG200812 03 _01

Notes: (units) [stabilization criteria] Ferrous Iron 1.14

DUP: AW0076UB_WG200812 03 _02

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		**Date:** 12/3/08	
Project No.:	1146.053	**Prepared by:** [illegible]	
Well Identification:	AW0077UB	**Weather:** Cloudy	
Measurement Point Description:	TOC	**Pump Intake:** CQS	**Screen:** 70.5 - 85.5

A	B	C	D = C - B	E = B - A	G = D x F	H = 15 x F	I = (top screen-B) x F	
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 Casing Volume** (gallons)	**Screen Volume** (gallons)	**Above Screen Volume** (gal.)	**Total Purge Volume** (gal.)
—	60.62	—	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: QED, Dedicated Low-flow

Purge Method: Micropurge

Well Condition:

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-24-08					22.72	3.37	0.05	6.61	-193	4.27	
0910	CPM-4	0	200	60.62	21.48	3.25	1.35	6.71	-130	62.5	cloudy
0913	↓	600	↓	60.81	21.70	3.61	0.26	6.51	-153	49.0	cloudy
0916	↓	1200	↓	60.79	21.68	3.62	0.24	6.50	-157	64.1	cloudy
0919	↓	1800	↓	60.79	21.73	3.56	0.16	6.48	-167	35.5	s. cloudy
0922	↓	2400	↓	60.80	21.69	3.55	0.16	6.49	-170	20.1	clear
0925	↓	3000	↓	60.80	21.70	3.57	0.17	6.50	-169	11.6	clear

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
		200	3000	N/A	NA	60.80	0934	AW0077UB_WG200812 03 _01

Notes: (units) [stabilization criteria] Ferrous Iron 0.97

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		**Date:** 12/3/08	
Project No.: 1146.053		**Prepared by:**	
Well Identification: EWB002		**Weather:**	
Measurement Point Description: TOC		**Pump Intake:**	**Screen:** 60 - 90

A	B	C	D = C - B	E = B - A	G = D x F	H = 30 x F	I = (top screen-B) x F	
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 Casing Volume** (gallons)	**Screen Volume** (gallons)	**Above Screen Volume** (gal.)	**Total Purge Volume** (gal.)
	60.36				N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 6	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: QED, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good / missing cap

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-24-08					23.03	2.99	0.1	6	-161	2.02	
0835	APM-4	0	200	60.36	20.66	1.72	5.68	7.10	-88	275	cloudy
0838		600		60.50	21.93	2.02	1.32	6.52	-100	140	cloudy
0841		1200		60.53	22.21	2.89	6.37	6.51	-111	81.3	cloudy
0844		1800		60.52	22.30	2.89	0.28	6.57	-113	74.8	clear
0847		2400		60.51	22.27	2.90	0.27	6.51	-113	73.2	cloudy
0850		3000		60.50	22.28	2.91	0.27	6.56	-114	73.6	
0853		3600		60.50	22.29	2.90	0.28	6.51	-115	73.1	
~~N/A~~											

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0835	0853	200	3600	N/A	NA	60.50	0900	EWB002_WG200812 05 _01

Notes: (units) [stabilization criteria] Ferrous Iron 1.83

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing Former C-6 Facility, WDR Sampling, December 2008		**Date:** 12/3/08	
Project No.: 1146.053		**Prepared by:** Zmc	
Well Identification: WCC_12S		**Weather:** Cloudy	
Measurement Point Description: TOC		**Pump Intake:** (D3)	**Screen:** 60 - 90

A	B	C	D = C - B	E = B - A	G = D x F	H = 30 x F	I = (top screen-B) x F	
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 Casing Volume** (gallons)	**Screen Volume** (gallons)	**Above Screen Volume** (gal.)	**Total Purge Volume** (gal.)
—	58.01	—	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: QED, Dedicated Low-flow

Purge Method: Micropurge

Well Condition:

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-24-08					21.79	1.73	6.42	7.36	104	1.32	
0725	MPM-4	0	200	58.01	20.14	1.82	9.78	6.43	96	20.9	S. Cloudy
0728		600		58.26	21.15	1.79	6.71	6.65	82	12.2	
0731		1200		58.25	21.19	1.79	6.61	6.82	93	8.1	clear
0734		1800		58.24	21.26	1.81	6.40	6.96	87	7.4	
0737		2400		58.25	21.25	1.80	6.46	6.95	86	6.3	
0740		3600		58.24	21.26	1.81	6.45	6.96	87	6.5	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0725	0740	200	3000	N/A	NA	58.24	0745	WCC_12S_WG200812 D3 _01

Notes: (units) [stabilization criteria] Ferrous iron 0.69

DUP:

DRUM NO:

EQUIPCO RENTALS

QED MP-20D RENTAL
CALIBRATION CERTIFICATE

SERVICE TECHNICIAN: MP

DATE: 12/1/08

INSTRUMENT INFORMATION

RENTAL I.D. NUMBER: MP-20D._____
SERIAL#: MP20-1585

CALIBRATION INFORMATION

PARAMETERS:	STANDARDS:	PASS ( )	LOT#
1. CONDUCTIVITY	10,000 µMhos	✓	6017
2. pH ZERO	pH 7	✓	5713
3. pH SLOPE	pH 4	✓	2807413
pH SLOPE	pH 10	✓	1804392
4. DISSOLVED OXYGEN	Air Calibration Barometric pressure = 760mmHg	✓	N/A
5. REDOX (ORP)	234.5 mV (YSI Zobell solution)	✓	051107

17935 Sky Park Circle, Suite H, Irvine, CA 92614 Phone (949)263-0236 Fax (949)263-1306

EQUIPCO RENTALS

QED MP-20D RENTAL
CALIBRATION CERTIFICATE

SERVICE TECHNICIAN: MP

DATE: 12/1/08

INSTRUMENT INFORMATION

RENTAL I.D. NUMBER: MP-20D._____
SERIAL#: Rental

CALIBRATION INFORMATION

PARAMETERS:	STANDARDS:	PASS ( )	LOT#
1. CONDUCTIVITY	10,000 µMhos	✓	60017
2. pH ZERO	pH 7	✓	5713
3. pH SLOPE	pH 4	✓	2807413
pH SLOPE	pH 10	✓	1804392
4. DISSOLVED OXYGEN	Air Calibration Barometric pressure = 760mmHg	✓	N/A
5. REDOX (ORP)	237.5 mV (YSI Zobell solution)	✓	05407

17935 Sky Park Circle, Suite H, Irvine, CA 92614 Phone (949)263-0236 Fax (949)263-1306

IRL0157

AVOCET ENVIRONMENTAL, INC.
16 Technology Drive, Suite 154
Irvine, California 92618-2327
TEL (949) 296-0977
FAX (949) 296-0978

Boeing CoC No. AVO200812 02 A

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, WDR Sampling, December 2008
Site Address	Los Angeles, CA
Project No.	1155.006
Project Manager	Michael Rendina
Sampled By	Brian Barsumian
Turn-Around-Time	Standard TAT

Analyses

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	VOCs EPA 8260B	TOC EPA 9060 Modified	Volatile Fatty Acids IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene - RSK 175	Alkalinity SM2320B	Anions (NO3, NO2, Cl, SO4) EPA 300.0	DHC PCR (NorthWind) 24 HR HTI	Total Dissolved Solids (TDS) SM2540C							Comments
~~WGC_12G_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X	X							48HR HT for NO_3
TMW_07_WG200812 02 _01	12/2/08	1310	Water	12		X	X	X	X	X	X	X	X							Please forward VFA & qPCR analyses to identified laboratories ASAP.
~~AW0079C_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X								
AW0074UB_WG200812 02 _01	12/2/08	1213	Water	12		X	X	X	X	X	X	X								
~~EWB002_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X								
~~AW0077UB_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X								
~~AW0076UB_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X								
~~AW0075UB_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X								
AW0055UB_WG200812 02 _01	12/2/08	1126	Water	12		X	X	X	X	X	X	X								
~~EB_AV200812 _01~~			~~Water~~	~~3~~		X														
~~TB_AV200812 _01~~			~~Water~~	~~3~~		X														

Relinquished by	Company	Received by	Company
Printed Name: Brian Barsumian Date: 12/2/08	Avocet Environmental, Inc.	Printed Name: Emilia Rosas Date: 12/02/08	
Signature: Brian Barsumian Time: 1410		Signature: Emilia Rosas Time: 1413	
Printed Name: Emilia Rosas Date: 12/02/08		Printed Name: Matt Gwaltney Date: 12-2-08	
Signature: Emilia Rosas TAT Time: 1535		Signature: Matt Gwaltney Time: 15:45	
Printed Name: Date:		Printed Name: Date:	
Signature: Time:		Signature: Time:	

Sample Receipt	Billing Information	
Total Containers	Bill To: Michael Rendina, P.G. AVOCET ENVIRONMENTAL, INC. 16 Technology Dive, Suite 154 Irvine, CA 92618-2327	DHC PCR Analyses require **overnight** delivery to NorthWind in Pittsburgh, PA Primary DHG analyses will continue to be analyzed by ATL. Please bill to Avocet. Please report electronically in accordance with Boeing standards. If any questions, please call Mike Rendina @ (949) 296 0977 Ext.103
Temperature °C 5.9/4.6 °F		
COC Seal (Y/N/NA)		

S:\Projects\1155 Boeing Former C-6 Facility\Groundwater Monitoring\December 2008\COC_AV200812 BLANKS

#057

AVOCET ENVIRONMENTAL, INC.
16 Technology Drive, Suite 154
Irvine, California 92618-2327
TEL (949) 296-0977
FAX (949) 296-0978

Sheet 2 of 2

Boeing CoC No. AVO20081202 A

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, WDR Sampling, December 2008
Site Address	Los Angeles, CA
Project No.	1155.006
Project Manager	Michael Rendina
Sampled By	Brian Barsumian
Turn-Around-Time	Standard TAT

Analyses

48HR HT for NO_3

Please forward VFA & qPCR analyses to identified laboratories ASAP.

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	VOCs EPA 8260B	TOC EPA 9060 Modified	Volatile Fatty Acids IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene - RSK 175	Alkalinity SM2320B	Anions (NO3, NO2, Cl, SO4) EPA 300.0	DHC PCR (NorthWind) 24 HR HT!!	Total Dissolved Solids (TDS) SM2540C	Comments
~~GMW026_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X		
~~IRZGMW002_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X		
~~IRZGMW001_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X	X	
~~MWC024_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X		
~~GMW002_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X	X	
~~IRZGMW003_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X		
WCC_06S_WG200812 02 _01	12/2/08	1030	Water	12		X	X	X	X	X	X	X		
AW0066UB_WG200812 02 _01	12/2/08	1105	Water	12		X	X	X	X	X	X	X		
AW0067UB_WG200812 02 _01	12/2/08	1154	Water	12		X	X	X	X	X	X	X		
AW0065UB_WG200812 02 _01	12/2/08	1235	Water	12		X	X	X	X	X	X	X		
AW0064UB_WG200812 02 _01	12/2/08	1315	Water	12		X	X	X	X	X	X	X		
MWB006_WG200812 02 _01	12/2/08	1350	Water	12		X	X	X	X	X	X	X	X	
EB_AV200812 02 _01	12/2/08	1405	Water	3		X								
TB_AV200812 02 _01	12/2/08	→	Water	3		X								

Relinquished by		Company	Received by		Company
Printed Name: Brian Barsumian	Date: 12/2/08	Avocet Environmental, Inc.	Printed Name: Emilio Acevedo	Date: 12/02/08	TESTAMERICA
Signature: [signature]	Time: 1410		Signature: [signature]	Time: 1410	
Printed Name: Emilio Acevedo	Date: 12/02/08		Printed Name: [signature]	Date: 12-2-08	
Signature: [signature]	Time: 1535		Signature: [signature]	Time: 15:45	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	

Sample Receipt	Billing Information	
Total Containers	Bill To: Michael Rendina, P.G. AVOCET ENVIRONMENTAL, INC. 16 Technology Dive, Suite 154 Irvine, CA 92618-2327	DHC PCR Analyses require **overnight** delivery to NorthWind in Pittsburgh, PA Primary DHG analyses will continue to be analyzed by ATL. Please bill to Avocet. Please report electronically in accordance with Boeing standards. If any questions, please call Mike Rendina @ (949) 296
Temperature °C 5.9/4.6 °F		
COC Seal (Y/N/NA)		

S:\Projects\1155 Boeing Former C-6 Facility\Groundwater Monitoring\December 2008\COC_AV200812 BLANKS

IRL0393

AVOCET ENVIRONMENTAL, INC.
16 Technology Drive, Suite 154
Irvine, California 92618-2327
TEL (949) 296-0977
FAX (949) 296-0978

Boeing CoC No. AVO200812-03 A

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, WDR Sampling, December 2008
Site Address	Los Angeles, CA
Project No.	1155.006
Project Manager	Michael Rendina
Sampled By	Brian Barsumian
Turn-Around-Time	Standard TAT

Analyses

48HR HT for NO_3

Please forward VFA & qPCR analyses to identified laboratories ASAP.

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	VOCs EPA 8260B	TOC EPA 9060 Modified	Volatile Fatty Acids IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene - RSK 175	Alkalinity SM2320B	Anions (NO3, NO2, Cl, SO4) EPA 300.0	DHC PCR (NorthWind) 24 HR HTI	Total Dissolved Solids (TDS) SM2540C	Comments
WCC_12S_WG200812 03 _01		0745	Water	12		X	X	X	X	X	X	X	X	
~~TMW_07_WG200812 03 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X	X	
AW0073C_WG200812 03 _01		0825	Water	12		X	X	X	X	X	X	X		
~~AW0074UB_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X		
EWB002_WG200812 03 _01		0900	Water	12		X	X	X	X	X	X	X		
AW0077UB_WG200812 03 _01		0934	Water	12		X	X	X	X	X	X	X		
AW0076UB_WG200812 03 _01		1010	Water	12		X	X	X	X	X	X	X		
AW0075UB_WG200812 03 _01		1050	Water	12		X	X	X	X	X	X	X		
~~AW0055UB_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X		
~~EB_AV200812 _01~~			~~Water~~	~~3~~		X								
~~TB_AV200812 _01~~			~~Water~~	~~3~~		X								

Relinquished by	Company	Received by	Company
Printed Name: Brian Barsumian Date: 12/3/08 Signature: Brian Barsumian Time: 1415	Avocet Environmental, Inc.	Printed Name: Matt Grassfield Date: 12-3-08 Signature: Matt Grassfield Time: 14:5	
Printed Name: Matt Grassfield Date: 12-3-08 Signature: Matt Grassfield Time: 15:20		Printed Name: Date: Signature: Time:	
Printed Name: Date: Signature: Time:		Printed Name: WILL KIM Date: 12/3/08 Signature: Time: 1520	Intact 5.2/4.4

Sample Receipt	Billing Information	
Total Containers	Bill To: Michael Rendina, P.G. AVOCET ENVIRONMENTAL, INC. 16 Technology Dive, Suite 154 Irvine, CA 92618-2327	DHC PCR Analyses require **overnight** delivery to NorthWind in Pittsburgh, PA Primary DHG analyses will continue to be analyzed by ATL. Please bill to Avocet. Please report electronically in accordance with Boeing standards. If any questions, please call Mike Rendina @ (949) 296 0977 Ext.103
Temperature °C ____ °F		
COC Seal (Y/N/NA)		

S:\Projects\1155 Boeing Former C-6 Facility\Groundwater Monitoring\December 2008\COC_AV200812 BLANKS

AVOCET ENVIRONMENTAL, INC.
16 Technology Drive, Suite 154
Irvine, California 92618-2327
TEL (949) 296-0977
FAX (949) 296-0978

Boeing CoC No. AVO200812 03 A

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, WDR Sampling, December 2008
Site Address	Los Angeles, CA
Project No.	1155.006
Project Manager	Michael Rendina
Sampled By	Brian Barsumian
Turn-Around-Time	Standard TAT

Analyses

48HR HT for NO_3

Please forward VFA & qPCR analyses to identified laboratories ASAP.

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	VOCs EPA 8260B	TOC EPA 9060 Modified	Volatile Fatty Acids IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene - RSK 175	Alkalinity SM2320B	Anions (NO3, NO2, Cl, SO4) EPA 300.0	DHC PCR (NorthWind) 24 HR HT!!	Total Dissolved Solids (TDS) SM2540C							Comments
CMW026_WG200812 03 _01	12/3/08	1220	Water	12		X	X	X	X	X	X	X								
IRZCMW002_WG200812 03 _01		0835	Water	12		X	X	X	X	X	X	X								
IRZCMW001_WG200812 03 _01		0940	Water	12		X	X	X	X	X	X	X	X							
MWC024_WG200812 03 _01		1126	Water	12		X	X	X	X	X	X	X								
CMW002_WG200812 03 _01		1215	Water	12		X	X	X	X	X	X	X	X							
IRZCMW003_WG200812 03 _01		1148	Water	12		X	X	X	X	X	X	X								
~~WCC_06S_WG200812 _01~~			~~Water~~	~~12~~	*	X	X	X	X	X	X	X					*			12/3/08
~~AW0066UB_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X								
~~AW0067UB_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X								
~~AW0065UB_WG200812 _01~~			~~Water~~	~~12~~		X	X	X	X	X	X	X								
~~AW0064UB_WG200812 03 _01~~	~~12/3/08~~	~~1035~~	~~Water~~	~~12~~		X	X	X	X	X	X	X								
~~MWB006_WG200812 _01~~			~~Water~~	~~12~~	*	X	X	X	X	X	X	X	X							
~~EB_AV200812 _01~~			~~Water~~	~~3~~	*	X														
TB_AV200812 03 _01	12/3/08	—	Water	3		X														
IRZCMW001_WG20081203_02		0940	"	3		X														
AW0076UB_WG20081203_02		1010	"	3		X														

Relinquished by		Company	Received by		Company
Printed Name: Brian Barsumian	Date: 12/3/08	Avocet Environmental, Inc.	Printed Name: Matt Grassfield	Date: 12-5-08	
Signature:	Time: 1415		Signature:	Time: 14:15	
Printed Name: Matt Grassfield	Date: 12-3-08		Printed Name:	Date:	
Signature:	Time: 15:20		Signature:	Time:	
Printed Name:	Date:		Printed Name: WILLIAM	Date: 12/3/08	
Signature:	Time:		Signature:	Time: 17:20	intact 5.2/4.4

Sample Receipt	Billing Information	
Total Containers	Bill To: Michael Rendina, P.G. AVOCET ENVIRONMENTAL, INC. 16 Technology Dive, Suite 154 Irvine, CA 92618-2327	DHC PCR Analyses require **overnight** delivery to NorthWind in Pittsburgh, PA Primary DHG analyses will continue to be analyzed by ATL. Please bill to Avocet. Please report electronically in accordance with Boeing standards. If any questions, please call Mike Rendina @ (949) 296-
Temperature °C / °F		
COC Seal (Y/N/NA)		

S:\Projects\1155 Boeing Former C-6 Facility\Groundwater Monitoring\December 2008\COC_AV200812 BLANKS