AVOCET
ENVIRONMENTAL, INC.

March 24, 2008 Project No. 1155.010

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

Field Data Report
March 2009 Groundwater Sampling
Site-Wide Annual Monitoring,
Semiannual Monitoring at Building 1/36 Area,
Quarterly Monitoring at Building 2 Area,
Waste Discharge Requirements Order No. R4-2007-0040
Boeing Real Property Management 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 March 2009 groundwater monitoring event at the Boeing Real Property Management (BRPM) Former C-6 Facility in Los Angeles, California. The March 2009 monitoring included sampling for the Building 1/36 Waste Discharge Requirements (WDR), Building 2 WDR, and Annual Site-Wide groundwater monitoring programs. The monitoring was conducted pursuant to and in accordance with the following:

Technical Memorandum, March 2009 Groundwater Sampling and Analysis Plan, Site-Wide Annual Monitoring, Semiannual Monitoring at Building 1/36 Area, Quarterly Monitoring at Building 2 Area, Boeing Real Property Management 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 19, 2009, 2009 Groundwater Monitoring Work Plan, Boeing Former C-6 Facility, 19503 South Normandie Avenue, Los Angeles, California.

Field activities performed during the March 2009 monitoring event are discussed in the following sections. Figures 1, 2 and 3 (Attachment 1) present the locations of the groundwater monitoring wells included in the monitoring programs.

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METHANE AND VOC MONITORING

The concentration of volatile organic compounds (VOCs) within the "headspace" of the monitoring wells is routinely measured as part of the fluid level gauging process at the Former C-6 Facility. The headspace concentration is measured immediately upon removal of the well cap by holding the intake of a photoionization detector (PID) just inside the monitoring well casing and recording the maximum reading on the Groundwater Monitoring Well Gauging Sheet (Attachment 2). In response to recent measurements of methane gas in several wells associated with the groundwater remediation programs, methane monitoring was added to the headspace monitoring program. Similar to the VOCs measurements, methane was measured immediately upon removal of the well cap by holding the intake of a combustible gas meter (RKI Eagle) approximately 1-inch above the center of the well casing and recording the maximum measurement in terms of the percent of the methane lower explosive limit (% LEL). For wells that displayed combustible gas concentrations greater than 2% of LEL, the "time to disperse" (i.e., the time required for concentrations to fall below 2% of LEL) was also recorded. The maximum combustible gas measurement and the "time to disperse" were recorded on the Groundwater Monitoring Well Gauging Sheet (Attachment 2). Wells that contained combustible gas concentrations of 1% LEL or greater were tagged with a yellow caution tag reading "THIS WELL MAY CONTAIN METHANE GAS". Of the 77 monitoring wells monitored for the presence of combustible gas, 18 exhibited concentrations of 1% LEL or greater and were identified with the yellow caution tag.

WATER LEVEL MEASUREMENTS

Fluid level gauging was conducted on all 77 monitoring wells on March 9, 2009. Water level measurements consisted of using a Solinst water level meter to measure the depth of water from a surveyed reference point on top of the casing. Care was taken to ensure that all down-hole equipment was properly and thoroughly decontaminated prior to use in any well. Water level measurements were recorded on the Groundwater Monitoring Well Gauging Sheet (Attachment 2).

GROUNDWATER SAMPLING ACTIVITIES

Groundwater monitoring in March 2009 was conducted in accordance with two separate programs: 1) the Site-Wide Groundwater Monitoring Program, which has been performed periodically at the site since 1987, and 2) Revised Monitoring and Reporting Program CI-9310 (MRP), which is conducted in accordance with Individual WDR Order No. R4-2007-0040 (August 22, 2008).

The Building 1/36 WDR, Building 2 WDR, and Annual Site-Wide groundwater monitoring programs called for fluid level measurements in 77 wells and sample collection from 75 wells, as follows:

Semi-Annual Building 1/36 WDR Monitoring – Pursuant to the MRP, 15[1] wells (Groups A, B, C, and D) were gauged for fluid levels and sampled. Five of these wells (EWB002, MWB006, TMW_07, WCC_12S, and WCC_06S) were also part of the Site-Wide Program. Finally, although the Group A2 wells have not been used for amendment injection, and gauging/monitoring of the Groups A2 and B2 wells was not required; pursuant to comments received on the March 2009 SAP, these four wells were gauged and monitored as part of the Building 1/36 March 2009 WDR Monitoring program.

Quarterly Building 2 WDR Monitoring - Pursuant to the MRP, six wells (Groups B, C, and D) were gauged for fluid levels and sampled. All six of these wells are also part of the Site-Wide Program.

Annual Site-Wide Groundwater Monitoring – Pursuant to the 2009 Work Plan, 66 wells were gauged for fluid levels and 65 wells were sampled. Eleven of these wells are also part of the Building 1/36 or Building 2 WDR programs and were gauged and sampled in accordance with MCP requirements.

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 March 10 and 11, 2009 using flow-through cells and either dedicated or portable low-flow bladder pumps. All WDR wells were purged for sampling using low-flow (0.20-0.25 liters/minute) methods. With two exceptions, all site-wide monitoring wells were also purged using low-flow methodology. Due to the small (<0.75-inch) diameter of the well casing, wells IRZB0095 and IRZB0081 were purged for sampling with a Waterra inertial pump and dedicated tubing using conventional (i.e., 3 to 5 wetted casing volumes) purging methods. For all of the WDR monitoring wells and select site-wide monitoring wells, ferrous iron testing was performed using a HACH DR/890 Colorimeter and the flow-through cell dissolved oxygen measurements were confirmed in several wells using a CHEMetrics Inc. test kit. The field instruments were calibrated just prior to the sampling event by Ashtead Technology, EQUIPCO, and Envirosupply, of Irvine, California and copies of the calibration data sheets are included in Attachment 2.

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,

[1] Per Camp Dresser & McKee (electronic mail dated February 23, 2009), this includes sampling of the Group A2 and B2 amendment wells. Sampling of these wells is not required by the revised MRP.

- Volatile fatty acids (VFAs) by IC Method 8M23G (subcontracted by TestAmerica to Microseeps, Inc., Pittsburg, PA),
- Dissolved gases (ethane, ethane, 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), and
- Total dissolved solids (TDS) by EPA Method 160.1.

Samples from the non-WDR wells were analyzed for VOCs using EPA Method 8260B. Samples from select former remediation wells were analyzed for TOC (EPA Method 9060), sulfate (EPA Method 300.0), and dissolved hydrocarbon gases (ethene, ethane, and methane) by RSK 175. In addition, Mr. Andy Cano of the California Department of Toxic Substances Control (DTSC) was on-site for a portion of the sampling event and collected split samples from six wells (DAC_P1, MWB013, TMW-15, TMW-14, MWB019, and MWC017); samples from these wells and well BL-03 were also tested for hexavalent chromium by EPA Method 7199.

Purge water (approximately 80 gallons) was stored in two 55-gallon drums adjacent to the treatment compound. Analytical results from this sampling event will be used for waste profiling and disposal purposes.

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: March 2009 Groundwater Sampling and Analysis Plan
Attachment 2: Field Data Forms

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Attachment 1

March 2009 Groundwater Sampling and Analysis Plan

AVOCET ENVIRONMENTAL, INC.

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ENVIRONMENTAL, INC.

February 25, 2009 Project No. 1155.006

Ms. Jennifer Wiley, P.G. (via electronic mail only)
THE BOEING COMPANY
Environment, Health & Safety –
Environmental Remediation
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Long Beach, California 90808

Technical Memorandum
March 2009 Groundwater Sampling and Analysis Plan
Site-Wide Annual Monitoring
Semiannual Monitoring at Building 1/36 Area
Quarterly Monitoring at Building 2 Area
Waste Discharge Requirements Order No. R4-2007-0040
Boeing Real Property Management 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 March 2009 groundwater monitoring event at Boeing Real Property Management's (RPM's) Former C-6 Facility in Los Angeles, California. Groundwater monitoring in March 2009 will be conducted in accordance with two separate programs: 1) the Site-Wide Groundwater Monitoring Program, which has been performed periodically at the site since 1987 and 2) Monitoring and Reporting Program CI-9310 (MRP), which is conducted in accordance with Individual Waste Discharge Requires (WDR) Order No. R4-2007-0040 (August 22, 2008). The details of the Annual Site-Wide Groundwater Monitoring Program are provided in the draft *2009 Groundwater Monitoring Work Plan* (the Work Plan; Avocet, February 2, 2009). This Work Plan was submitted to the Regional Water Quality Control Board, Los Angeles Region (LARWQCB) for formal approval on February 19, 2009. Under the WDR Order, the March 2009 MRP includes sample collection in two areas of the site in response to two separate bioremediation pilot tests: 1) semiannual sampling of Former Building 1/36 Biorecirculation Pilot Test wells, and 2) Quarterly sampling of Former Building 2 Periodic Slug Injection wells. Additional sample analyses, not included in the above-described programs, were added to this sampling event at the direction of CDM in order to more fully characterize methane generation and migration and to further assess the effects of the recent bioremediation efforts.

Field Activities

Ground water monitoring will be conducted in March of 2009 and include the Annual Site-Wide Groundwater Monitoring Program, the Building 1/36 and Building 2 WDR groundwater

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monitoring programs, and additional sampling directed by CDM. Details of the Annual Site-Wide, Building 1/36 WDR, and Building 2 WDR groundwater monitoring programs are presented in Tables 1 through 3, respectively. Maps showing the well locations are provided in Figures 1 through 3. Collectively, the three programs call for fluid level measurements in 76 wells and sample collection from 75 wells, as follows:

Annual Site-Wide Groundwater Monitoring – Pursuant to the 2009 Work Plan, 64 wells will be gauged for fluid levels and 59 wells are scheduled for sampling. Eleven of these wells are also part of the Building 1/36 or Building 2 WDR programs and will be gauged and sampled in accordance with MRP requirements. In accordance with recent communications with CDM (February 23, 2009), thirteen wells have either been added to the sampling program or have been assigned additional analyses. Three of these were assigned additional analyses (DHGs) to assess potential methane migration. Ten former or current bioremediation monitoring wells were assigned an expanded suite of analyses to evaluate the effects of recent bioremediation efforts. Six of these wells were not originally part of the March 2009 sampling and analysis plan and have been added. The details of the Annual sampling program are presented in Table 1 and a map showing the well locations is provided in Figure 1.

Semi-Annual Building 1/36 WDR Monitoring – Pursuant to the revised MRP, 15[1] wells will be gauged for fluid levels and sampled. The 15 wells scheduled for sampling include the four Group A Wells (AW0064UB, AW0065UB, AW0066UB and AW0067UB), the eight Group B Wells (AW0075UB, AW0076UB, AW0077UB, EWB002, AW0055UB, AW0073C, WCC_06S, and AW0074UB), the Group C Wells (TMW_07 and WCC_12S) and the Group D Well (MWB006). Five of these wells (EWB002, MWB006, TMW_07, WCC_12S, and WCC_06S) are also part of the Site-Wide Program. The details of this program are presented in Table 2. A map showing the Building 1/36 WDR well locations is provided in Figure 2.

Quarterly Building 2 WDR Monitoring - Pursuant to the MRP, six wells (Groups B, C, and D) are to be monitored in 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 water level and sampled. A list of the WDR wells to be monitored, broken out by Group, is provided in Table 2. A map showing the Building 2 WDR well locations is provided in Figure 2.

The scope of work includes all tasks associated with collecting the field measurements and laboratory samples required to comply with the WDR Order and 2009 Work Plan. In brief, these activities will include water level measurements, groundwater well purging and sampling, and sample analyses. Specifically, the March 2009 groundwater monitoring activities will include the following:

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[1] Per Camp Dresser & McKee (electronic mail dated February 23, 2009), this includes sampling of the Group A2 and B2 amendment wells. Sampling of these wells is not required by the revised MRP.

- Prior to any disturbance, depth to groundwater will be measured to the nearest one-hundredth of a foot in each of the 76 wells using a Solinst (or equivalent) well sounder. Monitoring well methane, oxygen, and vapor concentrations will be measured with a multi-gas meter (per the Methane Addendum to the HASP) and photoionization detector (PID) immediately following removal of the well cap. The "time to disperse" will be recorded as the time it takes from the moment the vault and the well casing cap is opened and monitoring begins, until methane concentrations drop below 2% LEL (1,000 ppm or 0.1% by volume), if applicable. 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 54 non-WDR wells (Table 1) and from 21 WDR wells during the March 2009 monitoring (Tables 2 and 3) 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 100 and 500 milliliters (ml/min), dependent on site-specific and well-specific factors as drawdown is not to exceed 0.5 feet in any well. For wells purged at rates in excess of 100 ml/min, the flow rate will be reduced to 100 ml/min or less prior to collection of samples for volatile organic compounds (VOCs) analysis.

- 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; approximately ten percent of the dissolved oxygen measurements will be confirmed using a CHEMetrics, Inc. test kit; and, for the WDR and Bioremediation wells, ferrous iron (Fe(II)) will be measured using a Hach DR890 Colorimeter. 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 coolers, identified on the chain-of-custody, and submitted to appropriately-certified environmental testing laboratories.

Samples collected from select site-wide monitoring wells and the Building 1/36 and Building 2 WDR wells will be analyzed for one or more of the following as detailed in Tables 1, 2 and 3:

- 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);
- anions (sulfate, nitrate, nitrite, and chloride by EPA Method 300 Series);
- total alkalinity (EPA Method 310.1);
- 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).

All other samples from the non-WDR wells will be analyzed for volatile organic compounds using EPA Method 8260B (Table 1).

Closing Remarks

Ground water monitoring is scheduled to begin at the site on Monday, March 9, 2009. 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

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Tables

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Table 1
March 2009 Building 1/36 WDR Groundwater Monitoring Program
BCRE Former C-6 Facility,
Los Angeles, California

Well Information			Field Program				Laboratory Program									
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, SO_4) EPA 300.0	Chlorides 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)	Comments
Group A Wells																
AW0066UB	A1	B-Sand	375	3	x	x	x	x	x	x		x				SA3 WDR Monitoring
AW0067UB	A1	B-Sand	591	4	x	x	x	x	x	x		x				SA3 WDR Monitoring
AW0064UB	A2	B-Sand	45,920	14	x	x	x	x		x		x			x	Additional Monitoring for Evaluation
AW0065UB	A2	B-Sand	877	7	x	x	x	x		x					x	Additional Monitoring for Evaluation
Group B Wells																
AW0075UB	B1	B-Sand	5,484	11	x	x	x	x		x		x			x	SA3 WDR Monitoring
AW0076UB	B1	B-Sand	5,264	10	x	x	x	x		x		x				SA3 WDR Monitoring
AW0077UB	B1	B-Sand	89	2	x	x	x	x		x		x				SA3 WDR Monitoring
EWB002	B1	B-Sand	1,243	9	x	x	x	x		x		x				Annual Sitewide & SA3 WDR Monitoring
AW0055UB	B1	B-Sand	27,200	13	x	x	x	x		x					x	SA3 WDR Monitoring
AW0073C	B1	B-Sand	873	6	x	x	x	x		x		x			x	SA3 WDR Monitoring
WCC_06S	B2	B-Sand	687	5	x	x	x	x		x		x			x	Annual Sitewide & Additional Monitoring for
AW0074UB	B2	C-Sand	24,300	12	x	x	x	x	x	x		x			x	Additional Monitoring for Evaluation
Group C Wells																
TMW_07	C	B-Sand	1,133	8	x	x	x	x	x	x			x	x	x	Annual Sitewide & SA3 WDR Monitoring
WCC_12S	C	B-Sand	52	1	x	x	x	x	x	x			x	x	x	Annual Sitewide & SA3 WDR Monitoring
Group D Well																
MWB006	D	B-Sand	924,000	15	x	x	x	x	x	x			x	x	x	Annual Sitewide & SA3 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	19	15	6	15	0	10	3	3	10	

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

Select VOCs for Total VOC calculation include PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and VC (June 2007).

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Table 2
March 2009 Building 2 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 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 for sampling
Group B Wells															
CMW026	B	C-Sand	863	2	x	x	x	x	x	x	x	x		x	Sitewide & Q3 WDR Monitoring
IRZCMW003	B	C-Sand	9,215	6	x	x	x	x	x	x	x	x		x	Sitewide & Q3 WDR Monitoring
IRZCMW002	B	C-Sand	1,116	3	x	x	x	x	x	x	x	x		x	Sitewide & Q3 WDR Monitoring
MWC024	B	C-Sand	2,420	5	x	x	x	x	x	x	x	x		x	Sitewide & Q3 WDR Monitoring
Group C Wells															
CMW002	C	B-Sand	430	1	x	x	x	x	x	x	x	x	x		Sitewide & Q3 WDR Monitoring
Group D Well															
IRZCMW001	D	B-Sand	2,102	4	x	x	x	x	x	x	x	x	x		Sitewide & Q3 WDR Monitoring
Quality Control Samples															
Duplicates (1 per 20 wells)							x (est. 1)								
Rinsate Blanks (1 per day)							(est. 0)								dedicated pumps
Trip Blanks (1 per cooler)							x (est. 1)								
			Totals:		6	6	9	6	6	6	6	6	2	4	

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

Select VOCs for Total VOC calculation include PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and VC (June 2007).

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Table 3
March 2009 Sitewide Groundwater Monitoring Program
BCRE Former C-6 Facility
Los Angeles, California

Well ID	Water-Bearing Unit	Total Select VOCs Concentration (ug/l)	Sampling Order	March 2009 Annual Event Analytical Program									Comments
				Methane Monitoring	Water Level Gauging	VOCs (8260B)	Field Parameters[1]	TOC (9060)	Sulfates (300.0)	DHGs (MEE) (RSK 175)	Ferrous Iron?	WDR Analyses?	
B-Sand Monitoring Wells													
BL-03	B-Sand	464	32	x	x	x	x						
DAC-P1	B-Sand	9,530	70	x	x	x	x						
EWB001	B-Sand	1,811	51	x	x	x	x						
EWB002	B-Sand	1,243	46	x	x	x	x					Yes[6]	Monitored under Building 1/36 WDR Program
MW0005	B-Sand	1,618	49	x	x	x	x						
MWB003	B-Sand	5,455	65	x	x	x	x			x			For Idenftiying Potential Methane Migration
MWB006	B-Sand	924,000	78	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
MWB007	B-Sand	2,822	58	x	x	x	x						
MWB012	B-Sand	793	38	x	x	x	x						
MWB013	B-Sand	11	3	x	x	x	x						
MWB014	B-Sand	174	24	x	x	x	x						
MWB019	B-Sand	344	28	x	x	x	x						
MWB020	B-Sand	14	9	x	x	x	x						
MWB027	B-Sand	991	42	x	x	x	x						
MWB028	B-Sand	1,171	45	x	x	x	x						
TMW_04	B-Sand	1,386	48	x	x								Water level measurement only
TMW_06	B-Sand	129	21	x	x	x	x						
TMW_07	B-Sand	1,133	44	x	x	x	x					Yes[6]	Monitored under Building 1/36 WDR Program
TMW_08	B-Sand	4,477	63	x	x	x	x			x			For Idenftiying Potential Methane Migration
TMW_10	B-Sand	19	11	x	x	x	x						
TMW_11	B-Sand	14	8	x	x	x	x						
TMW_14	B-Sand	12	7	x	x	x	x						
TMW_15	B-Sand	27	14	x	x	x	x						
WCC_03S	B-Sand	8,730	68	x	x	x	x						
WCC_04S	B-Sand	5,655	67	x	x	x	x						
WCC_05S	B-Sand	11	4	x	x	x	x						
WCC_06S	B-Sand	687	36	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
WCC_07S	B-Sand	536	33	x	x	x	x			x			For Idenftiying Potential Methane Migration
WCC_09S	B-Sand	58	17	x	x	x	x						
WCC_12S	B-Sand	52	15	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
XMW-09	B-Sand	72	18	x	x	x	x						
XMW-19	B-Sand	11	6	x	x	x	x						
C-Sand Monitoring Wells													
CMW001	C-Sand	150	23	x	x	x	x						
CMW002	C-Sand	430	31	x	x	x	x				Yes[4]	Yes[5]	Monitored under Building 2 WDR Program
CMW026	C-Sand	863	39	x	x	x	x				Yes[4]	Yes[5]	Monitored under Building 2 WDR Program
EWC001	C-Sand	4,277	62	x	x	x	x						
EWC002	C-Sand	3,587		x									Methane Monitoring Only
IWC001	C-Sand	2,288	55	x	x	x	x						
IWC002	C-Sand	1,694		x									Methane Monitoring Only
MWC004	C-Sand	326	27	x	x	x	x						
MWC006	C-Sand	19	12	x	x	x	x						
MWC007	C-Sand	10	2	x	x	x	x						
MWC009	C-Sand	244	26	x	x	x	x						
MWC011	C-Sand	54	16	x	x	x	x						
MWC015	C-Sand	596	35	x	x	x	x						
MWC016	C-Sand	1,313	47	x	x	x	x						
MWC017	C-Sand	370	29	x	x	x	x						
MWC021	C-Sand	16	10	x	x	x	x						
MWC022	C-Sand	2,043	52	x	x	x	x						
MWC023	C-Sand	2,278	54	x	x	x	x						
MWC024	C-Sand	2,420	56	x	x	x	x				Yes[4]	Yes[5]	Monitored under Building 2 WDR Program

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Table 3
March 2009 Sitewide Groundwater Monitoring Program
BCRE Former C-6 Facility
Los Angeles, California

Well ID	Water-Bearing Unit	Total Select VOCs Concentration (ug/l)	Sampling Order	March 2009 Annual Event Analytical Program									Comments
				Methane Monitoring	Water Level Gauging	VOCs (8260B)	Field Parameters[1]	TOC (9060)	Sulfates (300.0)	DHGs (MEE) (RSK 175)	Ferrous Iron?	WDR Analyses?	
Gage Monitoring Wells													
MWG001	Gage	84	19	x	x	x	x						
MWG002	Gage	11	5	x	x	x	x						
MWG003	Gage	24	13	x	x	x	x						
MWG004	Gage	9	1	x	x	x	x						
Former and Current Bioremediation Monitoring Wells													
IRZMW001A	B-Sand	12,317	71	x	x	x	x	x	x	x	Yes[4]		Additional analyses for injection evaluation
IRZMW001B	B-Sand	748	37	x	x	x	x	x	x	x	Yes[4]		Additional analyses for injection evaluation
IRZMW002A	B-Sand	12,379	72	x	x	x	x	x	x	x	Yes[4]		Analyses for Injection Evaluation
IRZMW002B	B-Sand	146	22	x	x	x	x	x	x	x	Yes[4]		Analyses for Injection Evaluation
IRZMW003A	B-Sand	18,365	73	x	x	x	x	x	x	x	Yes[4]		Analyses for Injection Evaluation
IRZMW003B	B-Sand	183	25	x	x	x	x	x	x	x	Yes[4]		Analyses for Injection Evaluation
IRZMW004	B-Sand	3,715	61	x	x	x	x	x	x	x	Yes[4]		Additional analyses for injection evaluation
IRZMW005	B-Sand	3,029	59	x	x	x	x	x	x	x	Yes[4]		Additional analyses for injection evaluation
IRZB0081	B-Sand	39,376	76	x	x	x	x	x	x	x	Yes[4]		Analyses for Injection Evaluation
IRZB0095	B-Sand	2,677	57	x	x	x	x	x	x	x	Yes[4]		Analyses for Injection Evaluation
IRZCMW001	C-Sand	2,102	53	x	x	x	x				Yes[4]	Yes[5]	Monitored under Building 2 WDR Program
IRZCMW002	C-Sand	1,116	43	x	x	x	x				Yes[4]	Yes[5]	Monitored under Building 2 WDR Program
IRZCMW003	C-Sand	9,215	69	x	x	x	x				Yes[4]	Yes[5]	Monitored under Building 2 WDR Program
Building 1/36 WDR Monitoring Wells													
AW0066UB	Upper B-Sand	375	30	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
AW0067UB	Upper B-Sand	591	34	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
AW0064UB	Upper B-Sand	45,920	77	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
AW0065UB	Upper B-Sand	877	41	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
AW0075UB	Upper B-Sand	5,484	66	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
AW0076UB	Upper B-Sand	5,264	64	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
AW0077UB	B-Sand	89	20	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
AW0073C	C-Sand	873	40	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
AW0074UB	Upper B-Sand	24,300	74	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
AW0055UB	Upper B-Sand	27,200	75	x	x	x	x				Yes[4]	Yes[6]	Monitored under Building 1/36 WDR Program
Subtotals		Sitewide Program		57	55	54	54	10	10	13			
		WDR Program		21	21	21	21						
Quality Control Samples[3]													
Duplicates (1 per 20 wells)						x (4)							
Rinseate Blanks (1 per day)						x (8)							
Trip Blanks (1 per day)						x (8)							
Totals				78	76	95	75	10	10	13	29	21	

Notes:
VOCs = volatile organic compounds using EPA Method 8260B
TOC = Total Organic Carbon
DHGs = Dissolved hydrocarbon gases - MEE (Methane, Ethane, Ethene) using Method RSK 175
Field Parameters = pH, dissolved oxygen (DO), redox, turbidity, electrical conductivity, and temperature.
(1) As a quality assurance check on DO measurements, 10 percent of the samples will be analyzed in the field using a CHEMetrics, Inc test kit (K-7512 or K-7540).
(2) Well WCC_06S is included in the Building 1/36 WDR, but is not included in the March 2009 sampling event for that program. Samples from this well will only be analyzed for VOCs as designated by the annual sitewide sampling program.
(3) Quality control sample number based on estimated number of sampling days.
(4) Test for ferrous iron using the Hach DR890 Colorimeter.
(5) Analyze samples in accordance with the Building 2 WDR Program summarized in Table 2.
(6) Analyze samples in accordance with the Building 1/36 WDR Program summarized in Table 1.

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Figures

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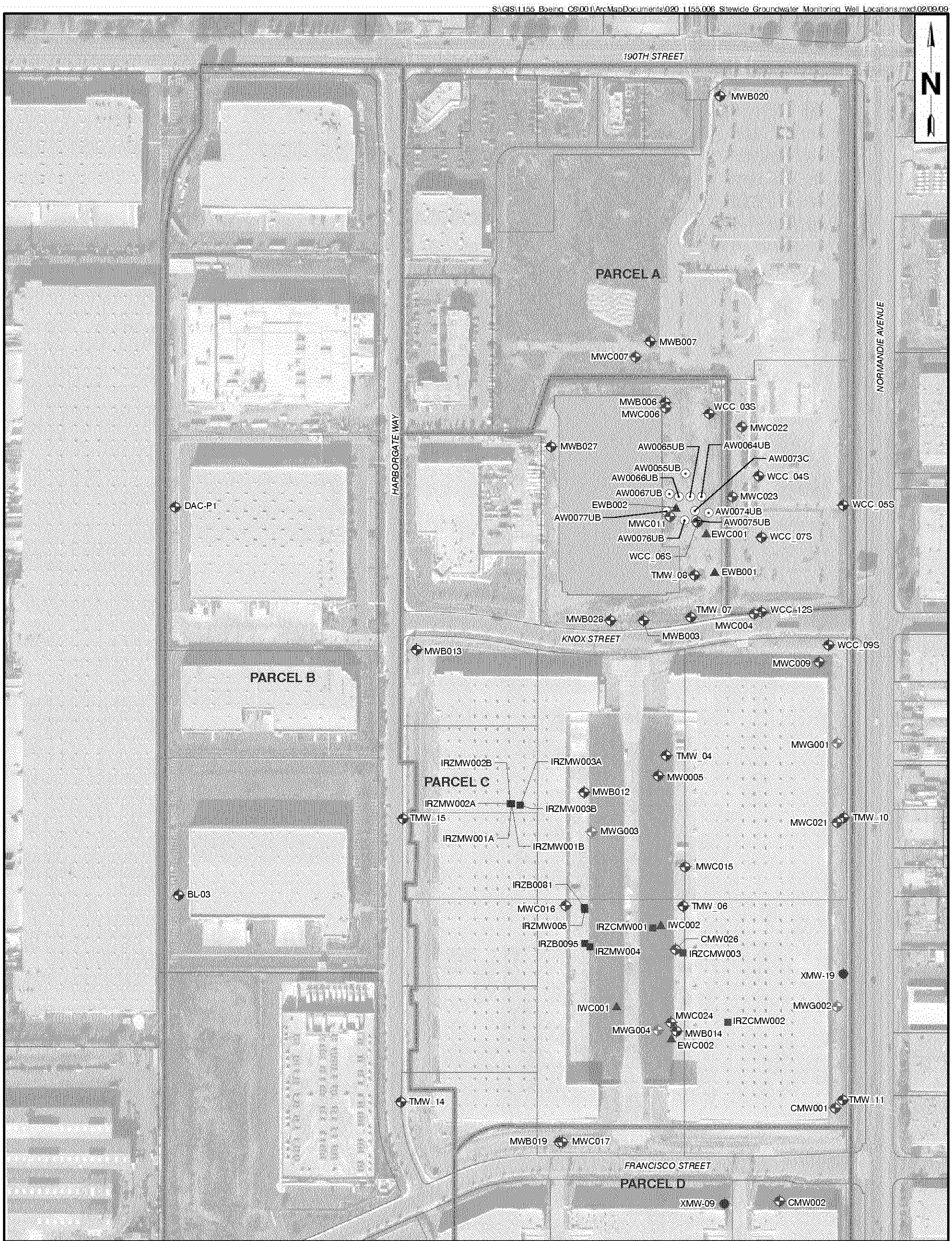
S:\GIS\1155 Boeing C6\001\ArcMapDocuments\020_1155.006 Sitewide Groundwater Monitoring Well Locations.mxd\02/09/09



LEGEND

- Parcel Boundary
- B-Sand IRZ Bioremediation Monitoring Well
- C-Sand IRZ Bioremediation Monitoring Well
- B-Sand Montrose Monitoring Well
- B-Sand Monitoring Well
- C-Sand Monitoring Well
- Gage Monitoring Well
- B-Sand Observation Well
- C-Sand Observation Well
- B-Sand Ammendment Wells
- C-Sand Ammendment Wells

0 250 500
SCALE

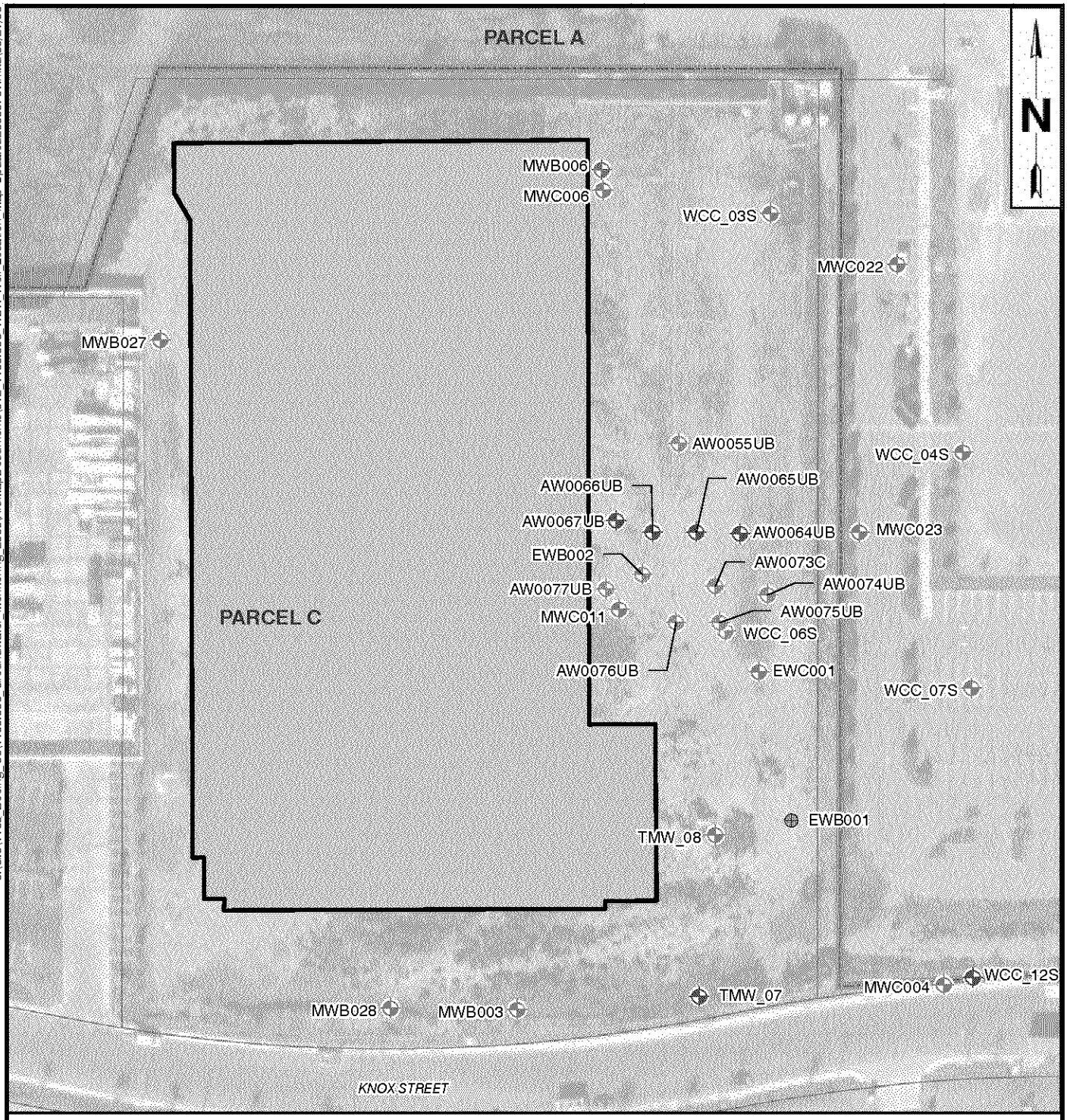
FIGURE 1

GROUNDWATER MONITORING WELL LOCATION MAP

BOEING ENTERPRISE REAL PROPERTY
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 ENTERPRISE REAL PROPERTY
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

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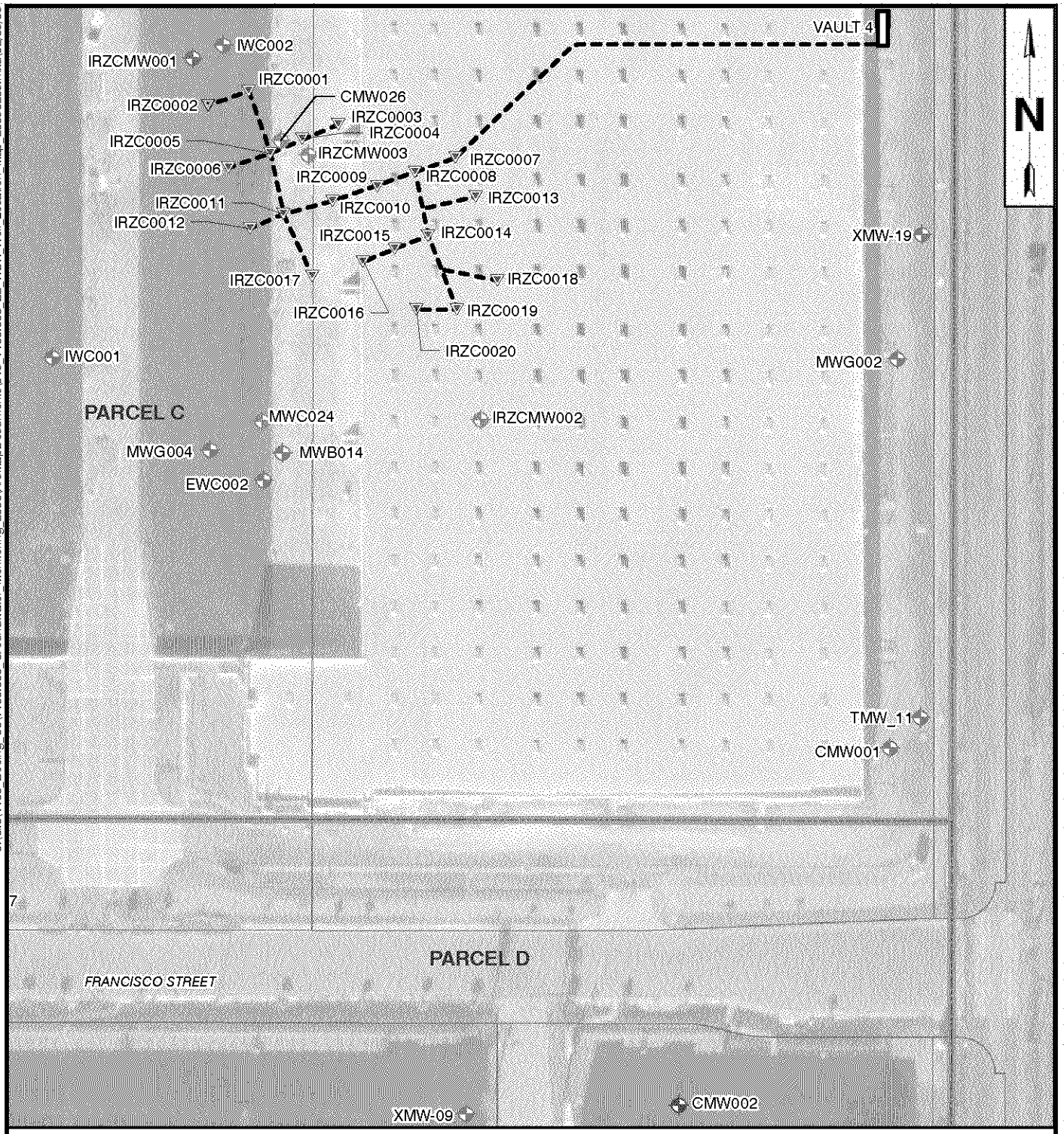

LEGEND

- 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 3

WDR WELL LOCATION MAP
FORMER BUILDING 2 AREA

BOEING ENTERPRISE REAL PROPERTY
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

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Attachment 2

Field Data Forms

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Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 March 2009 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.006
Location: Torrance, CA **Field Personnel:** Various **Date:** 3/9/2009
CGI Instrument ID: RKI Eagle Multi-Gas Detector **PID Instrument ID:** MiniRAE 2000 **Solinst ID:** Various
Field Conditions: Partly cloudy and cool (mean temp. 61°F.), calm to light winds - 4 to 14 mph from WNW, 61% humidity.
Sampling Methods: Initial CGI/PID collected approx. 1" above center of casing immediately after opening. Measure elapsed time when CGI ≤ 2%LEL

Well ID	Previous Measurement Date	Previous Depth to Water	Time	Well Diameter (in)	PID (ppm)	Initial CGI (%LEL)	Time to Disperse (mm:ss)	Measurement Point	Depth to Water	Depth to Water #2	Change in DTW	Comments/Well Conditon
MWC007	Sep-08	57.78	11:20	4	0	0%	-	TOC-N	57.58	57.58	0.2	
MWB013	Sep-08	61.85	9:24	4	1.2	0%	-	TOC-N	61.62	61.62	0.23	
WCC_05S	Sep-08	59.17	11:55	4	0	0%	-	TOC-N	59.00	59.00	0.17	
TMW_14	Sep-08	66.48	9:38	2	0.3	0%	-	TOC-N	66.22	66.22	0.26	
MWB020	Sep-08	56.73	11:40	4	0	0%	-	TOC-N	56.48	56.48	0.25	
TMW_15	Sep-08	64.6	9:47	2	0.6	0%	-	TOC-N	64.36	64.36	0.24	
WCC_12S	Dec-08	58.01	10:00	4	0.8	0%	-	TOC-N	57.72	57.72	0.29	
MWC004	Sep-08	58.6	9:55	4	19.5	0%	-	TOC-N	58.39	58.39	0.21	
BL-03	Sep-08	65.9	8:49	2	1.1	0%	-	TOC-N	65.68	65.68	0.22	
WCC_07S	Sep-08	58.7	10:20	4	9.8	0%	-	TOC-N	58.52	58.52	0.18	
MWC022	Sep-08	57.94	11:00	4	61.5	0%	-	TOC-N	57.71	57.71	0.23	
MWC023	Sep-08	57.85	10:35	4	1.1	0%	-	TOC-N	57.69	57.69	0.16	
MWB007	Sep-08	57.57	11:25	4	548	0%	-	TOC-N	57.34	57.34	0.23	O2 deficient (19.4%)
WCC_04S	Sep-08	58.78	10:45	4	0.5	0%	-	TOC-N	58.41	58.41	0.37	
DAC-P1	Sep-08	64.51	9:03	4	2.1	0%	-	TOC-N	61.22	61.22	3.29	
MWC006	Mar-08	60.78	8:20	2	1.7	0%	-	TOC-N	60.03	60.03	0.75	PID Background
MWC011	Mar-08	60.89	8:40	2	1.5	0%	-	TOC-N	60.29	60.29	0.6	
AW0077UB	Dec-08	60.62	9:00	2	34.2	60%	>10:00	TOC-N	60.26	60.26	0.36	Tagged
AW0066UB	Dec-08	59.49	9:30	2	5.1	2%	01:09	TOC-N	59.22	59.22	0.27	Tagged
AW0067UB	Dec-08	59.81	9:45	2	3.8	3%	08:20	TOC-N	59.62	59.62	0.19	Tagged
WCC_06S	Dec-08	59.06	10:10	4	1	0%	-	TOC-N	58.75	58.75	0.31	

AVOCET ENVIRONMENTAL, INC.

Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 March 2009 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.006
Location: Torrance, CA **Field Personnel:** Various **Date:** 3/9/2009
CGI Instrument ID: RKI Eagle Multi-Gas Detector **PID Instrument ID:** MiniRAE 2000 **Solinst ID:** Various
Field Conditions: Partly cloudy and cool (mean temp. 61°F.), calm to light winds - 4 to 14 mph from WNW, 61% humidity.
Sampling Methods: Initial CGI/PID collected approx. 1" above center of casing immediately after opening. Measure elapsed time when CGI ≤ 2%LEL

Well ID	Previous Measurement Date	Previous Depth to Water	Time	Well Diameter (in)	PID (ppm)	Initial CGI (%LEL)	Time to Disperse (mm:ss)	Measurement Point	Depth to Water	Depth to Water #2	Change in DTW	Comments/Well Conditon
AW0073C	Dec-08	59.87	10:25	2	1.2	0%	-	TOC-N	59.71	59.71	0.16	
AW0065UB	Dec-08	59.17	10:35	2	0.8	1%	-	TOC-N	58.95	58.95	0.22	Tagged, No well cap.
MWB027	Sep-08	63.34	10:45	2	1.1	0%	-	TOC-N	63.2	63.2	0.14	
TMW_07	Dec-08	60.77	11:00	2	4.2	0%	-	TOC-N	60.39	60.39	0.38	
MWB028	Sep-08	63.58	11:15	2	48	0%	-	TOC-N	63.38	63.38	0.2	Positive pressure; 10.6% O2
EWB001	Mar-08	0	11:45	6	2.1	0%	-	TOC-N	55.5	55.5	NA	
EWC001	Mar-08	59.45	12:00	4	20.1	0%	-	TOC-N	58.95	58.95	0.5	
TMW_08	Mar-08	61.02	12:05	2	2.5	0%	-	TOC-N	60.39	60.39	0.63	
AW0076UB	Dec-08	60.32	12:15	2	43.5	10%	>10:00	TOC-N	59.98	59.98	0.34	Tagged
MWB003	Mar-08	63.81	12:25	2	231	5%	>10:00	TOC-N	63.44	63.44	0.37	Tagged, CH4 meter not "zeroing"
AW0075UB	Dec-08	59.83	11:25	2	0.1	30%	3:26	TOC-N	59.66	59.66	0.17	Tagged
WCC_03S	Sep-08	59.07	11:38	4	0.1	0%	-	TOC-N	58.92	58.92	0.15	
AW0074UB	Dec-08	59.22	11:46	2	0.1	13%	0:42	TOC-N	59.11	59.11	0.11	Tagged; cap missing
AW0055UB	Dec-08	59.98	11:52	2	62.9	>100%	15:02	TOC-N	59.85	59.85	0.13	Tagged; H2S = 23 ppm
AW0064UB	Dec-08	58.74	12:00	4	17.2	31%	1:57	TOC-N	58.64	58.64	0.1	Tagged
MWB006	Dec-08	60.24	12:15	4	38	1%	-	TOC-N	60.05	60.05	0.19	Tagged
MWG004	Sep-08	60.44	8:45	2	0	0%	-	TOC-N	60.55	60.55	-0.11	
MWG003	Sep-08	61.4	8;03	2	2.6	0%	-	TOC-N	61.35	61.35	0.05	
TMW_06	Sep-08	59.03	8:28	2	0	0%	-	TOC-N	58.79	58.79	0.24	
MWB014	Sep-08	59.15	8:38	4	0	0%	-	TOC-N	58.91	58.91	0.24	
CMW002	Dec-08	60.65	8:40	4	0	0%	-	TOC-N	60.6	60.6	0.05	
MWC015	Sep-08	58.85	8:57	4	0.2	0%	-	TOC-N	59.67	59.67	-0.82	
MWB012	Mar-08	59.77	9:02	4	15.1	0%	-	TOC-N	59.75	59.75	0.02	

AVOCET ENVIRONMENTAL, INC.

Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 March 2009 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.006
Location: Torrance, CA **Field Personnel:** Various **Date:** 3/9/2009
CGI Instrument ID: RKI Eagle Multi-Gas Detector **PID Instrument ID:** MiniRAE 2000 **Solinst ID:** Various
Field Conditions: Partly cloudy and cool (mean temp. 61°F.), calm to light winds - 4 to 14 mph from WNW, 61% humidity.
Sampling Methods: Initial CGI/PID collected approx. 1" above center of casing immediately after opening. Measure elapsed time when CGI ≤ 2%LEL

Well ID	Previous Measurement Date	Previous Depth to Water	Time	Well Diameter (in)	PID (ppm)	Initial CGI (%LEL)	Time to Disperse (mm:ss)	Measurement Point	Depth to Water	Depth to Water #2	Change in DTW	Comments/Well Conditon
CMW026	Dec-08	59.12	9:30	4	0.8	11%	15:30	TOC-N	58.96	58.96	0.16	Tagged
IRZCMW002	Dec-08	63.28	9:30	4	1.3	11%	15:30	TOC-N	63.22	63.22	0.06	Tagged
MWC016	Mar-08	60.47	9:50	4	1.5	0%	-	TOC-N	60.27	60.27	0.2	
TMW_04	Mar-07	59.29	9:55	2	0.1	0%	-	TOC-N	58.29	58.29	1	
MW0005	Sep-08	59.32	10:05	4	0.1	0%	-	TOC-N	59.16	59.16	0.16	Needs gasket
IWC002	Mar-08	58.82	10:10	4	6.6	10%	3:13	TOC-N	58.89	58.89	-0.07	Tagged
IRZCMW001	Dec-08	59.15	10:15	4	0	0%	-	TOC-N	59.6	59.6	-0.45	
IWC001	Sep-08	60.82	10:21	4	0	0%	-	TOC-N	60.65	60.65	0.17	
MWC024	Dec-08	59.24	10:30	4	11.7	>100%	12:22	TOC-N	59.18	59.18	0.06	Tagged
IRZB0095	Mar-08	60.42	10:35	1	0	0%	-	TOC-N	59.76	59.76	0.66	Needs cap and gasket
IRZMW005	Mar-08	60.4	10:58	4	1.6	0%	-	TOC-N	60.01	60.01	0.39	
EWC002	Sep-08	59.5	11:00	4	0.2	0%	-	TOC-N	59.35	59.35	0.15	
IRZMW004	Mar-08	60.64	11:10	4	0.3	0%	-	TOC-N	60.35	60.35	0.29	Replace 12" EMCO lid
IRZCMW003	Dec-08	59.23	11:20	4	10.6	>100%	16:15	TOC-N	59.15	59.15	0.08	Tagged
IRZB0081	Mar-08	60.43	11:35	1	0.2	0%	-	TOC-N	60.17	60.17	0.26	
MWG002	Sep-08	63.53	9:10	2	0.8	0%	-	TOC-N	63.4	63.4	0.13	
XMW-19	Sep-08	56.36	8:20	6	0.8	0%	-	TOC-N	56.26	56.26	0.1	Not air tight
TMW_11	Sep-08	57.27	9:20	2	0.8	0%	-	TOC-N	56.91	56.91	0.36	
MWC021	Sep-08	61.87	9:40	4	0.8	0%	-	TOC-N	61.44	61.44	0.43	
TMW_10	Sep-08	56.99	9:50	2	0.8	0%	-	TOC-N	56.63	56.63	0.36	
WCC_09S	Sep-08	61.57	11:40	4	0.1	0%	-	TOC-N	61.38	61.38	0.19	
XMW-09	Sep-08	60.71	8:50	4	1	0%	-	TOC-N	60.4	60.4	0.31	

AVOCET ENVIRONMENTAL, INC.

Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 March 2009 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.006

Location: Torrance, CA **Field Personnel:** Various **Date:** 3/9/2009

CGI Instrument ID: RKI Eagle Multi-Gas Detector **PID Instrument ID:** MiniRAE 2000 **Solinst ID:** Various

Field Conditions: Partly cloudy and cool (mean temp. 61°F.), calm to light winds - 4 to 14 mph from WNW, 61% humidity.

Sampling Methods: Initial CGI/PID collected approx. 1" above center of casing immediately after opening. Measure elapsed time when CGI ≤ 2%LEL

Well ID	Previous Measurement Date	Previous Depth to Water	Time	Well Diameter (in)	PID (ppm)	Initial CGI (%LEL)	Time to Disperse (mm:ss)	Measurement Point	Depth to Water	Depth to Water #2	Change in DTW	Comments/Well Conditon
MWG001	Sep-08	62.54	10:05	2	1	0%	-	TOC-N	62.38	62.38	0.16	
IRZMW002B	Jun-07	64.66	11:45	2	9.9	0%	-	TOC-N	63.67	63.67	0.99	No pump, 1/2" tubing
CMW001	Sep-08	62.31	9:30	4	0.8	0%	-	TOC-N	62.03	62.03	0.28	
IRZMW003B	Jun-07	64.59	11:40	2	2.5	0%	-	TOC-N	63.67	63.67	0.92	No pump, 1/2" tubing
MWC009	Sep-08	61.1	10:20	4	2.5	0%	-	TOC-N	60.8	60.8	0.3	
MWB019	Sep-08	63.19	10:45	4	2	0%	-	TOC-N	62.56	62.56	0.63	
MWC017	Sep-08	63.17	11:00	4	2	0%	-	TOC-N	62.92	62.92	0.25	No well cap
IRZMW001B	Mar-08	64.05	11:20	2	14.8	1%	-	TOC-N	63.59	63.59	0.46	Tagged, no pump, no tubing, not sealed.
IRZMW001A	Mar-08	64.15	11:30	2	80	44%	0:45	TOC-N	63.63	63.63	0.52	Tagged, no pump, low-flow tubing
IRZMW002A	Jun-07	64.97	12:00	2	9	0%	-	TOC-N	63.56	63.56	1.41	No pump, 1/2" tubing
IRZMW003A	Jun-07	64.72	12:15	2	2.5	0%	-	TOC-N	63.64	63.64	1.08	No pump, 1/2" tubing

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/11/09
Project No.:	1155.006	**Prepared by:**	EMC
Well Identification:	EWB002	**Weather:**	Cloudy 60's
Measurement Point Description:	TOC	**Pump Intake:**	75
		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.)
—	60.17	90	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot				
Well Diameter (inches) = 6	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: 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
Previous Stabilized Parameters: 12-03-08					22.29	2.90	0.280	6.51	-115.00	73.10	
0952	CPM-4	0	200	60.17	19.02	2.89	8.10	7.02	18	13.3	clear
0953		600		60.24	20.86	2.82	0.89	6.42	-89	58.1	Cloudy
0956		1200		60.22	21.00	2.86	0.62	6.40	-96	43.1	Cloudy
0959		1800		60.23	21.12	2.87	0.54	6.40	-99	26.6	Cloudy
1002		2400		60.23	21.05	2.88	0.50	6.39	-101	26.9	Cloudy
1005		3000		60.22	21.03	2.89	0.49	6.39	-104	24.1	Cloudy
1008		3600		60.23	21.05	2.90	0.48	6.40	-105	23.2	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
0952	1008	200	3.6	N/A	NA	60.23	1015	EWB002_WG200903 11 _01

Notes: (units) [stabilization criteria] Ferrous Iron — 1.07

DUP: EWB002_WG200903 11 _02

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/11/09
Project No.:	1155.006	**Prepared by:**	EMC
Well Identification:	AW0055UB	**Weather:**	Cloudy 60's
Measurement Point Description:	TOC	**Pump Intake:** 79	**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.)
—	59.87	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: 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
Previous Stabilized Parameters: 12-02-08					21.77	3.24	0.350	6.51	-234.00	0.52	
1218	CPM-4	0	200	59.87	20.75	3.18	0.54	6.66	-112	30.6	Slightly cloudy
1221		600		59.95	20.99	3.17	0.38	6.62	-111	18.6	clear
1224		1200		59.94	20.99	3.16	0.31	6.61	-214	6.1	
1227		1800		59.94	20.97	3.16	0.34	6.61	-213	5.9	
1230		2400		59.95	20.95	3.16	0.36	6.60	-214	5.2	
1233		3000		59.94	20.96	3.16	0.31	6.60	-215	5.3	

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
1218	1233	200	3	N/A	NA	59.94	1240	AW0055UB_WG200903 _01

Notes: (units) [stabilization criteria] Ferrous Iron 0.63

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:** 3/12/09	
Project No.:	1155.006	**Prepared by:** TDT	
Well Identification:	AW0064UB	**Weather:** 60's partly cloudy	
Measurement Point Description:	TOC	**Pump Intake:** low flow	**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.)
—	58.56	88.5	—	—	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: 12-02-08					22.19	3.82	1.590	6.53	-101.00	81.40	
0747	cpm4	0	200	58.56	18.81	2.18	6.50	7.48	-176	25.8	Cloudy
0750		600		58.57	20.17	2.20	0.43	7.48	-215	NM	cloudy
0753		1200		58.59	20.24	2.21	0.21	7.50	-234	NM	cloudy
0756		1800		58.60	20.41	2.21	0.17	7.50	-240	47.1	cloudy
0759		2400		58.63	20.53	2.21	0.14	7.51	-248	43.6	cloudy
0802		3000		58.59	20.66	2.20	0.12	7.52	-257	47.7	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
0747	0802	206	3000	N/A	NA	58.54	0805	AW0064UB_WG200903 12 _01

Notes: (units) [stabilization criteria]

NM: calibration error

Fe: 1.90 mg/L

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/11/09
Project No.:	1155.006	**Prepared by:**	TPT
Well Identification:	AW0065UB	**Weather:**	60's overcast
Measurement Point Description:	TOC	**Pump Intake:**	**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.)
	58.99	88.5			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: 12-02-08					22.18	3.49	0.280	6.50	-181.00	1,982.00	
1106	cfm 4	0	200	58.99	19.87	5.12	1.93	6.55	-143	74.1	clear
1120		0		59.00	21.84	2.74	0.13	7.30	-153	NM	dark/cloudy
1123		600		59.02	21.87	2.68	0.06	7.29	-163	NM	dark/cloudy
1126		1200		59.02	22.13	2.64	0.04	7.28	-193	NM	dark/cloudy
1129		1800		59.04	22.39	2.64	0.03	7.28	-203	NM	dark/cloudy
1132		2400		59.05	22.45	2.68	0.05	7.28	-205	NM	inner clear cell: cloudy
1135		3000		59.07	22.52	2.70	0.05	7.28	-204	71.6	Cloudy
1138		3600		59.04	22.69	2.71	0.06	7.28	-203	136	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
1106	1138	200	3600	N/A	NA	59.01	1142	AW0065UB_WG200903 11 _01

Notes: (units) [stabilization criteria]

Turbidity @ Sample Time: 121 (NTU)

Fe Iron: 0.18 mg/L

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/11/09
Project No.:	1155.006	**Prepared by:**	EMC (TDT)
Well Identification:	AW0066UB	**Weather:**	60's Overcast
Measurement Point Description:	TOC	**Pump Intake:**	low flow
		Screen:	69.5 - 89.5

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.)
	59.59	89.5			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: 12-02-08					22.20	5.39	1.710	6.32	-69.00	271.00	
0806	CPM4	0	200	59.59	20.43	3.73	2.92	6.67	-142	NM	Cloudy
0809		600		60.58	21.34	3.67	0.36	6.64	-174	150	Cloudy
0811		1200		60.60	21.72	3.67	0.18	6.65	-194	159	Cloudy
0814		1800		60.85	21.87	3.67	0.13	6.65	-201	152	Cloudy
0817		2400		60.71	21.17	3.68	0.12	6.66	-208	150	Cloudy
0820		3000		60.63	21.60	3.69	0.09	6.65	-213	140	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
0806	0820	200	3000	N/A	NA	60.79	0823	AW0066UB_WG200903 11 _01

Notes: (units) [stabilization criteria]

DUP:
DRUM NO:

Fe Iron: 0.07 mg/L

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:** 3-11-09	
Project No.:	1155.006	**Prepared by:** TDT	
Well Identification:	AW0067UB	**Weather:** 60's overcast	
Measurement Point Description:	TOC	**Pump Intake:** low flow	**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.)
—	59.45	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, 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: 12-02-08					22.80	6.08	0.400	5.00	-64.00	596.00	
0940	CPMY	0	200	59.45	20.75	5.85	1.19	6.66	-178	55.1	clear
0943		600	200	61.15	21.48	6.23	0.10	6.63	-225	54.3	clear
0947		1050	150	62.26	21.70	6.23	0.06	6.58	-234	64.1	clear
0951		1500	150	62.68	21.51	6.23	0.05	6.58	-239	63.4	clear
0955		1950	150	62.83	21.33	6.23	0.06	6.57	-242	63.1	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
0940	0955	200	1950	N/A	NA	62.75	0958	AW0067UB_WG200903 11 _01

Notes: (units) [stabilization criteria]

Fe Iron: 0.57 mg/L

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/11/09
Project No.:	1155.006	**Prepared by:**	SMC
Well Identification:	AW0073C	**Weather:**	cloudy 60s
Measurement Point Description:	TOC	**Pump Intake:**	106'
		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.)
	59.87	116			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: 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
Previous Stabilized Parameters: 12-03-08					21.36	0.89	0.770	6.95	-112.00	560.00	
0830	cpm4	0	200	59.87	17.54	2.82	2.47	6.76	-121	69.3	cloudy
0833		600		59.91	18.46	1.65	3.81	6.77	-95	42.2	
0836		1200		59.93	19.19	1.027	2.11	6.93	-117	125	
0839		1800		59.92	19.38	0.940	1.53	6.98	-126	139	
0842		2400		59.92	19.48	0.919	1.31	6.99	-132	137	
0845		3000		59.91	19.45	0.901	1.22	6.99	-139	138	
0848		3600		59.92	19.43	0.912	1.25	6.97	-136	139	

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
0830	0848	200	3.6	N/A	NA	59.92	0852	AW0073C_WG200903 1 _01

Notes: (units) [stabilization criteria] Yellow Iron 0.76

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/11/09
Project No.:	1155.006	**Prepared by:**	EMC
Well Identification:	AW0074UB	**Weather:**	cloudy 60's
Measurement Point Description:	TOC	**Pump Intake:**	80
		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.)
	59.15	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: OK / Cap missing / no tag

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: 12-02-08					22.00	3.01	0.290	6.49	-212.00	0.44	
1138	GPM-4	0	200	59.15	19.98	2.29	4.16	6.09	-85	47.5	S Cloudy
1141		600		59.21	21.20	3.15	1.25	6.61	-95	17.5	S. Cloudy
1144		1200		59.20	21.35	3.28	0.86	6.52	-101	8.2	clear
1147		1800		59.20	21.48	3.09	0.47	6.51	-109	3.9	clear
1150		2400		59.21	21.43	2.92	0.48	6.54	-117	4.6	clear
1153		3000		59.21	21.41	2.95	0.47	6.53	-118	4.0	clear
1156		3600		59.20	21.42	2.92	0.48	6.52	-119	3.6	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
1138	1156	200	3.6	N/A	NA	59.20	1205	AW0074UB_WG200903 11 _01

Notes: (units) [stabilization criteria] Ferrous Iron 1.37

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/11/09
Project No.:	1155.006	**Prepared by:**	SMC
Well Identification:	AW0075UB	**Weather:**	Cloudy 60's
Measurement Point Description:	TOC	**Pump Intake:**	79'
		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.)
—	59.68	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: Tolc

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: 12-03-08					22.11	3.09	0.170	6.48	-124.00	5.40	
1103	CPM-1	0	200	59.68	20.46	2.85	1.91	6.82	-105	8.5	Clear
1106		600		59.74	20.98	2.61	1.03	6.76	-117	14.7	Clear
1109		1200		59.75	21.15	2.42	0.66	6.70	-123	18.3	Clear
1112		1800		59.74	21.21	2.41	0.47	6.67	-126	18.1	
1115		2400		59.75	21.22	2.46	0.39	6.65	-131	11.7	
1118		3000		59.74	21.21	2.45	0.40	6.66	-130	10.5	
1121		3600		59.75	22.22	2.44	0.38	6.65	-132	10.3	
~~Time~~											
~~Time~~											

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
1103	1121	200	3.6	N/A	NA		1130	AW0075UB_WG200903 11 _01

Notes: (units) [stabilization criteria] Ferrous Iron 0.30

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/4/09
Project No.:	1155.006	**Prepared by:**	Amc
Well Identification:	AW0076UB	**Weather:**	Cloudy 60s
Measurement Point Description:	TOC	**Pump Intake:**	79
		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.)
	60.17	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: TOC

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: 12-03-08					21.88	3.82	0.100	6.59	-150.00	3.80	
1030	CPM-4	0	200	60.17	20.08	3.39	0.86	6.76	-114	19.6	S. Cloudy
1033		600		60.22	20.46	3.52	0.59	6.68	-132	13.4	S. Cloudy
1036		1200		60.23	20.52	3.45	0.59	6.65	-137	8.6	Clear
1039		1800		60.22	20.55	3.44	0.55	6.64	-132	7.4	Clear
1042		2400		60.22	20.57	3.44	0.52	6.64	-139	4.9	Clear
1045		3000		60.21	20.50	3.44	0.50	6.63	-139	5.8	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
1030	1045	200	3	N/A	NA	60.21	1050	AW0076UB_WG200903 // _01

Notes: (units) [stabilization criteria] Ferrous Iron 0.21

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	[illegible]
Well Identification:	AW0077UB	**Weather:**	Cloudy 60s
Measurement Point Description:	TOC	**Pump Intake:**	78 ft
		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.)
	60.38	85.5			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: 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: 12-03-08					21.70	3.57	0.170	6.50	-169.00	11.60	
0800	CPM 4	0	200	60.38	17.66	2.89	9.28	6.81	38.	9.7	Clear
0803		600		60.45	19.01	3.35	1.36	6.59	-103	9.3	
0806		1200		60.45	19.55	3.39	0.52	6.54	-136	8.9	
0809		1800		60.44	19.92	3.39	0.66	6.54	-149	9.2	
0812		2400		60.44	19.96	3.32	0.62	6.55	-152	10.1	
0815		3000		60.45	19.515	3.37	0.63	6.54	-157	10.2	

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	0815	200	3	N/A	NA	60.45	0820	AW0077UB_WG200903 / / _01

Notes: (units) [stabilization criteria] Follows Mon - 1.37

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:** 3-12-09	
Project No.:	1155.006	**Prepared by:** TDT	
Well Identification:	MWB006	**Weather:** 60's sunny	
Measurement Point Description:	toc	**Pump Intake:** low flow	**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.)
—	59.83	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, 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: 12-02-08					24.02	7.56	4.030	6.12	-63.00	31.10	
0853	4pm4	0	200	59.83	20.69	6.08	2.43	6.84	-161	30.2	clear
0856		600		60.18	22.06	7.95	0.98	6.63	-148	8.60	clear
0859		1200		60.26	21.85	7.97	0.80	6.64	-144	5.95	clear
0902		1800		60.33	22.24	7.98	0.78	6.65	-144	5.30	clear
0905		2400		60.43	22.17	7.98	0.64	6.65	-146	2.93	clear
0908		3000		60.45	22.46	7.98	0.48	6.65	-149	5.13	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
0853	0908	200	3000	N/A	NA	60.40	0911	MWB006_WG200903 12 _01

Notes: (units) [stabilization criteria]

Fe : 0.85 mg/L

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/4/09
Project No.:	1155.006	**Prepared by:**	SMC
Well Identification:	TMW_07	**Weather:**	Slouchy 60s
Measurement Point Description:	TOC	**Pump Intake:**	75'
		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.)
—	60.59	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: 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: 12-02-08					22.12	1.70	6.710	7.06	-43.00	1.29	
0910	CPM-4	0	200	60.59	17.36	1.331	4.36	7.16	-97	49.1	Cloudy
0913		600		60.64	19.69	1.65	6.13	7.10	-46	19.5	
0916		1200		60.65	19.83	1.66	6.34	7.09	-27	18.5	
0919		1800		60.64	19.99	1.65	6.49	7.09	+14	14.3	
0922		2400		60.65	19.98	1.65	6.47	7.10	+21	12.6	
0925		3000		60.64	19.99	1.66	6.46	7.09	+23	11.7	
	SMC										

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
0910	0925	200	3	N/A	NA	60.65	0930	TMW_07_WG200903 11 _01

Notes: (units) [stabilization criteria] Ferrous Iron 0.26

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/11/09
Project No.:	1155.006	**Prepared by:**	TDT
Well Identification:	WCC_06S	**Weather:**	60's partly cloudy
Measurement Point Description:	TOC	**Pump Intake:**	low flow
		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.)
	58.77	90			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, 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: 12-02-08					22.02	3.85	3.170	6.94	-172.00	45.20	
1255	cpm 4	0	200	58.77	22.40	3.69	8.37	7.52	-90	73.0	cloudy
1258		600		58.91	21.57	3.90	8.31	7.67	-65	21.6	clear
1301		1200		58.95	21.68	3.91	8.28	7.71	-60	13.9	clear
1304		1800		58.93	21.54	3.91	8.12	7.72	-54	9.1	clear
1307		2400		58.90	21.72	3.91	8.02	7.72	-50	7.7	clear
1310		3000		58.97	21.88	3.91	8.02	7.72	-48	5.2	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
1255	1310	200	3000	N/A	NA	58.89	1314	WCC_06S_WG200903 " _01

Notes: (units) [stabilization criteria]

Fe Iron: 1.52 mg/L

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	[illegible]
Project No.:	1155.006	**Prepared by:**	[illegible]
Well Identification:	WCC_12S	**Weather:**	Cloudy 50s
Measurement Point Description:		**Pump Intake:** 75	**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.)
/	57.88	90	/	/	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: 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
Previous Stabilized Parameters: 12-03-08					21.26	1.81	6.450	6.96	87.00	6.50	
0736	Cmlly	0	200	57.88	17.14	1.75	8.69	6.36	132	4.4	clear
0733	↓	600	↓	57.90	18.09	1.78	7.47	6.76	127	2.1	clear
0736		200		57.91	19.03	1.79	7.12	6.89	123	1.5	clear
0739		1800		57.96	19.30	1.79	6.94	7.01	120	1.3	clear
0742		2400		57.91	19.77	1.80	6.96	7.05	119	1.2	clear
0745		3000		57.96	19.29	1.79	6.97	7.04	120	1.2	clear
	[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
0730	0745	200	3	N/A	NA	57.91	0750	WCC_12S_WG200903 11 _01

Notes: (units) [stabilization criteria] Cerrem Jan 09

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/12/09
Project No.:	1155.006	**Prepared by:**	TMC
Well Identification:	CMW002	**Weather:**	Sunny 60's
Measurement Point Description:	TOC	**Pump Intake:**	111 ft
		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	121	/	/	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: 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
Previous Stabilized Parameters: 12-03-08					21.60	1.04	0.180	7.17	-159.00	2.75	
0745	CPM-4	0	200	60.65	16.95	1.000	1.43	6.48	87.	2.9	clear
0748		600		60.71	18.86	0.992	2.86	6.91	-78	1.9	clear
0751		1200		60.72	19.79	0.998	0.78	7.16	-55	2.4	clear
0754		1800		60.73	19.93	0.997	0.59	7.13	-42	1.9	clear
0757		2400		60.72	19.95	0.998	0.57	7.14	-31	1.5	clear
0800		3000		60.71	19.97	0.992	0.56	7.15	-38	1.3	clear
~~TMC~~											

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
0745	800	200	3	N/A	NA	60.71	0810	CMW002_WG200903 12 _01

Notes: (units) [stabilization criteria]

FI - 0.92

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/12/09
Project No.:	1155.006	**Prepared by:**	EMC
Well Identification:	CMW026	**Weather:**	cloudy 40s
Measurement Point Description:	TOC	**Pump Intake:**	106
		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.)
—	58.98	117	—	—	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: 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
Previous Stabilized Parameters: 12-03-08					21.95	2.36	0.090	6.97	-130.00	4.00	
0850	0m-4	0	200	58.98	18.11	1.77	2.07	7.18	-15	2.2	clear
0853		600		59.07	19.95	2.28	0.72	7.06	-134	2.4	clear
0856		1200		59.10	20.32	2.14	0.51	6.86	-135	3.6	clear
0859		1800		59.11	20.53	2.11	0.44	6.78	-133	2.5	clear
0902		2400		59.10	20.44	2.12	0.41	6.76	-134	2.9	clear
0905		3000		59.11	20.52	2.14	0.35	6.74	-134	2.8	clear
0908		3600		59.10	20.54	2.15	0.34	6.73	-135	2.6	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
0850	0908	200	3.6	N/A	NA	59.10	0915	CMW026_WG200903 _01

Notes: (units) [stabilization criteria] PI 1.32

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/2/09
Project No.:	1155.006	**Prepared by:**	RMC
Well Identification:	IRZCMW001	**Weather:**	Sunny 60s
Measurement Point Description:	TOC	**Pump Intake:**	111'
		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.)
/	59.17	117	/	/	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: 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
Previous Stabilized Parameters: 12-03-08					22.34	1.33	0.170	7.08	-152.00	0.21	
0930	opm-1	0	200	59.17	19.97	1.51	3.52	6.95	-98	0.5	clear
0933		600		59.20	20.79	1.313	1.80	6.99	-148	0.2	clear
0936		1200		59.21	20.95	1.292	0.86	7.04	-133	0.1	clear
0939		1800		59.20	21.27	1.289	0.38	7.08	-93	2.4	clear
0942		2400		59.21	21.27	1.290	0.34	7.09	-89	2.2	clear
0945		3000		59.21	21.26	1.289	0.35	7.08	-90	2.1	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
0930	0945	200	3	N/A	NA	59.21	0955	IRZCMW001_WG200903 12 _01

Notes: (units) [stabilization criteria] F - 0.65

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/12/09
Project No.:	1155.006	**Prepared by:**	GMC
Well Identification:	IRZCMW002	**Weather:**	Sunny 70s
Measurement Point Description:	TOC	**Pump Intake:**	108
		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.)
/	63.26	121	/	/	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: 12-03-08					21.13	1.87	0.560	6.54	-192.00	1.92	
1325	CPM-4	0	200	63.26	21.36	1.66	5.33	7.12	-64	8.2	clear
1328	↓	600	↓	63.31	21.20	1.80	0.52	6.73	-102	3.6	clear
1331		1200		63.34	21.17	1.90	0.36	6.63	-147	2.5	clear
1334		1800		63.33	21.19	1.89	0.35	6.62	-150	1.1	clear
1337		2400		63.34	21.20	1.90	0.36	6.63	-151	1.9	clear
1340		3000		63.34	21.19	1.84	0.36	6.63	-150	1.3	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
1325	1340	200	3	N/A	NA	63.34	1345	IRZCMW002_WG200903 12 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/2/09
Project No.:	1155.006	**Prepared by:**	GMC
Well Identification:	IRZCMW003	**Weather:**	Sunny 70's
Measurement Point Description:	TOC	**Pump Intake:**	117 ft — **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.)
	59.17	117			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: 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
Previous Stabilized Parameters: 12-03-08					21.83	0.99	0.190	7.17	-78.00	3.80	
1125	CPM-4	0	200	59.17	19.34	1.118	3.11	7.29	-24	4.2	clear
1128	↓	600	↓	59.24	20.73	0.973	0.17	7.27	-111	2.9	clear
1131		1200		59.21	20.65	0.972	0.28	7.28	-82	1.8	clear
1134		1800		59.22	20.70	0.971	0.26	7.29	-76	3.9	clear
1137		2400		59.21	20.71	0.970	0.25	7.29	-79	3.1	clear
1140	↓	3000	↓	59.22	20.70	0.971	0.26	7.29	-80	2.6	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
1125	1140	200	3	N/A	NA	59.22	1146	IRZCMW003_WG200903 12 _01

Notes: (units) [stabilization criteria] F I 1.14

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

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GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-09	**Date:**	3/12/09
Project No.:	1155.006	**Prepared by:**	TMC
Well Identification:	MWC024	**Weather:**	Sunny 70s
Measurement Point Description:	TOC	**Pump Intake:** 108	**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.)
—	59.19	121	—	—	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: 12-03-08					22.71	1.42	0.120	7.07	-27.00	2.59	
1005	cpm-4	0	200	59.19	20.85	1.330	0.93	7.19	-50	2.5	clear
1008		600		59.22	20.89	1.359	0.44	7.05	-126	2.3	clear
1011		1200		59.24	20.69	1.381	0.33	7.12	-121	2.1	clear
1014		1800		59.23	20.67	1.385	0.25	7.13	-91	1.3	clear
1017		2400		59.22	20.66	1.398	0.21	7.13	-69	1.4	clear
1020		3000		59.22	20.62	1.389	0.22	7.13	-59	2.0	clear
1023		3600		59.23	20.75	1.394	0.21	7.12	-54	1.4	clear
~~1026~~		4200		59.22	20.73	1.391	0.21	7.13	-57	1.4	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
1005	1023	200	3.6	N/A	NA	59.22	1030	MWC024_WG200903 12 _01

Notes: (units) [stabilization criteria] FI - 0.79

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	ZMC
Well Identification:	BL-03	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	**Screen:** 59 - 79

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.)
	65.83	79			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: 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: 03-27-08						3.57	2.500	7.09	72.00	4.90	
0750	CPM-4	0	200	65.83	17.21	3.12	1.157	6.25	109	40.2	clear
0753		600		65.94	16.38	3.08	2.05	6.67	92	16.2	clear
0756		1200		65.96	19.34	3.05	2.65	6.75	86	13.5	clear
0759		1800		65.92	19.01	3.03	2.28	6.79	81	9.2	clear
0802		2400		65.96	19.05	3.02	2.36	6.80	80	7.3	clear
0805		3000		65.96	19.03	3.02	2.31	6.79	78	7.6	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
0750	0805	200	3000	N/A	NA	65.96	0810	BL-03_WG200903 16 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:** 3/16/09	
Project No.:	1155.006	**Prepared by:** TDT	
Well Identification:	CMW001	**Weather:** 60's sunny	
Measurement Point Description:	TOC	**Pump Intake:** low flow	**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.)
—	62.09	124	—	—	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					22.89	0.80	0.560	7.04	-117.00	6.20	
0809	cpm4	0	200	62.09	19.04	0.863	11.59	7.53	33	41.7	cloudy
0811		600		62.10	21.02	0.833	3.24	8.13	-263	≈0	clear
0814		1200		62.13	21.68	0.833	1.18	8.14	-254	≈0	clear
0817		1800		62.15	22.08	0.834	0.64	8.15	-232	≈0	clear
0820		2400		62.13	22.27	0.836	0.46	8.16	-216	≈0	clear
0823		3000		62.12	22.30	0.835	0.42	8.18	-207	≈0	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
0809	0823	200	3000	N/A	NA		0826	CMW001_WG200903 16 _01

Notes: (units) [stabilization criteria]
La Motte giving inaccurate readings
chemetrics DO: <1 mg/L

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	GMC
Well Identification:	~~EWB001~~ DAC-P1	**Weather:**	Sunny 70's
Measurement Point Description:		**Pump Intake:**	60.5
		Screen:	~~59.2 - 89.2~~

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.)
—	61.38	—	—	—	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 Extraction Well~~ Portable low-flow

Purge Method: ~~Sample Port~~ 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
Previous Stabilized Parameters: 03-28-08						1.83	2.490	7.19	97.00	28.90	
0955	CPM-4	0	200	61.38	19.21	2.02	4.36	7.11	14	39.6	cloudy
0958		600		61.42	19.56	1.93	3.01	7.07	21	35.3	cloudy
1001		1200		61.43	20.35	1.96	4.46	7.08	31	29.2	cloudy
1004		1800		61.40	20.54	1.99	2.67	7.08	34	24.7	cloudy
1007		2400		61.42	20.56	1.90	2.70	7.12	40	31.0	cloudy
1010		3000		61.43	20.57	1.89	2.64	7.13	41	32.6	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
0955	1010	200	3.0	N/A	NA	61.42	1018	~~EWB001~~ DAC-P1_WG200903 16_01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	[illegible]
Well Identification:	~~DAC-R1~~ EWB001	**Weather:**	Sunny 10s
Measurement Point Description:	TOC	**Pump Intake:**	75
		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.)
—	55.77	89.2	—	—	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, Portable 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: 03-27-08						1.73	1.100	7.22	-20.00	9.90	
1250	CPM-4	0	200	55.77	24.30	2.33	5.28	7.06	11	1369	cloudy
1253	↓	600	↓	55.78	22.97	3.25	6.51	7.02	21	279	cloudy
1256	↓	1200	↓	55.79	22.68	3.31	6.62	7.02	24	196	cloudy
1259	↓	1800	↓	55.78	22.68	3.34	6.64	7.01	30	83.6	cloudy
1302	↓	2400	↓	55.78	22.67	2.41	1.43	7.01	31	72.5	cloudy
1305	↓	3000	↓	55.79	22.65	2.40	6.37	7.00	30	62.9	cloudy
1308	↓	3600	↓	55.78	22.67	2.38	1.40	7.01	32	62.6	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
1250	1308	200	3.6	N/A	NA	55.78	1311	EWB001 ~~DAC-R1~~_WG200903 16 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

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GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	GMC TDS
Well Identification:	EWC001	**Weather:**	Sunny 70's
Measurement Point Description:	TOC	**Pump Intake:**	113
		Screen:	97 - 122

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	122	/	/	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, Portable Low-flow

Purge Method: 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
Previous Stabilized Parameters: 03-26-08						1.34	1.340	7.12	-24.00	1.60	
1045	CPM-4	0	200	59.23	19.50	1.72	3.26	7.23	-35	13.1	clear
1048		600		59.23	19.67	1.366	2.15	7.36	-107	3.1	clear
1051		1200		59.25	20.46	1.124	1.54	7.31	-97	3.5	clear
1054		1800		59.25	21.42	1.361	1.26	7.08	-77	2.6	clear
1057		2400		59.26	21.50	1.363	1.21	7.08	-76	2.9	clear
1100		3000		59.25	21.42	1.357	1.20	7.06	-73	2.8	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
1045	1100	200	3.0	N/A	NA	59.25	1105	EWC001_WG200903 16 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/12/09
Project No.:	1155.006	**Prepared by:**	TAT
Well Identification:	IWC001	**Weather:**	70s Sunny
Measurement Point Description:	TOC	**Pump Intake:**	low flow
		Screen:	95 - 115

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.)
—	60.56	115		—	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, 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: 03-29-08						1.26	6.390	7.19	147.00	7.80	
1402	opm4	0	200	60.56	23.04	0.783	6.40	8.31	-50	40.5	cloudy
1405		600		60.62	22.54	1.175	5.23	8.41	-29	44.9	cloudy
1408		1200		60.61	22.29	1.341	4.71	8.15	-16	52.5	cloudy
1411		1800		60.61	22.37	1.349	4.52	8.13	-11	70.2	cloudy
1414		2400		60.60	22.26	1.338	4.31	8.13	-4	70.2	cloudy
1417		3000		60.61	22.56	1.335	4.41	8.13	-1	53.0	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
1402	1417	200	3000	N/A	NA	60.60	1420	IWC001_WG200903 12 _01

Notes: (units) [stabilization criteria] Chemetrics D.O. = 4.5 mg/L

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-13-09
Project No.:	1155.006	**Prepared by:**	DMC
Well Identification:	IRZMW001A	**Weather:**	indoor
Measurement Point Description:	TOC-N	**Pump Intake:**	≈70
		Screen:	65 - 75

A	B	C	D = C - B	E = B - A	G = D x F	H = 10 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	63.63	75	11	NA	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 1.5	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: 03-29-08						1.99	0.970	6.98	150.00	239.00	
1243	8.5/6.5/40psi	0	200	63.73	21.13	2.07	1.41	7.93	-79	9.92	
1246	"	600	200	63.72	21.42	2.08	0.76	7.93	-80	12.2	
1249	"	1200	200	63.74	21.50	2.09	0.52	7.92	-89	14.1	
1252	"	1800	200	63.74	21.54	2.09 ✓	0.41	7.92	-94	15.0	
1255	"	2100	200	63.74	21.55 ✓	2.09 ✓	0.36	7.92	-96	13.0	
1258	✓	2700	200	63.74	21.55	2.09 ✓	0.33 ✓	7.92	-98 ✓	13.2	

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
1243	1258	200	2.7	N/A	NA	63.74	13:00	IRZMW001A_WG200903 13 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-13-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	IRZMW001B	**Weather:**	Indoors
Measurement Point Description:	TOC - N	**Pump Intake:**	≈85'
		Screen:	80 - 90

A	B	C	D = C - B	E = B - A	G = D x F	H = 10 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	63.55	≈90	26.5	NA	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 1.5	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: 03-29-08						1.74	2.610	6.90	51.00	8.10	
11:30	9161 120	0	200	63.54	21.04	1.74	1.41	7.81	-122	9.46	
11:38	"	≈1200	200	63.55	21.46	1.73	0.59	7.80	-128	1.83	
11:41	"	1800	200	"	21.53	1.73	0.45	7.80	-131	1.55	
11:44	"	2100	200	"	21.56	1.72	0.38	7.81	-137	1.67	
11:47	"	≈2600	200	"	21.57 ✓	1.72 ✓	0.31	7.80 ✓	-140	1.04	
11:50	"	3000	200	"	21.58 ✓	1.72 ✓	0.29 ✓	7.81 ✓	-142 ✓	1.21	
11:53	"	3600	200	"	21.59 ✓	1.71	0.26	7.81	-143	1.04	

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
11:30	1153	200	3.6	N/A	NA	63.55	1155	IRZMW001B_WG200903 13 _01

Notes: (units) [stabilization criteria]

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-13-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	IRZMW002A	**Weather:**	Indoors
Measurement Point Description:	TOC-N	**Pump Intake:**	≈ 73'
		Screen:	68 - 78

A	B	C	D = C - B	E = B - A	G = D x F	H = 10 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	63.76	78	14.2	NA	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 1.5	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: 06-04-07											
1354	8.5/65/100	0	150	64.7	21.43	2.10	0.50	7.80	-103	13.2	
1402	10/5/1100	~2	100	64.43	21.46	2.11	0.60	7.89	-103	146	
1408	"	2.6	"	64.47	21.48	2.11	0.56	7.90	-103	152	
1411	"	2.9	"	64.46	21.49	2.13	0.46	7.89	-102	126	

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
1354	1411	100	2.9	N/A	NA	64.46	14:12	IRZMW002A_WG200903 13 _01

Notes: (units) [stabilization criteria]

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-13-09
Project No.:	1155.006	**Prepared by:**	DMC
Well Identification:	IRZMW002B	**Weather:**	indoors
Measurement Point Description:	TOC-N	**Pump Intake:**	~ 88'
		Screen:	83 - 93

A	B	C	D = C - B	E = B - A	G = D x F	H = 10 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	63.65	93	29	NA	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 1.5	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
	R D 951	Previous Stabilized Parameters: 06-07-07									
8:55	1015/45	0	200	63.57	17.96	1.79	5.03	7.49	-170	31.1	
8:58	"	600	200	63.98	20.66	1.82	1.59	7.61	-189	34.8	
9:01	"	1200	200	63.95	20.83	01.87	0.97	7.62	-196	32.9	
9:04	"	1800	"	"	20.99	1.86	0.68	7.61	-197	55.5	
9:07	"	2400	"	"	21.13	1.87 ✓	0.55	7.59 ✓	195 ✓	68.2	
9:10	"	3000	"	"	21.12 ✓	1.89 ✓	0.37	7.56 ✓	190 ✓	46.4	
9:13	"	3600	"	"	21.10	1.90	0.32	7.60	194 ✓	61.1	

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
8:55	9:13	200	3.6	N/A	NA	63.99	9:16	IRZMW002B_WG200903 13 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-13-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	IRZMW003A	**Weather:**	Indoors
Measurement Point Description:	TOC-N	**Pump Intake:**	≈ 66'
		Screen:	61 - 71

A	B	C	D = C - B	E = B - A	G = D x F	H = 10 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	62.60	71	7.4	NA	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 1.5	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: 06-04-07											
1447	9/6/100	0	200	63.59	21.45	1.60	0.93	7.84	-86	111	sl. cloudy
1450	"	600	200	63.65	21.63	1.59	0.48	7.82	-82	158	"
1453	"	1200	200	63.71	21.66	1.59	0.35	7.82	-79	156	"
1458	"	1800	200	63.70	21.68	1.60	0.29	7.83	-79	143	"
1501	"	2100	200	63.70	21.69	1.60	0.23	7.85	-82	104	"

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
1447	1501	200	2.1	N/A	NA	63.69	1502	IRZMW003A_WG200903 13 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-13-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	IRZMW003B	**Weather:**	Indoors
Measurement Point Description:	TOC - N	**Pump Intake:**	≈ 85'
		Screen:	80 - 90

A	B	C	D = C - B	E = B - A	G = D x F	H = 10 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	63.66	90'	≈ 26.3	NA	N/A	N/A	N/A	N/A

	Gallons/Foot			
Well Diameter (inches) = 1.5	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: 06-06-07											
10:20	9/6 / 110ft	0	200	63.66	20.53	1.78	1.55	7.78	-193	38.1	
10:23	"	600	"	63.69	21.13	1.81	0.95	7.77	-180	20.3	
10:26	"	1200	"	63.69	21.25	1.82	0.78	7.78	-177	20.1	
10:29	"	1800	"	"	21.34 ✓	1.83 ✓	0.60	7.78 ✓	-175 ✓	20.9 ✓	
10:32	"	2100	"	"	21.38 ✓	1.83 ✓	0.48	7.75 ✓	-175	21.2	
10:35	"	2400	"	"	21.39 ✓	1.83 ✓	0.41	7.78 ✓	-175	24.0	
10:38	"	3000	"	"	21.40 ✓	1.84	0.34	7.78	-176		

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
10:20	10:38	200	3	N/A	NA	63.69	10:40	IRZMW003B_WG200903 13 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	SMC
Well Identification:	IRZMW004	**Weather:**	Sunny 70s
Measurement Point Description:	TOC	**Pump Intake:**	78.0
		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.)
	60.50	90			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, Portable Low-flow
Purge Method: 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
Previous Stabilized Parameters: 03-29-08						2.17	0.690	6.85	-89.00	0.90	
0915	0pm-4	0	200	60.50	19.25	1.89	5.43	6.98	-63.	-37.0	clear
0918		600		60.56	19.68	2.09	1.68	6.84	-30	13.7	clear
0921		1200		60.55	20.28	2.14	0.72	6.80	-71	9.7	clear
0924		1800		60.56	20.29	2.12	0.69	6.80	-74	8.4	clear
0927		2400		60.55	20.31	2.19	0.67	6.79	-75	7.6	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
0915	0927	200	2.4	N/A	NA	60.55	0935	IRZMW004_WG200903 16 _01

Notes: (units) [stabilization criteria]

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	CMK
Well Identification:	IRZMW005	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	77
		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.)
/	60.17	90	/	/	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, Portable Low-flow

Purge Method: 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
Previous Stabilized Parameters: 03-29-08						1.70	0.480	6.81	-62.00	8.20	
0840	CPM-4	0	200	60.7	17.46	2.53	1.99	7.08	-58	30.9	cloudy
0843		600		60.21	18.50	1.96	0.82	6.91	-81.0	16.7	cloudy
0846		1200		60.23	18.71	1.86	0.54	6.86	-81.2	10.2	cloudy
0849		1800		60.22	19.13	1.80	0.45	6.83	-81.6	9.7	clear
0852		2400		60.22	19.16	1.81	0.45	6.82	-81.9	9.3	clear
0855		3000		60.23	19.15	1.79	0.46	6.83	-82.3	8.4	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
0840	0855	200	3000	N/A	NA	60.23	1605	IRZMW005_WG200903 16 _01

Notes: (units) [stabilization criteria] S.C. 1.01

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-17-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	IRZB0081	**Weather:**	Clear, warm
Measurement Point Description:	TOC	**Pump Intake:**	≈ 85'
		Screen:	64.5 - 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.)
NA	NM	89.5	≈ 25'	NA	~~NA~~ 0.5	N/A	N/A	~~NA~~ 1.5

	Gallons/Foot			
Well Diameter (inches) = 0.75	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~~ Waterra - 3 - vol

Well Condition: OK

Time	Flow Controller Settings	Volume Purged ~~(Liters)~~ gallons	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: 03-27-08						0.39	4.270	6.56	109.00	927.00	
10:25	NA	0	NA	NA	25.01	1.80	8.51	8.11	-153	999+	cloudy
11:10		0.5		0.06	24.32	2.01	2.29	6.92	-123		
11:16		1.0		NA	23.01	1.97	0.11	6.72	-143		
11:20		1.5		NA	23.05	1.97	0.16	6.81	-145		

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged ~~(Liters)~~ gal	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
10:25	11:20	v. low	1.5	N/A	NA	≈ 60'	11:25	IRZB0081_WG200903 17 _01

Notes: (units) [stabilization criteria] Fe : 1.73 mg/L

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-17-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	IRZB0095	**Weather:**	Clear, cool
Measurement Point Description:	TOC	**Pump Intake:**	~80
		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.)
NA	NM	90	≈25'	NA	~~N/A~~ 0.5	N/A	N/A	1.5 ~~N/A~~

	Gallons/Foot			
Well Diameter (inches) = 0.75	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~~ Waterra check valve / QED

Purge Method: ~~Micropurge~~ Waterra

Well Condition: ball valve broken, no tubing

Time	Flow Controller Settings	Volume Purged ~~(Liters)~~ gallons	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: 03-29-08						0.29	2.500	6.45	-99.00	5.10	
8:50	NA	0.5	v. low	NM	19.95	2.15	9.41	7.68	-124	999+	v. cloudy
9:00	↓	1.0	flow	"	20.60	2.07	1.81	7.88	-158	↓	"
9:08	↓	1.25	↓	"	21.84	1.88	1.24	7.88	-149	↓	"
9:15	↓	1.5		"	22.22	1.92	1.84	7.58	-144	↓	"

Purge Start Time	Purge End Time	Average Flow ~~(mL/min)~~ gpm	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
8:50	9:15	v. low	1.5 gal	N/A	NA	NM	9:28	IRZB0095_WG200903 17 _01

Notes: (units) [stabilization criteria]

Fe^{2+} = 0.0 mg/L < detection limit

DUP: ~~IRZB0095_WG200903 _02~~

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/12/08
Project No.:	1155.006	**Prepared by:**	TDT
Well Identification:	MW0005	**Weather:**	70's sunny
Measurement Point Description:	TOC	**Pump Intake:**	low flow
		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.)
—	58.94	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, 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: 03-29-08						1.64	4.570	7.06	46.00	9.10	
1259	4pm 4	0	200	58.94	24.69	1.58	5.33	8.00	-40	36.5	clear
1302		600		58.96	23.07	1.66	3.43	7.91	-33	31.1	clear
1305		1200		58.96	22.67	1.66	3.41	7.92	-32	20.1	clear
1308		1800		58.97	22.67	1.62	3.31	7.90	-27	23.0	clear
1311		2400		58.94	22.91	1.63	3.30	7.91	-25	15.9	clear
1314		3000		58.94	22.77	1.63	3.30	7.91	-23	15.4	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
1259	1314	200	3000	N/A	NA	58.95	1318	MW0005_WG200903 12 _01

Notes: (units) [stabilization criteria]

Chemetrics DO = 3.5 mg/L

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	LMC
Well Identification:	MWB003	**Weather:**	Sunny 70's
Measurement Point Description:	TOC	**Pump Intake:**	77
		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.)
/	63.72	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, Portable Low-flow

Purge Method: 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
Previous Stabilized Parameters: 03-27-08						2.14	4.950	7.09	60.00	8.80	
1150	CPM-C	0	200	63.72	22.77	1.95	7.42	7.24	-60	111	Cloudy
1153		600		63.81	22.93	1.95	6.10	7.18	-53	130	
1156		1200		63.84	23.12	1.98	5.01	7.09	-38	10.82	
1159		1800		63.85	22.94	2.03	4.86	7.03	32	19.7	
1202		2400		63.82	22.93	2.01	4.79	7.02	39	21.0	
1205		3000		63.81	22.91	1.99	4.80	7.04	36	20.6	

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
50	1205	200	3.0	N/A	NA	63.81	1210	MWB003_WG200903 16 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/17/09
Project No.:	1155.006	**Prepared by:**	EMC
Well Identification:	MWB007	**Weather:**	60 Sunny
Measurement Point Description:	TOC	**Pump Intake:**	low-flow
		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.)
—	57.60	90	—	—	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: 09-25-08					22.57	1.97	3.990	7.16	22.00	6.60	
0804	gpm4	0	200	57.60	21.18	1.95	5.00	7.12	38	3.1	clear
0807		600		57.60	21.26	1.94	4.22	7.09	39	2.4	clear
0810		1200		57.61	21.44	1.92	3.90	7.09	46	2.4	clear
0813		1800		57.60	21.43	1.91	3.79	7.09	52	2.0	clear
0816		2400		57.60	21.52	1.92	3.77	7.08	55	2.1	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
0804	0816	200	2400	N/A	NA	57.60	0818	MWB007_WG200903 17 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/18/09
Project No.:	1155.006	**Prepared by:**	EMC
Well Identification:	MWB012	**Weather:**	70's sunny
Measurement Point Description:	TOC	**Pump Intake:**	low flow
		Screen:	64.5 - 84.5

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.)
	59.45	84.5			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, 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: 03-27-08						1.12	6.770	7.39	80.00	3.50	
1300	CPM4	0	200	59.45	22.74	1.229	4.66	7.25	-105	74.0	cloudy
1303		600		59.29	22.51	1.370	6.04	7.23	-47	36.9	cloudy
1306		1200		59.31	22.59	1.371	6.36	7.25	-18	33.0	cloudy
1309		1800		59.35	22.50	1.369	7.40	7.28	-3	39.9	cloudy
1312		2400		59.30	22.60	1.367	7.61	7.32	9	42.6	cloudy
1315		3000		59.30	22.70	1.359	7.82	7.34	16	48.8	cloudy
1318		3600		59.29	22.73	1.354	8.01	7.37	22	48.4	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
1300	1315	200	3600	N/A	NA	59.36	1322	MWB012_WG200903 _01

Notes: (units) [stabilization criteria]

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/13/09
Project No.:	1155.006	**Prepared by:**	LME
Well Identification:	MWB013	**Weather:**	Sunny 60's
Measurement Point Description:	TOC	**Pump Intake:**	75'
		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.)
	61.80	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: 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
Previous Stabilized Parameters: 09-23-08					22.71	1.60	6.070	7.74	61.00	1.91	
0745	CFM-4	0	200	59.61	19.60	1.64	5.92	6.78	41	0.5	clear
0748		600		59.62	19.84	1.63	6.70	7.15	34	1.4	clear
0751		1200		59.63	20.16	1.63	6.42	7.34	41	0.6	clear
0754		1800		59.62	20.36	1.62	6.43	7.36	43	0.8	clear
0757		2400		59.63	20.38	1.62	6.38	7.41	42	0.7	clear
0800		3000		59.63	20.39	1.61	6.38	7.46	42	0.6	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
0745	0800	200	3	N/A	NA	59.62	0805	MWB013_WG200903 13 _01

Notes: (units) [stabilization criteria]

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DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/19/09
Project No.:	1155.006	**Prepared by:**	EMC
Well Identification:	MWB014	**Weather:**	Sunny 70's
Measurement Point Description:	TOC	**Pump Intake:**	75
		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.)
	59.01	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, Portable Low-flow

Purge Method: 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
Previous Stabilized Parameters: 03-27-08						1.23	3.440	7.41	71.00	3.60	
1125	RPM-4	0	200	59.01	20.35	1.45	6.11	7.26	-58	127	cloudy
1128		600		59.04	21.31	1.271	4.23	7.13	-85	70.6	cloudy
1131		1200		59.02	21.48	1.282	4.14	7.13	-52	79.4	cloudy
1134		1800		59.03	21.51	1.283	4.03	7.13	-31	83.4	cloudy
1137		2400		59.04	21.58	1.283	4.04	7.13	-13	58.7	cloudy
1140		3000		59.03	21.59	1.284	3.94	7.12	0	54.0	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
1125	1140	200	3000	N/A	NA	59.00	1143	MWB014_WG200903 09_01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/3/09
Project No.:	1155.006	**Prepared by:**	SMC
Well Identification:	MWC017	**Weather:**	Sunny 60's
Measurement Point Description:	TOC	**Pump Intake:**	112
		Screen:	100 - 125

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.)
	63.11	125			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: OK / missing blue 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: 09-25-08					22.26	0.86	0.360	6.90	-132.00	9.68	
0850	CPM-4	0	200	63.11	19.61	2.65	5.95	6.91	55	1.0	Clear
0853		600		63.12	19.45	2.18	0.66	6.96	41	1.6	Clear
0856		1200		63.12	19.45	1.556	0.30	7.11	-125	1.6	Clear
0859		800		63.12	19.47	1.369	0.31	7.14	-143	2.0	Clear
0901		2400		63.12	19.49	1.319	0.32	7.15	-138	.9	Clear
	SMC										

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
0850	0901	200	2.4	N/A	NA	63.12	0905	MWC017_WG200903 B _01

Notes: (units) [stabilization criteria]

4C

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/13/09
Project No.:	1155.006	**Prepared by:**	SMC
Well Identification:	MWB019	**Weather:**	Sunny 60s
Measurement Point Description:	TOC	**Pump Intake:**	75
		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.)
	62.70	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: ok / missing gasket / morris 12"

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: 09-25-08					22.44	3.63	2.680	6.50	11.00	2.90	
0821	cpm-4	0	200	62.70	18.51	2.68	7.48	7.35	35	2.2	clear
0824		600		62.70	19.90	2.29	6.23	6.96	52	1.6	clear
0827		1200		62.71	20.28	3.20	5.35	6.84	64	1.0	clear
0830		1800		62.70	20.29	3.17	5.08	6.76	70	1.3	clear
0833		2400		62.71	20.30	3.15	5.13	6.75	72	0.8	clear

SMC

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
0821	0833	200	2.4	N/A	NA	62.70	0838	MWB019_WG200903 13 _01

Notes: (units) [stabilization criteria]

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DUP: MWB019_WG200903 13 _02

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-10-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	MWB020	**Weather:**	Warm, breezy
Measurement Point Description:	TOC - N	**Pump Intake:**	~75'
		Screen:	59.5 - 89.5

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.)
NA	56.49	89.5	33	NA	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: 09-25-08					21.89	1.85	3.800	7.30	-11.00	2.94	
14:15	9.5/5.5/45psi	0	200	56.54	21.87	2.04	5.18	7.17	-30	4.23	
14:20	"	1	"	56.55	21.80	2.06	4.63	7.12	-15	0.11	
14:25	"	2	"	56.55	21.83	2.06	4.43	7.10	-7	0.20	
14:30	"	3	"	56.55	21.80 ✓	2.06 ✓	4.37	7.10 ✓	1	0.09 ✓	
14:35	"	4	"	56.56	21.80	2.07	4.34 ✓	7.10	4	0.03	
14:40	"	5	"	56.55	21.85	2.08	4.32 ✓	7.10	7	0.15	

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
14:15	14:40			N/A	NA	56.55	14:45	MWB020_WG200903 10 _01

Notes: (units) [stabilization criteria] ORP did not stabilize w/ other values, sample collected.

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:** 3/16/09	
Project No.:	1155.006	**Prepared by:** TOJ	
Well Identification:	MWB027	**Weather:** 70's Sunny	
Measurement Point Description:	TOC	**Pump Intake:** low flow	**Screen:** 67.5 - 87.5

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.)
—	63.37	87.5	—	—	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: 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: 09-25-08					22.28	2.15	3.760	7.09	20.00	9.90	
1125	Cpm4	0	200	63.37	24.55	2.28	4.23	7.72	-113	4.29	clear
1128		600		63.65	22.72	2.18	3.48	7.81	-181	1.82	clear
1131		1200		63.67	22.54	2.16	3.94	7.85	-145	2.73	clear
1134		1800		63.66	22.48	2.15	4.30	7.86	-113	4.85	clear
1137		2400		63.67	22.30	2.15	4.42	7.86	-81	5.17	clear
1140		3000		63.68	22.54	2.15	4.47	7.86	-64	5.65	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
1125	1140	200	3000	N/A	NA		1144	MWB027_WG200903 16 _01

Notes: (units) [stabilization criteria]

Chemetrics DO: 4.5 mg/L

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:** 3/12/09	
Project No.:	1155.006	**Prepared by:** TDT	
Well Identification:	MWB028	**Weather:** 70's sunny	
Measurement Point Description:	TOC	**Pump Intake:** low-flow	**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.)
—	63.44	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, 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: 03-26-08						1.42	4.900	7.20	30.00	7.50	
1007	cpm4	0	200	63.44	21.87	2.32	5.62	7.14	-93	31.7	Clear
1010		600		63.46	22.30	1.68	7.10	7.63	-101	155	Cloudy
1013		1200		63.45	22.69	1.490	7.13	7.90	-84	259	Cloudy
1016		1800		63.49	22.88	1.51	6.89	7.93	-76	253	Cloudy
1019		2400		63.45	22.93	1.53	6.78	7.93	-73	284	Cloudy
1022		3000		63.47	23.07	1.53	6.69	7.92	-68	259	Cloudy
	TDN										

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
1007	1022	200	3000	N/A	NA	63.47	1025	MWB028_WG200903 12 _01

Notes: (units) [stabilization criteria] Chemetrics D.O = 6.5 mg/L

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:** 3/16/09	
Project No.:	1155.006	**Prepared by:** TDT	
Well Identification:	MWC004	**Weather:** 60's sunny	
Measurement Point Description:	TOC	**Pump Intake:** low flow	**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.)
—	58.51	116	—	—	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: 09-25-08					23.46	0.85	0.160	7.52	-75.00	2.41	
0946	cpm 4	0	200	58.51	21.69	0.704	4.91	8.86	-208	[redacted]	clear
0949		600		58.55	21.91	0.851	1.73	8.38	-232	[redacted]	clear
0952		1200		58.54	21.94	0.892	1.01	8.26	-215	[redacted]	clear
0955		1800		58.53	22.09	0.910	0.54	8.19	-186	[redacted]	clear
0958		2400		58.55	22.15	0.913	0.47	8.18	-173	[redacted]	clear
1001		3000		58.53	22.15	0.914	0.44	8.17	-168	[redacted]	clear
	TDT										

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
0946	1001	200	3000	N/A	NA	58.53	1004	MWC004_WG200903 16 _01

Notes: (units) [stabilization criteria]
LaMotte sunny
inaccurate readings

Chemetrics DO: <1 mg/L

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/10/09
Project No.:	1155.006	**Prepared by:**	JMC
Well Identification:	MWC006	**Weather:**	Sunny 60's
Measurement Point Description:	TOC	**Pump Intake:**	105
		Screen:	95 - 115

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.)
	60.26	115			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: 03-26-08						0.79	0.610	7.29	-261.00	8.80	
0940	CPM-4	0	200 mL/min	60.26	18.45	1.44	2.88	6.84	-176	233	Cloudy
0943		600		60.24	20.84	0.992	1.90	7.06	-205	222	Cloudy
0946		1200		60.28	21.61	0.853	1.45	7.08	-204	321	Cloudy
0949		1800		60.30	22.75	0.787	0.85	7.21	-194	400	Cloudy
0952		2400		60.27	23.08	0.781	0.62	7.27	-179	607	Cloudy
0955		3000		60.25	23.20	0.781	0.53	7.28	-182	756	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
0940	0955	200	3000	N/A	NA	60.25	0959	MWC006_WG200903 109 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-10-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	MWC007	**Weather:**	Warm
Measurement Point Description:	TOC-N	**Pump Intake:** mid-screen	**Screen:** 97 - 117

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	57.65	117	59.35	0	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					22.14	0.98	1.270	7.58	57.00	1.29	
8:48	11/4.0	0	100	57.71	24.50	2.43	1.34	6.84	~~[illegible]~~ -151	4.9	
8:55	10/5	7.00	100	57.67	21.35	3.27	0.74	6.35	-187	0.68	
9:00	10/5	1.2.00	100	57.66	21.35	3.27	0.74	6.35	-184	0.80	
9:05	10/5	1.7	100	57.66	21.35	3.27	0.74	6.35	-184	0.45	

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
8:48	9:05	100	1.7	N/A	NA	57.66	09:10	MWC007_WG200903 10 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	Date:	3/16/09
Project No.:	1155.006	Prepared by:	JDT
Well Identification:	MWC009	Weather:	60's sunny
Measurement Point Description:	TOC	Pump Intake:	low flow
		Screen:	101 - 121

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.)
	60.98	121			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: 09-25-08					22.51	0.86	0.140	7.67	-79.00	2.61	
0855	gpm 4	0	200	60.98	21.48	0.866	2.72	8.39	-200	≈0	clear
0858		600		61.00	21.52	0.900	0.88	8.30	-191	≈0	clear
0901		1200		61.01	21.66	0.902	0.46	8.26	-165	≈0	clear
0904		1800		61.03	21.69	0.901	0.44	8.25	-164	≈0	clear
0907		2400		61.02	21.83	0.903	0.40	8.25	-156	≈0	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
0855	0907	200	2400	N/A	NA	60.99	0910	MWC009_WG200903 16 _01

Notes: (units) [stabilization criteria]
LaMotte gives inaccurate readings

Chemetrics DO: <1 mg/L

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/10/09
Project No.:	1155.006	**Prepared by:**	GMC
Well Identification:	MWC011	**Weather:**	Sunny 70's
Measurement Point Description:	TOC	**Pump Intake:**	108
		Screen:	94 - 114

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.)
	60.53				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: 03-26-08						0.93	0.680	7.47	-61.00	516.00	
1015	cPM-4	0	200 ml/min	60.53	21.73	0.904	1.57	7.27	-217	266	Cloudy
1018		600		60.56	21.54	1.049	0.85	7.20	-211	149	Cloudy
1021		1800		60.55	21.56	1.073	0.65	7.21	-192	113	Cloudy
1024		2400		60.50	21.56	1.075	0.50	7.21	-173	121	Cloudy
1027		3000		60.55	21.60	1.070	0.47	7.22	-161	126	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
1015	1027	200	3000	N/A	NA	60.54	1030	MWC011_WG200903 09 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/19/09
Project No.:	1155.006	**Prepared by:**	[illegible]
Well Identification:	MWC015	**Weather:**	Sunny 70's
Measurement Point Description:	TOC	**Pump Intake:**	112
		Screen:	100 - 125

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.)
—	59.67	125	—	—	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, Portable Low-flow
Purge Method: 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
Previous Stabilized Parameters: 03-27-08						0.82	1.630	7.32	21.00	6.40	
1210	CPM 4	0	200	59.69	19.72	1.050	4.96	7.14	-181	72.6	cloudy
1213		600		59.70	19.84	0.752	3.39	6.94	-201	45.6	cloudy
1216		1200		59.68	19.94	0.782	2.70	7.01	-199	34.8	cloudy
1219		1800		59.70	19.96	0.828	1.94	7.13	-191	32.2	cloudy
1222		2400		59.69	19.98	0.844	1.80	7.14	-180	31.1	cloudy
1225		3000		59.69	20.01	0.856	1.64	7.24	-171	30.8	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
1210	1225	200	3000	N/A	NA	59.70	1224	MWC015_WG200903/05 _01

Notes: (units) [stabilization criteria]

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/12/09
Project No.:	1155.006	**Prepared by:**	TOT
Well Identification:	MWC016	**Weather:**	70's sunny
Measurement Point Description:	TOC	**Pump Intake:**	Low Flow
		Screen:	102.5 - 127.5

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.)
—	60.17	127.5	—	—	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, 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: 03-27-08						1.12	4.550	7.47	63.00	2.90	
1159	gpm 4	0	200	60.17	24.76	0.994	4.89	8.29	-56	55.0	cloudy
1202		600		60.19	24.02	1.161	4.61	8.23	-56	31.6	clear
1205		1200		60.21	23.62	1.221	5.21	8.24	-46	21.4	clear
1208		1800		60.24	23.46	1.249	5.33	8.27	-42	38.9	clearish
1211		2400		60.18	23.44	1.251	5.36	8.30	-40	37.2	clear
1214		3000		60.23	23.34	1.260	5.41	8.32	-39	49.1	clearish

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	1214	200	3000	N/A	NA	60.20	1216	MWC016_WG200903 pr _01

Notes: (units) [stabilization criteria]

Chemetrics DO = 5.5 mg/L

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/13/09
Project No.:	1155.006	**Prepared by:**	EMC
Well Identification:	MWC021	**Weather:**	Sunny 70's
Measurement Point Description:	TOC	**Pump Intake:**	109.0
		Screen:	97 - 122

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.)
	61.65	122			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: 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
Previous Stabilized Parameters: 09-23-08					24.30	0.89	0.420	7.56	-41.00	1.60	
1120	RPM-4	0	200	61.65	22.35	1.139	8.17	7.30	-21	2.8	clear
1123	↑	600	↓	61.72	23.13	0.932	2.25	7.25	-199	1.6	clear
1126		1200		61.73	23.40	0.909	0.66	7.36	-182	0.0	clear
1129		1800		61.72	23.45	0.908	0.58	7.38	-169	0.2	clear
1132		2400		61.72	23.46	0.908	0.52	7.39	-160	0.4	clear
1135	↓	3000	↓	61.73	23.47	0.909	0.52	7.40	-161	0.5	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
1120	1135	200	3	N/A	NA	61.73	1140	MWC021_WG200903 13 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	TDT
Well Identification:	MWC022	**Weather:**	70's sunny
Measurement Point Description:	TOC	**Pump Intake:**	low flow
		Screen:	97 - 117

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.)
—	57.89	117	—	—	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					23.45	1.16	0.200	6.92	-88.00	3.20	
1254	cpm 4	0	200	57.89	25.64	8.78	3.44	8.41	-220	2.13	clear
1302		600		57.92	24.98	0.896	0.95	8.37	-213	0.03	clear
1305		1200		57.91	25.03	0.905	0.52	8.36	-177	≈0	clear
1308		1800		57.90	25.14	0.907	0.48	8.37	-163	≈0	clear
1311		2400		57.91	25.27	0.906	0.44	8.38	-154	1.09	clear
1314		3000		57.91	25.42	0.907	0.40	8.38	-143	≈0	clear
	TDT										

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
1254	1314	200	3000	N/A	NA	57.90	1316	MWC022_WG200903 16 _01

Notes: (units) [stabilization criteria]

Chemetrics DO: <1 mg/L

DUP: MWC022_WG20090316_02

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	TDT
Well Identification:	MWC023	**Weather:**	70's Sunny
Measurement Point Description:	TOC	**Pump Intake:**	low flow
		Screen:	97 - 117

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.)
—	57.81	117	—	—	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: 09-25-08					23.04	1.17	0.280	6.89	-47.00	6.10	
1340	cpm4	0	200	57.81	25.06	1.023	4.65	8.38	-269	0.44	clear
1343		600		57.87	24.01	1.178	1.83	8.15	-272	≈0	clear
1346		1200		57.88	23.73	1.222	0.91	8.09	-257	≈0	clear
1349		1800		57.89	23.46	1.239	0.50	8.05	-232	≈0	clear
1352		2400		57.88	23.36	1.241	0.46	8.04	-221	≈0	clear
1355		3000		57.80	23.28	1.242	0.42	8.03	-217	≈0	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
1340	1355	200	3000	N/A	NA	57.82	1358	MWC023_WG200903 16 _01

Notes: (units) [stabilization criteria]

chemetrics DO: <1 mg/L

DUP: MWC023_WG200903 16 _02
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/13/09
Project No.:	1155.006	**Prepared by:**	MMC
Well Identification:	MWG001	**Weather:**	Sunny 70s
Measurement Point Description:	TOC	**Pump Intake:**	170 ft
		Screen:	156 - 186

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.)
—	62.58	186	—	—	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: 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
Previous Stabilized Parameters: 09-25-08					24.04	0.62	0.310	7.76	-232.00	3.13	
1250	CPM-4	0	200	62.58	22.82	0.612	6.04	7.83	-142	11.8	clear
1253		600		62.61	23.13	0.560	3.97	7.83	-190	4.6	clear
1256		1200		62.61	23.14	0.526	2.21	7.84	-215	3.9	clear
1259		1800		62.62	23.16	0.546	1.17	7.85	-236	2.4	clear
1302		2400		62.61	23.17	0.550	1.15	7.86	-235	2.9	clear
1305		3000		62.61	23.16	0.547	1.13	7.85	-232	3.1	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
1250	1305	200	3.00	N/A	NA	62.61	1310	MWG001_WG200903_13_01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-10-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	MWG002	**Weather:**	Warm
Measurement Point Description:	TOC-N	**Pump Intake:**	≈ 177
		Screen:	162 - 192

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.)
NA	63.47	192	129	NA	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: 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: 09-25-08					24.48	0.67	0.220	7.82	-267.00	3.11	
11:55	10/5/85	0	120	63.51	24.31	0.695	2.86	7.25	-110	NM	
12:00	9/6/85	0.75	150	63.49	23.00	0.709	1.43	7.80	-278	2.44	
12:05	"	1.50	"	63.50	22.80	0.720	0.20	7.79	-296	1.85	
12:10	"	2.25	"	63.50	22.78	0.720	0.09	7.77	-300	1.14	
12:15	"	3.00	"	63.51	22.86	0.721	0.08	7.77	-302	1.26	

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
11:55	12:15	150	3.0	N/A	NA	63.51	12:15	MWG002_WG200903 10 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/13/09
Project No.:	1155.006	**Prepared by:**	AMC
Well Identification:	MWG003	**Weather:**	Sunny 70s
Measurement Point Description:	TOC	**Pump Intake:**	169
		Screen:	154.5 - 184.5

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.)
—	61.45	185	—	—	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: 03-29-08						0.94	0.260	7.88	-181.00	6.27	
1220	cpm..1	0	200	61.45	23.01	1.121	5.97	7.30	-29	29.2	slightly
1223		600		61.45	22.75	0.919	1.29	7.29	-157	15.4	clear
1226		1200		61.45	22.82	0.423	0.51	7.80	-226	10.6	clear
1229		1800		61.45	22.74	0.300	0.44	7.81	-225	9.5	clear
1232		2400		61.47	22.80	0.299	0.49	7.80	-222	10.1	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
1220	1232	200	2.4	N/A	NA	61.47	12:38	MWG003_WG200903 13 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-10-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	MWG004	**Weather:**	Warm
Measurement Point Description:	TOC - N	**Pump Intake:**	≈ 170
		Screen:	155 - 185

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.)
NA	60.47	185	125	—	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: Good

Time	Flow Controller Settings R-0-PSI	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: 03-29-08						0.46	0.250	7.74	-32.00	7.21	
11:00		0	150	60.48	23.27	0.779	6.3	7.21	15	5.94	
11:05	9/6/75	.75	"	60.56	22.57	0.609	1.26	7.27	-197	7.61	
11:10	"	1.50	"	60.48	22.58	0.567	0.35	7.38	-210	11.1	
11:15	9/6/75	2.25	"	60.48	22.04	0.623	0.19	7.50	-218	7.37	
11:20	"	3.00	"	60.47	22.02	0.635	0.16	7.55	-218	4.83	
11:25	"	3.75	"	60.47	22.01	0.655	0.16	7.64	-218	5.60	
11:30	"	4.50	"	60.48	21.99	0.658	0.16	7.66	-210	5.86	

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
11:00	11:30	150	4.5	N/A	NA	60.48	11:30	MWG004_WG200903 10 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/18/09
Project No.:	1155.006	**Prepared by:**	BMC
Well Identification:	TMW_06	**Weather:**	Sunny 70's
Measurement Point Description:	TOC	**Pump Intake:**	75
		Screen:	67 - 87

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.)
/	58.79	87	/	/	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: 03-27-08						1.53	4.360	7.28	1.81	6,000.00	
1055	CPM 4/	0	200mL/m	58.79	21.08	1.224	2.77	7.28	-105	129	cloudy
1058		600		58.90	20.03	1.54	4.27	7.11	-63	274	cloudy
1101		1200		58.89	20.21	1.68	4.57	7.08	-28	217	cloudy
1104		1500		58.91	20.45	1.69	4.85	7.07	-17	202	cloudy
1107		2400		58.91	20.46	1.70	4.84	7.09	-19	199	cloudy
1110				58.90	20.45	1.68	4.85	7.10	-20	198	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
1055	1107	200	2400	N/A	NA	58.81	1111	TMW_06_WG200903109_01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

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GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	Tmc
Well Identification:	TMW_08	**Weather:**	Sunny 70s
Measurement Point Description:	TOC	**Pump Intake:**	71 ft / **Screen:** 61 - 81

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.)
/	60.65	81	/	/	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: 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: 03-26-08						1.82	0.560	7.07	-157.00	2.80	
1115	CPM-4	0	200	60.65	21.56	1.54	2.47	7.18	-151	69.6	cloudy
1118	↓	600	↓	60.71	21.57	1.70	2.91	7.10	-138	77.2	cloudy
1121		1200		60.72	21.70	1.82	3.09	7.09	-125	85.7	cloudy
1124		1800		60.73	22.34	2.00	2.81	7.10	-89	72.2	cloudy
1127		2400		60.72	22.39	2.00	2.96	7.10	-83	66.3	cloudy
1130		3000		60.73	22.40	2.01	2.99	7.11	-82	65.9	cloudy
1133		3600		60.73	22.40	2.01	2.95	7.10	-89	69.9	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
1115	1133	200	3.6	N/A	NA	60.73	1138	TMW_08_WG200903 1/2 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/13/09
Project No.:	1155.006	**Prepared by:**	JMC
Well Identification:	TMW_10	**Weather:**	
Measurement Point Description:	TOC	**Pump Intake:**	70
		Screen:	60.5 - 80.5

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.)
—	56.80	80.5	—	—	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: 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
Previous Stabilized Parameters: 09-23-08					23.31	2.18	2.520	7.08	92.00	1.85	
1147	CPM-4	0	200	56.80	23.43	2.07	3.02	6.99	-55	3.6	Clear
1150	↓	600		56.91	23.49	2.24	2.25	6.90	-44	9.6	Clear
1153		1200		56.92	23.23	2.29	2.20	6.89	56	10.1	Clear
1156		1800		56.92	23.26	2.30	2.09	6.90	59	9.7	Clear
1159		2400		56.91	23.21	2.31	2.15	6.90	61	9.6	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
1147	1159	200	2.4	N/A	NA	56.91	1205	TMW_10_WG200903 B _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-10-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	TMW_11	**Weather:**	Warm
Measurement Point Description:		**Pump Intake:**	≈ 68
		Screen:	58 - 78

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	56.97	78	21	NA	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: 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: 09-25-08					23.20	1.56	4.020	7.26	30.00	3.57	
12:45	10/5/1000A	0	150	56.98	23.43	1.60	4.49	7.18	-199	6.15	
12:50	"	0.75	"	56.99	22.91	1.64	5.05	7.05	-158	2.35	
12:55	"	1.50	"	56.99	22.60	1.65	5.11	7.02	-121	eq. error	
13:00	"	2.25	"	56.97	22.53	1.65	5.03	7.01	-94	0.93	
13:05	"	3.00	"	56.98	22.53	1.66	4.95	7.00	-87	0.91	
13:10	"	3.75	"	56.97	22.51	1.67	4.91	7.00	-79	0.94	
13:15	"	4.50	"	56.97	22.54	1.68	4.87	7.00	-67	0.96	
13:20	"	5.5	200	56.98	22.58	1.68	4.85	7.00	-60	0.80	

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
12:45	13:20	150	5.5	N/A	NA	56.98	13:20	TMW_11_WG200903 10 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/3/09
Project No.:	1155.006	**Prepared by:**	Tmc
Well Identification:	TMW_14	**Weather:**	Sunny 70's
Measurement Point Description:	TOC	**Pump Intake:**	75
		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.)
—	66.34	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: 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
Previous Stabilized Parameters: 09-23-08					22.59	2.63	4.920	7.12	77.00	2.11	
0937	CPM-4	0	200	66.34	20.00	4.66	4.95	7.08	-169	9.1	clear
0940	↓	600	↓	66.35	20.32	2.56	4.62	6.87	-132	4.1	clear
0943		1200		66.36	20.45	2.61	4.81	6.84	-117	3.0	clear
0946		1800		66.36	20.31	3.09	5.12	6.81	-96	1.2	clear
0949		2400		66.37	20.62	3.19	5.39	6.80	-74	1.2	clear
0952	↓	3000	↓	66.38	20.61	3.16	5.23	6.81	-70	1.3	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
0937	0952	200	3	N/A	NA	66.38	1000	TMW_14_WG200903 13 _01

Notes: (units) [stabilization criteria]

50

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/13/09
Project No.:	1155.006	**Prepared by:**	Zm C
Well Identification:	TMW_15	**Weather:**	Sunny 70s
Measurement Point Description:	TOC	**Pump Intake:**	74'
		Screen:	62 - 87

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.)
	64.50	87			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: 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
Previous Stabilized Parameters: 09-23-08					22.32	1.54	4.740	7.26	76.00	1.99	
1030	CPM-4	0	200	64.50	18.26	2.52	7.49	7.00	-21	1.5	clear
1033		600		64.61	19.43	1.79	5.18	7.05	-47	4.2	clear
1036		1200		64.62	20.08	1.61	5.38	7.13	+57	5.6	clear
1039		1800		64.62	20.35	1.58	5.42	7.16	+60	3.9	clear
1042		2400		64.63	20.39	1.58	5.44	7.16	+61	4.0	clear
1045		3000		64.62	20.41	1.59	5.47	7.15	+60	3.6	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
1030	1045	200	3	N/A	NA	64.62	1048	TMW_15_WG200903 13 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/17/09
Project No.:	1155.006	**Prepared by:**	EMC
Well Identification:	WCC_03S	**Weather:**	60's sunny
Measurement Point Description:	TOC	**Pump Intake:**	low flow
		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.)
—	58.90	89.00	—	—	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: 09-25-08					23.81	3.71	0.240	6.50	-134.00	9.60	
0903	Cpmy	0	200	58.90	22.24	3.42	3.26	6.63	-81	12.0	clear
0906		600		59.29	22.26	3.49	0.75	6.48	-152	9.4	clear
0909		1200		59.28	22.29	4.01	0.73	6.49	-162	10.2	clear
0912		1800		59.26	22.16	4.01	0.51	6.49	-170	8.3	clear
0915		2400		59.25	22.18	4.01	0.45	6.48	-176	6.7	clear
0918		3000		59.27	22.23	4.01	0.38	6.48	-181	6.0	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
0903	0918	200	3000	N/A	NA	59.07	0920	WCC_03S_WG200903 17 _01

Notes: (units) [stabilization criteria]

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/17/09
Project No.:	1155.006	**Prepared by:**	Eme
Well Identification:	WCC_04S	**Weather:**	60's sunny
Measurement Point Description:	TOC	**Pump Intake:**	low-flow
		Screen:	70.5 - 90.5

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.)
—	58.67	90.5	—	—	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: 09-25-08					23.28	2.33	3.430	6.87	23.00	9.50	
0832	cpm4	0	200	58.67	21.86	2.08	5.03	7.16	41	2.9	clear
0835		600		58.64	22.01	2.36	3.35	6.96	52	2.4	clear
0838		1200		58.71	22.02	2.38	3.25	6.95	60	2.0	clear
0841		1800		58.69	22.08	2.38	3.02	6.93	64	2.2	clear
0844		2400		58.70	22.06	2.39	2.97	6.93	65	2.5	clear
0847		3000		58.67	22.03	2.39	2.94	6.93	66	1.9	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
0832	0847	200	2000	N/A	NA	58.69	0850	WCC_04S_WG200903 17 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3-10-09
Project No.:	1155.006	**Prepared by:**	DML
Well Identification:	WCC_05S	**Weather:**	Warm, clear
Measurement Point Description:	TOC-N	**Pump Intake:**	≈ 76'
		Screen:	61 - 91

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.)
NM	59.08	91	32	—	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 R/D1 PSI	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					22.60	1.51	3.740	7.20	65.00	1.19	
9:45	10/5/50 psi	0	200	59.13	22.24	1.60	5.23	7.00	92	0.81	
9:50	11/4/50	1L	200	59.15	22.21	1.60	5.05	6.97	94	0.67	
9:55	11/4/50	2L	200	59.15	22.22	1.60	5.11	6.98	97	0.59	
10:00	11/4/50	3L	200	59.14	22.36	1.60	5.25	6.97	99	0.52	
10:05	11/4/50	4L	"	59.13	22.30	1.60	5.62	6.98	99	0.46	
10:10	"	5L	"	59.14	22.38	1.61	5.63	6.98	98	0.09	

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
9:45	10:10	200	5	N/A	NA	59.12	10:15	WCC_05S_WG200903 10 _01

Notes: (units) [stabilization criteria] D.O. w/ Chemetrics = 4.5 mg/L @ 10:00
5.5 " @ 10:10

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/16/09
Project No.:	1155.006	**Prepared by:**	TDT
Well Identification:	WCC_07S	**Weather:**	70's Sunny
Measurement Point Description:	TOC	**Pump Intake:**	low flow
		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.)
—	58.71	90	—	—	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: 09-25-08					24.32	2.15	5.010	7.25	79.00	3.04	
1030	cpm 4	0	200	58.71	23.16	2.10	5.38	7.86	-70	↑	clear
1033		600		58.72	23.10	2.25	5.84	7.88	-60	0	clear
1036		1200		58.70	23.52	2.43	6.12	7.92	-40	NM	clear
1039		1800		58.71	23.55	2.48	6.05	7.94	-29	≈0	clear
1042		2400		58.71	23.56	2.48	6.05	7.94	-26	≈0	clear
1045		3000		58.72	23.67	2.48	6.00	7.94	-22	≈0	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
1030	1045	200	3000	N/A	NA	58.70	1048	WCC_07S_WG200903 16 _01

Notes: (units) [stabilization criteria]
LaMotte gray
Innaccurate readings

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/17/09
Project No.:	1155.006	**Prepared by:**	BMC
Well Identification:	WCC_09S	**Weather:**	60's Sunny
Measurement Point Description:	TOC	**Pump Intake:**	low-flow
		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.)
—	61.57	90	—	—	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					22.54	2.24	2.230	6.89	42.00	4.20	
0730	cpm 4	0	200	61.57	18.85	2.25	7.30	7.14	97	5.4	clear
0733		600		61.69	20.32	2.26	6.62	6.54	93	2.9	clear
0736		1200		61.71	20.75	2.26	6.37	7.03	90	2.7	clear
0739		1800		61.68	20.83	2.27	6.32	7.03	89	2.4	clear
0742		2400		61.69	20.94	2.26	6.29	7.03	87	2.3	clear
0745		3000		61.70	20.43	2.25	6.29	7.01	85	2.1	clear
BMC											

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
0730	0745	200	3000	N/A	NA	61.59	0748	WCC_09S_WG200903 17 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/10/9
Project No.:	1155.006	**Prepared by:**	[illegible]
Well Identification:	XMW-09	**Weather:**	Sunny 60's
Measurement Point Description:	TOC	**Pump Intake:**	68.5
		Screen:	66 - 81

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.)
—	60.60	81	—	—	N/A	N/A	N/A	N/A

	Gallons/Foot				
Well Diameter (inches) = 4	0.75	2	4	6	**Field Equipment:** QED, Portable Low-flow
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	**Purge Method:** 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
Previous Stabilized Parameters: 09-24-08					23.22	3.09	0.700	6.51	28.00	5.00	
0900	CPM-4	0	200mL/min	60.40	18.25	2.26	5.00	7.08	62	170	Cloudy
0903		600		60.54	18.51	2.65	2.05	6.66	70	140	Cloudy
0906		1200		60.54	19.23	2.77	1.27	6.62	69	143	Cloudy
0909		1800		60.54	19.56	2.79	0.94	6.60	68	127	Cloudy
0912		2400		60.52	19.61	2.80	0.84	6.60	68	106	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
0900	0912	200	2400	N/A	NA	60.62	0915	XMW-09_WG200903 0310 09 _01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

Page 1 of 1

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-09	**Date:**	3/10/09
Project No.:	1155.006	**Prepared by:**	GMC
Well Identification:	XMW-19	**Weather:**	Sunny 60's
Measurement Point Description:	TOC	**Pump Intake:** 71.0	**Screen:** 63 - 79

A	B	C	D = C - B	E = B - A	G = D x F	H = 16 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.)
—	56.07	80	—	—	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, Portable Low-flow

Purge Method: 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
Previous Stabilized Parameters: 10-24-08					24.10	2.62	2.920	7.20	36.00	28.10	
0820	CPM-4	0	200ml/min	56.07	18.45	2.51	5.94	6.11	132	332	Cloudy
0823	↓	600	↓	56.15	21.14	2.61	4.11	6.68	102	314	Cloudy
0826		1200		56.14	21.03	2.60	3.23	6.89	93	264	Cloudy
0829		1800		56.14	21.02	2.60	3.04	6.92	81	226	Cloudy
0832		2400		56.15	21.32	2.58	2.41	6.96	75	201	Cloudy
0835		3000		56.15	21.33	2.57	2.57	6.98	71	167	Cloudy
0838		3600		56.13	21.35	2.56	2.84	6.94	69	155	Cloudy
~~0840~~											

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	0840	200	3600	N/A	NA	56.15	0840	XMW-19_WG200903~~0309~~_01

Notes: (units) [stabilization criteria]

DUP:

DRUM NO:

ASHTEAD Technology RENTALS

Calibration Certificate

Equipment Information:

CUSTOMER: _____
INSTRUMENT: DEO
MODEL: MP200T
SERIAL #: B6102

Calibration Standards:

STANDARD: PN4 RESPONSE: 4 ppm

STANDARD: PN7 RESPONSE: 7 ppm

STANDARD: 000 RESPONSE: 0

STANDARD: 89mV RESPONSE: 89

0 NTU 0

4.49 mS/cm 4.49

TECHNICIAN: [signature]
DATE: 6MAR09
DUE DATE: N/A

NOTES:
Unit performs within specifications: X Flow check: ____ Battery fully charged: ____

This instrument has been calibrated according to the calibration procedure as described in the operation manual.

☐ Ashtead Technology Rentals
1057 East Henrietta Road
Rochester, NY 14623
585-424-2140

☒ Ashtead Technology Rentals
18195 McDurmott East, Suite A/B
Irvine, CA 92614
949-955-3930

☐ Ashtead Technology Rentals
3311 Preston Avenue
Pasadena, TX 77505
281-991-1448

EQUIPCO RENTALS

QED MP-20D RENTAL
CALIBRATION CERTIFICATE

SERVICE TECHNICIAN: BH

DATE: 3/3/09

INSTRUMENT INFORMATION

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

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)	237.5 mV (YSI Zobell solution)	✓	051107

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

Certificate of Calibration

EQUIPMENT/MODEL	DESCRIPTION	SERIAL NUMBER
RKI EAGLE	GAS DETECTOR	E08x071

This instrument has been calibrated using calibration solution and procedures which are traceable to N.I.S.T.. Test and calibration data is on file with the manufacturer.

Calibration Date	Calibration Gas	Technical Rep.
3/6/2009 9:22AM	CH4 50% CO 50PPM H2S 25PPM 02 12.0%	Fred B.

EnviroSupply & Service, Inc.
(800) 201-8150
Ext.109

Certificate of Calibration

EQUIPMENT/MODEL	DESCRIPTION	SERIAL NUMBER
RKI EAGLE	GAS DETECTOR	E089074

This instrument has been calibrated using calibration solution and procedures which are traceable to N.I.S.T.. Test and calibration data is on file with the manufacturer.

Calibration Date	Calibration Gas	Technical Rep.
3/6/2009 9:22PM	CH4 50% CO 50PPM H2S 25PPM 02 12.0%	Fred B.

EnviroSupply & Service, Inc.
(800) 201-8150
Ext.109

Certificate of Calibration

EQUIPMENT/MODEL	DESCRIPTION	SERIAL NUMBER
RKI EAGLE	GAS DETECTOR	E08X092

This instrument has been calibrated using calibration solution and procedures which are traceable to N.I.S.T.. Test and calibration data is on file with the manufacturer.

Calibration Date	Calibration Gas	Technical Rep.
3/6/2009 9:22PM	CH4 50% CO 50PPM H2S 25PPM 02 12.0%	Fred B.

EnviroSupply & Service, Inc.
(800) 201-8150
Ext.109

Certificate of Calibration

EQUIPMENT/MODEL	DESCRIPTION	SERIAL NUMBER
RKI EAGLE	GAS DETECTOR	E26058

This instrument has been calibrated using calibration solution and procedures which are traceable to N.I.S.T.. Test and calibration data is on file with the manufacturer.

Calibration Date	Calibration Gas	Technical Rep.
3/6/2009 9:22PM	CH4 50% CO 50PPM H2S 25PPM 02 12.0%	Fred B.

EnviroSupply & Service, Inc.
(800) 201-8150
Ext.109

AVOCET ENVIRONMENTAL, INC.

QA/QC SAMPLE IDENTIFICATION FORM

Project Name:	Boeing Former C-6 Facility, WDR/Semi-annual Sitewide Sampling, March 2009	Project No.:	1155.006

Date	Time	QA/QC Sample Type (Duplicate, Field Blank, Equipment Blank, Split)	Sample ID	Sample Location	Primary Sample Reference	Analytical Methods	Organic-Free Water Source	Field Personnel	Comments
03/10/09	13:30	Equip. Blank	EB_AV20090310_01	-		8260B	TA-I	EMC	
03/10/09	-	Trip Blank	TB_AV20090310_01	-		8260B	TA-I	-	
03/11/09	13:40	Equip. Blank	EB_AV20090311_01	-		8260B	TA-I	TOT	
03/11/09	-	Trip Blank	TB_AV20090311_01	-		8260B	TA-I	-	
03/11/09	10:15	Duplicate	EWB002_WG20090311_02	EWB002	EWB002_WG20090311_01	8260B	-	EMC	
03/12/09	9:30	Equip. Blank	EB_AV20090312_01	-		8260B	TA-I	TOT	
03/12/09	-	Trip Blank	TB_AV20090312_01	-		8260B	TA-I	-	
03/12/09	-	Trip Blank	TB_AV20090312_02	-		8260B	TA-I	-	
03/13/09	16:00	Equip. Blank	EB_AV20090313_01	-		8260B	TA-I	DML	
03/13/09	8:38	Duplicate	MWB019_WG20090313_02	MWB019	MWB019_WG20090313_01	8260B	-	EMC	
03/16/09	13:20	Equip. Blank	EB_AV20090316_01	-		8260B	TA-I	EMC	
03/16/09	-	Trip Blank	TB_AV20090316_01	-		8260B	TA-I	-	
03/16/09	13:16	Duplicate	MWC022_WG20090316_02	MWC022	MWC022_WG20090316_01	8260B	-	TOT	
03/16/09	13:58	Duplicate	MWC023_WG20090316_02	MWC023	MWC023_WG20090316_01	8260B	-	TOT	
03/17/09	-	Trip Blank	TB_AV20090317_01	-		8260B	TA-I	-	

\\server2\shared\Projects\1155 Boeing Former C-6 Facility\Groundwater Monitoring\March 2009\CompletedForms\[qaqc sample id form_20090317.xls]Sheet1

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

Boeing CoC No. AVO20090310A

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, WDR Sampling, March 2009
Site Address	Los Angeles, CA
Project No.	1155.006
Project Manager	Michael Rendina
Sampled By	ERIC COSTALES, DAVID LIEBERMAN
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 HT!!	Total Dissolved Solids (TDS) SM2540C	Comments
														JSC017
MWG004_WG20090310_01	03/10/09	11:30	WATER	3		X								
MWC007_WG20090310_01	03/10/09	9:10	WATER	3		X								
WCC_05s_WG20090310_01	03/10/09	10:15	WATER	3		X								
MWG002_WG20090310_01	03/10/09	12:15	WATER	3		X								
TWM_11_WG20090310_01	03/10/09	13:20	WATER	3		X								
MWB020_WG20090310_01	03/10/09	14:45	WATER	3		X								
MWB014_WG20090310_01	03/10/09	11:43	WATER	3		X								
MWB012_WG20090310_01	03/10/09	13:22	WATER	3		X								
MWC015_WG20090310_01	03/10/09	12:29	WATER	3		X								
TMW_06_WG20090310_01	03/10/09	11:11	WATER	3		X								
MWC011_WG20090310_01	03/10/09	10:30	WATER	3		X								
XMW-09_WG20090310_01	03/10/09	9:15	WATER	3		X								
XMW-19_WG20090310_01	03/10/09	8:40	WATER	3		X								
MWC006_WG20090310_01	03/10/09	9:59	WATER	3		X								
TB_AV20090310_01	03/10/09	-	WATER	3		X								
EB_AV20090310_01	03/10/09	13:30	WATER	3		X								

Relinquished by		Company	Received by		Company
Printed Name: D. Lieberman	Date: 3-10-09	Avocet Environmental, Inc.	Printed Name: D. Broadnax	Date: 3/10/9	Avocet
Signature:	Time: 17:15		Signature:	Time: 17:15	
Printed Name: D. Broadnax	Date: 3-10-9		Printed Name: Angel A.	Date: 3/10/09	TAI
Signature:	Time: 17:37		Signature:	Time: 1737	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	

Sample Receipt	Billing Information	
Total Containers		
Temperature °C 4.6/4.0 °F	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
COC Seal (Y/N/NA)		

S:\Projects\1155 Boeing Former C-6 Facility\Groundwater Monitoring\March 2009\Copy of COC_AV20090310

#179

Heather Clark

From: David Lieberman [dlieberman@avocetenv.com]
Sent: Tuesday, March 10, 2009 9:06 PM
To: Trupti Mistry
Cc: Heather Clark; Michael Rendina; datamanager
Subject: Boeing C-6 March GW Sampling event. Sample ID error.
Follow Up Flag: Follow up
Flag Status: Blue

Trupti,

I just noticed a sample ID error one of today's samples on the COC.

TWM_11_WG20090310_01
Should have been identified as:
TMW_11_WG20090310_01

The sample label should be correct.

Please call me on my cell phone if you notice any other discrepancies. Thanks.

We received the Northwind containers today and will commence sampling the WDR wells on Wednesday as planned.

David Lieberman
Avocet Environmental, Inc.
16 Technology Drive, Suite 154
Irvine, CA 92618
Phone: 949-296-0977x107
Mobile: 949-274-3449

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

NOTIFICATION OF DISCREPANCY

DATE: 03/11/09 TIME: 11:30 PM: T. M. SC INITIALS: MS

CLIENT/PROJECT NAME: AVOCet Environmental inc.

Rush/Short Hold? ☐ Yes ☒ No | WORK ORDER #: ISC1017

☐ Project Not Set Up in Element ☐ New Client ☐ COC Received ON HOLD

☐ Analysis Requested on COC – Not Listed for Project in Element

PM To Add Analysis:

☐ Clarification of Analysis:

☐ Hold Time Expired: (Analysis)

☐ Turnaround Time Not Checked:

☒ Did Not Receive Sample(s) Listed on COC: Rec only 2 voas for MWB012_WG20090310-01

☐ Received Extra Sample(s) Not Listed on COC: 1 voa only MWB028_WG2009 0310-01 @ 13:22

☐ Sample Collector's name missing on COC:

☐ Sample Description(s) or Date/Time Sampled Do Not Match COC:

☐ Improper Preservative:

☐ VOAs have headspace (bubble>6mm):

☐ Sample Received Broken:

☐ Improper Temperature (_____°) (Comments):

☐ Insufficient Sample Volume:

☐ Other:

called 3/11 -HC

PROJECT MANAGER RESOLUTION: (Date & Time when returned to SC)

please log addional sample as MWB012_WG20090310_01 per David Ueberman Also, please see attached e-mail regarding sample ID. Please change sample ID to reflect change requested

Approval By: HC Date: 3/11 Time: 1554

C:\Documents and Settings\maria\Local Settings\Temporary Internet Files\OLK1E\NODFORM06.doc

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

 ISC1067

Boeing CoC No. AVO20090311A

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, ☐WDR Sampling, March 2009
Site Address	Los Angeles, CA
Project No.	1155.006
Project Manager	Michael Rendina
Sampled By	
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 24 Hr HT IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene - RSK 175	Alkalinity SM2320B	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Hexavalent Chromium EPA 7199	Dissolved Metals EPA 6010B	Total Dissolved Solids (TDS) SM2540C	DHC 16S by qPCR analysis (North Wind) 24Hr HT	Chlorides				Comments
WCC_12S_WG20090311_01	03/11/09	7:50	WATER	3		X	X	X	X					X	X	X				
AW0077UB_WG20090311_01	03/11/09	8:20	WATER	3		X	X		X		X									
AW0073C_WG20090311_01	03/11/09	8:54	WATER	3		X	X		X		X				X					
TMW_07_WG20090311_01	03/11/09	9:30	WATER	3		X	X	X	X					X	X	X				
EWB002_WG20090311_01	03/11/09	10:15	WATER	3		X	X		X		X									
EWB002_WG20090311_02	03/11/09	10:15	WATER	3		X														
AW0076UB_WG20090311_01	03/11/09	10:50	WATER	3		X	X		X		X									
AW0075UB_WG20090311_01	03/11/09	11:30	WATER	3		X	X		X		X				X					
AW0074UB_WG20090311_01	03/11/09	12:05	WATER	3		X	X	X	X		X				X					
AW0055UB_WG20090311_01	03/11/09	12:40	WATER	3		X	X		X						X					
AW0066UB_WG20090311_01	03/11/09	8:23	WATER	3		X	X	X	X		X									
AW0067UB_WG20090311_01	03/11/09	9:58	WATER	3		X	X	X	X		X									
WCC_06S_WG20090311_01	03/11/09	13:14	WATER	3		X	X		X		X				X					
AW0065UB_WG20090311_01	03/11/09	11:42	WATER	3		X	X		X						X					
TB_AV20090311_01	03/11/09	-	WATER	3		X														
EB_AV20090311_01	03/11/09	13:40	WATER	3		X														

48HR HT for NO_3

Please forward VFA & qPCR analyses to identified laboratories ASAP.

KMB 3/11/09 1455

Relinquished by		Company	Received by		Company
Printed Name: D. Lieberman	Date: 3-11-09	Avocet Environmental, Inc.	Printed Name: Duy N	Date: 3/11/09	
Signature:	Time: 14:10		Signature:	Time: 1460	
Printed Name: Duy Nguyen	Date: 3/11/09		Printed Name: WILLIAM	Date: 3/11/09	
Signature:	Time: 1515		Signature:	Time: 15:15	
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 ____ °F ____		
COC Seal (Y/N/NA)		

C:\Documents and Settings\David\Desktop\1155\March 2009\Master COC_AV200903

4.914.3

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

Sheet 1 of 1 ISC1214

Boeing CoC No. AV20090312A

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, □WDR Sampling, March 2009
Site Address	Los Angeles, CA
Project No.	1155.008
Project Manager	Michael Rendina
Sampled By	
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 24 Hr HT IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene - RSK 175	Alkalinity SM2320B	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Hexavalent Chromium EPA 7199	Dissolved Metals EPA 6010B	Total Dissolved Solids (TDS) SM2540C	DHC 16S by qPCR analysis (North Wind) 24Hr HT	Chlorides	Comments
AW0064UB_WG20090312_01	03/12/09	8:05	WATER	3		X	X		X		X				X		
MWB006_WG20090312_01	03/12/09	9:11	WATER	3		X	X	X	X					X	X	X	
CMW002_WG20090312_01	03/12/09	8:10	WATER	3		X	X	X	X	X	X			X			
CMW026_WG20090312_01	03/12/09	9:15	WATER	3		X	X	X	X	X	X				X		
IRZCMW002_WG20090312_01	03/12/09	13:45	WATER	3		X	X	X	X	X	X				X		
IRZCMW001_WG20090312_01	03/12/09	9:55	WATER	3		X	X	X	X	X	X			X			
MWC024_WG20090312_01	03/12/09	10:30	WATER	3		X	X	X	X	X	X				X		
IRZCMW003_WG20090312_01	03/12/09	11:46	WATER	3		X	X	X	X	X	X				X		
TB_AV20090312_01	03/12/09	-	WATER	3		X											
EB_AV20090312_01	03/12/09	9:30	WATER	3		X											

DM 3/12/09 16:35

Relinquished by	Company	Received by	Company
Printed Name: D Lieberman Date: 3/13/09	Avocet Environmental, Inc.	Printed Name: [illegible] Date: 3/12/09	
Signature: [illegible] Time: 14:06		Signature: [illegible] Time: 1416	
Printed Name: Duy Nguyen Date: 3/13/09	Test America Irvine	Printed Name: Angel Perez Date: 3/12/09	TAI
Signature: [illegible] Time: 1455		Signature: [illegible] Time: 1455	
Printed Name: Date:		Printed Name: Date:	
Signature: Time:		Signature: Time:	

Sample Receipt

Total Containers

Temperature °C 5.8°C/4.9°C °F

COC Seal (Y/N/NA)

Billing Information

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

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

Boeing CoC No. AV20090313A_rev

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, Sitewide Semiannual Sampling, March 2009
Site Address	Los Angeles, CA
Project No.	1155.006
Project Manager	Michael Rendina
Sampled By	
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 24 Hr HT IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene - RSK 175	Alkalinity SM2320B	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Hexavalent Chromium EPA 7199	Dissolved Metals - HOLD THIS SAMPLE EPA 6010B	Total Dissolved Solids (TDS) SM2540C	DHC 16S by qPCR analysis (North Wind) 24Hr HT	Chlorides EPA 300.0	Sulfate EPA 300.0			Comments
MWB013_WG20090313_01	03/13/09	8:05	WATER	5		X						X	X							
TMW_14_WG20090313_01	03/13/09	10:00	WATER	5		X						X	X							
TMW_15_WG20090313_01	03/13/09	10:48	WATER	5		X						X	X							
MWB019_WG20090313_01	03/13/09	8:38	WATER	5		X						X	X							
MWB019_WG20090313_02	03/13/09	8:38	WATER	3		X														
MWC017_WG20090313_01	03/13/09	9:05	WATER	5		X						X	X							
MWC021_WG20090313_01	03/13/09	11:40	WATER	3		X														
TMW_10_WG20090313_01	03/13/09	12:05	WATER	3		X														
MWG003_WG20090313_01	03/13/09	12:38	WATER	3		X														
MWG001_WG20090313_01	03/13/09	13:10	WATER	3		X														
IRZMW002B_WG20090313_01	03/13/09	9:16	WATER	8		X	X		X								X			
IRZMW003B_WG20090313_01	03/13/09	10:40	WATER	8		X	X		X								X			
IRZMW001B_WG20090313_01	03/13/09	11:55	WATER	8		X	X		X								X			

Relinquished by		Company	Received by		Company
Printed Name:	Date:	Avocet Environmental, Inc.	Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	
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 / °F		
COC Seal (Y/N/NA)		

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

Boeing CoC No. AV20090313A_ rev

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, Sitewide Semiannual Sampling, March 2009
Site Address	Los Angeles, CA
Project No.	1155.006
Project Manager	Michael Rendina
Sampled By	
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 24 Hr HT IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene - RSK 175	Alkalinity SM2320B	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Hexavalent Chromium EPA 7199	Dissolved Metals - HOLD THIS SAMPLE EPA 6010B	Total Dissolved Solids (TDS) SM2540C	DHC 16S by qPCR analysis (North Wind) 24Hr HT	Chlorides EPA 300.0	Sulfate EPA 300.0			Comments
MWB028_WG20090312_01	03/12/09	10:25	WATER	3		X														
→ MWC016_WG20090312_01	03/12/09	12:16	WATER	3		X														
→ MW0005_WG20090312_01	03/12/09	13:18	WATER	3		X														
→ IWC001_WG20090312_01	03/12/09	14:20	WATER	3		X														
IRZMW001A_WG20090313_01	03/13/09	13:00	WATER	8		X	X		X								X			
IRZMW002A_WG20090313_01	03/13/09	14:12	WATER	8		X	X		X								X			
IRZMW003A_WG20090313_01	03/13/09	15:02	WATER	8		X	X		X								X			
TB_AV20090312_02	03/12/09	-	WATER	3		X														
EB_AV20090313_01	03/13/09	16:00	WATER	3		X														

additions to previous day's chain 3-16-09 BY

Relinquished by	Company	Received by	Company
Printed Name: Date:	Avocet Environmental, Inc.	Printed Name: Date:	
Signature: Time:		Signature: Time:	
Printed Name: Date:		Printed Name: Date:	
Signature: Time:		Signature: Time:	
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
Temperature °C °F	
COC Seal (Y/N/NA)	

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

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ISC1506

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

Boeing CoC No. AV20090316A

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, Sitewide Semiannual Sampling, March 2009
Site Address	Los Angeles, CA
Project No.	1155.006
Project Manager	Michael Rendina
Sampled By	EMC/TOT
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 24 Hr HT IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene - RSK 175	Alkalinity SM2320B	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Hexavalent Chromium EPA 7199	Dissolved Metals - HOLD THIS SAMPLE EPA 6010B	Total Dissolved Solids (TDS) SM2540C	DHC 16S by qPCR analysis (North Wind) 24Hr HT	Chlorides EPA 300.0	Sulfate EPA 300.0			Comments
BL-03_WG20090316_01	03/16/09	8:10	WATER	5		X						X	X							
EWB001_WG20090316_01	03/16/09	13:11	WATER	3		X														Target this sample for Tier I Data Validation
CMW001_WG20090316_01	03/16/09	8:26	WATER	3		X														Target this sample for Tier II Data Validation
MWC009_WG20090316_01	03/16/09	9:10	WATER	3		X														Target this sample for Tier I Data Validation
MWC004_WG20090316_01	03/16/09	10:04	WATER	3		X														Target this sample for Tier III Data Validation
WCC_07S_WG20090316_01	03/16/09	10:48	WATER	6		X			X											Target this sample for Tier I Data Validation
MWB027_WG20090316_01	03/16/09	11:44	WATER	3		X														
MWC022_WG20090316_01	03/16/09	13:16	WATER	3		X														Target this sample for Tier I Data Validation
MWC022_WG20090316_02	03/16/09	13:16	WATER	3		X														
MWC023_WG20090316_01	03/16/09	13:58	WATER	3		X														Target this sample for Tier I Data Validation
MWC023_WG20090316_02	03/16/09	13:58	WATER	3		X														

Relinquished by		Company	Received by		Company
Printed Name: David Lieberman	Date: 3/16/09	Avocet Environmental, Inc.	Printed Name: Angel Perez	Date: 3/16/09	TAI
Signature:	Time: 15:30		Signature:	Time: 1530	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	

AP. M35 3/16/09

Sample Receipt	
Total Containers	2 8/2 2
Temperature	°C / °F
COC Seal (Y/N/NA)	

Billing Information

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

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#155

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

Boeing CoC No. AV20090316A

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, Sitewide Semiannual Sampling, March 2009
Site Address	Los Angeles, CA
Project No.	1155.006
Project Manager	Michael Rendina
Sampled By	EMC/TOT
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 24 Hr HT IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene - RSK 175	Alkalinity SM2320B	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Hexavalent Chromium EPA 7199	Dissolved Metals - **HOLD THIS SAMPLE** EPA 6010B	Total Dissolved Solids (TDS) SM2540C	DHC 16S by qPCR analysis (North Wind) 24Hr HT	Chlorides EPA 300.0	Sulfate EPA 300.0			Comments
IRZMW005_WG20090316_01	03/16/09	9:05	WATER	8		X	X		X								X			
IRZMW004_WG20090316_01	03/16/09	9:35	WATER	8		X	X		X								X			
EWC001_WG20090316_01	03/16/09	11:05	WATER	3		X														
TMW_08_WG20090316_01	03/16/09	11:38	WATER	6		X			X											
MWB003_WG20090316_01	03/16/09	12:10	WATER	6		X			X											*Target this sample for Tier I Data Validation*
DAC-P1_WG20090316_01	03/16/09	10:18	WATER	3		X						X	X							
EB_AV20090316_01	3/16/09	13:20	Water	3		X						~~X~~	~~X~~	(*)						(*) per David K.
TB_AV20090316_01	3/16/09	—	Water	3		X														3/16/09 17:33

3/16/09
20
3/20/09 (Lab error).

Relinquished by		Company	Received by		Company
Printed Name: David Lieberman	Date: 3/16/09	Avocet Environmental, Inc.	Printed Name: Angel Perez	Date: 3/16/09	TAI
Signature: [signature]	Time: 15:30		Signature: [signature]	Time: 1530	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	

Sample Receipt	Billing Information	
Total Containers 2.8 / 2.2	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 Sea (Y/N/NA)		

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

 ISC1607 Boeing CoC No. AV20090317A

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, Sitewide Semiannual Sampling, March 2009
Site Address	Los Angeles, CA
Project No.	1155.006
Project Manager	Michael Rendina
Sampled By	EMC/TOT
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 24 Hr HT IC Method 8M23G (Microseeps)	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene - RSK 175	Alkalinity SM2320B	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Hexavalent Chromium EPA 7199	Dissolved Metals - HOLD THIS SAMPLE EPA 6010B	Total Dissolved Solids (TDS) SM2540C	DHC 16S by qPCR analysis (North Wind) 24Hr HT	Chlorides EPA 300.0	Sulfate EPA 300.0			Comments
WCC_09S_WG20090317_01	03/17/09	7:48	WATER	3		X														
MWB007_WG20090317_01	03/17/09	8:18	WATER	3		X														
WCC_04S_WG20090317_01	03/17/09	8:50	WATER	3		X														
WCC_03S_WG20090317_01	03/17/09	9:20	WATER	3		X														
IRZB0095_WG20090317_01	03/17/09	9:28	WATER	8		X	X		X								X			
IRZB0081_WG20090317_01	03/17/09	11:25	WATER	8		X	X		X								X			
TB_AV20090317_01	03/17/09	-	WATER	3		X														

KB 3/17/09 14:42

Relinquished by		Company	Received by		Company
Printed Name: David Lieberman	Date: 3/17/09	Avocet Environmental, Inc.	Printed Name:	Date:	
Signature:	Time: 13:40		Signature:	Time:	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	
Printed Name:	Date:		Printed Name: NEIL KIM	Date: 3/17/09	
Signature:	Time:		Signature:	Time: 13:40	

Sample Receipt	Billing Information	
Total Containers	Bill To: Michael Rendina, P.G. AVOCET ENVIRONMENTAL, INC. 16 Technology Dive, Suite 154 Irvine, CA 92618-2327	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 6.9/6.3 °F		
COC Seal (Y/N/NA)		

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