ENVIRONMENTAL MONITORING REPORT
Third and Fourth Quarter 2009

NW Natural
Gasco Facility
7900 NW St. Helens Road
Portland, Oregon

June 4, 2010

HAI Project No. 2708

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ASSESSMENT
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Prepared for:

NW Natural
Portland, Oregon

Prepared by:

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1.0 INTRODUCTION

At the request of NW Natural, Hahn and Associates, Inc. (HAI) has prepared this Environmental Monitoring Report summarizing the results of routine monitoring activities that have occurred at the NW Natural, Gasco facility, located at 7900 St. Helens Road in Portland, Oregon and by NW Natural at the adjacent Siltronic Corporation property (Siltronic) located at 7200 NW Front Avenue (Figures 1 and 2) during the third and fourth quarters of 2009. Specific on-going environmental monitoring that occurred during the indicated time-frame include:

- groundwater quality and elevation data collection
- dense non-aqueous phase liquid (DNAPL) recovery system performance monitoring
- DNAPL measurement in monitoring wells

2.0 GROUNDWATER MONITORING ACTIVITIES

2.1 Water Level Monitoring

Static water levels were collected from all monitoring wells at the Gasco property and from select wells at the Siltronic property on August 5, 2009 and December 4, 2009. All monitoring well measurements were collected over an approximate 6-hour time frame with an electric water level indicator (conductive probe). All field measurements were deemed valid with the exception of the reading from well MW-3-26 on December 4, 2009. This reading deviated significantly from nearby measurements and historical trends, and therefore was deemed to be read in error. As such, the December 4, 2009 measurement was omitted from the data set. A summary of all well elevations collected to date is included in Table 1 and Table 1a. Certain water levels included on Table 1a were collected by representatives of Siltronic as independent monitoring events. These data are included herein for data set completeness.

Contoured groundwater elevation maps, depicting the Surficial Fill Water Bearing Zone (WBZ), as well as the intermediate and deep intervals of the Alluvial WBZ for the August 2009 and December 2009 monitoring events, are provided as Figures 3 through 10. Additionally, groundwater elevation hydrographs for all wells at the Gasco site, and select wells on the Siltronic property, are provided in Appendix A.

2.1.1 Surficial Fill Water Bearing Zone

As depicted in Figures 3 and 7, the interpreted groundwater flow direction within the Surficial Fill WBZ was found to be to the north/northeast towards the Willamette River, with the following overall calculated hydraulic gradients (measured between MW-9-29 and MW-2-32):

- August 5, 2009: 0.02
- December 5, 2009: 0.02

The elevation of the base of the LNG tank containment basin, located in the central portion of the Gasco site, is approximately 18 feet msl (City of Portland datum as measured below the granular base rock layer). Groundwater that seeps into this basin is pumped out and treated through granular activated carbon followed by permitted discharge to the City of Portland sanitary sewer system. The removal of shallow groundwater from this basin, which is pumped such that it remains dry, is anticipated to result in localized flow towards the basin as interpreted on Figures 3 and 7.

2.1.2 Alluvial Water Bearing Zone

As depicted in Figures 4 and 8, overall groundwater flow direction within the upper Alluvial WBZ (based on wells screened shallower than 80 feet bgs) was north-northeast towards the Willamette River, with a flattening of the gradient within 300 feet of the riverbank. The following hydraulic gradients (toward the river) were calculated for the central portion of the site (measured between MW-15-66 and MW-8-56):

- August 5, 2009: 0.021 (toward the river)
- December 4, 2009: 0.019 (toward the river)

The following hydraulic gradients were calculated along the shoreline for the portion of the site located within 300 feet of the river in August and December 2009 (measured between MW-8-56 and MW-4-57):

- August 5, 2009: 0.0021 (toward the river)
- December 4, 2009: 0.0006 (toward the river)

The preceding very low gradients toward the river within the upper alluvial WBZ at the near shore portion of the site are typical of historical gradients.

As depicted in Figures 5 and 9, overall groundwater flow direction within the intermediate depth Alluvial WBZ (based on wells screened between 80 to 125 feet bgs) was found to be to the northeast towards the Willamette River, with the following average calculated hydraulic gradients (as measured between wells MW-14-110 and MW-4-101):

- August 5, 2009: 0.011
- December 4, 2009: 0.0096

2.1.3 Vertical Gradients

Groundwater elevation data collected on August 5, 2009 indicate a downward hydraulic potential between the Surficial Fill WBZ and the underlying Alluvial WBZ across the site, with the downward vertical gradient (potential) ranging from a low of 0.0144 (wells MW-18-30 to MW-18-180) to a high of 0.4578 (MW-8-29 to MW-8-56).

Additionally, slight upward hydraulic gradients were present between the upper (wells screened to 80 feet bgs) and intermediate Alluvial WBZ (wells screened 80 to 125 feet bgs) and intermediate and lower Alluvial WBZ (wells screened lower than 125 feet bgs) as calculated:

<u>Upper and Intermediate Alluvial WBZ</u>

- MW-2-61 and MW-2-104: -0.197
- MW-21-75 and MW-21-115: -0.001

Intermediate and Lower Alluvial WBZ

- MW-21-115 and MW-21-165: -0.001

Groundwater elevation data collected on December 4, 2009 indicate a downward hydraulic potential between the Surficial Fill WBZ and the underlying Alluvial WBZ across the site, with the downward vertical gradient (potential) ranging from a low of 0.013 (wells MW-5-32 to MW-5-100) to a high of 0.4663 (wells MW-3-26 to MW-3-56). Additionally, upward hydraulic gradients were present between the upper (wells screened to 80 feet bgs) and intermediate Alluvial WBZ (wells screened 80 to 125 feet bgs) and the intermediate and lower Alluvial WBZ (wells screened lower than 125 feet bgs) as deemed representative at the following well locations:

Upper and Intermediate Alluvial WBZ

- MW-2-61 and MW-2-104: -0.00023

Intermediate and Lower Alluvial WBZ

- MW-21-115 and MW-21-165: -0.0012

The preceding groundwater elevation data and gradient calculations indicate that groundwater flow direction, as well as horizontal and vertical gradients measured during the third and fourth quarter 2009 monitoring events, were similar to previous flow directions and gradients measured at the site (Tables 1 and 2).

2.2 Groundwater Sample Collection

NW Natural's third quarter 2009 groundwater monitoring event at the Gasco and the adjacent Siltronic property was initiated on August 5, 2009 and was completed on August 20, 2009. Fifty-five wells were sampled during the third quarter 2009 monitoring event. The fourth quarter 2009 groundwater monitoring event was initiated on December 4, 2009 and was completed on the same day. The fourth quarter event consisted of groundwater elevation and DNAPL thickness measurements on the Gasco property and at select locations on the Siltronic property. Field forms documenting the third and fourth quarter 2009 groundwater monitoring events are included within Appendix B. All groundwater sampling activities were completed in

accordance with the DEQ-approved Groundwater Monitoring Program dated March 25, 2009.

Low-flow purging at the Gasco and Siltronic properties was conducted for the collection of a majority of samples as per procedures described within a September 2003 Standard Operating Procedure document, approved by the DEQ in correspondence dated September 17, 2003 for implementation at the Gasco site. In instances where greater than acceptable drawdown occurred during purging (based on low-flow protocols), then standard purge volumes and stabilization protocols were followed (e.g. 3 to 5 well volume purging). During the third quarter 2009, standard purging was conducted at the Gasco property at monitoring wells with DNAPL at the base of the well, which include MW-10-25, MW-11-32, MW-16-45, and MW-18-30 in an effort to avoid DNAPL incorporation into sample containers and to prevent damage from DNAPL contact to the in-line water quality meter used for low flow protocols.

Low-flow purging procedures are designed to minimize turbidity and suspended solids in samples allowing for collection of representative samples. During the third and fourth quarter 2009 sampling events, the Waterra Hydrolift inertia pump was used for monitoring well purging and groundwater sample collection according to the approved *Groundwater Monitoring Program* letter to the DEQ, dated June 1, 2007. The pump operates with dedicated polyethylene tubing and a stainless steel check valve positioned within the screened interval of the monitoring well. By implementing the Waterra pumping system with dedicated tubing and check valve, cross contamination is eliminated with regard to the potential for incomplete decontamination.

Stabilization parameter measurements were collected during low flow purging and sampling with use of a flow-through cell and an in-line multi-probe meter, at approximate 3 to 5 minute intervals. Water levels within each well were also measured during the purging process to monitor drawdown. Purging continued until all parameters achieved the minimum stability criteria for three consecutive measurements, which were achieved at all well locations. Parameter measurements recorded during purging were: time, purge volume, water level, temperature, specific conductivity, dissolved oxygen (DO), pH, oxygen reduction potential (ORP), and turbidity. Stabilization criteria are established as readings within 10% for DO and

turbidity; within 3% for conductivity; within 0.1 pH units; and within 10 millivolts for ORP. At those locations where drawdown prevented appropriate low-flow sampling, purging continued until between 3 and 5 casing volumes of water were removed and parameters were stable. In cases where wells were purged to dryness, samples were collected as soon as sufficient recharge occurred.

Maul Foster and Alongi (MFA), on behalf of Siltronic, purged the WS series wells owned by Siltronic during the third quarter groundwater monitoring event using low flow purging and sampling methods in accordance with Siltronic's DEQ-approved sampling and analysis plan (SAP). These wells include the WS-11 well cluster, WS-12 well cluster, WS-14 well cluster, and WS-21-112.

Field data sheets that document sampling activities at each monitoring well during the third and fourth quarters of 2009 are included in Appendix B.

2.3 Investigative Derived Waste (IDW) – Groundwater Monitoring

The Gasco and Sitronic (NWN-series wells) purge water generated from the third quarter 2009 sampling events was placed into a 625-gallon AST then processed through the on site granular activated carbon system (GAC) and discharged under permit to City of Portland sanitary sewer, with the exception of groundwater monitoring wells located within the spent trichloroethene (TCE) contaminated media management area (CMMA). Purge water generated from wells located within or very near the spent TCE CMMA was placed into the on site spent TCE CMMA water management area consisting of a 625-gallon above ground storage tank (AST) with secondary containment, pending characterization and completion of a waste determination. Purge water from wells managed in this manner include the MW-5 well cluster, the MW-19 well cluster, and well MW-20-120. Waste determination activities for the segregated water from the spent TCE CMMA have been completed and DEQ permission was granted to process the purge water through the GAC, as documented in correspondence dated December 29, 2009. Purge water disposal activities from the third quarter 2009 event are currently complete. No IDW was generated during the fourth quarter 2009 activities.

Purge water generated from the sampling of the WS-11 well cluster, WS-12 well cluster, WS-14 well clusters, and from well WS-21-112 at the Siltronic

property during the third quarter 2009 was managed by MFA on behalf of Siltronic.

2.4 Chemical Analyses of Groundwater Samples

All groundwater samples collected as part of the third quarter monitoring event were shipped to APEX Laboratories in Tigard, Oregon. All samples were analyzed in accordance with specifications provided in the approved groundwater monitoring plan.

Historical analytical results from the Siltronic and Gasco site monitoring well networks, including validated results of the third quarter 2009 monitoring event, are summarized for the Gasco property in Tables 3a through 3f and for the Siltronic property as Tables 4a through 4f. The laboratory reports and chain-of-custody documentation for the third quarter monitoring events are included (CD format) in Appendix C.

Laboratory results underwent an independent review and validation by Validata Chemical Services, Inc. of Duluth, Georgia. Data were examined to determine usability of the analytical results and compliance relative to the general requirements specified in the published analytical methods. Validation was also completed in accordance with guidance from the U.S. EPA Contracts Laboratory Program National Functional Guidelines for Organic Data Review (EPA-540-R-99-008) and Inorganic Data Review (EPA-540-R-94-013). Validation Reports are included on the same CDs containing the laboratory analytical reports (Appendix C).

Qualifier codes as assigned during the validation, have been placed on the data summary tables (Tables 3a through 3f and Tables 4a through 4f) to enable the user to assess the qualitative and quantitative reliability of any result.

Graphs showing benzene and total polynuclear aromatic hydrocarbon (PAH) concentrations in groundwater through time at all well locations sampled are included in Appendices D and E, respectively.

As depicted on the tables and in the concentration charts, third quarter 2009 groundwater analytical data were generally consistent with previously identified results.

3.0 FREE PRODUCT RECOVERY SYSTEM

As described in the January 2001 DNAPL Recovery System Report, DNAPL recovery via a pneumatic pump system was initiated at well MW-6-32 in August 2000. From August 10, 2000 through May 9, 2001, the DNAPL recovery system was set to cycle on every 8 hours for 5 minutes of pumping, at an approximate pumping rate of between 0.05 and 0.1 gallon per minute (head dependent). Due to several problems with clogs within the product line, a screen was placed over the pump intake on April 27, 2001. This screen is meant to prevent large particulates or clumps of more viscous DNAPL from entering the pump and tubing, thereby preventing the future occurrence of clogging. At the time of screen placement, approximately 7 feet of DNAPL were measured within the base of the well, consistent with historical DNAPL thicknesses (Figure 11). Subsequent pump removal and repairs have been conducted in February and December 2005, at which time DNAPL thicknesses of approximately 2 feet (February) and 13 feet (December) were measured. Variations in product thickness may be attributable to the timing of the measurement relative to the most recent pumping cycle.

A decrease in recovery rate was noted subsequent to the April 27, 2001 screen installation, with the new recovery rate measured at approximately 0.025 gallons per minute (gpm). Based on the preceding, in May 2001 the pumping cycle duration was re-set for 10 minutes, with recovery of product found to occur throughout the entire cycle duration. Due to the slower pumping rate, and due to the observed DNAPL recovery for the duration of each cycle, on May 9, 2001 the number of cycles per day was increased from 3 (every 8 hours) to 6 (every 4 hours). In October 2003, the number of cycles a day was further increased to 12 (every 2 hours) in an effort to increase an observed decline in recovery rates. However, due to a significant increase in gas usage with no corresponding increase in DNAPL recovery, the number of cycles per day was dropped back to 6 in May 2005.

DNAPL was discovered in surficial fill well MW-13-30 in 2007, with approximately 6 feet of product present. Well MW-13-30 is located near well MW-6-32, were active recovery had occurred since 2001. Periodic manual removal of DNAPL occurred at this well location until December 2009 at which time the MW-6-32 extraction system was upgraded and expanded to the MW-13-30 location. DNAPL from MW-13-30 is extracted using a similar

pump and controller as established at MW-6-32, and is plumbed to the same above ground storage tank for containment pending collection and recycling.

Prior to December 2009, the MW-6-32 DNAPL recovery system operated on nitrogen gas, however since December 2009 both DNAPL recovery stations (MW-6-32 and MW-13-30) operate using compressed air and a solar power energy source to maintain battery charge and strength.

Both the MW-6-32 and MW-13-30 systems currently receive weekly inspections to ensure the optimal pumping cycles and times are maintained to yield volume of DNAPL recovered. DNAPL recovery volume is determined during each routine check of the recovery systems by physically measuring the depth of liquid in the product storage tank with the use of a calibrated (in gallons) gauging staff. As of December 29, 2009, and as summarized on Table 5, an estimated 1,408 gallons of DNAPL have been recovered to date. Table 5 provides a summary of pump settings and volume of DNAPL recovered through time. A chart depicting cumulative product recovery from these wells is included as Figure 12.

4.0 FREE PRODUCT MEASURMENT IN EXISTING WELLS

In addition to the above-described DNAPL recovery activities, an evaluation to ascertain the presence or absence of light or dense free phase liquid product within all wells at the Gasco site and all NW Natural wells at the Siltronic site was completed during the third and fourth quarter groundwater monitoring events. The evaluation for light non-aqueous phase liquid (LNAPL) and for DNAPL was conducted by lowering a Waterra HS-1 Hydrocarbon Interface Sensor probe to the base of each well. The probe emits a steady signal upon encountering petroleum hydrocarbon product.

Results of the above-described monitoring for the August 5, 2009 event at the Gasco property indicated the presence of DNAPL in well MW-11-32 (1.0 feet), MW-16-45 (7.0 feet), and MW-18-30 (1.4 feet). A field measurement error at the MW-10-25 was identified during the third quarter 2009 and therefore the DNAPL thickness measurement from that location is not included in this report. No Product (DNAPL or LNAPL) has been identified within other wells at the Gasco site during the third quarter 2009 event, with the understanding that DNAPL evaluation of wells MW-6-32, MW-13-30, PW-01 (all with known DNAPL presence) and wells PW-03-85 and PW-03-

118 (DNAPL presence unknown), was not possible during the third quarter 2009 due to the lack of physical access to the base of these wells because of pump or plumbing placement.

The December 4, 2009 event at the Gasco property indicated the presence of DNAPL in well MW-10-25 (1.4 feet), MW-11-32 (1.0 feet), MW-16-45 (8.0 feet), and MW-18-30 (0.5 feet). No Product (DNAPL or LNAPL) has been identified within other wells at the Gasco site during the fourth quarter 2009 event, with the understanding that DNAPL evaluation of wells MW-6-32, MW-13-30, PW-01 (all with known DNAPL presence) and wells PW-03-85 and PW-03-118 (DNAPL presence unknown), was not possible during the fourth quarter 2009 due to the lack of physical access to the base of these wells because of pump or plumbing placement.

Thickness of DNAPL through time in groundwater monitoring wells is depicted in Figure 11.

Additionally, during the third and fourth quarter of 2009 LNAPL and DNAPL presence or absence was investigated by HAI on the Siltronic property at the NWN series wells, the WS-8 well cluster, and monitoring well WS-9-34. No LNAPL or DNAPL was identified at any of these monitoring well locations during the third and fourth quarters of 2009.

5.0 CURRENT MONITORING SCHEDULE

Routine environmental monitoring activities will continue during the first and second quarters of 2010 in accordance with the groundwater monitoring plan dated February 8, 2010 and verbally approved by the DEQ during a February 19, 2010 teleconference (Dana Bayuk to Rob Ede).

The first quarter 2010 monitoring event (completed in February and March) consisted of a groundwater elevation survey, DNAPL thickness measurements, and groundwater sample collection from the entire network of wells on the Gasco property and from select wells on the Siltronic property. The second quarter 2010 monitoring event will consist of a groundwater elevation survey and DNAPL thickness measurements on the Gasco and Siltronic properties, as well as the sampling of newly-installed monitoring wells (four consecutive quarters) for establishment of baseline water quality conditions.

6.0 LIMITATIONS AND SIGNATURES

The information presented in this report was collected, analyzed, and interpreted following the standards of care, skill, and diligence ordinarily provided by a professional in the performance of similar services as of the time the services were performed. This report and the conclusions and/or recommendations contained in it are based solely upon research and/or observations, and physical sampling and analytical activities, if any, that were conducted at the Client's request.

The information presented in this report is based only upon activities witnessed by HAI or its contractors, and/or upon information provided to HAI by the Client and/or its contractors. The analytical data presented in this report, if any, document only the concentrations of the target analytes in the particular sample, and not the property as a whole.

Unless otherwise specified in writing, this report has been prepared solely for the use by the Client and for use only in connection with the evaluation of the subject property. Any other use by the Client or any use by any other person shall be at the user's sole risk, and HAI shall have neither liability nor responsibility with respect to such use.

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7.0 GLOSSARY OF ABBREVIATIONS

AST	above ground storage tank
BTEX	benzene, toluene, ethylbenzene, and xylenes
CMMA	contaminated media management area
DEQ	Oregon Department of Environmental Quality
DNAPL	dense non-aqueous phase liquid
DO	dissolved oxygen
EPA	U.S. Environmental Protection Agency
GAC	granular activated carbon
gpm	gallons per minute
HAI	Hahn and Associates, Inc.
LNAPL	light non-aqueous phase liquid
MFA	Maul Foster and Alongi
NWN	Northwest Natural
ORP	oxygen reduction potential
PAHs	polynuclear aromatic hydrocarbons
SAP	Sampling and Analysis Plan
TCE	trichloroethene
WBZ	water-bearing zone
WRD	Water Resource Department

TABLES

TABLE 1 - Summary of Water Level Measurements - Gasco Property

Elevation of Top of Casing

Date of Elevation Survey	Elevation of Top of Casing (feet msl)*														
	MW-1-22	MW-1-55	MW-1-82	MW-2-32	MW-2-61	MW-2-104	MW-3-26	MW-3-56	MW-4-35	MW-4-57	MW-4-101	MW-5-32	MW-5-100	MW-5-175	MW-6-32
7-Dec-95	34.75	-	-	34.46	34.41	-	34.11	34.07	34.54	34.53	34.36	27.83	27.31	27.19	35.51
20-Feb-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-Aug-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-Aug-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22-May-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8-Aug-07	-	35.75	36.08	-	-	34.92	-	-	-	-	-	-	-	-	-

Measured Water Level

Date Measured	Measured Water Level (feet btc)														
	MW-1-22	MW-1-55	MW-1-82	MW-2-32	MW-2-61	MW-2-104	MW-3-26	MW-3-56	MW-4-35	MW-4-57	MW-4-101	MW-5-32	MW-5-100	MW-5-175	MW-6-32
5-Dec-95	14.15	-	-	15.23	-	-	15.58	15.79	16.12	16.39	-	9.46	-	-	16.71
5-Jan-96	14.47	-	-	20.04	-	-	19.47	21.85	22.47	22.38	-	15.57	-	-	14.84
12-Feb-96	7.74	-	-	8.61	-	-	8.52	8.63	9.09	9.10	-	2.41	-	-	9.55
18-Mar-96	12.44	-	-	18.03	-	-	17.87	19.66	20.24	20.21	-	13.37	-	-	12.10
16-Apr-96	13.65	-	-	18.83	-	-	18.13	19.47	20.26	20.07	-	13.36	-	-	13.42
10-May-96	13.75	-	-	19.47	-	-	18.98	22.01	22.58	22.60	-	15.78	-	-	13.30
17-Jun-96	13.88	-	-	17.40	-	-	17.40	18.21	18.61	18.73	-	11.96	-	-	13.40
16-Jul-96	15.51	-	-	20.71	-	-	20.07	24.41	24.30	24.93	-	17.91	-	-	14.60
21-Aug-96	16.51	-	-	21.80	-	-	22.24	26.99	26.77	27.51	-	20.46	-	-	16.17
17-Sep-96	17.06	-	-	22.06	-	-	20.61	28.02	27.15	28.53	-	21.27	-	-	16.94
30-Sep-96	17.17	-	-	22.24	-	-	23.32	27.04	27.46	27.61	-	20.68	-	-	17.08
15-Nov-96	16.38	-	-	22.02	-	-	20.76	26.48	26.85	27.00	-	19.84	-	-	17.00
24-Feb-97	12.41	-	-	18.71	-	-	18.61	20.48	20.82	21.02	-	14.17	-	-	12.83
10-Jun-97	12.89	-	-	14.23	-	-	13.80	14.20	14.70	14.56	-	7.97	-	-	13.81
26-Aug-97	15.38	-	-	21.70	-	-	22.61	26.10	26.56	25.84	-	19.63	-	-	18.53
25-Nov-97	14.42	-	-	21.50	-	-	19.25	24.64	25.14	24.80	-	18.23	-	-	16.29
19-Dec-97	-	-	-	-	-	-	-	22.75	-	23.28	-	-	-	-	-
16-Feb-98	12.60	-	-	20.13	-	-	18.65	23.55	23.25	24.10	-	17.09	-	-	14.29
1-Jun-98	14.49	-	-	16.97	-	-	16.61	16.51	16.90	17.00	-	10.33	-	-	15.75
25-Aug-98	17.62	-	-	22.74	-	-	23.68	27.79	27.32	28.36	-	21.14	-	-	17.73
16-Nov-98	18.42	-	-	24.59	28.36	-	22.20	27.57	27.32	28.10	28.29	20.99	21.19	21.05	18.23
15-Feb-99	11.97	-	-	19.02	23.94	-	18.27	23.20	23.94	23.71	23.75	16.75	16.72	16.54	12.35
11-May-99	14.32	-	-	20.19	22.99	-	18.76	22.44	22.92	22.99	22.94	16.06	15.87	15.68	13.41
20-Aug-99	17.37	-	-	22.16	26.95	-	21.92	26.31	25.98	26.81	26.87	19.73	19.80	19.62	19.80
25-Oct-99	18.48	-	-	24.73	28.77	-	24.40	28.05	28.02	28.49	28.44	21.56	21.36	21.11	19.00
27-Mar-00	12.88	-	-	20.09	26.94	-	19.24	26.27	25.69	26.80	26.91	19.36	19.83	19.64	14.05
15-Jun-00	16.26	-	-	21.18	24.08	-	20.01	23.56	24.42	24.14	24.10	17.40	17.07	16.86	16.05
4-Oct-00	18.15	-	-	23.24	28.92	-	22.12	28.42	28.02	28.95	28.92	21.93	21.88	21.69	-
20-Dec-00	17.98	-	-	22.73	27.13	-	19.50	26.89	26.13	27.27	26.76	20.33	19.63	19.31	-
27-Mar-01	16.91	-	-	21.94	28.05	-	20.86	27.35	27.01	27.91	28.10	20.66	21.05	20.88	-
28-Jun-01	18.02	-	-	23.49	28.58	-	24.14	28.11	27.51	28.52	28.25	21.59	21.23	20.97	-

Note: bbm = below bench mark msl = mean sea level
btc = below top of casing
* = City of Portland Datum
[1] Well casing raised in January 2000. Pre-2000 top of casing elevations are: MW-15-50 (35.15 feet); MW-15-66 (35.36 feet)
[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum:
December 1995 to December 1997. Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[3] Willamette River, Portland Harbor Stage, measured directly from surveyed benchmark on north east end of the Dolphin Dock adjacent to MW-4 well cluster

TABLE 1 - Summary of Water Level Measurements - Gasco Property

Elevation of Top of Casing

Date of Elevation Survey	Elevation of Top of Casing (feet msl)*													
	MW-6-61	MW-8-29	MW-8-56	MW-9-29	MW-10-25	MW-10-61	MW-11-32	MW-12-36	MW-13-30	MW-13-61	MW-13-60R	MW-14-110	MW-15-50	MW-15-66
7-Dec-95	34.50	39.09	39.13	37.65	39.22	39.33	38.39	38.69	-	-	-	37.41	35.97[1]	36.06[1]
20-Feb-01	-	-	-	-	-	-	-	-	34.86	34.78	-	-	-	-
30-Aug-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-Aug-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22-May-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8-Aug-07	-	-	-	-	-	-	-	-	-	-	35.38	-	-	-

Measured Water Level

Date Measured	Measured Water Level (feet btc)													
	MW-6-61	MW-8-29	MW-8-56	MW-9-29	MW-10-25	MW-10-61	MW-11-32	MW-12-36	MW-13-30	MW-13-61	MW-13-60R	MW-14-110	MW-15-50	MW-15-66
5-Dec-95	15.77	19.75	20.61	6.20	14.98	13.42	12.69	9.37	-	-	-	-	-	-
5-Jan-96	21.58	19.01	26.74	7.33	15.20	16.32	12.19	10.82	-	-	-	-	-	-
12-Feb-96	8.97	16.99	13.56	3.32	11.11	8.92	8.95	5.27	-	-	-	-	-	-
18-Mar-96	19.39	15.22	24.54	6.13	11.95	14.47	9.42	9.01	-	-	-	-	-	-
16-Apr-96	19.51	15.58	24.44	6.93	12.63	15.07	10.12	9.69	-	-	-	-	-	-
10-May-96	21.55	15.77	26.93	6.94	12.98	15.90	10.40	10.24	-	-	-	-	-	-
17-Jun-96	18.13	16.00	23.15	5.03	13.51	13.96	10.90	9.98	-	-	-	-	-	-
16-Jul-96	23.55	17.26	29.05	6.65	15.90	17.21	11.93	12.43	-	-	-	-	-	-
21-Aug-96	26.27	19.18	31.93	8.47	16.58	19.43	13.40	14.53	-	-	-	-	-	-
17-Sep-96	26.81	20.13	32.63	7.52	16.80	19.30	14.02	14.86	-	-	-	-	-	-
30-Sep-96	27.01	20.19	32.45	8.70	16.89	19.84	14.26	14.97	-	-	-	-	-	-
15-Nov-96	25.71	20.63	31.37	6.61	16.42	18.38	14.20	13.85	-	-	-	-	-	-
24-Feb-97	19.79	18.43	25.33	4.35	14.85	14.33	11.18	9.71	-	-	-	-	-	-
10-Jun-97	14.61	18.56	19.25	4.84	16.01	12.20	12.50	8.49	-	-	-	-	-	-
26-Aug-97	25.58	20.31	31.13	11.71	17.10	20.16	14.30	14.13	-	-	-	-	-	-
25-Nov-97	24.33	20.85	29.85	7.85	16.36	17.89	13.88	11.79	-	-	-	-	-	-
19-Dec-97	22.62	-	27.90	-	-	16.90	-	-	-	23.71	-	-	-	-
16-Feb-98	-	20.05	28.50	5.33	15.60	15.89	12.02	9.72	14.73	23.98	-	-	-	-
1-Jun-98	-	20.05	21.63	7.25	14.63	14.36	12.85	9.83	15.69	17.11	-	-	-	-
25-Aug-98	-	20.89	32.46	12.67	14.32	21.19	14.29	14.97	17.56	28.22	-	-	-	-
16-Nov-98	-	21.19	32.13	12.10	14.30	20.81	14.45	14.92	17.78	28.11	-	24.84	-	-
15-Feb-99	-	17.66	27.97	5.11	12.41	15.34	10.03	9.51	13.04	23.62	-	20.35	-	-
11-May-99	-	16.56	27.31	8.50	15.82	16.94	10.82	11.11	14.03	22.91	-	20.62	-	-
20-Aug-99	-	19.65	31.04	12.04	15.00	20.46	14.25	14.40	17.18	26.81	-	23.93	15.05	15.37
25-Oct-99	-	20.83	32.78	13.86	16.40	22.15	15.60	16.51	18.52	28.63	-	25.68	16.92	17.28
27-Mar-00	-	19.43	31.08	6.25	17.70	17.32	12.90	11.65	14.45	26.71	-	23.11	14.05	14.68
15-Jun-00	-	19.53	28.42	10.15	14.74	18.55	13.36	13.11	15.82	24.10	-	22.02	14.14	14.96
4-Oct-00	-	20.31	33.46	13.67	14.09	22.31	14.15	16.85	17.32	28.98	-	26.31	17.81	18.66
20-Dec-00	-	19.24	32.12	12.22	13.02	20.20	13.09	15.17	16.70	27.70	-	26.05	16.25	17.08
27-Mar-01	-	19.19	32.07	11.91	13.74	20.85	13.63	14.96	16.81	27.86	-	25.24	16.40	17.23
28-Jun-01	-	21.14	33.04	13.31	17.27	22.92	15.25	16.06	18.06	28.72	-	25.88	17.32	18.11

Note: bbm = below bench mark msl = mean sea level
btc = below top of casing
* = City of Portland Datum
[1] Well casing raised in January 2000. Pre-2000 top of casing elevations are: MW-15-50 (35.15 feet); MW-15-66 (35.36 feet)
[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum: December 1995 to December 1997. Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[3] Willamette River, Portland Harbor Stage, measured directly from surveyed benchmark on north east end of the Dolphin Dock adjacent to MW-4 well cluster

TABLE 1 - Summary of Water Level Measurements - Gasco Property

Elevation of Top of Casing

Date of Elevation Survey	Elevation of Top of Casing (feet msl)*															River Benchmark (feet msl) [2]	River Benchmark (feet msl) [3]
	MW-16-45	MW-16-65	MW-16-125	MW-17-79	MW-18-30	MW-18-180	MW-19-22	MW-19-125	MW-19-180	MW-20-120	MW-21-12	MW-21-75	MW-21-115	MW-21-165	PW-01-80		
7-Dec-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32.12	31.30
20-Feb-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-Aug-04	33.12	33.11	32.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-Aug-05	-	-	-	34.83	-	-	-	-	-	-	-	-	-	-	31.80	-	-
22-May-07	-	-	-	-	31.66	31.7	27.4	27.2	27.28	25.63	-	-	-	-	-	-	-
8-Aug-07	-	-	-	-	-	-	-	-	-	-	23.29	23.13	23.47	23.19	-	-	-

Measured Water Level

Date Measured	Measured Water Level (feet btc)															River Level (feet bbm)	River Level (feet bbm)
	MW-16-45	MW-16-65	MW-16-125	MW-17-79	MW-18-30	MW-18-180	MW-19-22	MW-19-125	MW-19-180	MW-20-120	MW-21-12	MW-21-75	MW-21-115	MW-21-165	PW-01-80		
5-Dec-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-Jan-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12-Feb-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18-Mar-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16-Apr-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10-May-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17-Jun-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16-Jul-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21-Aug-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17-Sep-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-Sep-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15-Nov-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24-Feb-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10-Jun-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26-Aug-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25-Nov-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19-Dec-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16-Feb-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.91	-
1-Jun-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.57	-
25-Aug-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.72	-
16-Nov-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.32	-
15-Feb-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.94	-
11-May-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.21	-
20-Aug-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.80	-
25-Oct-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.49	-
27-Mar-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.30	-
15-Jun-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.70	-
4-Oct-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.00	-
20-Dec-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.00	-
27-Mar-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.70	-
28-Jun-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.01	-

Note: bbm = below bench mark msl = mean sea level
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* = City of Portland Datum
[1] Well casing raised in January 2000. Pre-2000 top of casing elevations are: MW-15-50 (35.15 feet); MW-15-66 (35.36 feet)
[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum: December 1995 to December 1997. Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[3] Willamette River, Portland Harbor Stage, measured directly from surveyed benchmark on north east end of the Dolphin Dock adjacent to MW-4 well cluster

TABLE 1 - Summary of Water Level Measurements - Gasco Property

Measured Water Level

Date Measured	Measured Water Level (feet btc)														
	MW-1-22	MW-1-55	MW-1-82	MW-2-32	MW-2-61	MW-2-104	MW-3-26	MW-3-56	MW-4-35	MW-4-57	MW-4-101	MW-5-32	MW-5-100	MW-5-175	MW-6-32
8-Oct-01	19.24	-	-	26.16	29.85	-	25.45	29.10	29.05	29.68	28.72	22.67	22.60	22.45	-
12-Dec-01	16.73	-	-	22.68	26.54	-	20.49	25.81	24.12	26.33	26.46	19.01	19.41	19.21	-
2-Apr-02	14.98	-	-	20.47	25.78	-	20.61	25.33	26.38	25.84	25.59	18.71	18.56	18.34	-
10-Jul-02	17.18	-	-	21.78	25.31	-	21.42	24.69	25.12	25.22	25.13	18.28	18.10	17.92	-
29-Sep-02	18.44	-	-	24.95	29.44	-	24.73	28.65	28.25	29.27	29.44	22.14	22.41	22.23	-
17-Dec-02	19.34	-	-	24.41	24.61	-	20.25	25.05	23.61	25.42	25.06	18.92	18.02	17.99	-
17-Mar-03	14.90	-	-	20.71	24.92	-	19.79	24.35	24.38	24.91	24.91	17.82	17.87	17.67	-
2-Jun-03	15.17	-	-	20.02	21.63	-	20.25	21.19	21.82	21.75	21.50	15.04	14.50	14.29	-
29-Sep-03	18.45	-	-	25.09	28.56	-	24.63	27.36	28.24	27.86	27.49	21.03	20.55	20.35	-
29-Dec-03	16.52	-	-	23.03	25.72	-	19.41	24.96	22.64	25.46	25.43	18.32	18.39	18.21	-
29-Mar-04	15.33	-	-	21.25	27.30	-	20.45	26.83	26.38	27.34	27.25	19.95	20.19	19.99	-
11-Aug-04	18.27	-	-	24.45	28.81	-	24.61	29.13	28.30	29.52	29.48	22.36	22.24	21.95	-
20-Dec-04	18.21	-	-	24.40	25.95	-	22.20	25.80	25.69	26.31	26.12	19.10	19.03	18.80	-
28-Mar-05	16.96	-	-	23.17	24.86	-	19.85	24.72	23.94	25.19	25.00	18.39	17.97	17.17	-
20-Jun-05	16.68	-	-	21.90	27.59	-	22.27	26.85	26.56	27.33	27.40	20.25	20.39	20.20	-
16-Sep-05	18.17	-	-	25.34	30.78	-	24.85	29.81	28.94	30.51	30.85	23.12	23.74	23.58	-
7-Dec-05	16.31	-	-	22.31	27.12	-	20.61	26.63	26.06	27.20	27.24	19.67	20.08	19.88	-
27-Mar-06	15.00	-	-	20.92	27.01	-	19.82	26.74	26.25	26.25	25.70	19.68	19.74	19.46	-
19-Jun-06	16.60	-	-	20.25	22.62	-	19.26	22.06	22.10	22.62	22.51	15.71	15.48	15.33	-
11-Oct-06	18.61	-	-	25.50	28.50	-	24.61	27.89	28.33	28.35	28.10	21.40	21.03	20.80	-
21-Mar-07	15.37	-	-	22.90	20.54	-	19.49	22.44	23.63	22.95	22.71	16.15	15.74	15.47	-
7-May-07	16.05	-	-	21.09	24.05	-	20.30	23.55	24.03	24.17	24.06	17.17	17.00	16.82	-
21-Jun-07	17.00	-	-	22.04	27.02	-	21.78	26.45	26.06	26.84	26.79	19.72	19.69	19.51	-
6-Sep-07	18.30	30.40	30.56	25.52	28.39	29.26	24.61	28.54	28.43	28.98	28.65	22.70	22.54	22.28	-
17-Apr-08	15.54	28.26	28.55	21.24	26.89	27.30	20.10	26.30	26.61	26.71	26.76	19.30	19.65	19.45	-
9-Sep-08	18.02	31.75	32.04	25.51	30.36	30.85	24.40	29.71	28.56	30.10	30.02	22.90	23.05	22.81	-
4-Dec-08	18.12	29.19	29.43	25.10	27.83	28.30	23.23	27.52	27.61	28.13	27.65	21.10	20.60	20.40	-
25-Mar-09	16.59	29.10	29.40	21.85	27.72	28.15	20.15	26.94	26.81	27.44	27.60	19.86	20.57	20.32	-
3-Jun-09	16.95	-	23.32	20.31	21.65	22.11	19.78	21.16	21.56	21.60	21.45	14.81	14.42	14.25	-
5-Aug-09	17.97	28.73	31.55	24.78	29.60	30.00	23.81	28.65	27.69	28.91	29.00	22.30	21.70	22.10	-
4-Dec-09	17.97	29.50	29.87	24.78	28.20	28.70	-	27.30	26.80	27.40	27.40	20.00	20.40	20.75	-

Note: bbm = below bench mark msl = mean sea level
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[1] Well casing raised in January 2000. Pre-2000 top of casing elevations are: MW-15-50 (35.15 feet); MW-15-66 (35.36 feet)
[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum:
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TABLE 1 - Summary of Water Level Measurements - Gasco Property

Measured Water Level

Date Measured	Measured Water Level (feet btc)													
	MW-6-61	MW-8-29	MW-8-56	MW-9-29	MW-10-25	MW-10-61	MW-11-32	MW-12-36	MW-13-30	MW-13-61	MW-13-60R	MW-14-110	MW-15-50	MW-15-66
8-Oct-01	-	21.99	34.11	15.50	18.28	23.89	17.10	18.45	19.41	29.78	-	27.51	19.41	20.19
12-Dec-01	-	21.58	30.43	9.71	16.50	19.00	16.00	13.67	17.89	26.34	-	23.66	15.05	15.86
2-Apr-02	-	20.24	30.61	7.99	16.77	18.46	13.16	12.48	15.35	25.85	-	23.59	14.56	15.42
10-Jul-02	-	20.43	29.73	11.61	16.20	19.92	14.00	13.98	17.09	25.31	-	23.29	15.91	15.22
29-Sep-02	-	21.41	33.35	14.27	-	22.83	-	17.42	18.63	29.15	-	26.55	18.34	19.11
17-Dec-02	-	21.79	31.16	12.93	16.20	20.80	17.30	16.05	19.02	25.75	-	24.11	16.20	16.86
17-Mar-03	-	20.69	29.51	6.87	16.40	17.05	13.50	17.47	15.92	24.92	-	22.22	13.50	14.31
2-Jun-03	-	20.15	26.30	9.45	16.60	17.39	13.60	12.22	15.71	21.80	-	20.47	13.08	13.72
29-Sep-03	-	21.43	32.82	14.66	16.10	22.78	16.60	17.62	18.58	27.86	-	26.18	18.22	18.97
29-Dec-03	-	21.08	30.12	8.38	16.50	18.35	14.90	12.60	17.72	25.56	-	23.34	14.41	15.23
29-Mar-04	-	20.28	31.91	9.10	-	19.21	-	12.76	15.93	27.45	-	24.41	14.82	15.75
11-Aug-04	-	21.34	33.84	13.90	16.50	19.50	15.60	16.72	18.40	29.80	-	26.94	17.64	18.70
20-Dec-04	-	21.56	31.11	9.55	17.23	19.26	15.52	14.31	18.42	26.45	-	24.21	15.57	16.76
28-Mar-05	-	21.40	29.75	8.02	17.15	18.45	15.45	13.48	17.92	25.21	-	23.29	14.84	15.60
20-Jun-05	-	20.90	31.41	9.42	16.92	19.21	14.50	13.68	17.79	27.41	-	24.19	15.26	16.51
16-Sep-05	-	21.56	34.22	13.04	17.63	22.31	16.02	17.00	18.47	30.25	-	26.94	18.12	19.03
7-Dec-05	-	20.90	31.53	8.44	16.07	18.76	14.33	13.68	17.44	27.08	-	24.34	15.15	16.10
27-Mar-06	-	19.30	31.53	7.49	15.05	18.00	11.40	11.60	15.40	26.32	-	23.65	13.74	14.76
19-Jun-06	-	19.58	26.87	9.82	9.80	17.38	-	11.75	16.45	22.72	-	20.58	12.95	13.05
11-Oct-06	-	20.93	33.00	14.39	16.80	22.61	15.05	17.28	19.60	-	-	26.30	17.91	18.85
21-Mar-07	-	19.70	27.51	6.64	14.11	16.45	11.35	10.34	15.57	-	-	21.12	12.87	13.46
7-May-07	-	19.70	28.45	8.16	15.48	17.35	21.10	11.93	16.15	-	-	19.31	13.11	14.14
21-Jun-07	-	20.10	31.25	10.33	16.11	19.41	13.31	13.55	-	-	27.35	23.96	14.87	15.87
6-Sep-07	-	21.03	33.92	13.01	17.08	22.09	15.03	16.34	18.46	-	29.72	26.66	17.40	18.42
17-Apr-08	-	19.88	30.90	8.05	15.31	18.14	11.86	12.05	15.85	-	27.02	23.64	14.92	13.80
9-Sep-08	-	19.95	34.65	13.22	16.94	21.60	14.79	15.85	-	-	30.45	26.57	17.05	18.19
4-Dec-08	-	21.14	33.01	11.62	16.60	20.85	14.84	15.10	-	-	-	25.57	16.38	17.49
25-Mar-09	-	20.36	31.43	8.78	15.94	18.70	13.05	12.95	-	-	-	23.97	14.49	15.59
3-Jun-09	-	19.89	26.10	9.31	15.90	17.02	13.28	11.91	-	-	-	20.18	12.61	13.45
5-Aug-09	-	20.58	32.98	12.49	16.92	21.22	14.50	15.35	-	-	-	25.39	16.52	17.55
4-Dec-09	-	20.95	31.86	10.50	16.10	19.81	14.25	14.25	-	-	-	24.65	15.54	17.60

Note: bbm = below bench mark msl = mean sea level
btc = below top of casing
* = City of Portland Datum
[1] Well casing raised in January 2000. Pre-2000 top of casing elevations are: MW-15-50 (35.15 feet); MW-15-66 (35.36 feet)
[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum:
December 1995 to December 1997. Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[3] Willamette River, Portland Harbor Stage, measured directly from surveyed benchmark on north east end of the Dolphin Dock adjacent to MW-4 well cluster

TABLE 1 - Summary of Water Level Measurements - Gasco Property

Measured Water Level

Date Measured	Measured Water Level (feet btc)															River Level	River Level
	MW-16-45	MW-16-65	MW-16-125	MW-17-79	MW-18-30	MW-18-180	MW-19-22	MW-19-125	MW-19-180	MW-20-120	MW-21-12	MW-21-75	MW-21-115	MW-21-165	PW-01-80	(feet bbm)	(feet bbm)
8-Oct-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.15	-
12-Dec-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.44	-
2-Apr-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.60	-
10-Jul-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.16	-
29-Sep-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.52	-
17-Dec-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.30	-
17-Mar-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.79	-
2-Jun-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.45	-
29-Sep-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.45	-
29-Dec-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.81	-
29-Mar-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.51	-
11-Aug-04	27.45	28.00	27.55	-	-	-	-	-	-	-	-	-	-	-	-	26.45	-
20-Dec-04	24.80	24.93	24.81	-	-	-	-	-	-	-	-	-	-	-	-	25.09	-
28-Mar-05	23.65	23.86	23.84	-	-	-	-	-	-	-	-	-	-	-	-	23.33	-
20-Jun-05	24.72	25.98	26.03	-	-	-	-	-	-	-	-	-	-	-	-	25.48	-
16-Sep-05	27.42	28.89	29.43	30.25	-	-	-	-	-	-	-	-	-	-	-	28.90	-
7-Dec-05	25.89	25.22	25.79	27.36	-	-	-	-	-	-	-	-	-	-	24.38	24.49	-
27-Mar-06	24.89	25.25	24.59	26.96	-	-	-	-	-	-	-	-	-	-	24.38	-	22.65
19-Jun-06	21.11	21.26	21.20	22.85	-	-	-	-	-	-	-	-	-	-	19.81	-	19.52
11-Oct-06	26.70	26.95	26.83	28.59	-	-	-	-	-	-	-	-	-	-	25.59	25.92	below gauge
21-Mar-07	21.82	20.46	21.50	23.44	23.31	22.20	18.34	17.71	18.50	16.10	-	-	-	-	20.39	-	20.18
7-May-07	22.36	22.65	22.67	24.31	23.10	23.50	18.95	19.05	19.38	17.41	-	-	-	-	21.36	-	21.15
21-Jun-07	24.57	25.45	25.47	27.05	25.09	26.32	20.68	21.79	22.14	20.11	-	-	-	-	24.23	-	23.75
6-Sep-07	27.36	27.62	27.24	29.19	27.45	28.20	22.37	24.41	24.66	22.85	12.47	17.32	17.56	17.14	26.14	26.85	below gauge
17-Apr-08	24.60	25.36	25.51	27.00	25.84	26.31	19.81	21.70	22.05	20.08	9.90	15.51	15.80	15.42	24.00	-	24.51
9-Sep-08	27.52	29.35	28.52	30.97	30.70	29.50	22.02	25.06	25.35	23.45	12.20	18.95	19.25	18.82	27.18	28.60	below gauge
4-Dec-08	26.61	25.86	26.28	28.30	DRY	27.08	20.08	22.66	22.93	21.00	12.11	16.40	16.65	16.31	27.32	25.55	below gauge
25-Mar-09	25.05	26.02	26.25	27.84	25.45	27.16	19.22	22.57	22.91	20.89	10.82	16.25	16.51	16.20	25.12	25.72	below gauge
3-Jun-09	19.80	20.20	20.10	21.89	22.60	21.00	16.85	16.46	16.82	14.81	9.10	10.26	10.55	10.18	-	19.55	18.45
5-Aug-09	27.92	27.80	28.20	29.30	26.90	29.10	21.70	23.89	24.37	22.75	12.00	18.25	18.56	18.22	-	27.10	below gauge
4-Dec-09	25.45	26.10	26.20	27.72	25.65	27.31	19.40	22.15	22.95	20.85	11.69	16.29	17.09	16.75	25.20	25.52	24.70

Note: bbm = below bench mark msl = mean sea level
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[1] Well casing raised in January 2000. Pre-2000 top of casing elevations are: MW-15-50 (35.15 feet); MW-15-66 (35.36 feet)
[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum:
December 1995 to December 1997. Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[3] Willamette River, Portland Harbor Stage, measured directly from surveyed benchmark on north east end of the Dolphin Dock adjacent to MW-4 well cluster

TABLE 1 - Summary of Water Level Measurements - Gasco Property

Date Measured	Groundwater Elevation (feet msl)*														
	MW-1-22	MW-1-55	MW-1-82	MW-2-32	MW-2-61	MW-2-104	MW-3-26	MW-3-56	MW-4-35	MW-4-57	MW-4-101	MW-5-32	MW-5-100	MW-5-175	MW-6-32
5-Dec-95	20.60	-	-	19.23	-	-	18.53	18.28	18.42	18.14	-	18.37	-	-	18.80
5-Jan-96	20.28	-	-	14.42	-	-	14.64	12.22	12.07	12.15	-	12.26	-	-	20.67
12-Feb-96	27.01	-	-	25.85	-	-	25.59	25.44	25.45	25.43	-	25.42	-	-	25.96
18-Mar-96	22.31	-	-	16.43	-	-	16.24	14.41	14.30	14.32	-	14.46	-	-	23.41
16-Apr-96	21.10	-	-	15.63	-	-	15.98	14.60	14.28	14.46	-	14.47	-	-	22.09
10-May-96	21.00	-	-	14.99	-	-	15.13	12.06	11.96	11.93	-	12.05	-	-	22.21
17-Jun-96	20.87	-	-	17.06	-	-	16.71	15.86	15.93	15.80	-	15.87	-	-	22.11
16-Jul-96	19.24	-	-	13.75	-	-	14.04	9.66	10.24	9.60	-	9.92	-	-	20.91
21-Aug-96	18.24	-	-	12.66	-	-	11.87	7.08	7.77	7.02	-	7.37	-	-	19.34
17-Sep-96	17.69	-	-	12.40	-	-	13.50	6.05	7.39	6.00	-	6.56	-	-	18.57
30-Sep-96	17.58	-	-	12.22	-	-	10.79	7.03	7.08	6.92	-	7.15	-	-	18.43
15-Nov-96	18.37	-	-	12.44	-	-	13.35	7.59	7.69	7.53	-	7.99	-	-	18.51
24-Feb-97	22.34	-	-	15.75	-	-	15.50	13.59	13.72	13.51	-	13.66	-	-	22.68
10-Jun-97	21.86	-	-	20.23	-	-	20.31	19.87	19.84	19.97	-	19.86	-	-	21.70
26-Aug-97	19.37	-	-	12.76	-	-	11.50	7.97	7.98	8.69	-	8.20	-	-	16.98
25-Nov-97	20.33	-	-	12.96	-	-	14.86	9.43	9.40	9.73	-	9.60	-	-	19.22
19-Dec-97	-	-	-	-	-	-	-	11.32	-	11.25	-	-	-	-	-
16-Feb-98	22.15	-	-	14.33	-	-	15.46	10.52	11.29	10.43	-	10.74	-	-	21.22
1-Jun-98	20.26	-	-	17.49	-	-	17.50	17.56	17.64	17.53	-	17.50	-	-	19.76
25-Aug-98	17.13	-	-	11.72	-	-	10.43	6.28	7.22	6.17	-	6.69	-	-	17.78
16-Nov-98	16.33	-	-	9.87	6.05	-	11.91	6.50	7.22	6.43	6.07	6.84	6.12	6.14	17.28
15-Feb-99	22.78	-	-	15.44	10.47	-	15.84	10.87	10.60	10.82	10.61	11.08	10.59	10.65	23.16
11-May-99	20.43	-	-	14.27	11.42	-	15.35	11.63	11.62	11.54	11.42	11.77	11.44	11.51	22.10
20-Aug-99	17.38	-	-	12.30	7.46	-	12.19	7.76	8.56	7.72	7.49	8.10	7.51	7.57	15.71
25-Oct-99	16.27	-	-	9.73	5.64	-	9.71	6.02	6.52	6.04	5.92	6.27	5.95	6.08	16.51
27-Mar-00	21.87	-	-	14.37	7.47	-	14.87	7.80	8.85	7.73	7.45	8.47	7.48	7.55	21.46
15-Jun-00	18.49	-	-	13.28	10.33	-	14.10	10.51	10.12	10.39	10.26	10.43	10.24	10.33	19.46
4-Oct-00	16.60	-	-	11.22	5.49	-	11.99	5.65	6.52	5.58	5.44	5.90	5.43	5.50	-
20-Dec-00	16.77	-	-	11.73	7.28	-	14.61	7.18	8.41	7.26	7.60	7.50	7.68	7.88	-
27-Mar-01	17.84	-	-	12.52	6.36	-	13.25	6.72	7.53	6.62	6.26	7.17	6.26	6.31	-
28-Jun-01	16.73	-	-	10.97	5.83	-	9.97	5.96	7.03	6.01	6.11	6.24	6.08	6.22	-
8-Oct-01	15.51	-	-	8.30	4.56	-	8.66	4.97	5.49	4.85	5.64	5.16	4.71	4.74	-
12-Dec-01	18.02	-	-	11.78	7.87	-	13.62	8.26	10.42	8.20	7.90	8.82	7.90	7.98	-
2-Apr-02	19.77	-	-	13.99	8.63	-	13.50	8.74	8.16	8.69	8.77	9.12	8.75	8.85	-
10-Jul-02	17.57	-	-	12.68	9.10	-	12.69	9.38	9.42	9.31	9.23	9.55	9.21	9.27	-
23-Sep-02	16.31	-	-	9.51	4.97	-	9.38	5.42	6.29	5.26	4.92	5.69	4.90	4.96	-
17-Dec-02	15.41	-	-	10.05	9.80	-	13.86	9.02	10.93	9.11	9.30	8.91	9.29	9.20	-
17-Mar-03	19.85	-	-	13.75	9.49	-	14.32	9.72	10.16	9.62	9.45	10.01	9.44	9.52	-
2-Jun-03	19.58	-	-	14.44	12.78	-	13.86	12.88	12.72	12.78	12.86	12.79	12.81	12.90	-

Note: bbm = below bench mark
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[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum: December 1995 to December 1997.
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[3] Willamette River, Portland Harbor Stage, measured directly from surveyed benchmark on north east end of the Dolphin Dock adjacent to MW-4 well cluster

TABLE 1 - Summary of Water Level Measurements - Gasco Property

Date Measured	Groundwater Elevation (feet msl)*													
	MW-6-61	MW-8-29	MW-8-56	MW-9-29	MW-10-25	MW-10-61	MW-11-32	MW-12-36	MW-13-30	MW-13-61	MW-13-61R	MW-14-110	MW-15-50	MW-15-66
5-Dec-95	18.73	19.34	18.52	31.45	24.24	25.91	25.70	29.32	-	-	-	-	-	-
5-Jan-96	12.92	20.08	12.39	30.32	24.02	23.01	26.20	27.87	-	-	-	-	-	-
12-Feb-96	25.53	22.10	25.57	34.33	28.11	30.41	29.44	33.42	-	-	-	-	-	-
18-Mar-96	15.11	23.87	14.59	31.52	27.27	24.86	28.97	29.68	-	-	-	-	-	-
16-Apr-96	14.99	23.51	14.69	30.72	26.59	24.26	28.27	29.00	-	-	-	-	-	-
10-May-96	12.95	23.32	12.20	30.71	26.24	23.43	27.99	28.45	-	-	-	-	-	-
17-Jun-96	16.37	23.09	15.98	32.62	25.71	25.37	27.49	28.71	-	-	-	-	-	-
16-Jul-96	10.95	21.83	10.08	31.00	23.32	22.12	26.46	26.26	-	-	-	-	-	-
21-Aug-96	8.23	19.91	7.20	29.18	22.64	19.90	24.99	24.16	-	-	-	-	-	-
17-Sep-96	7.69	18.96	6.50	30.13	22.42	20.03	24.37	23.83	-	-	-	-	-	-
30-Sep-96	7.49	18.90	6.68	28.95	22.33	19.49	24.13	23.72	-	-	-	-	-	-
15-Nov-96	8.79	18.46	7.76	31.04	22.80	20.95	24.19	24.84	-	-	-	-	-	-
24-Feb-97	14.71	20.66	13.80	33.30	24.37	25.00	27.21	28.98	-	-	-	-	-	-
10-Jun-97	19.89	20.53	19.88	32.81	23.21	27.13	25.89	30.20	-	-	-	-	-	-
26-Aug-97	8.92	18.78	8.00	25.94	22.12	19.17	24.09	24.56	-	-	-	-	-	-
25-Nov-97	10.17	18.24	9.28	29.80	22.86	21.44	24.51	26.90	-	-	-	-	-	-
19-Dec-97	11.88	-	11.23	-	-	22.43	-	-	-	11.07	-	-	-	-
16-Feb-98	-	19.04	10.63	32.32	23.62	23.44	26.37	28.97	20.13	10.80	-	-	-	-
1-Jun-98	-	19.04	17.50	30.40	24.59	24.97	25.54	28.86	19.17	17.67	-	-	-	-
25-Aug-98	-	18.20	6.67	24.98	24.90	18.14	24.10	23.72	17.30	6.56	-	-	-	-
16-Nov-98	-	17.90	7.00	25.55	24.92	18.52	23.94	23.77	17.08	6.67	-	12.57	-	-
15-Feb-99	-	21.43	11.16	32.54	26.81	23.99	28.36	29.18	21.82	11.16	-	17.06	-	-
11-May-99	-	22.53	11.82	29.15	23.40	22.39	27.57	27.58	20.83	11.87	-	16.79	-	-
20-Aug-99	-	19.44	8.09	25.61	24.22	18.87	24.14	24.29	17.68	7.97	-	13.48	20.10	19.99
25-Oct-99	-	18.26	6.35	23.79	22.82	17.18	22.79	22.18	16.34	6.15	-	11.73	18.23	18.08
27-Mar-00	-	19.66	8.05	31.40	21.52	22.01	25.49	27.04	20.41	8.07	-	14.30	21.92	21.38
15-Jun-00	-	19.56	10.71	27.50	24.48	20.78	25.03	25.58	19.04	10.68	-	15.39	21.83	21.10
4-Oct-00	-	18.78	5.67	23.98	25.13	17.02	24.24	21.84	17.54	5.80	-	11.10	18.16	17.40
20-Dec-00	-	19.85	7.01	25.43	26.20	19.13	25.30	23.52	18.16	7.08	-	11.36	19.72	18.98
27-Mar-01	-	19.90	7.06	25.74	25.48	18.48	24.76	23.73	18.05	6.92	-	12.17	19.57	18.83
28-Jun-01	-	17.95	6.09	24.34	21.95	16.41	23.14	22.63	16.80	6.06	-	11.53	18.65	17.95
8-Oct-01	-	17.10	5.02	22.15	20.94	15.44	21.29	20.24	15.45	5.00	-	9.90	16.56	15.87
12-Dec-01	-	17.51	8.70	27.94	22.72	20.33	22.39	25.02	16.97	8.44	-	13.75	20.92	20.20
2-Apr-02	-	18.85	8.52	29.66	22.45	20.87	25.23	26.21	19.51	8.93	-	13.82	21.41	20.64
10-Jul-02	-	18.66	9.40	26.04	23.02	19.41	24.39	24.71	17.77	9.47	-	14.12	20.06	20.84
23-Sep-02	-	17.68	5.78	23.38	-	16.50	-	21.27	16.23	5.63	-	10.86	17.63	16.95
17-Dec-02	-	17.30	7.97	24.72	23.02	18.53	21.09	22.64	15.84	9.03	-	13.30	19.77	19.20
17-Mar-03	-	18.40	9.62	30.78	22.82	22.28	24.89	21.22	18.94	9.86	-	15.19	22.47	21.75
2-Jun-03	-	18.94	12.83	28.20	22.62	21.94	24.79	26.47	19.15	12.98	-	16.94	22.89	22.34

Note: bbm = below bench mark
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msl = mean sea level
* = City of Portland Datum
[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum: December 1995 to December 1997.
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[3] Willamette River, Portland Harbor Stage, measured directly from surveyed benchmark on north east end of the Dolphin Dock adjacent to MW-4 well cluster

TABLE 1 - Summary of Water Level Measurements - Gasco Property

Date Measured	Groundwater Elevation (feet msl)*															River Stage	River Stage
	MW-16-45	MW-16-65	MW-16-125	MW-17-79	MW-18-30	MW-18-180	MW-19-22	MW-19-125	MW-19-180	MW-20-120	MW-21-12	MW-21-75	MW-21-115	MW-21-165	PW-01	(feet msl) [2]	(feet msl) [3]
5-Dec-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.90	-
5-Jan-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.43	-
12-Feb-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.43	-
18-Mar-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.41	-
16-Apr-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.53	-
10-May-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.63	-
17-Jun-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.73	-
16-Jul-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21-Aug-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.63	-
17-Sep-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.80	-
30-Sep-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.40	-
15-Nov-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.20	-
24-Feb-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.60	-
10-Jun-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.83	-
26-Aug-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.90	-
25-Nov-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.72	-
19-Dec-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16-Feb-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.21	-
1-Jun-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.55	-
25-Aug-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.40	-
16-Nov-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.80	-
15-Feb-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.18	-
11-May-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.91	-
20-Aug-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.32	-
25-Oct-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.63	-
27-Mar-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.82	-
15-Jun-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.42	-
4-Oct-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.12	-
20-Dec-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.12	-
27-Mar-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.42	-
28-Jun-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.11	-
8-Oct-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.97	-
12-Dec-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.68	-
2-Apr-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.52	-
10-Jul-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.96	-
23-Sep-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	-
17-Dec-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.82	-
17-Mar-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.33	-
2-Jun-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.67	-

Note: bbm = below bench mark msl = mean sea level
btc = below top of casing
* = City of Portland Datum
[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum: December 1995 to December 1997.
Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[3] Willamette River, Portland Harbor Stage, measured directly from surveyed benchmark on north east end of the Dolphin Dock adjacent to MW-4 well cluster

TABLE 1 - Summary of Water Level Measurements - Gasco Property

Date Measured	Groundwater Elevation (feet msl)*														
	MW-1-22	MW-1-55	MW-1-82	MW-2-32	MW-2-61	MW-2-104	MW-3-26	MW-3-56	MW-4-35	MW-4-57	MW-4-101	MW-5-32	MW-5-100	MW-5-175	MW-6-32
29-Sep-03	16.30	-	-	9.37	5.85	-	9.48	6.71	6.30	6.67	6.87	6.80	6.76	6.84	-
29-Dec-03	18.23	-	-	11.43	8.69	-	14.70	9.11	11.90	9.07	8.93	9.51	8.92	8.98	-
29-Mar-04	19.42	-	-	13.21	7.11	-	13.66	7.24	8.16	7.19	7.11	7.88	7.12	7.20	-
11-Aug-04	16.48	-	-	10.01	5.60	-	9.50	4.94	6.24	5.01	4.88	5.47	5.07	5.24	-
20-Dec-04	16.54	-	-	10.06	8.46	-	11.91	8.27	8.85	8.22	8.24	8.73	8.28	8.39	-
28-Mar-05	17.79	-	-	11.29	9.55	-	14.26	9.35	10.60	9.34	9.36	9.44	9.34	10.02	-
20-Jun-05	18.07	-	-	12.56	6.82	-	11.84	7.22	7.98	7.20	6.96	7.58	6.92	6.99	-
16-Sep-05	16.58	-	-	9.12	3.63	-	9.26	4.26	5.60	4.02	3.51	4.71	3.57	3.61	-
7-Dec-05	18.44	-	-	12.15	7.29	-	13.50	7.44	8.48	7.33	7.12	8.16	7.23	7.31	-
27-Mar-06	19.75	-	-	13.54	7.40	-	14.29	7.33	8.29	8.28	8.66	8.15	7.57	7.73	-
19-Jun-06	18.15	-	-	14.21	11.79	-	14.85	12.01	12.44	11.91	11.85	12.12	11.83	11.86	-
11-Oct-06	16.14	-	-	8.96	5.91	-	9.50	6.18	6.21	6.18	6.26	6.43	6.28	6.39	-
21-Mar-07	19.38	-	-	11.56	13.87	-	14.62	11.63	10.91	11.58	11.65	11.68	11.57	11.72	-
7-May-07	18.70	-	-	13.37	10.36	-	13.81	10.52	10.51	10.36	10.30	10.66	10.31	10.37	-
21-Jun-07	17.75	-	-	12.42	7.39	-	12.33	7.62	8.48	7.69	7.57	8.11	7.62	7.68	-
6-Sep-07	16.45	5.35	5.52	8.94	6.02	5.66	9.50	5.53	6.11	5.55	5.71	5.13	4.77	4.91	-
17-Apr-08	19.21	7.49	7.53	13.22	7.52	7.62	14.01	7.77	7.93	7.82	7.60	8.53	7.66	7.74	-
9-Sep-08	16.73	4.00	4.04	8.95	4.05	4.07	9.71	4.36	5.98	4.43	4.34	4.93	4.26	4.38	-
4-Dec-08	16.63	6.56	6.65	9.36	6.58	6.62	10.88	6.55	6.93	6.40	6.71	6.73	6.71	6.79	-
25-Mar-09	18.16	6.65	6.68	12.61	6.69	6.77	13.96	7.13	7.73	7.09	6.76	7.97	6.74	6.87	-
3-Jun-09	17.80	-	12.76	14.15	12.76	12.81	14.33	12.91	12.98	12.93	12.91	13.02	12.89	12.94	-
5-Aug-09	16.78	7.02	4.53	9.68	4.81	4.92	10.30	5.42	6.85	5.62	5.36	5.53	5.61	5.09	-
4-Dec-09	16.78	6.25	6.21	9.68	6.21	6.22	-	6.77	7.74	7.13	6.96	7.83	6.91	6.44	-

Note: bbm = below bench mark
btc = below top of casing
msl = mean sea level
* = City of Portland Datum
[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum: December 1995 to December 1997.
Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[3] Willamette River, Portland Harbor Stage, measured directly from surveyed benchmark on north east end of the Dolphin Dock adjacent to MW-4 well cluster

TABLE 1 - Summary of Water Level Measurements - Gasco Property

Date Measured	Groundwater Elevation (feet msl)*													
	MW-6-61	MW-8-29	MW-8-56	MW-9-29	MW-10-25	MW-10-61	MW-11-32	MW-12-36	MW-13-30	MW-13-61	MW-13-61R	MW-14-110	MW-15-50	MW-15-66
29-Sep-03	-	17.66	6.31	22.99	23.12	16.55	21.79	21.07	16.28	6.92	-	11.23	17.75	17.09
29-Dec-03	-	18.01	9.01	29.27	22.72	20.98	23.49	26.09	17.14	9.22	-	14.07	21.56	20.83
29-Mar-04	-	18.81	7.22	28.55	-	20.12	-	25.93	18.93	7.33	-	13.00	21.15	20.31
11-Aug-04	-	17.75	5.29	23.75	22.72	19.83	22.79	21.97	16.46	4.98	-	10.47	18.33	17.36
20-Dec-04	-	17.53	8.02	28.10	21.99	20.07	22.87	24.38	16.44	8.33	-	13.20	20.40	19.30
28-Mar-05	-	17.69	9.38	29.63	22.07	20.88	22.94	25.21	16.94	9.57	-	14.12	21.13	20.46
20-Jun-05	-	18.19	7.72	28.23	22.30	20.12	23.89	25.01	17.07	7.37	-	13.22	20.71	19.55
16-Sep-05	-	17.53	4.91	24.61	21.59	17.02	22.37	21.69	16.39	4.53	-	10.47	17.85	17.03
7-Dec-05	-	18.19	7.60	29.21	23.15	20.57	24.06	25.01	17.42	7.70	-	13.07	20.82	19.96
27-Mar-06	-	19.79	7.6	30.16	24.17	21.33	26.99	27.09	19.46	8.46	-	13.76	22.23	21.30
19-Jun-06	-	19.51	12.26	27.83	29.42	21.95	-	26.94	18.41	12.06	-	16.83	23.02	23.01
11-Oct-06	-	18.16	6.13	23.26	22.42	16.72	23.34	21.41	15.26	-	-	11.11	18.06	17.21
21-Mar-07	-	19.39	11.62	31.01	25.11	22.88	27.04	28.35	19.29	-	-	16.29	23.10	22.60
7-May-07	-	19.39	10.68	29.49	23.74	21.98	17.29	26.76	18.71	-	-	18.10	22.86	21.92
21-Jun-07	-	18.99	7.88	27.32	23.11	19.92	25.08	25.14	-	-	8.03	13.45	21.10	20.19
6-Sep-07	-	18.06	5.21	24.64	22.14	17.24	23.36	22.35	16.40	-	5.66	10.75	18.57	17.64
17-Apr-08	-	19.21	8.23	29.60	23.91	21.19	26.53	26.64	19.01	-	8.36	13.77	21.05	22.26
9-Sep-08	-	19.14	4.48	24.43	22.28	17.73	23.60	22.84	-	-	4.93	10.84	18.92	17.87
4-Dec-08	-	17.95	6.12	26.03	22.62	18.48	23.55	23.59	-	-	-	11.84	19.59	18.57
25-Mar-09	-	18.73	7.70	28.87	23.28	20.63	25.34	25.74	-	-	-	13.44	21.48	20.47
3-Jun-09	-	19.20	13.03	28.34	23.32	22.31	25.11	26.78	-	-	-	17.23	23.36	22.61
5-Aug-09	-	18.51	6.15	25.16	22.30	18.11	23.89	23.34	-	-	-	12.02	19.45	18.51
4-Dec-09	-	18.14	7.27	27.15	23.12	19.52	24.14	24.44	-	-	-	12.76	20.43	18.46

Note: bbm = below bench mark msl = mean sea level
btc = below top of casing
* = City of Portland Datum
[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum: December 1995 to December 1997.
Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[3] Willamette River, Portland Harbor Stage, measured directly from surveyed benchmark on north east end of the Dolphin Dock adjacent to MW-4 well cluster

TABLE 1 - Summary of Water Level Measurements - Gasco Property

Date Measured	Groundwater Elevation (feet msl)*															River Stage (feet msl) [2]	River Stage (feet msl) [3]
	MW-16-45	MW-16-65	MW-16-125	MW-17-79	MW-18-30	MW-18-180	MW-19-22	MW-19-125	MW-19-180	MW-20-120	MW-21-12	MW-21-75	MW-21-115	MW-21-165	PW-01		
29-Sep-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.67	-
29-Dec-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.31	-
29-Mar-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.61	-
11-Aug-04	5.67	5.11	5.34	-	-	-	-	-	-	-	-	-	-	-	-	5.67	-
20-Dec-04	8.32	8.18	8.08	-	-	-	-	-	-	-	-	-	-	-	-	7.03	-
28-Mar-05	9.47	9.25	9.05	-	-	-	-	-	-	-	-	-	-	-	-	8.79	-
20-Jun-05	8.40	7.13	6.86	-	-	-	-	-	-	-	-	-	-	-	-	6.64	-
16-Sep-05	5.70	4.22	3.46	4.58	-	-	-	-	-	-	-	-	-	-	-	3.22	-
7-Dec-05	7.23	7.89	7.10	7.47	-	-	-	-	-	-	-	-	-	-	7.42	7.63	-
27-Mar-06	8.23	7.86	8.30	7.87	-	-	-	-	-	-	-	-	-	-	7.42	-	8.65
19-Jun-06	12.01	11.85	11.69	11.98	-	-	-	-	-	-	-	-	-	-	11.99	-	11.78
11-Oct-06	6.42	6.16	6.06	6.24	-	-	-	-	-	-	-	-	-	-	6.21	6.20	below gauge
21-Mar-07	11.30	12.65	11.39	11.39	8.35	9.50	9.06	9.49	8.78	9.53	-	-	-	-	11.41	-	11.12
7-May-07	10.76	10.46	10.22	10.52	8.56	8.20	8.45	8.15	7.90	8.22	-	-	-	-	10.44	-	10.15
21-Jun-07	8.55	7.66	7.42	7.78	6.57	5.38	6.72	5.41	5.14	5.52	-	-	-	-	7.57	-	7.55
6-Sep-07	5.76	5.49	5.65	5.64	4.21	3.50	5.03	2.79	2.62	2.78	10.82	5.81	5.91	6.05	5.66	5.27	below gauge
17-Apr-08	8.52	7.75	7.38	7.83	5.82	5.39	7.59	5.50	5.23	5.55	13.39	7.62	7.67	7.77	7.80	-	6.79
9-Sep-08	5.60	3.76	4.37	3.86	0.96	2.20	5.38	2.14	1.93	2.18	11.09	4.18	4.22	4.37	4.62	3.52	below gauge
4-Dec-08	6.51	7.25	6.61	6.53	DRY	4.62	7.32	4.54	4.35	4.63	11.18	6.73	6.82	6.88	4.48	6.57	below gauge
25-Mar-09	8.07	7.09	6.64	6.99	6.21	4.54	8.18	4.63	4.37	4.74	12.47	6.88	6.96	6.99	6.68	6.40	-
3-Jun-09	13.32	12.91	12.79	12.94	9.06	10.70	10.55	10.74	10.46	10.82	14.19	12.87	12.92	13.01	-	12.57	12.85
5-Aug-09	5.20	5.31	4.69	5.53	4.76	2.60	5.70	3.31	2.91	2.88	11.29	4.88	4.91	4.97	-	5.02	-
4-Dec-09	7.67	7.01	6.69	7.11	6.01	4.39	8.00	5.05	4.33	4.78	11.60	6.84	6.38	6.44	-	6.60	6.60

Note: bbm = below bench mark
btc = below top of casing
msl = mean sea level
* = City of Portland Datum
[2] Willamette River, Portland Harbor Stage, obtained from National Weather Service and adjusted to feet msl - City of Portland datum: December 1995 to December 1997.
Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[3] Willamette River, Portland Harbor Stage, measured directly from surveyed benchmark on north east end of the Dolphin Dock adjacent to MW-4 well cluster

TABLE 1a - Summary of Water Level Measurements and Elevations-Siltronic Wells

Benchmark Elevation

Date of Elevation Survey	Elevation of Top of Casing (feet msl) *																
	WS-1-22 [2]	WS-2-22 [2]	WS-5-20 [2]	WS-8-33	WS-8-59	WS-9-34	WS-10-27 [2]	WS-11-125 [2]	WS-11-161 [2]	WS-12-125 [2]	WS-12-161 [2]	WS-13-69 [2]	WS-13-105 [2]	WS-14-125 [2]	WS-14-161 [2]	WS-15-85 [2]	WS-15-140 [2]
23-Oct-01	35.18	33.67	37.83	34.33	34.21	33.65	34.83	33.21	33.23	34.14	34.15	34.57	34.53	33.63	33.50	34.22	34.24
Post Oct-03	35.18	33.67	37.83	34.33	34.21	33.65	34.83	33.36	33.38	34.29	34.30	34.68	34.68	33.59	33.65	34.36	34.40
3-Nov-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Measured Water Level

Date Measured	Measured Water Level (feet btc)																
	WS-1-22	WS-2-22	WS-5-20	WS-8-33	WS-8-59	WS-9-34	WS-10-27	WS-11-125	WS-11-161	WS-12-125	WS-12-161	WS-13-69	WS-13-105	WS-14-125	WS-14-161	WS-15-85	WS-15-140
8-Oct-01	-	-	-	28.90	29.58	27.15	-	-	-	-	-	-	-	-	-	-	-
12-Dec-01	-	-	-	25.02	25.30	22.77	-	-	-	-	-	-	-	-	-	-	-
2-Apr-02	3.57	6.02	7.60	25.95	26.21	23.40	-	-	-	-	-	-	-	-	-	-	-
10-Jul-02	11.43	12.12	19.93	24.01	25.71	22.25	-	-	-	-	-	-	-	-	-	-	-
27-Oct-03	-	-	-	27.88	27.50	25.20	15.51	26.50	26.54	27.43	27.35	26.92	26.77	-	-	-	-
24-Nov-03	-	-	-	27.36	27.48	24.84	15.94	26.56	26.61	27.48	27.43	26.43	26.60	-	-	-	-
29-Dec-03	-	-	-	25.03	24.86	-	14.41	23.84	23.82	24.72	24.65	25.08	24.79	-	-	-	-
28-Jan-04	-	-	-	24.37	24.17	21.71	12.83	23.02	23.12	23.88	24.20	24.26	23.88	-	-	-	-
24-Feb-04	-	-	-	25.04	25.31	22.41	13.13	24.64	24.52	25.42	25.48	25.61	24.26	-	-	-	-
25-Mar-04	-	-	-	25.86	26.05	23.08	12.99	25.37	25.09	25.97	25.83	25.27	25.36	-	-	-	-
26-Apr-04	-	-	-	26.11	26.48	23.61	14.27	25.72	25.64	26.54	26.46	25.69	25.83	-	-	-	-
28-May-04	-	-	-	25.02	24.44	23.00	14.52	22.95	23.06	25.42	23.82	25.13	24.48	-	-	-	-
1-Jul-04	-	-	-	25.93	26.67	23.68	14.98	26.05	26.18	26.83	26.79	25.44	25.74	-	-	-	-
26-Jul-04	-	-	-	27.51	28.72	25.19	15.70	28.39	27.90	28.73	28.70	28.13	28.24	28.35	28.33	28.29	28.35
11-Aug-04	-	-	-	27.78	28.41	25.43	15.45	28.49	27.80	28.56	28.50	27.71	27.99	28.57	28.09	28.54	28.00
14-Oct-04	-	-	-	28.19	28.74	25.72	16.10	27.64	27.68	28.49	28.44	27.83	27.99	28.90	28.45	28.05	28.37
19-Nov-04	-	-	-	27.34	28.32	25.31	16.73	27.57	27.56	28.37	28.48	27.39	27.54	27.80	27.85	27.58	27.88
16-Dec-04	-	-	-	25.41	24.93	23.29	16.71	24.04	24.02	24.81	24.85	24.36	24.68	24.26	24.30	25.18	24.81
19-Jan-05	-	-	-	26.45	25.57	24.04	16.11	24.56	24.52	25.62	25.65	25.98	25.76	24.70	24.72	25.84	25.42
16-Feb-05	-	-	-	26.88	27.25	24.41	16.18	26.65	26.70	27.58	27.50	26.87	27.22	26.60	26.67	26.88	26.69
15-Mar-05	-	-	-	27.25	26.36	24.68	15.87	25.36	25.33	26.26	26.27	27.10	26.73	25.62	25.64	26.42	26.23
22-Apr-05	-	-	-	26.85	27.35	24.32	15.64	26.78	26.79	27.62	27.57	27.02	26.94	27.03	27.08	26.97	27.06
18-May-05	-	-	-	24.17	23.58	22.32	15.01	22.60	22.58	23.48	23.41	23.76	23.47	22.83	22.83	23.72	23.53
15-Jun-05	-	-	-	26.08	27.09	23.50	14.48	26.66	26.66	27.51	27.42	26.74	26.86	26.81	26.88	26.40	27.11
14-Jul-05	-	-	-	26.63	27.42	24.31	14.81	26.66	26.66	27.54	27.47	26.65	26.87	26.85	26.90	26.89	26.98
8-Aug-05	-	-	-	-	-	24.68	15.09	26.18	26.19	-	-	26.88	26.98	26.48	26.50	27.17	26.77

Note: btc = below top of casing msl = mean sea level

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[1] = Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.

[2] = Elevation survey conducted by Siltronic representatives - survey date is not known

TABLE 1a - Summary of Water Level Measurements and Elevations-Siltronic Wells

Benchmark Elevation

Date of Elevation Survey	Elevation of Top of Casing (feet msl) *															River Benchmark (feet msl) [1]
	WS-16-125 [2]	WS-16-161 [2]	WS-17-52 [2]	WS-17-94 [2]	WS-21-112 [2]	NWN-1-20	NWN-2-20	NWN-3-17	NWN-4-15	NWN-5-20	NWN-6-31	NWN-7-30	NWN-8-30	NWN-9-31	NWN-10-26	
23-Oct-01	34.34	34.39	35.06	35.00	35.85	-	-	-	-	-	-	-	-	-	-	32.12
Post Oct-03	34.31	34.41	35.06	33.78	34.47	-	-	-	-	-	-	-	-	-	-	32.12
3-Nov-08	-	-	-	-	-	37.27	41.39	41.47	42.69	36.87	33.18	36.1	33.87	33.79	34.37	-

Measured Water Level

Date Measured	Measured Water Level (feet btc)															River Level [1] (feet bbm)
	WS-16-125	WS-16-161	WS-17-52	WS-17-94	WS-21-112	NWN-1-20	NWN-2-20	NWN-3-17	NWN-4-15	NWN-5-20	NWN-6-31	NWN-7-30	NWN-8-30	NWN-9-31	NWN-10-26	
8-Oct-01	-	-	-	-	-	-										28.15
12-Dec-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.44
2-Apr-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.60
10-Jul-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.16
27-Oct-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24-Nov-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29-Dec-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.81
28-Jan-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24-Feb-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25-Mar-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26-Apr-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28-May-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Jul-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26-Jul-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11-Aug-04	28.90	28.80	-	-	-	-	-	-	-	-	-	-	-	-	-	26.45
14-Oct-04	29.19	28.97	27.17	28.39	-	-	-	-	-	-	-	-	-	-	-	-
19-Nov-04	28.49	28.31	22.40	27.62	-	-	-	-	-	-	-	-	-	-	-	-
16-Dec-04	24.98	24.84	21.67	25.07	-	-	-	-	-	-	-	-	-	-	-	-
19-Jan-05	25.55	25.38	21.56	26.05	-	-	-	-	-	-	-	-	-	-	-	-
16-Feb-05	27.52	27.38	21.32	27.41	-	-	-	-	-	-	-	-	-	-	-	-
15-Mar-05	26.37	26.24	21.65	27.13	-	-	-	-	-	-	-	-	-	-	-	-
22-Apr-05	27.65	27.48	21.27	26.93	-	-	-	-	-	-	-	-	-	-	-	-
18-May-05	23.69	23.41	20.14	23.71	-	-	-	-	-	-	-	-	-	-	-	-
15-Jun-05	27.53	27.34	20.35	26.78	-	-	-	-	-	-	-	-	-	-	-	-
14-Jul-05	27.50	27.36	20.44	26.98	-	-	-	-	-	-	-	-	-	-	-	-
8-Aug-05	27.15	26.98	21.20	27.16	-	-	-	-	-	-	-	-	-	-	-	-

Note: btc = below top of casing msl = mean sea level

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TABLE 1a - Summary of Water Level Measurements and Elevations-Siltronic Wells

Benchmark Elevation

Date of Elevation Survey	Elevation of Top of Casing (feet msl) *																
	WS-1-22 [2]	WS-2-22 [2]	WS-5-20 [2]	WS-8-33	WS-8-59	WS-9-34	WS-10-27 [2]	WS-11-125 [2]	WS-11-161 [2]	WS-12-125 [2]	WS-12-161 [2]	WS-13-69 [2]	WS-13-105 [2]	WS-14-125 [2]	WS-14-161 [2]	WS-15-85 [2]	WS-15-140 [2]
23-Oct-01	35.18	33.67	37.83	34.33	34.21	33.65	34.83	33.21	33.23	34.14	34.15	34.57	34.53	33.63	33.50	34.22	34.24
Post Oct-03	35.18	33.67	37.83	34.33	34.21	33.65	34.83	33.36	33.38	34.29	34.30	34.68	34.68	33.59	33.65	34.36	34.40
3-Nov-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Measured Water Level

Date Measured	Measured Water Level (feet btc)																
	WS-1-22	WS-2-22	WS-5-20	WS-8-33	WS-8-59	WS-9-34	WS-10-27	WS-11-125	WS-11-161	WS-12-125	WS-12-161	WS-13-69	WS-13-105	WS-14-125	WS-14-161	WS-15-85	WS-15-140
16-Aug-05	-	-	-	27.49	28.34	-	-	-	-	28.55	28.52	-	-	-	-	-	-
15-Sep-05	-	-	-	28.39	28.90	25.90	15.62	28.53	28.56	29.27	29.08	28.21	28.40	28.93	28.96	28.45	28.83
13-Oct-05	-	-	-	28.30	29.19	25.75	15.85	28.80	28.81	29.48	29.40	28.03	28.41	29.13	29.17	28.26	28.98
14-Nov-05	-	-	-	26.95	27.09	24.46	15.36	26.43	26.46	27.27	27.22	26.34	26.50	26.72	27.72	26.39	26.79
16-Dec-05	-	-	-	26.97	26.91	24.03	14.47	26.18	26.22	27.04	26.97	26.72	26.62	26.51	26.52	26.52	26.77
19-Dec-05	-	-	-	-	-	-	-	26.47	-	-	-	29.96	-	26.52	-	30.49	-
16-Jan-06	-	-	-	17.87	-	16.94	11.53	18.26	18.25	19.14	18.91	18.56	19.79	-	-	-	18.16
14-Feb-06	-	-	-	23.15	24.91	20.97	11.25	24.34	24.38	25.17	25.14	24.47	24.52	24.64	24.68	24.48	24.74
30-Mar-06	-	-	-	25.19	25.08	23.56	12.00	24.40	24.46	25.23	25.20	24.81	24.62	24.77	24.80	24.48	24.77
12-Apr-06	-	-	-	22.48	20.41	20.84	12.01	19.43	19.41	20.30	20.25	21.25	20.62	19.65	19.69	20.55	20.48
8-May-06	-	-	-	21.90	22.70	20.52	12.12	21.95	22.00	22.80	22.78	22.27	22.26	22.18	22.20	22.46	22.64
13-Jun-06	-	-	-	20.40	20.37	19.50	12.38	19.59	19.50	20.42	20.38	20.46	20.35	19.85	19.81	20.31	20.31
28-Jul-06	-	-	-	26.18	26.18	23.72	13.41	25.40	25.40	26.23	26.19	26.35	26.26	25.80	25.82	-	26.07
21-Aug-06	-	-	-	27.22	27.48	24.64	13.97	26.87	26.92	27.70	26.67	27.12	27.09	27.22	27.29	26.82	27.26
25-Sep-06	-	-	-	28.16	28.17	25.36	14.70	27.34	27.34	28.21	28.18	28.36	28.31	27.71	27.75	28.44	28.11
23-Oct-06	-	-	-	28.38	28.24	25.70	15.22	27.55	28.91	28.38	28.33	28.18	28.20	27.99	28.03	28.22	28.33
13-Nov-06	-	-	-	24.31	24.24	21.84	15.54	23.41	22.69	24.29	24.26	23.58	23.96	23.51	23.53	23.92	23.95
18-Dec-06	-	-	-	22.23	24.00	20.32	12.80	23.52	23.29	24.17	23.99	23.04	23.16	23.64	23.70	22.76	23.48
24-Jan-07	-	-	-	24.39	24.92	22.05	11.98	24.08	24.02	24.89	24.99	24.88	24.93	24.21	24.24	24.90	24.84
19-Feb-07	-	-	-	25.22	24.48	22.65	12.35	23.79	23.70	24.53	24.61	24.35	24.15	24.04	24.06	24.04	24.24
19-Mar-07	-	-	-	24.15	23.85	21.77	11.70	23.20	23.10	23.92	23.87	23.84	23.71	23.45	23.48	23.63	23.74
23-Apr-07	-	-	-	23.98	24.46	21.98	12.14	23.86	23.60	24.53	24.55	23.73	23.91	24.79	24.83	23.88	23.99
7-May-07	-	-	-	23.59	23.47	21.35	12.27	22.74	22.57	23.56	23.49	23.69	23.35	22.85	22.87	23.89	23.18
13-Jun-07	-	-	-	24.32	24.28	22.41	13.00	23.70	23.53	24.35	24.37	23.99	23.84	23.90	23.92	24.14	23.97
25-Jul-07	-	-	-	26.68	27.76	24.19	13.95	27.22	27.24	27.98	28.02	26.78	27.04	27.56	27.60	26.71	27.44
15-Aug-07	-	-	-	26.86	26.00	24.27	14.22	25.27	25.20	26.05	26.03	26.56	25.96	25.55	25.60	26.10	25.83
26-Sep-07	-	-	-	28.61	28.82	25.99	15.15	28.17	28.15	29.05	29.00	28.20	28.37	28.58	28.62	28.30	28.60

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Date of Elevation Survey	Elevation of Top of Casing (feet msl) *															River Benchmark (feet msl) [1]
	WS-16-125 [2]	WS-16-161 [2]	WS-17-52 [2]	WS-17-94 [2]	WS-21-112 [2]	NWN-1-20	NWN-2-20	NWN-3-17	NWN-4-15	NWN-5-20	NWN-6-31	NWN-7-30	NWN-8-30	NWN-9-31	NWN-10-26	
23-Oct-01	34.34	34.39	35.06	35.00	35.85	-	-	-	-	-	-	-	-	-	-	32.12
Post Oct-03	34.31	34.41	35.06	33.78	34.47	-	-	-	-	-	-	-	-	-	-	32.12
3-Nov-08	-	-	-	-	-	37.27	41.39	41.47	42.69	36.87	33.18	36.1	33.87	33.79	34.37	-

Measured Water Level

Date Measured	Measured Water Level (feet btc)															River Level [1] (feet bbm)
	WS-16-125	WS-16-161	WS-17-52	WS-17-94	WS-21-112	NWN-1-20	NWN-2-20	NWN-3-17	NWN-4-15	NWN-5-20	NWN-6-31	NWN-7-30	NWN-8-30	NWN-9-31	NWN-10-26	
16-Aug-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15-Sep-05	29.42	29.33	22.18	28.46	-	-	-	-	-	-	-	-	-	-	-	-
13-Oct-05	29.62	29.31	22.12	28.46	-	-	-	-	-	-	-	-	-	-	-	-
14-Nov-05	27.29	27.16	21.52	26.63	-	-	-	-	-	-	-	-	-	-	-	-
16-Dec-05	27.11	26.96	21.24	26.69	-	-	-	-	-	-	-	-	-	-	-	-
19-Dec-05	27.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16-Jan-06	19.56	19.12	17.21	19.00	-	-	-	-	-	-	-	-	-	-	-	-
14-Feb-06	25.25	25.09	17.52	24.61	-	-	-	-	-	-	-	-	-	-	-	-
30-Mar-06	25.32	25.07	17.82	24.66	-	-	-	-	-	-	-	-	-	-	-	-
12-Apr-06	20.39	20.46	18.17	20.79	-	-	-	-	-	-	-	-	-	-	-	-
8-May-06	22.81	22.79	17.85	22.69	-	-	-	-	-	-	-	-	-	-	-	-
13-Jun-06	20.51	20.42	16.84	20.66	-	-	-	-	-	-	-	-	-	-	-	-
28-Jul-06	26.43	26.23	19.84	26.40	-	-	-	-	-	-	-	-	-	-	-	-
21-Aug-06	27.80	27.58	20.68	27.15	-	-	-	-	-	-	-	-	-	-	-	-
25-Sep-06	28.44	28.34	21.57	28.54	29.01	-	-	-	-	-	-	-	-	-	-	-
23-Oct-06	28.59	28.46	21.85	28.37	29.15	-	-	-	-	-	-	-	-	-	-	-
13-Nov-06	24.25	24.15	20.09	24.15	24.86	-	-	-	-	-	-	-	-	-	-	-
18-Dec-06	24.24	24.12	19.01	23.65	24.86	-	-	-	-	-	-	-	-	-	-	-
24-Jan-07	24.98	24.96	18.81	25.15	25.67	-	-	-	-	-	-	-	-	-	-	-
19-Feb-07	24.70	24.59	19.31	24.35	25.21	-	-	-	-	-	-	-	-	-	-	-
19-Mar-07	24.10	23.99	18.92	23.79	24.64	-	-	-	-	-	-	-	-	-	-	-
23-Apr-07	24.52	24.33	18.50	24.18	25.11	-	-	-	-	-	-	-	-	-	-	-
7-May-07	23.61	23.41	18.35	23.34	24.14	-	-	-	-	-	-	-	-	-	-	-
13-Jun-07	24.52	24.36	18.77	24.10	25.08	-	-	-	-	-	-	-	-	-	-	-
25-Jul-07	28.17	27.96	19.81	27.16	28.75	-	-	-	-	-	-	-	-	-	-	-
15-Aug-07	26.21	26.10	19.76	26.29	26.78	-	-	-	-	-	-	-	-	-	-	-
26-Sep-07	29.10	28.98	21.41	28.45	29.62	-	-	-	-	-	-	-	-	-	-	-

Note: btc = below top of casing msl = mean sea level
* = City of Portland Datum
[1] = Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
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Date of Elevation Survey	Elevation of Top of Casing (feet msl) *																
	WS-1-22 [2]	WS-2-22 [2]	WS-5-20 [2]	WS-8-33	WS-8-59	WS-9-34	WS-10-27 [2]	WS-11-125 [2]	WS-11-161 [2]	WS-12-125 [2]	WS-12-161 [2]	WS-13-69 [2]	WS-13-105 [2]	WS-14-125 [2]	WS-14-161 [2]	WS-15-85 [2]	WS-15-140 [2]
23-Oct-01	35.18	33.67	37.83	34.33	34.21	33.65	34.83	33.21	33.23	34.14	34.15	34.57	34.53	33.63	33.50	34.22	34.24
Post Oct-03	35.18	33.67	37.83	34.33	34.21	33.65	34.83	33.36	33.38	34.29	34.30	34.68	34.68	33.59	33.65	34.36	34.40
3-Nov-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Measured Water Level

Date Measured	Measured Water Level (feet btc)																
	WS-1-22	WS-2-22	WS-5-20	WS-8-33	WS-8-59	WS-9-34	WS-10-27	WS-11-125	WS-11-161	WS-12-125	WS-12-161	WS-13-69	WS-13-105	WS-14-125	WS-14-161	WS-15-85	WS-15-140
30-Oct-07	-	-	-	27.95	28.25	25.44	15.44	27.60	27.47	28.40	28.38	27.51	27.60	27.92	27.98	27.59	28.08
13-Nov-07	-	-	-	28.05	27.20	25.68	15.70	26.40	26.40	27.27	27.10	26.95	26.68	26.68	26.70	26.70	26.80
28-Dec-07	-	-	-	24.28	23.30	21.27	13.11	22.42	22.34	23.28	23.30	23.69	23.35	22.65	22.68	23.74	23.46
30-Jan-08	-	-	-	25.08	25.18	22.91	12.41	24.35	24.29	25.19	25.15	25.10	25.09	24.51	24.55	25.05	25.23
29-Feb-08	-	-	-	26.01	26.35	23.25	12.10	25.57	25.65	26.57	26.52	26.31	26.58	25.87	25.88	26.70	26.51
31-Mar-08	-	-	-	26.08	27.44	23.41	12.40	26.75	26.85	27.67	27.70	26.98	26.89	27.08	27.11	26.70	27.20
30-Apr-08	-	-	-	25.85	26.06	23.17	12.71	25.23	25.28	26.21	26.11	25.71	25.50	25.60	25.63	25.66	25.69
12-May-08	-	-	-	23.99	24.21	21.92	12.82	23.41	23.42	24.29	24.29	23.60	23.32	23.65	23.68	23.65	23.71
17-Jun-08	-	-	-	20.22	21.08	19.05	13.21	20.36	20.31	21.30	21.16	20.61	21.02	20.61	20.62	20.97	20.95
18-Jul-08	-	-	-	25.33	27.41	23.08	13.62	26.81	26.90	27.63	27.68	26.25	26.67	27.27	27.34	26.49	27.14
29-Jul-08	-	-	-	26.32	27.34	23.92	-	23.41	23.42	24.29	24.29	-	-	23.65	23.68	-	-
27-Aug-08	-	-	-	27.24	28.40	24.73	14.60	27.55	27.54	28.44	28.48	27.27	27.73	27.50	27.52	27.37	27.85
25-Sep-08	-	-	-	28.25	28.65	-	-	28.25	27.69	29.78	29.22	-	-	28.66	29.22	-	-
4-Dec-08	-	-	-	27.42	28.11	25.34	-	-	-	-	-	-	-	-	-	-	-
25-Mar-09	-	-	-	26.70	26.90	23.85	-	-	-	-	-	-	-	-	-	-	-
3-Jun-09	-	-	-	21.24	21.26	20.27	-	20.40	20.40	21.24	21.31	-	-	20.66	20.68	-	-
5-Aug-09	-	-	-	27.15	27.81	24.92	-	27.20	27.30	28.00	27.96	-	-	24.40	27.40	-	-
4-Dec-09	-	-	-	26.85	27.22	23.85	-	26.48	26.54	27.38	27.34	-	-	26.65	26.70	-	-

Note: btc = below top of casing msl = mean sea level
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[1] = Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[2] = Elevation survey conducted by Siltronic representatives - survey date is not known

TABLE 1a - Summary of Water Level Measurements and Elevations-Siltronic Wells

Benchmark Elevation

Date of Elevation Survey	Elevation of Top of Casing (feet msl) *															River Benchmark (feet msl) [1]
	WS-16-125 [2]	WS-16-161 [2]	WS-17-52 [2]	WS-17-94 [2]	WS-21-112 [2]	NWN-1-20	NWN-2-20	NWN-3-17	NWN-4-15	NWN-5-20	NWN-6-31	NWN-7-30	NWN-8-30	NWN-9-31	NWN-10-26	
23-Oct-01	34.34	34.39	35.06	35.00	35.85	-	-	-	-	-	-	-	-	-	-	32.12
Post Oct-03	34.31	34.41	35.06	33.78	34.47	-	-	-	-	-	-	-	-	-	-	32.12
3-Nov-08	-	-	-	-	-	37.27	41.39	41.47	42.69	36.87	33.18	36.1	33.87	33.79	34.37	-

Measured Water Level

Date Measured	Measured Water Level (feet btc)															River Level [1] (feet bbm)
	WS-16-125	WS-16-161	WS-17-52	WS-17-94	WS-21-112	NWN-1-20	NWN-2-20	NWN-3-17	NWN-4-15	NWN-5-20	NWN-6-31	NWN-7-30	NWN-8-30	NWN-9-31	NWN-10-26	
30-Oct-07	28.51	28.50	21.05	27.85	29.00	-	-	-	-	-	-	-	-	-	-	-
13-Nov-07	27.30	27.15	21.25	27.00	27.92	-	-	-	-	-	-	-	-	-	-	-
28-Dec-07	23.34	23.31	20.42	23.51	24.14	-	-	-	-	-	-	-	-	-	-	-
30-Jan-08	25.29	25.25	19.71	25.30	26.04	-	-	-	-	-	-	-	-	-	-	-
29-Feb-08	26.56	26.50	19.80	26.47	27.10	-	-	-	-	-	-	-	-	-	-	-
31-Mar-08	27.76	27.62	19.49	27.12	28.32	-	-	-	-	-	-	-	-	-	-	-
30-Apr-08	26.26	26.09	19.45	25.82	26.84	-	-	-	-	-	-	-	-	-	-	-
12-May-08	24.31	24.06	18.99	23.81	24.91	-	-	-	-	-	-	-	-	-	-	-
17-Jun-08	21.32	21.23	17.36	21.15	21.87	-	-	-	-	-	-	-	-	-	-	-
18-Jul-08	27.84	27.60	18.61	26.50	28.40	-	-	-	-	-	-	-	-	-	-	-
29-Jul-08	-	-	-	-	-	9.93	12.90	15.75	14.80	13.60	10.71	16.00	12.10	25.85	20.50	-
27-Aug-08	28.28	28.24	20.98	27.71	29.02	-	-	-	-	-	-	-	-	-	-	-
25-Sep-08	-	-	-	-	29.28	-	-	-	-	-	-	-	-	-	-	27.18
4-Dec-08	-	-	-	-	-	11.24	13.61	16.93	14.18	15.13	11.82	17.46	13.02	26.80	25.46	25.55
25-Mar-09	-	-	-	-	-	9.12	11.90	15.69	13.78	12.23	9.80	12.79	10.94	26.13	25.30	25.72
3-Jun-09	-	-	-	-	21.95	8.95	11.81	14.94	14.22	12.91	10.02	13.42	11.39	20.68	21.55	19.55
5-Aug-09	-	-	-	-	26.80	10.30	13.15	16.60	14.80	14.40	11.20	15.30	12.45	26.50	25.46	27.10
4-Dec-09	-	-	-	-	27.95	10.83	12.96	16.90	13.65	14.65	11.22	16.46	12.28	26.12	25.45	25.52

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TABLE 1a - Summary of Water Level Measurements and Elevations-Siltronic Wells

Date Measured	Groundwater Elevation (feet msl) *																
	WS-1-22	WS-2-22	WS-5-20	WS-8-33	WS-8-59	WS-9-34	WS-10-27	WS-11-125	WS-11-161	WS-12-125	WS-12-161	WS-13-69	WS-13-105	WS-14-125	WS-14-161	WS-15-85	WS-15-140
8-Oct-01	-	-	-	5.43	4.63	6.50	-	-	-	-	-	-	-	-	-	-	-
12-Dec-01	-	-	-	9.31	8.91	10.88	-	-	-	-	-	-	-	-	-	-	-
2-Apr-02	31.61	27.65	30.23	8.38	8.00	10.25	-	-	-	-	-	-	-	-	-	-	-
10-Jul-02	23.75	21.55	17.90	10.32	8.50	11.40	-	-	-	-	-	-	-	-	-	-	-
27-Oct-03	-	-	-	6.45	6.71	8.45	19.32	6.71	6.69	6.71	6.80	7.65	7.76	-	-	-	-
24-Nov-03	-	-	-	6.97	6.73	8.81	18.89	6.80	6.77	6.81	6.87	8.25	8.08	-	-	-	-
29-Dec-03	-	-	-	9.30	9.35	-	20.42	9.52	9.56	9.57	9.65	9.60	9.89	-	-	-	-
28-Jan-04	-	-	-	9.96	10.04	11.94	22.00	10.34	10.26	10.41	10.10	10.42	10.80	-	-	-	-
24-Feb-04	-	-	-	9.29	8.90	11.24	21.70	8.72	8.86	8.86	8.82	9.07	10.42	-	-	-	-
25-Mar-04	-	-	-	8.47	8.16	10.57	21.84	7.99	8.29	8.32	8.47	9.41	9.32	-	-	-	-
26-Apr-04	-	-	-	8.22	7.73	10.04	20.56	7.64	7.74	7.75	7.84	8.99	8.85	-	-	-	-
28-May-04	-	-	-	9.31	9.77	10.65	20.31	10.41	10.32	8.86	10.48	9.55	10.20	-	-	-	-
1-Jul-04	-	-	-	8.40	7.54	9.97	19.85	7.31	7.20	7.46	7.51	9.24	8.94	-	-	-	-
26-Jul-04	-	-	-	6.82	5.49	8.46	19.13	4.97	5.48	5.56	5.60	6.55	6.44	5.24	5.32	6.07	6.05
11-Aug-04	-	-	-	6.55	5.80	8.22	19.38	4.87	5.58	5.73	5.80	6.97	6.69	5.02	5.56	5.82	6.40
14-Oct-04	-	-	-	6.14	5.47	7.93	18.73	5.72	5.70	5.80	5.86	6.85	6.69	4.69	5.20	6.31	6.03
19-Nov-04	-	-	-	6.99	5.89	8.34	18.10	5.79	5.82	5.92	5.82	7.29	7.14	5.79	5.80	6.78	6.52
16-Dec-04	-	-	-	8.92	9.28	10.36	18.12	9.32	9.36	9.48	9.45	10.32	10.00	9.33	9.35	9.18	9.59
19-Jan-05	-	-	-	7.88	8.64	9.61	18.72	8.80	8.86	8.67	8.65	8.70	8.92	8.89	8.93	8.52	8.98
16-Feb-05	-	-	-	7.45	6.96	9.24	18.65	6.71	6.68	6.71	6.80	7.81	7.46	6.99	6.98	7.48	7.71
15-Mar-05	-	-	-	7.08	7.85	8.97	18.96	8.00	8.05	8.03	8.03	7.58	7.95	7.97	8.01	7.94	8.17
22-Apr-05	-	-	-	7.48	6.86	9.33	19.19	6.58	6.59	6.67	6.73	7.66	7.74	6.56	6.57	7.39	7.34
18-May-05	-	-	-	10.16	10.63	11.33	19.82	10.76	10.80	10.81	10.89	10.92	11.21	10.76	10.82	10.64	10.87
15-Jun-05	-	-	-	8.25	7.12	10.15	20.35	6.70	6.72	6.78	6.88	7.94	7.82	6.78	6.77	7.96	7.29
14-Jul-05	-	-	-	7.70	6.79	9.34	20.02	6.70	6.72	6.75	6.83	8.03	7.81	6.74	6.75	7.47	7.42
8-Aug-05	-	-	-	-	-	8.97	19.74	7.18	7.19	-	-	7.80	7.70	7.11	7.15	7.19	7.63
16-Aug-05	-	-	-	6.84	5.87	-	-	-	-	5.74	5.78	-	-	-	-	-	-
15-Sep-05	-	-	-	5.94	5.31	7.75	19.21	4.83	4.82	5.02	5.22	6.47	6.28	4.66	4.69	5.91	5.57
13-Oct-05	-	-	-	6.03	5.02	7.90	18.98	4.56	4.57	4.81	4.90	6.65	6.27	4.46	4.48	6.10	5.42
14-Nov-05	-	-	-	7.38	7.12	9.19	19.47	6.93	6.92	7.02	7.08	8.34	8.18	6.87	5.93	7.97	7.61
16-Dec-05	-	-	-	7.36	7.30	9.62	20.36	7.18	7.16	7.25	7.33	7.96	8.06	7.08	7.13	7.84	7.63
19-Dec-05	-	-	-	-	-	-	-	6.89	-	-	-	4.72	-	7.07	-	3.87	-
16-Jan-06	-	-	-	16.46	-	16.71	23.30	15.10	15.13	15.15	15.39	16.12	14.89	-	-	-	16.24
14-Feb-06	-	-	-	11.18	9.30	12.68	23.58	9.02	9.00	9.11	9.16	10.21	10.16	8.95	8.97	9.88	9.66
30-Mar-06	-	-	-	9.14	9.13	10.09	22.83	8.96	8.92	9.06	9.10	9.87	10.06	8.82	8.85	9.88	9.63

Note: btc = below top of casing msl = mean sea level

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TABLE 1a - Summary of Water Level Measurements and Elevations-Siltronic Wells

Date Measured	Groundwater Elevation (feet msl) *															River Stage (feet msl) [1]
	WS-16-125	WS-16-161	WS-17-52	WS-17-94	WS-21-112	NWN-1-20	NWN-2-20	NWN-3-17	NWN-4-15	NWN-5-20	NWN-6-31	NWN-7-30	NWN-8-30	NWN-9-31	NWN-10-26	
8-Oct-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.97
12-Dec-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.68
2-Apr-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.52
10-Jul-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.96
27-Oct-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24-Nov-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29-Dec-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.31
28-Jan-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24-Feb-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25-Mar-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26-Apr-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28-May-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Jul-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26-Jul-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11-Aug-04	5.41	5.61	-	-	-	-	-	-	-	-	-	-	-	-	-	5.67
14-Oct-04	5.12	5.44	7.89	5.39	-	-	-	-	-	-	-	-	-	-	-	-
19-Nov-04	5.82	6.10	12.66	6.16	-	-	-	-	-	-	-	-	-	-	-	-
16-Dec-04	9.33	9.57	13.39	8.71	-	-	-	-	-	-	-	-	-	-	-	-
19-Jan-05	8.76	9.03	13.50	7.73	-	-	-	-	-	-	-	-	-	-	-	-
16-Feb-05	6.79	7.03	13.74	6.37	-	-	-	-	-	-	-	-	-	-	-	-
15-Mar-05	7.94	8.17	13.41	6.65	-	-	-	-	-	-	-	-	-	-	-	-
22-Apr-05	6.66	6.93	13.79	6.85	-	-	-	-	-	-	-	-	-	-	-	-
18-May-05	10.62	11.00	14.92	10.07	-	-	-	-	-	-	-	-	-	-	-	-
15-Jun-05	6.78	7.07	14.71	7.00	-	-	-	-	-	-	-	-	-	-	-	-
14-Jul-05	6.81	7.05	14.62	6.80	-	-	-	-	-	-	-	-	-	-	-	-
8-Aug-05	7.16	7.43	13.86	6.62	-	-	-	-	-	-	-	-	-	-	-	-
16-Aug-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15-Sep-05	4.89	5.08	12.88	5.32	-	-	-	-	-	-	-	-	-	-	-	-
13-Oct-05	4.69	5.10	12.94	5.32	-	-	-	-	-	-	-	-	-	-	-	-
14-Nov-05	7.02	7.25	13.54	7.15	-	-	-	-	-	-	-	-	-	-	-	-
16-Dec-05	7.20	7.45	13.82	7.09	-	-	-	-	-	-	-	-	-	-	-	-
19-Dec-05	6.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16-Jan-06	14.75	15.29	17.85	14.78	-	-	-	-	-	-	-	-	-	-	-	-
14-Feb-06	9.06	9.32	17.54	9.17	-	-	-	-	-	-	-	-	-	-	-	-
30-Mar-06	8.99	9.34	17.24	9.12	-	-	-	-	-	-	-	-	-	-	-	-

Note: btc = below top of casing msl = mean sea level

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[1] = Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.

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TABLE 1a - Summary of Water Level Measurements and Elevations-Siltronic Wells

Date Measured	Groundwater Elevation (feet msl) *																
	WS-1-22	WS-2-22	WS-5-20	WS-8-33	WS-8-59	WS-9-34	WS-10-27	WS-11-125	WS-11-161	WS-12-125	WS-12-161	WS-13-69	WS-13-105	WS-14-125	WS-14-161	WS-15-85	WS-15-140
12-Apr-06				11.85	13.80	12.81	22.82	13.93	13.97	13.99	14.05	13.43	14.06	13.94	13.96	13.81	13.92
8-May-06	-	-	-	12.43	11.51	13.13	22.71	11.41	11.38	11.49	11.52	12.41	12.42	11.41	11.45	11.90	11.76
13-Jun-06	-	-	-	13.93	13.84	14.15	22.45	13.77	13.88	13.87	13.92	14.22	14.33	13.74	13.84	14.05	14.09
28-Jul-06	-	-	-	8.15	8.03	9.93	21.42	7.96	7.98	8.06	8.11	8.33	8.42	7.79	7.83	-	8.33
21-Aug-06	-	-	-	7.11	6.73	9.01	20.86	6.49	6.46	6.59	7.63	7.56	7.59	6.37	6.36	7.54	7.14
25-Sep-06	-	-	-	6.17	6.04	8.29	20.13	6.02	6.04	6.08	6.12	6.32	6.37	5.88	5.90	5.92	6.29
23-Oct-06	-	-	-	5.95	5.97	7.95	19.61	5.81	4.47	5.91	5.97	6.50	6.48	5.60	5.62	6.14	6.07
13-Nov-06	-	-	-	10.02	9.97	11.81	19.29	9.95	10.69	10.00	10.04	11.10	10.72	10.08	10.12	10.44	10.45
18-Dec-06	-	-	-	12.10	10.21	13.33	22.03	9.84	10.09	10.12	10.31	11.64	11.52	9.95	9.95	11.60	10.92
24-Jan-07	-	-	-	9.94	9.29	11.60	22.85	9.28	9.36	9.40	9.31	9.80	9.75	9.38	9.41	9.46	9.56
19-Feb-07	-	-	-	9.11	9.73	11.00	22.48	9.57	9.68	9.76	9.69	10.33	10.53	9.55	9.59	10.32	10.16
19-Mar-07	-	-	-	10.18	10.36	11.88	23.13	10.16	10.28	10.37	10.43	10.84	10.97	10.14	10.17	10.73	10.66
23-Apr-07	-	-	-	10.35	9.75	11.67	22.69	9.50	9.78	9.76	9.75	10.95	10.77	8.80	8.82	10.48	10.41
7-May-07	-	-	-	10.74	10.74	12.30	22.56	10.62	10.81	10.73	10.81	10.99	11.33	10.74	10.78	10.47	11.22
13-Jun-07	-	-	-	10.01	9.93	11.24	21.83	9.66	9.85	9.94	9.93	10.69	10.84	9.69	9.73	10.22	10.43
25-Jul-07	-	-	-	7.65	6.45	9.46	20.88	6.14	6.14	6.31	6.28	7.90	7.64	6.03	6.05	7.65	6.96
15-Aug-07	-	-	-	7.47	8.21	9.38	20.61	8.09	8.18	8.24	8.27	8.12	8.72	8.04	8.05	8.26	8.57
26-Sep-07	-	-	-	5.72	5.39	7.66	19.68	5.19	5.23	5.24	5.30	6.48	6.31	5.01	5.03	6.06	5.80
30-Oct-07	-	-	-	6.38	5.96	8.21	19.39	5.76	5.91	5.89	5.92	7.17	7.08	5.67	5.67	6.77	6.32
13-Nov-07	-	-	-	6.28	7.01	7.97	19.13	6.96	6.98	7.02	7.20	7.73	8.00	6.91	6.95	7.66	7.60
28-Dec-07	-	-	-	10.05	10.91	12.38	21.72	10.94	11.04	11.01	11.00	10.99	11.33	10.94	10.97	10.62	10.94
30-Jan-08	-	-	-	9.25	9.03	10.74	22.42	9.01	9.09	9.10	9.15	9.58	9.59	9.08	9.10	9.31	9.17
29-Feb-08	-	-	-	8.32	7.86	10.40	22.73	7.79	7.73	7.72	7.78	8.37	8.10	7.72	7.77	7.66	7.89
31-Mar-08	-	-	-	8.25	6.77	10.24	22.43	6.61	6.53	6.61	6.60	7.70	7.79	6.51	6.54	7.66	7.20
30-Apr-08	-	-	-	8.48	8.15	10.48	22.12	8.13	8.10	8.08	8.19	8.97	9.18	7.99	8.02	8.70	8.71
12-May-08	-	-	-	10.34	10.00	11.73	22.01	9.95	9.96	10.00	10.01	11.08	11.36	9.94	9.97	10.71	10.69
17-Jun-08	-	-	-	14.11	13.13	14.60	21.62	13.00	13.07	12.99	13.14	14.07	13.66	12.98	13.03	13.39	13.45
18-Jul-08	-	-	-	9.00	6.80	10.57	21.21	6.55	6.48	6.66	6.62	8.43	8.01	6.32	6.31	7.87	7.26
29-Jul-08	-	-	-	8.01	6.87	9.73	-	9.95	9.96	10.00	10.01	-	-	9.94	9.97	-	-
27-Aug-08	-	-	-	7.09	5.81	8.92	20.23	5.81	5.84	5.85	5.82	7.41	6.95	6.09	6.13	6.99	6.55
25-Sep-08	-	-	-	6.08	5.56	-	-	5.11	5.69	4.51	5.08	-	-	4.93	4.43	-	-
4-Dec-08	-	-	-	6.91	6.10	8.31	-	-	-	-	-	-	-	-	-	-	-
25-Mar-09	-	-	-	7.63	7.31	9.80	-	-	-	-	-	-	-	-	-	-	-
3-Jun-09	-	-	-	13.09	12.95	13.38	-	12.96	12.98	13.05	12.99	-	-	12.93	12.97	-	-
5-Aug-09	-	-	-	7.18	6.40	8.73	-	6.16	6.08	6.29	6.34	-	-	9.19	6.25	-	-
4-Dec-09	-	-	-	7.48	6.99	9.80	-	6.88	6.84	6.91	6.96	-	-	6.94	6.95	-	-

Note: btc = below top of casing msl = mean sea level
* = City of Portland Datum
[1] = Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[2] = Elevation survey conducted by Siltronic representatives - survey date is not known

TABLE 1a - Summary of Water Level Measurements and Elevations-Siltronic Wells

Date Measured	Groundwater Elevation (feet msl) *															River Stage (feet msl) [1]
	WS-16-125	WS-16-161	WS-17-52	WS-17-94	WS-21-112	NWN-1-20	NWN-2-20	NWN-3-17	NWN-4-15	NWN-5-20	NWN-6-31	NWN-7-30	NWN-8-30	NWN-9-31	NWN-10-26	
12-Apr-06	13.92	13.95	16.89	12.99	-	-	-	-	-	-	-	-	-	-	-	-
8-May-06	11.50	11.62	17.21	11.09	-	-	-	-	-	-	-	-	-	-	-	-
13-Jun-06	13.80	13.99	18.22	13.12	-	-	-	-	-	-	-	-	-	-	-	-
28-Jul-06	7.88	8.18	15.22	7.38	-	-	-	-	-	-	-	-	-	-	-	-
21-Aug-06	6.51	6.83	14.38	6.63	-	-	-	-	-	-	-	-	-	-	-	-
25-Sep-06	5.87	6.07	13.49	5.24	5.46	-	-	-	-	-	-	-	-	-	-	-
23-Oct-06	5.72	5.95	13.21	5.41	5.32	-	-	-	-	-	-	-	-	-	-	-
13-Nov-06	10.06	10.26	14.97	9.63	9.61	-	-	-	-	-	-	-	-	-	-	-
18-Dec-06	10.07	10.29	16.05	10.13	9.61	-	-	-	-	-	-	-	-	-	-	-
24-Jan-07	9.33	9.45	16.25	8.63	8.80	-	-	-	-	-	-	-	-	-	-	-
19-Feb-07	9.61	9.82	15.75	9.43	9.26	-	-	-	-	-	-	-	-	-	-	-
19-Mar-07	10.21	10.42	16.14	9.99	9.83	-	-	-	-	-	-	-	-	-	-	-
23-Apr-07	9.79	10.08	16.56	9.60	9.36	-	-	-	-	-	-	-	-	-	-	-
7-May-07	10.70	11.00	16.71	10.44	10.33	-	-	-	-	-	-	-	-	-	-	-
13-Jun-07	9.79	10.05	16.29	9.68	9.39	-	-	-	-	-	-	-	-	-	-	-
25-Jul-07	6.14	6.45	15.25	6.62	5.72	-	-	-	-	-	-	-	-	-	-	-
15-Aug-07	8.10	8.31	15.30	7.49	7.69	-	-	-	-	-	-	-	-	-	-	-
26-Sep-07	5.21	5.43	13.65	5.33	4.85	-	-	-	-	-	-	-	-	-	-	-
30-Oct-07	5.80	5.91	14.01	5.93	5.47	-	-	-	-	-	-	-	-	-	-	-
13-Nov-07	7.01	7.26	13.81	6.78	6.55	-	-	-	-	-	-	-	-	-	-	-
28-Dec-07	10.97	11.10	14.64	10.27	10.33	-	-	-	-	-	-	-	-	-	-	-
30-Jan-08	9.02	9.16	15.35	8.48	8.43	-	-	-	-	-	-	-	-	-	-	-
29-Feb-08	7.75	7.91	15.26	7.31	7.37	-	-	-	-	-	-	-	-	-	-	-
31-Mar-08	6.55	6.79	15.57	6.66	6.15	-	-	-	-	-	-	-	-	-	-	-
30-Apr-08	8.05	8.32	15.61	7.96	7.63	-	-	-	-	-	-	-	-	-	-	-
12-May-08	10.00	10.35	16.07	9.97	9.56	-	-	-	-	-	-	-	-	-	-	-
17-Jun-08	12.99	13.18	17.70	12.63	12.60	-	-	-	-	-	-	-	-	-	-	-
18-Jul-08	6.47	6.81	16.45	7.28	6.07	-	-	-	-	-	-	-	-	-	-	-
29-Jul-08	-	-	-	-	-	27.34	28.49	25.72	27.89	23.27	22.47	20.10	21.77	7.94	13.87	-
27-Aug-08	6.03	6.17	14.08	6.07	5.45	-	-	-	-	-	-	-	-	-	-	-
25-Sep-08	-	-	-	-	5.19	-	-	-	-	-	-	-	-	-	-	4.94
4-Dec-08	-	-	-	-	-	26.03	27.78	24.54	28.51	21.74	21.36	18.64	20.85	6.99	8.91	6.57
25-Mar-09	-	-	-	-	-	28.15	29.49	25.78	28.91	24.64	23.38	23.31	22.93	7.66	9.07	6.40
3-Jun-09	-	-	-	-	12.52	28.32	29.58	26.53	28.47	23.96	23.16	22.68	22.48	13.11	12.82	12.57
5-Aug-09	-	-	-	-	7.67	26.97	28.24	24.87	27.89	22.47	21.98	20.80	21.42	7.29	8.91	5.02
4-Dec-09	-	-	-	-	6.52	26.44	28.43	24.57	29.04	22.22	21.96	19.64	21.59	7.67	8.92	6.60

Note: btc = below top of casing msl = mean sea level
* = City of Portland Datum
[1] = Post December 1997 River Stage data measured directly from surveyed bench mark located on north end of FAMM Dock.
[2] = Elevation survey conducted by Siltronic representatives - survey date is not known

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
Well Cluster MW-1						
6-Sep-07	MW-1-22	Fill	16.45	10	0.3364	Down
	MW-1-55	Alluvial	5.35	-23		
	River		5.27			
	MW-1-55	Alluvial	5.35	-23	-0.0063	Up
	MW-1-82	Alluvial	5.52	-50		
17-Apr-08	MW-1-22	Fill	19.21	10	0.3552	Down
	MW-1-55	Alluvial	7.49	-23		
	River		6.79			
	MW-1-55	Alluvial	7.49	-23	-0.0015	Up
	MW-1-82	Alluvial	7.53	-50		
9-Sep-08	MW-1-22	Fill	16.73	10	0.3858	Down
	MW-1-55	Alluvial	4	-23		
	River		3.52			
	MW-1-55	Alluvial	4	-23	-0.0015	Up
	MW-1-82	Alluvial	4.04	-50		
4-Dec-08	MW-1-22	Fill	16.63	10	0.3052	Down
	MW-1-55	Alluvial	6.56	-23		
	River		6.57			
	MW-1-55	Alluvial	6.56	-23	-0.0033	Up
	MW-1-82	Alluvial	6.65	-50		
23-Mar-09	MW-1-22	Fill	18.16	10	0.3488	Down
	MW-1-55	Alluvial	6.65	-23		
	River		6.4			
	MW-1-55	Alluvial	6.65	-23	-0.0011	Up
	MW-1-82	Alluvial	6.68	-50		
3-Jun-09	MW-1-22	Fill	17.8	10	-	-
	MW-1-55	Alluvial	-	-23		
	River		12.57			
	MW-1-55	Alluvial	-	-23	-	-
	MW-1-82	Alluvial	12.76	-50		
5-Aug-09	MW-1-22	Fill	16.78	10	0.2958	Down
	MW-1-55	Alluvial	7.02	-23		
	River		5.02			
	MW-1-55	Alluvial	7.02	-23	0.0922	Down
	MW-1-82	Alluvial	4.53	-50		
4-Dec-09	MW-1-22	Fill	16.78	10	0.3191	Down
	MW-1-55	Alluvial	6.25	-23		
	River		6.6			
	MW-1-55	Alluvial	6.25	-23	0.0015	Down
	MW-1-82	Alluvial	6.21	-50		
Well Cluster MW-2						
17-Mar-03	MW-2-32	Fill	13.75	4.3	0.1439	Down
	MW-2-61	Alluvial	9.49	-25.3		
	River		9.33			
2-Jun-03	MW-2-32	Fill	14.44	4.3	0.0561	Down
	MW-2-61	Alluvial	12.78	-25.3		
	River		12.67			
29-Sep-03	MW-2-32	Fill	9.37	4.3	0.1189	Down
	MW-2-61	Alluvial	5.85	-25.3		
	River		5.67			
29-Dec-03	MW-2-32	Fill	11.43	4.3	0.0926	Down
	MW-2-61	Alluvial	8.69	-25.3		
	River		8.31			

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Well Cluster MW-2 (continued)						
Date	**Location**	**Water-Bearing Zone**	**Water Level Elevation (feet MSL)**	**Base of Screen Elevation (feet MSL)**	**Vertical Gradient**	**Direction**
29-Mar-04	MW-2-32	Fill	13.21	4.3	0.2061	Down
	MW-2-61	Alluvial	7.11	-25.3		
	River		7.61			
11-Aug-04	MW-2-32	Fill	10.01	4.3	0.1490	Down
	MW-2-61	Alluvial	5.60	-25.3		
	River		5.67			
20-Dec-04	MW-2-32	Fill	10.06	4.3	0.0541	Down
	MW-2-61	Alluvial	8.46	-25.3		
	River		7.03			
28-Mar-05	MW-2-32	Fill	11.29	4.3	0.0588	Down
	MW-2-61	Alluvial	9.55	-25.3		
	River		8.79			
20-Jun-05	MW-2-32	Fill	12.56	4.3	0.194	Down
	MW-2-61	Alluvial	6.82	-25.3		
	River		6.64			
16-Sep-05	MW-2-32	Fill	9.12	4.3	0.185	Down
	MW-2-61	Alluvial	3.63	-25.3		
	River		3.22			
7-Dec-05	MW-2-32	Fill	12.15	4.3	0.164	Down
	MW-2-61	Alluvial	7.29	-25.3		
	River		7.63			
27-Mar-06	MW-2-32	Fill	13.54	4.3	0.207	Down
	MW-2-61	Alluvial	7.40	-25.3		
	River		8.52			
19-Jun-06	MW-2-32	Fill	14.21	4.3	0.082	Down
	MW-2-61	Alluvial	11.79	-25.3		
	River		11.72			
11-Oct-06	MW-2-32	Fill	8.96	4.3	0.103	Down
	MW-2-61	Alluvial	5.91	-25.3		
	River		6.20			
6-Sep-07	MW-2-32	Fill	8.94	4.3	0.099	Down
	MW-2-61	Alluvial	6.02	-25.3		
	River		5.27			
	MW-2-61	Alluvial	6.02	-25.3	0.008	Down
	MW-2-104	Alluvial	5.66	-69.1		
17-Apr-08	MW-2-32	Fill	13.22	4.3	0.193	Down
	MW-2-61	Alluvial	7.52	-25.3		
	River		6.79			
	MW-2-61	Alluvial	7.52	-25.3	-0.002	Up
	MW-2-104	Alluvial	7.62	-69.1		
9-Sep-08	MW-2-32	Fill	8.95	4.3	0.166	Down
	MW-2-61	Alluvial	4.05	-25.3		
	River		3.52			
	MW-2-61	Alluvial	4.05	-25.3	-0.00046	Up
	MW-2-104	Alluvial	4.07	-69.1		

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
Well Cluster MW-2 (continued)						
4-Dec-08	MW-2-32	Fill	9.36	4.3	0.094	Down
	MW-2-61	Alluvial	6.58	-25.3		
	River		6.57			
	MW-2-61	Alluvial	6.58	-25.3	-0.00091	Up
	MW-2-104	Alluvial	6.62	-69.1		
23-Mar-09	MW-2-32	Fill	6.74	4.3	-0.197	Up
	MW-2-61	Alluvial	12.56	-25.3		
	River		6.40			
	MW-2-61	Alluvial	12.56	-25.3	0.13219	Down
	MW-2-104	Alluvial	6.77	-69.1		
3-Jun-09	MW-2-32	Fill	14.15	4.3	0.047	Down
	MW-2-61	Alluvial	12.76	-25.3		
	River		12.57			
	MW-2-61	Alluvial	12.76	-25.3	-0.001	Up
	MW-2-104	Alluvial	12.81	-69.1		
5-Aug-09	MW-2-32	Fill	9.68	4.3	0.165	Down
	MW-2-61	Alluvial	4.81	-25.3		
	River		5.50			
	MW-2-61	Alluvial	4.81	-25.3	-0.197	Up
	MW-2-104	Alluvial	4.92	-69.1		
4-Dec-09	MW-2-32	Fill	9.68	4.3	0.117	Down
	MW-2-61	Alluvial	6.21	-25.3		
	River		6.60			
	MW-2-61	Alluvial	6.21	-25.3	-0.00023	Up
	MW-2-104	Alluvial	6.22	-69.1		
Well Cluster MW-3						
12-Feb-96	MW-3-26	Fill	25.59	6.2	0.0050	Down
	MW-3-56	Alluvial	25.44	-23.8		
	River		26.43			
17-Mar-03	MW-3-26	Fill	14.32	6.2	0.1533	Down
	MW-3-56	Alluvial	9.72	-23.8		
	River		9.33			
2-Jun-03	MW-3-26	Fill	13.86	6.2	0.0327	Down
	MW-3-56	Alluvial	12.88	-23.8		
	River		12.67			
29-Sep-03	MW-3-26	Fill	9.48	6.2	0.0923	Down
	MW-3-56	Alluvial	6.71	-23.8		
	River		5.67			
29-Dec-03	MW-3-26	Fill	14.70	6.2	0.1863	Down
	MW-3-56	Alluvial	9.11	-23.8		
	River		8.31			
29-Mar-04	MW-3-26	Fill	13.66	6.2	0.2140	Down
	MW-3-56	Alluvial	7.24	-23.8		
	River		7.61			
11-Aug-04	MW-3-26	Fill	9.50	6.2	0.1520	Down
	MW-3-56	Alluvial	4.94	-23.8		
	River		5.67			
20-Dec-04	MW-3-26	Fill	11.91	6.2	0.1213	Down
	MW-3-56	Alluvial	8.27	-23.8		
	River		8.79			
28-Mar-05	MW-3-26	Fill	14.26	6.2	0.1637	Down
	MW-3-56	Alluvial	9.35	-23.8		
	River		8.79			

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Well Cluster MW-3 (continued)						
Date	**Location**	**Water-Bearing Zone**	**Water Level Elevation (feet MSL)**	**Base of Screen Elevation (feet MSL)**	**Vertical Gradient**	**Direction**
20-Jun-05	MW-3-26	Fill	11.84	6.2	0.1540	Down
	MW-3-56	Alluvial	7.22	-23.8		
	River		6.64			
16-Sep-05	MW-3-26	Fill	9.26	6.2	0.1667	Down
	MW-3-56	Alluvial	4.26	-23.8		
	River		3.22			
7-Dec-05	MW-3-26	Fill	13.50	6.2	0.2020	Down
	MW-3-56	Alluvial	7.44	-23.8		
	River		7.63			
27-Mar-06	MW-3-26	Fill	14.29	6.2	0.2320	Down
	MW-3-56	Alluvial	7.33	-23.8		
	River		8.52			
19-Jun-06	MW-3-26	Fill	14.85	6.2	0.0947	Down
	MW-3-56	Alluvial	12.01	-23.8		
	River		11.72			
11-Oct-06	MW-3-26	Fill	9.50	6.2	0.1107	Down
	MW-3-56	Alluvial	6.18	-23.8		
	River		6.20			
21-Mar-07	MW-3-26	Fill	14.62	6.2	0.0997	Down
	MW-3-56	Alluvial	11.63	-23.8		
	River		11.12			
7-May-07	MW-3-26	Fill	13.81	6.2	0.1097	Down
	MW-3-56	Alluvial	10.52	-23.8		
	River		10.15			
21-Jun-07	MW-3-26	Fill	12.33	6.2	0.1570	Down
	MW-3-56	Alluvial	7.62	-23.8		
	River		7.55			
6-Sep-07	MW-3-26	Fill	9.5	6.2	0.1323	Down
	MW-3-56	Alluvial	5.53	-23.8		
	River		5.27			
17-Apr-08	MW-3-26	Fill	14.01	6.2	0.2080	Down
	MW-3-56	Alluvial	7.77	-23.8		
	River		6.79			
9-Sep-08	MW-3-26	Fill	9.71	6.2	0.1783	Down
	MW-3-56	Alluvial	4.36	-23.8		
	River		3.52			
4-Dec-08	MW-3-26	Fill	10.88	6.2	0.1443	Down
	MW-3-56	Alluvial	6.55	-23.8		
	River		6.57			
23-Mar-09	MW-3-26	Fill	13.96	6.2	0.2277	Down
	MW-3-56	Alluvial	7.13	-23.8		
	River		6.40			
3-Jun-09	MW-3-26	Fill	14.33	6.2	0.047	Down
	MW-3-56	Alluvial	12.91	-23.8		
	River		12.57			
5-Aug-09	MW-3-26	Fill	10.30	6.2	0.163	Down
	MW-3-56	Alluvial	5.42	-23.8		
	River		5.02			
4-Dec-09	MW-3-26	Fill	20.76	6.2	0.4663	Down
	MW-3-56	Alluvial	6.77	-23.8		
	River		6.60			

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Well Cluster MW-4						
Date	**Location**	**Water-Bearing Zone**	**Water Level Elevation (feet MSL)**	**Base of Screen Elevation (feet MSL)**	**Vertical Gradient**	**Direction**
12-Feb-96	MW-4-35	Fill	25.45	-2.3	0.0009	Down
	MW-4-57	Alluvial	25.43	-24.3		
	River		26.43			
17-Mar-03	MW-4-35	Fill	10.16	-2.3	0.0245	Down
	MW-4-57	Alluvial	9.62	-24.3		
	River		9.33			
	MW-4-57	Alluvial	9.62	-24.3	0.0039	Down
	MW-4-101	Alluvial	9.45	-67.7		
2-Jun-03	MW-4-35	Fill	12.72	-2.3	-0.0027	Up
	MW-4-57	Alluvial	12.78	-24.3		
	River		12.67			
	MW-4-57	Alluvial	12.78	-24.3	-0.0018	Up
	MW-4-101	Alluvial	12.86	-67.7		
29-Sep-03	MW-4-35	Fill	6.30	-2.3	-0.0168	Up
	MW-4-57	Alluvial	6.67	-24.3		
	River		5.67			
	MW-4-57	Alluvial	6.67	-24.3	-0.0046	Up
	MW-4-101	Alluvial	6.87	-67.7		
29-Dec-03	MW-4-35	Fill	11.90	-2.3	0.1286	Down
	MW-4-57	Alluvial	9.07	-24.3		
	River		8.31			
	MW-4-57	Alluvial	9.07	-24.3	0.0032	Down
	MW-4-101	Alluvial	8.93	-67.7		
29-Mar-04	MW-4-35	Fill	8.16	-2.3	0.0441	Down
	MW-4-57	Alluvial	7.19	-24.3		
	River		7.61			
	MW-4-57	Alluvial	7.19	-24.3	0.0018	Down
	MW-4-101	Alluvial	7.11	-67.7		
11-Aug-04	MW-4-35	Fill	6.24	-2.3	0.0559	Down
	MW-4-57	Alluvial	5.01	-24.3		
	River		5.67			
	MW-4-57	Alluvial	5.01	-24.3	0.0030	Down
	MW-4-101	Alluvial	4.88	-67.7		
20-Dec-04	MW-4-35	Fill	8.85	-2.3	0.0286	Down
	MW-4-57	Alluvial	8.22	-24.3		
	River		7.03			
	MW-4-57	Alluvial	8.22	-24.3	-0.0005	Up
	MW-4-101	Alluvial	8.24	-67.7		
28-Mar-05	MW-4-35	Fill	10.60	-2.3	0.0573	Down
	MW-4-57	Alluvial	9.34	-24.3		
	River		8.79			
	MW-4-57	Alluvial	9.34	-24.3	-0.0005	Up
	MW-4-101	Alluvial	9.36	-67.7		
20-Jun-05	MW-4-35	Fill	7.98	-2.3	0.0355	Down
	MW-4-57	Alluvial	7.20	-24.3		
	River		6.64			
	MW-4-57	Alluvial	7.20	-24.3	0.0055	Down
	MW-4-101	Alluvial	6.96	-67.7		

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Well Cluster MW-4 (continued)						
Date	**Location**	**Water-Bearing Zone**	**Water Level Elevation (feet MSL)**	**Base of Screen Elevation (feet MSL)**	**Vertical Gradient**	**Direction**
16-Sep-05	MW-4-35	Fill	5.60	-2.3	0.0718	Down
	MW-4-57	Alluvial	4.02	-24.3		
	River		3.22			
	MW-4-57	Alluvial	4.02	-24.3	0.0118	Down
	MW-4-101	Alluvial	3.51	-67.7		
7-Dec-05	MW-4-35	Fill	8.48	-2.3	0.0523	Down
	MW-4-57	Alluvial	7.33	-24.3		
	River		7.63			
	MW-4-57	Alluvial	7.33	-24.3	0.0048	Down
	MW-4-101	Alluvial	7.12	-67.7		
27-Mar-06	MW-4-35	Fill	8.29	-2.3	0.0005	Down
	MW-4-57	Alluvial	8.28	-24.3		
	River		8.52			
	MW-4-57	Alluvial	8.28	-24.3	-0.0088	Up
	MW-4-101	Alluvial	8.66	-67.7		
19-Jun-06	MW-4-35	Fill	12.44	-2.3	0.0241	Down
	MW-4-57	Alluvial	11.91	-24.3		
	River		11.72			
	MW-4-57	Alluvial	11.91	-24.3	0.0014	Down
	MW-4-101	Alluvial	11.85	-67.7		
11-Oct-06	MW-4-35	Fill	6.21	-2.3	0.0014	Down
	MW-4-57	Alluvial	6.18	-24.3		
	River		6.20			
	MW-4-57	Alluvial	6.18	-24.3	-0.0018	Up
	MW-4-101	Alluvial	6.26	-67.7		
21-Mar-07	MW-4-35	Fill	10.91	-2.3	-0.0305	Up
	MW-4-57	Alluvial	11.58	-24.3		
	River		11.12			
	MW-4-57	Alluvial	11.58	-24.3	-0.0016	Up
	MW-4-101	Alluvial	11.65	-67.7		
7-May-07	MW-4-35	Fill	10.51	-2.3	0.0068	Down
	MW-4-57	Alluvial	10.36	-24.3		
	River		10.15			
	MW-4-57	Alluvial	10.36	-24.3	0.0014	Down
	MW-4-101	Alluvial	10.30	-67.7		
21-Jun-07	MW-4-35	Fill	8.48	-2.3	0.0359	Down
	MW-4-57	Alluvial	7.69	-24.3		
	River		7.55			
	MW-4-57	Alluvial	7.69	-24.3	0.0028	Down
	MW-4-101	Alluvial	7.57	-67.7		
6-Sep-07	MW-4-35	Fill	6.11	-2.3	0.0255	Down
	MW-4-57	Alluvial	5.55	-24.3		
	River		5.27			
	MW-4-57	Alluvial	5.55	-24.3	-0.0037	Up
	MW-4-101	Alluvial	5.71	-67.7		

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
Well Cluster MW-4 (continued)						
17-Apr-08	MW-4-35	Fill	7.93	-2.3	0.0050	Down
	MW-4-57	Alluvial	7.82	-24.3		
	River		6.79			
	MW-4-57	Alluvial	7.82	-24.3	0.0051	Down
	MW-4-101	Alluvial	7.60	-67.7		
9-Sep-08	MW-4-35	Fill	5.98	-2.3	0.0705	Down
	MW-4-57	Alluvial	4.43	-24.3		
	River		3.52			
	MW-4-57	Alluvial	4.43	-24.3	0.0021	Down
	MW-4-101	Alluvial	4.34	-67.7		
4-Dec-08	MW-4-35	Fill	6.93	-2.3	0.0241	Down
	MW-4-57	Alluvial	6.40	-24.3		
	River		6.57			
	MW-4-57	Alluvial	6.40	-24.3	-0.0071	Up
	MW-4-101	Alluvial	6.71	-67.7		
23-Mar-09	MW-4-35	Fill	7.73	-2.3	0.029	Down
	MW-4-57	Alluvial	7.09	-24.3		
	River		6.40			
	MW-4-57	Alluvial	7.09	-24.3	0.008	Down
	MW-4-101	Alluvial	6.76	-67.7		
3-Jun-09	MW-4-35	Fill	12.98	-2.3	0.002	Down
	MW-4-57	Alluvial	12.93	-24.3		
	River		12.57			
	MW-4-57	Alluvial	12.93	-24.3	0.000	Down
	MW-4-101	Alluvial	12.91	-67.7		
5-Aug-09	MW-4-35	Fill	6.85	-2.3	0.056	Down
	MW-4-57	Alluvial	5.62	-24.3		
	River		5.02			
	MW-4-57	Alluvial	5.62	-24.3	0.006	Down
	MW-4-101	Alluvial	5.36	-67.7		
4-Dec-09	MW-4-35	Fill	7.74	-2.3	0.0277	Down
	MW-4-57	Alluvial	7.13	-24.3		
	River		5.02			
	MW-4-57	Alluvial	7.13	-24.3	0.0039	Down
	MW-4-101	Alluvial	6.96	-67.7		
Well Cluster MW-5						
17-Mar-03	MW-5-32	Fill/Alluvial	10.01	-5.9	0.0085	Down
	MW-5-100	Alluvial	9.44	-72.6		
	River		9.33			
	MW-5-100	Alluvial	9.44	-72.6	-0.0011	Up
	MW-5-175	Alluvial	9.52	-147.8		
2-Jun-03	MW-5-32	Fill/Alluvial	12.79	-5.9	-0.0003	Up
	MW-5-100	Alluvial	12.81	-72.6		
	River		12.67			
	MW-5-100	Alluvial	12.81	-72.6	-0.0012	Up
	MW-5-175	Alluvial	12.90	-147.8		
29-Sep-03	MW-5-32	Fill/Alluvial	6.80	-5.9	0.0006	Down
	MW-5-100	Alluvial	6.76	-72.6		
	River		5.67			
	MW-5-100	Alluvial	6.76	-72.6	-0.0011	Up
	MW-5-175	Alluvial	6.84	-147.8		

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Well Cluster MW-5 (continued)

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
29-Dec-03	MW-5-32	Fill/Alluvial	9.51	-5.9	0.0088	Down
	MW-5-100	Alluvial	8.92	-72.6		
	River		8.31			
	MW-5-100	Alluvial	8.92	-72.6	-0.0008	Up
	MW-5-175	Alluvial	8.98	-147.8		
29-Mar-04	MW-5-32	Fill/Alluvial	7.88	-5.9	0.0114	Down
	MW-5-100	Alluvial	7.12	-72.6		
	River		7.61			
	MW-5-100	Alluvial	7.12	-72.6	-0.0011	Up
	MW-5-175	Alluvial	7.20	-147.8		
11-Aug-04	MW-5-32	Fill/Alluvial	5.47	-5.9	0.0060	Down
	MW-5-100	Alluvial	5.07	-72.6		
	River		5.67			
	MW-5-100	Alluvial	5.07	-72.6	-0.0023	Up
	MW-5-175	Alluvial	5.24	-147.8		
20-Dec-04	MW-5-32	Fill/Alluvial	8.73	-5.9	0.0067	Down
	MW-5-100	Alluvial	8.28	-72.6		
	River		7.03			
	MW-5-100	Alluvial	8.28	-72.6	-0.0015	Up
	MW-5-175	Alluvial	8.39	-147.8		
28-Mar-05	MW-5-32	Fill/Alluvial	9.44	-5.9	0.0015	Down
	MW-5-100	Alluvial	9.34	-72.6		
	River		8.79			
	MW-5-100	Alluvial	9.34	-72.6	-0.0090	Up
	MW-5-175	Alluvial	10.02	-147.8		
20-Jun-05	MW-5-32	Fill/Alluvial	7.58	-5.9	0.0099	Down
	MW-5-100	Alluvial	6.92	-72.6		
	River		6.64			
	MW-5-100	Alluvial	6.92	-72.6	-0.0009	Up
	MW-5-175	Alluvial	6.99	-147.8		
16-Sep-05	MW-5-32	Fill/Alluvial	4.71	-5.9	0.0171	Down
	MW-5-100	Alluvial	3.57	-72.6		
	River		3.22			
	MW-5-100	Alluvial	3.57	-72.6	-0.0005	Up
	MW-5-175	Alluvial	3.61	-147.8		
7-Dec-05	MW-5-32	Fill/Alluvial	8.16	-5.9	0.0139	Down
	MW-5-100	Alluvial	7.23	-72.6		
	River		7.63			
	MW-5-100	Alluvial	7.23	-72.6	-0.0011	Up
	MW-5-175	Alluvial	7.31	-147.8		
27-Mar-06	MW-5-32	Fill/Alluvial	8.15	-5.9	0.0087	Down
	MW-5-100	Alluvial	7.57	-72.6		
	River		8.52			
	MW-5-100	Alluvial	7.57	-72.6	-0.0021	Up
	MW-5-175	Alluvial	7.73	-147.8		
19-Jun-06	MW-5-32	Fill/Alluvial	12.12	-5.9	0.0043	Down
	MW-5-100	Alluvial	11.83	-72.6		
	River		11.72			
	MW-5-100	Alluvial	11.83	-72.6	-0.0004	Up
	MW-5-175	Alluvial	11.86	-147.8		

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Well Cluster MW-5 (continued)

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
11-Oct-06	MW-5-32	Fill/Alluvial	6.43	-5.9	0.0022	Down
	MW-5-100	Alluvial	6.28	-72.6		
	River		6.20			
	MW-5-100	Alluvial	6.28	-72.6	-0.0015	Up
	MW-5-175	Alluvial	6.39	-147.8		
21-Mar-07	MW-5-32	Fill/Alluvial	11.68	-5.9	0.0016	Down
	MW-5-100	Alluvial	11.57	-72.6		
	River		11.12			
	MW-5-100	Alluvial	11.57	-72.6	-0.0020	Up
	MW-5-175	Alluvial	11.72	-147.8		
7-May-07	MW-5-32	Fill/Alluvial	10.66	-5.9	0.0052	Down
	MW-5-100	Alluvial	10.31	-72.6		
	River		10.15			
	MW-5-100	Alluvial	10.31	-72.6	-0.0008	Up
	MW-5-175	Alluvial	10.37	-147.8		
21-Jun-07	MW-5-32	Fill/Alluvial	8.11	-5.9	0.0073	Down
	MW-5-100	Alluvial	7.62	-72.6		
	River		7.55			
	MW-5-100	Alluvial	7.62	-72.6	-0.0008	Up
	MW-5-175	Alluvial	7.68	-147.8		
6-Sep-07	MW-5-32	Fill/Alluvial	5.13	-5.9	0.0054	Down
	MW-5-100	Alluvial	4.77	-72.6		
	River		5.27			
	MW-5-100	Alluvial	4.77	-72.6	-0.0019	Up
	MW-5-175	Alluvial	4.91	-147.8		
17-Apr-08	MW-5-32	Fill/Alluvial	8.53	-5.9	0.0130	Down
	MW-5-100	Alluvial	7.66	-72.6		
	River		6.79			
	MW-5-100	Alluvial	7.66	-72.6	-0.0011	Up
	MW-5-175	Alluvial	7.74	-147.8		
9-Sep-08	MW-5-32	Fill/Alluvial	4.93	-5.9	0.0100	Down
	MW-5-100	Alluvial	4.26	-72.6		
	River		3.52			
	MW-5-100	Alluvial	4.26	-72.6	-0.0016	Up
	MW-5-175	Alluvial	4.38	-147.8		
4-Dec-08	MW-5-32	Fill/Alluvial	6.73	-5.9	0.0003	Down
	MW-5-100	Alluvial	6.71	-72.6		
	River		6.57			
	MW-5-100	Alluvial	6.71	-72.6	-0.0011	Up
	MW-5-175	Alluvial	6.79	-147.8		
23-Mar-09	MW-5-32	Fill/Alluvial	7.97	-5.9	0.018	Down
	MW-5-100	Alluvial	6.74	-72.6		
	River		6.40			
	MW-5-100	Alluvial	6.74	-72.6	-0.002	Up
	MW-5-175	Alluvial	6.87	-147.8		

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
Well Cluster MW-5 (continued)						
23-Jun-09	MW-5-32	Fill/Alluvial	13.02	-5.9	0.0019	Down
	MW-5-100	Alluvial	12.89	-72.6		
	River		12.57			
	MW-5-100	Alluvial	12.89	-72.6	-0.0007	Up
	MW-5-175	Alluvial	12.94	-147.8		
05-Aug-09	MW-5-32	Fill/Alluvial	5.53	-5.9	-0.0012	Up
	MW-5-100	Alluvial	5.61	-72.6		
	River		5.02			
	MW-5-100	Alluvial	5.61	-72.6	0.0069	Down
	MW-5-175	Alluvial	5.09	-147.8		
5-Dec-09	MW-5-32	Fill/Alluvial	7.83	-5.9	0.0138	Down
	MW-5-100	Alluvial	6.91	-72.6		
	River		6.60			
	MW-5-100	Alluvial	6.91	-72.6	0.0063	Down
	MW-5-175	Alluvial	6.44	-147.8		
Well Cluster MW-8						
12-Feb-96	MW-8-29	Fill	22.10	8.5	-0.1285	Up
	MW-8-56	Alluvial	25.57	-18.5		
	River		26.43			
17-Mar-03	MW-8-29	Fill	18.40	8.5	0.3252	Down
	MW-8-56	Alluvial	9.62	-18.5		
	River		9.33			
2-Jun-03	MW-8-29	Fill	18.94	8.5	0.2263	Down
	MW-8-56	Alluvial	12.83	-18.5		
	River		12.67			
29-Sep-03	MW-8-29	Fill	17.66	8.5	0.4204	Down
	MW-8-56	Alluvial	6.31	-18.5		
	River		5.67			
29-Dec-03	MW-8-29	Fill	18.01	8.5	0.3333	Down
	MW-8-56	Alluvial	9.01	-18.5		
	River		8.31			
29-Mar-04	MW-8-29	Fill	18.81	8.5	0.4293	Down
	MW-8-56	Alluvial	7.22	-18.5		
	River		7.61			
11-Aug-04	MW-8-29	Fill	17.75	8.5	0.4615	Down
	MW-8-56	Alluvial	5.29	-18.5		
	River		5.67			
20-Dec-04	MW-8-29	Fill	17.53	8.5	0.3522	Down
	MW-8-56	Alluvial	8.02	-18.5		
	River		7.03			
28-Mar-05	MW-8-29	Fill	17.69	8.5	0.3078	Down
	MW-8-56	Alluvial	9.38	-18.5		
	River		8.79			
20-Jun-05	MW-8-29	Fill	18.19	8.5	0.3878	Down
	MW-8-56	Alluvial	7.72	-18.5		
	River		6.64			
16-Sep-05	MW-8-29	Fill	17.53	8.5	0.4674	Down
	MW-8-56	Alluvial	4.91	-18.5		
	River		3.22			
7-Dec-05	MW-8-29	Fill	18.19	8.5	0.3922	Down
	MW-8-56	Alluvial	7.60	-18.5		
	River		7.63			
27-Mar-06	MW-8-29	Fill	19.79	8.5	0.4515	Down
	MW-8-56	Alluvial	7.60	-18.5		
	River		8.52			

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
Well Cluster MW-8 (continued)						
19-Jun-06	MW-8-29	Fill	19.51	8.5	0.2685	Down
	MW-8-56	Alluvial	12.26	-18.5		
	River		11.72			
11-Oct-06	MW-8-29	Fill	18.16	8.5	0.4456	Down
	MW-8-56	Alluvial	6.13	-18.5		
	River		6.20			
21-Mar-07	MW-8-29	Fill	19.39	8.5	0.2878	Down
	MW-8-56	Alluvial	11.62	-18.5		
	River		11.12			
7-May-07	MW-8-29	Fill	19.39	8.5	0.3226	Down
	MW-8-56	Alluvial	10.68	-18.5		
	River		10.15			
21-Jun-07	MW-8-29	Fill	18.99	8.5	0.4115	Down
	MW-8-56	Alluvial	7.88	-18.5		
	River		7.55			
6-Sep-07	MW-8-29	Fill	18.06	8.5	0.4759	Down
	MW-8-56	Alluvial	5.21	-18.5		
	River		5.27			
17-Apr-08	MW-8-29	Fill	19.21	8.5	0.4067	Down
	MW-8-56	Alluvial	8.23	-18.5		
	River		6.79			
9-Sep-08	MW-8-29	Fill	19.14	8.5	0.5430	Down
	MW-8-56	Alluvial	4.48	-18.5		
	River		3.52			
4-Dec-08	MW-8-29	Fill	17.95	8.5	0.4381	Down
	MW-8-56	Alluvial	6.12	-18.5		
	River		6.57			
23-Mar-09	MW-8-29	Fill	18.73	8.5	0.409	Down
	MW-8-56	Alluvial	7.70	-18.5		
	River		6.40			
3-Jun-09	MW-8-29	Fill	19.20	8.5	0.229	Down
	MW-8-56	Alluvial	13.03	-18.5		
	River		12.57			
5-Aug-09	MW-8-29	Fill	18.51	8.5	0.4578	Down
	MW-8-56	Alluvial	6.15	-18.5		
	River		5.02			
4-Dec-09	MW-8-29	Fill	18.14	8.5	0.4026	Down
	MW-8-56	Alluvial	7.27	-18.5		
	River		6.60			
Well Cluster MW-10						
12-Feb-96	MW-10-25	Fill	28.11	12.5	-0.0639	Up
	MW-10-61	Alluvial	30.41	-23.5		
	River		26.43			
17-Mar-03	MW-10-25	Fill	22.82	12.5	0.0150	Down
	MW-10-61	Alluvial	22.28	-23.5		
	River		9.03			
2-Jun-03	MW-10-25	Fill	22.62	12.5	0.0189	Down
	MW-10-61	Alluvial	21.94	-23.5		
	River		12.67			
29-Sep-03	MW-10-25	Fill	23.12	12.5	0.1825	Down
	MW-10-61	Alluvial	16.55	-23.5		
	River		5.67			
29-Dec-03	MW-10-25	Fill	22.72	12.5	0.0483	Down
	MW-10-61	Alluvial	20.98	-23.5		
	River		8.31			

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Well Cluster MW-10 (continued)						
Date	**Location**	**Water-Bearing Zone**	**Water Level Elevation (feet MSL)**	**Base of Screen Elevation (feet MSL)**	**Vertical Gradient**	**Direction**
29-Mar-04	MW-10-25	Fill	-	12.5	-	-
	MW-10-61	Alluvial	20.12	-23.5		
	River		7.61			
11-Aug-04	MW-10-25	Fill	22.72	12.5	0.0803	Down
	MW-10-61	Alluvial	19.83	-23.5		
	River		5.67			
20-Dec-04	MW-10-25	Fill	21.99	12.5	0.0533	Down
	MW-10-61	Alluvial	20.07	-23.5		
	River		7.03			
28-Mar-05	MW-10-25	Fill	22.07	12.5	0.0331	Down
	MW-10-61	Alluvial	20.88	-23.5		
	River		8.79			
20-Jun-05	MW-10-25	Fill	22.30	12.5	0.0606	Down
	MW-10-61	Alluvial	20.12	-23.5		
	River		6.64			
16-Sep-05	MW-10-25	Fill	21.59	12.5	0.1269	Down
	MW-10-61	Alluvial	17.02	-23.5		
	River		3.22			
7-Dec-05	MW-10-25	Fill	23.15	12.5	0.0717	Down
	MW-10-61	Alluvial	20.57	-23.5		
	River		7.63			
27-Mar-06	MW-10-25	Fill	24.17	12.5	0.0789	Down
	MW-10-61	Alluvial	21.33	-23.5		
	River		8.52			
19-Jun-06	MW-10-25	Fill	29.42	12.5	0.2075	Down
	MW-10-61	Alluvial	21.95	-23.5		
	River		11.72			
11-Oct-06	MW-10-25	Fill	22.42	12.5	0.1583	Down
	MW-10-61	Alluvial	16.72	-23.5		
	River		6.20			
21-Mar-07	MW-10-25	Fill	25.11	12.5	0.0619	Down
	MW-10-61	Alluvial	22.88	-23.5		
	River		11.12			
7-May-07	MW-10-25	Fill	23.74	12.5	0.0489	Down
	MW-10-61	Alluvial	21.98	-23.5		
	River		10.15			
21-Jun-07	MW-10-25	Fill	23.11	12.5	0.0886	Down
	MW-10-61	Alluvial	19.92	-23.5		
	River		7.55			
6-Sep-07	MW-10-25	Fill	22.14	12.5	0.1361	Down
	MW-10-61	Alluvial	17.24	-23.5		
	River		5.27			
17-Apr-08	MW-10-25	Fill	23.91	12.5	0.0756	Down
	MW-10-61	Alluvial	21.19	-23.5		
	River		6.79			

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
Well Cluster MW-10 (continued)						
9-Sep-08	MW-10-25	Fill	22.28	12.5	0.1264	Down
	MW-10-61	Alluvial	17.73	-23.5		
	River		3.52			
4-Dec-08	MW-10-25	Fill	22.62	12.5	0.1150	Down
	MW-10-61	Alluvial	18.48	-23.5		
	River		6.57			
23-Mar-09	MW-10-25	Fill	23.28	12.5	0.074	Down
	MW-10-61	Alluvial	20.63	-23.5		
	River		6.40			
3-Jun-09	MW-10-25	Fill	23.32	12.5	0.028	Down
	MW-10-61	Alluvial	22.31	-23.5		
	River		12.57			
5-Aug-09	MW-10-25	Fill	22.30	12.5	0.1164	Down
	MW-10-61	Alluvial	18.11	-23.5		
	River		5.02			
4-Dec-09	MW-10-25	Fill	23.12	12.5	0.1000	Down
	MW-10-61	Alluvial	19.52	-23.5		
	River		6.60			
Well Cluster MW-13						
17-Mar-03	MW-13-30	Fill	18.94	6.2	0.2929	Down
	MW-13-61	Alluvial	9.86	-24.8		
	River		9.33			
2-Jun-03	MW-13-30	Fill	19.15	6.2	0.1990	Down
	MW-13-61	Alluvial	12.98	-24.8		
	River		12.67			
29-Sep-03	MW-13-30	Fill	16.28	6.2	0.3019	Down
	MW-13-61	Alluvial	6.92	-24.8		
	River		5.67			
29-Dec-03	MW-13-30	Fill	17.14	6.2	0.2555	Down
	MW-13-61	Alluvial	9.22	-24.8		
	River		8.31			
29-Mar-04	MW-13-30	Fill	18.93	6.2	0.3742	Down
	MW-13-61	Alluvial	7.33	-24.8		
	River		7.61			
11-Aug-04	MW-13-30	Fill	16.46	6.2	0.3703	Down
	MW-13-61	Alluvial	4.98	-24.8		
	River		5.67			
20-Dec-04	MW-13-30	Fill	16.44	6.2	0.2616	Down
	MW-13-61	Alluvial	8.33	-24.8		
	River		7.03			
28-Mar-05	MW-13-30	Fill	16.94	6.2	0.2377	Down
	MW-13-61	Alluvial	9.57	-24.8		
	River		8.79			
20-Jun-05	MW-13-30	Fill	17.07	6.2	0.3129	Down
	MW-13-61	Alluvial	7.37	-24.8		
	River		6.64			
16-Sep-05	MW-13-30	Fill	16.39	6.2	0.3826	Down
	MW-13-61	Alluvial	4.53	-24.8		
	River		3.22			
7-Dec-05	MW-13-30	Fill	17.42	6.2	0.3135	Down
	MW-13-61	Alluvial	7.70	-24.8		
	River		7.63			

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
Well Cluster MW-13 (continued)						
27-Mar-06	MW-13-30	Fill	19.46	6.2	0.3548	Down
	MW-13-61	Alluvial	8.46	-24.8		
	River		8.65			
19-Jun-06	MW-13-30	Fill	18.41	6.2	0.2048	Down
	MW-13-61	Alluvial	12.06	-24.8		
	River		11.78			
[1] 21-Jun-07	MW-13-30	Fill	-	6.2	-	-
	MW-13-61R	Alluvial	8.03	-24.8		
	River		7.55			
6-Sep-07	MW-13-30	Fill	16.40	6.2	0.3465	Down
	MW-13-61R	Alluvial	5.66	-24.8		
	River		5.27			
17-Apr-08	MW-13-30	Fill	19.01	6.2	0.3435	Down
	MW-13-61R	Alluvial	8.36	-24.8		
	River		6.79			
9-Sep-08	MW-13-30	Fill	-	6.2	-	-
	MW-13-61R	Alluvial	4.93	-24.8		
	River		3.52			
4-Dec-08	MW-13-30	Fill	-	6.2	-	-
	MW-13-61R	Alluvial	-	-24.8		
	River		6.57			
23-Mar-09	MW-13-30	Fill	-	6.2	-	-
	MW-13-61R	Alluvial	-	-24.8		
	River		6.40			
3-Jun-09	MW-13-30	Fill	-	6.2	-	-
	MW-13-61R	Alluvial	-	-24.8		
	River		12.57			
5-Aug-09	MW-13-30	Fill	-	6.2	-	-
	MW-13-61R	Alluvial	-	-24.8		
	River		5.02			
4-Dec-09	MW-13-30	Fill	-	6.2	-	-
	MW-13-61R	Alluvial	-	-24.8		
	River		6.60			
Well Cluster MW-15						
17-Mar-03	MW-15-50	Alluvial	22.47	-13.7	0.0465	Down
	MW-15-66	Alluvial	21.75	-29.2		
	River		9.33			
2-Jun-03	MW-15-50	Alluvial	22.89	-13.7	0.0355	Down
	MW-15-66	Alluvial	22.34	-29.2		
	River		12.67			
29-Sep-03	MW-15-50	Alluvial	17.75	-13.7	0.0426	Down
	MW-15-66	Alluvial	17.09	-29.2		
	River		5.67			
29-Dec-03	MW-15-50	Alluvial	21.56	-13.7	0.0471	Down
	MW-15-66	Alluvial	20.83	-29.2		
	River		8.31			
29-Mar-04	MW-15-50	Alluvial	21.15	-13.7	0.0542	Down
	MW-15-66	Alluvial	20.31	-29.2		
	River		7.61			

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Well Cluster MW-15 (continued)						
Date	**Location**	**Water-Bearing Zone**	**Water Level Elevation (feet MSL)**	**Base of Screen Elevation (feet MSL)**	**Vertical Gradient**	**Direction**
11-Aug-04	MW-15-50	Alluvial	18.33	-13.7	0.0626	Down
	MW-15-66	Alluvial	17.36	-29.2		
	River		5.67			
20-Dec-04	MW-15-50	Alluvial	20.40	-13.7	0.0710	Down
	MW-15-66	Alluvial	19.30	-29.2		
	River		7.03			
28-Mar-05	MW-15-50	Alluvial	21.13	-13.7	0.0432	Down
	MW-15-66	Alluvial	20.46	-29.2		
	River		8.79			
20-Jun-05	MW-15-50	Alluvial	20.71	-13.7	0.0748	Down
	MW-15-66	Alluvial	19.55	-29.2		
	River		6.64			
16-Sep-05	MW-15-50	Alluvial	17.85	-13.7	0.0529	Down
	MW-15-66	Alluvial	17.03	-29.2		
	River		3.22			
7-Dec-05	MW-15-50	Alluvial	20.82	-13.7	0.0555	Down
	MW-15-66	Alluvial	19.96	-29.2		
	River		7.63			
27-Mar-06	MW-15-50	Alluvial	22.23	-13.7	0.0600	Down
	MW-15-66	Alluvial	21.30	-29.2		
	River		8.52			
19-Jun-06	MW-15-50	Alluvial	23.02	-13.7	0.0006	Down
	MW-15-66	Alluvial	23.01	-29.2		
	River		11.72			
11-Oct-06	MW-15-50	Alluvial	18.06	-13.7	0.0548	Down
	MW-15-66	Alluvial	17.21	-29.2		
	River		6.20			
21-Mar-07	MW-15-50	Alluvial	23.10	-13.7	0.0323	Down
	MW-15-66	Alluvial	22.60	-29.2		
	River		11.12			
7-May-07	MW-15-50	Alluvial	22.86	-13.7	0.0606	Down
	MW-15-66	Alluvial	21.92	-29.2		
	River		10.15			
21-Jun-07	MW-15-50	Alluvial	21.10	-13.7	0.0587	Down
	MW-15-66	Alluvial	20.19	-29.2		
	River		7.55			
6-Sep-07	MW-15-50	Alluvial	18.57	-13.7	0.0600	Down
	MW-15-66	Alluvial	17.64	-29.2		
	River		5.27			
17-Apr-08	MW-15-50	Alluvial	21.05	-13.7	-0.0781	Up
	MW-15-66	Alluvial	22.26	-29.2		
	River		6.79			
9-Sep-08	MW-15-50	Alluvial	18.92	-13.7	0.0677	Down
	MW-15-66	Alluvial	17.87	-29.2		
	River		3.52			
4-Dec-08	MW-15-50	Alluvial	19.59	-13.7	0.0658	Down
	MW-15-66	Alluvial	18.57	-29.2		
	River		6.57			

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
Well Cluster MW-15 (continued)						
23-Mar-09	MW-15-50	Alluvial	21.48	-13.7	0.0652	Down
	MW-15-66	Alluvial	20.47	-29.2		
	River		6.40			
23-Jun-09	MW-15-50	Alluvial	23.36	-13.7	0.048	Down
	MW-15-66	Alluvial	22.61	-29.2		
	River		12.57			
5-Aug-09	MW-15-50	Alluvial	19.45	-13.7	0.048	Down
	MW-15-66	Alluvial	18.51	-29.2		
	River		5.02			
4-Dec-09	MW-15-50	Alluvial	20.43	-13.7	0.1271	Down
	MW-15-66	Alluvial	18.46	-29.2		
	River		6.60			
Well Cluster MW-16						
11-Aug-04	MW-16-45	Alluvial	5.44	-14.2	0.0163	Down
	MW-16-65	Alluvial	5.11	-34.4		
	River		5.67			
	MW-16-65	Alluvial	5.11	-34.4	-0.0077	Up
	MW-16-125	Alluvial	5.57	-94.5		
20-Dec-04	MW-16-45	Alluvial	8.32	-14.2	0.0069	Down
	MW-16-65	Alluvial	8.18	-34.4		
	River		7.03			
	MW-16-65	Alluvial	8.18	-34.4	0.0017	Down
	MW-16-125	Alluvial	8.08	-94.5		
28-Mar-05	MW-16-45	Alluvial	9.47	-14.2	0.0109	Down
	MW-16-65	Alluvial	9.25	-34.4		
	River		8.79			
	MW-16-65	Alluvial	9.25	-34.4	0.0033	Down
	MW-16-125	Alluvial	9.05	-94.5		
20-Jun-05	MW-16-45	Alluvial	8.40	-14.2	0.0629	Down
	MW-16-65	Alluvial	7.13	-34.4		
	River		6.64			
	MW-16-65	Alluvial	7.13	-34.4	0.0045	Down
	MW-16-125	Alluvial	6.86	-94.5		
16-Sep-05	MW-16-45	Alluvial	5.70	-14.2	0.0733	Down
	MW-16-65	Alluvial	4.22	-34.4		
	River		3.22			
	MW-16-65	Alluvial	4.22	-34.4	0.0126	Down
	MW-16-125	Alluvial	3.46	-94.5		
7-Dec-05	MW-16-45	Alluvial	7.23	-14.2	-0.0327	Up
	MW-16-65	Alluvial	7.89	-34.4		
	River		7.63			
	MW-16-65	Alluvial	7.89	-34.4	0.0131	Down
	MW-16-125	Alluvial	7.10	-94.5		
27-Mar-06	MW-16-45	Alluvial	8.23	-14.2	0.0183	Down
	MW-16-65	Alluvial	7.86	-34.4		
	River		8.52			
	MW-16-65	Alluvial	7.86	-34.4	-0.0073	Up
	MW-16-125	Alluvial	8.30	-94.5		
19-Jun-06	MW-16-45	Alluvial	12.01	-14.2	0.0079	Down
	MW-16-65	Alluvial	11.85	-34.4		
	River		11.72			
	MW-16-65	Alluvial	11.85	-34.4	0.0027	Down
	MW-16-125	Alluvial	11.69	-94.5		

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Well Cluster MW-16 (continued)						
Date	**Location**	**Water-Bearing Zone**	**Water Level Elevation (feet MSL)**	**Base of Screen Elevation (feet MSL)**	**Vertical Gradient**	**Direction**
11-Oct-06	MW-16-45	Alluvial	6.42	-14.2	0.0129	Down
	MW-16-65	Alluvial	6.16	-34.4		
	River		6.20	6.2		
	MW-16-65	Alluvial	6.16	-34.4	0.0017	Down
	MW-16-125	Alluvial	6.06	-94.5		
21-Mar-07	MW-16-45	Alluvial	11.30	-14.2	-0.0668	Up
	MW-16-65	Alluvial	12.65	-34.4		
	River		11.12	6.2		
	MW-16-65	Alluvial	12.65	-34.4	0.0210	Down
	MW-16-125	Alluvial	11.39	-94.5		
7-May-07	MW-16-45	Alluvial	10.76	-14.2	0.0149	Down
	MW-16-65	Alluvial	10.46	-34.4		
	River		10.15	6.2		
	MW-16-65	Alluvial	10.46	-34.4	0.0040	Down
	MW-16-125	Alluvial	10.22	-94.5		
21-Jun-07	MW-16-45	Alluvial	8.55	-14.2	0.0441	Down
	MW-16-65	Alluvial	7.66	-34.4		
	River		7.55	6.2		
	MW-16-65	Alluvial	7.66	-34.4	0.0040	Down
	MW-16-125	Alluvial	7.42	-94.5		
6-Sep-07	MW-16-45	Alluvial	5.76	-14.2	0.0134	Down
	MW-16-65	Alluvial	5.49	-34.4		
	River		5.27	6.2		
	MW-16-65	Alluvial	5.49	-34.4	-0.0027	Up
	MW-16-125	Alluvial	5.65	-94.5		
17-Apr-08	MW-16-45	Alluvial	8.52	-14.2	0.0381	Down
	MW-16-65	Alluvial	7.75	-34.4		
	River		6.79	6.2		
	MW-16-65	Alluvial	7.75	-34.4	0.0062	Down
	MW-16-125	Alluvial	7.38	-94.5		
9-Sep-08	MW-16-45	Alluvial	5.60	-14.2	0.0911	Down
	MW-16-65	Alluvial	3.76	-34.4		
	River		3.52	6.2		
	MW-16-65	Alluvial	3.76	-34.4	-0.0101	Up
	MW-16-125	Alluvial	4.37	-94.5		
4-Dec-08	MW-16-45	Alluvial	6.51	-14.2	-0.037	Up
	MW-16-65	Alluvial	7.25	-34.4		
	River		6.57	6.2		
	MW-16-65	Alluvial	7.25	-34.4	0.011	Down
	MW-16-125	Alluvial	6.61	-94.5		
23-Mar-09	MW-16-45	Alluvial	8.07	-14.2	0.049	Down
	MW-16-65	Alluvial	7.09	-34.4		
	River		6.40	6.2		
	MW-16-65	Alluvial	7.09	-34.4	0.007	Down
	MW-16-125	Alluvial	6.64	-94.5		

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
Well Cluster MW-16 (continued)						
3-Jun-09	MW-16-45	Alluvial	13.32	-14.2	0.020	Down
	MW-16-65	Alluvial	12.91	-34.4		
	River		12.57	6.2		
	MW-16-65	Alluvial	12.91	-34.4	0.002	Down
	MW-16-125	Alluvial	12.79	-94.5		
5-Aug-09	MW-16-45	Alluvial	5.20	-14.2	-0.005	Up
	MW-16-65	Alluvial	5.31	-34.4		
	River		5.02	6.2		
	MW-16-65	Alluvial	5.31	-34.4	0.010	Down
	MW-16-125	Alluvial	4.69	-94.5		
4-Dec-09	MW-16-45	Alluvial	7.67	-14.2	0.033	Down
	MW-16-65	Alluvial	7.01	-34.4		
	River		6.60	6.2		
	MW-16-65	Alluvial	7.01	-34.4	0.005	Down
	MW-16-125	Alluvial	6.69	-94.5		
Well Cluster MW-18						
21-Mar-07	MW-18-30	Fill	8.35	1.66	-0.0077	Up
	MW-18-180	Alluvial	9.50	-148.3		
	River		11.12			
7-May-07	MW-18-30	Fill	8.56	1.66	0.0024	Down
	MW-18-180	Alluvial	8.20	-148.3		
	River		10.15			
21-Jun-07	MW-18-30	Fill	6.57	1.66	0.0079	Down
	MW-18-180	Alluvial	5.38	-148.3		
	River		7.55			
6-Sep-07	MW-18-30	Fill	4.21	1.66	0.0047	Down
	MW-18-180	Alluvial	3.50	-148.3		
	River		5.27			
17-Apr-08	MW-18-30	Fill	5.82	1.66	0.0029	Down
	MW-18-180	Alluvial	5.39	-148.3		
	River		6.79			
9-Sep-08	MW-18-30	Fill	0.96	1.66	-0.0083	Up
	MW-18-180	Alluvial	2.20	-148.3		
	River		3.52			
4-Dec-08	MW-18-30	Fill	-	1.66	-	-
	MW-18-180	Alluvial	-	-148.3		
	River		6.57			
23-Mar-09	MW-18-30	Fill	6.21	1.66	0.011	Down
	MW-18-180	Alluvial	4.54	-148.3		
	River		6.40			
3-Jun-09	MW-18-30	Fill	9.06	1.66	-0.011	Up
	MW-18-180	Alluvial	10.70	-148.3		
	River		12.57			
5-Aug-09	MW-18-30	Fill	4.76	1.66	0.0144	Down
	MW-18-180	Alluvial	2.60	-148.3		
	River		5.02			
4-Dec-09	MW-18-30	Fill	6.01	1.66	0.0108	Down
	MW-18-180	Alluvial	4.39	-148.3		
	River		6.60			
Well Cluster MW-19						
21-Mar-07	MW-19-22	Fill	9.06	5.4	-0.0042	Up
	MW-19-125	Alluvial	9.49	-97.8		
	River		11.12			
	MW-19-125	Alluvial	9.49	-97.8	0.0129	Down
	MW-19-180	Alluvial	8.78	-152.72		

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Date	Location	Water-Bearing Zone	Water Level Elevation (feet MSL)	Base of Screen Elevation (feet MSL)	Vertical Gradient	Direction
Well Cluster MW-19 (continued)						
7-May-07	MW-19-22	Fill	8.45	5.4	0.0029	Down
	MW-19-125	Alluvial	8.15	-97.8		
	River		10.15			
	MW-19-125	Alluvial	8.15	-97.8	0.0046	Down
	MW-19-180	Alluvial	7.90	-152.72		
21-Jun-07	MW-19-22	Fill	6.72	5.4	0.0127	Down
	MW-19-125	Alluvial	5.41	-97.8		
	River		7.55			
	MW-19-125	Alluvial	5.41	-97.8	0.0049	Down
	MW-19-180	Alluvial	5.14	-152.72		
6-Sep-07	MW-19-22	Fill	5.03	5.4	0.0217	Down
	MW-19-125	Alluvial	2.79	-97.8		
	River		5.27			
	MW-19-125	Alluvial	2.79	-97.8	0.0031	Down
	MW-19-180	Alluvial	2.62	-152.72		
17-Apr-08	MW-19-22	Fill	7.59	5.4	0.0203	Down
	MW-19-125	Alluvial	5.50	-97.8		
	River		6.79			
	MW-19-125	Alluvial	5.50	-97.8	0.0049	Down
	MW-19-180	Alluvial	5.23	-152.72		
4-Dec-08	MW-19-22	Fill	7.32	5.4	0.027	Down
	MW-19-125	Alluvial	4.54	-97.8		
	River		6.57			
	MW-19-125	Alluvial	4.54	-97.8	0.003	Down
	MW-19-180	Alluvial	4.35	-152.72		
23-Mar-09	MW-19-22	Fill	8.18	5.4	0.034	Down
	MW-19-125	Alluvial	4.63	-97.8		
	River		6.40			
	MW-19-125	Alluvial	4.63	-97.8	0.005	Down
	MW-19-180	Alluvial	4.37	-152.72		
3-Jun-09	MW-19-22	Fill	10.55	5.4	-0.002	Up
	MW-19-125	Alluvial	10.74	-97.8		
	River		12.57			
	MW-19-125	Alluvial	10.74	-97.8	0.005	Down
	MW-19-180	Alluvial	10.46	-152.72		
5-Aug-09	MW-19-22	Fill	5.70	5.4	0.023	Down
	MW-19-125	Alluvial	3.31	-97.8		
	River		5.02			
	MW-19-125	Alluvial	3.31	-97.8	0.007	Down
	MW-19-180	Alluvial	2.91	-152.72		
4-Dec-09	MW-19-22	Fill	8.00	5.4	0.029	Down
	MW-19-125	Alluvial	5.05	-97.8		
	River		6.60			
	MW-19-125	Alluvial	5.05	-97.8	0.013	Down
	MW-19-180	Alluvial	4.33	-152.72		
Well Cluster MW-21						
6-Sep-07	MW-21-12	Fill	10.82	8.5	0.0795	Down
	MW-21-75	Alluvial	5.81	-54.5		
	River		5.27			
	MW-21-75	Alluvial	5.81	-54.5	-0.0025	Up
	MW-21-115	Alluvial	5.91	-94.5		
	MW-21-115	Alluvial	5.91	-94.5	-0.0028	Up
	MW-21-165	Alluvial	6.05	-144.5		

Note: MSL = mean sea level, City of Portland datum

TABLE 2 - Groundwater Vertical Gradient Calculations: Well Clusters

Well Cluster MW-21 (continued)						
Date	**Location**	**Water-Bearing Zone**	**Water Level Elevation (feet MSL)**	**Base of Screen Elevation (feet MSL)**	**Vertical Gradient**	**Direction**
17-Apr-08	MW-21-12	Fill	13.39	8.5	0.0916	Down
	MW-21-75	Alluvial	7.62	-54.5		
	River		6.79			
	MW-21-75	Alluvial	7.62	-54.5	-0.0013	Up
	MW-21-115	Alluvial	7.67	-94.5		
	MW-21-115	Alluvial	7.67	-94.5	-0.0020	Up
	MW-21-165	Alluvial	7.77	-144.5		
9-Sep-08	MW-21-12	Fill	11.09	8.5	0.1097	Down
	MW-21-75	Alluvial	4.18	-54.5		
	River		3.52			
	MW-21-75	Alluvial	4.18	-54.5	-0.0010	Up
	MW-21-115	Alluvial	4.22	-94.5		
	MW-21-115	Alluvial	4.22	-94.5	-0.0030	Up
	MW-21-165	Alluvial	4.37	-144.5		
4-Dec-08	MW-21-12	Fill	11.18	8.5	0.0706	Down
	MW-21-75	Alluvial	6.73	-54.5		
	River		6.57			
	MW-21-75	Alluvial	6.73	-54.5	-0.0023	Up
	MW-21-115	Alluvial	6.82	-94.5		
	MW-21-115	Alluvial	6.82	-94.5	-0.0012	Up
	MW-21-165	Alluvial	6.88	-144.5		
23-Mar-09	MW-21-12	Fill	12.47	8.5	0.0887	Down
	MW-21-75	Alluvial	6.88	-54.5		
	River		6.40			
	MW-21-75	Alluvial	6.88	-54.5	-0.0020	Up
	MW-21-115	Alluvial	6.96	-94.5		
	MW-21-115	Alluvial	6.96	-94.5	-0.0006	Up
	MW-21-165	Alluvial	6.99	-144.5		
3-Jun-09	MW-21-12	Fill	14.19	8.5	0.0210	Down
	MW-21-75	Alluvial	12.87	-54.5		
	River		12.57			
	MW-21-75	Alluvial	12.87	-54.5	-0.0013	Up
	MW-21-115	Alluvial	12.92	-94.5		
	MW-21-115	Alluvial	12.92	-94.5	-0.0018	Up
	MW-21-165	Alluvial	13.01	-144.5		
5-Aug-09	MW-21-12	Fill	11.29	8.5	0.102	Down
	MW-21-75	Alluvial	4.88	-54.5		
	River		5.02			
	MW-21-75	Alluvial	4.88	-54.5	-0.001	Up
	MW-21-115	Alluvial	4.91	-94.5		
	MW-21-115	Alluvial	4.91	-94.5	-0.001	Up
	MW-21-165	Alluvial	4.97	-144.5		
4-Dec-09	MW-21-12	Fill	11.60	8.5	0.0756	Down
	MW-21-75	Alluvial	6.84	-54.5		
	River		5.02			
	MW-21-75	Alluvial	6.84	-54.5	0.0115	Down
	MW-21-115	Alluvial	6.38	-94.5		
	MW-21-115	Alluvial	6.38	-94.5	-0.0012	Up
	MW-21-165	Alluvial	6.44	-144.5		

Note: MSL = mean sea level, City of Portland datum
1 = Suspected error in field water level measurement
2 = Suspected error in field water level measurement, use purge/sampling initial water level for gradients

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
Drinking Water														
	MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]														
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#	#	#
MW-01-22	951207-MW1-22-01	7-Dec-95	11 - 21	13.	2.	1.8	3.2	1.08	-	-	-	-	93.4	465.3
	960319-MW1-22-01	19-Mar-96	(fill WBZ)	3.5	3.5	2.3	23.	0.86	-	-	-	-	4.71	140.45
	960618-MW1-22-01	18-Jun-96		2.4	9.5	3.2	15.	1.91	-	-	-	-	2.23	112.2
	961001-MW1-22-01	1-Oct-96		8.5	9.	7.7	72.	5.7	-	-	-	-	6.2	720.17
	970225-MW1-22-01	25-Feb-97		3.2	1.7	0.5 U	8.5	1.24	-	-	-	-	0.91	66.51
	970225-MW1-22-02	25-Feb-97		1.5	1.6	0.7	11.	-	-	-	-	-	2.23	64.16
	970827-MW1-22-01	27-Aug-97		7.5	8.2	6.9	62.	11.	-	-	-	-	20.	988.2
	970827-MW1-22-02	27-Aug-97		6.7	7.4	6.2	55.	10.	-	-	-	-	28.1	735.9
	980217-MW1-22-01	17-Feb-98		0.5 U	0.5 U	0.5 U	1.6	0.34	0.01 U	-	-	-	4.48	23.26
	980602-MW1-32-11	2-Jun-98		0.5 U	0.5 U	0.5 U	1.5 U	0.46	0.045	-	-	-	93.1	209.49
	980826-MW1-22-10	26-Aug-98		7.1	8.2	6.8	60.	6.7	0.6	-	-	-	161.6	1,137.5
	981118-MW1-22-15	18-Nov-98		10. U	10. U	10. U	30. U	3.4	-	-	-	-	3.42	568.73
	990216-MW1-22-012	16-Feb-99		0.5 U	0.5 U	0.5 U	1.5 U	0.22	0.02 U	-	-	-	3.53	11.27
	990513-MW1-22-11	13-May-99		0.643	0.704	0.5 U	2.04	-	-	-	-	-	3.17	17.33
	990824-MW1-22-15	24-Aug-99		7.12	8.42	5.89	50.4	6.5	0.02 U	-	-	-	68.19	816.91
	991028-MW1-22-16	28-Oct-99		7.64	10.6	7.24	40.8	6.7	0.02 U	-	-	-	8.69	424.98
	000330-MW1-22-116	30-Mar-00		0.859	1.43	0.616	7.02	1.7	0.02 U	-	-	-	0.42	62.35
	010329-MW1-22-115	29-Mar-01		0.5 U	0.5 U	0.5 U	1.5 U	0.192	0.186	-	-	-	13.36	51.06
	040825-MW1-22-019 [7]	25-Aug-04		4.66	5.87	6.59	46.3	4.31	1.89	-	-	-	0.261	589.511
	050401-014	1-Apr-05		0.987	0.5 U	0.5 U	1. U	-	0.0844	-	-	-	0.7752	18.1781
	050928-MW1-22-120	28-Sep-05		5.29	6.67	8.01	52.3	17.8	1.54	-	-	-	0.327	471.087
	060403-MW-1-22-117	3-Apr-06		2.79	4.63	5.68	37.5	4.13	0.165	0.185	-	-	ND U	243.59
	061030-MW-1-22-123	30-Oct-06		3.9	5.2	6.6	7.4 J	8.7	0.5	0.113	-	-	1.26	733.15
	2708-070720-MW-1-22-131	20-Jul-07		2.88	4.6	6.	7.42	5.66	0.5 U	0.482	-	-	1.2207	488.0307
	2708-080512-MW1-22-105	12-May-08		1.8	2.9	3.9	4.4	2.92	0.22	0.135	-	-	0.7276	121.9726
	NS (Dry)	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-
	2708-090402-MW1-22-132	2-Apr-09		0.73	0.76	1.	1.07 J	0.97	0.26 J	0.06 J	-	-	3.739	69.779
	2708-090820-MW-1-22-163	20-Aug-09		3.37	4.44	7.3	7.25	5.84	0.158	0.15	0.333	0.13	64.89	1,094.62
MW-01-55	2708-070719-MW-1-55-127	19-Jul-07	45 - 55	0.5 U	0.5 U	0.5 U	1. U	0.398	0.005 U	0.0104	-	-	ND U	ND U
	2708-080512-MW1-55-104	12-May-08		0.045 U	0.048 U	0.042 U	0.078 U	0.9	0.21	0.008 J	-	-	0.003	0.0627
	2708-080915-MW-1-55-121	15-Sep-08		0.045 U	0.52	0.042 U	0.078 U	0.86	0.33	0.01	-	-	ND U	0.056
	2708-081208-MW-1-55-002	8-Dec-08		0.045 U	0.12 U*	0.042 U	0.078 U	0.84	0.18	0.009 U*	-	-	ND U	0.0408
	2708-090401-MW1-55-130	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.82	0.003 UJ	0.003 UJ	-	-	ND U	0.0586
	2708-090820-MW-1-55-164	20-Aug-09		0.25 U	0.5 U	0.5 U	0.5 U	0.952	0.154	0.00915	0.121	0.012	ND U	0.2361
MW-01-82	2708-070719-MW-1-82-126	19-Jul-07	72 - 82	0.5 U	0.5 U	0.5 U	1. U	0.0095	0.0053	0.003 U	-	-	ND U	0.142
	2708-080512-MW1-82-103	12-May-08		0.11 J	0.1 J	0.042 U	0.078 U	0.003 J	0.002 U	0.002 J	-	-	0.0104	0.0606
	2708-080915-MW-1-82-119	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.002 U	0.002 U	0.003 U	-	-	0.0045	0.0912
	2708-081208-MW-1-82-001	8-Dec-08		0.07 J	0.22 U*	0.042 U	0.078 U	0.003 J	0.002 U	0.005 U*	-	-	0.0134	0.0428
	2708-090401-MW1-82-128	1-Apr-09		0.05 J	0.048 U	0.042 U	0.078 U	0.003 U	0.003 UJ	0.003 UJ	-	-	0.0033	0.0291
	2708-090820-MW-1-82-161	20-Aug-09		0.25 U	0.5 U	0.5 U	0.5 U	0.0094	0.01 U	0.01 U	-	-	ND U	0.0604
	2708-090820-MW-1-82-162	20-Aug-09		0.25 U	0.5 U	0.5 U	0.5 U	0.0125	0.0125	0.01 U	-	-	ND U	0.144
MW-02-32	951206-MW2-32-01	6-Dec-95	21.5 - 31.5	6.	0.5 U	4.2	2.4	0.353	-	-	-	-	ND U	51.55
	960318-MW2-32-01	18-Mar-96	(fill WBZ)	0.5 U	0.5 U	0.5 U	0.5 U	0.26	-	-	-	-	ND U	4.54
	960618-MW2-32-01	18-Jun-96		0.5 U	0.5 U	0.5 U	0.5 U	0.44	-	-	-	-	ND U	2.6
	961001-MW2-32-01	1-Oct-96		0.5 U	0.5 U	0.5 U	0.5 U	0.22	-	-	-	-	ND U	10.43
	970225-MW2-32-01	25-Feb-97		0.5 U	0.5 U	0.5 U	0.5 U	0.16	-	-	-	-	ND U	1.62
	970827-MW2-32-01	27-Aug-97		0.5 U	0.5 U	0.5 U	1.5 U	0.28	-	-	-	-	0.1	17.94
	980217-MW2-32-01	17-Feb-98		0.5 U	0.5 U	0.5 U	1.5 U	0.16	0.01 U	-	-	-	ND U	5.02
	980601-MW2-32-05	1-Jun-98		0.5 U	0.5 U	0.5 U	1.5 U	0.26	0.01 U	-	-	-	ND U	3.21
	980825-MW2-32-04	25-Aug-98		0.5 U	0.5 U	0.5 U	1.5 U	0.28	0.09	-	-	-	1.39	7.1
	981117-MW2-32-10	17-Nov-98		0.5 U	0.5 U	0.5 U	1.5 U	0.08	0.02	-	-	-	ND U	ND U
	990216-MW2-32-008	16-Feb-99		0.5 U	0.5 U	0.5 U	1.5 U	0.12	0.03	-	-	-	ND U	18.35
	990513-MW2-32-10	13-May-99		0.5 U	0.5 U	0.5 U	1.5 U	0.11	-	-	-	-	0.1	9.12
	990824-MW2-32-10	24-Aug-99		0.5 U	0.5 U	0.5 U	1.5 U	0.16	0.02 U	-	-	-	0.11	6.29
	991027-MW2-32-12	27-Oct-99		0.5 U	0.5 U	0.5 U	1.5 U	0.13	0.02 U	-	-	-	ND U	ND U
	000329-MW2-32-112	29-Mar-00		0.5 U	0.5 U	0.5 U	1.5 U	0.08	0.02 U	-	-	-	ND U	2.23
	010328-MW2-32-111	28-Mar-01		0.5 U	0.5 U	0.5 U	1.5 U	0.039	0.02 U	-	-	-	ND U	ND U

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
Drinking Water														
	MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]														
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#	#	#
MW-02-32	040816-MW2-32-009 [7]	16-Aug-04	21.5 - 31.5	0.5 U	0.5 U	0.5 U	1. U	0.0835	0.0285	-	-	-	ND U	ND U
	050331-009	31-Mar-05	(fill WBZ)	3.2	0.5 U	0.711	1. U	-	0.3	-	-	-	ND U	3.1333
	050927-MW-2-32-118	27-Sep-05		0.5 U	0.5 U	0.5 U	1. U	0.082	0.01 U	-	-	-	ND U	0.2128
	060328-MW-2-32-102	28-Mar-06		0.5 U	0.5 U	0.5 U	1. U	0.198	0.043	0.0089	-	-	0.0094	0.7574
	061016-MW-2-32-107	16-Oct-06		0.14 U	1.1	0.13 U	0.22 U	0.2	0.002 U	0.005 U	-	-	ND U	0.2622
	2708-070712-MW-2-32-120	12-Jul-07		0.5 UJ	0.5 UJ	0.5 UJ	1. UJ	0.181 J	0.158 J	0.0074 J	-	-	0.1517	11.3437
	2708-080512-MW2-32-101	12-May-08		0.045 U	0.14 J	0.042 U	0.078 U	0.05	0.05	0.007 J	-	-	0.0285	2.0838
	2708-080915-MW-2-32-120	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.15	0.03 J	0.006 J	-	-	0.2099	0.7299
	2708-090401-MW2-32-127	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.25	0.06 J	0.003 UJ	-	-	0.074	1.03
	2708-090812-MW-2-32-113	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.0781	0.005 U	0.01 U	-	-	0.085	0.4401
MW-02-61	981116-MW2-61-04	16-Nov-98	50 - 60	0.5 U	0.5 U	0.5 U	1.5 U	1.3	1.3	-	-	-	ND U	0.33
	990216-MW2-61-006	16-Feb-99	(alluvial WBZ)	0.5 U	0.5 U	0.5 U	1.5 U	1.6	0.04 U	-	-	-	ND U	0.37
	990512-MW2-61-05	12-May-99		0.5 U	0.5 U	0.5 U	1.5 U	1.1	0.02 U	-	-	-	ND U	0.54
	990823-MW2-61-07	23-Aug-99		0.5 U	0.5 U	0.5 U	1.5 U	1.4	0.2	-	-	-	ND U	ND U
	991026-MW2-61-04	26-Oct-99		0.5 U	0.5 U	0.5 U	1.5 U	1.3	0.34	-	-	-	ND U	ND U
	000328-MW2-61-104	28-Mar-00		0.5 U	0.5 U	0.5 U	1.5 U	1.2	0.58	-	-	-	ND U	ND U
	001004-MW2-61-04	4-Oct-00		0.5 U	0.5 U	0.5 U	1.5 U	-	0.43	-	-	-	ND U	ND U
	010328-MW2-61-104	28-Mar-01		0.5 U	0.5 U	0.5 U	1.5 U	0.251	0.02 U	-	-	-	ND U	ND U
	011009-MW2-61-104	9-Oct-01		0.5 U	0.5 U	0.5 U	1.5 U	0.83	-	-	-	-	ND U	ND U
	020403-MW2-61-103	3-Apr-02		0.5 U	0.5 U	0.5 U	1.5 U	2.38	0.4 U	-	-	-	ND U	ND U
	020924-MW2-61-103	24-Sep-02		0.5 U	0.5 U	0.5 U	1.5 U	0.97	-	-	-	-	ND U	ND U
	030318-MW2-61-104	18-Mar-03		0.5 U	0.5 U	0.5 U	1.5 U	1.3	0.04 U	-	-	-	ND U	ND U
	030930-MW2-61-103 [7]	30-Sep-03		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	ND U
	040813-MW2-61-002 [7]	13-Aug-04		0.5 U	0.5 U	0.5 U	1. U	0.819	0.085	-	-	-	ND U	ND U
	050926-MW-2-61-111	26-Sep-05		0.5 U	0.5 U	0.5 U	1. U	0.803	0.017	-	-	-	ND U	0.0424
	060329-MW-2-61-104	29-Mar-06		0.5 U	0.5 U	0.5 U	1. U	0.884	0.0714	0.0157	-	-	ND U	0.0937
	061011-MW-2-61-101	11-Oct-06		0.14 U	0.72	0.13 U	0.22 U	1.1	0.09	0.005 U	-	-	ND U	0.0887
	2708-070719-MW-2-61-128	19-Jul-07		0.5 U	0.5 U	0.5 U	1. U	0.779	0.172	0.0043	-	-	ND U	ND U
	2708-080512-MW2-61-100	12-May-08		0.045 U	0.09 J	0.042 U	0.078 U	0.92	0.11	0.027	-	-	0.0172	ND U
	2708-080915-MW-2-61-118	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.74	0.04 U	0.059	-	-	0.1984	0.7534
	2708-090401-MW2-61-125	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.74	0.19 J	0.003 UJ	-	-	ND U	0.043
	2708-090812-MW-2-61-115	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.738 J	0.415	0.01 U	0.056	0.0055	ND U	ND U
MW-02-104	2708-070712-MW-2-104-119	12-Jul-07	94 - 104	0.5 UJ	0.54	0.5 UJ	1. UJ	0.173 J	0.163 J	0.0039 J	-	-	ND U	0.248
	2708-080512-MW2-104-102	12-May-08		0.045 U	0.14 J	0.042 U	0.11	0.44	0.18	0.02	-	-	ND U	0.1356
	2708-080915-MW-2-104-122	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.24	0.01 U	0.003 J	-	-	ND U	0.0908
	2708-080915-MW-2-104-123	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.23	0.04 J	0.006 J	-	-	ND U	0.0987
	2708-081208-MW-2-104-003	8-Dec-08		0.045 U	0.16 U*	0.042 U	0.078 U	0.24	0.002 U	0.007 U*	-	-	ND U	0.1153
	2708-090401-MW2-104-129	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.5	0.003 UJ	0.003 UJ	-	-	ND U	0.0618
	2708-090812-MW-2-104-111	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.535 U	0.01 U	0.01 U	-	-	ND U	ND U
MW-03-26	951206-MW3-26-01	6-Dec-95	15 - 25	30.	0.98	0.65	1.4	-	-	-	-	-	21.04	85.24
	960318-MW3-26-02	18-Mar-96	(fill WBZ)	1,300.	5.	2.2	5.6	0.27	-	-	-	-	1.71	42.39
	960618-MW3-26-01	18-Jun-96		2,300.	22.	10. U	27.	0.25	-	-	-	-	2.55	47.86
	961001-MW3-26-01	1-Oct-96		0.55	0.95	0.5 U	2.4	0.34	-	-	-	-	182.	334.1
	970225-MW3-26-01	25-Feb-97		130.	0.5 U	0.5 U	0.5 U	0.28	-	-	-	-	4.94	11.89
	970827-MW3-26-01	27-Aug-97		0.5 U	0.5 U	0.5 U	1.5 U	2.3	-	-	-	-	27.6	53.2
	980217-MW3-26-01	17-Feb-98		2.	0.5 U	0.5 U	1.5 U	0.5	0.01 U	-	-	-	7.06	13.44
	980602-MW3-26-09	2-Jun-98		0.5 U	0.5 U	0.5 U	1.5 U	0.76	0.01 U	-	-	-	99.8	204.27
	980826-MW3-26-08	26-Aug-98		0.5 U	0.5 U	0.5 U	1.5 U	1.3	0.72	-	-	-	576.	982.
	981117-MW3-26-12	17-Nov-98		0.5 U	0.5 U	0.5 U	1.5 U	2.1	0.1	-	-	-	32.23	58.83
	990216-MW3-26-010	16-Feb-99		89.9	0.5 U	0.5 U	1.5 U	0.33	0.02 U	-	-	-	0.97	3.56
	990514-MW3-26-23	14-May-99		587.	1.11	0.5 U	1.5 U	0.3	-	-	-	-	4.42	13.21
	990824-MW3-26-12	24-Aug-99		0.5 U	0.5 U	0.5 U	1.5 U	0.57	0.02 U	-	-	-	1.67	4.69
	991027-MW3-26-14	27-Oct-99		0.5 U	0.5 U	0.5 U	1.5 U	0.79	0.02 U	-	-	-	7.23	12.56
	000330-MW3-26-113	30-Mar-00		0.5 U	0.5 U	0.5 U	1.5 U	0.36	0.21	-	-	-	2.44	6.32
	001005-MW3-26-11	5-Oct-00		0.5 U	0.5 U	0.5 U	1.5 U	-	0.04	-	-	-	2.96	6.15
	010328-MW3-26-113	28-Mar-01		0.5 U	0.5 U	0.5 U	1.5 U	0.221	0.209	-	-	-	5.42	11.9
	048023-MW3-26-010 [7]	23-Aug-04		0.5 U	0.5 U	0.5 U	1. U	0.184	0.184	-	-	-	ND U	0.2121

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
Drinking Water														
	MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]														
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#	#	#
MW-03-26	050330-004	30-Mar-05	15 - 25	0.5 U	0.5 U	0.5 U	1. U	-	0.384	-	-	-	0.7177	1.4491
	050922-MW-3-26-105	22-Sep-05	(fill WBZ)	0.5 U	0.5 U	0.5 U	1. U	0.502	0.295	-	-	-	3.412	8.0986
	060330-MW-3-26-110	30-Mar-06		0.5 U	0.5 U	0.5 U	1. U	0.3	0.0756	0.0157	-	-	0.1554	1.482
	061017-MW-3-26-110	17-Oct-06		0.5 U	0.5 U	0.5 U	0.5 U	4.2	0.53	0.005 U	-	-	0.3799	1.3539
	2708-070629-MW-3-26-119	29-Jun-07		14.3 J	0.5 UJ	0.5 UJ	1.45 J	0.0423 J	0.0246 J	0.003 UJ	-	-	15.709	102.579
	2708-080512-MW3-26-107	12-May-08		0.045 U	0.1 J	0.042 U	0.078 U	0.38	0.21	0.004 J	-	-	1.496	4.066
	2708-080911-MW-3-26-115	11-Sep-08		0.05 J	0.66 U*	0.042 U	0.08	7.5	4.03	0.029	-	-	1.986	5.
	2708-090331-MW3-26-123	31-Mar-09		0.045 U	0.048 U	0.042 U	0.078 U	0.41 J	0.11 J	0.003 U	-	-	0.776	1.8863
	2708-090817-MW-3-26-139	17-Aug-09		0.25 U	0.5 U	0.5 U	0.5 U	0.371	0.005 U	0.01 UJ	0.0587	0.003	1.139	3.1544
MW-03-56	951206-MW3-56-01	6-Dec-95	45 - 55	1,200.	24.	34.	90.	-	-	-	-	-	2.69	1,384.75
	960319-MW3-56-01	19-Mar-96	(alluvial WBZ)	730.	16.	27.	66.	0.19	-	-	-	-	2.34	1,926.62
	960620-MW3-56-01	20-Jun-96		730.	7.1	26.	73.	0.08	-	-	-	-	1.59	1,491.1
	961002-MW3-56-01	2-Oct-96		450.	5. U	11.	27.	0.094	-	-	-	-	0.54	937.84
	970226-MW3-56-01	26-Feb-97		750.	5. U	5. U	6. U	0.13	-	-	-	-	0.62	618.32
	970828-MW3-56-01	28-Aug-97		340.	0.9	2.5	11.	0.11	-	-	-	-	0.82	195.52
	980218-MW3-56-01	18-Feb-98		520.	0.89	2.9	15.	0.16	0.01 U	-	-	-	0.58	129.58
	980218-MW3-56-02	18-Feb-98		520.	1.1	4.	19.	-	-	-	-	-	0.46	155.56
	980602-MW3-56-14	2-Jun-98		580.	25.	10. U	30. U	0.15	0.01 U	-	-	-	24.5	315.8
	980602-MW3-56-15	2-Jun-98		630.	10. U	10. U	30. U	-	-	-	-	-	24.3	305.6
	980826-MW3-56-12	26-Aug-98		430.	0.96	2.8	13.	0.15	0.04	-	-	-	3.34	101.58
	981118-MW3-56-16	18-Nov-98		630.	0.5 U	0.5 U	1.5 U	0.13	0.01 U	-	-	-	0.97	118.97
	981118-MW3-56-17	18-Nov-98		610.	0.5 U	0.5 U	1.5 U	-	-	-	-	-	0.77	121.47
	990217-MW3-56-015	17-Feb-99		760.	0.5 U	5. U	15. U	0.076	0.02 U	-	-	-	12.53	163.45
	990514-MW3-56-24	14-May-99		90.2	0.5 U	0.5 U	2.32	0.11	-	-	-	-	3.24	157.21
	990824-MW3-56-16	24-Aug-99		610.	5.03	5. U	20.8	0.12	0.022	-	-	-	0.6	99.66
	991028-MW3-56-17	28-Oct-99		390.	63.4	60.4	192.	0.1	0.02 U	-	-	-	0.59	98.98
	000330-MW3-56-117	30-Mar-00		167.	0.5 U	0.993	7.36	0.07	0.02 U	-	-	-	3.84	166.08
	001005-MW3-56-13	5-Oct-00		53.2	0.5 U	0.5 U	2.09	-	0.02 U	-	-	-	12.63	135.58
	010329-MW3-56-116	29-Mar-01		157.	50. U	115.	913.	0.055	0.047	-	-	-	10.35	107.75
	020404-MW3-56-111	4-Apr-02		340.	0.5 U	0.5 U	7.8	0.146	0.046	-	-	-	2.62	98.13
	030319-MW3-56-112	19-Mar-03		430.	0.5 U	5. U	15. U	0.1	0.04 U	-	-	-	1.52	94.38
	040823-MW3-56-011 [7]	23-Aug-04		10.6	1. U	1. U	2. U	0.0324	0.0324	-	-	-	ND U	56.164
	050330-003	30-Mar-05		0.958	0.5 U	0.5 U	2.06	-	0.0198	-	-	-	0.6607	66.2207
	050922-MW-3-56-106	22-Sep-05		17.2	0.5 U	0.5 U	3.	0.0418	0.0175	-	-	-	0.632	52.212
	060330-MW-3-56-111	30-Mar-06		0.514	0.5 U	0.5 U	2.94	0.0402	0.0274	0.0013 U	-	-	1.466	95.269
	061024-MW-3-56-116	24-Oct-06		2.6	0.3 J	0.18 J	1.77 J	0.05	0.002	0.005 U	-	-	8.81	85.21
	2708-070626-MW-3-56-108	26-Jun-07		5.83	0.5 U	0.5 U	1.01	0.0339	0.0169	0.006 UJ	-	-	21.195	193.875
	2708-080512-MW3-56-106	12-May-08		0.91	0.35 J	0.14 J	2.13	0.05	0.002 U	0.003 J	-	-	22.84	119.33
	2708-080911-MW-3-56-116	11-Sep-08		0.84	1.5 U*	0.09 J	1.73	0.03	0.02	0.004 J	-	-	40.52	186.12
	2708-090326-MW3-56-105	26-Mar-09		0.56	0.4 J	0.13 J	2.5	0.04	0.01 J	0.004 J	-	-	18.57	107.07
	2708-090811-MW-3-56-107	11-Aug-09		5.33 J	0.5 UJ	0.5 UJ	1. U	0.0295	0.005 U	0.01 U	-	-	62.11	213.31
MW-04-35	951206-MW4-35-01	6-Dec-95	24 - 34	0.54	0.5 U	0.5 U	0.5 U	0.079	-	-	-	-	0.69	54.49
	960318-MW4-35-01	18-Mar-96	(fill WBZ)	17.	0.96	0.5 U	1.3	0.35	-	-	-	-	3.18	84.4
	960318-MW4-35-02	18-Mar-96		18.	0.82	0.5 U	2.1	-	-	-	-	-	2.41	79.1
	960618-MW4-35-01	18-Jun-96		5.9	0.5 U	0.5 U	0.61	0.46	-	-	-	-	2.51	61.4
	961001-MW4-35-01	1-Oct-96		5.9	0.5 U	0.5 U	-	0.75	-	-	-	-	1.7	42.33
	970225-MW4-35-01	25-Feb-97		14.	0.5 U	0.5 U	0.5 U	0.39	-	-	-	-	0.41	45.65
	980827-MW4-57-01 [4]	27-Aug-97		8.8	0.5 U	0.5 U	1.7	0.8	-	-	-	-	0.53	36.26
	980217-MW4-35-01	17-Feb-98		15.	0.5 U	0.5 U	1.5 U	0.36	0.01 U	-	-	-	0.25	31.85
	980601-MW4-35-06	1-Jun-98		0.5 U	0.5 U	0.5 U	1.5 U	0.29	0.017	-	-	-	0.48	43.63
	980826-MW4-35-06	26-Aug-98		10.	0.5 U	0.5 U	1.5 U	0.63	0.03	-	-	-	3.02	60.85
	980826-MW4-35-07	26-Aug-98		10.	0.5 U	0.5 U	1.5 U	0.81	0.17	-	-	-	4.37	64.65
	981117-MW4-35-11	17-Nov-98		17.	0.5 U	0.99	1.5 U	0.83	0.53	-	-	-	5.32	50.83
	990216-MW4-35-009	16-Feb-99		31.	0.5 U	0.5 U	1.5 U	0.22	0.02 U	-	-	-	0.4	23.41
	990514-MW4-35-21	14-May-99		16.	0.5 U	0.5 U	1.5 U	0.26	-	-	-	-	0.32	24.83
	990824-MW4-35-11	24-Aug-99		5. U	0.5 U	0.5 U	1.5 U	0.86	0.1	-	-	-	1.101	33.261
	991027-MW4-35-13	27-Oct-99		13.9	1.16	0.5 U	2.45	0.98	0.02 U	-	-	-	5.75	97.39

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
Drinking Water														
	MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]														
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#	#	#
MW-04-35	000330-MW4-35-114	30-Mar-00	24 - 34	5.39	0.5 U	0.5 U	1.5 U	0.61	0.04	-	-	-	0.42	45.26
	001005-MW4-35-10	5-Oct-00	(fill WBZ)	10.4	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	21.72	162.5
	010328-MW4-35-112	28-Mar-01		-	0.0055	-	-	-	0.005 U	-	-	-	0.4	25.55
	040823-MW4-35-012	23-Aug-04		1.61	0.5 U	0.5 U	1.65	0.178	0.098	-	-	-	ND U	65.33
	050331-005	31-Mar-05		0.5 U	0.5 U	0.5 U	1. U	-	0.0499	-	-	-	0.21	11.9331
	050928-MW4-35-123	28-Sep-05		1.9	0.5 U	0.5 U	1.81	0.247	0.01 U	-	-	-	0.301	37.936
	060331-MW-4-35-113	31-Mar-06		0.5 U	0.5 U	0.5 U	1. U	0.14	0.0389	0.0029	-	-	0.4361	31.9876
	061018-MW-4-35-113	18-Oct-06		3.	0.48 J	0.13 U	2.11	0.17	0.002 U	0.005 U	-	-	1.66	65.37
	2708-070726-MW-4-35-137	26-Jul-07		0.5 U	0.5 U	0.5 U	1. U	0.28	0.262	0.0043 J	-	-	0.4281	20.4801
	2708-080513-MW4-35-112	13-May-08		0.12 J	0.43 J	0.042 U	0.45	0.16	0.01	0.003 U	-	-	1.686	57.916
	2708-080513-MW4-35-113 (DUP)	13-May-08		0.12 J	0.27 J	0.06 J	0.47	0.15	0.01	0.003 U	-	-	1.432	52.262
	2708-080911-MW-4-35-109	11-Sep-08		6.5	1.4 U*	0.18 J	3.3	0.17	0.01 U	0.007 J	-	-	1.045	92.955
	2708-090331-MW4-35-119	31-Mar-09		0.34 J	0.59	0.05 J	0.67 J	0.21 J	0.003 U	0.003 U	-	-	0.6944	43.9514
	2708-090813-MW-4-35-121	13-Aug-09		2.63	0.5 U	0.5 U	2.12	0.202 J	0.005 U	0.01 U	0.0297	0.002 U	ND U	45.599
MW-04-57	951205-MW4-57-01	5-Dec-95	46 - 56	9,600.	72.	590.	290.	1.18	-	-	-	-	1.73	1,328.27
	960321-MW4-57-01	21-Mar-96	(alluvial WBZ)	11,000.	50. U	520.	270.	0.03	-	-	-	-	2.29	1,097.76
	960620-MW4-57-01	20-Jun-96		10,000.	200. U	480.	200. U	0.88	-	-	-	-	1.42	646.47
	961002-MW4-57-01	2-Oct-96		14,000.	100. U	580.	400.	1.	-	-	-	-	0.64	1,706.84
	970226-MW4-57-01	26-Feb-97		16,000.	34.	630.	130.	1.52	-	-	-	-	0.52	1,688.42
	970828-MW4-35-01 [4]	28-Aug-97		12,000.	50. U	360.	150. U	2.	-	-	-	-	0.44	1,691.74
	980218-MW4-57-01	18-Feb-98		15,600.	35.	530.	240.	2.	0.05 U	-	-	-	0.28	2,357.88
	980603-MW4-57-18[5]	3-Jun-98		10,100.	58.	540.	170.	1.9	0.008 [6]	-	-	-	0.67	2,298.87
	980826-MW4-57-13	26-Aug-98		13,800.	37.	560.	280.	1.4	0.1	-	-	-	0.44	2,471.24
	981119-MW4-57-20	19-Nov-98		11,100.	25. U	470.	110.	1.8	0.5	-	-	-	0.34	1,967.94
	990217-MW4-57-016	17-Feb-99		14,400.	10.6	639.	220.	1.4	0.02 U	-	-	-	0.32	1,575.28
	990514-MW4-57-22	14-May-99		15,900.	50. U	750.	150. U	1.8	-	-	-	-	0.39	1,684.32
	990825-MW4-57-17	25-Aug-99		17,500.	54.8	493.	150. U	1.7	0.02 U	-	-	-	0.4	2,305.4
	991028-MW4-57-21	28-Oct-99		6,900.	12.	461.	144.	0.65	0.02 U	-	-	-	ND U	1,692.
	000403-MW4-57-121	3-Apr-00		19,300.	8.64	452.	137.	0.74	0.17	-	-	-	0.47	2,765.74
	001006-MW4-57-19	6-Oct-00		15,000.	100. U	574.	300. U	-	0.02 U	-	-	-	0.38	2,498.11
	010329-MW4-57-120	29-Mar-01		18,800.	50. U	730.	150. U	0.696	0.08 U	-	-	-	0.43	3,063.35
	020405-MW4-57-117	5-Apr-02		18,800.	500. U	805.	1,000. U	3.43	0.4 U	-	-	-	0.21	2,249.96
	030320-MW4-57-117	20-Mar-03		17,000.	100. U	770.	300. U	1.3	0.04 U	-	-	-	ND U	2,233.4
	040824-MW4-57-016	24-Aug-04		15,000.	100. U	748.	122.	1.76	0.261	-	-	-	1.205	3,823.305
	050331-008	31-Mar-05		13,000.	12.8	645.	180.	-	0.175	-	-	-	ND U	2,909.039
	051003-MW-4-57-133	3-Oct-05		622.	5. U	231.	65.1	2.7	0.55	-	-	-	ND U	271.63
	060331-MW-4-57-114	31-Mar-06		4,660.	25. U	500.	114.	2.24	0.044	0.0374	-	-	0.536	551.64
	060331-MW-4-57-115 (Dup)	31-Mar-06		4,680.	25. U	509.	98.6	2.12	0.016	0.0353	-	-	-	-
	061030-MW-4-57-122	30-Oct-06		7,100.	11. J	450.	154.	2.6	0.13	0.0282	-	-	0.72	806.12
	2708-070622-MW-4-57-101	22-Jun-07		0.5 U	0.5 U	0.5 U	1. U	-	0.005 U	-	-	-	0.6619	33.6919
	2708-070723-MW-4-57-135	23-Jul-07		3,870. J	25. UJ	249. J	82. U*	2.89 J	0.5 UJ	0.003 UJ	-	-	-	-
	2708-080513-MW4-57-111	13-May-08		5,400.	13.	520.	160.	3.01	0.19	0.008 J	-	-	4.94	930.81
	2708-080911-MW-4-57-108	11-Sep-08		710.	3.8 U*	43.	61.	3.4	0.52	0.073	-	-	6.96	302.26
	2708-090331-MW4-57-121	31-Mar-09		6,700.	8.8 J	330.	115.	2.66 J	0.05 J	0.003 U	-	-	1.538	397.388
	2708-090817-MW-4-57-138	17-Aug-09		508.	5 U	32.1	43.9	2.62	0.05 U	0.01 UJ	0.244	0.005	4.34	271.67
MW-04-101	981117-MW4-101-09	17-Nov-98	89.5 -99.5	32.	0.5 U	3.3	2.1	0.62	0.2	-	-	-	ND U	20.
	990216-MW4-101-007	16-Feb-99	(alluvial WBZ)	18.9	0.5 U	1.9	1.5 U	0.64	0.03	-	-	-	ND U	8.3
	990514-MW4-101-19	14-May-99		95.	0.5 U	10.4	2.05	0.47	0.12	-	-	-	ND U	68.31
	990514-MW4-101-20	14-May-99		99.4	0.5 U	13.	1.5 U	0.48	-	-	-	-	ND U	62.5
	990824-MW4-101-09	24-Aug-99		53.1	3.	4.76	7.5 U	0.56	0.03	-	-	-	ND U	190.64
	991027-MW4-101-11	27-Oct-99		7.25	0.5 U	4.17	1.5 U	0.36	0.02 U	-	-	-	ND U	166.65
	000329-MW4-101-111	29-Mar-00		3.96	0.5 U	1.33	1.5 U	0.52	0.11	-	-	-	ND U	21.57
	001005-MW4-101-09	5-Oct-00		0.5 U	0.5 U	0.5 U	1.5 U	-	0.08	-	-	-	ND U	1.36
	010328-MW4-101-110	28-Mar-01		0.5 U	0.5 U	0.5 U	1.5 U	0.203	0.02 U	-	-	-	ND U	1.14
	011009-MW4-101-103	9-Oct-01		0.5 U	0.5 U	0.5 U	1.5 U	0.66	-	-	-	-	ND U	1.18
	020404-MW4-101-110	4-Apr-02		5.17	0.5 U	0.5 U	1.5 U	0.432	0.04 U	-	-	-	ND U	5.97
	020924-MW4-101-102	24-Sep-02		43.	0.5 U	0.5 U	1.5 U	0.49	-	-	-	-	ND U	12.63

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene		Toluene		Ethylbenzene		Xylenes		EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide		Amenable Cyanide		Free Cyanide		WAD Cyanide*		Available Cyanide**		EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs		Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]																								
Fish Consumption																								
	EPA 2004 NRWQC (organism only)			51.		15,000.		2,100.		#		#		#		0.14		#		#		#		#
	Portland Harbor specific fish consumption rate			5.1		1,500.		210.		#		#		#		0.014		#		#		#		#
	DEQ 2004 AWQC (organism only)			51.		15,000.		2,100.		#		#		#		0.14		#		#		#		#
Drinking Water																								
	MCL			5.		1,000.		700.		10,000.		#		#		0.2		#		#		#		#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41		2,300.		1,500.		200.		#		#		0.73		#		#		#		#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]																								
	EPA 2004 NRWQC (chronic)			#		#		#		#		#		#		0.0052		#		#		#		#
	DEQ 2004 AWQC (chronic)			#		#		#		#		#		#		0.0052		#		#		#		#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.		9.8		7.3		13.		#		#		#		#		#		#		#
MW-04-101	030318-MW4-101-109	18-Mar-03	89.5 -99.5	120.	A	2.5	U,A	2.5	U,A	7.5	U,A	0.51		0.04	U	-		-		-		ND	U	15.63
	030930-MW4-101-105 [7]	30-Sep-03	(alluvial WBZ)	360.		2.5	U	2.5	U	7.5	U	-		0.28		-		-		-		ND	U	14.59
	040816-MW4-101-007 [7]	16-Aug-04		513.		2.5	U	3.14		5.	U	0.005	U	0.005	U	-		-		-		ND	U	26.741
	050330-002	30-Mar-05		366.		1.23		1.1		4.33		-		0.131		-		-		-		ND	U	16.676
	050928-MW4-101-122	28-Sep-05		216.		1.22		1.	U	5.09		0.587		0.022		-		-		-		ND	U	7.3298
	060329-MW-4-101-106	29-Mar-06		301.		5.	U	5.	U	10.	U	0.636		0.0604		0.0134		-		-		ND	U	10.5918
	061018-MW-4-101-112	18-Oct-06		170.		2.		63.		6.3		0.8		0.002	U	0.008	J	-		-		0.0092		6.3155
	2708-070625-MW-4-101-106	25-Jun-07		39.5		1.14		0.5	U	3.52		0.671	J	0.083		0.0035		-		-		0.0338		1.4248
	2708-080513-MW4-101-114	13-May-08		11.		1.2		0.4	J	5.61		0.87		0.08		0.006	J	-		-		0.0031		3.2401
	2708-080910-MW-4-101-107	10-Sep-08		25.		2.		0.5		5.81		0.7		0.002	UJ	0.032		-		-		ND	U	2.2108
	2708-090331-MW4-101-115	31-Mar-09		9.7		2.1		0.59		7.06		0.7	J	0.003	U	0.003	U	-		-		ND	U	2.8741
	2708-090331-MW4-101-117	31-Mar-09		7.8		1.6		0.46	J	6.04		0.68	J	-		0.003	U	-		-		ND	U	2.7484
	2708-090813-MW-4-101-119	13-Aug-09		4.66	J	1.	J	0.5	U	3.88		0.759	U	0.0194		0.01	U	-		-		0.04		3.2696
MW-05-32	951205-MW5-32-01	5-Dec-95	21 - 31	0.5	U	0.5	U	0.5	U	0.5	U	0.101		-		-		-		-		7.59		207.69
	960319-MW5-32-01	19-Mar-96	(fill / alluvial WBZ)	0.5	U	0.5	U	0.5	U	0.5	U	0.11		-		-		-		-		29.81		268.91
	960319-MW5-32-01 (dissolved)	19-Mar-96		-		-		-		-		-		-		-		-		-		ND	U	44.97
	960620-MW5-32-01	20-Jun-96		0.5	U	0.5	U	0.5	U	0.5	U	0.05		-		-		-		-		13.67		82.79
	961001-MW5-32-01	1-Oct-96		0.5	U	0.5	U	0.5	U	0.5	U	0.14		-		-		-		-		277.		773.
	970225-MW5-32-01	25-Feb-97		0.5	U	0.5	U	0.5	U	0.5	U	0.11		-		-		-		-		1.		9.71
	970827-MW5-32-01	27-Aug-97		0.5	U	0.5	U	0.5	U	1.5	U	0.14		-		-		-		-		10.4		24.3
	980217-MW5-32-01	17-Feb-98		0.5	U	0.5	U	0.5	U	1.5	U	0.17		0.01	U	-		-		-		3.23		7.57
	980602-MW5-32-10	2-Jun-98		0.5	U	0.5	U	0.5	U	1.5	U	0.18		0.038		-		-		-		35.71		94.72
	980826-MW5-32-09	26-Aug-98		0.5	U	0.5	U	0.5	U	1.5	U	0.23		0.01		-		-		-		258.8		540.4
	981118-MW5-32-13	18-Nov-98		0.5	U	0.5	U	0.5	U	1.5	U	0.25		0.05		-		-		-		1.42		4.73
	990216-MW5-32-011	16-Feb-99		0.5	U	0.5	U	0.5	U	1.5	U	0.13		0.02	U	-		-		-		2.57		6.89
	990514-MW5-32-17	14-May-99		0.5	U	0.5	U	0.5	U	1.5	U	0.15		-		-		-		-		0.8		2.38
	990824-MW5-32-13	24-Aug-99		0.749		0.742		0.68		1.74		0.18		0.028		-		-		-		8.82		21.15
	991027-MW5-32-15	27-Oct-99		0.5	U	0.5	U	0.5	U	1.5	U	0.19		0.02	U	-		-		-		6.68		16.16
	000330-MW5-32-115	30-Mar-00		0.5	U	0.5	U	0.5	U	1.5	U	0.02	U	0.02	U	-		-		-		4.45		8.97
	001005-MW5-32-12	5-Oct-00		0.5	U	0.5	U	0.5	U	1.5	U	-		0.04		-		-		-		1.66		3.3
	010329-MW5-32-114	29-Mar-01		0.5	U	0.5	U	0.5	U	1.5	U	0.178		0.17		-		-		-		10.12		19.65
	040816-MW5-32-008 [7]	16-Aug-04		0.5	U	0.5	U	0.5	U	1.	U	0.521		0.175		-		-		-		ND	U	0.269
	050401-011	1-Apr-05		0.5	U	0.5	U	0.5	U	1.	U	-		0.0281		-		-		-		1.59		4.463
	050937-MW-5-32-117	27-Sep-05		0.5	U	0.5	U	0.5	U	1.	U	0.09		0.01	U	-		-		-		11.113		26.855
	060329-MW-5-32-107	29-Mar-06		0.5	U	0.5	U	0.5	U	1.	U	0.106		0.101		0.0031		-		-		5.376		11.937
	061018-MW-5-32-114	18-Oct-06		0.14	U	0.11	U	0.13	U	0.22	U	0.09		0.01		0.005	J	-		-		1.196		5.337
	2708-070625-MW-5-32-104	25-Jun-07		0.5	U	0.5	U	0.5	U	1.	U	-		0.0907		-		-		-		6.239		17.209
	2708-070730-MW-5-32-142	30-Jul-07		-		-		-		-		0.106		0.0941		0.003	U	-		-		-		-
	2708-080514-MW5-32-118	14-May-08		0.045	U	0.08	J	0.042	U	0.078	U	0.11		0.03		0.006	J	-		-		5.57		11.5909
	2708-080910-MW-5-32-102	10-Sep-08		0.34	J	0.91	U*	0.05	J	0.04		0.09		0.05		0.007	J	-		-		3.628		7.706
	2708-090330-MW5-32-111	30-Mar-09		0.07	J	0.21	J	0.042	U	0.078	U	0.11	J	0.04	J	0.003	U	-		-		6.9		14.035
	2708-090812-MW-5-32-114	12-Aug-09		0.25	U	0.5	U	0.5	U	0.5	U	0.108		0.005	U	0.01	U	0.0234		0.0023		3.4891		7.3541
MW-05-100	981118-MW5-100-14	18-Nov-98	88 - 98	5,000.		0.5	U	330.		320.		0.66		0.01	U	-		-		-		ND	U	7,126.7
	990217-MW5-100-018	17-Feb-99	(alluvial WBZ)	6,650.		25.	U	244.		242.		0.66		0.06		-		-		-		ND	U	5,032.73
	990514-MW5-100-18	14-May-99		11,400.		6.75		613.		611.		0.44		0.02	U	-		-		-		ND	U	7,482.13
	990825-MW5-100-18	25-Aug-99		11,800.		250.	U	534.		750.		0.84		0.02	U	-		-		-		ND	U	13,330.3
	991028-MW5-100-19	28-Oct-99		10,300.		50.	U	644.		552.		0.69		0.02	U	-		-		-		ND	U	7,471.79
	000330-MW5-100-119	30-Mar-00		9,550.		25.	U	575.		525.		0.56		0.02	U	-		-		-		0.1		9,825.06
	001006-MW5-100-15	6-Oct-00		9,180.		50.	U	513.		472.		-		0.08		-		-		-		ND	U	10,104.03
	001006-MW5-100-16	6-Oct-00		9,020.		100.	U	468.		412.		-		0.09		-		-		-		ND	U	9,218.41
	010329-MW5-100-118	29-Mar-01		9,560.		100.	U	436.		300.	U	0.142		0.135		-		-		-		ND	U	9,619.8
	020405-MW5-100-114	5-Apr-02		8,750.		500.	U	500.	U	1,000.	U	1.8		0.4	U	-		-		-		1.1		82,318.6
	020405-MW5-100-115	5-Apr-02		8,950.		500.	U	500.	U	1,000.	U	1.54		0.08	U	-		-		-		0.25		4,321.28
	030319-MW5-100-114	19-Mar-03		6,600.		25.	U,A	400.		250.		0.56		0.04	U	-		-		-		ND	U	5,614.
	040824-MW5-100-015 [7]	24-Aug-04		11,500.		100.	U	683.		253.		0.816		0.298		-		-		-		ND	U	11,921.9
	050401-012	1-Apr-05		19,800.		11.5		542.		290.		-		0.109		-		-		-		ND	U	8,753.8
	050921-MW-5-100-102	21-Sep-05		12,300.		50.	U	690.		393.		0.869		0.248		-		-		-		0.0369		6,549.2297

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
Drinking Water														
	MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]														
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#	#	#
MW-05-100	060404-MW-5-100-121	4-Apr-06	88 - 98	11,300.	50. U	538.	345.	0.814	0.106	0.0283	-	-	ND U	8,408.6
	061027-MW-5-100-120	27-Oct-06	(alluvial WBZ)	11,000.	18. J	560.	298.	1.06	0.17	0.005 J	-	-	ND U	7,117.
	2708-070625-MW-5-100-103	25-Jun-07		10,100.	40. U	532.	294.	-	0.056	-	-	-	ND U	7,320.
	2708-070730-MW-5-100-141	30-Jul-07		-	-	-	-	0.747	0.287	0.0074 J	-	-	-	-
	2708-080514-MW5-100-119	14-May-08		12,000.	26. J	690.	299.	0.99	0.11	0.041	-	-	0.0323	7,816.7353
	2708-080910-MW-5-100-100	10-Sep-08		11,000.	25. U*	640.	320.	0.91	0.12	0.036	-	-	0.011	9,927.507
	2708-090330-MW5-100-109	30-Mar-09		12,000.	25. J	710.	240.	0.94 J	0.2 J	0.063	-	-	0.0444	9,630.7738
	2708-090812-MW-5-100-112	12-Aug-09		11,800.	50. U	703.	261.	0.924 U	0.05 U	0.0124	0.109	0.015	ND U	19,500.
MW-05-175	981116-MW5-175-07	16-Nov-98	163 - 173	0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.01 U	-	-	-	ND U	ND U
	990215-MW5-175-003	15-Feb-99	(alluvial WBZ)	0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	ND U	ND U
	990512-MW5-175-07	12-May-99		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	ND U	ND U
	990823-MW5-175-03	23-Aug-99		0.5 U	1.16	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	ND U	0.2
	991026-MW5-175-06	26-Oct-99		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	ND U	ND U
	000329-MW5-175-106	29-Mar-00		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	ND U	ND U
	001004-MW5-175-05	4-Oct-00		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	ND U
	010328-MW5-175-105	28-Mar-01		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	ND U	ND U
	011009-MW5-175-102	9-Oct-01		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	-	-	-	-	ND U	ND U
	020404-MW5-175-105	4-Apr-02		1. U	1. U	1. U	2. U	0.04 U	0.04 U	-	-	-	ND U	ND U
	020924-MW5-175-101	24-Sep-02		0.5 U	0.5 U	0.5 U	1.5 U	-	-	-	-	-	ND U	ND U
	030318-MW5-175-105	18-Mar-03		0.5 U	0.5 U	0.5 U	1.5 U	0.04 U	0.04 U	-	-	-	ND U	ND U
	030929-MW5-175-101	29-Sep-03		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	ND U
	040824-MW5-175-013	24-Aug-04		0.5 U	0.5 U	0.5 U	1. U	0.0069	0.0069	-	-	-	ND U	0.0883
	050921-MW5-175-101	21-Sep-05		0.5 U	0.5 U	0.5 U	1. U	0.0156	0.0052	-	-	-	ND U	0.0894
	060329-MW-5-175-105	29-Mar-06		0.5 U	0.5 U	0.5 U	1. U	0.018	0.0054	0.0013 U	-	-	ND U	0.0796
	061016-MW-5-175-05	16-Oct-06		0.14 U	1.1	0.13 U	0.22 U	0.04	0.002 U	0.005 U	-	-	ND U	0.047
	2708-070625-MW-5-175-105	25-Jun-07		0.5 U	0.86	0.5 U	1. U	0.0145 J	0.0064	0.0022 J	-	-	0.0302	0.1442
	2708-080514-MW5-175-116	14-May-08		0.05 J	0.1 J	0.042 U	0.078 U	0.02	0.002 U	0.005 J	-	-	0.0185	0.1241
	2708-080910-MW-5-175-101	10-Sep-08		0.045 U	0.57 U*	0.042 U	0.078 U	0.01	0.01	0.004 J	-	-	0.0236	0.1416
	2708-090330-MW5-175-107	30-Mar-09		0.06 J	0.05 J	0.042 U	0.078 U	0.01 J	0.003 U	0.003 U	-	-	0.0108	0.0481
	2708-090812-MW-5-175-110	12-Aug-09		0.25 U	0.5 U	0.5 U	0.5 U	0.0186	0.005 U	0.01 U	-	-	ND U	ND U
MW-06-32	951207-MW6-32-01	7-Dec-95	21 - 31	3,000.	150.	960.	740.	0.091	-	-	-	-	7,470.	199,570.
	960319-MW6-32-01	19-Mar-96	(fill WBZ)	640.	22.	400.	270.	0.21	-	-	-	-	6.56	2,346.46
	960319-MW6-32-01 (dissolved)	19-Mar-96		-	-	-	-	-	-	-	-	-	ND U	1,940.1
	960617-MW6-32-01	17-Jun-96		410.	40.	280.	410.	0.23	-	-	-	-	16.24	1,877.54
	960930-MW6-32-01	30-Sep-96		1,100.	34.	470.	320.	0.02	-	-	-	-	203.5	4,757.7
	970225-MW6-32-01	25-Feb-97		1,100.	22.	370.	80.	0.22	-	-	-	-	ND U	1,308.2
	970826-MW6-32-01	26-Aug-97		1,200.	27.	420.	280.	0.15	-	-	-	-	15.	2,069.65
	980216-MW6-32-01	16-Feb-98		1,700.	250. U	650.	750. U	0.18	0.01 U	-	-	-	161.9	3,554.2
	980601-MW6-32-04	1-Jun-98		1,200.	32.	300.	190.	0.1	0.01 U	-	-	-	19.98	2,244.96
MW-06-61	951206-MW6-61-01	6-Dec-95	50 - 60	6.7	0.71	8.9	5.8	0.228	-	-	-	-	8.17	744.89
	960319-MW6-61-01	19-Mar-96	(alluvial WBZ)	11.	0.68	9.2	5.3	0.28	-	-	-	-	3.29	196.96
	960620-MW6-61-01	20-Jun-96		8.4	0.5 U	6.	3.3	0.27	-	-	-	-	4.27	139.28
	961001-MW6-61-01	1-Oct-96		20.	0.93	16.	8.	0.3	-	-	-	-	3.8	152.9
	970225-MW6-61-01	25-Feb-97		82.	6.1	79.	41.	0.35	-	-	-	-	ND U	365.1
	970828-MW6-61-01	28-Aug-97		130.	11.	180.	120.	0.41	-	-	-	-	4.88	1,451.5
MW-08-29	951207-MW8-29-01	7-Dec-95	18 - 28	2,100.	510.	200.	320.	3.11	-	-	-	-	315.	7,688.
	960321-MW8-29-01	21-Mar-96	(fill WBZ)	1,700.	380.	170.	400.	2.4	-	-	-	-	143.7	7,879.7
	960620-MW8-29-01	20-Jun-96		-	-	-	-	-	-	-	-	-	5.41	2,087.29
	960620-MW8-29-02	20-Jun-96		1,300.	310.	170.	380.	-	-	-	-	-	13.32	2,166.12
	961002-MW8-29-01	2-Oct-96		770.	210.	130.	270.	0.524	-	-	-	-	25.9	6,086.4
	970226-MW8-29-01	26-Feb-97		860.	200.	150.	250.	1.46	-	-	-	-	9.9	6,203.9
	970828-MW8-29-01	28-Aug-97		390.	130.	110.	190.	3.4	-	-	-	-	171.7	11,712.7
	980218-MW8-29-01	18-Feb-98		620.	220.	170.	250.	2.6	0.01 U	-	-	-	22.19	11,760.19
	980603-MW8-29-19	3-Jun-98		700.	320.	250.	310.	4.9	0.022	-	-	-	195.8	12,406.8
	981119-MW8-29-22	19-Nov-98		260.	80.	93.	130.	2.5	-	-	-	-	11.11	5,376.91
	990513-MW8-29-14	13-May-99		209.	64.7	58.6	92.5	2.6	-	-	-	-	10.73	6,444.82
	991029-MW8-29-23	29-Oct-99		168.	50.3	51.4	70.8	60.	2.	-	-	-	ND U	3,302.

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
Drinking Water														
	MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]														
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#	#	#
MW-08-29	000403-MW8-29-123	3-Apr-00	18 - 28	181.	49.5	46.2	75. U	0.61	0.03	-	-	-	7.42	7,158.23
	010330-MW8-29-123	30-Mar-01	(fill WBZ)	104.	17.4	19.	33.5	0.92	0.042	-	-	-	49.12	2,291.24
	040825-MW8-29-022	25-Aug-04		85.9	13.4	14.3	29.1	2.69	0.138	-	-	-	38.52	3,072.45
	05-0929-MW-29-27	29-Sep-05		724.	207.	137.	177.	5.92	0.01 U	-	-	-	28.643	5,592.863
	061031-MW-8-29-124	31-Oct-06		93.	17.	16.	26.	3.8	0.28	0.005 U	-	-	8.7	2,265.4
	2708-080603-MW8-29-100	3-Jun-08		88.	26.	38.	53.	3.44	0.48	0.015	-	-	21.22	2,623.82
	2708-080911-MW-8-27-113	11-Sep-08		85.	14. U*	30.	41.	2.59	0.04 U	0.028	-	-	19.15	2,685.35
	2708-090331-MW8-29-118	31-Mar-09		200.	46.	36.	50.	4.57 J	0.45 J	0.003 U	-	-	5.027	3,690.297
	2708-090811-MW-8-29-106	11-Aug-09		78.4 J	13.4 J	26.4 J	38. J	2.36	0.05 U	0.01 U	-	-	8.36	492.8
MW-08-56	951207-MW8-56-01	7-Dec-95	45 - 55	13,000.	1,700.	850.	1,300.	0.582	-	-	-	-	156.	21,200.
	960321-MW8-56-01	21-Mar-96	(alluvial WBZ)	17,000.	820.	730.	1,600.	0.54	-	-	-	-	361.1	15,501.1
	960620-MW8-56-01 [6]	20-Jun-96		17,000.	650.	740.	1,100.	0.31	-	-	-	-	34.81	1,768.61
	961002-MW8-56-01	2-Oct-96		20,000.	690.	900.	1,800.	-	-	-	-	-	114.	11,742.
	970226-MW8-56-01	26-Feb-97		19,000.	630.	820.	1,100.	0.7	-	-	-	-	ND U	13,692.
	970828-MW8-56-01	28-Aug-97		17,000.	350.	510.	810.	0.66	-	-	-	-	20.	18,141.
	980218-MW8-56-01	18-Feb-98		20,200.	410.	740.	1,100.	0.74	0.01 U	-	-	-	11.18	12,944.88
	980603-MW8-56-21 [5]	3-Jun-98		17,900.	470.	940.	1,300.	0.77	0.018 [5]	-	-	-	67.8	17,719.8
	981119-MW8-56-23	19-Nov-98		18,200.	350.	730.	890.	0.36	-	-	-	-	ND U	11,024.
	990513-MW8-56-15	13-May-99		20,600.	254.	663.	763.	0.57	-	-	-	-	ND U	11,965.8
	991029-MW8-56-24	29-Oct-99		9,890.	352.	990.	1,100.	2.1	0.08 U	-	-	-	4.23	12,537.17
	000403-MW8-56-124	3-Apr-00		17,800.	228.	828.	830.	0.58	0.02 U	-	-	-	42.1	14,027.8
	010330-MW8-56-122	30-Mar-01		21,600.	125. U	820.	458.	0.272	0.02 U	-	-	-	40.42	14,953.54
	020405-MW8-56-118	5-Apr-02		26,400.	1. U	1,000.	2. U	1.13	0.08 U	-	-	-	1.94	7,143.
	030320-MW8-56-120	20-Mar-03		20,000.	260. A	940. A	930. A	0.51	0.04 U	-	-	-	4.2	7,712.2
	040825-MW8-56-021	25-Aug-04		20,300.	248.	795.	831.	0.474	0.153	-	-	-	ND U	10,832.7
	05-0929-MW-8-56-128	29-Sep-05		15,300.	232.	706.	791.	0.538	0.017	-	-	-	26.97	8,759.88
	061031-MW-8-56-125	31-Oct-06		22,000.	270.	670.	640.	0.3	0.002 U	0.005 U	-	-	22.1	10,483.7
	061031-MW-8-56-126 (DUP)	31-Oct-06		21,000.	270.	710.	670.	0.6	0.002 U	0.005 U	-	-	20.9	20,492.8
	2708-080603-MW8-56-101	3-Jun-08		17,000.	240.	870.	980.	0.63	0.03	0.003 J	-	-	126.	12,165.
	2708-080915-MW-8-56-117	15-Sep-08		15,000.	270.	640.	660.	0.59	0.03 J	0.015	-	-	174.4	8,698.4
	2708-090331-MW8-56-116	31-Mar-09		20,000.	280.	900.	880.	0.54 J	0.07 J	0.003 U	-	-	41.22	8,175.02
	2708-090811-MW-8-56-104	11-Aug-09		17,800. J	256. J	1,070. J	1,130. J	0.455	0.02 U	0.01 U	-	-	110.3	10,539.2
MW-09-29	951205-MW9-29-01	5-Dec-95	18 - 28	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	ND U	1.19
	960318-MW9-29-01	18-Mar-96	(fill WBZ)	0.5 U	0.5 U	0.5 U	0.5 U	0.01 U	-	-	-	-	ND U	1.6
	960618-MW9-29-01	18-Jun-96		0.5 U	0.5 U	0.5 U	0.5 U	0.01 U	-	-	-	-	ND U	0.15
	961001-MW9-29-01	1-Oct-96		0.5 U	0.5 U	0.5 U	0.5 U	0.018	-	-	-	-	ND U	0.4
	970225-MW9-29-01	25-Feb-97		0.5 U	0.5 U	0.5 U	0.5 U	0.01	-	-	-	-	ND U	ND U
	970827-MW9-29-01	27-Aug-97		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	-	-	-	-	ND U	ND U
	980217-MW9-29-01	17-Feb-98		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	-	-	-	-	ND U	ND U
	980602-MW9-29-07	2-Jun-98		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	-	-	-	-	ND U	ND U
	981116-MW9-29-02	16-Nov-98		0.5 U	0.5 U	0.5 U	1.5 U	0.03	-	-	-	-	ND U	ND U
	990511-MW9-29-03	11-May-99		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	-	-	-	-	ND U	ND U
	991026-MW9-29-02	26-Oct-99		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	ND U	ND U
	000328-MW9-29-102	28-Mar-00		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	ND U	ND U
	010327-MW9-29-102	27-Mar-01		0.5 U	0.5 U	0.5 U	1.5 U	0.026	0.02 U	-	-	-	ND U	ND U
	020403-MW9-29-101	3-Apr-02		0.5 U	0.5 U	0.5 U	1.5 U	0.04 U	0.04 U	-	-	-	ND U	ND U
	030318-MW9-29-103	18-Mar-03		0.5 U	0.5 U	0.5 U	1.5 U	0.042	0.04 U	-	-	-	ND U	ND U
	040812-MW9-29-001 [7]	12-Aug-04		0.5 U	0.5 U	0.5 U	1. U	0.01	0.01	-	-	-	ND U	ND U
	05096-MW-9-29-109	26-Sep-05		0.5 U	0.5 U	0.5 U	1. U	0.017	0.01 U	-	-	-	ND U	0.1193
	061013-MW-9-103	13-Oct-06		0.14 U	0.27 J	0.13 U	0.22 U	0.04	0.04	0.005 U	-	-	0.1747	0.4097
	2708-080604-MW9-29-109	4-Jun-08		0.045 U	0.24 J	0.18 J	0.57	0.01	0.005 J	0.004 J	-	-	0.1146	0.4818
	2708-080604-MW9-29-110 (DUP)	4-Jun-08		0.045 U	0.21 J	0.16 J	0.49	0.01	0.01 J	0.004 J	-	-	0.1022	0.4914
	2708-080916-MW-9-29-132	16-Sep-08		0.045 U	0.38 J	0.042 U	0.078 U	0.01	0.01	0.004 J	-	-	0.1822	0.4423
	2708-090326-MW9-29-102	26-Mar-09		0.045 U	0.048 U	0.042 U	0.078 U	0.02	0.003 U	0.005 J	-	-	0.0591	0.1871
	2708-090813-MW-9-29-120	13-Aug-09		0.25 U	0.5 U	0.5 U	1.5 U	0.201 J	0.005 U	0.01 U	-	-	0.0475	0.1416

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
Drinking Water														
	MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]														
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#	#	#
MW-10-25	951207-MW10-25-01	7-Dec-95	14 - 24	120,000.	42,000.	2,000.	9,200.	-	-	-	-	-	18.	13,316.5
	960320-MW10-25-01	20-Mar-96	(fill WBZ)	32,000.	38,000.	3,100.	13,000.	0.07	-	-	-	-	5.9	9,126.31
	960617-MW10-25-01	17-Jun-96		28,000.	32,000.	2,500.	8,600.	0.01 U	-	-	-	-	6.79	10,266.09
	960930-MW10-25-01	30-Sep-96		17,000.	5,000.	200. U	4,500.	0.204	-	-	-	-	78.6	10,529.5
	970225-MW10-25-01	25-Feb-97		180,000.	54,000.	1,300.	6,800.	0.01	-	-	-	-	74.3	9,841.3
	970827-MW10-25-01	27-Aug-97		168,000.	54,000.	850.	6,000.	-	-	-	-	-	19.6	7,047.1
	980216-MW10-25-01	16-Feb-98		186,000.	51,100.	880.	6,500.	0.02 U	-	-	-	-	58.1	9,165.2
	980601-MW10-25-02	1-Jun-98		93,800.	30,900.	670.	3,900.	0.21	-	-	-	-	35.1	12,161.9
	061213-MW-10-25-131	13-Dec-06		120,000.	32,000.	770.	4,100.	0.07	0.002 U	0.006 J	-	-	212.	14,463.
	2708-080604-MW10-25-108	4-Jun-08		180,000.	53,000.	970.	5,100.	0.04	0.002 UJ	0.005 J	-	-	7.84	9,435.84
	2708-080917-MW-10-25-136	17-Sep-08		170,000.	53,000.	1,000.	5,200.	0.07	0.002 U	0.005 J	-	-	1,017.	19,257.
	2708-090326-MW10-25-101	26-Mar-09		200,000.	47,000.	1,200.	6,800.	0.07	0.003 U	0.008 J	-	-	791.	11,761.
	2708-090813-MW-10-25-124	13-Aug-09		171,000.	51,300.	825.	4,470.	0.0612 J	0.005 U	0.01 U	-	-	442.97	4,188.47
MW-10-61	951206-MW10-61-01	6-Dec-95	50 - 60	75.	130.	26.	110.	-	-	-	-	-	0.72	829.72
	960321-MW10-61-01	21-Mar-96	(alluvial WBZ)	4.1	1.6	2.9	8.5	0.01 U	-	-	-	-	2.55	102.43
	960620-MW10-61-01	20-Jun-96		0.9	0.5 U	1.1	1.7	0.01 U	-	-	-	-	2.	45.52
	961002-MW10-61-01	2-Oct-96		0.56	0.5 U	0.69	1.1	0.01 U	-	-	-	-	1.5	25.15
	970226-MW10-61-01	26-Feb-97		0.5 U	0.5 U	0.5 U	0.5 U	0.01 U	-	-	-	-	1.04	18.02
	970828-MW10-61-01	28-Aug-97		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	-	-	-	-	0.39	7.76
	980218-MW10-61-01	18-Feb-98		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	-	-	-	-	0.4	3.76
	980603-MW10-61-16	3-Jun-98		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	-	-	-	-	1.55	6.18
	981117-MW10-61-08	17-Nov-98		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	-	-	-	-	3.06	5.85
	990512-MW10-61-06	12-May-99		0.5 U	0.692	0.5 U	1.5 U	0.02 U	-	-	-	-	0.57	1.3
	991026-MW10-61-05	26-Oct-99		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	0.24	1.36
	000329-MW10-61-105	29-Mar-00		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	0.24	1.09
	011010-MW10-61-109	10-Oct-01		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	-	-	-	-	ND U	0.61
	020404-MW10-61-109	4-Apr-02		1. U	1. U	1. U	2. U	0.04 U	0.04 U	-	-	-	0.11	0.84
	020924-MW10-61-104	24-Sep-02		0.5 U	0.5 U	0.5 U	1.5 U	0.04 U	-	-	-	-	0.25	1.38
	030319-MW10-61-111	19-Mar-03		0.5 U	0.5 U	0.5 U	1.5 U	0.04 U	0.04 U	-	-	-	ND U	0.95
	031003-MW10-61-108 [7]	3-Oct-03		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	ND U
	040813-MW10-61-005 [7]	13-Aug-04		0.5 U	0.5 U	0.5 U	1. U	0.0614	0.0321	-	-	-	0.104	0.527
	050928-MW10-61-121	28-Sep-05		0.5 U	0.5 U	0.5 U	1. U	0.01 U	0.01 U	-	-	-	1.43	2.5692
	061017-MW-10-61-108	17-Oct-06		0.5 U	0.24 J	0.5 U	0.5 U	0.002 J	0.002 U	0.005 U	-	-	1.255	2.433
	2708-080604-MW10-61-105	4-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.003	0.002 UJ	0.003 J	-	-	0.3251	0.7281
	2708-080917-MW-10-61-135	17-Sep-08		0.045 U	0.31 J	0.042 U	0.078 U	0.003 J	0.003 J	0.003 U	-	-	5.3	10.004
	2708-090326-MW10-61-100	26-Mar-09		0.045 U	0.05 J	0.042 U	0.078 U	0.003 U	0.003 U	0.004 J	-	-	1.792	2.9
	2708-090813-MW-10-61-122	13-Aug-09		0.25 U	0.5 U	0.5 U	1.5 U	0.0059 U	0.005 U	0.01 U	-	-	2.1816	5.759
MW-11-32	951207-MW11-32-01	7-Dec-95	21 - 31	25,000.	5,400.	480.	2,800.	-	-	-	-	-	20.	22,365.2
	960320-MW11-32-01	20-Mar-96	(fill WBZ)	24,000.	4,300.	970.	2,400.	0.24	-	-	-	-	6.33	14,676.08
	960617-MW11-32-01	17-Jun-96		2,800.	2,000.	1,000.	1,940.	0.19	-	-	-	-	13.51	11,608.31
	960930-MW11-32-01	30-Sep-96		17,000.	3,300.	900.	1,760.	0.249	-	-	-	-	131.9	17,603.9
	960930-MW11-32-02	30-Sep-96		-	-	-	-	-	-	-	-	-	189.	18,894.
	970225-MW11-32-01	25-Feb-97		21,000.	4,100.	750.	1,800.	0.22	-	-	-	-	10.7	11,536.1
	970826-MW11-32-01	26-Aug-97		15,000.	4,400.	1,100.	2,500.	0.17	-	-	-	-	20.5	17,075.8
	980216-MW11-32-01	16-Feb-98		12,600.	3,800.	930.	2,100.	0.2	0.01 U	-	-	-	15.9	9,759.2
	980601-MW11-32-03	1-Jun-98		16,800.	4,000.	810.	1,800.	0.21	0.01 U	-	-	-	112.	32,376.
	061212-MW-11-32-130	12-Dec-06		24,000.	5,500.	1,200.	2,660.	0.25	0.01 U	0.005 U	-	-	67.	19,026.
	2708-080604-MW11-32-111	4-Jun-08		16,000.	3,200.	990.	2,090.	0.13	0.002 UJ	0.005	-	-	77.4	16,029.4
	2708-080917-MW-11-32-134	17-Sep-08		17,000.	3,600.	1,200.	2,400.	0.17	0.002 U	0.007 J	-	-	20,460.	207,160.
	2708-090402-MW11-32-136	2-Apr-09		19,000.	4,600.	1,300.	2,790.	0.25	0.03 J	0.003 UJ	-	-	820.	27,508.
	2708-090811-MW-11-32-100	11-Aug-09		16,900. J	4,100. J	1,260. J	2,630. J	0.0826	0.005 U	0.01 U	-	-	842.	24,574.
MW-12-36	951207-MW12-36-01	7-Dec-95	25 - 35	95.	410.	170.	590.	-	-	-	-	-	3.65	3,377.55
	960321-MW12-36-01	21-Mar-96	(fill/alluvial WBZ)	170.	180.	110.	550.	0.01 U	-	-	-	-	0.73	2,010.03
	960620-MW12-36-01	20-Jun-96		250.	250.	120.	440.	0.01 U	-	-	-	-	0.8	1,621.2
	961002-MW12-36-01	2-Oct-96			390.	130.	510.	0.01 U	-	-	-	-	0.8	1,374.8
	970226-MW12-36-01	26-Feb-97		260.	310.	120.	470.	0.01 U	-	-	-	-	0.94	1,032.64
	970828-MW12-36-01	28-Aug-97		230.	430.	110.	430.	0.02 U	-	-	-	-	0.67	839.77

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
Drinking Water														
	MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]														
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#	#	#
MW-12-36	980218-MW12-36-01	18-Feb-98	25 - 35	140.	370.	82.	280.	0.02 U	-	-	-	-	0.69	708.27
	980603-MW12-36-17	3-Jun-98	(fill/alluvial WBZ)	150.	350.	74.	340.	0.02 U	-	-	-	-	ND U	697.
	981119-MW12-36-18	19-Nov-98		140.	370.	99.	360.	0.02 U	-	-	-	-	0.79	487.13
	990513-MW12-36-12	13-May-99		226.	621.	171.	554.	1.1	-	-	-	-	0.53	491.4
	991028-MW12-36-18	28-Oct-99		309.	802.	293.	797.	0.02 U	0.02 U	-	-	-	0.7	546.03
	000330-MW12-36-118	30-Mar-00		326.	675.	296.	700.	0.02 U	0.02 U	-	-	-	1.74	648.98
	010329-MW12-36-117	29-Mar-01		99.3	380.	168.	307.	0.02 U	0.02 U	-	-	-	0.69	415.04
	020404-MW12-36-112	4-Apr-02		146.	351.	235.	501.	0.04 U	0.04 U	-	-	-	0.5	375.88
	030319-MW12-36-113	19-Mar-03		200.	400.	290.	680.	0.04 U	0.04 U	-	-	-	0.31	369.18
	040825-MW12-36-017 [7]	25-Aug-04		235.	584.	488.	991.	0.005 U	0.005 U	-	-	-	ND U	696.31
	050927-MW-12-36-116	27-Sep-05		118.	219.	305.	605.	0.01 U	0.01 U	-	-	-	0.2529	371.9952
	061024-MW-12-36-115	24-Oct-06		290.	790.	800.	1,420.	0.004 J	0.002 J	0.005 U	-	-	0.1223	591.2071
	2708-080604-MW12-36-106	4-Jun-08		79.	200.	140.	350.	0.004	0.002 UJ	0.004 J	-	-	0.4662	226.8522
	2708-080916-MW-12-36-127	16-Sep-08		290.	570.	600.	1,170.	0.002 U	0.002 J	0.003 U	-	-	0.2359	739.9925
	2708-090402-MW12-36-134	2-Apr-09		140.	270.	380.	750.	0.003 U	0.003 UJ	0.003 UJ	-	-	0.2798	193.279
	2708-090817-MW-12-36-137	17-Aug-09		577.	1,480.	1,260.	2,530.	0.005 U	0.005 U	0.01 UJ	-	-	ND U	1,035.6
MW-13-30	980217-MW13-30-01	17-Feb-98	19 - 29	6,900.	50. U	370.	150. U	0.28	0.01 U	-	-	-	ND U	426.1
	980602-MW13-30-12	2-Jun-98	(fill WBZ)	5,200.	13.	380.	120.	0.28	0.01 U	-	-	-	ND U	1,180.9
	980826-MW13-30-11	26-Aug-98		13,900.	20.	550.	220.	0.42	0.42	-	-	-	ND U	742.3
	981119-MW13-30-19	19-Nov-98		550.	4.3	110.	53.	0.28	0.02	-	-	-	ND U	399.
	990217-MW13-30-014	17-Feb-99		2,360.	11.1	407.	229.	0.095	0.02 U	-	-	-	ND U	770.59
	990513-MW13-30-13	13-May-99		896.	8.9	261.	175.	0.12	-	-	-	-	ND U	1,035.62
	991028-MW13-30-20	28-Oct-99		650.	10. U	147.	56.5	0.02	0.02 U	-	-	-	ND U	820.
	000403-MW13-30-120	3-Apr-00		5,550.	5.67	175.	77.4	0.14	0.02 U	-	-	-	ND U	720.84
	001005-MW13-30-18	5-Oct-00		577.	50. U	344.	302.	-	0.02 U	-	-	-	ND U	410.3
	010329-MW13-30-119	29-Mar-01		290.	10. U	122.	30. U	0.046	0.037	-	-	-	ND U	522.96
	020405-MW13-30-116	5-Apr-02		79.9	309.	227.	295.	0.04 U	0.04 U	-	-	-	ND U	451.65
	030319-MW13-30-115	19-Mar-03		1,400.	9.2	330.	110.	0.1	0.04 U	-	-	-	ND U	1,008.4
	040825-MW13-30-018 [7]	25-Aug-04		1,150.	8.25	120.	75.6	0.1	0.0552	-	-	-	ND U	354.41
	051003-MW-13-30-132	3-Oct-05		1,940.	25. U	121.	62.2	0.0889	0.0703	-	-	-	ND U	568.47
	060404-MW-13-30-122	4-Apr-06		2,370.	10.9	237.	130.	0.112	0.0751	0.0013 U	-	-	ND U	931.34
	061027-MW-13-30-121	27-Oct-06		350.	3.3	86.	55.	0.13	0.02	0.005 U	-	-	ND U	477.2
	2708-080604-MW13-30-112	4-Jun-08		4,500.	55. J	1,600.	770.	0.1	0.002 UJ	0.004	-	-	22,020.	2,715,520.
MW-13-61	980218-MW13-61-01	18-Feb-98	50 - 60	0.5 U	0.5 U	0.5 U	1.5 U	0.14	0.01 U	-	-	-	ND U	ND U
	980602-MW13-61-13	2-Jun-98	(alluvial WBZ)	0.5 U	0.5 U	0.5 U	1.5 U	0.13	0.01 U	-	-	-	ND U	ND U
	980825-MW13-61-03	25-Aug-98		2.1	0.5 U	0.5 U	1.5 U	0.15	0.09	-	-	-	ND U	ND U
	981116-MW13-61-03	16-Nov-98		1.4	0.5 U	0.5 U	1.5 U	0.15	0.15	-	-	-	ND U	0.2
	990512-MW13-61-04	12-May-99		0.5 U	0.5 U	0.5 U	1.5 U	0.069	-	-	-	-	ND U	0.26
	991026-MW13-61-03	26-Oct-99		1.39	0.5 U	0.5 U	1.5 U	0.11	0.02 U	-	-	-	ND U	0.62
	000328-MW13-61-104	28-Mar-00		0.5 U	0.5 U	0.5 U	1.5 U	0.087	0.04	-	-	-	ND U	ND U
	001004-MW13-61-03	4-Oct-00		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	0.68
	010327-MW13-61-103	27-Mar-01		0.5 U	0.5 U	0.5 U	1.5 U	0.088	0.02 U	-	-	-	ND U	ND U
	011009-MW13-61-106	9-Oct-01		0.5 U	0.5 U	0.5 U	1.5 U	0.19	-	-	-	-	ND U	0.28
	020403-MW13-61-102	3-Apr-02		0.5 U	0.5 U	0.5 U	1.5 U	0.206	0.04 U	-	-	-	ND U	ND U
	020924-MW13-61-106	24-Sep-02		0.5 U	0.5 U	0.5 U	1.5 U	-	-	-	-	-	ND U	ND U
	030317-MW13-61-101	17-Mar-03		0.5 U	0.5 U	0.5 U	1.5 U	0.13	0.04 U	-	-	-	ND U	ND U
	031003-MW13-61-109 [7]	3-Oct-03		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	ND U
	040813-MW13-61-003 [7]	13-Aug-04		2.19	0.5 U	0.5 U	1. U	0.125	0.0423	-	-	-	ND U	0.283
	050927-MW-13-61-114	27-Sep-05		161.	0.571	9.	9.68	0.089	0.01 U	-	-	-	1.263	14.927
	060404-MW-13-61-123	4-Apr-06		41.5	0.5 U	5.46	3.07	0.106	0.0399	0.0013 U	-	-	3.435	24.141
MW-14-110	981116-MW14-110-06	16-Nov-98	98 - 108	3.2	0.5 U	0.5 U	1.5 U	0.05	-	-	-	-	ND U	ND U
	990216-MW14-110-005	16-Feb-99	(alluvial WBZ)	12.7	0.5 U	0.604	1.5 U	0.04	0.02 U	-	-	-	ND U	0.11
	990512-MW14-110-09	12-May-99		22.1	0.5 U	1.88	2.4	0.029	0.029	-	-	-	ND U	0.28
	990823-MW14-110-06	23-Aug-99		45.6	0.752	1.85	2.09	0.045	0.02 U	-	-	-	ND U	0.41
	991027-MW14-110-09	27-Oct-99		28.6	0.814	1.45	1.5 U	0.035	0.02 U	-	-	-	ND U	0.26
	991027-MW14-110-10	27-Oct-99		29.7	0.569	1.52	1.5 U	0.028	0.02 U	-	-	-	ND U	0.26
	000329-MW14-110-109	29-Mar-00		7.84	0.5 U	0.733	1.5 U	0.03	0.02 U	-	-	-	ND U	0.42

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
Drinking Water														
	MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]														
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#	#	#
MW-14-110	000329-MW14-110-110	29-Mar-00	98 - 108	8.9	0.502	0.825	1.5 U	0.034	0.02 U	-	-	-	ND U	0.42
	000615-MW14-110-102	15-Jun-00	(alluvial WBZ)	4.85	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	0.18
	001005-MW14-110-06	5-Oct-00		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	ND U
	001220-MW14-110-102	20-Dec-00		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	0.14
	010328-MW14-110-108	28-Mar-01		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	ND U	0.23
	010628-MW14-110-102	28-Jun-01		0.5 U	0.5 U	0.5 U	1.5 U	-	0.025	-	-	-	-	-
	011009-MW14-110-105	9-Oct-01		0.5 U	0.5 U	0.5 U	1.5 U	0.05	-	-	-	-	ND U	ND U
	011213-MW14-110-101	13-Dec-01		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	ND U
	020404-MW14-110-108	4-Apr-02		1. U	1. U	1. U	2. U	0.04 U	0.04 U	-	-	-	ND U	ND U
	020711MW14-110-101	11-Jul-02		0.5 U	0.5 U	0.5 U	1.5 U	0.04 U	0.04 U	-	-	-	ND U	ND U
	020924-MW14-110-105	24-Sep-02		0.5 U	0.5 U	0.5 U	1.5 U	-	-	-	-	-	ND U	ND U
	021217-MW14-110-102	17-Dec-02		0.5 U	0.5 U	0.5 U	1.5 U	-	0.04 U	-	-	-	ND U	ND U
	030318-MW14-110-108	18-Mar-03		0.5 U	0.5 U	0.5 U	1.5 U	0.04 U	0.04 U	-	-	-	ND U	ND U
	030602-MW14-110-101	2-Jun-03		0.5 U	0.5 U	0.5 U	1.5 U	-	0.04 U	-	-	-	ND U	ND U
	031003-MW14-110-110 [7]	3-Oct-03		0.5 U	0.6	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	ND U
	030112-MW-14-110-101 [7]	12-Jan-04		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	ND U
	040824-MW14-110-014 [7]	24-Aug-04		0.5 U	0.5 U	0.5 U	1. U	0.0154	0.0154	-	-	-	ND U	0.0828
	050922-MW-14-110-104	22-Sep-05		0.5 U	0.5 U	0.5 U	1. U	0.0208	0.005 U	-	-	-	ND U	0.2008
	061013-MW-14-110-104	13-Oct-06		0.14 U	0.5	0.14 J	0.79 J	-	0.04	0.005 U	-	-	0.158	0.5584
	2708-080603-MW14-110-104	3-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.02	0.002 U	0.003 J	-	-	0.1749	0.4602
	2708-080916-MW-14-110-131	16-Sep-08		0.045 U	0.6	0.042 U	0.078 U	0.002 U	0.002 U	0.003 J	-	-	0.897	1.668
	2708-090326-MW14-110-103	26-Mar-09		0.43 J	0.26 J	0.57	0.63 J	0.03	0.003 U	0.004 J	-	-	0.14	0.699
	2708-090812-MW-14-110-117	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.0223	0.005 U	0.01 U	-	-	ND U	0.104
MW-15-50	990728-MW15-50-04	28-Jul-99	40 - 50	95,100.	863.	223.	2,420.	0.02 U	0.02 U	-	-	-	ND U	18,460.
	991029-MW15-50-25	29-Oct-99	(silt unit/alluvial WBZ)	8,910.	134.	59.2	500.	0.15	0.02 U	-	-	-	ND U	762.
	000403-MW15-50-125	3-Apr-00		44,800.	620.	222.	2,300.	0.065	0.02 U	-	-	-	3.31	5,610.74
	000615-MW15-50-105	15-Jun-00		1,490.	14.3	6.62	42.	-	0.02 U	-	-	-	267.65	474.75
	000615-MW15-50-106	15-Jun-00		1,270.	10.	5.16	28.4	-	0.02 U	-	-	-	253.67	450.94
	001005-MW15-50-14	5-Oct-00		2,700.	5.65	3.83	15.2	-	0.02 U	-	-	-	74.38	128.96
	001221-MW15-50-105	21-Dec-00		40,200.	356.	176.	1,620.	-	0.028	-	-	-	158.93	9,661.17
	001221-MW15-50-106	21-Dec-00		46,200.	125. U	125. U	1,070.	-	0.062	-	-	-	199.16	8,730.64
	010330-MW15-50-124	30-Mar-01		47,600.	270.	133.	1,250.	0.151	0.089	-	-	-	87.5	7,233.48
	010628-MW15-50-105	28-Jun-01		2,580.	25. U	25. U	75. U	-	0.089	-	-	-	-	-
	010628-MW15-50-106	28-Jun-01		3,420.	25. U	25. U	75. U	-	0.105	-	-	-	-	-
	011010-MW15-50-111	10-Oct-01		44,000.	110.	208.	960.	0.11	-	-	-	-	14.52	3,839.07
	011010-MW15-50-112	10-Oct-01		44,700.	109.	210.	970.	0.07	-	-	-	-	48.2	59,423.3
	011214-MW15-50-104	14-Dec-01		64,000.	5. U	500. U	1,500. U	-	0.02 U	-	-	-	0.98	4,667.24
	011214-MW15-50-105	14-Dec-01		63,000.	5. U	500. U	1,500. U	-	0.02 U	-	-	-	1.27	6,035.38
	020405-MW15-50-119	5-Apr-02		57,000.	1. U	1. U	2. U	0.102	0.04 U	-	-	-	9.76	4,353.97
	020711-MW15-50-104	11-Jul-02		53,500.	250. U	250. U	750. U	0.04 U	0.04 U	-	-	-	15.5	3,795.9
	020711-MW15-50-105	11-Jul-02		58,000.	250. U	250. U	750. U	0.04 U	0.04 U	-	-	-	24.8	5,788.
	020925-MW15-50-110	25-Sep-02		49,000.	320.	230.	1,300.	0.072	-	-	-	-	65.3	8,044.4
	020925-MW15-50-111	25-Sep-02		50,000.	340.	250.	1,400.	0.076	-	-	-	-	17.2	7,971.3
	021218-MW15-50-107	18-Dec-02		48,000.	450.	260.	1,600.	-	0.04 U	-	-	-	42.	7,494.
	030321-MW15-50-122	21-Mar-03		49,000.	310.	250. U	750. U	0.07	0.04 U	-	-	-	ND U	5,042.
	030603-MW15-50-105	3-Jun-03		47,000.	300.	260.	1,300.	-	0.15	-	-	-	ND U	3,405.
	031006-MW15-50-113 [7]	6-Oct-03		37,000.	260.	200.	1,000.	-	0.02	-	-	-	ND U	4,804.3
	030113-MW-15-50-105 [7]	13-Jan-04		44,000.	270.	220.	1,000.	-	0.02 U	-	-	-	ND U	4,765.
	030113-MW-15-50-106 [7]	13-Jan-04		44,000.	270.	220.	990.	-	0.02 U	-	-	-	ND U	3,650.
	040825-MW15-50-020 [7]	25-Aug-04		40,500.	250. U	288.	764.	0.46	0.418	-	-	-	ND U	6,359.5
	050929-MW-15-50-126	29-Sep-05		20,700.	156.	164.	519.	0.488	0.39	-	-	-	46.23	2,300.08
	061031-MW-15-50-127	31-Oct-06		33,000.	200.	180.	430.	0.52	0.41	0.005 U	-	-	89.6	3,883.
	2708-080603-MW15-50-103	3-Jun-08		42,000.	200.	290.	570.	0.11	0.02	0.003 U	-	-	54.6	6,878.3
	2708-080916-MW-15-50-128	16-Sep-08		27,000.	150.	180.	380.	0.35	0.23	0.004 J	-	-	80.3	4,827.3
	2708-090402-MW15-50-131	2-Apr-09		59,000.	300.	350.	750.	0.16	0.09 J	0.003 UJ	-	-	34.36	6,356.86
	2708-090817-MW-15-50-133	17-Aug-09		51,600.	320.	335.	765.	0.308	0.21	0.01 UJ	-	-	18.77	6,424.87

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
Drinking Water														
	MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]														
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#	#	#
MW-15-66	990728-MW15-66-03	28-Jul-99	60.5 - 66.5	3.61	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	0.83	2.46
	990823-MW15-66-04	23-Aug-99	(alluvial WBZ)	0.72	0.5 U	0.5 U	1.5 U	-	-	-	-	-	-	-
	991026-MW15-66-07	26-Oct-99		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	ND U	ND U
	000329-MW15-66-108	29-Mar-00		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	3.91	6.93
	000615-MW15-66-104	15-Jun-00		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	12.17	22.05
	001005-MW15-66-08	5-Oct-00		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	1.36	2.34
	001221-MW15-66-104	21-Dec-00		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	0.7	1.24
	010328-MW15-66-107	28-Mar-01		0.5 U	0.5 U	0.5 U	1.5 U	0.02 U	0.02 U	-	-	-	0.61	1.1
	010628-MW15-66-104	28-Jun-01		1.65	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	-	-
	011010-MW15-66-110	10-Oct-01		0.5 U	0.5 U	0.5 U	1.51 U	0.02 U	-	-	-	-	ND U	ND U
	011213-MW15-66-103	13-Dec-01		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	ND U
	020404-MW15-66-107	4-Apr-02		1. U	1. U	1. U	2. U	0.04 U	0.04 U	-	-	-	ND U	0.12
	020711-MW15-66-103	11-Jul-02		0.5 U	0.5 U	0.5 U	1.5 U	0.04 U	0.04 U	-	-	-	ND U	ND U
	020925-MW15-66-109	25-Sep-02		0.5 U	0.5 U	0.5 U	1.5 U	0.04 U	-	-	-	-	ND U	ND U
	021218-MW15-66-105	18-Dec-02		0.5 U	0.5 U	0.5 U	1.5 U	-	0.04 U	-	-	-	ND U	ND U
	021218-MW15-66-106	18-Dec-02		0.5 U	0.5 U	0.5 U	1.5 U	-	0.04 U	-	-	-	ND U	ND U
	030318-MW15-66-107	18-Mar-03		0.5 U	0.5 U	0.5 U	1.5 U	0.04 U	0.08 U	-	-	-	ND U	0.1
	030603-MW15-66-104	3-Jun-03		31.	0.5 U	0.5 U	1.5 U	-	0.04 U	-	-	-	4.	7.41
	031006-MW15-66-112 [7]	6-Oct-03		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	ND U	ND U
	030113-MW-15-66-104 [7]	13-Jan-04		0.5 U	0.5 U	0.5 U	1.5 U	-	0.02 U	-	-	-	1.33	1.82
	040813-MW15-66-006 [7]	13-Aug-04		0.5 U	0.5 U	0.5 U	1. U	0.005 U	0.005 U	-	-	-	ND U	ND U
	050929-MW-15-66-125	29-Sep-05		0.5 U	0.5 U	0.5 U	1.36	0.01 U	0.01 U	-	-	-	0.2032	0.4482
	061017-MW-15-66-109	17-Oct-06		0.5 U	0.5 U	0.5 U	0.5 U	0.002 U	-	0.005 U	-	-	50.	83.41
	2708-080603-MW15-66-102	3-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.002 U	0.002 U	0.003 U	-	-	0.781	1.3539
	2708-080916-MW-15-66-129	16-Sep-08		27.	0.86	0.8	1.66	0.002 U	0.002 U	0.003 U	-	-	0.3672	21.8502
	2708-090402-MW15-66-133	2-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.003 U	0.003 UJ	0.003 UJ	-	-	0.0522	0.2811
	2708-090817-MW-15-66-135	17-Aug-09		0.5 U	0.5 U	0.5 U	1.5 U	0.015 U	0.015 U	0.01 UJ	-	-	0.0529	0.6072
MW-16-45	040826-MW16-45-028 [7]	26-Aug-04	30 - 45	2,880.	959.	460.	867.	0.138	0.0725	-	-	-	10.77	7,946.17
	041222-MW16-45-103 [7]	22-Dec-04	(alluvial WBZ)	2,680.	1,020.	619.	1,100.	-	0.154	-	-	-	16.08	8,492.11
	050401-013	1-Apr-05		2,970.	1,200.	552.	990.	-	0.0663	-	-	-	6.892	6,353.179
	0506-22-05	21-Jun-05		3,190.	1,810.	817.	1,450.	-	0.1	-	-	-	44.95	10,997.45
	051003-MW-16-45-136	3-Oct-05		3,710.	1,670.	559.	1,050.	0.131	0.0528	-	-	-	236.8	9,774.9
	060403-MW-16-45-118	3-Apr-06		4,210.	1,820.	736.	1,420.	0.117	0.0188	0.0013 U	-	-	3,028.5	53,847.5
	061212-MW-16-45-129	12-Dec-06		5,000.	2,200.	770.	1,740.	0.14	0.01 U	0.005 U	-	-	21.3	11,429.3
	2708-070731-MW-16-45-148	31-Jul-07		4,230.	1,540.	615.	1,140.	0.412	0.276	0.003 U	-	-	11,940.	145,371.
	2708-080521-MW16-45-128	21-May-08		4,800.	1,400.	530.	960.	0.51	0.002 U	0.005	-	-	256.5	6,538.5
	2708-080917-MW-16-45-133	17-Sep-08		5,600.	1,800.	740.	1,390.	0.67	0.06 J	0.006 J	-	-	968.	19,038.
	2708-090402-MW16-45-135	2-Apr-09		4,200.	1,700.	810.	1,470.	0.38	0.12 J	0.003 UJ	-	-	6,170.	82,240.
	2708-090814-MW-16-45-130	14-Aug-09		2,060.	832.	405.	718.	0.306 J	0.005 U	0.01 U	-	-	ND U	11,158.
MW-16-65	040826-MW16-65-026 [7]	26-Aug-04	55 - 65	1,370.	388.	236.	552.	0.402	0.186	-	-	-	0.541	3,838.121
	040826-MW16-65-027 [7]	26-Aug-04	(alluvial WBZ)	1,250.	339.	223.	486.	-	-	-	-	-	0.756	4,098.676
	041222-MW16-65-102 [7]	22-Dec-04		1,290.	54.9	366.	618.	-	0.201	-	-	-	ND U	0.1
	050331-006	31-Mar-05		1,240.	7.72	338.	294.	-	0.175	-	-	-	0.664	5,058.574
	0506-21-04	21-Jun-05		917.	8.39	282.	256.	-	0.219	-	-	-	ND U	5,928.06
	051003-MW-16-65-134	3-Oct-05		991.	25. U	216.	182.	0.25	0.0854	-	-	-	ND U	3,060.92
	060403-MW-16-65-119	3-Apr-06		1,090.	8.19	262.	201.	0.301	0.127	0.0149	-	-	ND U	3,321.77
	061023-MW-16-65-114	23-Oct-06		930.	4.8 J	170.	110.	0.31	0.002 U	0.005 U	-	-	0.3531	2,623.4741
	2708-070628-MW-16-65-115	28-Jun-07		698.	2.75 U*	95.7	59.	0.18 J	0.18 J	0.003 UJ	-	-	3.319	903.849
	2708-080513-MW16-65-109	13-May-08		690.	9.8 J	130.	122.	0.42	0.1	0.009 J	-	-	2.685	2,710.295
	2708-080911-MW-16-65-112	11-Sep-08		680. J	9.8	120. J	79.	0.28	0.01 U	0.007 J	-	-	2.941	1,308.491
	2708-090330-MW16-65-114	30-Mar-09		860.	6.5	130.	80.	0.24 J	0.02 J	0.003 U	-	-	1.536	1,792.016
	2708-090813-MW-16-65-126	13-Aug-09		582.	25 U	102.	27.	0.27 J	0.005 U	0.01 U	0.0321	0.0027	ND U	4,948.2
	2708-090813-MW-16-65-128	13-Aug-09		597.	25 U	105.	29.	0.248 J	0.005 U	0.01 U	0.0377	0.0033	ND U	5,188.7
MW-16-125	040826-MW16-125-025 [7]	26-Aug-04	115-125	1. U	1. U	1. U	2. U	0.0943	0.0747	-	-	-	ND U	36.883
	041221-MW16-125-100 [7]	21-Dec-04	(alluvial WBZ)	0.513	0.5 U	0.5 U	1. U	-	0.0598	-	-	-	ND U	10.216
	050330-001	30-Mar-05		0.5 U	0.5 U	0.5 U	1. U	-	0.0554	-	-	-	ND U	10.65
	0506-21-03	21-Jun-05		0.5 U	0.5 U	0.5 U	1. U	-	0.0455	-	-	-	ND U	4.67

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)								EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm)								EPA Method 8270 SIM or 8270C ug/l (ppb)			
				Benzene		Toluene		Ethylbenzene		Xylenes		Total Cyanide		Amenable Cyanide		Free Cyanide		WAD Cyanide*		Available Cyanide**	Carcinogenic PAHs		Total PAHs	
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]																								
Fish Consumption																								
	EPA 2004 NRWQC (organism only)			51.		15,000.		2,100.		#		#		#		0.14		#		#	#		#	
	Portland Harbor specific fish consumption rate			5.1		1,500.		210.		#		#		#		0.014		#		#	#		#	
	DEQ 2004 AWQC (organism only)			51.		15,000.		2,100.		#		#		#		0.14		#		#	#		#	
Drinking Water																								
	MCL			5.		1,000.		700.		10,000.		#		#		0.2		#		#	#		#	
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41		2,300.		1,500.		200.		#		#		0.73		#		#	#		#	
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]																								
	EPA 2004 NRWQC (chronic)			#		#		#		#		#		#		0.0052		#		#	#		#	
	DEQ 2004 AWQC (chronic)			#		#		#		#		#		#		0.0052		#		#	#		#	
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.		9.8		7.3		13.		#		#		#		#		#	#		#	
MW-16-125	050930-MW-16-125-130	30-Sep-05	115-125	2.95		0.53		0.5	U	1.	U	0.0775		0.0702		-		-		-	0.0328		5.0428	
	060330-MW-16-125-109	30-Mar-06	(alluvial WBZ)	0.5	U	0.5	U	0.64		1.	U	0.0777		0.0272		0.0016		-		-	0.0755		7.5515	
	061016-MW-16-125-106	16-Oct-06		0.26	J	0.94		0.18	J	1.38	J	0.13		0.01		0.005	U	-		-	0.059		2.737	
	2708-070628-MW-16-125-116	28-Jun-07		0.5	U	0.5	U	0.5	U	1.	U	0.114	J	0.108	J	0.003	UJ	-		-	0.0477		0.8277	
	2708-080515-MW16-125-127	15-May-08		160.		55.		60.		98.		0.16		0.002	U	0.006	J	-		-	25.96		1,502.26	
MW-17-79	050926-MW-17-79-110	26-Sep-05	38.5 - 78.5	2.82		1.	U	8.8		1.72		0.814		0.045		-		-		-	ND	U	49.531	
	061026-MW-17-79-119	26-Oct-06	(alluvial WBZ)	1.5		0.48	J	5.7		2.03		1.		0.15		0.005	U	-		-	0.23		6.916	
	2708-070627-MW-17-79-112	27-Jun-07		1.34		0.4	U	4.39		2.	U	0.831		0.433		0.0178		-		-	0.1139		2.0109	
	2708-080514-MW17-79-120	14-May-08		1.4		0.44	J	1.6		1.32		0.81		0.02		0.008	J	-		-	0.1976		7.4686	
	2708-080911-MW-17-79-110	11-Sep-08		5.4		0.87	U*	5.1		2.4		0.81		0.04	J	0.011		-		-	0.2338		7.4838	
	2708-081209-MW-17-79-009	9-Dec-08		6.1		0.46	J	4.7		2.13		0.89		0.03		0.024		-		-	0.1937		8.1177	
	2708-090326-MW17-79-106	26-Mar-09		6.9		0.37	J	3.7		1.75		0.79		0.08	J	0.023		-		-	0.1173		7.4559	
	2708-090817-MW-17-79-134	17-Aug-09		5.48		0.5	U	3.19		1.		0.82		0.01	U	0.01	UJ	-		-	0.6253		10.2231	
MW-18-30	2708-070731-MW-18-30-146	31-Jul-07	19 - 29	10,100.		1,470.		537.		1,360.		1.65		0.895		0.003		-		-	-		-	
	2708-080514-MW18-30-121	14-May-08		8,600.		1,300.		420.		1,350.		2.22		0.002	U	0.006	J	-		-	326,100.		3,613,100.	
	NS (Dry)	17-Sep-08		-		-		-		-		-		-		-		-		-	-		-	
	NS (Dry)	9-Dec-08		-		-		-		-		-		-		-		-		-	-		-	
	2708-090402-MW18-30-137	2-Apr-09		11,000.		3,000.		690.		2,230.		1.69		0.2	J	0.003	UJ	-		-	14,610.	J	169,310.	J
	2708-090812-MW-18-30-102	12-Aug-09		9,370.		2,140.		480.		1,500.		1.48	UV	0.05	U	0.01	U	-		-	ND	U	14,395.	
MW-18-180	2708-070628-MW-18-180-117	28-Jun-07	170 - 180	0.5	U	0.5	U	0.5	U	1.	U	0.0242	J	0.0201	J	0.003	UJ	-		-	ND	U	0.575	
	2708-080513-MW18-180-108	13-May-08		0.045	U	0.12	J	0.042	U	0.078	U	0.03		0.02		0.003	J	-		-	0.0032		0.1692	
	2708-080911-MW-18-180-111	11-Sep-08		0.07	J	0.67	U*	0.06	J	0.08		0.04		0.02		0.006	J	-		-	0.012		0.2981	
	2708-081209-MW-18-180-008	9-Dec-08		0.045	U	0.09	J	0.042	U	0.078	U	0.03		0.002	U	0.01		-		-	0.0075		0.1188	
	2708-090326-MW18-180-104	26-Mar-09		0.045	U	0.07	J	0.042	U	0.078	U	0.03		0.003	U	0.007	J	-		-	0.0033		0.1296	
	2708-090817-MW-18-180-132	17-Aug-09		0.25	U	0.5	U	0.5	U	0.5	U	0.0412		0.005	U	0.01	UJ	-		-	ND	U	2.1915	
MW-19-22	2708-070730-MW-19-22-143	30-Jul-07	12 - 22	6.58		1.65		3.02		7.28		0.121		0.0777		0.003	U	-		-	5,473.		17,922.	
	2708-080513-MW19-22-110	13-May-08		1.		0.4	J	1.7		5.		0.12		0.01		0.004	J	-		-	1,896.		5,221.	
	2708-080910-MW-19-22-105	10-Sep-08		3.4		2.		2.6		8.1		0.12		0.07	J	0.007	J	-		-	1,235.		3,883.	
	2708-081209-MW-19-22-014	9-Dec-08		4.		0.76		1.6		4.5		0.14		0.002	U	0.013		-		-	625.		1,977.	
	2708-090330-MW19-22-112	30-Mar-09		4.4		0.4	J	3.4		5.7		0.07	J	0.01	J	0.003	U	-		-	225.9		871.5	
	2708-090817-MW-19-22-140	17-Aug-09		5.89		0.95		3.99		5.48		0.1		0.005	U	0.01	UJ	-		-	2,656.9		8,445.	
MW-19-125	2708-070627-MW-19-125-110	27-Jun-07	115 - 125	16.7		11.3		0.4	U	2.99		0.0755		0.0622		0.0087		-		-	0.0126		3.1226	
	2708-080514-MW19-125-117	14-May-08		13.		1.5		0.32	J	4.8		0.23		0.01		0.007	J	-		-	0.011		49.207	
	2708-080910-MW-19-125-106	10-Sep-08		2.7		1.9		0.16	J	3.65		0.15		0.002	UJ	0.004	J	-		-	0.0088		27.1384	
	2708-081209-MW-19-125-013	9-Dec-08		0.58		0.36	J	0.09	J	3.18		0.1	J	0.005	J	0.011		-		-	0.0132		15.1788	
	2708-090330-MW19-125-110	30-Mar-09		0.51		0.19	J	0.05	J	2.67	J	0.08	J	0.08	J	0.003	U	-		-	0.0105		8.0432	
	2708-090813-MW-19-125-123	13-Aug-09		0.56		0.5	U	0.5	U	2.72		0.0827	J	0.005	U	0.01	U	-		-	ND	U	9.05	
MW-19-180	2708-070627-MW-19-180-111	27-Jun-07	170 - 180	0.5	U	0.5	U	0.5	U	1.	U	0.0172		0.0076		0.003	U	-		-	ND	U	0.0954	
	2708-080513-MW19-180-115	13-May-08		0.17	J	0.07	J	0.042	U	0.078	U	0.02		0.01		0.003	J	-		-	0.0035		0.1479	
	2708-080910-MW-19-180-104	10-Sep-08		0.19	J	0.33	U*	0.042	U	0.078	U	0.02		0.02	J	0.005	J	-		-	ND	U	0.1219	
	2708-081209-MW-19-180-012	9-Dec-08		0.22	J	0.09	J	0.042	U	0.078	U	0.02		0.01		0.012		-		-	ND	U	0.031	
	2708-090330-MW19-180-108	30-Mar-09		0.21	J	0.048	U	0.042	U	0.078	U	0.02	J	0.003	U	0.003	U	-		-	ND	U	0.014	
	2708-090813-MW-19-180-125	13-Aug-09		0.25	U	0.5	U	0.5	U	0.5	U	0.0255	J	0.005	U	0.01	U	-		-	ND	U	0.755	
MW-20-120	2708-070628-MW-20-120-114	28-Jun-07	110 - 120	75.		0.78	U*	1.76		28.7		0.118		0.0548		0.003	UJ	-		-	ND	U	40.749	
	2708-080515-MW20-120-126	15-May-08		120.		0.51		1.2		18.3		0.16		0.02		0.007	J	-		-	0.0276		120.4986	
	2708-080910-MW-20-120-103	10-Sep-08		55.		1.2		1.		13.2		0.14		0.002	U	0.005	J	-		-	0.0197		84.5787	
	2708-081209-MW-20-120-010	9-Dec-08		70.		0.69		0.94		12.2		0.14		0.002	U	0.013		-		-	0.0153		51.5959	
	2708-081209-MW-20-120-011	9-Dec-08		73.		0.52		1.		12.5		0.14		0.002	U	0.014		-		-	0.0043		45.5743	
	2708-090330-MW20-120-113	30-Mar-09		71.		0.64		1.1		11.4		0.15	J	0.003	U	0.006	U	-		-	ND	U	86.3906	
	2708-090812-MW-20-120-116	12-Aug-09		62.		0.5	U	0.5	U	2.98		0.119		0.005	U	0.01	U	-		-	ND	U	ND	U
MW-21-12	2708-070719-MW-21-12-129	19-Jul-07	7 - 12	0.5	U	0.5	U	0.5	U	1.13		0.0537		0.0211		0.0048		-		-	0.0921		12.7821	
	2708-080514-MW21-12-122	14-May-08		0.2	J	0.24	J	0.16	J	1.73		0.05		0.002	U	0.01	J	-		-	1.626		22.256	
	NS (Dry)	15-Sep-08		-		-		-		-		-		-		-		-		-	-		-	
	2708-081208-MW-21-12-007	8-Dec-08		0.31	J	0.43	J	0.13	J	1.07	J	0.09		0.002	U	0.005	J	-		-	0.974		20.044	
	2708-090401-MW21-12-126	1-Apr-09		0.44	J	0.19	J	0.16	J	1.88	J	0.04		0.01	J	0.003	UJ	-		-	3.07		29.52	
	2708-090811-MW-21-12-105	11-Aug-09		0.48	J	0.5	UJ	0.5	UJ	1.	U	0.0538		0.005	U	0.01	U	-		-	0.0431		10.1061	

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb) Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN⁻, or OIA-1677** mg/l (ppm) Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	EPA Method 8270 SIM or 8270C ug/l (ppb) Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#	#	#
Drinking Water														
	MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]														
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#	#	#
MW-21-75	2708-070718-MW-21-75-124	18-Jul-07	65 - 75	0.5 UJ	0.5 UJ	0.5 UJ	1. UJ	0.0648 J	0.0537 J	0.0043 J	-	-	ND U	0.135
	2708-080514-MW21-75-123	14-May-08		0.045 U	0.048 U	0.042 U	0.08	0.12	0.02	0.009 J	-	-	0.0076	0.182
	2708-080915-MW-21-75-125	15-Sep-08		0.045 U	0.62	0.042 U	0.078 U	0.09	0.01 U	0.012	-	-	ND U	0.1527
	2708-081208-MW-21-75-004	8-Dec-08		0.045 U	0.14 U*	0.042 U	0.078 U	0.14	0.002 U	0.005 J	-	-	0.0038	0.1705
	2708-090331-MW21-75-124	31-Mar-09		0.045 U	0.06 J	0.042 U	0.078 U	0.14 J	0.003 UJ	0.003 U	-	-	ND U	0.1343
	2708-090817-MW-21-75-136	17-Aug-09		0.25 U	0.5 U	0.5 U	0.5 U	0.121	0.005 U	0.01 UJ	0.0187	0.002 U	ND U	0.844
MW-21-115	2708-070718-MW-21-115-123	18-Jul-07	105 - 115	0.5 UJ	0.5 UJ	0.5 UJ	1. UJ	0.0123 J	0.0088 J	0.003 UJ	-	-	ND U	0.0989
	2708-080515-MW21-115-125	15-May-08		0.045 U	0.08 J	0.042 U	0.12	0.01	0.002 U	0.003 J	-	-	ND U	0.0649
	2708-080915-MW-21-115-126	15-Sep-08		0.045 U	0.76	0.042 U	0.078 U	0.02	0.002 U	0.003 U	-	-	0.0028	0.1259
	2708-081208-MW-21-115-005	8-Dec-08		0.045 U	0.13 U*	0.042 U	0.08 J	0.01	0.01	0.005 U*	-	-	0.0067	0.0719
	2708-090331-MW21-115-120	31-Mar-09		0.045 U	0.09 J	0.042 U	0.13 J	0.01 J	0.003 U	0.003 U	-	-	0.0534	0.2155
	2708-090811-MW-21-115-101	11-Aug-09		0.25 UJ	0.5 UJ	0.5 UJ	1. U	0.0146	0.005 U	0.01 U	-	-	ND U	ND U
MW-21-165	2708-070718-MW-21-165-122	18-Jul-07	156 - 166	0.5 UJ	0.5 UJ	0.5 UJ	1. UJ	0.005 UJ	0.005 UJ	0.003 UJ	-	-	ND U	0.0971
	2708-080514-MW21-166-124	14-May-08		0.14 J	0.23 J	0.06 J	0.25	0.002 U	0.002 U	0.003 U	-	-	ND U	0.1277
	2708-080915-MW-21-166-124	15-Sep-08		0.045 U	0.5	0.042 U	0.078 U	0.02 U	0.002 U	0.003 U	-	-	ND U	0.1061
	2708-081208-MW-21-166-006	8-Dec-08		0.14 J	0.2 U*	0.042 U	0.078 U	0.005 J	0.005 J	0.005 J	-	-	ND U	0.0503
	2708-090331-MW21-165-122	31-Mar-09		0.08 J	0.12 J	0.042 U	0.04 J	0.003 UJ	0.003 UJ	0.003 U	-	-	ND U	0.032
	2708-090811-MW-21-166	11-Aug-09		0.25 UJ	0.5 UJ	0.5 UJ	1. U	0.0062	0.0062	0.01 U	-	-	ND U	ND U
PW-01	061012-PW-01-102	12-Oct-06	40 - 80	7,300.	100.	520.	350.	1.5	0.002 U	0.005 U	-	-	2.795	4,269.505
	2708-070731-PW-01-80-147	31-Jul-07		7,060.	59.5	457.	238.	1.31	0.75	0.0329	-	-	173.3	6,129.2
	2708-080604-PW01-80-107	4-Jun-08		3,700.	27.	170.	71.	1.45	0.002 UJ	0.019	-	-	11.72	3,239.62
	NS*	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-
Temporary Well Point Samples 1995 (surficial fill WBZ)														
B-01	950921-BW1-01	21-Sep-95	20 - 23	6.9	2.5	3.1	56.	7.8	-	-	-	-	0.09	175.71
B-05	950929-BW05-01	29-Sep-95	25 - 28	0.5 U	0.97	0.5 U	1.4	0.02 U	-	-	-	-	ND	34.78
B-08	950918-BW8-01	18-Sep-95	20.5 - 23.5	0.5 U	0.85	0.5 U	0.86	-	-	-	-	-	-	-
B-19	950920-BW19-01	20-Sep-95	10 - 13	-	-	-	-	-	-	-	-	-	-	-
B-19	950920-BW19-02	20-Sep-95	25 - 28	100,000.	39,000.	1,600.	11,000.	-	-	-	-	-	0.7	6,610.2
B-21	951003-BW21-01	3-Oct-95	15.5 - 19.5	0.5 U	1.2	1.9	3.3	-	-	-	-	-	2.93	726.25
B-31	950925-BW31-01	25-Sep-95	26 - 29	3.	1.6	10.	13.	0.02 U	-	-	-	-	13.28	694.58
HydroPunch Samples 1998 (alluvial WBZ)														
MW-04-101	981014-BW4-01	14-Oct-98	86 - 86.5	12.	0.5 U	0.5 U	1.5 U	-	-	-	-	-	-	-
	981015-BW4-02	15-Oct-98	110.5 - 111	1.5	0.5 U	0.5 U	1.9	-	-	-	-	-	-	-
MW-05-175	981020-BW5-03	20-Oct-98	52.5 - 53	2,100.	3.7	39.	440.	-	-	-	-	-	-	-
	981020-BW5-04	20-Oct-98	52.5 - 53	2,000.	5. U	37.	470.	-	-	-	-	-	-	-
	981020-BW5-05	20-Oct-98	72.5 - 73	8.5	0.5 U	1.1	6.2	-	-	-	-	-	-	-
	981020-BW5-06	20-Oct-98	94.5 - 95	2,000.	3.2	150.	270.	-	-	-	-	-	-	-
MW-05-175	981021-BW5-07	21-Oct-98	122 - 122.5	5.3	0.5 U	0.5 U	1.5 U	-	-	-	-	-	-	-
	981021-BW5-08	21-Oct-98	152 - 152.5	18.	0.5 U	1.8	1.5 U	-	-	-	-	-	-	-
Temporary Well Point Samples 2004														
B-56	040602-101	2-Jun-04	18 - 22	8.	5. U	0.5 U	10. U	0.08	0.0343	-	-	-	45.52	317.6
	040603-102	3-Jun-04	40 - 44	1. U	1. U	1. U	2. U	0.517	0.105	-	-	-	0.1369	4.9419
	040603-103	3-Jun-04	60 - 64	3.62	1. U	70.	18.64	0.406	0.0842	-	-	-	ND	63.903
	040603-104	3-Jun-04	80 - 84	5. U	5. U	0.5 U	10.6	0.506	0.107	-	-	-	0.16	358.961
	040603-105	3-Jun-04	80 - 84	3.1	2. U	2.02	6.96	-	-	-	-	-	ND	405.53
	040604-106	4-Jun-04	100 - 104	1. U	1. U	1. U	2. U	0.533	0.156	-	-	-	0.0895	0.939
	040614-115	14-Jun-04	136 - 140	1. U	1. U	1. U	2. U	0.006	0.005 U	-	-	-	0.521	9.56
	040614-116	14-Jun-04	174 - 178	1. U	1. U	1. U	2. U	0.0557	0.0319	-	-	-	ND	1.17
B-59	040611-108	11-Jun-04	46-50	5,570.	50. U	317.	85.5	-	-	-	-	-	-	-
	040611-109	11-Jun-04	76-80	230.	12.4	25.8	26.	-	-	-	-	-	-	-
	040611-110	11-Jun-04	96-100	113.	6.16	9.78	11.28	-	-	-	-	-	-	-
	040611-112	11-Jun-04	116-120	166.	2.16	3.02	7.05	-	-	-	-	-	-	-
	040611-113	11-Jun-04	144-148	19.3	1.43	2.58	3.58	-	-	-	-	-	-	-
	040614-114	14-Jun-04	171-175	2.29	1. U	1. U	2. U	-	-	-	-	-	-	-

Table 3a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)								EPA Method 9012A, 9010A, D4282-95M, 335.4, SM-4500-CN*, or OIA-1677** mg/l (ppm)					EPA Method 8270 SIM or 8270C ug/l (ppb)	
				Benzene		Toluene		Ethylbenzene		Xylenes		Total Cyanide	Amenable Cyanide	Free Cyanide	WAD Cyanide*	Available Cyanide**	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]																		
Fish Consumption																		
	EPA 2004 NRWQC (organism only)			51.		15,000.		2,100.		#		#	#	0.14	#	#	#	#
	Portland Harbor specific fish consumption rate			5.1		1,500.		210.		#		#	#	0.014	#	#	#	#
	DEQ 2004 AWQC (organism only)			51.		15,000.		2,100.		#		#	#	0.14	#	#	#	#
Drinking Water																		
	MCL			5.		1,000.		700.		10,000.		#	#	0.2	#	#	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41		2,300.		1,500.		200.		#	#	0.73	#	#	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]																		
	EPA 2004 NRWQC (chronic)			#		#		#		#		#	#	0.0052	#	#	#	#
	DEQ 2004 AWQC (chronic)			#		#		#		#		#	#	0.0052	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.		9.8		7.3		13.		#	#	#	#	#	#	#
Quality Control Samples (HAI)																		
TB	2708-080512-TB1-37492	12-May-08		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-080513-TB2-37493	13-May-08		0.045	U	0.05	J	0.16	J	1.	J	-	-	-	-	-	-	-
TB	2708-080514-TB3-37552	14-May-08		0.045	U	0.1	J	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-080515-TB4-37553	15-May-08		0.045	U	0.09	J	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	TB5-37589	21-May-08		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-080603-TB-37649	3-Jun-08		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-080604-TB6-37648	4-Jun-08		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-080910-TB-38520	10-Sep-08		0.045	U	0.19	J	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-080911-TB-38519	11-Sep-08		0.045	U	0.37	J	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-080915-TB-38518	15-Sep-08		0.045	U	0.81		0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-080916-TB 38517	16-Sep-08		0.045	U	1.2		0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-080917-TB 38516	17-Sep-08		0.045	U	2.1		0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-081208-TB-39353	8-Dec-08		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-081209-TB-39350	9-Dec-08		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-090326-TB39765	26-Mar-09		0.045	U	0.05	J	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-090330-TB-39763	30-Mar-09		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-090331-TB39825	31-Mar-09		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-090401-TB39764	1-Apr-09		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-090402-TB39827	2-Apr-09		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	5237-090407-TB39828	7-Apr-09		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	5237-090408-TB39826	8-Apr-09		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	5237-090409-TB40002	9-Apr-09		0.045	U	0.048	U	0.042	U	0.078	U	-	-	-	-	-	-	-
TB	2708-081109-TB-108	11-Aug-09		0.25	UJ	0.5	UJ	0.5	UJ	1.	UJ	-	-	-	-	-	-	-
TB	2708-090812-TB-109	12-Aug-09		0.25	U	0.5	U	0.5	U	1.	U	-	-	-	-	-	-	-
TB	2708-090813-TB-118	13-Aug-09		0.25	U	0.5	U	0.5	U	1.	U	-	-	-	-	-	-	-
TB	2708-090817-TB-131	17-Aug-09		0.25	U	0.5	U	0.5	U	1.	U	-	-	-	-	-	-	-
TB	2708-090820-TB-160	20-Aug-09		0.25	U	0.5	U	0.5	U	1.	U	-	-	-	-	-	-	-

Note:
'-' = not analyzed
# = Reference Level not established
A = this analysis was performed on a VOA sample containing headspace
AWQC = Ambient Water Quality Criteria
BTEX = benzene, toluene, ethylbenzene, and xylenes
DEQ = Oregon Department of Environmental Quality
EPA = U.S. Environmental Protection Agency
J = Estimated Concentration
MCL = Maximum Contaminant Level
mg/l = milligrams per liter
ND = not detected above detection limit indicated
NS = No Sample
NRWQC = National Recommended Water Quality Criteria
PRG = Potential Remediation Goal
PAHs = polynuclear aromatic hydrocarbons
ppb = parts per billion
ppm = parts per million
SCV = Secondary Chronic Value
U = Non-detect above reporting detection limit
U* = Compound considered non-detect because it was also detected in associated blank at similar concentration levels.
UJ = Compound not detected, but the reporting limit is probably higher due to a low bias identified during the quality assurance review.
ug/l = micrograms per liter

Note: Reference Level is lowest of EPA AWQC for aquatic life protection, AWQC for human consumption of organisms only, or DEQ SLV for aquatic receptors
1 = Sample number prefix: 2708-
2 = Tier II values were taken from Suter II, G.W. and Tasco, C.L., 1996. Toxilogical Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2
3 = Unless otherwise noted Screening Level Values are from *Portland Harbor Joint Source Control Strategy*, Final, December 2005 (7/16/07 revision)
4 = Due to mislabeling in the field or due to laboratory misidentification, the laboratory report transposed results for MW4-35 and MW-4-57 in August 1997. Tables attribute data to the correct well.
5 = Sample Numbers (980603-) MW4-57-18 & MW8-56-21 were analyzed for Amenable Cyanide outside of recommended holding time.
6 = PAH results for sample 960620-MW8-56-01 should be considered qualitative due to an apparent error concerning sample identity.
7 = Monitoring well purged & sampled with low-flow protocol as per EPA/540/S-95/504 (April 1996)
8 = EPA, under CERCLA authority, has identified the Safe Drinking Water Acts MCLs and AWQCs (federal and state once approved) as potential ARARs under CERCLA. The final determination will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to The EPA Portland Harbor ROD, due to an exceedance of an SLV in upland stormwater will be evaluated and prioritized on a case by case basis.

*Location PW-01 was converted to an extraction well following 2nd quarter of 2008.

Table 3b - Summary of Historical Analytical Results for Groundwater Samples: PAHs by EPA Method 8270-SIM or 8270C
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date/Time	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
				Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [8,9]																					
Fish Consumption																					
	EPA 2004 NRWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate			99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																					
	MCL [3]			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	0.2	0.2	#	#
	EPA Region 3.6.9 Tap Water PRGs (12/09 update)			2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,9]																					
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)			520 [4]	#	#	#	#	#	#	#	#	#	#	#	#	620 [4]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [5]			#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
MW-01-22	951207-MW1-22-01	7-Dec-95	11 - 21	11.	2.6	52.	24.	12.	13.	9.3	4.8	32.	1.3	74.	16.	6.3	39.	100.	68.	93.4	465.3
	960319-MW1-22-01	19-Mar-96	(fill WBZ)	9.6	0.33	4.1	1.2	0.64	0.7	0.41	0.28	1.6	0.1 U	4.4	7.3	0.29	90.	15.	4.6	4.71	140.45
	960618-MW1-22-01	18-Jun-96		7.6	0.26	3.3	0.59	0.34	0.33	0.21	0.14	0.68	0.1 U	2.5	6.2	0.15	75.	12.	2.9	2.23	112.2
	961001-MW1-22-01	1-Oct-96		55.	0.98	15.	1.7	1.3	1.4	0.99	1. U	1.8	1. U	7.	59.	1. U	440.	130.	6.	6.2	720.17
	970225-MW1-22-01	25-Feb-97		3.7	0.1 U	1.6	0.36	0.12	0.13	0.1 U	0.1 U	0.3	0.1 U	1.8	3.1	0.1 U	47.	6.5	1.9	0.91	66.51
	970225-MW1-22-02	25-Feb-97		3.2	0.1 U	1.6	0.72	0.31	0.34	0.13	0.12	0.64	0.1 U	2.1	2.9	0.1	44.	5.5	2.5	2.23	64.16
	970827-MW1-22-01	27-Aug-97		70.	1.6	16.	3.8	3.9	4.	2.6	1.4	4.8	1. U	12.	75.	2.1	550.	230.	11.	20.	988.2
	970827-MW1-22-02	27-Aug-97		66.	0.1 U	19.	5.2	5.6	5.4	3.8	2.	6.7	1. U	14.	73.	3.2	350.	170.	12.	28.1	735.9
	980217-MW1-22-01	17-Feb-98		1.2	0.1 U	1.5	1.1	0.76	0.8	0.58	0.26	0.98	0.1	2.7	1.4	0.48	4.7	3.5	3.2	4.48	23.26
	980602-MW1-32-11	2-Jun-98		3.3	0.89	14.	15.	18.	21.	13.	6.7	21.	1.8	25.	4.9	9.6	3.3	23.	29.	93.1	209.49
	980826-MW1-22-10	26-Aug-98		75.	2.9	51.	24.	32.	37.	22.	12.	37.	3.6	55.	78.	16.	390.	240.	62.	161.6	1,137.5
	981118-MW1-22-15	18-Nov-98		58.	0.1 U	9.1	0.61	0.72	0.7	0.41	0.29	0.78	0.1 U	3.6	51.	0.32	340.	100.	3.2	3.42	568.73
	990216-MW1-22-012	16-Feb-99		0.33	0.1 U	1.21	0.72	0.76	0.85	0.52	0.1 U	0.88	0.1 U	1.91	0.49	0.32	0.11	0.89	2.28	3.53	11.27
	990513-MW1-22-11	13-May-99		2.31	0.1 U	1.67	0.66	0.55	0.65	0.45	0.25	0.75	0.1 U	2.12	3.26	0.31	0.64	1.37	2.34	3.17	17.33
	990824-MW1-22-15	24-Aug-99		62.3	1.42	16.2	10.6	12.1	9.2	11.3	7.97	17.3	2.08	24.6	64.1	8.94	340.	204.	24.8	68.19	816.91
	991028-MW1-22-16	28-Oct-99		48.5	0.56	6.58	1.48	1.58	1.19	1.21	1.02	2.27	0.2	6.51	51.5	0.95	186.	109.	6.43	8.69	424.98
	000330-MW1-22-116	30-Mar-00		4.52	0.1 U	2.22	0.21	0.1 U	0.1 U	0.1 U	0.1 U	0.21	0.1 U	2.84	4.63	0.1 U	42.4	3.03	2.29	0.42	62.35
	010329-MW1-22-115	29-Mar-01		2.32	0.18	4.14	2.31	2.22	1.95	2.	1.42	3.03	0.66	6.73	3.35	1.77	3.97	6.78	8.23	13.36	51.06
	040825-MW1-22-019[7]	25-Aug-04		50.	0.5 U	7.	0.13 J	0.1 U	0.1 U	0.5 U	0.1 U	0.131 J	0.2 U	2.61	46.9	0.1 U	403.	77.4	2.34	0.261	589.511
	050401-014[7]	1-Apr-05		1.79	0.0529	3.02	0.24	0.119	0.0902 J	0.05 U	0.0868 U	0.326	0.1 U	2.62	2.61	0.05 U	2.44 B	2.34 B	2.53	0.7752	18.1781
	050928-MW1-22-120	28-Sep-05		46.9	515. U	4.56	0.258 U	0.258 U	0.258 U	0.258 U	0.258 U	0.327	0.258 U	2.95	37.1	0.258 U	302.	74.4	2.85	0.327	471.087
	060403-MW-1-22-117	3-Apr-06		17.7	0.485 U	2.65	0.485 U	0.485 U	0.485 U	0.485 U	0.485 U	0.485 U	0.485 U	1.37	15.6	0.485 U	172.	33.	1.27	ND U	243.59
	061030-MW-1-22-123	30-Oct-06		68.	0.011 U	11.	0.31	0.23	0.19 J	0.09 J	0.08 J	0.34	0.031 U	5.9	61.	0.11 J	450.	130.	5.9	1.26	733.15
	2708-070720-MW-1-22-131	20-Jul-07		49.4 J	4.83 U	7.64	0.332	0.157	0.124	0.483 U	0.102	0.349	0.0557	7.54	43.5	0.101	282.	90.7	6.03 J	1.2207	488.0307
	2708-080512-MW1-22-105	12-May-08		11.	0.099	1.7	0.16	0.11	0.14	0.046	0.073	0.19	0.0076 J	1.9	9.4	0.047	78.	17.	2.1	0.7276	121.9726
	NS (Dry)	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2708-090402-MW1-22-132	2-Apr-09		5.1	0.12	2.6	0.82	0.63	0.59	0.32	0.3	1.	0.059	5.4	5.7	0.34	24.	17.	5.8	3.739	69.779
	2708-090820-MW-1-22-163	20-Aug-09		68.6	5.04	57.	14.9	10.4	15.8 BK	5.89	- BK	17.8	3.77 U	77.8	81.1	5.99	348.	301.	85.3	64.89	1,094.62
MW-01-55	2708-070719-MW-1-55-127	19-Jul-07	45 - 55	0.386 U	0.0966 U	0.0966 U	0.00483 U	0.00483 U	0.00483 U	0.0966 U	0.00483 U	0.00483 U	0.00483 U	0.0966 U	0.0966 U	0.00483 U	0.0966 U	0.0966 U	0.0966 U	ND U	ND U
	2708-080512-MW1-55-104	12-May-08	(alluvial WBZ)	0.0044 U	0.0034 U	0.0073 J	0.003 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.045	0.0074 J	0.0035 U	0.003	0.0627
	2708-080915-MW-1-55-121	15-Sep-08		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.056	0.005 U	0.0035 U	ND U	0.056
	2708-081208-MW-1-55-002	8-Dec-08		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0098 J	0.0026 U	0.031	0.005 U	0.0035 U	ND U	0.0408
	2708-090401-MW1-55-130	1-Apr-09		0.0044 U	0.0034 U	0.0051 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.046	0.0075 J	0.0035 U	ND U	0.0586
	2708-090820-MW-1-55-164	20-Aug-09		0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0424	0.0374 U	0.0657	0.128	0.0374 U	ND U	0.2361
MW-01-82	2708-070719-MW-1-82-126	19-Jul-07	72 - 82	0.0962 U	0.0962 U	0.0962 U	U	U 0.00481 U	0.00481 U	0.0962 U	0.00481 U	0.00481 U	0.00481 U	0.0962 U	0.0962 U	0.00481 U	0.142	0.0962 U	0.0962 U	ND U	0.142
	2708-080512-MW1-82-103	12-May-08	(alluvial WBZ)	0.0044 U	0.0034 U	0.0036 U	0.0031 J	0.0043 U	0.0023 U	0.0034 J	0.0025 U	0.0034 U	0.0031 J	0.0044 U	0.0038 U	0.0042 J	0.041	0.0058 J	0.0035 U	0.0104	0.0606
	2708-080915-MW-1-82-119	15-Jun-08		0.0044 U	0.0034 U	0.0036 U	0.0045 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0067 J	0.0038 U	0.0026 U	0.064	0.0094 J	0.0066 J	0.0045	0.0912
	2708-081208-MW-1-82-001	8-Dec-08		0.0044 U	0.0034 U	0.0036 U	0.0053 J	0.0043 U	0.0038 J	0.0049 J	0.0025 U	0.0034 U	0.0025 U	0.0051 J	0.0049 J	0.0043 J	0.016 U*	0.0083 J	0.0062 J	0.0134	0.0428
	2708-090401-MW1-82-128	1-Apr-09		0.0044 U	0.0034 U	0.0036 U	0.0033 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0052 J	0.0038 U	0.0026 U	0.016 J	0.005 U	0.0046 J	0.0033	0.0291
	2708-090820-MW-1-82-161	20-Aug-09		0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0604	0.0374 U	0.0374 U	ND U	0.0604
	2708-090820-MW-1-82-162	20-Aug-09		0.0377 U	0.0377 U	0.0377 U	0.0377 U	0.0377 U	0.0377 U	0.0377 U	0.0377 U	0.0377 U	0.0377 U	0.0377 U	0.0377 U	0.0377 U	0.144	0.0377 U	0.0377 U	ND U	0.144
MW-02-32	951206-MW2-32-01	6-Dec-95	21.5 - 31.5	4.	0.29	0.28	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.48	0.32	0.1 U	45.	0.51	0.67	ND U	51.55
	960318-MW2-32-01	18-Mar-96	(fill WBZ)	4.	0.16	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.28	ND U	4.54
	960618-MW2-32-01	18-Jun-96		1.5	0.23	0.15	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.22	0.1 U	0.09	0.1 U	0.41	ND U	2.6
	961001-MW2-32-01	1-Oct-96		8.4	0.14	0.16	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12	0.23	0.1 U	0.22	0.23	0.93	ND U	10.43
	970225-MW2-32-01	25-Feb-97		1.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15	0.1 U	0.1 U	0.1 U	0.37	ND U	1.62
	970827-MW2-32-01	27-Aug-97		16.	0.17	0.19	0.1 U	0.1	0.1 U	0.14	0.1 U	0.1 U	0.1 U	0.1 U	0.21	0.1 U	0.17	0.1 U	0.96	0.1	17.94
	980217-MW2-32-01	17-Feb-98		4.2	0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19	0.1 U	0.1 U	0.1 U	0.52	ND U	5.02
	980601-MW2-32-05	1-Jun-98		2.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19	0.1 U	0.1 U	0.1 U	0.82	ND U	3.21
	980825-MW2-32-04	25-Aug-98		4.	0.11	0.1 U	0.17	0.35	0.37	0.47	0.1 U	0.2	0.1 U	0.26	0.12	0.3	0.1 U	0.11	0.64	1.39	7.1
	981117-MW2-32-10	17-Nov-98		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	990216-MW2-32-008	16-Feb-99		17.9	0.45	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	18.35
	990513-MW2-32-10	13-May-99		8.08	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.26	0.1	0.1 U	0.1 U	0.58	0.1	9.12
	990824-MW2-32-10	24-Aug-99		5.08	0.1 U	0.12	0.1 U	0.1 U	0.1 U	0.18	0.1 U	0.1 U	0.1 U	0.1 U	0.15	0.11	0.1 U	0.11	0.54	0.11	6.29
	991027-MW2-32-12	27-Oct-99		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	000329-MW2-32-112	29-Mar-00		1.55	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.26	0.1 U	0.1 U	0.1 U	0.42	ND U	2.23
	010328-MW2-32-111	28-Mar-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	040816-MW2-32-009[7]	16-Aug-04		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	050331-009[7]	31-Mar-05		0.103	0.05 U	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.1 U	0.05 U	0.05 U	0.05 U	2.89	0.0858 J	0.0545 J	ND U	3.1333
	050927-MW-2-32-118	27-Sep-05		0.0147	0.0521	0.0361	0.00926 U	0.00962 U	0.00962 U	0.00962 U	0.00962 U	0.00962 U	0.00962 U	0.0135	0.00962 U	0.00962 U	0.0785	0.0179	0.00952 U	ND U	0.2128
	060328-MW-2-32-102	28-Mar-06		0.0226	0.0538	0.0967	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.0617	0.0357	0.00943	0.0555	0.252	0.17	0.00943	0.75743
	061016-MW-2-32-107	16-Oct-06		0.056	0.065	0.046	0.0039 U	0.0043 U	0.0046 U	0.0041 U	0.0051 U	0.0053 U	0.0036 U	0.014 J	0.0036 U	0.0033 U	0.057	0.0062 J	0.018 J	ND U	0.2622
	2708-070712-MW-2-32-120	12-Jul-07		10.4 J	0.261 J	0.141 J	0.0199 J	0.0296 J	0.0226 J	0.0962 UJ	0.0235 J	0.0239 J	0.00622 J	0.0962 UJ	0.192 U	0.026 J	0.289 J	0.0962 UJ	0.101 J	0.15172	11.34372
	2708-080512-MW2-32-101	12-May-08		1.5	0.095	0.079	0.0063 J	0.0046 J	0.0063 J	0.0073 J	0.0025 U	0.005 J	0.0025 U	0.02	0.032	0.0063 J	0.045	0.037	0.24	0.0285	2.0838
	2708-080915-MW-2-32-120	15-Sep-08		0.12	0.074	0.055	0.026	0.04	0.041	0.064	0.014 J	0.031	0.0059 J	0.048	0.004 U	0.052	0.051	0.031	0.077	0.2099	0.7299
	2708-090401-MW2-32-127	1-Apr-09		0.3	0.12	0.098	0.011 J	0.017 J	0.016 J	0.018 J	0.0026 U	0.012 J	0.0026 U	0.018 J	0.073 U	0.018 J	0.29	0.045	0.067	0.074	1.03
	2708-090812-MW-2-32-113	12-Aug-09		0.0383 U	0.109	0.0664	0.0398	0.0452	0.0766 U,BK	0.0383 U	- BK	0.0383 U	0.0383 U	0.0617	0.0443	0.0383 U	2.35 U	0.0383 U	0.0737	0.085	0.4401

Table 3b - Summary of Historical Analytical Results for Groundwater Samples: PAHs by EPA Method 8270-SIM or 8270C
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date/Time	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
				Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [8,9]																					
Fish Consumption																					
	EPA 2004 NRWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate			99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																					
	MCL [3]			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	0.2	0.2	#	#
	EPA Region 3.6.9 Tap Water PRGs (12/09 update)			2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,9]																					
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)			520 [4]	#	#	#	#	#	#	#	#	#	#	#	#	620 [4]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
MW-02-61	981116-MW2-61-04	16-Nov-98	50 - 60	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.33	0.1 U	0.1 U	ND U	0.33
	990216-MW2-61-006	16-Feb-99	(alluvial WBZ)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.37	0.1 U	0.1 U	ND U	0.37
	990512-MW2-61-05	12-May-99		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.54	0.1 U	0.1 U	ND U	0.54
	990823-MW2-61-07	23-Aug-99		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	991026-MW2-61-04	26-Oct-99		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	000328-MW2-61-104	28-Mar-00		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	001004-MW2-61-04	4-Oct-00		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	010328-MW2-61-104	28-Mar-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	011009-MW2-61-104	9-Oct-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	020403-MW2-61-103	3-Apr-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	020924-MW2-61-103	24-Sep-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	030318-MW2-61-104	18-Mar-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	030930-MW2-61-103 [7]	30-Sep-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	040813-MW2-61-002[7]	13-Aug-04		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	050926-MW-2-61-111	26-Sep-05		0.0283 U	0.00943 U	0.0124	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.0111	0.00943 U	0.00943 U	0.0189	0.00943 U	0.0189 U	ND U	0.0424
	060329-MW-2-61-104	29-Mar-06		0.0476 U	0.00952 U	0.0144 J	0.00952 U	0.00952 U	0.00952 U	0.0145 U	0.00952 U	0.00952 U	0.00952 U	0.0133 J	0.00952 U	0.00952 U	0.0437	0.0097 U	0.0223	ND U	0.0937
	061011-MW-2-61-101	11-Oct-06		0.0031 U	0.0023 U	0.0075 J	0.0039 U	0.0043 U	0.0046 U	0.0042 J	0.0051 U	0.0053 U	0.0036 U	0.0083 J	0.0036 U	0.0033 U	0.054	0.0072 J	0.0075 J	ND U	0.0887
	2708-070719-MW-2-61-128	19-Jul-07		0.098 U	0.098 U	0.098 U	0.0049 U	0.0049 U	0.0049 U	0.098 U	0.0049 U	0.0049 U	0.0049 U	0.098 U	0.098 U	0.0049 U	0.098 U	0.098 U	0.098 UJ	ND U	ND U
	2708-080512-MW2-61-100	12-May-08		0.0044 U	0.0034 U	0.015 J	0.0042 J	0.0043 U	0.0046 J	0.0054 J	0.0025 U	0.0035 J	0.0025 U	0.006 J	0.0038 U	0.0049 J	0.021	0.005 U	0.006 J	0.0172	ND U
	2708-080915-MW-2-61-118	15-Sep-08		0.021	0.014 J	0.022	0.031	0.039	0.038	0.042	0.015 J	0.038	0.0044 J	0.075	0.009 J	0.033	0.21	0.064	0.098	0.1984	0.7534
	2708-090401-MW2-61-125	1-Apr-09		0.0044 U	0.0034 U	0.016 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.027	0.005 U	0.0035 U	ND U	0.043
	2708-090812-MW-2-61-115	12-Aug-09		0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.165 U	0.0400 U	0.0400 U	ND U	ND U
MW-2-104	2708-070712-MW-2-104-119	12-Jul-07	94 - 104	0.0962 UJ	0.0962 UJ	0.0962 UJ	0.00481 UJ	0.00481 UJ	0.00481 UJ	0.0962 UJ	0.00481 UJ	0.00481 UJ	0.00481 UJ	0.0962 UJ	0.0962 UJ	0.00481 UJ	0.248 J	0.0962 UJ	0.0962 UJ	ND U	0.248
	2708-080512-MW2-104-102	12-May-08	(alluvial WBZ)	0.0051 J	0.0034 U	0.0091 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0047 J	0.0026 U	0.11	0.0067 J	0.0035 U	ND U	0.1356
	2708-080915-MW-2-104-122	15-Sep-08		0.0051 J	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.078	0.0077 J	0.0035 U	ND U	0.0908
	2708-080915-MW-2-104-123 (DUP)	15-Sep-08		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.086	0.0084 J	0.0043 J	ND U	0.0987
	2708-081208-MW-2-104-003	8-Dec-08		0.007 J	0.0064 J	0.006 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0061 J	0.0026 U	0.077	0.0091 J	0.0037 J	ND U	0.1153
	2708-090401-MW2-104-129	1-Apr-09		0.0058 J	0.0034 U	0.013 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.043	0.005 U	0.0035 U	ND U	0.0618
	2708-090812-MW-2-104-111	12-Aug-09		0.0390 U	0.0390 U	0.0390 U	0.0390 U	0.0390 U	0.0390 U	0.0390 U	0.0390 U	0.0390 U	0.0390 U	0.0390 U	0.0390 U	0.0390 U	0.284 U	0.0390 U	0.0390 U	ND U	ND U
MW-03-26	951206-MW3-26-01	6-Dec-95	15 - 25	1.5	2.7	2.3	2.8	4.1	4.7	3.9	1.5	4.6	0.54	8.5	1.2	2.8	30.	4.7	9.4	21.04	85.24
	960318-MW3-26-02	18-Mar-96	(fill WBZ)	2.5	1.4	1.1	0.29	0.39	0.35	0.34	0.14	0.3	0.1 U	1.1	0.58	0.24	32.	0.36	1.3	1.71	42.39
	960618-MW3-26-01	18-Jun-96		5.5	2.6	1.5	0.49	0.56	0.47	0.42	0.17	0.55	0.1 U	1.3	1.3	0.31	30.	0.79	1.9	2.55	47.86
	961001-MW3-26-01	1-Oct-96		0.1 U	9.5	0.1 U	29.	47.	41.	34.	12.	30.	0.1 U	36.	0.1 U	23.	10.	8.6	54.	182.	334.1
	970225-MW3-26-01	25-Feb-97		0.79	0.32	0.1	0.78	1.3	1.1	1.1	0.36	0.59	0.1 U	1.2	0.18	0.81	0.97	0.39	1.9	4.94	11.89
	970827-MW3-26-01	27-Aug-97		1.3	1.7	1.1	4.1	7.7	5.7	5.6	2.	3.9	1. U	6.7	1. U	4.2	1. U	1.4	7.8	27.6	53.2
	980217-MW3-26-01	17-Feb-98		0.18	0.5	0.24	0.68	1.8	1.5	2.4	0.39	0.44	0.35	1.	0.1	1.9	0.39	0.27	1.3	7.06	13.44
	980602-MW3-26-09	2-Jun-98		0.3	1.6	1.5	13.	26.	24.	25.	5.7	11.	3.1	27.	0.47	17.	1.8	3.8	43.	99.8	204.27
	980826-MW3-26-08	26-Aug-98		10. U	19.	10. U	62.	160.	130.	120.	46.	76.	16.	90.	10. U	86.	26.	21.	130.	576.	982.
	981117-MW3-26-12	17-Nov-98		1. U	1.7	1. U	3.9	9.2	7.1	7.5	2.1	3.7	0.93	6.6	1. U	5.3	1.8	0.9	8.1	32.23	58.83
	990216-MW3-26-010	16-Feb-99		0.1 U	0.1 U	0.11	0.24	0.22	0.22	0.17	0.1 U	0.29	0.1 U	1.1	0.1 U	0.1 U	0.1 U	0.1 U	1.21	0.97	3.56
	990514-MW3-26-23	14-May-99		1.57	0.4	0.3	0.46	1.14	1.04	1.36	0.26	0.42	0.15	1.04	0.93	0.95	1.25	0.5	1.44	4.42	13.21
	990824-MW3-26-12	24-Aug-99		0.71	0.21	0.21	0.12	0.38	0.2	0.46	0.17	0.17	0.3	0.59	0.48	0.33	0.1 U	0.1 U	0.36	1.67	4.69
	991027-MW3-26-14	27-Oct-99		0.1 U	0.3	0.18	0.77	1.9	1.14	1.57	0.94	1.08	0.23	1.14	0.33	1.17	0.19	0.17	1.45	7.23	12.56
	000330-MW3-26-113	30-Mar-00		0.59	0.27	0.22	0.27	0.63	0.37	0.76	0.32	0.3	0.1 U	0.72	0.36	0.55	0.1 U	0.19	0.77	2.44	6.32
	001005-MW3-26-11	5-Oct-00		0.13	0.29	0.24	0.22	0.89	0.69	0.71	0.24	0.26	0.11	0.65	0.16	0.55	0.2	0.11	0.7	2.96	6.15
	010328-MW3-26-113	28-Mar-01		0.1	0.44	0.1 U	0.78	1.72	1.25	2.08	0.74	0.93	0.1 U	1.35	0.19	0.1 U	0.15	0.4	1.77	5.42	11.9
	040823-MW3-26-010[7]	23-Aug-04		0.005 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.0632 J	0.05 U	0.1 U	0.05 U	0.0681 J	0.0808 J	ND U	0.2121
	050330-004[7]	30-Mar-05		0.05 U	0.0584 J	0.109	0.0925 J	0.17	0.137	0.165	0.0892 J	0.119	0.1 U	0.162	0.05 U	0.11	0.05 U	0.05 U	0.237	0.7177	1.4491
	050922-MW-3-26-105	22-Sep-05		0.0736	0.266	0.291	0.403	0.843	0.472	0.955	0.425	0.565	0.116	0.663	0.0495 U	0.588	0.578	0.23	1.63	3.412	8.0986
	060330-MW-3-26-110	30-Mar-06		0.107	0.104	0.39	0.0201	0.0399	0.0198 J	0.0523	0.0187 J	0.0254	0.01 U	0.082	0.0751	0.0315	0.289	0.0612	0.166	0.1554	1.482
	061017-MW-3-26-110	17-Oct-06		0.15	0.082	0.11	0.058	0.082	0.057	0.044	0.051	0.086	0.0049 J	0.15	0.035	0.041	0.051	0.022	0.33	0.3799	1.3539
	2708-070629-MW-3-26-119	29-Jun-07		21.6 J	4.9 UJ	4.9 UJ	2.85 J	3.13 J	1.92 J	4.9 UJ	2.09 J	3.67 J	0.349 J	14.4 J	9.67 J	1.7 J	2.25 UJ	16.8 J	24.4 J	15.709	102.579
	2708-080512-MW3-26-107	12-May-08		0.19	0.16	0.3	0.13	0.23	0.33	0.54	0.12	0.16	0.066	0.34	0.22	0.46	0.25	0.12	0.45	1.496	4.066
	2708-080911-MW-3-26-115	11-Sep-08		0.032	0.14	0.2	0.18	0.37	0.44	0.59	0.17	0.27	0.056	0.53	0.042	0.5	0.47	0.19	0.82	1.986	5.
	2708-090331-MW3-26-123	31-Mar-09		0.0093 J	0.093	0.27	0.066	0.16	0.15	0.28	0.053	0.082	0.025	0.12	0.02 J	0.24	0.099	0.039	0.18	0.776	1.8863
	2708-090817-MW-3-26-139	17-Aug-09		0.0693	0.141	0.213	0.112	0.323 J	0.347 J, BK	0.301	- BK	0.126	0.0396 U	0.138	0.0396 U	0.231	0.824	0.0561	0.273	1.139	3.1544
MW-03-56	951206-MW3-56-01	6-Dec-95	45 - 55	51.	46.	8.1	0.73	0.41	0.33	0.36	0.14	0.85	0.1 U	7.8	19.	0.23	1,200.	42.	7.8	2.69	1,384.75
	960319-MW3-56-01	19-Mar-96	(alluvial WBZ)	56.	70.	5.6	0.59	0.38	0.33	0.28	0.13	0.73	0.1 U	6.1	25.	0.18	1,700.	53.	8.3	2.34	1,926.62
	960620-MW3-56-01	20-Jun-96		47.	56.	6.4	0.45	0.26	0.22	0.21	0.1 U	0.51	0.1 U	5.8	27.	0.15	1,300.	39.	8.1	1.59	1,491.1
	961002-MW3-56-01	2-Oct-96		42.	62.	6.	0.27	0.1 U	0.1 U	0.1 U	0.1 U	0.27	0.1 U	6.7	27.	0.1 U	730.	58.	5.6	0.54	937.84
	970226-MW3-56-01	26-Feb-97		42.	51.	0.1 U	0.33	0.1 U	0.1 U	0.1 U	0.1 U	0.29	0.1 U	3.2	21.	0.1 U	440.	53.	7.5	0.62	618.32
	970828-MW3-56-01	28-Aug-97		21.	15.	7.3	0.28	0.13	0.13	0.1 U	0.1 U	0.28	0.1 U	7.	15.	0.1 U	85.	39.	5.4	0.82	195.52
	980218-MW3-56-01	18-Feb-98		25.	14.	3.7	0.28	0.1 U	0.1	0.1 U	0.1 U	0.2	0.1 U	4.8	13.	0.1 U	22.	41.	5.5	0.58	129.58
	980218-MW3-56-02	18-Feb-98		33.	17.	3.9	0.26	0.1 U	0.1 U	0.1 U	0.1 U	0.2	0.1 U	4.9	17.	0.1 U	26.	48.	5.3	0.46	155.56
	980602-MW3-56-14	2-Jun-98		57.	19.	12.	5.3	5.1	4.9	4.3	1.7	4.6	1. U	20.	28.	2.9	37.	86.	28.	24.5	315.8
	980602-MW3-56-15	2-Jun-98		54.	18.	12.	5.1	5.3	4.7	4.3	1.9	4.5	1. U	19.	28.	2.8	32.	86.	28.	24.3	305.6
	980826-MW3-56-12	26-Aug-98		37.	8.5	0.1 U	0.72	0.66	0.61	0.44	0.22	0.82	0.1 U	4.1	18.	0.31	16.	6.	8.2	3.34	101.58
	981118-MW3-56-16	18-Nov-98		35.	5.9	4.7	0.33	0.16	0.16	0.1 U	0.1 U	0.32	0.1 U	5.5	12.	0.1 U	9.3	40.	5.6	0.97	118.97

Table 3b - Summary of Historical Analytical Results for Groundwater Samples: PAHs by EPA Method 8270-SIM or 8270C
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date/Time	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
				Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [8,9]																					
Fish Consumption																					
	EPA 2004 NRWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate			99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																					
	MCL [3]			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	0.2	0.2	#	#
	EPA Region 3.6.9 Tap Water PRGs (12/09 update)			2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,9]																					
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)			520 [4]	#	#	#	#	#	#	#	#	#	#	#	#	620 [4]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
MW-03-56	981118-MW3-56-17	18-Nov-98	45 - 55	35.	6.2	4.5	0.29	0.1	0.11	0.1 U	0.1 U	0.27	0.1 U	5.4	12.	0.1 U	12.	40.	5.6	0.77	121.47
	990217-MW3-56-015	17-Feb-99	(alluvial WBZ)	37.4	5.54	6.08	2.52	2.9	2.95	2.3	0.1 U	2.32	0.36	13.3	12.2	1.48	12.1	48.3	13.7	12.53	163.45
	990514-MW3-56-24	14-May-99		50.2	4.02	8.8	0.66	0.51	0.46	0.37	0.16	0.59	0.59	6.05	17.2	0.27	16.	44.8	6.53	3.24	157.21
	990824-MW3-56-16	24-Aug-99		33.	2.63	3.76	0.26	1. U	1. U	1. U	1. U	0.34	1. U	5.17	9.99	1. U	6.04	33.	5.47	0.6	99.66
	991028-MW3-56-17	28-Oct-99		35.4	2.49	4.59	0.27	0.1 U	0.1 U	0.1 U	0.1 U	0.32	0.1 U	5.32	11.4	0.1 U	4.35	29.5	5.34	0.59	98.98
	000330-MW3-56-117	30-Mar-00		36.4	2.93	7.16	0.87	0.73	0.43	0.58	0.38	1.	0.1 U	8.92	17.3	0.43	37.2	43.5	8.25	3.84	166.08
	001005-MW3-56-13	5-Oct-00		36.5	1.65	7.83	2.2	2.76	2.3	1.89	0.86	2.71	0.3	12.4	15.5	1.5	1.58	29.1	16.5	12.63	135.58
	010329-MW3-56-116	29-Mar-01		30.5	0.95	5.95	1.93	1.88	1.27	2.03	0.96	2.12	0.47	9.32	10.9	1.72	3.37	24.6	9.78	10.35	107.75
	020404-MW3-56-111	4-Apr-02		37.9	0.41	5.32	0.53	0.47	0.26	0.46	0.2	0.75	0.1 U	7.53	13.5	0.41	2.08	22.7	5.61	2.62	98.13
	030319-MW3-56-112 [7]	19-Mar-03		38.	0.4	5.8	0.46	0.23	0.2	0.16	0.1 U	0.52	0.1 U	8.	12.	0.11	2.3	18.	8.2	1.52	94.38
	040823-MW3-56-011 [7]	23-Aug-04		25.8	0.5 U	2.29	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1. U	6.76	10.2	0.5 U	0.554 J	3.94	6.62	ND U	56.164
	050330-003 [7]	30-Mar-05		31.4	0.25 U	2.3	0.289	0.0597 J	0.5 U	0.05 U	0.5 U	0.312	0.1 U	6.08	10.7	0.5 U	1.16	7.63	6.29	0.6607	66.2207
	050922-MW-3-56-106	22-Sep-05		23.1	0.243 U	2.16	0.275	0.243 U	0.243 U	0.243 U	0.243 U	0.357	0.243 U	4.5	7.45	0.243 U	0.92	8.23	5.22	0.632	52.212
	060330-MW-3-56-111	30-Mar-06		43.1	0.388 U	2.88	0.442	0.218	0.159 U	0.193 J	0.115 J	0.57	0.0971 U	7.86	11.4	0.121 J	1.08	18.	9.29	1.466	95.269
	061024-MW-3-56-116	24-Oct-06		27.	1.5	3.	1.6	1.6	1.6	1.5	0.55	2.1	0.16 J	9.1	9.9	1.2	1.4	11.	12.	8.81	85.21
	2708-070626-MW-3-56-108	26-Jun-07		42.5 J	4.85 U	8.78	3.96	4.22	2.74	4.85 U	2.41	5.14	0.445	28.1	22.3	2.28	4.85 U	31.6	39.4 J	21.195	193.875
	2708-080512-MW3-56-106	12-May-08		19.	0.79	2.2	3.6	2.9	5.1	4.4	1.6	5.	0.54	20.	7.1	4.1	2.	14.	27.	22.84	119.33
	2708-080911-MW-3-56-116	11-Sep-08		28.	1.2	5.1	6.3	7.	8.5	7.2	2.7	8.6	0.82	30.	10.	6.6	3.1	20.	41.	40.52	186.12
	2708-090326-MW3-56-105	26-Mar-09		26.	1.1	3.3	3.3	3.7	3.4	3.	1.1	3.9	0.37	14.	9.3	2.8	1.8	12.	18.	18.57	107.07
	2708-090811-MW-3-56-107	11-Aug-09		31.8	2.6	6.6	10.1	14.8	16.9 BK	10.9	- BK	11.2	1.92 U	30.	10.5	9.11	1.92 U	20.1	38.7	62.11	213.31
MW-04-35	951206-MW4-35-01	6-Dec-95	24 - 34	13.	3.	2.5	0.34	0.1 U	0.1 U	0.1 U	0.1 U	0.35	0.1 U	9.7	6.1	0.1 U	2.	8.1	9.4	0.69	54.49
	960318-MW4-35-01	18-Mar-96	(fill WBZ)	35.	2.7	2.7	0.74	0.54	0.5	0.42	0.18	0.94	0.1 U	8.4	11.	0.28	3.2	7.9	9.9	3.18	84.4
	960318-MW4-35-02	18-Mar-96		34.	2.8	2.8	0.62	0.4	0.36	0.29	0.14	0.7	0.1 U	8.1	9.2	0.19	2.5	7.9	9.1	2.41	79.1
	960618-MW4-35-01	18-Jun-96		25.	3.5	2.	0.66	0.43	0.37	0.3	0.12	0.71	0.1 U	7.8	8.5	0.22	0.59	1.9	9.3	2.51	61.4
	961001-MW4-35-01	1-Oct-96		19.	2.	1.2	0.41	0.3	0.3	0.18	0.1	0.46	0.1 U	6.1	4.9	0.13	0.41	0.34	6.5	1.7	42.33
	970225-MW4-35-01	25-Feb-97		24.	2.6	0.78	0.22	0.1 U	0.1 U	0.1 U	0.1 U	0.19	0.1 U	5.	6.	0.1 U	1.2	0.36	5.3	0.41	45.65
	980827-MW4-57-01 [5]	27-Aug-97		16.	2.3	0.93	0.21	0.1 U	0.1	0.1 U	0.1 U	0.22	0.1 U	5.3	5.3	0.1 U	0.49	0.31	5.1	0.53	36.26
	980217-MW4-35-01	17-Feb-98		16.	2.1	0.47	0.15	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1 U	4.1	3.9	0.1 U	1.1	0.13	3.8	0.25	31.85
	980601-MW4-35-06	1-Jun-98		20.	2.9	0.74	0.25	0.1 U	0.1 U	0.1 U	0.1 U	0.23	0.1 U	6.6	6.2	0.1 U	0.12	0.19	6.4	0.48	43.63
	980826-MW4-35-06	26-Aug-98		28.	2.6	1.6	0.58	0.64	0.63	0.43	0.21	0.64	0.1 U	7.2	8.	0.32	2.	0.6	7.4	3.02	60.85
	980826-MW4-35-07	26-Aug-98		29.	2.3	1.6	0.78	0.95	0.94	0.59	0.35	0.91	0.1 U	7.8	7.5	0.44	2.4	0.69	8.4	4.37	64.65
	981117-MW4-35-11	17-Nov-98		17.	1.9	1.3	0.91	1.2	1.1	0.97	0.33	0.96	0.13	6.1	5.8	0.69	0.84	5.1	6.5	5.32	50.83
	990216-MW4-35-009	16-Feb-99		9.33	1.12	0.69	0.21	0.1 U	0.1 U	0.1 U	0.1 U	0.19	0.1 U	3.57	2.65	0.1 U	1.87	0.1 U	3.78	0.4	23.41
	990514-MW4-35-21	14-May-99		11.6	1.25	0.5	0.18	0.1 U	0.1 U	0.1 U	0.1 U	0.14	0.1 U	3.74	2.77	0.1 U	0.43	0.1	4.12	0.32	24.83
	990824-MW4-35-11	24-Aug-99		14.9	2.28	0.81	0.24	0.19	0.12	0.16	0.121	0.31	0.1 U	4.47	3.91	0.12	0.86	0.18	4.59	1.101	33.261
	991027-MW4-35-13	27-Oct-99		36.1	1.96	2.89	1.17	1.11	0.74	0.87	0.63	1.34	0.12	11.8	12.2	0.64	5.79	8.43	11.6	5.75	97.39
	000330-MW4-35-114	30-Mar-00		19.7	2.54	1.15	0.21	0.1 U	0.1 U	0.1 U	0.1 U	0.21	0.1 U	6.03	6.29	0.1 U	2.46	1.33	5.34	0.42	45.26
	001005-MW4-35-10	5-Oct-00		54.4	2.38	3.56	3.42	4.99	4.25	3.27	1.56	4.6	0.54	17.5	17.8	2.36	17.2	6.67	18.	21.72	162.5
	010328-MW4-35-112	28-Mar-01		9.92	0.82	0.49	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.2	0.1 U	3.56	3.18	0.1 U	2.76	1.08	3.34	0.4	25.55
	040823-MW4-35-012 [7]	23-Aug-04		32.8	1.39	1.02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1. U	7.46	11.4	0.5 U	1.44	2.46	7.36	ND U	65.33
	050331-005 [7]	31-Mar-05		5.24	0.33	0.185	0.106	0.05 U	0.1 U	0.05 U	0.1 U	0.104	0.1 U	2.29	1.41	0.05 U	0.0781 J	0.05 U	2.19	0.21	11.9331
	050928-MW-4-35-123	28-Sep-05		24.3	0.778	0.634	0.115	0.057	0.051 U	0.051 U	0.051 U	0.129	0.051 U	2.71	5.36	0.051 U	0.786	0.357	2.71	0.301	37.936
	060331-MW-4-35-113	31-Mar-06		21.8	0.0595	0.249	0.13	0.0822 J	0.0569 J	0.0639 U	0.0481 U	0.167	0.0481 U	2.9	3.33	0.0481 U	0.117	0.086 J	3.01	0.4361	31.9876
	061018-MW-4-35-113	18-Oct-06		34.	2.9	2.6	0.38	0.26	0.42	0.21	0.02 U	0.43	0.031 U	4.6	9.8	0.17 J	2.4	2.4	4.8	1.66	65.37
	2708-070726-MW-4-35-137	26-Jul-07		11.2 J	1.02	0.528	0.143	0.0426	0.0372	0.0971 U	0.0265	0.168	0.00485 U	1.95	2.21	0.0108	0.285	0.139	2.72 J	0.4281	20.4801
	2708-080513-MW4-35-112	13-May-08		38.	0.88	0.77	0.33	0.31	0.31	0.24	0.1	0.39	0.036	3.1	8.5	0.21	0.38	0.86	3.5	1.686	57.916
	2708-080513-MW4-35-113 (DUP)	13-May-08		34.	0.84	0.7	0.29	0.26	0.27	0.2	0.085	0.33	0.027	2.9	8.	0.17	0.33	0.66	3.2	1.432	52.262
	2708-080911-MW-4-35-109	11-Sep-08		57.	1.3	1.6	0.26	0.16	0.15	0.11	0.064	0.3	0.014 J	5.4	13.	0.097	3.8	3.9	5.8	1.045	92.955
	2708-090331-MW4-35-119	31-Mar-09		29.	0.8	0.68	0.17	0.12	0.11	0.077	0.043	0.17	0.0094 J	2.8	6.6	0.072	0.4	0.4	2.5	0.6944	43.9514
	2708-090813-MW-4-35-121	13-Aug-09		28.5	0.972	0.721	0.400 U	0.400 U	0.800 U,BK	0.400 U	- BK	0.400 U	0.400 U	3.66	7.38	0.400 U	2.71 U	0.806	3.56	ND U	45.599
MW-04-57	951205-MW4-57-01	5-Dec-95	46 - 56	49.	2.2	5.8	0.56	0.21	0.22	0.14	0.1 U	0.65	0.1 U	7.8	11.	0.09	1,200.	42.	8.6	1.73	1,328.27
	960321-MW4-57-01	21-Mar-96	(alluvial WBZ)	35.	1.9	4.9	0.59	0.35	0.34	0.27	0.12	0.71	0.1 U	6.9	9.2	0.18	1,000.	31.	6.3	2.29	1,097.76
	960620-MW4-57-01	20-Jun-96		39.	2.8	4.1	0.45	0.21	0.19	0.15	0.1 U	0.46	0.1 U	6.5	10.	0.11	540.	34.	8.5	1.42	646.47
	961002-MW4-57-01	2-Oct-96		48.	5.6	4.7	0.35	0.1 U	0.1 U	0.1 U	0.1 U	0.29	0.1 U	7.2	7.6	0.1 U	1,600.	27.	6.1	0.64	1,706.84
	970226-MW4-57-01	26-Feb-97		39.	3.3	3.4	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.22	0.1 U	6.2	6.	0.1 U	1,600.	24.	6.	0.52	1,688.42
	970828-MW4-35-01 [5]	28-Aug-97		49.	2.9	2.6	0.24	0.1 U	0.1 U	0.1 U	0.1 U	0.2	0.1 U	4.3	4.3	0.1 U	1,600.	24.	4.2	0.44	1,691.74
	980218-MW4-57-01	18-Feb-98		45.	2.	1.6	0.17	0.1 U	0.1 U	0.1 U	0.1 U	0.11	0.1 U	3.6	3.4	0.1 U	2,280.	19.	3.	0.28	2,357.88
	980603-MW4-57-18	3-Jun-98		51.	2.4	3.1	0.35	0.1 U	0.1 U	0.1 U	0.1 U	0.32	0.1 U	6.1	5.9	0.1 U	2,200.	23.	6.7	0.67	2,298.87
	980826-MW4-57-13	26-Aug-98		43.	2.2	1.7	0.22	0.1 U	0.1 U	0.1 U	0.1 U	0.22	0.1 U	3.5	3.7	0.1 U	2,400.	13.	3.7	0.44	2,471.24
	981119-MW4-57-20	19-Nov-98		42.	1.7	1.7	0.18	0.1 U	0.1 U	0.1 U	0.1 U	0.16	0.1 U	3.	3.3	0.1 U	1,900.	13.	2.9	0.34	1,967.94
	990217-MW4-57-016	17-Feb-99		26.2	1.15	1.4	0.18	0.1 U	0.1 U	0.1 U	0.1 U	0.14	0.1 U	2.57	2.36	0.1 U	1,530.	8.69	2.59	0.32	1,575.28
	990514-MW4-57-22	14-May-99		- U	1.32	1.89	0.22	0.1 U	0.1 U	0.1 U	0.1 U	0.17	0.1 U	3.44	3.13	0.1 U	1,660.	10.7	3.45	0.39	1,684.32
	990825-MW4-57-17	25-Aug-99		34.	1.11	1.48	0.19	1. U	0.1 U	0.1 U	1. U	0.21	1. U	3.17	2.7	1. U	2,250.	9.46	3.08	0.4	2,305.4
	991028-MW4-57-21	28-Oct-99		42.	20. U	20. U	20. U	20. U	0.1 U	0.1 U	20. U	20. U	20. U	20. U	20. U	20. U	1,650.	20. U	20. U	ND U	1,692.
	000403-MW4-57-121	3-Apr-00		38.8	1.42	2.34	0.24	0.1 U	0.1 U	0.1 U	0.1 U	0.23	0.1 U	3.95	3.21	0.1 U	2,700.	12.	3.55	0.47	2,765.74
	001006-MW4-57-19	6-Oct-00		32.	1.61	0.9	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.18	0.1 U	1.88	2.2	0.1 U	2,450.	6.31	2.83	0.38	2,498.11
	010329-MW4-57-120	29-Mar-01		32.6	1.35	1.43	0.23	0.1 U	0.1 U	0.1 U	0.1 U	0.2	0.1 U	2.52	3.08	0.1 U	3,010.	9.47	2.47	0.43	3,063.35
	020405-MW4-57-117	5-Apr-02		20.	0.86	0.74	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.11	0.1 U	1.22	1.78	0.1 U	2,220.	4.14	1.01	0.21	2,249.96
	030320-MW4-57-117	20-Mar-03		28.	2. U	2. U	2. U	2. U	0.1 U	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2,200.	5.4	2. U	ND U	2,233.4

Table 3b - Summary of Historical Analytical Results for Groundwater Samples: PAHs by EPA Method 8270-SIM or 8270C
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date/Time	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
				Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [8,9]																					
Fish Consumption																					
	EPA 2004 NRWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate			99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																					
	MCL [3]			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	0.2	0.2	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,9]																					
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)			520 [4]	#	#	#	#	#	#	#	#	#	#	#	#	620 [4]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
MW-04-57	040824-MW4-57-016[7]	24-Aug-04	46 - 56	42.1	5. U	5. U	0.275	0.207	0.168 J	5. U	0.167 J	0.275	0.2 U	5. U	5. U	0.113 J	3,780.	5. U	5. U	1.205	3,823.305
	050331-008[7]	31-Mar-05	(alluvial WBZ)	43.2	1.66	0.919 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1. U	1.94	3.08	0.5 U	2,850.	6.08	2.16	ND U	2,909.039
	051003-MW4-57-133	3-Oct-05		74.7	1.23	1.61	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.06	4.06	0.5 U	178.	7.46	2.51	ND U	271.63
	060331-MW-4-57-114	31-Mar-06		136.	1.23	0.884 J	0.481 U	0.481 U	0.481 U	0.481 U	0.481 U	0.536 J	0.481 U	1.63	10.6	0.481 U	393.	5.37	2.39	0.536	551.64
	060331-MW-4-57-115	31-Mar-06		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	061030-MW-4-57-122	30-Oct-06		120.	3.9	3.6	0.26 J	0.2 J	0.096 U	0.082 U	0.096 U	0.26 J	0.16 U	1.9	14.	0.12 U	650.	9.8	2.2	0.72	806.12
	2708-070622-MW-4-57-101	22-Jun-07		20.2 J	0.971 U	0.971 U	0.24	0.151	0.113	0.971 U	0.0891	- U	0.0485 U	3.75	5.39	0.0688	0.971 U	0.971 U	3.69 J	0.6619	33.6919
	2708-080513-MW4-57-111	13-May-08		140.	1.7	2.6	0.97	0.89	0.93	0.67	0.31	1.1	0.1	1.7	13.	0.64	750.	13.	3.2	4.94	930.81
	2708-080911-MW-4-57-108	11-Sep-08		190.	2.4	4.1	1.1	1.3	1.3	1.1	0.51	1.6	0.15	2.	24.	1.	51.	18.	2.7	6.96	302.26
	2708-090331-MW4-57-121	31-Mar-09		100.	1.1	2.5	0.21	0.34	0.41	0.19	0.0025 U	0.34	0.038	0.96	11.	0.2	270.	8.9	1.2	1.538	397.388
	2708-090817-MW-4-57-138	17-Aug-09		163.	3.74 U	4.95	3.74 U	4.34 J	7.48 U,BK	3.74 U	- BK	3.74 U	3.74 U	5.82	21.6	3.74 U	46.3	18.5	7.16	4.34	271.67
MW-04-101	981117-MW4-101-09	17-Nov-98	89.5 - 99.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	20.	0.1 U	0.1 U	ND U	20.
	990216-MW4-101-007	16-Feb-99	(alluvial WBZ)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	8.3	0.1 U	0.1 U	ND U	8.3
	990514-MW4-101-19	14-May-99		0.21	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	68.1	0.1 U	0.1 U	ND U	68.31
	990514-MW4-101-20	14-May-99		0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	62.3	0.1 U	0.1 U	ND U	62.5
	990824-MW4-101-09	24-Aug-99		0.64	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	190.	0.1 U	0.1 U	ND U	190.64
	991027-MW4-101-11	27-Oct-99		0.65	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	166.	0.1 U	0.1 U	ND U	166.65
	000329-MW4-101-111	29-Mar-00		0.97	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	20.6	0.1 U	0.1 U	ND U	21.57
	001005-MW4-101-09	5-Oct-00		0.72	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.64	0.1 U	0.1 U	ND U	1.36
	010328-MW4-101-110	28-Mar-01		0.56	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.58	0.1 U	0.1 U	ND U	1.14
	011009-MW4-101-103	9-Oct-01		0.47	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.71	0.1 U	0.1 U	ND U	1.18
	020404-MW4-101-110	4-Apr-02		0.1 U	0.51	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	5.46	0.1 U	0.1 U	ND U	5.97
	020924-MW4-101-102	24-Sep-02		0.63	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	12.	0.1 U	0.1 U	ND U	12.63
	030318-MW4-101-109	18-Mar-03		0.63	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	15.	0.1 U	0.1 U	0.1 U	0.1 U	ND U	15.63
	030930-MW4-101-105 [7]	30-Sep-03		0.59	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	14.	0.1 U	0.1 U	ND U	14.59
	040816-MW4-101-007[7]	16-Aug-04		0.541	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	26.2	0.1 U	0.1 U	ND U	26.741
	50330-002[7]	30-Mar-05		0.776	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	15.9	0.05 U	0.05 U	ND U	16.676
	050928-MW4-101-122	28-Sep-05		0.539	0.0204 U	0.0204 U	0.0204 U	0.0204 U	0.0204 U	0.0204 U	0.0204 U	0.0204 U	0.0204 U	0.0204 U	0.0208 J	0.0204 U	6.77	0.0204 U	0.0408 U	ND U	7.3298
	060329-MW-4-101-106	29-Mar-06		0.943	0.066 U	0.0377 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.0388	0.00943 U	9.61	0.0189 U	0.0189 U	ND U	10.5918
	061018-MW-4-101-112	18-Oct-06		0.67	0.034	0.0092 J	0.0039 U	0.0054 J	0.0046 U	0.0051 J	0.0051 U	0.0053 U	0.0036 U	0.034	0.027	0.0038 J	5.5	0.013 J	0.014 J	0.0092	6.3155
	2708-070625-MW-4-101-106	25-Jun-07		0.211 J	0.099 U	0.198 U	0.00495 U	0.00774	0.00581	0.099 U	0.00583	0.00834	0.00495 U	0.198 U	0.099 U	0.00611	1.18	0.198 U	0.099 U	0.03383	1.42483
	2708-080513-MW4-101-114	13-May-08		0.52	0.054	0.071	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.049	0.0031 J	2.5	0.016 J	0.027	0.0031	3.2401
	2708-080910-MW-4-101-107	10-Sep-08		0.34	0.013 J	0.018 J	0.0027 U	0.0044 U	0.0024 U	0.003 U	0.0026 U	0.0035 U	0.0026 U	0.0059 J	0.026	0.0027 U	1.8	0.0079 J	0.0036 U	ND U	2.2108
	2708-090331-MW4-101-115	31-Mar-09		0.46	0.028	0.045	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.032	0.0026 U	2.3	0.0091 J	0.0035 U	ND U	2.8741
	2708-090331-MW4-101-117	31-Mar-09		0.44	0.025	0.041	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.035	0.0026 U	2.2	0.0074 J	0.0035 U	ND U	2.7484
	2708-090813-MW-4-101-119	13-Aug-09		0.601	0.0381 U	0.0381 U	0.0381 U	0.04	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0386	0.0381 U	2.59	0.0381 U	0.0381 U	0.04	3.2696
MW-05-32	951205-MW5-32-01	5-Dec-95	21 - 31	12.	9.2	18.	1.8	1.1	1.	0.9	0.41	2.6	0.12	15.	28.	0.56	11.	88.	18.	7.59	207.69
	960319-MW5-32-01	19-Mar-96	(fill/alluvial WBZ)	4.2	2.1	20.	5.7	5.5	4.7	4.8	1.7	8.5	0.61	44.	10.	3.1	1.	100.	53.	29.81	268.91
	960319-MW5-32-01 (dissolved)	19-Mar-96		2.5	1.1	4.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.96	5.3	0.1 U	0.61	29.	1.1	ND U	44.97
	960620-MW5-32-01	20-Jun-96		2.	1.1	9.2	2.6	2.7	2.2	2.3	0.93	3.4	0.34	12.	2.1	1.5	0.42	20.	20.	13.67	82.79
	961001-MW5-32-01	1-Oct-96		10. U	10. U	47.	50.	63.	55.	56.	18.	51.	10. U	160.	10. U	40.	10. U	83.	150.	277.	773.
	970225-MW5-32-01	25-Feb-97		0.16	0.1 U	0.95	0.32	0.16	0.19	0.12	0.1 U	0.33	0.1 U	3.	0.23	0.1 U	0.16	0.29	3.8	1.	9.71
	970827-MW5-32-01	27-Aug-97		1. U	1. U	1. U	2.	2.4	1.9	1.8	1. U	2.7	1. U	5.8	1. U	1.4	1. U	1. U	6.3	10.4	24.3
	980217-MW-5-32-01	17-Feb-98		0.1 U	0.1	0.19	0.57	0.67	0.55	0.62	0.19	0.65	0.11	1.5	0.1 U	0.49	0.1 U	0.23	1.7	3.23	7.57
	980602-MW5-32-10	2-Jun-98		1.2	0.47	1.6	7.	7.6	7.	6.3	1.9	7.	0.91	20.	0.57	4.3	0.67	4.2	24.	35.71	94.72
	980826-MW5-32-09	26-Aug-98		1. U	4.5	8.5	42.	56.	53.	36.	17.	58.	5.8	91.	1.2	27.	3.4	17.	120.	258.8	540.4
	981118-MW5-32-13	18-Nov-98		0.1 U	0.1 U	0.1 U	0.27	0.27	0.26	0.21	0.1	0.37	0.1 U	1.4	0.1 U	0.15	0.1 U	0.1 U	1.7	1.42	4.73
	990216-MW5-32-011	16-Feb-99		0.1 U	0.1 U	0.18	0.51	0.57	0.51	0.41	0.1 U	0.61	0.14	1.66	0.1 U	0.23	0.1 U	0.17	1.9	2.57	6.89
	990514-MW5-32-17	14-May-99		0.1 U	0.1 U	0.1 U	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.11	0.59	0.1 U	0.1 U	0.1 U	0.95	0.1 U	0.63	0.8	2.38
	990824-MW5-32-13	24-Aug-99		0.1 U	0.19	0.33	1.43	1.69	0.93	1.79	0.93	2.08	0.47	4.03	0.1 U	1.29	0.12	0.51	5.36	8.82	21.15
	991027-MW5-32-15	27-Oct-99		0.1 U	0.12	0.2	1.19	1.33	0.79	1.07	0.73	1.68	0.16	3.2	0.1 U	0.8	0.1 U	0.32	4.57	6.68	16.16
	000330-MW5-32-115	30-Mar-00		0.1 U	0.12	0.18	0.72	0.93	0.58	0.83	0.49	1.	0.12	1.41	0.1 U	0.61	0.1 U	0.27	1.71	4.45	8.97
	001005-MW5-32-12	5-Oct-00		0.1 U	0.1 U	0.12	0.28	0.37	0.34	0.25	0.11	0.37	0.1 U	0.54	0.1 U	0.19	0.1 U	0.1 U	0.73	1.66	3.3
	010329-MW5-32-114	29-Mar-01		0.1 U	0.2	0.4	1.61	1.94	1.33	1.75	1.12	2.12	0.52	2.63	0.1 U	1.48	0.13	0.61	3.81	10.12	19.65
	040816-MW5-32-008[7]	16-Aug-04		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.269	ND U	0.269
	050401-011[7]	1-Apr-05		0.05 B	0.183	0.483	0.255	0.33	0.199	0.302	0.219	0.38	0.1 U	0.442	0.1 U	0.207	0.136 B	0.107 B	1.17	1.59	4.463
	050927-MW-5-32-117	27-Sep-05		0.1 U	0.31	0.587	2.06	2.1	1.31	1.82	1.35	2.86	0.263	4.05	0.103	1.17	0.999	0.863	7.01	11.113	26.855
	060329-MW-5-32-107	29-Mar-06		0.0962 U	0.212	0.4	0.919	1.08	0.677	1.03	0.598	1.31	0.142 J	1.58	0.0962 U	0.65	0.192 U	0.339	3.	5.376	11.937
	061018-MW-5-32-114	18-Oct-06		0.028 J	0.96	1.5	0.22	0.21	0.24	0.19 J	0.086 J	0.26	0.031 U	0.31	0.072 J	0.18 J	0.068 J	0.083 J	0.93	1.196	5.337
	2708-070625-MW-5-32-104	25-Jun-07		1.92 U	1.92 U	1.92 U	1.19	1.1	0.775	1.92 U	0.693	1.78	0.119	2.12	1.92 U	0.582	4.63	1.92 U	4.22 J	6.239	17.209
	2708-080514-MW5-32-118	14-May-08		0.0099 J	0.19	0.34	0.84	0.72	1.3	1.	0.44	1.2	0.13	1.4	0.061	0.94	0.24	0.28	2.5	5.57	11.5909
	2708-080910-MW-5-32-102	10-Sep-08		0.012 J	0.15	0.25	0.54	0.69	0.75	0.66	0.24	0.79	0.068	0.84	0.056	0.55	0.34	0.17	1.6	3.628	7.706
	2708-090330-MW5-32-111	30-Mar-09		0.015 J	0.24	0.45	1.1	1.1	1.5	1.1	0.54	1.5	0.16	1.7	0.06	1.	0.32	0.35	2.9	6.9	14.035
	2708-090812-MW-5-32-114	12-Aug-09		0.0374 U	0.228	0.322	0.555	0.807	0.92 BK	0.564	- BK	0.669	0.0671	0.937	0.0374 U	0.471	0.264 U	0.214	1.6	3.4891	7.3541
MW-05-100	981118-MW5-100-14	18-Nov-98	88 - 98	7.2	6.2	1.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.1	2.7	0.1 U	7,100.	7.2	1.2	ND U	7,126.7
	990217-MW5-100-018	17-Feb-99	(alluvial WBZ)	6.34	3.52	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.47	2.14	0.1 U	5,010.	7.87	1.39	ND U	5,032.73
	990514-MW5-100-18	14-May-99		12.3	1.6	1.3	0.1 U	1. U	0.1 U	1. U	0.1 U	1. U	1. U	16.3	1.73	1. U	7,440.	6.9	2.	ND U	7,482.13
	990825-MW5-100-18	25-Aug-99		18.	1.	1.	0.1 U	1. U	0.1 U	1. U	0.1 U	1. U	1. U	1.9	1.7	1. U	13,300.	6.7	1. U	ND U	13,330.3

Table 3b - Summary of Historical Analytical Results for Groundwater Samples: PAHs by EPA Method 8270-SIM or 8270C
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date/Time	Screen Interval (feet bgs)	Analytical Results in ug/L (ppb)																													
				Acenaphthene		Acenaphthylene		Anthracene		Benzo (a) anthracene		Benzo (a) pyrene		Benzo (b) fluoranthene		Benzo (g,h,i) perylene		Benzo (k) fluoranthene		Chrysene		Dibenzo (a,h) anthracene		Fluoranthene		Fluorene		Indeno (1,2,3-cd) pyrene		Naphthalene		Phenanthrene		Pyrene		Total Carcinogenic PAHs		Total PAHs	
HUMAN HEALTH SCREENING LEVEL VALUES [8,9]																																							
Fish Consumption																																							
	EPA 2004 NRWQC (organism only)			990.		#		40,000.		0.018		0.018		0.018		#		0.018		0.018		0.018		140.		5,300.		0.018		#		#		4,000.		#		#	
	Portland Harbor specific fish consumption rate			99.		#		4,000.		0.0018		0.0018		0.0018		#		0.0018		0.0018		0.0018		14.		530.		0.0018		#		#		400.		#		#	
	DEQ 2004 AWQC (organism only)			990.		#		40,000.		0.018		0.018		0.018		#		0.018		0.018		0.018		140.		5,300.		0.018		#		#		4,000.		#		#	
Drinking Water																																							
	MCL [3]			0.2		0.2		0.2		0.2		0.2		0.2		0.2		0.2		0.2		0.2		0.2		0.2		0.2		#		0.2		0.2		#		#	
	EPA Region 3.6.9 Tap Water PRGs (12/09 update)			2,200.		#		11,000.		0.029		0.0029		0.029		#		0.29		2.9		0.0029		1,500.		1,500.		0.029		0.14		#		1,100.		#		#	
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,9]																																							
	EPA 2004 NRWQC (chronic)			#		#		#		#		#		#		#		#		#		#		#		#		#		#		#		#		#		#	
	DEQ 2004 AWQC (chronic)			520 [4]		#		#		#		#		#		#		#		#		#		#		#		#		620 [4]		#		#		#		#	
	Oak Ridge National Laboratory (Tier II SCV) [5]			#		#		0.73		0.027		0.014		#		#		#		#		#		#		3.9		#		12.		#		#		#		#	
MW-05-100	991028-MW5-100-19	28-Oct-99	88 - 98	12.9		0.4		0.67		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	1.29		0.96		0.1	U	7,450.		4.28		1.29		ND	U	7,471.79	
	000330-MW5-100-119	30-Mar-00	(alluvial WBZ)	15.7		0.32		0.77		0.1		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	1.43		1.01		0.1	U	9,800.		4.42		1.31		0.1		9,825.06	
	001006-MW5-100-15	6-Oct-00		0.1	U	0.31		0.27		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.64		0.68		0.1	U	10,100.		1.49		0.64		ND	U	10,104.03	
	001006-MW5-100-16	6-Oct-00		15.		0.26		0.25		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.52		0.58		0.1	U	9,200.		1.27		0.53		ND	U	9,218.41	
	010329-MW5-100-118	29-Mar-01		19.8		2.	U	2.	U	0.1	U	2.	U	0.1	U	2.	U	2.	U	2.	U	2.	U	2.	U	2.	U	2.	U	9,600.		2.	U	2.	U	ND	U	9,619.8	
	020405-MW5-100-114	5-Apr-02		17.5		1.	U	1.	U	0.1	U	1.	U	0.1	U	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U	1.1		82,300.		1.	U	0.1	U	1.1		82,318.6	
	020405-MW5-100-115	5-Apr-02		8.9		0.1	U	0.14		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.14		0.36		0.49		0.11		4,310.		0.81		0.33		0.25		4,321.28	
	030319-MW5-100-114	19-Mar-03		14.		2.	U	2.	U	0.1	U	2.	U	0.1	U	2.	U	2.	U	2.	U	2.	U	2.	U	2.	U	2.	U	5,600.		2.	U	2.	U	ND	U	5,614.	
	040824-MW5-100-015 [7]	24-Aug-04		21.9		2.5	U	2.5	U	0.1	U	0.1	U	0.1	U	2.5	U	0.1	U	0.1	U	0.2	U	2.5	U	2.5	U	0.1	U	11,900.		2.5	U	2.5	U	ND	U	11,921.9	
	050401-012 [7]	1-Apr-05		21.3	B	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	5.	U	2.5	U	2.5	U	2.5	U	8,730.	B	2.5	B	2.5	U	ND	U	8,753.8	
	050921-MW-5-100-102	21-Sep-05		18.5		0.962	U	0.0888		0.0178		0.00962	U	0.00962	U	0.00962	U	0.00962	U	0.0191		0.00962	U	0.126		0.962	U	0.00962	U	6,530.		0.314		0.164		0.0369		6,549.2297	
	060404-MW-5-100-121	4-Apr-06		18.6		0.962	U	0.962	U	0.926	U	0.962	U	0.962	U	0.962	U	0.962	U	0.962	U	0.962	U	0.962	U	0.962	U	0.962	U	8,390.		0.962	U	1.92	U	ND	U	8,408.6	
	061027-MW-5-100-120	27-Oct-06		17.	J	1.1	U	1.5	U	1.2	U	1.6	U	2.	U	1.7	U	2.	U	1.4	U	3.1	U	1.3	U	1.2	U	2.4	U	7,100.		1.1	U	1.5	U	ND	U	7,117.	
	2708-070625-MW-5-100-103	25-Jun-07		47.6	U	47.6	U	47.6	U	2.38	U	2.38	U	2.38	U	47.6	U	2.38	U	2.38	U	2.38	U	47.6	U	47.6	U	2.38	U	7,320.		47.6	U	47.6	U	ND	U	7,320.	
	2708-080514-MW5-100-119	14-May-08		16.		0.09	U	0.093	U	0.011	J	0.0047	J	0.0049	J	0.0029	U	0.003	J	0.0087	J	0.0025	U	0.046		0.51		0.0026	U	7,800.		0.083		0.064		0.0323		7,816.7353	
	2708-080910-MW-5-100-100	10-Sep-08		26.		0.09		0.077		0.013	U*	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.011	J	0.0025	U	0.053		1.1		0.0026	U	9,900.		0.1		0.076		0.011		9,927.507	
	2708-090330-MW5-100-109	30-Mar-09		29.		0.087		0.066		0.014	J	0.0078	J	0.0083	J	0.0034	J	0.0026	U	0.011	J	0.0026	U	0.065		1.3		0.0033	J	9,600.		0.13		0.078		0.0444		9,630.7738	
	2708-090812-MW-5-100-112	12-Aug-09		94.3	U	94.3	U	94.3	U	94.3	U	94.3	U	94.3	U	94.3	U	94.3	U	94.3	U	94.3	U	94.3	U	94.3	U	94.3	U	19,500.		94.3	U	94.3	U	ND	U	19,500.	
MW-05-175	981116-MW5-175-07	16-Nov-98	163 - 173	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	990215-MW5-175-003	15-Feb-99	(alluvial WBZ)	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	990512-MW5-175-07	12-May-99		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	990823-MW5-175-03	23-Aug-99		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.2		0.1	U	0.1	U	ND	U	0.2	
	991026-MW5-175-06	26-Oct-99		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	000329-MW5-175-106	29-Mar-00		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	001004-MW5-175-05	4-Oct-00		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	010328-MW5-175-105	28-Mar-01		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	011009-MW5-175-102	9-Oct-01		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	020404-MW5-175-105	4-Apr-02		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	020924-MW5-175-101	24-Sep-02		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	030318-MW5-175-105	18-Mar-03		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	030929-MW5-175-101	29-Sep-03		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	ND	U	ND	U
	040824-MW5-175-013	24-Aug-04		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.1	U	0.05	U	0.05	U	0.05	U	0.0883	J	0.05	U	0.05	U	ND	U	0.0883	
	050921-MW-5-175-101	21-Sep-05		0.0098	U	0.0098	U	0.0098	U	0.0098	U	0.0098	U	0.0098	U	0.0098	U	0.0098	U	0.0098	U	0.0098	U	0.0098	U	0.0098	U	0.0098	U	0.0894		0.0098	U	0.0196	U	ND	U	0.0894	
	060329-MW-5-175-105	29-Mar-06		0.00952	U	0.00952	U	0.00952	U	0.00952	U	0.00952	U	0.00952	U	0.00952	U	0.00952	U	0.00952	U	0.00952	U	0.00952	U	0.00952	U	0.00952	U	0.0796		0.00952	U	0.019	U	ND	U	0.0796	
	061016-MW-5-175-05	16-Oct-06		0.0031	U	0.0023	U	0.0039	U	0.0039	U	0.0043	U	0.0046	U	0.0041	U	0.0051	U	0.0053	U	0.0036	U	0.0047	U	0.0036	U	0.0033	U	0.047		0.0032	U	0.0047	U	ND	U	0.047	
	2708-070625-MW-5-175-105	25-Jun-07		0.1	U	0.1	U	0.1	U	0.005	U	0.0056		0.00756		0.1	U	0.0055		0.0052		0.005	U	0.1	U	0.1	U	0.00632		0.114		0.1	U	0.1	U	0.03018		0.14418	
	2708-080514-MW5-175-116	14-May-08		0.0044	U	0.0034	U	0.0036	U	0.0049	J	0.0043	U	0.0048	J	0.0047	J	0.0025	U	0.004	J	0.0025	U	0.0077	J	0.0038	U	0.0048	J	0.076		0.0087	J	0.0085	J	0.0185		0.1241	
	2708-080910-MW-5-175-101	10-Sep-08		0.0045	U	0.0035	U	0.0037	U	0.0083	U*	0.0074	J	0.0077	J	0.0071	U*	0.0026	U	0.0085	J	0.0026	U	0.014	J	0.0039	U	0.0061	U*	0.075		0.011	J	0.018	J	0.0236		0.1416	
	2708-090330-MW5-175-107	30-Mar-09		0.0044	U	0.0034	U	0.0036	U	0.0037	J	0.0043	U	0.0033	J	0.0043	J	0.0025	U	0.0034	U	0.0025	U	0.0044	U	0.0038	U	0.0038	J	0.033		0.005	U	0.0035	U	0.0108		0.0481	
	2708-090812-MW-5-175-110	12-Aug-09		0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.119	U	0.0377	U	0.0377	U	ND	U	ND	U
MW-06-32	951207-MW6-32-01	7-Dec-95	21 - 31	23,000.		220.		14,000.		2,400.		690.		750.		280.		280.		3,100.		50.		22,000.		4,600.		200.		42,000.		61,000.		25,000.		7,470.		199,570.	
	960319-MW6-32-01	19-Mar-96	(fill WBZ)	280.		2.6		24.		1.9		0.79		0.85		0.3		0.3		2.5		0.1	U	16.		61.		0.22		1,800.		140.		16.		6.56		2,346.46	
	960319-MW6-32-01 (dissolved)	19-Mar-96		220.		2.		5.1		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	1.3		42.		0.1	U	1,600.		68.		1.7		ND	U	1,940.1	
	960617-MW6-32-01	17-Jun-96		310.		2.4		29.		4.5		2.5		2.4		0.9		0.87		5.		0.23		27.		82.		0.74		1,200.		170.		40.		16.24		1,877.54	
	960930-MW6-32-01	30-Sep-96		620.		7.8		190.		66.		29.		32.		6.4		12.		63.		1.5		320.		210.		0.1	U	1,900.		970.		330.		203.5		4,757.7	
	970225-MW6-32-01	25-Feb-97		260.		2.7		13.		2.	U	2.	U	2.	U	2.	U	2.	U	2.	U	2.	U	2.	U	64.		2.	U	830.		130.		8.5		ND	U	1,308.2	
	970826-MW6-32-01	26-Aug-97		350.		5.	U	29.		4.4		2.2		2.2		0.65		0.82		4.8		0.5	U	33.		97.		0.58		1,300.		220.		25.		15.		2,069.65	
	980216-MW6-32-01	16-Feb-98		560.		7.1		96.		48.		24.		27.		9.2		7.		47.		1.7		220.		170.		7.2		1,200.		840.		290.		161.9		3,554.2	
	980601-MW6-32-04	1-Jun-98		410.		10.	U	50.		6.2		2.6		3.		0.98		0.85		6.4		0.19		38.		100.		0.74		1,300.		280.		46.		19.98		2,244.96	
MW-06-61	951206-MW6-61-01	6-Dec-95	50 - 60	160.		1.4		29.		2.7		0.73		0.77		0.32		0.34		3.4		0.1	U	24.		48.		0.23		250.		200.		24.		8.17		744.89	
	960319-MW6-61-01	19-Mar-96	(alluvial WBZ)	29.		0.24		9.6		1.1		0.33		0.33		0.13		0.13		1.4		0.1	U	13.		9.7		0.1	U	66.		53.		13.		3.29		196.96	
	960620-MW6-61-01	20-Jun-96		21.		0.3		6.1		1.4		0.5		0.48		0.21		0.25		1.5		0.1	U	9.9		7.5		0.14		44.		30.		16.		4.27		139.28	
	961001-MW6-61-01	1-Oct-96		16.		1.	U	4.8		2.		1.	U	1.	U	1.	U	1.	U	1.8		1.	U	9.9		5.4		1.	U	76.		25.		12.		3.8		152.9	
	970225-MW6-61-01	25-Feb-97		32.		2.	U	4.		2.	U	2.	U	2.	U	2.	U	2.	U	2.	U	2.	U	3.5		7.7		2.	U	290.		23.		4.9		ND	U	365.1	
	970828-MW6-61-01	28-Aug-97		210.		2.4		17.		1.5		0.62		0.66		0.22		0.23		1.7		0.1	U	17.		47.		0.17		1,000.		130.		23.		4.88		1,451.5	
MW-08-29	951207-MW8-29-01	7-Dec-95	18 - 28	94.		200.		110.		65.		44.		34.		36.		16.		81.		50.		230.		83.		25.		6,000.		400.		220.		315.		7,688.	
	960321-MW8-29-01	21-Mar-96	(fill WBZ)	140.		260.		56.		28.		31.		23.		23.		9.8		33.		2.9		98.		89.		16.		6,700.		270.		100.		143.7		7,879.7	
	960620-MW8-29-01 [7]	20-Jun-96		100.		310.		15.		1.2		1.1		0.88		0.88		0.3		1.2		0.12		15.		70.		0.61		1,400.		150.		21.		5.41		2,087.29	
	960620-MW8-29-02	20-Jun-96		26.		49.		5.1		2.5		3.		2.4		2.3		0.82		2.7		0.3		9.4		14.		1.6		2,000.		32.		15.		13.32		2,166.12	
	961002-MW8-29-01	2-Oct-96		120.		240.		29.		5.4		6.2		4.4		4.5		1.6		4.8		1.	U	30.		71.		3.5		5,400.		140.		26.		25.9		6,086.4	
	970226-MW8-29-01	26-Feb-97		120.		250.		17.		3.1		2.		2.1		1.	U	1.	U	2.7		1.	U	22.		52.		1.	U	5,600.		110.		23.		9.9		6,203.9	
	970828-MW8-29-01	28-Aug-97		370.		230.		56.		32.		39.		29.		25.		11.		38.		4.7		150.		120.		18.		10,000.		380.		210.		171.7		11,712.7	
	980218-MW8-29-01	18-Feb-98		340.		110.		13.		4.3		4.9		3.7		4.		1.2		4.1		0.69		24.		65.		3.3		11,000.		150.		32.		22.19		11,760.19	
	980603-MW8-29-19	3-Jun-98		420.		130.		51.		37.		45.		37.		30.		13.		39.		3.8		140.		120.		21.		10,700.		440.		180.		195.8		12,406.8	
	981119-MW8-29-22	19-Nov-98		190.		85.		15.		2.2		2.6		1.9		1.8		0.69		2.3		0.22		17.		47.		1.2		4,900.		91.		19.		11.11		5,376.91	
	990513-MW8-29-14	13-May-99		311.		31.2		262.		2.57		2.13		1.98		1.39		0.64		2.21		0.19		21.		64.5		1.01		5,580.		133.		30.		10.73		6,444.82	
	991029-MW8-29-23	29-Oct-99		210.		42.		28.		20.	U	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U	20.		54.		20.	U	2,790.		138.		20.		ND	U	3,302.	
	000403-MW8-29-123	3-Apr-00		320.		6.46		20.1		1.78		1.47		0.93		0.75		0.79		1.66		0.14		18.3		68.7		0.65		6,550.		143.		23.5		7.42		7,158.23	
	010330-MW8-29-123	30-Mar-01		173.		4.84		22.6		8.97		10.		6.4		6.48		5.16		10.9		1.93		31.2		47.		5.76		1,770.		151.		36.		49.12		2,291.24	

Table 3b - Summary of Historical Analytical Results for Groundwater Samples: PAHs by EPA Method 8270-SIM or 8270C
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date/Time	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
				Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [8,9]																					
Fish Consumption																					
	EPA 2004 NRWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate			99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																					
	MCL [3]			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	0.2	0.2	#	#
	EPA Region 3.6.9 Tap Water PRGs (12/09 update)			2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,9]																					
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)			520 [4]	#	#	#	#	#	#	#	#	#	#	#	#	620 [4]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [5]			#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
MW-08-29	040825-MW8-29-022[7]	25-Aug-04	18 - 28	234.	2.82	16.1	7.49	8.19	4.95	6.01	4.24	9.56	1. U	27.8	56.6	4.09	2,520.	136.	34.6	38.52	3,072.45
	050929-MW8-29-127	29-Sep-05	(fill WBZ)	331.	3.61	25.1	5.32	5.16	2.54	4.11	2.46	9.96	0.563	28.7	54.8	2.64	4,960.	117.	39.9	28.643	5,592.863
	061031-MW-8-29-124	31-Oct-06		160.	21.	21.	2. J	2.3 J	0.96 U	1.7 J	0.96 U	2.8 J	1.6 U	17.	38.	1.6 J	1,900.	79.	19.	8.7	2,265.4
	2708-080603-MW8-29-100	3-Jun-08		180.	5.6	15.	3.8	4.2	4.	3.	1.1	4.8	0.42	22.	53.	2.9	2,200.	93.	31.	21.22	2,623.82
	2708-080911-MW-8-27-113	11-Sep-08		220.	3.5	15.	3.3	3.6	2.8	2.7	1.1	5.5	0.45	20.	70.	2.4	2,200.	110.	25.	19.15	2,685.35
	2708-090331-MW8-29-118	31-Mar-09		280.	4.9	13.	0.99	1.	0.63	0.37	0.26	1.6	0.097 J	12.	61.	0.45	3,200.	100.	14.	5.027	3,690.297
	2708-090811-MW-8-29-106	11-Aug-09		230.	9.94	19.2	7.55 U	8.36	15.1 U,BK	7.55 U	- BK	7.55 U	7.55 U	24.6	56.6	7.55 U	37.7 U	116.	28.1	8.36	492.8
MW-08-56	951207-MW8-56-01	7-Dec-95	45 - 55	130.	250.	53.	25.	17.	14.	15.	60.	30.	2. U	110.	86.	10.	20,000.	290.	110.	156.	21,200.
	960321-MW8-56-01	21-Mar-96	(alluvial WBZ)	220.	300.	110.	68.	74.	66.	60.	23.	83.	7.1	200.	130.	40.	13,300.	580.	240.	361.1	15,501.1
	960620-MW8-56-01 [6]	20-Jun-96		28.	66.	9.8	6.6	7.9	5.7	6.	2.2	7.3	0.81	21.	17.	4.3	1,500.	56.	30.	34.81	1,768.61
	961002-MW8-56-01	2-Oct-96		120.	230.	42.	26.	27.	24.	20.	10. U	22.	10. U	92.	74.	15.	10,700.	250.	100.	114.	11,742.
	970226-MW8-56-01	26-Feb-97		120.	240.	34.	20. U	20. U	20. U	20. U	20. U	20. U	20. U	34.	60.	20. U	13,000.	160.	44.	ND U	13,692.
	970828-MW8-56-01	28-Aug-97		160.	240.	16.	4.1	4.4	3.7	3.	1.4	4.1	1. U	24.	80.	2.3	17,400.	170.	28.	20.	18,141.
	980218-MW8-56-01	18-Feb-98		130.	220.	18.	2.6	2.4	2.	1.7	0.58	1.8	0.3	20.	67.	1.5	12,300.	150.	27.	11.18	12,944.88
	980603-MW8-56-21	3-Jun-98		190.	310.	31.	13.	15.	13.	11.	5.	13.	1.3	61.	100.	7.5	16,600.	280.	69.	67.8	17,719.8
	981119-MW8-56	19-Nov-98		130.	180.	15.	10. U	10. U	10. U	10. U	10. U	10. U	10. U	12.	64.	10. U	10,500.	110.	13.	ND U	11,024.
	990513-MW8-56-15	13-May-99		128.	168.	10.2	1. U	1. U	1. U	1. U	1. U	1. U	1. U	9.2	52.3	1. U	11,500.	88.2	9.9	ND U	11,965.8
	991029-MW8-56-24	29-Oct-99		148.	179.	19.1	0.97	0.81	0.52	0.56	0.45	1.04	- U	8.94	58.8	0.44	12,000.	110.	8.54	4.23	12,537.17
	000403-MW8-56-124	3-Apr-00		188.	207.	50.	12.2	11.1 U	11.	11.1 U	11.1 U	18.9	11.1 U	66.7	82.2	11.1 U	13,000.	294.	97.8	42.1	14,027.8
	010330-MW8-56-122	30-Mar-01		169.	165.	29.8	8.28	7.84	5.07	5.62	4.23	8.57	1.5	32.9	71.7	4.93	14,200.	202.	37.1	40.42	14,953.54
	020405-MW8-56-118	5-Apr-02		91.6	77.6	9.61	0.45	0.35	0.19	0.27	0.21	0.53	0.1 U	7.61	48.6	0.21	6,830.	69.6	6.17	1.94	7,143.
	030320-MW8-56-120	20-Mar-03		99.	61.	11.	2.2	2. U	2. U	2. U	2. U	2.	2. U	9.2	42.	2. U	7,400.	77.	8.8	4.2	7,712.2
	040825-MW8-56-021[7]	25-Aug-04		165.	57.2	11.7	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5. U	14.7	59.8	2.5 U	10,400.	108.	16.3	ND U	10,832.7
	050929-MW8-56-128	29-Sep-05		152.	44.4	15.3	4.81	5.74	3.23	4.91	3.58	6.37	1.03 U	25.9	49.3	3.24	8,290.	120.	31.1	26.97	8,759.88
	061031-MW-8-56-125	31-Oct-06		170.	56.	17.	4.1 J	3.8 J	4.3 J	3.6 J	1.6 J	5.3 J	1.6 U	23.	57.	3. J	10,000.	110.	25.	22.1	10,483.7
	061031-MW-8-56-126	31-Oct-06		180.	52.	18.	4. J	4. J	3.8 J	2.9 J	1.4 J	4.6 J	1.6 U	21.	56.	3.1 J	20,000.	120.	22.	20.9	20,492.8
	2708-080603-MW8-56-101	3-Jun-08		270.	38.	51.	21.	23.	24.	20.	9.3	27.	2.7	100.	100.	19.	11,000.	340.	120.	126.	12,165.
	2708-080915-MW-8-56-117	15-Sep-08		220.	26.	46.	29.	35.	32.	30.	12.	35.	3.4	130.	82.	28.	7,500.	340.	150.	174.4	8,698.4
	2708-090331-MW8-56-116	31-Mar-09		120.	14.	12.	6.8	9.	8.	5.8	2.8	8.	0.72	24.	36.	5.9	7,800.	93.	29.	41.22	8,175.02
	2708-090811-MW-8-56-104	11-Aug-09		220.	47.2 U	53.8	50.3	60.	94.3 U,BK	47.2 U	- BK	47.2 U	47.2 U	153.	83.1	47.2 U	9,400.	342.	177.	110.3	10,539.2
MW-09-29	951205-MW9-29-01	5-Dec-95	18 - 28	0.1 U	0.1 U	0.15	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12	0.1 U	0.1 U	0.44	0.37	0.11	ND U	1.19
	960318-MW9-29-01	18-Mar-96	(fill WBZ)	0.11	0.1 U	0.18	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.29	0.15	0.1 U	0.1 U	0.6	0.27	ND U	1.6
	960618-MW9-29-01	18-Jun-96		0.1 U	0.1 U	0.15	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	0.15
	961001-MW9-29-01	1-Oct-96		0.1 U	0.1 U	0.12	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.28	0.1 U	0.1 U	ND U	0.4
	970225-MW9-29-01	25-Feb-97		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	970827-MW9-29-01	27-Aug-97		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	980217-MW9-29-01	17-Feb-98		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	980602-MW9-29-07	2-Jun-98		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	981116-MW9-29-02	16-Nov-98		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	990511-MW9-29-03	11-May-99		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	991026-MW9-29-02	26-Oct-99		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	000328-MW9-29-102	28-Mar-00		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	010327-MW9-29-102	27-Mar-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	020403-MW9-29-101	3-Apr-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	030318-MW9-29-103	18-Mar-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	040812-MW9-29-001[7]	12-Aug-04		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	050926-MW-9-29-109	26-Sep-05		0.01 U	0.01 U	0.0308	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.036	0.01 U	0.01 U	0.02 U	0.0179	0.0346	ND U	0.1193	
	061013-MW-9-29-103	13-Oct-06		0.0031 U	0.01 J	0.023	0.024	0.029	0.032	0.038	0.023	0.03	0.0047 J	0.044	0.0036 U	0.032	0.046	0.021	0.053	0.1747	0.4097
	2708-080604-MW9-29-109	4-Jun-08		0.0044 U	0.02	0.052	0.013 J	0.015 J	0.024	0.048	0.01 J	0.013 J	0.0046 J	0.018 J	0.0072 J	0.035	0.18 J	0.016 J	0.026	0.1146	0.4818
	2708-080604-MW9-29-110 (DUP)	4-Jun-08		0.0045 J	0.021	0.056	0.012 J	0.013 J	0.021	0.048	0.0086 J	0.01 J	0.0046 J	0.016 J	0.0067 J	0.033	0.2 J	0.016 J	0.021	0.1022	0.4914
	2708-080916-MW-9-29-132	16-Sep-08		0.0046 U	0.025	0.026	0.017 J	0.028	0.04	0.08	0.016 J	0.019 J	0.0072 J	0.028	0.0041 J	0.055	0.039	0.025	0.033	0.1822	0.4423
	2708-090326-MW9-29-102	26-Mar-09		0.0044 U	0.0076 J	0.028	0.0085 J	0.0088 J	0.011 J	0.017 J	0.0057 J	0.0085 J	0.0036 J	0.011 J	0.0038 U	0.013 J	0.044	0.0094 J	0.011 J	0.0591	0.1871
	2708-090813-MW-9-29-120	13-Aug-09		0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0475	0.0748 U,BK	0.0374 U	- BK	0.0374 U	0.0374 U	0.0448	0.0374 U	0.0374 U	0.082 U	0.0374 U	0.0493	0.0475	0.1416
MW-10-25	951207-MW10-25-01	7-Dec-95	14 - 24	31.	88.	16.	4.	3.4	2.9	2.5	1.3	4.6	1. U	21.	33.	1.8	13,000.	85.	22.	18.	13,316.5
	960320-MW10-25-01	20-Mar-96	(fill WBZ)	70.	98.	11.	1.3	1.4	1.2	0.91	0.55	0.78	0.3 U	8.8	39.	0.67	8,800.	86.	6.7	5.9	9,126.31
	960617-MW10-25-01	17-Jun-96		75.	130.	14.	1.1	1.8	1.2	1.1	0.62	0.87	0.25	1.6	49.	0.95	9,900.	82.	6.6	6.79	10,266.09
	960930-MW10-25-01	30-Sep-96		140.	87.	39.	20.	15.	12.	9.9	3.9	19.	1.7	95.	90.	7.	9,600.	310.	80.	78.6	10,529.5
	970225-MW10-25-01	25-Feb-97		210.	81.	30.	21.	15.	13.	11.	3.4	16.	1. U	1. U	95.	5.9	9,000.	340.	1. U	74.3	9,841.3
	970827-MW10-25-01	27-Aug-97		72.	59.	11.	4.4	4.3	3.5	2.5	1.2	4.2	1. U	22.	41.	2.	6,700.	100.	20.	19.6	7,047.1
	980216-MW10-25-01	16-Feb-98		100.	87.	19.	14.	12.	11.	8.1	3.6	11.	1.1	59.	62.	5.4	8,500.	210.	62.	58.1	9,165.2
	980601-MW10-25-02	1-Jun-98		140.	150.	26.	8.2	7.	6.7	4.8	1.9	7.2	0.7	45.	82.	3.4	11,400.	230.	49.	35.1	12,161.9
	061213-MW-10-25-131	13-Dec-06		250.	140.	58. J	38. J	44. J	42. J	33. J	16. J	40. J	16. U	120.	100.	32. J	13,000.	380.	170.	212.	14,463.
	2708-080604-MW10-25-108	4-Jun-08		130.	73.	14.	1.6	1.4	1.4	1.	0.49	1.8	0.17 J	13.	71.	0.98	9,000. J	110. J	16.	7.84	9,435.84
	2708-080917-MW-10-25-136	17-Sep-08		670.	210.	240.	170.	210.	180.	160.	78.	210.	19.	880.	380.	150.	13,000.	1,700.	1,000.	1,017.	19,257.
	2708-090326-MW10-25-101	26-Mar-09		490.	190.	180.	140.	170.	140.	120.	47.	160.	14.	690.	300.	120.	6,500.	1,700.	800.	791.	11,761.
	2708-090813-MW-10-25-124	13-Aug-09		365.	155.	107.	71.3	98.3	122. BK	63.5	- BK	86.	8.77	315.	193.	56.6	1,450.	733.	364.	442.97	4,188.47
MW-10-61	951206-MW10-61-01	6-Dec-95	50 - 60	39.	17.	12.	0.39	0.1 U	0.1 U	0.1 U	0.1 U	0.33	0.1 U	12.	28.	0.1 U	620.	90.	11.	0.72	829.72
	960321-MW10-61-01	21-Mar-96	(alluvial WBZ)	5.8	2.2	4.7	0.75	0.36	0.34	0.28	0.12	0.8	0.1 U	7.3	1.5	0.18	43.	28.	7.1	2.55	102.43
	960620-MW10-61-01	20-Jun-96		2.1	0.98	2.2	0.54	0.28	0.24	0.22	0.12	0.68	0.1 U	4.4	0.22	0.14	13.	15.	5.4	2.	45.52
	961002-MW10-61-01	2-Oct-96		0.88	0.54	1.5	0.48	0.25	0.23	0.17	0.1 U	0.42	0.1 U	4.1	0.16	0.12	4.6	8.5	3.2	1.5	25.15
	970226-MW10-61-01	26-Feb-97		0.73	0.45	1.	0.41	0.13	0.15	0.1 U	0.1 U	0.35	0.1 U	3.5	0.1	0.1 U	3.3	4.1	3.8	1.04	18.02

Table 3b - Summary of Historical Analytical Results for Groundwater Samples: PAHs by EPA Method 8270-SIM or 8270C
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date/Time	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
				Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [8,9]																					
Fish Consumption																					
	EPA 2004 NRWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate			99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																					
	MCL [3]			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	0.2	0.2	#	#
	EPA Region 3.6.9 Tap Water PRGs (12/09 update)			2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,9]																					
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)			520 [4]	#	#	#	#	#	#	#	#	#	#	#	#	620 [4]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [5]			#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
MW-10-61	970828-MW10-61-01	28-Aug-97	50 - 60	0.33	0.11	0.55	0.21	0.1 U	0.1 U	0.1 U	0.1 U	0.18	0.1 U	2.2	0.1 U	0.1 U	0.78	1.1	2.3	0.39	7.76
	980218-MW10-61-01	18-Feb-98	(alluvial WBZ)	0.13	0.1 U	0.12	0.24	0.1 U	0.16	0.1 U	0.1 U	0.1 U	0.1 U	1.1	0.1 U	0.1 U	0.29	0.22	1.5	0.4	3.76
	980603-MW10-61-16	3-Jun-98		0.18	0.1 U	0.13	0.42	0.27	0.27	0.21	0.11	0.36	0.1 U	1.7	0.1 U	0.12	0.26	0.15	2.	1.55	6.18
	981117-MW10-61-08	17-Nov-98		0.1 U	0.15	0.1 U	0.56	0.78	0.61	0.58	0.2	0.57	0.1 U	0.86	0.1 U	0.34	0.1	0.1 U	1.1	3.06	5.85
	990512-MW10-61-06	12-May-99		0.1 U	0.1 U	0.1 U	0.18	0.11	0.1	0.1 U	0.1 U	0.18	0.1 U	0.73	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.57	1.3
	991026-MW10-61-05	26-Oct-99		0.1 U	0.1 U	0.1 U	0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.13	0.1 U	0.54	0.1 U	0.1 U	0.1 U	0.1 U	0.58	0.24	1.36
	000329-MW10-61-105	29-Mar-00		0.1 U	0.1 U	0.1 U	0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.13	0.1 U	0.48	0.1 U	0.1 U	0.1 U	0.1 U	0.37	0.24	1.09
	011010-MW10-61-109	10-Oct-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.28	0.1 U	0.1 U	0.1 U	0.1 U	0.33	ND U	0.61
	020404-MW10-61-109	4-Apr-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11	0.1 U	0.43	0.1 U	0.1 U	0.1 U	0.1 U	0.3	0.11	0.84
	020924-MW10-61-104	24-Sep-02		0.1 U	0.1 U	0.1 U	0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.14	0.1 U	0.53	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.25	1.38
	030319-MW10-61-111	19-Mar-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.45	0.1 U	0.1 U	0.1 U	0.1 U	0.5	ND U	0.95
	031003-MW10-61-108 [7]	3-Oct-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	040813-MW10-61-005[7]	13-Aug-04		0.1 U	0.1 U	0.1 U	0.1 U	0.104	0.1 U	0.111	0.1 U	0.1 U	0.2 U	0.135	0.1 U	0.1 U	0.1 U	0.1 U	0.177	0.104	0.527
	050928-MW10-61-121	28-Sep-05		0.0182	0.103	0.0517	0.184	0.358	0.228	0.362	0.162	0.22	0.049	0.168	0.0118	0.229	0.0803	0.0382	0.306	1.43	2.5692
	061017-MW-10-61-108	17-Oct-06		0.0088 U	0.16 J	0.17 J	0.15 J	0.28	0.26	0.29	0.1 J	0.18 J	0.045 J	0.078 J	0.012	0.24	0.18 J	0.078 J	0.21	1.255	2.433
	2708-080604-MW10-61-105	4-Jun-08		0.01 J	0.037	0.037	0.05	0.064	0.062	0.067	0.027	0.053	0.0091 J	0.031	0.015 J	0.06	0.065 J	0.011 J	0.13	0.3251	0.7281
	2708-080917-MW-10-61-135	17-Sep-08		0.036	0.32	0.14	0.7	1.2	1.	1.	0.41	0.9	0.12	0.53	0.088	0.97	1.3	0.31	0.98	5.3	10.004
	2708-090326-MW10-61-100	26-Mar-09		0.019 J	0.16	0.063	0.19	0.47	0.37	0.4	0.13	0.22	0.042	0.074	0.023	0.37	0.096	0.033	0.24	1.792	2.9
	2708-090813-MW-10-61-122	13-Aug-09		0.0634	0.146	0.0508	0.219	0.585	0.656 BK	0.511	- BK	0.26	0.0646	0.0864	0.0447	0.397	2.3	0.0791	0.296	2.1816	5.759
MW-11-32	951207-MW11-32-01	7-Dec-95	21 - 31	340.	340.	32.	5.5	2.8	2.6	2.2	1.3	6.3	1. U	48.	190.	1.5	21,000.	360.	33.	20.	22,365.2
	960320-MW11-32-01	20-Mar-96	(fill WBZ)	200.	180.	20.	1.6	1.2	1.2	0.75	0.49	1.3	0.5 U	16.	90.	0.54	14,000.	150.	13.	6.33	14,676.08
	960617-MW11-32-01	17-Jun-96		160.	160.	19.	2.9	2.8	2.3	1.8	1.	2.8	0.31	19.	90.	1.4	11,000.	120.	25.	13.51	11,608.31
	960930-MW11-32-01	30-Sep-96		270.	220.	62.	31.	27.	22.	20.	9.9	27.	2.	150.	150.	13.	16,000.	430.	170.	131.9	17,603.9
	960930-MW11-32-02	30-Sep-96		270.	250.	74.	41.	40.	36.	31.	14.	33.	3.	200.	180.	22.	17,000.	510.	190.	189.	18,894.
	970225-MW11-32-01	25-Feb-97		150.	140.	1.4	4.2	1. U	3.2	1. U	1. U	3.3	1. U	1. U	68.	1. U	11,000.	140.	26.	10.7	11,536.1
	970826-MW11-32-01	26-Aug-97		260.	190.	21.	4.6	4.3	3.7	2.3	1.3	4.1	0.5	37.	120.	2.	16,200.	200.	25.	20.5	17,075.8
	980216-MW11-32-01	16-Feb-98		150.	120.	16.	4.1	3.2	3.1	2.3	1.	2.9	1. U	25.	65.	1.6	9,200.	140.	25.	15.9	9,759.2
	980601-MW11-32-03	1-Jun-98		510.	360.	56.	26.	24.	25.	18.	10. U	24.	10. U	130.	250.	13.	30,200.	580.	160.	112.	32,376.
	061212-MW-11-32-130	12-Dec-06		250.	210.	35. J	15. J	8. U	17. J	8.2 U	9.6 U	20. J	16. U	67. J	99. J	15. J	18,000.	220.	78. J	67.	19,026.
	2708-080604-MW11-32-111	4-Jun-08		240.	140.	36.	15.	14.	14.	12.	5.	17.	1.4	81.	99.	11.	15,000. J	250. J	94.	77.4	16,029.4
	2708-080917-MW-11-32-134	17-Sep-08		8,600.	5,700.	4,400.	3,500.	4,500.	3,800.	3,300.	1,600.	3,700.	360.	15,000.	6,700.	3,000.	96,000.	29,000.	18,000.	20,460.	207,160.
	2708-090402-MW11-32-136	2-Apr-09		1,100.	210.	290.	200.	140.	140.	78.	55.	190.	12.	1,300.	710.	83.	19,000.	2,900.	1,100.	820.	27,508.
	2708-090811-MW-11-32-100	11-Aug-09		617.	276.	214.	166.	179.	217. BK	111.	- BK	174.	94.3 U	681.	321.	106.	19,500.	1,300.	712.	842.	24,574.
MW-12-36	951207-MW12-36-01	7-Dec-95	25 - 35	400.	7.8	21.	1.5	0.22	0.36	0.1	0.17	1.4	0.1 U	28.	170.	0.1 U	2,500.	230.	17.	3.65	3,377.55
	960321-MW12-36-01	21-Mar-96	(fill/alluvial WBZ)	250.	3.3	16.	0.38	0.1 U	0.1 U	0.1 U	0.1 U	0.35	0.1 U	18.	110.	0.1 U	1,400.	200.	12.	0.73	2,010.03
	960620-MW12-36-01	20-Jun-96		160.	2.4	11.	0.4	1.1 U	0.1 U	0.1 U	0.1 U	0.4	0.1 U	18.	81.	0.1 U	1,200.	130.	18.	0.8	1,621.2
	961002-MW12-36-01	2-Oct-96		140.	2.	10.	0.47	2.1 U	0.1 U	0.1 U	0.1 U	0.33	0.1 U	25.	59.	0.1 U	990.	130.	18.	0.8	1,374.8
	970226-MW12-36-01	26-Feb-97		100.	1.7	0.1 U	0.63	3.1 U	0.1 U	0.1 U	0.1 U	0.31	0.1 U	24.	40.	0.1 U	760.	88.	18.	0.94	1,032.64
	970828-MW12-36-01	28-Aug-97		79.	1.4	7.7	0.43	4.1 U	0.1 U	0.1 U	0.1 U	0.24	0.1 U	19.	33.	0.1 U	620.	61.	18.	0.67	839.77
	980218-MW12-36-01	18-Feb-98		71.	0.78	2.6	0.51	5.1 U	0.1 U	0.1 U	0.1 U	0.18	0.1 U	17.	25.	0.1 U	530.	52.	9.2	0.69	708.27
	980603-MW12-36-17	3-Jun-98		77.	1.1	5.9	1. U	1. U	1. U	1. U	0.1 U	1. U	1. U	22.	30.	1. U	480.	62.	19.	ND U	697.
	981119-MW12-36-18	19-Nov-98		52.	0.64	2.4	0.49	0.1 U	0.1 U	0.1 U	0.1 U	0.3	0.1 U	14.	21.	0.1 U	350.	38.	8.3	0.79	487.13
	990513-MW12-36-12	13-May-99		47.9	0.79	2.28	0.53	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	7.47	19.2	0.1 U	374.	31.3	7.93	0.53	491.4
	991028-MW12-36-18	28-Oct-99		60.	0.95	2.2	0.35	0.1 I	0.1 U	0.1 U	0.1 U	0.25	0.1 U	7.52	23.7	0.1 U	409.	35.9	6.06	0.7	546.03
	000330-MW12-36-118	30-Mar-00		63.8	1.21	3.9	0.59	0.21	0.14	0.18	0.16	0.51	0.1 U	9.51	25.5	0.13	490.	45.9	7.24	1.74	648.98
	010329-MW12-36-117	29-Mar-01		51.5	0.69	3.11	0.4	0.1 U	0.1 U	0.1 U	0.1 U	0.29	0.1 U	7.34	21.6	0.1 U	284.	39.4	6.71	0.69	415.04
	020404-MW12-36-112	4-Apr-02		37.5	0.46	1.98	0.28	0.1 U	0.1 U	0.1 U	0.1 U	0.22	0.1 U	5.14	16.6	0.1 U	287.	23.5	3.2	0.5	375.88
	030319-MW12-36-113	19-Mar-03		35.	0.47	2.1	0.31	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	5.9	16.	0.1 U	280.	24.	5.4	0.31	369.18
	040825-MW12-36-017[7]	25-Aug-04		62.	1. U	2.66	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1. U	6.34	29.6	0.5 U	554.	36.2	5.51	ND U	696.31
	050927-MW-12-36-116	27-Sep-05		37.4	0.212	1.13	0.111	0.0197	0.0167	0.0103	0.0176	0.0879	0.0102 U	2.9	15.3	0.0102 U	293.	19.1	2.69	0.2529	371.9952
	061024-MW-12-36-115	24-Oct-06		52.	0.28	2.2	0.01 J	0.01 J	0.0099 J	0.0048 J	0.0076 J	0.081	0.0036 U	6.1	27.	0.0038 J	470.	29.	4.5	0.1223	591.2071
	2708-080604-MW12-36-106	4-Jun-08		22.	0.17	1.4	0.19	0.037	0.05	0.016 J	0.02	0.15	0.0032 J	4.5	12.	0.016 J	170. J	12. J	4.3	0.4662	226.8522
	2708-080916-MW-12-36-127	16-Sep-08		51.	0.35	2.9	0.099	0.017 J	0.021	0.0066 J	0.011 J	0.081	0.0025 U	5.9	26.	0.0069 J	620.	29.	4.6	0.2359	739.9925
	2708-090402-MW12-36-134	2-Apr-09		26.	0.19	1.4	0.13	0.018 J	0.022	0.0092 J	0.0095 J	0.091	0.0025 U	3.9	14.	0.0093 J	130.	14.	3.5	0.2798	193.279
	2708-090817-MW-12-36-137	17-Aug-09		50.3	7.92 U	7.92 U	7.92 U	7.92 U	7.92 U	7.92 U	7.92 U	7.92 U	7.92 U	7.92 U	23.6	7.92 U	935.	26.7	7.92 U	ND U	1,035.6
MW-13-30	980217-MW13-30-01	17-Feb-98	19 - 29	190.	1.6	7.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	3.5	52.	0.1 U	69.	100.	2.7	ND U	426.1
	980602-MW13-30-12	2-Jun-98	(fill WBZ)	300.	1. U	16.	0.1 U	1. U	1. U	1. U	1. U	1. U	1. U	5.1	85.	1. U	610.	160.	4.8	ND U	1,180.9
	980826-MW13-30-11	26-Aug-98		160.	1.8	11.	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	3.7	45.	0.1 U	420.	98.	2.8	ND U	742.3
	981119-MW13-30-19	19-Nov-98		210.	1.4	16.	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.8	59.	0.1 U	7.6	100.	2.2	ND U	399.
	990217-MW13-30-014	17-Feb-99		144.	1.13	9.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.54	34.8	0.1 U	506.	70.6	1.92	ND U	770.59
	990513-MW13-30-13	13-May-99		163.	1.59	10.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.73	51.8	0.1 U	735.	68.4	2.5	ND U	1,035.62
	991028-MW13-30-20	28-Oct-99		130.	20. U	132.	0.1 U	0.1 U	20. U	20. U	20. U	20. U	20. U	20. U	42.	20. U	460.	56.	20. U	ND U	820.
	000403-MW13-30-120	3-Apr-00		297.	1.62	8.39	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	3.09	77.3	0.1 U	240.	90.5	2.94	ND U	720.84
	001005-MW13-30-18	5-Oct-00		142.	0.96	6.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.7	46.	0.1 U	146.	64.	2.34	ND U	410.3
	010329-MW13-30-119	29-Mar-01		147.	1.11	6.11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.3	46.6	0.1 U	241.	77.3	1.54	ND U	522.96
	020405-MW13-30-116	5-Apr-02		149.	0.9	6.77	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	3.19	44.8	0.1 U	188.	57.1	1.89	ND U	451.65
	030319-MW13-30-115	19-Mar-03		160.	1.6	9.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	3.9	48.	0.1 U	700.	83.	2.7	ND U	1,008.4
	040825-MW13-30-018[7]	25-Aug-04		171.	1.5 U	6.46	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1. U	2.94	35.9	0.5 U	78.6	57.1	2.41	ND U	354.41
	051003-MW-13-13-132	3-Oct-05		204.	2. U	7.48	1. U	1. U	1. U	1. U	1. U	1. U	1. U	3.3	45.4	1. U	238.	67.3	2.99	ND U	568.47
	060404-MW-13-30-122	4-Apr-06		267.	2.97 U	8.89	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.66	55.9	0.99 U	493.	97.7	4.19	ND U	931.34
	061027-MW-13-30-121	27-Oct-06		110.	1.6	7.1	0.058 U	0.08 U	0.096 U	0.082 U	0.096 U	0.07 U	0.16 U	2.5	36.	0.12 U	260.	58.	2.	ND U	477.2
	2708-080604-MW13-30-112	4-Jun-08		310,000.	1,400.	170,000.	4,900.	3,700.	3,700.	2,100.	1,200.	6,300.	320.	270,000.	160,000.	1,900.	560,000. J	820,000. J	400,000.	22,020.	2,715,520.

Table 3b - Summary of Historical Analytical Results for Groundwater Samples: PAHs by EPA Method 8270-SIM or 8270C
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date/Time	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
				Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [8,9]																					
Fish Consumption																					
	EPA 2004 NRWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate			99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																					
	MCL [3]			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	0.2	0.2	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,9]																					
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)			520 [4]	#	#	#	#	#	#	#	#	#	#	#	#	620 [4]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
MW-13-61	980218-MW13-61-01	18-Feb-98	50 - 60	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	980602-MW13-61-13	2-Jun-98	(alluvial WBZ)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	980825-MW13-61-03	25-Aug-98		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	981116-MW13-61-03	16-Nov-98		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2	0.1 U	0.1 U	ND U	0.2
	990512-MW13-61-04	12-May-99		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.26	0.1 U	0.1 U	ND U	0.26
	991026-MW13-61-03	26-Oct-99		0.1 U	0.14	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.48	0.1 U	0.1 U	ND U	0.62
	000328-MW13-61-104	28-Mar-00		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	001004-MW13-61-03	4-Oct-00		0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.57	0.1 U	0.1 U	ND U	0.68
	010327-MW13-61-103	27-Mar-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	011009-MW13-61-106	9-Oct-01		0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17	0.1 U	0.1 U	ND U	0.28
	020403-MW13-61-102	3-Apr-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	020924-MW13-61-106	24-Sep-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	030317-MW13-61-101	17-Mar-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	031003-MW13-61-109 [7]	3-Oct-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	040813-MW13-61-003[7]	13-Aug-04		0.115	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.168	0.1 U	0.1 U	ND U	0.283
	050937-MW-13-61-114	27-Sep-05		6.61	0.204 U	0.478	0.187	0.244	0.235	0.225	0.192	0.24	0.102 U	0.685	2.17	0.165	0.204 U	2.79	0.706	1.263	14.927
	060404-MW-13-61-123	4-Apr-06		2.7 J	0.178	0.985	0.774	0.565	0.347	0.453	0.365	1.1	0.099 U	3.53	0.98	0.284	0.198 U	7.54	4.34	3.435	24.141
MW-14-110	981116-MW14-110-06	16-Nov-98	98 - 108	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	990216-MW14-110-005	16-Feb-99	(alluvial WBZ)	0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	0.11
	990512-MW14-110-09	12-May-99		0.14	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14	0.1 U	0.1 U	ND U	0.28
	990823-MW14-110-06	23-Aug-99		0.29	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12	0.1 U	0.1 U	ND U	0.41
	991027-MW14-110-09	27-Oct-99		0.26	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	0.26
	991027-MW14-110-09	27-Oct-99		0.26	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	0.26
	000329-MW14-110-109	29-Mar-00		0.42	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	0.42
	000329-MW14-110-110	29-Mar-00		0.42	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	0.42
	000615-MW14-110-102	15-Jun-00		0.18	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	0.18
	001005-MW14-110-06	5-Oct-00		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	001220-MW14-110-102	20-Dec-00		0.14	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	0.14
	010328-MW14-110-108	28-Mar-01		0.23	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	0.23
	011009-MW14-110-105	9-Oct-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	011213-MW14-110-101	13-Dec-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	020404-MW14-110-108	4-Apr-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	020711-MW14-110-101	11-Jul-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	020924-MW14-110-105	24-Sep-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	021217-MW14-110-102	17-Dec-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	030318-MW14-110-108	18-Mar-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	030602-MW14-110-101	2-Jun-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	031003-MW14-110-110 [7]	3-Oct-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	030112-MW14-110-101[7]	12-Jan-04		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	040824-MW14-110-014[7]	24-Aug-04		0.0828 J	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	ND U	0.0828
	050922-MW-14-110-104	22-Sep-05		0.0658	0.0192 U	0.0192 U	0.00962 U	0.00962 U	0.00962 U	0.00962 U	0.00962 U	0.00962 U	0.00962 U	0.00962 U	0.00962 U	0.0962 U	0.135	0.00962 U	0.0192 U	ND U	0.2008
	061013-MW-14-110-104	13-Oct-06		0.0042 J	0.019 J	0.013 J	0.025	0.025	0.026	0.028	0.022	0.031	0.004 J	0.046	0.0072 J	0.025	0.2	0.028	0.055	0.158	0.5584
	2708-080603-MW14-110-104	3-Jun-08		0.027	0.026	0.035	0.025	0.03	0.041	0.025	0.02	0.026	0.0059 J	0.034	0.0083 J	0.027	0.079	0.018 J	0.033	0.1749	0.4602
	2708-080916-MW-14-110-131	16-Sep-08		0.12	0.027	0.024	0.12	0.16	0.21	0.14	0.089	0.15	0.028	0.17	0.0038 U	0.14	0.066	0.044	0.18	0.897	1.668
	2708-090326-MW14-110-103	26-Mar-09		0.13	0.018 J	0.024	0.021	0.026	0.03	0.022	0.01 J	0.027	0.005 J	0.034	0.027	0.021	0.24	0.026	0.038	0.14	0.699
	2708-090812-MW-14-110-117	12-Aug-09		0.104	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0762 U,BK	0.0381 U	- BK	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.237 U	0.0381 U	0.0381 U	ND U	0.104
MW-15-50	990728-MW15-50-04	28-Jul-99	40 - 50	50.	8,510.	10. U	10. U	10. U	10. U	10. U	10. U	10. U	10. U	10. U	83.	10. U	9,700.	117.	10. U	ND U	18,460.
	991029-MW15-50-25	29-Oct-99	(silt/alluvial WBZ)	20. U	20.	20. U	20. U	20. U	20. U	20. U	20. U	20. U	20. U	20. U	20. U	20. U	716.	26.	20. U	ND U	762.
	000403-MW15-50-125	3-Apr-00		22.	41.6	2.91	0.79	0.55	0.51	0.25	0.49	0.73	0.1 U	6.01	23.6	0.24	5,480.	25.9	5.16	3.31	5,610.74
	000615-MW15-50-105	15-Jun-00		2.91	0.59	4.11	43.6	57.1	45.5	41.8	38.5	40.5	8.95	69.7	1.66	33.5	1.23	25.	60.1	267.65	474.75
	000615-MW15-50-106	15-Jun-00		2.96	0.77	4.1	40.	53.5	44.1	40.2	36.3	38.3	8.87	65.2	1.71	32.6	1.23	23.8	57.3	253.67	450.94
	001005-MW15-50-14	5-Oct-00		1.51	0.96	1.47	10.7	16.4	19.7	8.14	6.97	9.88	2.52	15.5	1.06	8.21	2.8	6.44	16.7	74.38	128.96
	001221-MW15-50-105	21-Dec-00		43.5	66.1	6.14	26.1	32.2	39.6	24.	14.8	20.8	4.13	40.1	74.6	21.3	9,200.	10.9	36.9	158.93	9,661.17
	001221-MW15-50-106	21-Dec-00		52.4	70.6	6.58	33.1	40.8	48.7	30.3	18.1	26.5	4.96	50.3	78.	27.	8,180.	12.6	50.7	199.16	8,730.64
	010330-MW15-50-124	30-Mar-01		35.4	59.	9.58	11.2	13.4	11.8	15.1	18.9	12.4	5.4	22.7	45.7	14.4	6,860.	76.1	22.4	87.5	7,233.48
	011010-MW15-50-111	10-Oct-01		18.1	29.7	2.19	2.47	2.95	2.62	1.77	2.08	2.37	0.47	5.33	26.	1.56	3,700.	37.2	4.26	14.52	3,839.07
	011010-MW15-50-112	10-Oct-01		44.6	60.4	4.2	7.6	9.3	8.4	6.4	7.4	8.	1.8	12.7	53.9	5.7	59,100.	78.3	14.6	48.2	59,423.3
	011214-MW15-50-104	14-Dec-01		26.8	43.8	3.	0.35	0.1	0.1	0.1 U	0.1	0.33	0.1 U	3.29	34.3	0.1 U	4,510.	42.8	2.27	0.98	4,667.24
	011214-MW15-50-105	14-Dec-01		27.8	45.9	3.1	0.42	0.17	0.14	0.1 U	0.13	0.41	0.1 U	3.28	36.1	0.1 U	5,870.	45.6	2.33	1.27	6,035.38
	020405-MW15-50-119	5-Apr-02		20.	30.	3.29	1.57	1.76	1.33	1.5	1.39	1.81	0.61	5.75	26.	1.29	4,220.	34.	3.67	9.76	4,353.97
	020711-MW15-50-104	11-Jul-02		19.7	31.3	4.	2.5	2.9	2.6	2.1	2.7	3.1	1. U	7.9	26.6	1.7	3,640.	41.2	7.6	15.5	3,795.9
	020711-MW15-50-105	11-Jul-02		27.6	41.6	2. U	3.4	4.4	3.6	3.4	5.4	5.6	2. U	11.6	35.8	2.4	5,580.	52.6	10.6	24.8	5,788.
	020925-MW15-50-110	25-Sep-02		38.	55.	8.	10.	15.	11.	9.1	10.	12.	1. U	21.	47.	7.3	7,700.	82.	19.	65.3	8,044.4
	020925-MW15-50-111	25-Sep-02		40.	58.	6.3	3.3	3.2	2.6	1.8	3.	3.7	1. U	12.	50.	1.4	7,700.	76.	10.	17.2	7,971.3
	021218-MW15-50-107	18-Dec-02		50.	78.	5. U	5. U	22.	5. U	25.	5. U	5. U	5. U	36.	70.	20.	7,000.	160.	33.	42.	7,494.
	030321-MW15-50-122	21-Mar-03		24.	36.	10. U	10. U	10. U	10. U	10. U	10. U	10. U	10. U	10. U	32.	10. U	4,900.	50.	10. U	ND U	5,042.
	030603-MW15-50-105	3-Jun-03		18.	32.	1. U	1. U	1. U	1. U	1. U	1. U	1. U	1. U	1.9	22.	1. U	3,300.	29.	2.1	ND U	3,405.
	031006-MW15-50-113 [7]	6-Oct-03		17.	26.	1. U	1. U	1. U	1. U	1. U	0.1 U	1. U	1. U	1.9	22.	1. U	4,700.	36.	1.4	ND U	4,804.3
	030113-MW-15-50-105 [7]	13-Jan-04		50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	4,700.	65.	50. U	ND U	4,765.
	030113-MW-15-50-106 [7]	13-Jan-04		50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	3,600.	50.	50. U	ND U	3,650.
	040825-MW15-50-020[7]	25-Aug-04		35.3	50.9	4.23 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5. U	4.44 J	51.9	2.5 U	6,130.	78.8	3.93 J	ND U	6,359.5

Table 3b - Summary of Historical Analytical Results for Groundwater Samples: PAHs by EPA Method 8270-SIM or 8270C
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date/Time	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
				Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [8,9]																					
Fish Consumption																					
	EPA 2004 NRWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate			99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																					
	MCL [3]			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	0.2	0.2	#	#
	EPA Region 3.6.9 Tap Water PRGs (12/09 update)			2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,9]																					
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)			520 [4]	#	#	#	#	#	#	#	#	#	#	#	#	620 [4]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
MW-15-50	050929-MW15-50-126	29-Sep-05	40 - 50	15.2	19.3	3.12	6.21	9.13	7.48	8.31	7.4	7.49	2.19	9.62	18.2	6.33	2,130.	40.1	10.	46.23	2,300.08
	061031-MW-15-50-127	31-Oct-06	(silt/alluvial WBZ)	21.	27.	5.4 J	13.	18.	21.	13.	7.5 J	14.	3.1 J	16.	31.	13.	3,600.	64.	16.	89.6	3,883.
	2708-080603-MW15-50-103	3-Jun-08		57.	59.	20.	8.	9.7	13.	7.7	4.9	9.3	1.6	35.	90.	8.1	6,300.	220.	35.	54.6	6,878.3
	2708-080916-MW-15-50-128	16-Sep-08		58.	51.	24.	11.	15.	18.	12.	7.8	14.	2.5	46.	120.	12.	4,100.	290.	46.	80.3	4,827.3
	2708-090402-MW15-50-131	2-Apr-09		49.	54.	12.	5.1	6.8	8.2	4.5	2.8	5.8	0.86	24.	76.	4.8	5,900.	180.	23.	34.36	6,356.86
	2708-090817-MW-15-50-133	17-Aug-09		66.3	69.6	16.6	7.55 U	9.78 J	8.99 J	7.55 U	7.55 U	7.55 U	7.55 U	23.4	111.	7.55 U	5,900.	198.	21.2	18.77	6,424.87
MW-15-66	990728-MW15-66-03	28-Jul-99	60.5 - 66	0.11	0.1 U	0.1 U	0.15	0.16	0.26	0.14	0.1 U	0.15	0.1 U	0.3	0.1 U	0.11	0.57	0.17	0.34	0.83	2.46
	991026-MW15-66-07	26-Oct-99	(alluvial WBZ)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	000329-MW15-66-108	29-Mar-00		0.1 U	0.1 U	0.11	0.57	0.77	0.59	0.66	0.6	0.67	0.18	0.96	0.1 U	0.53	0.1 U	0.33	0.96	3.91	6.93
	000615-MW15-66-104	15-Jun-00		0.14	0.1 U	0.39	1.93	2.64	1.96	2.04	1.61	1.91	0.57	3.32	0.1 U	1.55	0.1 U	1.07	2.92	12.17	22.05
	001005-MW15-66-08	5-Oct-00		0.1 U	0.1 U	0.1 U	0.23	0.32	0.4	0.1 U	0.17	0.24	0.1 U	0.41	0.1 U	0.1 U	0.1 U	0.14	0.43	1.36	2.34
	001221-MW15-66-104	21-Dec-00		0.1 U	0.1 U	0.1 U	0.14	0.15	0.19	0.13	0.1	0.12	0.1 U	0.21	0.1 U	0.1 U	0.1 U	0.1 U	0.2	0.7	1.24
	010328-MW15-66-107	28-Mar-01		0.1 U	0.1 U	0.1 U	0.11	0.14	0.11	0.1 U	0.12	0.13	0.1 U	0.2	0.1 U	0.1 U	0.1 U	0.1	0.19	0.61	1.1
	011010-MW15-66-110	10-Oct-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	011213-MW15-66-103	13-Dec-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	020404-MW15-66-107	4-Apr-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	0.12
	020711-MW15-66-103	11-Jul-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	020925-MW15-66-109	25-Sep-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	021218-MW15-66-105	18-Dec-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	021218-MW15-66-106	18-Dec-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	030318-MW15-66-107	18-Mar-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1	ND U	0.1
	030603-MW15-66-104	3-Jun-03		0.1 U	0.1 U	0.1 U	0.6	0.85	0.64	0.77	0.77	0.69	0.1 U	1.2	0.1 U	0.45	0.1 U	0.34	1.1	4.	7.41
	031006-MW15-66-112 [7]	6-Oct-03		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	030113-MW15-66-104 [7]	13-Jan-04		0.1 U	0.1 U	0.1 U	0.36	0.13	0.4	0.16	0.13	0.15	0.1 U	0.18	0.1 U	0.16	0.1 U	0.1 U	0.15	1.33	1.82
	040813-MW15-66-006[7]	13-Aug-04		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	ND U
	050929-MW15-66-125	29-Sep-05		0.0103 U	0.0103 U	0.0103 U	0.0274	0.0417	0.0332	0.0383	0.037	0.0348	0.0103 U	0.0555	0.0103 U	0.0291	0.0732	0.018	0.06	0.2032	0.4482
	061017-MW-15-66-109	17-Oct-06		0.39	0.26	0.82	6.6	9.2	13.	7.8	3.5	8.	1.6	9.9	0.19 J	8.1	0.15 J	2.9	11.	50.	83.41
	2708-080603-MW15-66-102	3-Jun-08		0.0065 J	0.011 J	0.018 J	0.091	0.14	0.19	0.15	0.072	0.11	0.028	0.13	0.0094 J	0.15	0.054	0.034	0.16	0.781	1.3539
	2708-080916-MW-15-66-129	16-Sep-08		0.19	0.19	0.043	0.054	0.065	0.078	0.06	0.041	0.062	0.0092 J	0.15	0.24	0.058	20.	0.46	0.15	0.3672	21.8502
	2708-090402-MW15-66-133	2-Apr-09		0.0059 J	0.0052 J	0.0055 J	0.0091 J	0.0097 J	0.012 J	0.0096 J	0.003 J	0.0064 J	0.0027 U	0.013 J	0.0047 J	0.012 J	0.16	0.013 J	0.012 J	0.0522	0.2811
	2708-090817-MW-15-66-135	17-Aug-09		0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0529 J	0.0800 U,BK	0.0423	- BK	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.512	0.0400 U	0.0400 U	0.0529	0.6072
MW-16-45	040826-MW16-45-028[7]	26-Aug-04	30 - 45	137.	17.8 J	22.4	2.64	2.23 J	2.57	10. U	1.25 U	3.33	2.5 U	19.6 J	60.7	1.25 U	7,500.	154.	23.9	10.77	7,946.17
	041222-MW16-45-103[7]	22-Dec-04	(alluvial WBZ)	115.	14.5	16.4	3.6	3.01	1.8	2.03	1.87	4.35	2. U	16.1	43.1	1.45	8,140.	110.	18.9	16.08	8,492.11
	050401-013	1-Apr-05		106. B	10.5	11.6	1.83	1.18	1.29	0.887 J	0.5 U	1.98	1. U	10.3	42.7	0.612 J	6,060. B	93. B	11.3	6.892	6,353.179
	0506-22-MW-16-45-05	21-Jun-05		147.	50. U	30.	10.8	8.66	4.71	- U	5.52	11.4	4. U	38.6	76.7	3.86	10,400.	214.	46.2	44.95	10,997.45
	051003-MW-16-45-136	3-Oct-05		278.	32.6	120.	51.7	44.7	22.	32.5	28.6	61.9	5.8	177.	154.	22.1	7,820.	687.	237.	236.8	9,774.9
	060403-MW-16-45-118	3-Apr-06		2,150.	246.	1,370.	663.	559.	267.	413.	331.	870.	68.5	2,360.	1,450.	270.	29,400.	10,400.	3,030.	3,028.5	53,847.5
	061212-MW-16-45-129	12-Dec-06		140.	21. J	22. J	12. J	8. U	9.6 U	8.2 U	9.6 U	9.3 J	16. U	24. J	54. J	12. U	11,000.	120. J	27. J	21.3	11,429.3
	2708-070731-MW-16-45-148	31-Jul-07		6,760. J	891.	4,450.	2,510.	2,250.	1,160.	1,560.	1,480.	3,090.	310.	7,170.	5,100.	1,140.	64,100.	30,500.	12,900. J	11,940.	145,371.
	2708-080521-MW16-45-128	21-May-08		200.	31.	120.	54.	47.	42.	31.	13.	64.	6.5	170.	120.	30.	4,800. J	590. J	220.	256.5	6,538.5
	2708-080917-MW-16-45-133	17-Sep-08		740.	80.	460.	210.	190.	150.	120.	52.	250.	16.	780.	460.	100.	12,000.	2,500.	930.	968.	19,038.
	2708-090402-MW16-45-135	2-Apr-09		3,700.	500.	2,400.	1,300.	1,200.	1,100.	670.	290.	1,500.	130.	3,800.	2,300.	650.	43,000.	15,000.	4,700.	6,170.	82,240.
	2708-090814-MW-16-45-130	14-Aug-09		226.	80.0 U	80.0 U	80.0 U	80.0 U	80.0 U	80.0 U	80.0 U	80.0 U	80.0 U	101.	102.	80.0 U	10,200.	400.	129.	ND U	11,158.
MW-16-65	040826-MW16-65-026[7]	26-Aug-04	55 - 65	91.	10. U	10.3	0.241	0.2 U	0.2 U	5. U	0.2 U	0.3	0.4 U	5.54 J	42.8	0.2 U	3,600.	81.1	6.84 J	0.541	3,838.121
	040826-MW16-65-027[7]	26-Aug-04	(alluvial WBZ)	85.6	10. U	10.3	0.343	0.25 U	0.25 U	5. U	0.25 U	0.413	0.5 U	5.62 J	39.5	0.25 U	3,870.	80.2	6.7 J	0.756	4,098.676
	041222-MW16-65-102[7]	22-Dec-04		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 A	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND U	0.1
	050331-006	31-Mar-05		88.4	7.07	7.86	0.548 U	0.5 U	0.5 U	0.5 U	0.5 U	0.664 J	0.1 U	5.3	36.2	0.5 U	4,840.	67.2	5.88	0.664	5,058.574
	0506-21-MW-16-65-04	21-Jun-05		92.2	25. U	8.94	1. U	1. U	1. U	- U	1. U	1. U	1. U	6.24	41.9	1. U	5,700.	71.4	7.38	ND U	5,928.06
	051003-MW-16-65-134	3-Oct-05		68.7	6.18	5.65	2.06 U	2.06 U	2.06 U	2.06 U	2.06 U	2.06 U	2.06 U	3.09	27.7	2.06 U	2,900.	49.6	4.12 U	ND U	3,060.92
	060403-MW-16-65-119	3-Apr-06		57.8	4.5	4.07	2.36 U	2.36 U	2.36 U	2.36 U	2.36 U	2.36 U	2.36 U	2.36 U	21.3	2.36 U	3,190.	44.1	4.72 U	ND U	3,321.77
	061023-MW-16-65-114	23-Oct-06		52.	4.1	3.4	0.11	0.033	0.023	0.021	0.024	0.14	0.0051 J	2.2	23.	0.018 J	2,500.	36.	2.4	0.3531	2,623.4741
	2708-070628-MW-16-65-115	28-Jun-07		22.9 J	4.76 U	4.76 U	0.91	0.545	0.368	4.76 U	0.336	1.16	0.238 U	4.76 U	9.91	0.238 U	837.	25.5	5.22 J	3.319	903.849
	2708-080513-MW16-65-109	13-May-08		79.	4.1	6.9	0.64	0.43	0.4	0.31	0.12	0.74	0.055	5.1	31.	0.3	2,500.	75.	6.2	2.685	2,710.295
	2708-080911-MW-16-65-112	11-Sep-08		40.	2.4	3.4	0.64	0.53	0.44	0.35	0.15	0.8	0.051	3.1	16.	0.33	1,200.	36.	4.3	2.941	1,308.491
	2708-090330-MW16-65-114	30-Mar-09		38.	2.5	3.1	0.36	0.26	0.22	0.18	0.089	0.42	0.027	2.2	15.	0.16	1,700.	27.	2.5	1.536	1,792.016
	2708-090813-MW-16-65-126	13-Aug-09		168.	18.7 U	22.5	18.7 U	18.7 U	18.7 U	18.7 U	18.7 U	18.7 U	18.7 U	21.8	67.9	18.7 U	4,480.	162.	26.	ND U	4,948.2
	2708-090813-MW-16-65-128	13-Aug-09		180.	18.7 U	25.7	18.7 U	18.7 U	18.7 U	18.7 U	18.7 U	18.7 U	18.7 U	25.6	73.9	18.7 U	4,670.	182.	31.5	ND U	5,188.7
MW-16-125	040826-MW16-125-025[7]	26-Aug-04	115 - 125	1.74	0.5 U	0.676 J	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.2 U	0.621	1.14	0.1 U	26.5	5.39	0.816 J	ND U	36.883
	041221-MW16-125-100[7]	21-Dec-04	(alluvial WBZ)	0.655	0.1 U	0.31	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.613	0.476	0.1 U	4.88	2.62	0.662	ND U	10.216
	50330-001	30-Mar-05		0.74	0.1 U	0.287	0.05 U	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	0.1 U	0.517	0.527	0.05 U	5.41	2.64	0.529	ND U	10.65
	0506-21-MW-16-125-03	21-Jun-05		0.432	0.1 U	0.214	0.1 U	0.1 U	0.1 U	- U	0.1 U	0.1 U	0.2 U	0.421	0.361	0.1 U	0.828	1.9	0.514	ND U	4.67
	050930-MW-16-125-130	30-Sep-05		0.545	0.0306 U	0.272	0.0328	0.0102 U	0.00102 U	0.0102 U	0.0102 U	0.0163 U	0.0102 U	0.466	0.403	0.0102 U	0.577	2.21	0.537	0.0328	5.0428
	060330-MW-16-125-109	30-Mar-06		0.891	0.051	0.331	0.0322	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0433	0.0102 U	0.569	0.519	0.0102 U	0.452	3.88	0.783	0.0755	7.5515
	061016-MW-16-125-106	16-Oct-06		0.71	0.037	0.24	0.026	0.0043 U	0.0046 U	0.0041 U	0.0051 U	0.033	0.0036 U	0.48	0.47	0.0033 U	0.13	0.061	0.55	0.059	2.737
	2708-070628-MW-16-125-116	28-Jun-07		0.133 J	0.0952 U	0.0952 U	0.0156	0.00612	0.00483	0.0952 U	0.00476 U	0.0211	0.00476 U	0.146	0.0952 U	0.00476 U	0.165	0.109	0.227 J	0.04765	0.82765
	2708-080515-MW16-125-127	15-May-08		28.	3.	12.	5.4	4.5	4.4	3.3	1.5	6.5	0.56	20.	15.	3.1	1,300.	70.	25.	25.96	1,502.26
MW-17-79	050926-MW-17-79-110	26-Sep-05	38.5 - 78.5	5.51	0.662	0.879	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.23	1.88	0.1 U	32.4	5.48	1.49	ND U	49.531
	061026-MW-17-79-119	26-Oct-06	(alluvial WBZ)	1.1	0.14	0.25	0.043	0.044	0.028	0.036	0.027	0.059	0.0036 U	0.35	0.35	0.029	2.9	1.2	0.36	0.23	6.916
	2708-070627-MW-17-79-112	27-Jun-07		0.382 J	0.19 U	0.256	0.0195	0.0199	0.0138	0.19 U	0.0166	0.029	0.00952 U	0.19 U	0.19 U	0.0151	0.598	0.43	0.231 J	0.1139	2.0109
	2708-080514-MW17-79-120	14-May-08		1.6	0.19	0.54	0.039	0.03	0.034	0.031	0.015 J	0.044	0.0046 J	0.43	0.63	0.031	2.2	1.1	0.55	0.1976	7.4686
	2708-080911-MW-17-79-110	11-Sep-08		1.5	0.14	0.39	0.047	0.039	0.039	0.04	0.015 J	0.051	0.0048 J	0.44	0.5	0.038	2.7	0.96	0.58	0.2338	7.4838

Table 3b - Summary of Historical Analytical Results for Groundwater Samples: PAHs by EPA Method 8270-SIM or 8270C
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date/Time	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
				Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [8,9]																					
Fish Consumption																					
	EPA 2004 NRWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate			99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																					
	MCL [3]			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	0.2	0.2	#	#
	EPA Region 3.6.9 Tap Water PRGs (12/09 update)			2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,9]																					
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)			520 [4]	#	#	#	#	#	#	#	#	#	#	#	#	620 [4]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
MW-17-79	2708-081209-MW-17-79-009	9-Dec-08	38.5 - 78.5	2.	0.22	0.59	0.049	0.023	0.027	0.024	0.012 J	0.054	0.0047 J	0.64	0.69	0.024	2.	1.1	0.66	0.1937	8.1177
	2708-090326-MW17-79-106	26-Mar-09	(alluvial WBZ)	1.8	0.27	0.82	0.038	0.013 J	0.017 J	0.0086 J	0.007 J	0.034	0.0025 U	0.47	0.62	0.0083 J	2.2	0.62	0.53	0.1173	7.4559
	2708-090817-MW-17-79-134	17-Aug-09		2.19	0.215	0.594	0.124	0.127 J	0.159 J, BK	0.0658	- BK	0.153	0.0377 U	0.852	0.733	0.0623	3.55	0.473	0.925	0.6253	10.2231
MW-18-30	2708-080514-MW18-30-121	14-May-08	19 - 29	130,000.	38,000.	99,000.	67,000.	61,000.	56,000.	42,000.	18,000.	78,000.	6,100.	230,000.	98,000.	40,000.	1,700,000.	650,000.	300,000.	326,100.	3,613,100.
	NS (Dry)	17-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NS (Dry)	9-Dec-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2708-090402-MW18-30-137	2-Apr-09		6,000. J	1,700. J	4,400. J	2,900. J	2,900. J	2,500. J	1,700. J	850. J	3,400. J	360. J	12,000. J	4,900. J	1,700. J	80,000. J	31,000. J	13,000. J	14,610. J	169,310. J
	2708-090812-MW-18-30-102	12-Aug-09		400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	548.	400 U	400 U	11,600.	1,580.	667.	ND U	14,395.
MW-18-180	2708-070628-MW-18-180-117	28-Jun-07	170 - 180	0.0952 U	0.0952 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.0952 U	0.00476 U	0.575	0.0952 U	0.0952 U	ND U	0.575
	2708-080513-MW18-180-108	13-May-08		0.023	0.0058 J	0.005 J	0.0032 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0065 J	0.014 J	0.0026 U	0.082	0.025	0.0047 J	0.0032	0.1692
	2708-080911-MW-18-180-111	11-Sep-08		0.028	0.0045 J	0.0041 J	0.0051 J	0.0043 U	0.0039 J	0.0035 J	0.0025 U	0.0034 U	0.0025 U	0.011 J	0.015 J	0.003 J	0.18	0.029	0.011 J	0.012	0.2981
	2708-081209-MW-18-180-008	9-Dec-08		0.013 J	0.0041 J	0.0037 U	0.0047 J	0.0044 U	0.0028 J	0.0033 J	0.0026 U	0.0035 U	0.0026 U	0.0063 J	0.0091 J	0.0027 U	0.044	0.025	0.0065 J	0.0075	0.1188
	2708-090326-MW18-180-104	26-Mar-09		0.021	0.0074 J	0.005 J	0.0033 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0062 J	0.016 J	0.0026 U	0.03	0.035	0.0057 J	0.0033	0.1296
	2708-090817-MW-18-180-132	17-Aug-09		0.0433	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0748 U,BK	0.0374 U	- BK	0.0374 U	0.0374 U	0.0596	0.0374 U	0.0374 U	1.93	0.0903	0.0683	ND U	2.1915
MW-19-22	2708-070730-MW-19-22-143	30-Jul-07	12 - 22	266. J	251.	944.	835.	1,180.	720.	969.	670.	1,240.	140.	2,610.	412.	688.	297.	2,690.	4,010. J	5,473.	17,922.
	2708-080513-MW19-22-110	13-May-08		53.	40.	190.	280.	360.	340.	290.	110.	500.	36.	900.	62.	270.	270.	320.	1,200.	1,896.	5,221.
	2708-080910-MW-19-22-105	10-Sep-08		54.	28.	130.	190.	260.	230.	220.	74.	280.	21.	690.	56.	180.	230.	330.	910.	1,235.	3,883.
	2708-081209-MW-19-22-014	9-Dec-08		43.	18.	59.	99.	110.	120.	120.	41.	130.	15.	350.	42.	110.	120.	210.	390.	625.	1,977.
	2708-090330-MW19-22-112	30-Mar-09		37.	8.6	19.	33.	31.	45.	35.	15.	61.	5.9	120.	23.	35.	200.	73.	130.	225.9	871.5
	2708-090817-MW-19-22-140	17-Aug-09		141.	61.1	344.	477.	799. J	220. J, BK	548.	- BK	638.	62.9	1,550.	125.	460.	265.	874.	1,880.	2,656.9	8,445.
MW-19-125	2708-070627-MW-19-125-110	27-Jun-07	115 - 125	0.0962 U	0.0962 U	0.0962 U	0.00528	0.00481 U	0.00481 U	0.0962 U	0.00481 U	0.00732	0.00481 U	0.0962 U	0.0962 U	0.00481 U	2.95	0.16	0.0962 U	0.0126	3.1226
	2708-080514-MW19-125-117	14-May-08		0.023	0.015 J	0.012 J	0.0059 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0051 J	0.0025 U	0.032	0.019 J	0.0026 U	49.	0.057	0.038	0.011	49.207
	2708-080910-MW-19-125-106	10-Sep-08		0.015 J	0.0079 J	0.0047 J	0.0076 U*	0.0043 U	0.0038 J	0.0029 U	0.0025 U	0.005 J	0.0025 U	0.025	0.013 J	0.0026 U	27.	0.037	0.027	0.0088	27.1384
	2708-081209-MW-19-125-013	9-Dec-08		0.018 J	0.0083 J	0.0073 J	0.0074 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0058 J	0.0025 U	0.032	0.017 J	0.0026 U	15.	0.047	0.036	0.0132	15.1788
	2708-090330-MW19-125-110	30-Mar-09		0.016 J	0.011 J	0.0077 J	0.0065 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.004 J	0.0025 U	0.022	0.013 J	0.0026 U	7.9	0.038	0.025	0.0105	8.0432
	2708-090813-MW-19-125-123	13-Aug-09		0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	9.05	0.192 U	0.192 U	ND U	9.05
MW-19-180	2708-070627-MW-19-180-111	27-Jun-07	170 - 180	0.0952 U	0.0952 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.0952 U	0.00476 U	0.0954	0.0952 U	0.0952 U	ND U	0.0954
	2708-080513-MW19-180-115	13-May-08		0.0071 J	0.0035 J	0.0036 U	0.0035 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0065 J	0.0026 U	0.11	0.01 J	0.0073 J	0.0035	0.1479
	2708-080910-MW-19-180-104	10-Sep-08		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.004 J	0.0026 U	0.11	0.0079 J	0.0035 U	ND U	0.1219
	2708-081209-MW-19-180-012	9-Dec-08		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.031	0.005 U	0.0035 U	ND U	0.031
	2708-090330-MW19-180-108	30-Mar-09		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.014 J	0.005 U	0.0035 U	ND U	0.014
	2708-090813-MW-19-180-125	13-Aug-09		0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.755	0.0381 U	0.0381 U	ND U	0.755
MW-20-120	2708-070628-MW-20-120-114	28-Jun-07	110 - 120	0.35 J	0.0952 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.143	0.00476 U	39.9	0.356	0.0952 U	ND U	40.749
	2708-080515-MW20-120-126	15-May-08		0.11	0.017 J	0.029	0.0078 J	0.0045 J	0.0053 J	0.004 J	0.0025 U	0.0059 J	0.0025 U	0.034	0.052	0.0041 J	120.	0.18	0.045	0.0276	120.4986
	2708-080910-MW-20-120-103	10-Sep-08		0.12	0.013 J	0.033	0.0084 U*	0.0046 J	0.0063 J	0.0045 U*	0.0025 U	0.0088 J	0.0025 U	0.048	0.062	0.0035 U*	84.	0.23	0.053	0.0197	84.5787
	2708-081209-MW-20-120-010	9-Dec-08		0.14	0.012 J	0.033	0.005 J	0.0043 U	0.003 J	0.0036 J	0.0025 U	0.0044 J	0.0025 U	0.039	0.073	0.0029 J	51.	0.24	0.04	0.0153	51.5959
	2708-081209-MW-20-120-011	9-Dec-08		0.14	0.015 J	0.031	0.0043 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.035	0.093	0.0026 U	45.	0.22	0.036	0.0043	45.5743
	2708-090330-MW20-120-113	30-Mar-09		0.087	0.0086 J	0.026	0.0027 U	0.0044 U	0.0024 U	0.003 U	0.0026 U	0.0035 U	0.0026 U	0.029	0.042	0.0027 U	86.	0.17	0.028	ND U	86.3906
	2708-090812-MW-20-120-116	12-Aug-09		1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	59. U	1.89 U	1.89 U	ND U	ND U
MW-21-12	2708-070719-MW-21-12-129	19-Jul-07	7 - 12	5.47 J	0.966 U	2.42 U	0.0375	0.121 U	0.121 U	2.42 U	0.121 U	0.0546	0.121 U	2.42 U	7.22	0.121 U	2.9 U	2.42 U	0.483 UJ	0.0921	12.7821
	2708-080514-MW21-12-122	14-May-08		8.1	0.71 U	0.25	0.14	0.24	0.32	0.65	0.1	0.24	0.066	0.3	9.3	0.52	1.2	0.21	0.62	1.626	22.256
	NS (Dry)	15-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2708-081208-MW-21-12-007	8-Dec-08		8.3	0.65 U	0.3	0.13	0.17	0.17	0.3	0.05	0.19	0.034	0.26	8.3	0.23	0.94	0.19	0.48	0.974	20.044
	2708-090401-MW21-12-126	1-Apr-09		12.	0.99 U	0.46 U	0.34	0.55	0.61	0.9	0.19	0.46	0.13	0.45	12.	0.79	3.5 U	0.29 U	1.1	3.07	29.52
	2708-090811-MW-21-12-105	11-Aug-09		10.8 U	0.850 U	0.441	0.0431	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.109	9.36	0.0400 U	1.94 U	0.0900 U	0.153	0.0431	10.1061
MW-21-75	2708-070718-MW-21-75-124	18-Jul-07	65 - 75	0.0966 UJ	0.0966 UJ	0.0966 UJ	0.00483 UJ	0.00483 UJ	0.00483 UJ	0.0966 UJ	0.00483 UJ	0.00483 UJ	0.00483 UJ	0.0966 UJ	0.0966 UJ	0.00483 UJ	0.135 J	0.0966 UJ	0.0966 UJ	ND U	0.135
	2708-080514-MW21-75-123	14-May-08		0.038	0.0056 J	0.014 J	0.0052 J	0.0043 U	0.0024 J	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0068 J	0.011 J	0.0026 U	0.081	0.0087 J	0.0093 J	0.0076	0.182
	2708-080915-MW-21-75-125	15-Sep-08		0.026	0.0035 U	0.0046 J	0.0027 U	0.0044 U	0.0024 U	0.003 U	0.0026 U	0.0035 U	0.0026 U	0.0045 U	0.011 J	0.0027 U	0.097	0.01 J	0.0041 J	ND U	0.1527
	2708-081208-MW-21-75-004	8-Dec-08		0.053	0.015 J	0.0093 J	0.0038 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.005 J	0.015 J	0.0026 U	0.048	0.014 J	0.0074 J	0.0038	0.1705
	2708-090331-MW21-75-124	31-Mar-09		0.055	0.0034 U	0.013 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0052 J	0.0084 J	0.0026 U	0.036	0.011 J	0.0057 J	ND U	0.1343
	2708-090817-MW-21-75-136	17-Aug-09		0.146	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.698	0.0374 U	0.0374 U	ND U	0.844
MW-21-115	2708-070718-MW-21-115-123	18-Jul-07	105 - 115	0.0976 UJ	0.0976 UJ	0.0976 UJ	0.00488 UJ	0.00488 UJ	0.00488 UJ	0.0976 UJ	0.00488 UJ	0.00488 UJ	0.00488 UJ	0.0976 UJ	0.0976 UJ	0.00488 UJ	0.0989 J	0.0976 UJ	0.0976 UJ	ND U	0.0989
	2708-080515-MW21-115-125	15-May-08		0.0044 U	0.0034 U	0.0043 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.053	0.0076 J	0.0035 U	ND U	0.0649
	2708-080915-MW-21-115-126	15-Sep-08		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0064 J	0.0028 J	0.1	0.013 J	0.0037 J	0.0028	0.1259
	2708-081208-MW-21-115-005	8-Dec-08		0.0044 U	0.0034 U	0.0041 J	0.0041 J	0.0043 U	0.0023 U	0.0031 J	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.005 J	0.0026 J	0.042	0.011 J	0.0035 U	0.0067	0.0719
	2708-090331-MW21-115-120	31-Mar-09		0.0083 J	0.0059 J	0.0099 J	0.0034 J	0.012 J	0.013 J	0.019	0.0031 J	0.0049 J	0.0025 U	0.0076 J	0.0051 J	0.017 J	0.088	0.012 J	0.0063 J	0.0534	0.2155
	2708-090811-MW-21-115-101	11-Aug-09		0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0381 U	0.0722 U	0.0381 U	0.0381 U	ND U	ND U
MW-21-165	2708-070718-MW-21-165-122	18-Jul-07	156 - 166	0.0971 UJ	0.0971 UJ	0.0971 UJ	0.00971 UJ	0.00485 UJ	0.00485 UJ	0.0971 UJ	0.00485 UJ	0.00485 UJ	0.00485 UJ	0.0971 UJ	0.0971 UJ	0.00485 UJ	0.0971 J	0.0971 UJ	0.0971 UJ	ND U	0.0971
	2708-080514-MW21-166-124	14-May-08		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.12	0.0077 J	0.0035 U	ND U	0.1277
	2708-080915-MW-21-166-124	15-Sep-08		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0041 J	0.0026 U	0.09	0.012 J	0.0035 U	ND U	0.1061
	2708-081208-MW-21-166-006	8-Dec-08		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0045 J	0.0026 U	0.036	0.0098 J	0.0035 U	ND U	0.0503
	2708-090331-MW21-165-122	31-Mar-09		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.032	0.005 U	0.0035 U	ND U	0.032
	2708-090811-MW-21-166	11-Aug-09		0.0385 U	0.0385 U	0.0385 U	0.0385 U	0.0385 U	0.0385 U	0.0385 U	0.0385 U	0.0385 U	0.0385 U	0.0385 U	0.0385 U	0.0385 U	0.181 U	0.0385 U	0.0385 U	ND U	ND U
PW-01	061012-PW-01-102	12-Oct-06	40 - 80	59.	33.	4.5	0.54	0.53	0.33	0.41	0.31	0.67	0.045	5.	20.	0.37	4,100.	39.	5.8	2.795	4,269.505
	2708-070731-PW-01-80-147	31-Jul-07	(alluvial WBZ)	133. J	87.8	38.	30.	38.5	21.5	31.8	23.9	37.2	4.35 U*	99.8	67.5	22.2	5,060.	264.	174. J	173.3	6,129.2
	2708-080604-PW01-80-107	4-Jun-08		100.	59.	11.	2.1	2.2	2.2	1.9	0.76	2.4	0.26	14.	40.	1.8	2,900. J	85. J	17.	11.72	3,239.62
	NS*	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3b - Summary of Historical Analytical Results for Groundwater Samples: PAHs by EPA Method 8270-SIM or 8270C
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date/Time	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
				Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [8,9]																					
Fish Consumption																					
	EPA 2004 NRWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate			99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)			990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																					
	MCL [3]			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	0.2	0.2	#	#
	EPA Region 3.6.9 Tap Water PRGs (12/09 update)			2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,9]																					
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)			520 [4]	#	#	#	#	#	#	#	#	#	#	#	#	620 [4]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
Temporary Well Point Samples 1995 (fill WBZ)																					
B-01	950921-BW1-01	21-Sep-95	20 - 23	7.4	0.22	1.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09	0.1 U	1.3	4.5	0.1 U	140.	19.	1.7	0.09	175.71
B-05	950929-BW05-01	29-Sep-95	25 - 28	13.	0.14	1.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.4	9.8	0.1 U	0.94	6.9	1.4	ND U	34.78
B-19	950920-BW19-02	20-Sep-95	25 - 28	39.	7.7	3.1	0.26	0.1 U	0.16	0.1 U	0.1 U	0.28	0.1 U	5.1	20.	0.1 U	6,500.	29.	5.6	0.7	6,610.2
B-21	951003-BW21-01	3-Oct-95	15.5 - 19.5	110.	1.83	2.66	0.53	0.34	0.66	0.37	0.27	0.79	0.07	5.04	21.	0.27	560.	17.	5.42	2.93	726.25
B-31	950925-BW31-01	25-Sep-95	26 - 29	96.	2.7	15.	2.4	2.4	2.1	1.6	0.97	3.9	0.21	16.	29.	1.3	420.	76.	25.	13.28	694.58
Temporary Well Point Samples 2004																					
B-56	040602-101	2-Jun-04	18 - 22	54.1	4.08	14.1	7.99	9.45	7.03	6.89	6.04	10.2	4. U	44.2	23.3	4.81	21.	53.7	50.7	45.52	317.59
	040603-102	3-Jun-04	40 - 44	0.342	0.1 U	0.1 U	0.0239	0.0196	0.0234	0.1 U	0.0188	0.0345	0.01 U	0.168	0.132	0.0167	3.61	0.33	0.223	0.14	4.9419
	040603-103	3-Jun-04	60 - 64	0.103	0.1 U	0.1 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.0101 U	63.8	0.1 U	0.1 U	ND U	63.903
	040603-104	3-Jun-04	80 - 84	0.126	0.1 U	0.1 U	0.0315	0.0313	0.0236	0.1 U	0.0166	0.0416	0.01 U	0.165	0.15 U	0.0154	358.	0.28	0.23	0.16	358.961
	040603-105	3-Jun-04	80 - 84	0.15 U	0.15 U	0.1 U	0.03 U	0.03 U	0.03 U	0.1 U	0.03 U	0.03 U	0.03 U	0.132	0.15 U	0.03 U	405.	0.214	0.184	ND U	405.53
	040604-106	4-Jun-04	100 - 104	0.1 U	0.1 U	0.1 U	0.0167	0.017	0.0121	0.1 U	0.0113	0.0216	0.01 U	0.1 U	0.1 U	0.0108	0.85	0.1 U	0.1 U	0.09	0.9395
	040614-115	14-Jun-04	136 - 140	0.646	0.1 U	0.1 U	0.17	0.137	0.1 U	0.1 U	0.1 U	0.214	0.2 U	1.1	0.449	0.1 U	2.58	2.99	1.31	0.52	9.596
	040614-116	14-Jun-04	174 - 178	0.1 U	0.1 U	0.1 U	0.01 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.92	0.144	0.106	ND U	1.17

Note:

'-' = not analyzed
# = Reference Level not established
AWQC = Ambient Water Quality Criteria
BK = Benzo(b)fluoranthene and Benzo(k)fluoranthene were indistinguishable. Lab reported as a one number sum.
DEQ = Oregon Department of Environmental Quality
EPA = U.S. Environmental Protection Agency
J = Estimated Concentration
MCL = Maximum Contaminant Level
ND = not detected above detection limit indicated
NRWQC = National Recommended Water Quality Criteria
NS = No Sample
PAHs = polynuclear aromatic hydrocarbons
ppb = parts per billion
PRG = Preliminary Remediation Goal
SCV = Secondary Chronic Value
ug/l = micrograms per liter
U = Non-detect above method reporting limit
U* = Compound considered non-detect because it was also detected in associated blank at similar concentration levels.
UJ = Compound not detected, but the reporting limit is probably higher due to a low bias identified during the quality assurrance review.

1 = Sample number prefix: 2708-
2 = Tier II SCV values were taken from Suter II, G.W. and Tasco, C.L., 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota*: 1996 Revision. ORNL publication ES/ER/TM-96/R2
3 = MCL is based on benzo(a)pyrene
4 = Values were taken from Table 33c (OAR 340-41), which are Water Quality Guidance Values, not criteria, that can be used in application of Oregon's Narrative Toxics Criteria to waters of the state in order to protect aquatic life
5 = Due to mislabeling in the field or due to laboratory misidentification, the laboratory report transposed results for MW4-35 and MW-4-57 in August 1997. Tables attribute data to the correct well.
6 = Results for sample 960620-MW-8-56-01 should be considered qualitative due to an apparent error concerning sample identity with respect to PAH container
7 = Monitoring well purged & sampled with low-flow protocol as per EPA/540/S-95/504 (April 1996)
8 = Unless otherwise noted Screening Level Values are from *Portland Harbor Joint Service Control Strategy, Final*, December 2005 (7/16/07 revision)
9 = EPA, under CERCLA authority, has identified the Safe Drinking Water Acts MCLs and AWQCs (federal and state once approved) as potential ARARs under CERCLA. The final determination will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to The EPA Portland Harbor ROD, due to an exceedance of an SLV in upland stormwater will be evaluated and prioritized on a case by case basis.

*Location PW-01 was converted to an extraction well following 2nd quarter of 2008.

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
				Analytical Results - mg/l (ppm)																					
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEQ 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [3]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [3]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
MW-01-22	951207-MW1-22-01	7-Dec-95	11 - 21	-	-	-	-	-	-	-	-	-	-	0.041	-	-	-	-	-	-	-	-	-	-	-
	960319-MW1-22-01	19-Mar-96	(fill WBZ)	-	ND>0.005	0.005 U	-	0.002 U	0.002 U	-	0.01	0.005 U	-	0.007	-	-	0.0002 U	0.14	-	0.002 U	0.002 U	-	0.01 U	-	0.066
	960618-MW1-22-01	18-Jun-96		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.039	-	-	-	-	-	-	0.024
	961001-MW1-22-01	1-Oct-96		-	-	0.005 U	-	-	-	-	0.023	0.005 U	-	0.005 U	-	-	-	0.16	-	-	-	-	-	-	0.17
	970225-MW1-22-01	25-Feb-97		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.045	-	-	-	-	-	-	0.028
	970225-MW1-22-02	25-Feb-97		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.044	-	-	-	-	-	-	0.024
	970827-MW1-22-01	27-Aug-97		-	-	0.012	-	-	-	-	0.018	0.01	-	0.027	-	-	-	0.1	-	-	-	-	-	-	0.16
	970827-MW1-22-02	27-Aug-97		-	-	0.05 U	-	-	-	-	0.05 U	0.005 U	-	0.005 U	-	-	-	0.12	-	-	-	-	-	-	0.53
	980217-MW1-22-01	17-Feb-98		-	-	0.009	-	-	-	-	0.005 U	0.007	-	0.015	-	-	-	0.011	-	-	-	-	-	-	0.05
	980602-MW1-32-11	2-Jun-98		-	-	0.031	-	-	-	-	0.006	-	-	0.03	-	-	-	0.026	-	-	-	-	-	-	0.13
	980826-MW1-22-10	26-Aug-98		-	-	-	-	-	-	-	-	-	-	0.005 U	-	-	-	0.041	-	-	-	-	-	-	0.005 U
	981118-MW1-22-15	18-Nov-98		-	-	0.03	-	-	-	-	0.008	0.022	-	0.091	-	-	-	0.11	-	-	-	-	-	-	0.086
	990216-MW1-22-012	16-Feb-99		-	-	-	-	-	-	-	-	-	-	0.006	-	-	-	0.005 U	-	-	-	-	-	-	0.051
	990513-MW1-22-11	13-May-99		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.025
	990824-MW1-22-15	24-Aug-99		-	-	0.061	-	-	-	-	0.02	0.044	-	0.15	-	-	-	0.19	-	-	-	-	-	-	0.52
	991028-MW1-22-16	28-Oct-99		-	-	0.005 U	-	-	-	-	0.011	0.005 U	-	0.0081	-	-	-	0.046	-	-	-	-	-	-	0.063
	000330-MW1-22-116	30-Mar-00		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.0329	-	-	-	-	-	-	0.0341
	010329-MW1-22-115	29-Mar-01		-	-	0.0178	-	-	-	-	0.005 U	0.01 U	-	0.0101	-	-	-	0.0128	-	-	-	-	-	-	0.0503
	040825-MW1-22-019[6]	25-Aug-04		-	-	0.00302	-	-	-	-	0.0315	0.002 U	-	0.0182	-	-	-	0.168	-	-	-	-	-	-	0.23
	050401-014	1-Apr-05		-	-	0.00142	-	-	-	-	0.001 U	0.00118	-	0.001 U	-	-	-	0.0025	-	-	-	-	-	-	0.01 U
	060403-MW-1-22-117	3-Apr-06		-	-	0.00321	-	-	-	-	0.0129	0.002 U	-	0.0627	-	-	-	0.128	-	-	-	-	-	-	0.164
	061030-MW-1-22-123	30-Oct-06		-	-	0.00366	-	-	0.00004	-	0.026	0.00274	-	0.00539	-	-	0.00002 U	0.0858	-	0.0021 J	0.000015 J	-	-	-	0.651
	2708-070720-MW-1-22-131	20-Jul-07		36.4	0.0008 U	0.00538	0.0226	0.00123	0.00038 U	283.	0.0396	0.00531	43.8	0.0334	17.7	1.12	0.0002 U	0.0939	6.15	0.05 U	0.00012 U	25.3	0.0008 U	0.0633	0.148
	2708-080512-MW1-22-105	12-May-08		21.9	0.00012	0.00402	0.0632	0.00255	0.000227	162.	0.0439	0.00096	21.9	0.0572	23.6	1.11	0.00003 U	0.0561	5.71	0.0003 J	0.00002	22.3	0.000003 U	0.0496	0.0757
	NS (Dry)	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2708-090402-MW1-22-132	2-Apr-09		8.84	0.00015 J	0.0039	0.125	0.0013	0.000195	154.	0.0239	0.00585 J	10.6	0.0244	26.7	1.15 J	0.00005 U	0.0308 J	5.92	0.0004 UJ	0.000005 U	19.1	0. U	0.0219 J	0.064 J
	2708-090820-MW-1-22-163	20-Aug-09		39.6	0.001 U	0.0203	0.0711	0.00126	0.00108	307.	0.0417	0.0233	46.7	0.109	17.	1.05 J	0.0001 U	0.0992	6.88	0.0011	0.001 U	28.2	0.001 U	0.0407	0.166
MW-1-55	2708-070719-MW-1-55-127	19-Jul-07	45 - 55	4.96	0.0008 U	0.00283	0.087	0.0008 U	0.00038 U	712.	0.0493	0.0109 J	465.	0.00221	407.	14.4	0.0002 U	0.0278	9.25	0.005 U	0.00012 U	109.	0.0008 U	0.0194	0.033 U
	2708-080512-MW1-55-104	12-May-08	(alluvial WBZ)	0.504	0.00002 J	0.00189	0.0313	0.00004	0.000012 J	686.	0.0139	0.00306	467.	0.000388	417.	13.9	0.00003 U	0.00999	9.67	0.0009 J	0.000098	151.	0.000005 J	0.00327	0.00272
	2708-080915-MW-1-55-121	15-Sep-08		-	0.00002 U	0.00175	0.0314	0.00004	0.000014 J	717.	0.0108	0.00229	472.	0.000418	394.	14.1	0.00005 U	0.00699	8.77	0.004 U	0.000012 J	152.	0.000009 J	0.00337	0.0082
	2708-081208-MW-1-55-002	8-Dec-08		0.247	0.000013 J	0.0017	0.0301	0.00002	0.000005 U	649.	0.00472	0.00175	434.	0.000174	427.	13.5	0.00005 U	0.00753	9.57	0.0004 U	0.000025	153.	0.000002 U	0.00181	0.0018
	2708-090401-MW1-55-130	1-Apr-09		1.39	0.000005 U	0.0019	0.0343	0.00005	0.000005 U	620.	0.0273	0.00303	403.	0.00042	395.	12.5	0.00005 U	0.0163	9.3	0.0005 J	0.000005 U	148.	0.000002 U	0.00359	0.0031 J
	2708-090820-MW-1-55-164	20-Aug-09		0.1 U	0.001 U	0.00204	0.0344	0.001 U	0.001 U	625.	0.001 U	0.00491	406.	0.001 U	387.	12.4 J	0.0001 U	0.00569	7.99	0.0023	0.001 U	141.	0.001 U	0.002 U	0.00718
MW-1-82	2708-070719-MW-1-82-126	19-Jul-07	72 - 82	1.98	0.0008 U	0.00154	0.0412	0.0008 U	0.00038 U	31.9	0.0181	0.00422 J	5.53	0.000712	8.26	0.45	0.0002 U	0.0298	3.01	0.005 U	0.00012 U	9.2	0.0008 U	0.00707	0.033 U
	2708-080512-MW1-82-103	12-May-08	(alluvial WBZ)	0.497	0.00002 J	0.00396	0.0239	0.00002	0.000013 J	24.6	0.00232	0.00123	8.06	0.00022	7.96	0.62	0.00003 U	0.00331	2.56	0.0002 UJ	0.000034	9.48	0.000004 J	0.0023	0.00368
	2708-080915-MW-1-82-119	15-Sep-08		-	0.00003 J	0.00397	0.0232	0.00004	0.000056	24.9	0.00168	0.00169	8.37	0.000354	7.53	0.619	0.00005 U	0.00293	2.59	0.004 U	0.000022	9.99	0.000015 J	0.00267	0.00667
	2708-081208-MW-1-82-001	8-Dec-08		1.14	0.000067	0.0041	0.0251	0.00004	0.000009 J	26.4	0.00368	0.0024	8.82	0.000529	7.97	0.576	0.00005 U	0.00493	2.71	0.0004 U	0.00001 J	9.78	0.000006 J	0.00429	0.0056
	2708-090401-MW1-82-128	1-Apr-09		0.146	0.000005 U	0.0033	0.0191	0.00001 U	0.000005 U	23.6	0.00074	0.00023 J	6.61	0.000065	7.39	0.566	0.00005 U	0.00138	2.34	0.0004 U	0.000005 U	8.99	0.000002 U	0.00065	0.0034 J
	2708-090820-MW-1-82-161	20-Aug-09		1.46	0.001 U	0.00291	0.0326	0.001 U	0.001 U	26.2	0.0182	0.004 U	8.44	0.001 U	8.54	0.553 J	0.0001 U	0.0131	2.5	0.0019	0.001 U	10.2	0.001 U	0.0051	0.00707
	2708-090820-MW-1-82-162	20-Aug-09		2.29	0.001 U	0.00336	0.0374	0.001 U	0.001 U	27.1	0.0303	0.004 U	9.73	0.001 U	8.85	0.581 J	0.0001 U	0.0223	2.6	0.002	0.001 U	10.	0.001 U	0.00634	0.00818
MW-02-32	951206-MW2-32-01	6-Dec-95	21.5 - 31.5	-	-	-	-	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-	-	-	-	-
	960618-MW2-32-01	18-Jun-96	(fill WBZ)	-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.008	-	-	-	-	-	-	0.005 U
	961001-MW2-32-01	1-Oct-96		-	-	0.005 U	-	-	-	-	0.005 U	0.008	-	0.005 U	-	-	-	0.005	-	-	-	-	-	-	0.01
	970225-MW2-32-01	25-Feb-97		-	-	0.008	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.011	-	-	-	-	-	-	0.007
	970827-MW2-32-01	27-Aug-97		-	-	0.007	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.008	-	-	-	-	-	-	0.008
	980217-MW2-32-01	17-Feb-97		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	980601-MW2-32-05	1-Jun-98		-	-	0.005 U	-	-	-	-	0.005 U	-	-	-	-	-	-	0.006	-	-	-	-	-	-	-
	981117-MW2-32-10	17-Nov-98		-	-	0.005 U	-	-	-	-	0.005 U	-	-	-	-	-	-	0.005	-	-	-	-	-	-	-
	990513-MW2-32-10	13-May-99		-	-	0.005 U	-	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-
	991027-MW2-32-12	27-Oct-99		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	000329-MW2-32-112	29-Mar-00		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.0053	-	-	-	-	-	-	0.0158
	010328-MW2-32-111	28-Mar-01		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.0147	-	-	-	-	-	-	0.005 U
	040816-MW2-32-009[6]	16-Aug-04		-	-	0.00108	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.00621	-	-	-	-	-	-	0.005 U
	050331-009	31-May-05		-	-	0.00247	-	-	-	-	0.001 U	0.00138	-	0.001 U	-	-	-	0.00838	-	-	-	-	-	-	0.01 U
	050927-MW-2-32-118	27-Sep-05		-	-	0.00486	-	-	-	-	0.00886	0.0218	-	0.001 U	-	-	-	0.0065	-	-	-	-	-	-	0.0577
	060328-MW-2-32-102	28-Mar-06		-	-	0.00207	-	-	-	-	0.001 U	0.002 U	-	0.01 U	-	-	-	0.00874	-	-	-	-	-	-	0.005 U
	061016-MW-2-32-107	16-Oct-06		-	-	0.00221	-	-	0.00005	-	0.00033	0.0028	-	0.000086	-	-	0.00002 U	0.0107	-	0.0002 U	0.000007 U	-	-	-	0.0368
	2708-070712-MW-2-32-120	12-Jul-07		0.045	0.0008 U	0.00159	0.0131	0.008 U	0.00038 U	36.2	0.001 U	0.0027 U	1.67	0.00054 U	9.63	0.387	0.0002 U	0.0101	2.01	0.005 U	0.00012 U	9.15	0.0008 U	0.0058	0.033 U

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
				Analytical Results - mg/l (ppm)																					
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEQ 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [3]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [3]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
MW-02-32	2708-080512-MW2-32-101	12-May-08	21.5 - 31.5	0.0082	0.0001	0.00165	0.0098	0.000003 U	0.000056	28.	0.00024	0.0009	1.14	0.000074	7.86	0.535	0.00003 U	0.0132	1.61 J	0.0002 J	0.000022	8.82	0.000004 J	0.00285	0.00204
	2708-080915-MW-2-32-120	15-Sep-08	(fill WBZ)	-	0.00029	0.00518	0.0407	0.000029	0.000188	34.1	0.00052	0.00478	9.67	0.00129	9.66	0.96	0.00005 U	0.0165	1.92 J	0.004 U	0.00001 J	10.5	0.000017 J	0.0123	0.00728
	2708-090401-MW2-32-127	1-Apr-09		0.149	0.000349	0.0048	0.0372	0.00001 J	0.00148	35.5	0.00156	0.00387	8.86	0.000682	9.45	1.11	0.00024	0.023	1.49	0.0004 U	0.000005 U	7.98	0.000002 U	0.0128	0.0169 J
	2708-090812-MW-2-32-113	12-Aug-09		0.1 U	0.001 U	0.00168	0.0104	0.001 U	0.001 U	29.8	0.001 U	0.004 U	0.966	0.001 U	8.35	0.149	0.0001 U	0.00834	1.66	0.001 U	0.001 U	7.89	0.001 U	0.00253	0.004 U
MW-02-61	981116-MW2-61-04	16-Nov-98	50 - 60	-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	990216-MW2-61-006	16-Feb-99	(alluvial WBZ)	-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.03 U
	990512-MW2-61-05	12-May-99		-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	990823-MW2-61-07	23-Aug-99		-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.01 U
	991026-MW2-61-04	26-Oct-99		-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	000328-MW2-61-104	28-Mar-00		-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	001004-MW2-61-04	4-Oct-00		-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	010328-MW2-61-104	28-Mar-01		-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	011009-MW2-61-104	9-Oct-01		-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.01 U
	020403-MW2-61-103	3-Apr-02		-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0091
	020924-MW2-61-103	24-Sep-02		-	-	0.005 U	-	-	-	-	0.005 U	0.01 U	-	0.01 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	030318-MW2-61-104	18-Mar-03		-	-	0.01 U	-	-	-	-	0.015 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.002 U
	030930-MW2-61-103 [6]	30-Sep-03		-	-	0.02 U	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040813-MW2-61-002[6]	13-Aug-04		-	-	0.00161	-	-	-	-	0.00169	0.002 U	-	0.001 U	-	-	-	0.0105	-	-	-	-	-	-	0.005 U
	050926-MW-2-61-111	26-Sep-05		-	-	0.00324	-	-	-	-	0.001 U	0.00311	-	0.001 U	-	-	-	-	-	-	-	-	-	-	-
	060329-MW-2-61-104	29-Mar-06		-	-	0.00311	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.002 U	-	-	-	-	-	-	0.0059
	061011-MW-2-61-101	11-Oct-06		-	-	0.00295	-	-	0.000078	-	0.00045	0.00216	-	0.000235	-	-	0.00002 U	0.00101	-	0.0004 J	0.000005 J	-	-	-	0.0305
	2708-070719-MW-2-61-128	19-Jul-07		1.38	0.0008 U	0.00302	0.0683	0.0008 U	0.00038 U	64.9	0.0018	0.0036 J	28.5	0.000576	49.2	1.12	0.0002 U	0.002 U	2.74	0.005 U	0.00012 U	19.4	0.0008 U	0.00467	0.033 U
	2708-080512-MW2-61-100	12-May-08		0.173	0.00002 U	0.00276	0.0595	0.00001 J	0.000513	60.2	0.00041	0.00069	26.	0.000179	45.6	1.05	0.00003 U	0.00071	2.76	0.0005 J	0.000014 J	19.9	0.000003 U	0.00104	0.00146
	2708-080915-MW-2-61-118	15-Sep-08		-	0.00003 J	0.00314	0.0586	0.00002 J	0.00127	62.3	0.00031	0.00081	27.3	0.000258	46.	1.11	0.00005 U	0.0006	2.88	0.004 U	0.000005 J	22.	0.000007 J	0.00122	0.00534
	2708-090401-MW2-61-125	1-Apr-09		0.37	0.000005 U	0.0028	0.0633	0.00003	0.000633	58.8	0.00059	0.00102	25.3	0.000339	43.6	1.08	0.00005 U	0.00114	2.7	0.0004 U	0.000005 U	19.6	0.000002 U	0.00178	0.0023 J
	2708-090812-MW-2-61-115	12-Aug-09		1.19	0.001 U	0.0035	0.0618	0.001 U	0.001 U	56.5	0.00193	0.00739	25.	0.001 U	43.8	1.01	0.0001 U	0.00156	2.57	0.0013	0.001 U	19.3	0.001 U	0.00457	0.00767
MW-02-104	2708-070712-MW-2-104-119	12-Jul-07	94 - 104	0.624 U*	0.0008 U	0.00312	0.0755	0.008 U	0.00038 U	76.3	0.0161	0.0027 U	10.5	0.00054 U	17.9	1.26	0.0002 U	0.0102	11.5	0.005 U	0.00012 U	15.4	0.0008 U	0.004 U	0.033 U
	2708-080512-MW2-104-102	12-May-08	(alluvial WBZ)	0.0578	0.00002 J	0.00659	0.0658	0.00001 J	0.000019 J	64.2	0.00134	0.00053	49.1	0.000103	26.3	0.00003 U	0.00143	4.2	0.0004 J	0.000013 J	15.9	0.000003 U	0.0005	0.00672	0.00146
	2708-080915-MW-2-104-122	15-Sep-08		-	0.00002 U	0.00772	0.0584	0.00001 J	0.000008 U	59.9	0.00088	0.00044	40.5	0.000042	24.4	3.03	0.00005 U	0.00151	4.09	0.004 U	0.000018 J	15.4	0.000006 J	0.00029	0.00676
	2708-080915-MW-2-104-123 (DUP)	15-Sep-08		-	0.00002 U	0.0076	0.0578	0.00001 J	0.000008 U	60.4	0.00088	0.00032	40.9	0.000049	24.8	3.05	0.00005 U	0.0013	4.21	0.004 U	0.000007 J	15.7	0.000006 J	0.00031	0.00274
	2708-081208-MW-2-104-003	8-Dec-08		0.407	0.000041 J	0.0078	0.0649	0.00002	0.00001 J	69.8	0.00748	0.00147	44.	0.000354	27.8	2.82	0.00005 U	0.00364	4.42	0.0004 U	0.000013 J	16.4	0.000002 U	0.00165	0.0044
	2708-090401-MW2-104-129	1-Apr-09		0.0164	0.000005 U	0.0083	0.0642	0.00001 J	0.000005 U	60.4	0.00047	0.00003 UJ	50.3	0.000003 U	25.4	4.13	0.00005 U	0.00134	3.62	0.0004 J	0.000005 U	15.2	0.000002 U	0.0002	0.0021 J
	2708-090812-MW-2-104-111	12-Aug-09		3.45	0.001 U	0.01	0.0785	0.001 U	0.001 U	59.9	0.0158	0.00697	49.8	0.00169	26.2	3.62	0.0001 U	0.0123	3.73	0.0012	0.001 U	15.6	0.001 U	0.0105	0.0177
MW-03-26	951206-MW3-26-01	6-Dec-95	15 - 25	-	-	-	-	-	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-
	960318-MW3-26-02	18-Mar-96	(fill WBZ)	-	-	0.005 U	-	-	0.002 U	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.36	-	-	-	-	-	-	0.005
	960618-MW3-26-01	18-Jun-96		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.33	-	-	-	-	-	-	0.014
	961001-MW3-26-01	1-Oct-96		-	-	0.026	-	-	-	-	0.44	0.41	-	0.11	-	-	-	1.5	-	-	-	-	-	-	0.98
	970225-MW3-26-01	25-Feb-97		-	-	0.005 U	-	-	-	-	0.006	0.005 U	-	0.005 U	-	-	-	0.27	-	-	-	-	-	-	0.017
	970827-MW3-26-01	27-Aug-97		-	-	0.031	-	-	-	-	0.39	0.38	-	0.099	-	-	-	1.4	-	-	-	-	-	-	0.71
	980218-MW3-26-01	18-Feb-98		-	-	0.005 U	-	-	-	-	0.017	0.009	-	0.007	-	-	-	0.21	-	-	-	-	-	-	0.04
	980602-MW3-26-09	2-Jun-98		-	-	0.005 U	-	-	-	-	0.005 U	0.008	-	0.005	-	-	-	0.29	-	-	-	-	-	-	0.028
	980826-MW3-26-08	26-Aug-98		-	-	-	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.083	-	-	-	-	-	-	0.005
	981117-MW3-26-12	17-Nov-98		-	-	0.024	-	-	-	-	0.22	0.25	-	0.08	-	-	-	1.2	-	-	-	-	-	-	0.61
	990216-MW3-26-010	16-Feb-99		-	-	-	-	-	-	-	0.0078	0.041	-	0.005 U	-	-	-	0.15	-	-	-	-	-	-	0.063
	990514-MW3-26-23	14-May-99		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.0097	-	-	-	0.14	-	-	-	-	-	-	0.024
	990824-MW3-26-12	24-Aug-99		-	-	-	-	-	-	-	0.096	0.023	-	0.0054	-	-	-	0.21	-	-	-	-	-	-	0.064
	991027-MW3-26-14	27-Oct-99		-	-	0.02	-	-	-	-	1.	0.28	-	0.079	-	-	-	1.5	-	-	-	-	-	-	0.59
	000330-MW3-26-113	30-Mar-00		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.085	-	-	-	-	-	-	0.0713
	001005-MW3-26-11	5-Oct-00		-	-	0.005 U	-	-	-	-	0.0386	0.0296	-	0.0107	-	-	-	0.187	-	-	-	-	-	-	0.0696
	010328-MW3-26-113	28-Mar-01		-	-	0.0051	-	-	-	-	0.0149	0.0116	-	0.005 U	-	-	-	0.191	-	-	-	-	-	-	0.0304
	048023-MW3-26-010[6]	23-Aug-04		-	-	0.001 U	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.0983	-	-	-	-	-	-	0.00692
	050330-004	30-Mar-05		-	-	0.001 U	-	-	-	-	0.001 U	0.00185	-	0.001	-	-	-	0.19	-	-	-	-	-	-	0.01 U
	050922-MW-3-26-105	22-Sep-05		-	-	0.00369	-	-	-	-	0.005 U	0.00742	-	0.00388	-	-	-	0.131	-	-	-	-	-	-	0.029
	060330-MW-3-26-110	30-Mar-06		-	-	0.001 U	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.16	-	-	-	-	-	-	0.005 U
	061017-MW-3-26-110	17-Oct-06		-	-	0.0153	-	-	0.00154	-	0.0477	0.0805	-	0.0455	-	-	0.00073	1.05	-	0.0069 J	0.000083 J	-	-	-	0.372
	2708-070629-MW-3-26-119	29-Jun-07		31.5	0.0008 UJ	0.00695	0.238	0.004 U	0.00038 U	44.2	0.052	0.0692	48.5	0.0256	49.6	0.91	0.0002 U	0.0869	3.06	0.005 U	0.00012 J	21.2	0.0008 U	0.233 J	0.0973
	2708-080512-MW3-26-107	12-May-08		0.249	0.00008	0.00069	0.0421	0.00003	0.000038	49.8	0.00117	0.00063	6.25	0.000506	11.7	1.02	0.00003 U	0.133	2.28	0.0002 UJ	0.000007 J	11.3	0. J	0.248	0.00746

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
				Analytical Results - mg/l (ppm)																					
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEQ 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [3]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [3]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
MW-03-26	2708-080911-MW-3-26-115	11-Sep-08	15 - 25	-	0.001 J	0.0765	1.57	0.00837	0.00368	65.5	0.132	0.0863	890.	0.0668	25.4	4.45	0.00174	1.3	5.06	0.008 U	0.000052 U*	- R	0.000253	69.7	0.53
	2708-090331-MW3-26-123	31-Mar-09	(fill WBZ)	0.0931	0.000089	0.0004 J	0.031	0.000008 UJ	0.000019 J	40.5	0.00074	0.00107	1.27	0.000152	8.32	0.253	0.00005 U	0.123	1.9	0.0004 U	0.000005 U	8.42	0.000002 UJ	0.326	0.0042
	2708-090817-MW-3-26-139	17-Aug-09		0.109	0.001 U	0.00153	0.0567	0.001 U	0.001 U	64.8	0.0462	0.004 U	8.6	0.00919	16.4	3.64	0.0001 U	0.124	2.52	0.001 U	0.001 U	14.5	0.001 U	0.074	0.00543
MW-03-56	951206-MW3-56-01	6-Dec-95	45 - 55	-	ND>0.005	0.005 U	-	0.002 U	0.002 U	-	0.005 U	0.005 U	-	0.005 U	-	-	0.0002 U	0.007	-	0.005 U	0.005 U	-	0.01 U	-	0.005
	960319-MW3-56-01	19-Mar-96	(alluvial WBZ)	-	-	0.005 U	-	-	0.002 U	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.013	-	-	-	-	-	-	0.005 U
	980602-MW3-56-14	2-Jun-98		-	-	0.005 U	-	-	-	-	0.007	-	-	-	-	-	-	0.017	-	-	-	-	-	-	-
	981118-MW3-56-16	18-Nov-98		-	-	0.005 U	-	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-
	990514-MW3-56-24	14-May-99		-	-	0.005 U	-	-	-	-	0.0064	-	-	-	-	-	-	0.019	-	-	-	-	-	-	-
	990824-MW3-56-16	24-Aug-99		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.0087	-	-	-	-	-	-	0.01 U
	991028-MW3-56-17	28-Oct-99		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.0058	-	-	-	-	-	-	0.005 U
	000330-MW3-56-117	30-Mar-00		-	-	0.0084	-	-	-	-	0.0457	0.0276	-	0.0121	-	-	-	0.0865	-	-	-	-	-	-	0.0631
	001005-MW3-56-13	5-Oct-00		-	-	0.005 U	-	-	-	-	0.0064	0.005 U	-	0.005 U	-	-	-	0.0151	-	-	-	-	-	-	0.0129
	010329-MW3-56-116	29-Mar-01		-	-	0.0056	-	-	-	-	0.0053	0.01 U	-	0.005 U	-	-	-	0.013	-	-	-	-	-	-	0.0072
	020404-MW3-56-111	4-Apr-02		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.0096	-	-	-	-	-	-	0.0082
	030319-MW3-56-112	19-Mar-03		-	-	0.01 U	-	-	-	-	0.003 U	0.003 U	-	0.006 U	-	-	-	0.0053	-	-	-	-	-	-	0.02 U
	040823-MW3-56-011 [6]	23-Aug-04		-	-	0.00345	-	-	-	-	0.00177	0.002 U	-	0.001 U	-	-	-	0.0042	-	-	-	-	-	-	0.005 U
	050330-003	30-Mar-05		-	-	0.00395	-	-	-	-	0.001 U	0.001 U	-	0.001 U	-	-	-	0.00226	-	-	-	-	-	-	0.01 U
	050922-MW-3-56-106	22-Sep-05		-	-	0.004	-	-	-	-	0.005 U	0.002 U	-	0.001 U	-	-	-	0.00386	-	-	-	-	-	-	0.025 U
	060330-MW-3-56-111	30-Mar-06		-	-	0.00342	-	-	-	-	0.001 U	0.002 U	-	0.001	-	-	-	0.002 U	-	-	-	-	-	-	0.005 U
	061024-MW-3-56-116	24-Oct-06		-	-	0.00344	-	-	0.00005	-	0.00151	0.00134	-	0.00036	-	-	0.00002 U	0.0044	-	0.0002 U	0.000014 J	-	-	-	0.0203
	2708-070626-MW-3-56-108	26-Jun-07		51.6 J	0.001 U	0.00923	0.368	0.005 U	0.000808	46.7	0.08	0.111	92.1	0.0443	53.8	1.09	0.0002 U	0.164	3.8	0.005 U	0.000208	25.3	0.001 U	0.401	0.182
	2708-080512-MW3-56-106	12-May-08		8.62	0.00004 J	0.00314	0.0809	0.00029	0.000102	38.1	0.00988	0.016	25.5	0.00547	38.9	0.557	0.00003 J	0.0209	2.47	0.0005 J	0.000037	22.2	0.00004	0.0569	0.023
	2708-080911-MW-3-56-116	11-Sep-08		-	0.00008 U*	0.00488	0.226	0.00107	0.000384	- R	0.0359	0.0509	37.5	0.0201	- R	0.444	0.00015	0.08	2.01	0.008 U	0.0001 J	- R	0.0001	0.204	0.0901
	2708-090326-MW3-56-105	26-Mar-09		9.42	0.000047 J	0.0034	0.0882	0.00025	0.000139	38.3	0.01	0.0147 J	29.7	0.00537	37.5	0.538 J	0.00005 U	0.0191	2.52	0.0004 U	0.000002 U	21.5	0.000035	0.0543 J	0.0253 J
	2708-090811-MW-3-56-107	11-Aug-09		17.2	0.001 U	0.00552	0.13	0.001 U	0.001 U	37.9	0.0296	0.0225	32.8	0.00654	39.5	0.578	0.000125	0.0398	2.87 J	0.001 U	0.001 U	21.5	0.001 U	0.0867	0.045
MW-04-35	951206-MW4-35-01	6-Dec-95	24 - 34	-	-	-	-	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-	-	-	-	-
	960618-MW4-35-01	18-Jun-96	(fill WBZ)	-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	961001-MW4-35-01	1-Oct-96		-	-	0.007	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.008
	970225-MW4-35-01	25-Feb-97		-	-	0.006	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	980827-MW4-57-01 [5]	27-Aug-97		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	980217-MW4-35-01	17-Feb-98		-	-	0.005 U	-	-	-	-	0.007	0.005 U	-	0.005 U	-	-	-	0.005	-	-	-	-	-	-	0.005
	980601-MW4-35-06	1-Jun-98		-	-	0.005 U	-	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-
	981117-MW4-35-11	17-Nov-98		-	-	0.005	-	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-
	990514-MW4-35-21	14-May-99		-	-	0.005 U	-	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-
	991027-MW4-35-13	27-Oct-99		-	-	0.0064	-	-	-	-	0.044	0.033	-	0.016	-	-	-	0.037	-	-	-	-	-	-	0.067
	000330-MW4-35-114	30-Mar-00		-	-	0.0063	-	-	-	-	U	U	-	U	-	-	-	ND	-	-	-	-	-	-	U
	001005-MW4-35-10	5-Oct-00		-	-	0.0134	-	-	-	-	0.111	0.123	-	0.0511	-	-	-	0.105	-	-	-	-	-	-	0.252
	010328-MW4-35-112	28-Mar-01		-	-	0.0055	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	040823-MW4-35-012 [6]	23-Aug-04		-	-	0.00672	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.0073	-	-	-	-	-	-	0.005 U
	050331-005	31-Mar-05		-	-	0.00336	-	-	-	-	0.001 U	0.001 U	-	0.001 U	-	-	-	0.00154	-	-	-	-	-	-	0.01 U
	060331-MW-4-35-113	31-Mar-06		-	-	0.00312	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	061018-MW-4-35-113	18-Oct-06		-	-	0.00605	-	-	0.00005	-	0.00133	0.00074	-	0.00029	-	-	0.00002 J	0.0011	-	0.0011	0.000007 U	-	-	-	0.927
	2708-070726-MW-4-35-137	26-Jul-07		0.0316	0.0008 U	0.00374 J	0.282 J	0.0008 U	0.00038 UJ	201.	0.00757 J	0.0027 U	17.3	0.00054 U	29.1	5.06	0.0002 U	0.00428	15.2	0.005 UJ	0.00012 UJ	38.2	0.0008 U	0.004 U	0.033 U
	2708-080513-MW4-35-112	13-May-08		0.156	0.00005	0.00329	0.126	0.00002	0.000013 J	137.	0.00113	0.00096	18.3	0.00173	22.7	4.63	0.00003 U	0.00191	7.04	0.0002 J	0.000005 J	26.4	0.000003 U	0.00168	0.00163
	2708-080513-MW4-35-113	13-May-08		0.131	0.00005 J	0.00348	0.126	0.00002 J	0.000011 J	141.	0.00108	0.00084	18.5	0.0015	23.1	4.7	0.00003 U	0.00176	7.17	0.0004 J	0.000003 U	26.9	0.000003 U	0.00152	0.00142
	2708-080911-MW-4-35-109	11-Sep-08		-	0.00008 U*	0.00581	0.196	0.00003 U*	0.000013 U*	173.	0.00087 J	0.00074	53.3	0.00158	45.	12.4	0.00005 U	0.00119	5.63	0.004 U	0.000024 U*	39.7	0.000007 U*	0.00209	0.00296
	2708-090331-MW4-35-119	31-Mar-09		0.0597	0.000051	0.0036	0.166	0.000008 UJ	0.000005 U	168.	0.00043	0.00068	24.3	0.000778	29.	6.79	0.00005 U	0.00235	7.17	0.0007 J	0.000005 U	30.4	0.000002 UJ	0.00141	0.0033
	2708-090813-MW-4-35-121	13-Aug-09		0.324	0.001 U	0.00479	0.184	0.001 U	0.001 U	170.	0.0251	0.004 U	40.3	0.001 U	39.4	10.8	0.0001 U	0.0152	5.94	0.0012	0.001 U	32.1	0.001 U	0.00244	0.004 U
MW-04-57	951205-MW4-57-01	5-Dec-95	46 - 56	-	-	-	-	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-	-	-	-	-
	960321-MW4-57-01	21-Mar-96	(alluvial WBZ)	-	-	0.005	-	-	0.002 U	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	960620-MW4-57-02	20-Jun-96		-	-	0.007	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005	-	-	-	-	-	-	0.005 U
	961002-MW4-57-01	2-Oct-96		-	-	0.013	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	970226-MW4-57-01	26-Feb-97		-	-	0.01	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	970828-MW4-35-01 [5]	28-Aug-97		-	-	0.013	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	980218-MW4-57-01	18-Feb-98		-	-	0.011	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	980603-MW4-57-18	3-Jun-98		-	-	0.011	-	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-
	981119-MW4-57-20	19-Nov-98		-	-	0.01	-	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-
	990514-MW4-57-22	14-May-99		-	-	0.011	-	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
				Analytical Results - mg/l (ppm)																					
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEQ 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [5]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [3]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
MW-04-57	990825-MW4-57-17	25-Aug-99	46 - 56	-	-	0.013	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.01 U
	991028-MW4-57-21	28-Oct-99	(alluvial WBZ)	-	-	0.013	-	-	-	-	0.015	0.008	-	0.005 U	-	-	-	0.012	-	-	-	-	-	-	0.014
	000403-MW4-57-121	3-Apr-00		-	-	0.0157	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0259
	001006-MW4-57-19	6-Oct-00		-	-	0.0137	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	010329-MW4-57-120	29-Mar-01		-	-	0.0183	-	-	-	-	0.005 U	0.01 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	020405-MW4-57-117	5-Apr-02		-	-	0.0128	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.0079	-	-	-	-	-	-	0.005 U
	030320-MW4-57-117	20-Mar-03		-	-	0.016	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040824-MW4-57-016[6]	24-Aug-04		-	-	0.0126	-	-	-	-	0.00108	0.002 U	-	0.001 U	-	-	-	0.00788	-	-	-	-	-	-	0.005 U
	050331-008	31-Mar-05		-	-	0.0129	-	-	-	-	0.001 U	0.001 U	-	0.001 U	-	-	-	0.00617	-	-	-	-	-	-	0.01 U
	051003-MW-4-57	3-Oct-05		-	-	0.011	-	-	-	-	0.002 U	0.002 U	-	0.001 U	-	-	-	0.0058	-	-	-	-	-	-	0.02 U
	060331-MW-4-57-114	30-Mar-06		-	-	0.0138	-	-	-	-	0.00214	0.00364	-	0.001 U	-	-	-	0.00892	-	-	-	-	-	-	0.005 U
	061030-MW-4-57-122	30-Oct-06		-	-	0.0144	-	-	0.00007	-	0.00456	0.00103	-	0.000168	-	-	0.00002 U	0.0084	-	0.0006 J	0.000007 U	-	-	-	0.0072
	2708-070622-MW-4-57-101	22-Jun-07		0.106	0.001 U	0.00376	0.169	0.001 U	0.00038 U	171.	0.00857	0.0027 U	20.2	0.00054 U	26.1	5.58	0.0002 U	0.00585	9.39	0.005 U	0.00012 U	37.7	0.001 U	0.005 U	0.033 U
	2708-080513-MW4-57-111	13-May-08		6.49	0.00005 J	0.0116	0.119	0.000201	0.000042	130.	0.00561	0.0115	41.6	0.00216	87.5	3.96	0.00003 U	0.0135	2.66	0.0009 J	0.000023	56.2	0.000028	0.0188	0.0116
	2708-080911-MW-4-57-108	11-Sep-08		-	0.00009 U*	0.00937	0.148	0.000461	0.000118	- R	0.0124	0.00858	23.4 J	0.00518	- R	- R	0.00005 U	0.0206	- R	0.008 U	0.000065 U*	- R	0.00008	0.0375	0.0297
	2708-090331-MW4-57-121	31-Mar-09		9.8	0.000056	0.0086	0.126	0.000008 UJ	0.000069	123.	0.00714 J	0.0145	37.4	0.00362	81.	4.75	0.00005 U	0.0157	2.54	0.0005 J	0.000005 U	58.7	0.000034	0.0243	0.0166
	2708-090817-MW-4-57-138	17-Aug-09		12.8	0.001 U	0.0107	0.133	0.001 U	0.001 U	120.	0.0339	0.013	38.2	0.00411	78.3	4.82	0.0001 U	0.031	2.71	0.001 U	0.001 U	60.7	0.001 U	0.0428	0.0262
MW-04-101	981117-MW4-101-09	17-Nov-98	89.5 - 99.5	-	-	0.007	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	990216-MW4-101-007	16-Feb-99	(alluvial WBZ)	-	-	0.0098	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.03 U
	990514-MW4-101-20	14-May-99		-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	990514-MW4-101-20	14-May-99		-	-	0.0082	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	U
	990824-MW4-101-09	24-Aug-99		-	-	0.01	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.01 U
	991027-MW4-101-11	27-Oct-99		-	-	0.01	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	000329-MW4-101-111	29-Mar-00		-	-	0.0108	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0069
	001005-MW4-101-09	5-Oct-00		-	-	0.0069	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	010328-MW4-101-110	28-Mar-01		-	-	0.0157	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	011009-MW4-101-103	9-Oct-01		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.01 U
	020404-MW4-101-110	4-Apr-02		-	-	0.0138	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0054
	020924-MW4-101-102	24-Sep-02		-	-	0.014	-	-	-	-	0.005 U	0.01 U	-	0.01 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0077
	030318-MW4-101-109	18-Mar-03		-	-	0.017	-	-	-	-	0.015 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	030930-MW4-101-106 [6]	30-Sep-03		-	-	0.04	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040816-MW4-101-007[6]	16-Aug-04		-	-	0.0142	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.002 U	-	-	-	-	-	-	0.005 U
	050330-002	30-Mar-05		-	-	0.0138	-	-	-	-	0.001 U	0.00158	-	0.001 U	-	-	-	0.00147	-	-	-	-	-	-	0.01 U
	050928-MW4-101-122	28-Sep-05		-	-	0.0139	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.00334	-	-	-	-	-	-	0.005 U
	060329-MW-4-101-106	29-Mar-06		-	-	0.0134	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.002 U	-	-	-	-	-	-	0.005 U
	061018-MW-4-101-112	18-Oct-06		-	-	0.0113	-	-	0.00006	-	0.00043	0.0003	-	0.000044	-	-	0.00002 J	0.0006	-	0.0004	0.000007 U	-	-	-	0.0073
	2708-070625-MW-4-101-106	25-Jun-07		2.49	0.001 U	0.0111	0.105	0.001 U	0.00038 U	73.	0.00313	0.00638	42.	0.00119	28.4	3.87	0.0002 UJ	0.00326	4.11	0.005 U	0.00012 U	40.	0.001 U	0.0107	0.033 U
	2708-080513-MW4-101-114	13-May-08		0.418	0.00002 U	0.0113	0.0881	0.000036	0.000008 J	75.7	0.00078	0.00128	41.	0.000212	29.	3.83	0.00003 U	0.00118	4.64	0.0006 J	0.000028	38.6	0.000003 U	0.0021	0.00199
	2708-080910-MW-4-101-107	10-Sep-08		-	0.00002 U	0.0111	0.0831	0.000035 U*	0.000012	74.1	0.00068 J	0.00174	40.6	0.000339 J	28.9 J	3.97	0.00005 U	0.00086	4.7	0.0002 U	0.000005 U*	39.4	0.000005	0.002	0.00307
	2708-090331-MW4-101-115	31-Mar-09		0.288	0.000005 U	0.0108	0.0873	0.000008 UJ	0.000014 J	72.2	0.00048	0.0014	38.7	0.000212	27.5	3.89	0.00005 U	0.00138	4.37	0.0004 U	0.000005 U	34.7	0.000002 UJ	0.00149	0.0025
	2708-090331-MW4-101-117	31-Mar-09		0.202	0.000005 U	0.0111	0.0862	0.000008 UJ	0.000012 J	70.7	0.00027 J	0.00081	37.4	0.00014	26.7	3.79	0.00005 U	0.00118	4.27	0.0005 J	0.000005 U	34.1	0.000002 UJ	0.00121	0.0022
	2708-090813-MW-4-101-119	13-Aug-09		0.523	0.001 U	0.0114	0.0909	0.001 U	0.001 U	74.1	0.001 U	0.004 U	39.	0.001 U	27.9	3.76	0.0001 U	0.00127	4.33	0.001 U	0.001 U	35.	0.001 U	0.002 U	0.00751
MW-05-32	951205-MW5-32-01	5-Dec-95	21 - 31	-	-	-	-	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-	-	-	-	-
	960620-MW5-32-01	20-Jun-96	(fill/alluvial WBZ)	-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	961001-MW5-32-01	1-Oct-96		-	-	0.008	-	-	-	-	0.11	0.22	-	0.029	-	-	-	0.086	-	-	-	-	-	-	0.4
	970225-MW5-32-01	25-Feb-97		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.006
	970827-MW5-32-01	27-Aug-97		-	-	0.005 U	-	-	-	-	0.011	0.012	-	0.005 U	-	-	-	0.012	-	-	-	-	-	-	0.024
	980217-MW5-32-01	17-Feb-98		-	-	0.005 U	-	-	-	-	0.022	0.01	-	0.005 U	-	-	-	0.011	-	-	-	-	-	-	0.016
	980602-MW5-32-10	2-Jun-98		-	-	0.005 U	-	-	-	-	0.022	-	-	-	-	-	-	0.023	-	-	-	-	-	-	-
	981118-MW5-32-13	18-Nov-98		-	-	0.008	-	-	-	-	0.099	-	-	-	-	-	-	0.091	-	-	-	-	-	-	-
	990514-MW5-32-17	14-May-99		-	-	0.005 U	-	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-
	991027-MW5-32-15	27-Oct-99		-	-	0.018	-	-	-	-	0.28	0.38	-	0.071	-	-	-	0.23	-	-	-	-	-	-	0.54
	000330-MW5-32-115	30-Mar-00		-	-	0.005 U	-	-	-	-	0.014	0.0177	-	0.005 U	-	-	-	0.0161	-	-	-	-	-	-	0.0407
	001005-MW5-32-12	5-Oct-00		-	-	0.005 U	-	-	-	-	0.0458	0.0533	-	0.0129	-	-	-	0.0409	-	-	-	-	-	-	0.0963
	010329-MW5-32-114	29-Mar-01		-	-	0.0083	-	-	-	-	0.061	0.0651	-	0.0163	-	-	-	0.0524	-	-	-	-	-	-	0.117
	040816-MW5-32-008[6]	16-Aug-04		-	-	0.001 U	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.00359	-	-	-	-	-	-	0.005 U
	050401-011	1-Apr-05		-	-	0.00103	-	-	-	-	0.001 U	0.00178	-	0.001 U	-	-	-	0.00356	-	-	-	-	-	-	0.01 U
	050927-MW-5-32-117	27-Sep-05		-	-	0.001 U	-	-	-	-	0.00411	0.0107	-	0.00172	-	-	-	0.00782	-	-	-	-	-	-	0.0131

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
				Analytical Results - mg/l (ppm)																					
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEO 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [3]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [3]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
MW-05-32	060329-MW-5-32-107	29-Mar-06	21 - 31	-	-	0.001 U	-	-	-	-	0.00143	0.002 U	-	0.001 U	-	-	-	0.00483	-	-	-	-	-	-	0.005 U
	061018-MW-5-32-114	18-Oct-06	(fill/alluvial WBZ)	-	-	0.00047 J	-	-	0.00003	-	0.00123	0.00084	-	0.000121	-	-	0.00002 J	0.0035	-	0.0003 J	0.000007 U	-	-	-	0.564
	2708-070625-MW-5-32-104	25-Jun-07		2.9	0.001 U	0.000688	0.0448	0.001 U	0.00038 U	47.2	0.00418	0.00951	5.91	0.00142	27.2	1.7	0.0002 UJ	0.00634	1. U	0.005 U	0.00012 U	17.9	0.001 U	0.0173	0.033 U
	2708-080514-MW5-32-118	14-May-08		4.84	0.00009 J	0.00115	0.0655	0.000129	0.000084	91.5	0.00543	0.011	7.93	0.00121	53.2	3.21	0.00005 U	0.00971	1.52 J	0.0004 U	0.000026 J	35.7	0.000027 J	0.0196	0.00861
	2708-080910-MW-5-32-102	10-Sep-08		-	0.00004 U*	0.00065	0.0372	0.000074	0.000112	44.	0.00146	0.00467	5.92	0.00052 J	26.9 J	1.38	0.00005 U	0.00435	0.737	0.0002 U	0.000012 U*	17.6	0.000023	0.00849	0.00652
	2708-090330-MW5-32-111	30-Mar-09		2.48	0.000005 U	0.0008	0.0372	0.000089	0.000058	46.2	0.00248	0.00678	6.2	0.00091	27.2	1.47	0.00005 U	0.00478	0.746	0.0004 U	0.000005 U	17.2	0.000002 U	0.0132	0.0065 J
	2708-090812-MW-5-32-114	12-Aug-09		1.21	0.001 U	0.001	0.036	0.001 U	0.001 U	42.5	0.00197	0.004 U	3.88	0.001 U	25.9	1.44	0.0001 U	0.0046	0.649	0.001 U	0.001 U	15.7	0.001 U	0.0069	0.00844
MW-05-100	981118-MW5-100-14	18-Nov-98	88 - 98	-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.008	-	-	-	-	-	-	0.006
	990217-MW5-100-017	17-Feb-99	(alluvial WBZ)	-	-	0.0071	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.028
	990514-MW5-100-18	14-May-99		-	-	0.005 U	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0091
	990825-MW5-100-18	25-Aug-99		-	-	0.0055	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.01 U
	991028-MW5-100-19	28-Oct-99		-	-	0.0052	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	000330-MW5-100-119	30-Mar-00		-	-	0.0069	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	001006-MW5-100-15	6-Oct-00		-	-	0.0057	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	001006-MW5-100-16	6-Oct-00		-	-	0.0058	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	010329-MW5-100-118	29-Mar-01		-	-	0.0095	-	-	-	-	0.005 U	0.01 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	020405-MW5-100-114	5-Apr-02		-	-	0.0073	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0051
	020405-MW5-100-115	5-Apr-02		-	-	0.0073	-	-	-	-	0.005 U	0.002 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0072
	030319-MW5-100-114	19-Mar-03		-	-	0.011	-	-	-	-	0.003 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040824-MW5-100-015[6]	24-Aug-04		-	-	0.00865	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.002	-	-	-	-	-	-	0.005 U
	050401-012	1-Apr-05		-	-	0.00766	-	-	-	-	0.001 U	0.01 U	-	0.001 U	-	-	-	0.00121	-	-	-	-	-	-	0.01 U
	050921-MW-5-100-102	21-Sep-05		-	-	0.00944	-	-	-	-	0.005 U	0.002 U	-	0.001 U	-	-	-	0.00224	-	-	-	-	-	-	0.025 U
	060404-MW-5-100-121	4-Apr-06		-	-	0.00762	-	-	-	-	0.01 U	0.002 U	-	0.001 U	-	-	-	0.002 U	-	-	-	-	-	-	0.005 U
	061027-MW-5-100-120	27-Oct-06		-	-	0.0107	-	-	0.00011	-	0.0013	0.00059	-	0.000115	-	-	0.00002 U	0.0051	-	0.0005 J	0.000008 J	-	-	-	0.801
	2708-070625-MW-5-100-103	25-Jun-07		0.0663	0.001 U	0.007	0.0703	0.001 U	0.00038 U	72.2	0.001 U	0.0027 U	42.4	0.00054 U	55.6	1.71	0.0002 UJ	0.002 U	2.56	0.005 U	0.00012 U	15.8	0.001 U	0.005 U	0.033 U
	2708-080514-MW5-100-119	14-May-08		0.03	0.00002 U	0.00835	0.0703	0.000021	0.000008 U	72.8	0.00065	0.00035	42.3	0.000032	51.7	1.66	0.00005 U	0.00147	2.92	0.0036	0.000005 J	17.	0.000003 U	0.00031	0.00124
	2708-080910-MW-5-100-100	10-Sep-08		-	0.00002 U	0.00748	0.0662	0.000018 U*	0.00001	73.9	0.00041 J	0.00035	42.6	0.00004 U*	53.7 J	1.67	0.00005 U	0.00115	3.03	0.0002 U	0.000016 U*	18.7	0.000012	0.00038	0.00116
	2708-090330-MW5-100-109	30-Mar-09		0.0578	0.000005 U	0.0081	0.0701	0.000008 U	0.000005 U	71.2	0.00037	0.00041	40.7	0.00004	50.4	1.64	0.00005 U	0.00182	2.81	0.0029	0.000005 U	16.8	0.000002 U	0.0005	0.0018 J
	2708-090812-MW-5-100-112	12-Aug-09		0.1 U	0.001 U	0.00868	0.0699	0.001 U	0.001 U	68.6	0.00227	0.004 U	39.8	0.001 U	50.9	1.73	0.0001 U	0.0057	2.79	0.0054	0.001 U	16.7	0.001 U	0.002 U	0.00766
MW-05-175	981116-MW5-175-07	16-Nov-98	163 - 173	-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	990215-MW5-175-003	15-Feb-99	(alluvial WBZ)	-	-	0.0054	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.04 U
	990512-MW5-175-07	12-May-99		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	990823-MW5-175-03	23-Aug-99		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.01 U
	991026-MW5-175-06	26-Oct-99		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	000329-MW5-175-106	29-Mar-00		-	-	0.0057	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	001004-MW5-175-05	4-Oct-00		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	010328-MW5-175-105	28-Mar-01		-	-	0.0083	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	011009-MW5-175-102	9-Oct-01		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.01 U
	020404-MW5-175-105	4-Apr-02		-	-	0.0069	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.0157	-	-	-	-	-	-	0.0055
	020924-MW5-175-101	24-Sep-02		-	-	0.005 U	-	-	-	-	0.005 U	0.01 U	-	0.01 U	-	-	-	0.0061	-	-	-	-	-	-	0.015
	030318-MW5-175-105	18-Mar-03		-	-	0.01 U	-	-	-	-	0.015 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	030929-MW5-175-101	29-Sep-03		-	-	0.02 U	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040824-MW5-175-013	24-Aug-04		-	-	0.0062	-	-	-	-	0.00123	0.002 U	-	0.001 U	-	-	-	0.00307	-	-	-	-	-	-	0.005 U
	050921-MW-5-175-101	21-Sep-05		-	-	0.00494	-	-	-	-	0.005 U	0.002 U	-	0.001 U	-	-	-	0.00374	-	-	-	-	-	-	0.025 U
	060329-MW-5-175-105	29-Mar-06		-	-	0.00439	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.00218	-	-	-	-	-	-	0.005 U
	061016-MW-5-175-05	16-Oct-06		-	-	0.00391	-	-	0.00002 U	-	0.00035	0.00005 J	-	0.000035	-	-	0.00002 J	0.002	-	0.0006 J	0.000007 U	-	-	-	0.0019
	2708-070625-MW-5-175-105	25-Jun-07		1.24	0.001 U	0.00434	0.0386	0.001 U	0.00038 U	46.3	0.00146	0.0027 U	27.4	0.000888	27.2	2.52	0.0002 UJ	0.00347	2.48	0.005 U	0.00012 U	13.9	0.001 U	0.005 U	0.033 U
	2708-080910-MW-5-175-101	10-Sep-08		-	0.00002 U	0.00457	0.0286	0.000026 U*	0.000012	45.9	0.00048 J	0.00103	25.6	0.000231 J	27. J	2.66	0.00005 U	0.00181	2.78	0.0002 U	0.000017 U*	15.3	0.000018	0.0013	0.00243
	2708-090330-MW5-175-107	30-Mar-09		0.43	0.000005 U	0.0046	0.0298	0.000013 J	0.000027	45.2	0.00048	0.00081	24.5	0.000312	25.6	2.68	0.00005 U	0.00203	2.72	0.0004 U	0.000005 U	14.6	0.000002 U	0.00118	0.0041 J
	2708-090812-MW-5-175-110	12-Aug-09		1.24	0.001 U	0.00528	0.0317	0.001 U	0.001 U	45.	0.00153	0.004 U	23.9	0.001 U	26.2	2.59	0.0001 U	0.00232	2.66	0.001 U	0.001 U	14.3	0.001 U	0.00358	0.00557
MW-06-32	951207-MW6-32-01	7-Dec-95	21 - 31	-	ND>0.005	0.015	-	0.002 U	0.002 U	-	0.005 U	0.005 U	-	0.005 U	-	-	0.0002 U	0.005 U	-	0.005 U	0.005 U	-	0.01 U	-	0.005 U
	960319-MW6-32-01	19-Mar-96	(fill WBZ)	-	-	0.011	-	-	0.002 U	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005
	960617-MW6-32-01	17-Jun-96		-	-	0.011	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	960930-MW6-32-01	30-Sep-96		-	-	0.007	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	970225-MW6-32-01	25-Feb-97		-	-	0.008	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	970826-MW6-32-01	26-Aug-97		-	-	0.007	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	980216-MW6-32-01	16-Feb-98		-	-	0.009	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
				Analytical Results - mg/l (ppm)																					
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEQ 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [3]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [3]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
MW-06-61	951206-MW6-61-01	6-Dec-95	50 - 60	-	-	-	-	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-	-	-	-	-
	960319-MW6-61-01	19-Mar-96	(alluvial WBZ)	-	ND>0.005	0.005 U	-	-	0.005 U	-	0.005	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.015
	960620-MW6-61-01	20-Jun-96		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	961001-MW6-61-01	1-Oct-96		-	-	0.006	-	-	-	-	0.005 U	0.01	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.01
	970225-MW6-61-01	25-Feb-97		-	-	0.006	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	970828-MW6-61-01	28-Aug-97		-	-	0.007	-	-	-	-	0.014	0.018	-	0.005 U	-	-	-	0.012	-	-	-	-	-	-	0.2
MW-08-29	951207-MW8-29-01	7-Dec-95	18 - 28	-	ND>0.005	0.005 U	-	0.002 U	0.002 U	-	0.031	0.023	-	0.011	-	-	0.0002 U	0.075	-	0.005 U	0.005 U	-	0.01 U	-	0.3
	960321-MW8-29-01	21-Mar-96	(fill WBZ)	-	-	0.005 U	-	-	0.005 U	-	0.008	0.005	-	0.005 U	-	-	-	0.015	-	-	-	-	-	-	0.26
	960620-MW8-29-02	20-Jun-96		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.008	-	-	-	-	-	-	0.014
	961002-MW8-29-01	2-Oct-96		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.008	-	-	-	-	-	-	0.005 U
	970226-MW8-29-01	26-Feb-97		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.007	-	-	-	-	-	-	0.01
	970828-MW8-29-01	28-Aug-97		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.011	-	-	-	-	-	-	0.2
	980218-MW8-29-01	18-Feb-98		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.009	-	-	-	-	-	-	0.21
	040825-MW8-29-022[6]	25-Aug-04		-	-	0.00243	-	-	-	-	0.0066	0.002 U	-	0.001 U	-	-	-	0.0113	-	-	-	-	-	-	0.005 U
	050929-MW-8-29-127	29-Sep-05		-	-	0.00765	-	-	-	-	0.0118	0.00294	-	0.0024	-	-	-	0.278	-	-	-	-	-	-	0.0126
	061031-MW-8-29-124	31-Oct-06		-	-	0.003	-	-	0.00002 U	-	0.00158	0.00217	-	0.000323	-	-	0.00002 J	0.00965	-	0.0074	0.000118 J	-	-	-	0.324
	2708-080603-MW8-29-100	3-Jun-08		0.742	0.00004 J	0.00194	1.01	0.000063	0.000056	86.3	0.00237	0.00074	43.2	0.00119	40.6	8.12	0.00005 U	0.0102	3.09	0.0021 J	0.000014 J	135.	0.000008 J	0.00465	0.00491
	2708-080911-MW-8-27-113	11-Sep-08		-	0.00015 J	0.00332	0.833	0.000203	0.000243	44.1	0.00387	0.00404	23.5	0.00424	20.2	4.06	0.00005 U	0.0185	1.63	0.008 U	0.000025 U*	64.	0.000033 U*	0.00741	0.0267
	2708-090331-MW8-29-118	31-Mar-09		1.06	0.00008	0.0044	0.956	0.000078 J	0.000057	103.	0.00116	0.00194	42.7	0.00237	38.	6.65	0.00005 U	0.0419	3.74	0.0015	0.000005 U	192.	0.000008 J	0.00636	0.0096
	2708-090811-MW-8-29-106	11-Aug-09		0.387	0.001 U	0.00304	0.919	0.001 U	0.001 U	89.	0.027	0.004 U	41.5	0.001 U	40.4	7.68	0.0001 U	0.0328	2.81 J	0.00352	0.001 U	152.	0.001 U	0.00424	0.00474
MW-08-56	951207-MW8-56-01	7-Dec-95	45 - 55	-	ND>0.005	0.005 U	-	0.002 U	0.002 U	-	0.048	0.009	-	0.005 U	-	-	0.0002 U	0.035	-	0.005 U	0.005 U	-	0.01 U	-	0.27
	960321-MW8-56-01	21-Mar-96	(alluvial WBZ)	-	-	0.005 U	-	-	0.002 U	-	0.021	0.009	-	0.005 U	-	-	-	0.02	-	-	-	-	-	-	0.24
	960620-MW8-56-01	20-Jun-96		-	-	0.005 U	-	-	-	-	0.005 U	0.15	-	0.0005 U	-	-	-	0.017	-	-	-	-	-	-	0.1
	961002-MW8-56-01	2-Oct-96		-	-	0.005 U	-	-	-	-	0.02	0.027	-	0.005 U	-	-	-	0.071	-	-	-	-	-	-	0.023
	970226-MW8-56-01	26-Feb-97		-	-	0.005 U	-	-	-	-	0.07	0.026	-	0.005	-	-	-	0.052	-	-	-	-	-	-	0.05
	970828-MW8-56-01	28-Aug-97		-	-	0.006	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.007
	980218-MW8-56-01	18-Feb-98		-	-	0.006	-	-	-	-	0.027	0.017	-	0.005 U	-	-	-	0.02	-	-	-	-	-	-	0.22
	020405-MW8-56-118	5-Apr-02		-	-	0.0053	-	-	-	-	0.0382	0.224	-	0.005 U	-	-	-	0.0284	-	-	-	-	-	-	0.0362
	030320-MW8-56-120	20-Mar-03		-	-	0.012	-	-	-	-	0.001 U	0.0033 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040825-MW8-56-021[6]	25-Aug-04		-	-	0.00766	-	-	-	-	0.0072	0.002 UJ	-	0.001 U	-	-	-	0.0076	-	-	-	-	-	-	0.00535
	050929-MW-8-56-128	29-Sep-05		-	-	0.00957	-	-	-	-	0.0126	0.00419	-	0.001 U	-	-	-	0.0121	-	-	-	-	-	-	0.00778
	061031-MW-8-56-125	31-Oct-06		-	-	0.0071	-	-	0.00004	-	0.00187	0.00183	-	0.000142	-	-	0.00002 U	0.00584	-	0.0022	0.000146 J	-	-	-	0.401
	061031-MW-8-56-126	31-Oct-06		-	-	0.0063	-	-	0.00005	-	0.00231	0.00223	-	0.000233	-	-	0.00002 U	0.00609	-	0.0022	0.00013 J	-	-	-	0.308
	2708-080603-MW8-56-101	3-Jun-08		6.77	0.00003 J	0.00925	0.133	0.000193	0.000101	83.8	0.00514	0.00686	35.3	0.00189	57.	4.62	0.00005 U	0.00662	3.88	0.0009 J	0.000015 J	79.	0.000021	0.0146	0.0162
	2708-080915-MW-8-56-117	15-Sep-08		-	0.00006	0.00777	0.107	0.000101	0.0001	92.2	0.00336	0.00482	31.7	0.00124	59.9	4.53	0.00005 U	0.00362	4.	0.004 U	0.000024	93.	0.00002 J	0.00801	0.0106
	2708-090331-MW8-56-116	31-Mar-09		0.367	0.000097	0.0069	0.102	0.000008 UJ	0.000051	86.6	0.00248	0.00167	27.8	0.000312	55.1	4.07	0.00005 U	0.00238	3.55	0.0008 J	0.000005 U	79.2	0.000002 UJ	0.00251	0.004
	2708-090811-MW-8-56-104	11-Aug-09		1.68	0.001 U	0.00789	0.102	0.001 U	0.001 U	85.4	0.0122	0.004 U	27.7	0.001 U	56.1	3.98	0.0001 U	0.00707	3.4 J	0.00139	0.001 U	75.3	0.001 U	0.00578	0.0077
MW-09-29	951205-MW9-29-01	5-Dec-95	18 - 28	-	-	-	-	-	-	-	-	-	-	0.022	-	-	-	-	-	-	-	-	-	-	-
	960318-MW9-29-01	18-Mar-96	(fill WBZ)	-	ND>0.005	0.005 U	-	0.002 U	0.002 U	-	0.005 U	0.005 U	-	0.005 U	-	-	0.0002 U	0.005 U	-	0.005 U	0.005 U	-	0.01 U	-	0.005 U
	960618-MW9-29-01	18-Jun-96		-	-	0.01	-	-	-	-	0.23	0.3	-	0.008	-	-	-	0.16	-	-	-	-	-	-	0.097
	961001-MW9-29-01	1-Oct-96		-	-	0.005 U	-	-	-	-	0.047	0.015	-	0.005 U	-	-	-	0.035	-	-	-	-	-	-	0.037
	970225-MW9-29-01	25-Feb-97		-	-	0.006	-	-	-	-	0.021	0.005	-	0.005 U	-	-	-	0.018	-	-	-	-	-	-	0.022
	970827-MW9-29-01	27-Aug-97		-	-	0.005 U	-	-	-	-	0.035	0.009	-	0.005 U	-	-	-	0.029	-	-	-	-	-	-	0.03
	980217-MW9-29-01	17-Feb-98		-	-	0.005	-	-	-	-	0.021	0.019	-	0.005 U	-	-	-	0.022	-	-	-	-	-	-	0.25
	980602-MW9-29-07	2-Jun-98		-	-	0.01	-	-	-	-	0.037	-	-	-	-	-	-	0.04	-	-	-	-	-	-	-
	981116-MW9-29-02	16-Nov-98		-	-	0.009	-	-	-	-	0.071	-	-	-	-	-	-	0.058	-	-	-	-	-	-	-
	990511-MW9-29-03	11-May-99		-	-	0.005 U	-	-	-	-	0.018	-	-	-	-	-	-	0.017	-	-	-	-	-	-	-
	991026-MW9-29-02	26-Oct-99		-	-	0.015	-	-	-	-	0.22	0.048	-	0.014	-	-	-	0.16	-	-	-	-	-	-	0.14
	000328-MW9-29-102	28-Mar-00		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	010327-MW9-29-102	27-Mar-01		-	-	0.012	-	-	-	-	0.225	0.0306	-	0.0089	-	-	-	0.158	-	-	-	-	-	-	0.0914
	020403-MW9-29-101	3-Apr-02		-	-	0.005 U	-	-	-	-	0.0063	0.005 U	-	0.005 U	-	-	-	0.0065	-	-	-	-	-	-	0.0198
	030318-MW9-29-103	18-Mar-03		-	-	0.01 U	-	-	-	-	0.0015 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040812-MW9-29-001[6]	12-Aug-04		-	-	0.002	-	-	-	-	0.0014	0.002 U	-	0.001 U	-	-	-	0.00272	-	-	-	-	-	-	0.005 U
	050926-MW-9-29-109	26-Sep-05		-	-	0.00368	-	-	-	-	0.001 U	0.00224	-	0.001 U	-	-	-	0.00216	-	-	-	-	-	-	0.00515
	061013-MW-9-29-103	13-Oct-06		-	-	0.00306	-	-	0.00019	-	0.00118	0.00115 U	-	0.00089	-	-	0.00002 J	0.0016	-	0.0002 U	0.00001 J	-	-	-	0.0231
	2708-080604-MW9-29-109	4-Jun-08		128. J	0.00011	0.0075	1.25 J	0.00488	0.00216 J	80.7 J	0.0252 J	0.057	265.	0.0293 J	80.5 J	8.67 J	0.00021	0.0599	13.7	0.0011 J	0.000163 J	11.8	0.000167 J	0.0999 J	0.181
	2708-080604-MW9-29-110	4-Jun-08		99.9 J	0.00015	0.00858	1.01 J	0.00404	0.00387 J	55. J	0.0343 J	0.067	227.	0.0421 J	57.4 J	5.64 J	0.00016	0.0563	11.5	0.0017 J	0.000215 J	11.	0.000255 J	0.126 J	0.201
	2708-080916-MW-9-29-132	16-Sep-08		-	0.00021	0.0155	1.27	0.00508	0.00223	32.6	0.0516	0.0887	197.	0.0798	37.	3.5	0.00028	0.0733	8.45	0.008 U	0.000293	6.88	0.0007	0.192	0.247

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Analytical Results - mg/l (ppm)																					
				Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEQ 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [3]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [3]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
MW-09-29	2708-090326-MW9-29-102	26-Mar-09	18 - 28	10.1	0.00014 J	0.0048	0.153	0.00049	0.000274	19.1	0.00917	0.0143 J	21.7	0.00805	14.2	0.452 J	0.00005 U	0.0123	2.17	0.0004 U	0.000066	10.4	0.000115	0.0563 J	0.0442 J
	2708-090813-MW-9-29-120	13-Aug-09	(fill WBZ)	6.25	0.001 U	0.00493	0.0749	0.001 U	0.001 U	17.6	0.0188	0.00926	12.2	0.00297	13.7	0.228	0.0001 U	0.0155	1.76	0.001 U	0.001 U	12.1	0.001 U	0.0528	0.0286
MW-10-25	951207-MW10-25-01	7-Dec-95	14 - 24	-	ND>0.005	0.034	-	0.002 U	0.005	-	0.11	0.005 U	-	0.005 U	-	-	0.0002 U	0.29	-	0.005 U	0.005 U	-	0.01 U	-	0.95
	960320-MW10-25-01	20-Mar-96	(fill WBZ)	-	-	0.035	-	-	0.005	-	0.089	0.005 U	-	0.01 U	-	-	-	0.28	-	-	-	-	-	-	0.86
	960617-MW10-25-01	17-Jun-96		-	-	0.028	-	-	-	-	0.043	0.005 U	-	0.005 U	-	-	-	0.2	-	-	-	-	-	-	0.48
	960930-MW10-25-01	30-Sep-96		-	-	0.041	-	-	-	-	0.13	0.005 U	-	0.02 U	-	-	-	0.43	-	-	-	-	-	-	1.3
	970225-MW10-25-01	25-Feb-97		-	-	0.058	-	-	-	-	0.17	0.005 U	-	0.005 U	-	-	-	0.41	-	-	-	-	-	-	1.3
	970827-MW10-25-01	27-Aug-97		-	-	0.045	-	-	-	-	0.36	0.005 U	-	0.05 U	-	-	-	0.83	-	-	-	-	-	-	3.
	980216-MW10-25-01	16-Feb-98		-	-	0.048	-	-	-	-	0.16	0.005 U	-	0.015 U	-	-	-	0.39	-	-	-	-	-	-	1.5
	980601-MW10-25-02	1-Jun-98		-	-	0.031	-	-	-	-	0.12	-	-	-	-	-	-	0.29	-	-	-	-	-	-	-
	061213-MW-10-25-131	13-Dec-06		-	-	0.0441	-	-	0.00243	-	0.0946	0.00465	-	0.000877	-	-	-	0.356	-	0.0054 J	0.000034	-	-	-	1.23
	2708-080604-MW10-25-108	4-Jun-08		388.	0.00002 U	0.0289	0.0226	0.00867	0.00176	193.	0.0608	0.00062 J	302.	0.00014 J	107.	12.8	0.00005 U	0.257	160.	0.0017 J	0.000011 U*	141.	0.00229	0.387	0.769
	2708-080917-MW-10-25-136	17-Sep-08		-	0.00005 J	0.0268	0.0502	0.00709	0.00222	277.	0.0639	0.00161	345.	0.00056	114.	14.4	0.00006 J	0.237	150.	0.004 U	0.000031	152.	0.00189	0.407	0.751
	2708-090326-MW10-25-101	26-Mar-09		376.	0.000036 J	0.0216	0.0897	0.00679	0.00167	206.	0.0664	0.00127 J	272.	0.000389	106.	12.9 J	0.00006 J	0.231	133.	0.0004 U	0.0001	123.	0.00218	0.414 J	0.795 J
	2708-090813-MW-10-25-124	13-Aug-09		232.	0.001 U	0.0282	0.098	0.00818	0.00142	199.	0.0541	0.004 U	258.	0.001 U	92.7	10.8	0.0001 U	0.234	114.	0.0028	0.001 U	105.	0.00162	0.339	0.804
MW-10-61	951206-MW10-61-01	6-Dec-95	50 - 60	-	-	-	-	-	-	-	-	-	-	0.005 U	-	-	-	-	-	-	-	-	-	-	-
	960321-MW10-61-01	21-Mar-96	(alluvial WBZ)	-	-	0.005	-	-	0.002 U	-	0.027	0.009	-	0.005 U	-	-	-	0.022	-	-	-	-	-	-	0.025
	960620-MW10-61-01	20-Jun-96		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.007	-	-	-	-	-	-	0.008
	961002-MW10-61-01	2-Oct-96		-	-	0.006	-	-	-	-	0.016	0.005 U	-	0.005 U	-	-	-	0.011	-	-	-	-	-	-	0.012
	970226-MW10-61-01	26-Feb-97		-	-	0.005 U	-	-	-	-	0.018	0.005 U	-	0.005 U	-	-	-	0.015	-	-	-	-	-	-	0.015
	970828-MW10-61-01	28-Aug-97		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	980218-MW10-61-01	18-Feb-98		-	-	0.005 U	-	-	-	-	0.01	0.005 U	-	0.005 U	-	-	-	0.009	-	-	-	-	-	-	0.015
	980603-MW10-61-16	3-Jun-98		-	-	0.006	-	-	-	-	0.009	-	-	-	-	-	-	0.009	-	-	-	-	-	-	-
	981117-MW10-61-08	17-Nov-98		-	-	0.008	-	-	-	-	0.017	-	-	-	-	-	-	0.014	-	-	-	-	-	-	-
	990512-MW10-61-06	12-May-99		-	-	0.005 U	-	-	-	-	0.026	-	-	-	-	-	-	0.022	-	-	-	-	-	-	-
	991026-MW10-61-05	26-Oct-99		-	-	0.005 U	-	-	-	-	0.0084	0.005 U	-	0.005 U	-	-	-	0.0082	-	-	-	-	-	-	0.11
	000329-MW10-61-105	29-Mar-00		-	-	0.0068	-	-	-	-	0.0144	0.0148	-	0.005 U	-	-	-	0.0145	-	-	-	-	-	-	0.0474
	011010-MW10-61-109	10-Oct-01		-	-	0.005 U	-	-	-	-	0.0015 U	0.001 U	-	0.005 U	-	-	-	0.003 U	-	-	-	-	-	-	0.005 U
	020404-MW10-61-109	4-Apr-02		-	-	0.0063	-	-	-	-	0.0321	0.0091	-	0.005 U	-	-	-	0.0293	-	-	-	-	-	-	0.0339
	020924-MW10-61-104	24-Sep-02		-	-	0.005 U	-	-	-	-	0.0056	0.01 U	-	0.01 U	-	-	-	0.0064	-	-	-	-	-	-	0.014
	030319-MW10-61-111	19-Mar-03		-	-	0.01 U	-	-	-	-	0.0062	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	031003-MW10-61-108 [6]	3-Oct-03		-	-	0.03	-	-	-	-	0.003	0.003 U	-	0.014	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040813-MW10-61-005[6]	13-Aug-04		-	-	0.00227	-	-	-	-	0.00355	0.00414	-	0.001 U	-	-	-	0.013	-	-	-	-	-	-	0.0183
	050928-MW10-61-121	28-Sep-05		-	-	0.00664	-	-	-	-	0.00844	0.0166	-	0.00272	-	-	-	0.0108	-	-	-	-	-	-	0.0447
	061017-MW-10-61-108	17-Oct-06		-	-	0.00367	-	-	0.00057	-	0.0021	0.0178	-	0.00112	-	-	0.00002 J	0.0059	-	0.0003 J	0.000012 J	-	-	-	0.757
	2708-080604-MW10-61-105	4-Jun-08		0.969	0.00073	0.0041	0.0548	0.00005	0.000846	53.7	0.00507	0.00304	1.81	0.000662	36.9	2.5	0.00005 U	0.00499	3.73	0.0004 J	0.000014 U*	31.2	0.000017 U*	0.0487	0.0196
	2708-080917-MW-10-61-135	17-Sep-08		-	0.00196	0.00627	0.0913	0.0002	0.00432	59.6	0.0157	0.0161	9.93	0.0042	39.2	2.78	0.00005 J	0.0132	4.34	0.004 U	0.000043	33.2	0.000102	0.189	0.0718
	2708-090326-MW10-61-100	26-Mar-09		5.41	0.000926 J	0.006	0.136	0.00035	0.00208	57.4	0.0214	0.0171 J	9.28	0.00588	36.3	2.54 J	0.00005 U	0.0185	3.94	0.0004 J	0.00002 U	29.4	0.000101	0.192 J	0.054 J
	2708-090813-MW-10-61-122	13-Aug-09		4.55	0.00239 J	0.00578	0.0899	0.001 U	0.00261	60.	0.0284	0.0125	6.74	0.00271	38.3	2.74	0.0001 U	0.0189	4.05	0.001 U	0.001 U	30.4	0.001 U	0.129	0.0458
MW-11-32	951207-MW11-32-01	7-Dec-95	21 - 31	-	ND>0.005	0.005 U	-	0.002 U	0.002 U	-	0.005 U	0.005 U	-	0.005 U	-	-	0.0002 U	0.005 U	-	0.005 U	0.0005 U	-	0.01 U	-	0.005 U
	960320-MW11-32-01	20-Mar-96	(fill WBZ)	-	-	0.005 U	-	-	0.002 U	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.008
	960930-MW11-32-01	30-Sep-96		-	-	0.005 U	-	-	0.005 U	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	960930-MW11-32-02	30-Sep-96		-	-	0.005 U	-	-	0.005 U	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	970225-MW11-32-01	25-Feb-97		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	970826-MW11-32-01	26-Aug-97		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	980216-MW11-32-01	16-Feb-98		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	061212-MW-11-32-130	12-Dec-06		-	-	0.002	-	-	0.00004	-	0.00126	0.00321	-	0.00131	-	-	-	0.0019	-	0.004 U	0.000017 J	-	-	-	0.0056
	2708-080604-MW11-32-111	4-Jun-08		0.117 J	0.00003	0.00192	0.0212	0.00002 U*	0.000018	22.	0.00081	0.00321	22.7	0.00103	6.48	1.3	0.00005 U	0.00148	2.75	0.0002 J	0.00001 U*	6.56	0.000003 U	0.00362	0.00234
	2708-080917-MW-11-32-134	17-Sep-08		-	0.00003 J	0.00198	0.0324	0.00006	0.000053	27.2	0.0012	0.00292	27.	0.00289	7.69	1.51	0.00005 U	0.00236	2.99	0.004 U	0.000013 J	6.98	0.000013 J	0.006	0.0079
	2708-090402-MW11-32-136	2-Apr-09		4.27	0.0001 UJ	0.00308	0.0753	0.00024	0.0001 U	32.9	0.00637	0.00895 J	37.8	0.00657	10.5	1.82 J	0.00005 U	0.0112 J	3.13	0.0015 UJ	0.000035 U	7.39	0.000037 J	0.0307 J	0.0388 J
	2708-090811-MW-11-32-100	11-Aug-09		0.852	0.001 U	0.00212	0.0255	0.001 U	0.001 U	22.2	0.00178	0.004 U	22.1	0.0017	6.71	1.23	0.0001 U	0.00202	2.44 J	0.001 U	0.001 U	5.82	0.001 U	0.00578	0.00642
MW-12-36	951207-MW12-36-01	7-Dec-95	25 - 35	-	ND>0.005	0.005 U	-	0.002 U	0.002 U	-	0.005 U	0.006	-	0.005 U	-	-	0.0002 U	0.005 U	-	0.005 U	0.005 U	-	0.01 U	-	0.012
	991028-MW12-36-18	28-Oct-99	(fill / alluvial WBZ)	-	-	0.005 U	-	-	-	-	0.0084	0.005 U	-	0.005 U	-	-	-	0.0082	-	-	-	-	-	-	0.011
	040825-MW12-36-017[6]	25-Aug-04		-	-	0.00297	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.002 U	-	-	-	-	-	-	0.005 U
	050927-MW-12-36-116	27-Sep-05		-	-	0.00213	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.002 U	-	-	-	-	-	-	0.005 U
	061024-MW-12-36-115	24-Oct-06		-	-	0.00328	-	-	0.00009	-	0.0002 J	0.00034	-	0.00006	-	-	0.00002 U	0.0012	-	0.0002 U	0.000007 U	-	-	-	0.0346
	2708-080604-MW12-36-106	4-Jun-08		0.079 J	0.00006	0.00256	0.0347	0.00001 U*	0.000027	39.8	0.00023	0.0003 J	3.32	0.000102	22.6	2.43	0.00005 U	0.00141	1.69	0.0002 J	0.000005 U*	9.2	0.000003 U	0.00219	0.00289
	2708-080916-MW-12-36-127	16-Sep-08		-	0.00005	0.00304	0.035	0.00001 J	0.000031	46.5	0.00003 U	0.00022	4.47	0.000032	26.9	3.71	0.00005 U	0.00101	1.7 J	0.004 U	0.000003 U	10.5	0.000003 U	0.00138	0.00281
	2708-090402-MW12-36-134	2-Apr-09		0.0197	0.000082 J	0.002	0.0322	0.00001 J	0.000072	40.	0.00009 J	0.00027 J	2.68	0.000039	22.3	2.25 J	0.00005 U	0.00146 J	1.55	0.0004 U	0.000044	8.95	0.000002 U	0.00263 J	0.003
	2708-090817-MW-12-36-137	17-Aug-09		0.1 U	0.001 U	0.00593	0.0413	0.001 U	0.001 U	49.5	0.00137	0.004 U	6.13	0.001 U	27.7	5.14	0.0001 U	0.00161	1.67	0.001 U	0.001 U	10.9	0.001 U	0.002 U	0.0071

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
				Analytical Results - mg/l (ppm)																					
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEQ 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [3]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [3]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
MW-13-30	980602-MW13-30-12	2-Jun-98	19 - 29	-	-	0.015	-	-	-	-	0.009	0.007	-	0.005 U	-	-	-	0.008	-	-	-	-	-	-	0.008
	980826-MW13-30-11	26-Aug-98	(fill WBZ)	-	-	0.015	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.014
	981119-MW13-30-19	19-Nov-98		-	-	0.008	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	990217-MW13-30-014	17-Feb-99		-	-	0.014	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.018
	990513-MW13-30-13	13-May-99		-	-	0.0091	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	991028-MW13-30-20	28-Oct-99		-	-	0.01	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	000403-MW13-30-120	3-Apr-00		-	-	0.0131	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	001005-MW13-30-18	5-Oct-00		-	-	0.0104	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	010329-MW13-30-119	29-Mar-01		-	-	0.013	-	-	-	-	0.005 U	0.01 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	020405-MW13-30-116	5-Apr-02		-	-	0.0108	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0122
	030319-MW13-30-115	19-Mar-03		-	-	0.01 U	-	-	-	-	0.003 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040825-MW13-30-018[6]	25-Aug-04		-	-	0.0144	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.002 U	-	-	-	-	-	-	0.005 U
	060404-MW-13-30-122	4-Apr-06		-	-	0.0137	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.002 U	-	-	-	-	-	-	0.005 U
	061027-MW-13-30-121	27-Oct-06		-	-	0.0138	-	-	0.00047	-	0.00093	0.00052	-	0.000102	-	-	0.00002 U	0.00459	-	0.0002 U	0.000007 U	-	-	-	0.264
	2708-080604-MW13-30-112	4-Jun-08		0.172	0.00004	0.0498	0.0547	0.00001 U*	0.000081	53.1	0.00073	0.0017	33.1	0.000382	22.3	1.46	0.00005 U	0.00545	3.16	0.0009 J	0.000014 U*	14.5	0.000006 U	0.0158	0.00218
MW-13-61	980602-MW13-61-13	2-Jun-98	50 - 60	-	-	0.007	-	-	-	-	0.013	0.015	-	0.005 U	-	-	-	0.017	-	-	-	-	-	-	0.028
	980825-MW13-61-03	25-Aug-98	(alluvial WBZ)	-	-	0.008	-	-	-	-	0.036	0.027	-	0.005 U	-	-	-	0.03	-	-	-	-	-	-	0.042
	981116-MW13-61-03	16-Nov-98		-	-	0.006	-	-	-	-	0.018	0.02	-	0.005 U	-	-	-	0.019	-	-	-	-	-	-	0.044
	990512-MW13-61-04	12-May-99		-	-	0.0083	-	-	-	-	0.066	0.028	-	0.005 U	-	-	-	0.054	-	-	-	-	-	-	0.038
	991026-MW13-61-03	26-Oct-99		-	-	0.0069	-	-	-	-	0.01	0.0066	-	0.005 U	-	-	-	0.012	-	-	-	-	-	-	0.017
	000328-MW13-61-104	28-Mar-00		-	-	0.0086	-	-	-	-	0.0095	0.0074	-	0.005 U	-	-	-	0.0116	-	-	-	-	-	-	0.0144
	001004-MW13-61-03	4-Oct-00		-	-	0.009	-	-	-	-	0.017	0.0155	-	0.005 U	-	-	-	0.0192	-	-	-	-	-	-	0.0253
	010327-MW13-61-103	27-Mar-01		-	-	0.0096	-	-	-	-	0.0146	0.0147	-	0.005 U	-	-	-	0.0129	-	-	-	-	-	-	0.0166
	011009-MW13-61-106	9-Oct-01		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0117
	020403-MW13-61-102	3-Apr-02		-	-	0.0064	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0479
	020924-MW13-61-106	24-Sep-02		-	-	0.012	-	-	-	-	0.005 U	0.01 U	-	0.01 U	-	-	-	0.005 U	-	-	-	-	-	-	0.011
	030317-MW13-61-101	17-Mar-03		-	-	0.01 U	-	-	-	-	0.015 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	031003-MW13-61-109 [6]	3-Oct-03		-	-	0.02 U	-	-	-	-	0.0067	0.003 U	-	0.006 U	-	-	-	0.0063	-	-	-	-	-	-	0.02 U
	040813-MW13-61-003[6]	13-Aug-04		-	-	0.00772	-	-	-	-	0.0018	0.00237	-	0.001 U	-	-	-	0.0138	-	-	-	-	-	-	0.00613
	050927-MW-13-61-114	27-Sep-05		-	-	0.00993	-	-	-	-	0.00294	0.00749	-	0.00231	-	-	-	0.00594	-	-	-	-	-	-	0.029
	060404-MW-13-61-123	4-Apr-06		-	-	0.00843	-	-	-	-	0.00176	0.003	-	0.001 U	-	-	-	0.004	-	-	-	-	-	-	0.00506
MW-14-110	981116-MW14-110-06	16-Nov-98	98 - 108	-	-	0.012	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	990216-MW14-110-005	16-Feb-99	(alluvial WBZ)	-	-	0.013	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.03
	990512-MW14-110-09	12-May-99		-	-	0.012	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	990823-MW14-110-06	23-Aug-99		-	-	0.011	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.01 U
	991027-MW14-110-09	27-Oct-99		-	-	0.01	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	991027-MW14-110-10	27-Oct-99		-	-	0.01	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0054
	000329-MW14-110-109	29-Mar-00		-	-	0.0115	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0107
	000329-MW14-110-110	29-Mar-00		-	-	0.0123	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	000615-MW14-110-102	15-Jun-00		-	-	0.0136	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	001005-MW14-110-06	5-Oct-00		-	-	0.041	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	001220-MW14-110-102	20-Dec-00		-	-	0.013	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	010328-MW14-110-108	28-Mar-01		-	-	0.0127	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	011009-MW14-110-105	9-Oct-01		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.01 U
	011213-MW14-110-101	13-Dec-01		-	-	0.01 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0104
	020404-MW14-110-108	4-Apr-02		-	-	0.0103	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	020711-MW14-110-101	11-Jul-02		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	020924-MW14-110-105	24-Sep-02		-	-	0.005 U	-	-	-	-	0.005 U	0.01 U	-	0.01 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	021217-MW14-110-102	17-Dec-02		-	-	0.011	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	030318-MW14-110-108	18-Mar-03		-	-	0.011	-	-	-	-	0.015 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	030602-MW14-110-101	2-Jun-03		-	-	0.038	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	031003-MW14-110-[6]	3-Oct-03		-	-	0.02 U	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	030112-MW14-110-101 [6]	12-Jan-04		-	-	0.044	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040824-MW14-110-014[6]	24-Aug-04		-	-	0.0114	-	-	-	-	0.001 U	0.002 U	-	0.001 U	-	-	-	0.00279	-	-	-	-	-	-	0.005 U
	050922-MW-14-110-104	22-Sep-05		-	-	0.0134	-	-	-	-	0.005 U	0.002 U	-	0.001 U	-	-	-	0.0041	-	-	-	-	-	-	0.025 U
	061013-MW-14-110-104	13-Oct-06		-	-	0.012	-	-	0.00047	-	0.00058	0.0006	-	0.000319	-	-	0.00002 J	0.0028	-	0.0003 J	0.000007 U	-	-	-	0.0175
	2708-080603-MW14-110-104	3-Jun-08		1.21	0.00012	0.0121	0.0618	0.00006	0.00243	160.	0.002	0.00301	4.75	0.00132	104.	16.1	0.00005 J	0.00344	9.08	0.0005 J	0.000007 J	40.8	0.000016 J	0.00422	0.00655
	2708-080916-MW-14-110-131	16-Sep-08		-	0.00015	0.0113	0.0793	0.00011	0.00198	166.	0.00531	0.00416	7.29	0.00194	103.	15.9	0.00005 U	0.00571	9.04	0.004 U	0.000019 J	42.	0.00003	0.00774	0.012
	2708-090326-MW14-110-103	26-Mar-09		1.36	0.000122 J	0.0105	0.0729	0.00006	0.0016	156.	0.00184	0.0032 J	4.45	0.000979	93.5	14.5 J	0.00005 U	0.00354	8.11	0.0004 U	0.00002 U	36.5	0.000002 U	0.00538 J	0.0067 J
	2708-090812-MW-14-110-117	12-Aug-09		0.864	0.001 U	0.0118	0.0711	0.001 U	0.00362	163.	0.00838	0.004 U	4.35	0.001 U	102.	15.8	0.0001 U	0.007	8.12	0.001 U	0.001 U	35.9	0.001 U	0.00442	0.00814

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
				Analytical Results - mg/l (ppm)																					
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEQ 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [5]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [9]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
MW-15-50	991029-MW15-50-25	29-Oct-99	40 - 50	-	-	0.011	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0096
	000403-MW15-50-125	3-Apr-00	(alluvial WBZ)	-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0202
	000615-MW15-50-105	15-Jun-00		-	-	0.005 U	-	-	-	-	0.006	0.005 U	-	0.005 U	-	-	-	0.0064	-	-	-	-	-	-	0.0359
	000615-MW15-50-106	15-Jun-00		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0388
	001005-MW15-50-14	5-Oct-00		-	-	0.0054	-	-	-	-	0.0176	0.0081	-	0.005 U	-	-	-	0.0121	-	-	-	-	-	-	0.0393
	001221-MW15-50-105	21-Dec-00		-	-	0.0134	-	-	-	-	0.0585	0.0188	-	0.011	-	-	-	0.042	-	-	-	-	-	-	0.0272
	001221-MW15-50-106	21-Dec-00		-	-	0.0123	-	-	-	-	0.0193	0.0402	-	0.0125	-	-	-	0.0306	-	-	-	-	-	-	0.0334
	010330-MW15-50-124	30-Mar-01		-	-	0.0098	-	-	-	-	0.0058	0.005 U	-	0.005 U	-	-	-	0.0067	-	-	-	-	-	-	0.0107
	011010-MW15-50-111	10-Oct-01		-	-	0.005 U	-	-	-	-	0.0015 U	0.0063	-	0.005 U	-	-	-	0.003 U	-	-	-	-	-	-	0.0646
	011010-MW15-50-112	10-Oct-01		-	-	0.005 U	-	-	-	-	0.0015 U	0.004	-	0.005 U	-	-	-	0.003 U	-	-	-	-	-	-	0.0412
	011214-MW15-50-104	14-Dec-01		-	-	0.01 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0089
	011214-MW15-50-105	14-Dec-01		-	-	0.01 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.011	-	-	-	-	-	-	0.0084
	020405-MW15-50-119	5-Apr-02		-	-	0.0063	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0204
	020711-MW15-50-104	11-Jul-02		-	-	0.0118	-	-	-	-	0.0187	0.0183	-	0.0154	-	-	-	0.0228	-	-	-	-	-	-	0.0929
	020711-MW15-50-104	11-Jul-02		-	-	0.0103	-	-	-	-	0.0189	0.0219	-	0.0166	-	-	-	0.0232	-	-	-	-	-	-	0.0972
	020925-MW15-50-110	25-Sep-02		-	-	0.016	-	-	-	-	0.017	0.027	-	0.018	-	-	-	0.025	-	-	-	-	-	-	0.092
	020925-MW15-50-111	25-Sep-02		-	-	0.021	-	-	-	-	0.045	0.062	-	0.05	-	-	-	0.061	-	-	-	-	-	-	0.24
	021218-MW15-50-107	18-Dec-02		-	-	0.012	-	-	-	-	0.005 U	0.0078	-	0.0091	-	-	-	0.013	-	-	-	-	-	-	0.034
	030321-MW15-50-122	21-Mar-03		-	-	0.012	-	-	-	-	0.0056	0.011	-	0.0095	-	-	-	0.016	-	-	-	-	-	-	0.045
	030603-MW15-50-105	3-Jun-03		-	-	0.018	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	031006-MW15-50-113 [6]	6-Oct-03		-	-	0.04 U	-	-	-	-	0.002 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	030113-MW-15-50-105 [6]	13-Jan-04		-	-	0.02 U	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	030113-MW-15-50-106 [6]	13-Jan-04		-	-	0.02 U	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040825-MW15-50-020[6]	25-Aug-04		-	-	0.0172	-	-	-	-	0.00141	0.00265	-	0.001 U	-	-	-	0.00529	-	-	-	-	-	-	0.005 U
	050929-MW15-50-126	29-Sep-05		-	-	0.0285	-	-	-	-	0.0156	0.00512	-	0.00229	-	-	-	0.0174	-	-	-	-	-	-	0.0123
	061031-MW-15-50-127	31-Oct-06		-	-	0.0225	-	-	0.00032	-	0.00226	0.00505	-	0.00186	-	-	0.00005 J	0.0126	-	0.0025	0.000096 J	-	-	-	0.0633
	2708-080603-MW15-50-103	3-Jun-08		81.6	0.00021	0.0295	0.757	0.00308	0.00496	218.	0.0262	0.0747	173.	0.0511	159.	28.4	0.00045	0.0461	15.2 J	0.0016 J	0.000281	41.1	0.0001	0.211	0.164
	2708-080916-MW-15-50-128	16-Sep-08		-	0.00046	0.0371	0.594	0.00175	0.0108	94.1	0.0305	0.0703	59.7	0.0544	62.3	11.5	0.00085	0.0388	6.36	0.008 U	0.00029	31.1	0.0004	0.212	0.155
	2708-090402-MW15-50-131	2-Apr-09		104.	0.00181 J	0.0722	1.05	0.00393	0.00799	244.	0.0872	0.168 J	225.	0.000003 U	167.	29.4 J	0.00036	0.107 J	18.8	0.0021 J	0.000005 U	42.4	0.0009	0.626 J	0.0003 U
	2708-090817-MW-15-50-133	17-Aug-09		173.	0.00212 J	0.12	1.82	0.00813	0.0161	259.	0.18	0.294	346.	0.129	187.	30.6	0.000562	0.207	24.5	0.0032	0.001 U	44.6	0.005 U	1.02	0.801
MW-15-66	991026-MW15-66-07	26-Oct-99	60.5 - 66.5	-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	000329-MW15-66-108	29-Mar-00	(alluvial WBZ)	-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	000615-MW15-66-104	15-Jun-00		-	-	0.0054	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0214
	001005-MW15-66-08	5-Oct-00		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	001221-MW15-66-104	21-Dec-00		-	-	0.0055	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	010328-MW15-66-107	28-Mar-01		-	-	0.0066	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	011010-MW15-66-110	10-Oct-01		-	-	0.005 U	-	-	-	-	0.0015 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0241
	011213-MW15-66-103	13-Dec-01		-	-	0.01 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0133
	020404-MW15-66-107	4-Apr-02		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	020711-MW15-66-103	11-Jul-02		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	020925-MW15-66-109	25-Sep-02		-	-	0.005 U	-	-	-	-	0.005 U	0.01 U	-	0.01 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	021218-MW15-66-105	18-Dec-02		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.0057
	021218-MW15-66-106	18-Dec-02		-	-	0.005 U	-	-	-	-	0.005 U	0.005 U	-	0.005 U	-	-	-	0.005 U	-	-	-	-	-	-	0.005 U
	030318-MW15-66-107	18-Mar-03		-	-	0.01 U	-	-	-	-	0.015 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	030603-MW15-66-104	3-Jun-03		-	-	0.01 U	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	031006-MW15-66-112 [6]	6-Oct-03		-	-	0.04 U	-	-	-	-	0.002 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040113-MW-15-66-104 [6]	13-Jan-04		-	-	0.02 U	-	-	-	-	0.001 U	0.003 U	-	0.006 U	-	-	-	0.005 U	-	-	-	-	-	-	0.02 U
	040813-MW15-66-006[6]	13-Aug-04		-	-	0.00477	-	-	-	-	0.0027	0.00295	-	0.001 U	-	-	-	0.00553	-	-	-	-	-	-	0.00895
	050929-MW15-66-125	29-Sep-05		-	-	0.0191	-	-	-	-	0.0242	0.0581	-	0.0228	-	-	-	0.0406	-	-	-	-	-	-	0.146
	061017-MW-15-66-109	17-Oct-06		-	-	0.00653	-	-	0.00051	-	0.00419	0.00959	-	0.0047	-	-	0.00004 J	0.0081	-	0.0006 J	0.000503	-	-	-	0.0658
	2708-080603-MW15-66-102	3-Jun-08		130.	0.00017	0.0143	1.29	0.00555	0.0018	78.4	0.0313	0.0804	279.	0.0508	83.7	6.62	0.00023	0.0551	18.1	0.0014 J	0.0083	12.	0.0001	0.135	0.212
	2708-080916-MW-15-66-129	16-Sep-08		-	0.00028	0.0247	1.39	0.00577	0.00224	47.9	0.0508	0.114	246.	0.0955	56.	4.1	0.00019 J	0.0843	13.9	0.008 U	0.00871	7.54	0.0005	0.169	0.291
	2708-090402-MW15-66-133	2-Apr-09		176.	0.00192 J	0.104	1.63	0.000008 U	0.0024	83.	0.00003 UJ	0.298 J	0.004 U	0.000003 U	83.7	6.47 J	0.00018 J	0.187 J	25.6	0.0015 UJ	0.000005 U	15.	0.0018	0.977 J	0.0003 U
	2708-090817-MW-15-66-135	17-Aug-09		233.	0.00163 J	0.151	2.45	0.00884	0.00469	116.	0.233	0.438	540.	0.196	124.	9.69	0.0005 U	0.288	32.6	0.0022	0.0131	18.4	0.01 U	1.06	1.19
MW-16-45	040826-MW16-45-028[6]	26-Aug-04	30 - 45	-	-	0.00917	-	-	-	-	0.0138	0.00473	-	0.00138	-	-	-	0.131	-	-	-	-	-	-	0.011
	041222-MW16-45-103[6]	22-Dec-04	(alluvial WBZ)	-	-	0.0825	-	-	-	-	0.0267	0.02	-	0.01 U	-	-	-	0.17	-	-	-	-	-	-	0.122
	050401-013	1-Apr-05		-	-	0.0097	-	-	-	-	0.00182	0.001 U	-	0.00113	-	-	-	0.00834	-	-	-	-	-	-	0.01 U
	0506-22-MW-16-45-05	22-Jun-05		-	-	0.0093	-	-	-	-	0.015	0.02	-	0.0099	-	-	-	0.023	-	-	-	-	-	-	0.04 U

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
				Analytical Results - mg/l (ppm)																					
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEQ 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [3]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [3]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
MW-16-45	060403-MW-16-45-118	3-Apr-06	30 - 45	-	-	0.0109	-	-	-	-	0.0111	0.02 U	-	0.0133	-	-	-	0.02 U	-	-	-	-	-	-	0.05 U
	061212-MW-16-45-129	12-Dec-06	(alluvial WBZ)	-	-	0.00838	-	-	0.00015	-	0.00267	0.00291	-	0.0022	-	-	-	0.0065	-	0.004	0.000032	-	-	-	0.0066
	2708-070731-MW-16-45-148	31-Jul-07		0.0615 J	0.00138 U*	0.00883 U*	0.0644	0.0008 U	0.00038 U	96.3	0.00954 J	0.0027 U	51.3	0.00054 U	69.1 J	2.65	0.0002 U	0.0107	1.54	0.005 UJ	0.00012 U	37.3	0.0008 U	0.004 UJ	0.033 U
	2708-080521-MW16-45-128	21-May-08		0.0246	0.00017	0.00822	0.0596	0.00003	0.000012	90.4	0.0013	0.00034	41.5	0.000404	60.	2.44	0.00005 U	0.00587	1.25 U*	0.0007 U*	0.000003 U	36.1	0.000003 U	0.0017	0.00178 J
	2708-080917-MW-16-45-133	17-Sep-08		-	0.00014	0.00745	0.0726	0.00006	0.000047	105.	0.00236	0.00126	49.	0.00211	71.4	2.96	0.00005 U	0.00638	1.56 J	0.004 U	0.000031	47.2	0.000015 J	0.00291	0.00433
	2708-090402-MW16-45-135	2-Apr-09		33.	0.00051 J	0.0134	0.285	0.00178	0.000534	80.2	0.0597	0.0769 J	69.2	0.0256	56.6	2.52 J	0.00005 J	0.0564 J	3.35	0.0015 UJ	0.000362	36.2	0.000296	0.183 J	0.121 J
	2708-090814-MW-16-45-130	14-Aug-09		0.961	0.001 U	0.00862	0.0621	0.001 U	0.001 U	73.4	0.00364	0.004 U	31.8	0.00152	48.4	1.87	0.0001 U	0.00748	1.34	0.001 U	0.001 U	32.6	0.001 U	0.00621	0.00604
MW-16-65	040826-MW16-65-026[6]	26-Aug-04	55 - 65	-	-	0.00173	-	-	-	-	0.00137	0.00201	-	0.001 U	-	-	-	0.0197	-	-	-	-	-	-	0.00762
	040826-MW16-65-026[6]	26-Aug-04	(alluvial WBZ)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	041222-MW16-65-102[6]	22-Dec-04		-	-	0.0018	-	-	-	-	0.0101	0.002 U	-	0.001 U	-	-	-	0.0251	-	-	-	-	-	-	0.005 U
	050331-006	31-Mar-05		-	-	0.00276	-	-	-	-	0.00382	0.001 U	-	0.001 U	-	-	-	0.00545	-	-	-	-	-	-	0.01 U
	0506-21-MW-16-65-04	21-Jun-05		-	-	0.003	-	-	-	-	4. U	4. U	-	2. U	-	-	-	4. U	-	-	-	-	-	-	0.04 U
	060403-MW-16-65-119	3-Apr-06		-	-	0.00353	-	-	-	-	0.00112	0.001 U	-	0.001 U	-	-	-	0.002 U	-	-	-	-	-	-	0.005 U
	061023-MW-16-65-114	23-Oct-06		-	-	0.00311	-	-	0.00006	-	0.00133	0.00092	-	0.000136	-	-	0.00002 U	0.0024	-	0.0004 J	0.000007 J	-	-	-	0.127
	2708-070628-MW-16-65-115	28-Jun-07		0.463	0.001 U	0.00336	0.08	0.001 UJ	0.00038 U	39.7	0.00602	0.00298	24.6	0.0011	27.3	1.69	0.0002 U	0.00622	3.24	0.005 U	0.00012 U	40.8	0.001 U	0.005 U	0.033 U
	2708-080513-MW16-65-109	13-May-08		0.168	0.00013	0.0369	0.0693	0.00003	0.000044	50.3	0.00089	0.00078	27.6	0.00025	30.7	2.17	0.00003 U	0.00209	3.91	0.0003 J	0.00001 J	37.7	0.000003 U	0.00126	0.00149
	2708-080911-MW-16-65-112	11-Sep-08		-	0.00006 U*	0.00246	0.0601	0.00007	0.000032 U*	43.6	0.00222	0.0034	18.3	0.000653	30.2	1.7	0.00005 U	0.00512	4.1	0.004 U	0.000017 U*	40.3	0.000007 U*	0.0036	0.00599
	2708-090330-MW16-65-114	30-Mar-09		0.481	0.000005 U	0.0029	0.0669	0.00003	0.000018 J	42.8	0.00209	0.00236	23.7	0.000379	29.2	1.62	0.00005 U	0.00243	3.69	0.0004 U	0.000005 U	35.4	0.000002 U	0.00254	0.0032 J
	2708-090813-MW-16-65-126	13-Aug-09		2.23	0.001 U	0.00396	0.078	0.001 U	0.001 U	46.4	0.0136	0.00418	25.4	0.001 U	29.3	1.93	0.0001 U	0.00912	3.63	0.001 U	0.001 U	31.5	0.001 U	0.00757	0.00878
	2708-090813-MW-16-65-128	13-Aug-09		2.38	0.001 U	0.00383	0.0766	0.001 U	0.001 U	46.3	0.0137	0.00446	25.4	0.001 U	29.	1.92	0.0001 U	0.00932	3.58	0.001 U	0.001 U	31.4	0.001 U	0.00731	0.00637
MW-16-125	040826-MW16-125-025[6]	26-Aug-04	115 - 125	-	-	0.00461	-	-	-	-	0.00134	0.002 U	-	0.001 U	-	-	-	0.00542	-	-	-	-	-	-	0.005 U
	041221-MW16-125-100[6]	21-Dec-04	(alluvial WBZ)	-	-	0.00616	-	-	-	-	0.00195	0.00205	-	0.001 U	-	-	-	0.00683	-	-	-	-	-	-	0.005 U
	050330-001	30-Mar-05		-	-	0.00603	-	-	-	-	0.001 U	0.00108	-	0.001 U	-	-	-	0.00221	-	-	-	-	-	-	0.01 U
	0506-21-MW-16-125-03	21-Jun-05		-	-	0.0068	-	-	-	-	0.002	0.0027	-	1. U	-	-	-	2. U	-	-	-	-	-	-	0.02 U
	060330-MW-16-125-109	30-Mar-06		-	-	0.00509	-	-	-	-	0.001 U	0.002	-	0.001 U	-	-	-	0.00202	-	-	-	-	-	-	0.005 U
	061016-MW-16-125-106	16-Oct-06		-	-	0.00505	-	-	0.00006	-	0.00114	0.0215	-	0.000887 U	-	-	0.00002 U	0.0024	-	0.0003 J	0.000007 J	-	-	-	0.0089
	2708-070628-MW-16-125-116	28-Jun-07		1.65	0.001 U	0.00866	0.122	0.001 UJ	0.00038 U	58.7	0.00277	0.0035	27.9	0.00064	22.3	1.76	0.0002 U	0.0029	14.3	0.005 U	0.00012 U	35.4	0.001 U	0.00564	0.033 U
	2708-080515-MW16-125-127	15-May-08		0.612 J	0.00002 U	0.00874	0.117	0.00004	0.000008 J	65.4	0.0012	0.00162	29.	0.000269	24.6	1.79 J	0.00005 U	0.00192	14.7	0.0006 J	0.000031	31.3	0.000003 J	0.00212	0.00281
MW-17-79	050926-MW-17-79-110	26-Sep-05	38.5 - 78.5	-	-	0.00234	-	-	-	-	0.001 U	0.00311	-	0.001 U	-	-	-	0.00257	-	-	-	-	-	-	0.005 U
	061026-MW-17-79	26-Oct-06	(alluvial WBZ)	-	-	0.00159	-	-	0.00006	-	0.00122	0.00059	-	0.000056	-	-	0.00003 J	0.00645	-	0.0003 J	0.000007 U	-	-	-	0.895
	2708-070627-MW-17-79-112	27-Jun-07		0.248	0.001 U	0.00106	0.0821	0.001 U	0.00038 U	88.6	0.0114	0.0027 U	23.4	0.00054 U	82.2	0.705	0.0002 U	0.00795	2.36	0.005 U	0.00012 U	30.5	0.001 U	0.005 U	0.033 U
	2708-080514-MW17-79-120	14-May-08		0.0864	0.00002 U	0.00173	0.0747	0.00001 J	0.000018 J	91.6	0.00105	0.00049	28.2	0.000074	72.7	1.08	0.00005 U	0.00242	2.8	0.0007 J	0.000003 U	31.	0.000003 U	0.00069	0.00155
	2708-080911-MW-17-79-110	11-Sep-08		-	0.00002 UJ	0.0014	0.0776	0.00001 U*	0.000015 U*	99.7	0.00057 J	0.0006	24.6	0.000095	82.	0.846	0.00005 U	0.00171	2.77	0.004 U	0.000008 U*	36.2	0.000004 U*	0.00074	0.00263
	2708-081209-MW-17-79-009	9-Dec-08		0.0889	0.000006 J	0.001	0.0856	0.00001 J	0.000008 J	101.	0.000879	0.00032	23.7	0.000099	82.5	0.969	0.00005 U	0.00306	2.65	0.0005 J	0.000008 J	34.9	0.000004 J	0.00085	0.0034
	2708-090326-MW17-79-106	26-Mar-09		0.0449	0.000007 J	0.0011	0.0775	0.00001 J	0.000005 U	93.8	0.00063	0.00031 J	23.5	0.000026	74.	0.699 J	0.00005 U	0.00229	2.68	0.0005 J	0.000002 U	32.8	0.000002 UJ	0.00064 J	0.0017 J
	2708-090817-MW-17-79-134	17-Aug-09		0.457	0.001 U	0.00184	0.0874	0.001 U	0.001 U	97.4	0.00543	0.004 U	24.	0.001 U	78.1	0.831	0.0001 U	0.0057	2.6	0.0013	0.001 U	32.7	0.001 U	0.00234	0.00489
MW-18-30	2708-080514-MW18-30-121	14-May-08		106.	0.00095	0.00686	1.25	0.0027	0.00152	184.	0.0748	2.47	202.	0.339	143.	13.2	0.00092	1.72	8.47	0.0048 J	0.00142	88.5	0.0005	0.332	1.52
	NS (Dry)	17-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NS (Dry)	9-Dec-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2708-090812-MW-18-30-102	12-Aug-09		2.79	0.001 U	0.00412	0.692	0.001 U	0.001 U	133.	0.00683	0.0924	53.9	0.00977	164.	6.48	0.0001 U	0.322	6.78	0.0066	0.001 U	93.7	0.001 U	0.0273	0.0594
MW-18-180	2708-070628-MW-18-180-117	28-Jun-07	170 - 180	0.13	0.001 U	0.000848	0.0413	0.001 UJ	0.00038 U	38.5	0.001 U	0.0027 U	1.91	0.00054 U	19.6	0.288	0.0002 U	0.002 U	4.84	0.005 U	0.00012 U	22.3	0.001 U	0.005 U	0.033 U
	2708-080513-MW18-180-108	13-May-08	(alluvial WBZ)	0.0898	0.00003 J	0.00068	0.0303	0.00001 J	0.000044	41.	0.00067	0.0004	4.27	0.000174	19.3	0.178	0.00003 U	0.00128	4.56	0.0004 J	0.000012 J	17.2	0.000003 U	0.00028	0.00133
	2708-080911-MW-18-180-111	11-Sep-08		-	0.00003 U*	0.00071	0.0287	0.00002 U*	0.000022 U*	43.9	0.00016 J	0.00052	4.78	0.000183	21.	0.165	0.00005 U	0.00067	4.57	0.004 U	0.000013 U*	17.1	0.000005 U*	0.00021	0.00263
	2708-081209-MW-18-180-008	9-Dec-08		0.0812	0.000019 J	0.00059	0.0287	0.00001 J	0.000018 J	41.6	0.000326	0.0004	4.48	0.000212	19.8	0.146	0.00005 U	0.00099	4.32	0.0004 U	0.00001 J	15.8	0.000002 J	0.00021	0.0012
	2708-090326-MW18-180-104	26-Mar-09		0.048	0.000016 J	0.0006	0.0315	0.00001 U	0.000015 J	51.5	0.00016 J	0.00024 J	5.61	0.000105	23.5	0.206 J	0.00005 U	0.00071	4.63	0.0004 U	0.000002 U	16.7	0.000002 UJ	0.00021 J	0.0026 J
	2708-090817-MW-18-180-132	17-Aug-09		0.161	0.001 U	0.00124	0.0344	0.001 U	0.001 U	50.3	0.001 U	0.004 U	5.72	0.001 U	23.2	0.202	0.0001 U	0.001 U	4.23	0.001 U	0.001 U	15.9	0.001 U	0.002 U	0.004 U
MW-19-22	2708-070730-MW-19-22-143	30-Jul-07	12 - 22	2.88 J	0.00181 U*	0.00171 U*	0.0657	0.0008 U	0.00038 U	71.3	0.00961 J	0.00988 J	8.97 J	0.00946	25.	0.47	0.0002 U	0.012	3.27	0.005 UJ	0.00012 U	13.5	0.0008 U	0.0159 J	0.0409
	2708-080513-MW19-22-110	13-May-08	(fill WBZ)	4.81	0.00011	0.00045 J	0.0317	0.00016	0.000091	23.2	0.00403	0.00567	5.05	0.0161	7.82	0.12	0.00012 U	0.0106	1.49 J	0.0002 J	0.00003	6.02	0.000016 J	0.0201	0.0365
	2708-080910-MW-19-22-105	10-Sep-08		-	0.00027	0.00112	0.0468	0.00011	0.000044	55.	0.00495	0.00489	6.71	0.00689 J	21.5 J	0.26	0.00005 U	0.0104	2.99	0.0004 U	0.00002 U*	12.9	0.000024	0.00995	0.0252
	2708-081209-MW-19-22-014	9-Dec-08		2.18	0.000296	0.001 U	0.0547	0.00007 J	0.000051 J	56.8	0.00436	0.00576	7.78	0.00535	23.2	0.47	0.00005 U	0.0108	3.02	0.002 U	0.000049 J	12.6	0.000026 J	0.00996	0.0388
	2708-090330-MW19-22-112	30-Mar-09		0.172	0.000069	0.0003 J	0.0275	0.00001 J	0.000006 J	37.3	0.0006	0.00114	2.24	0.001	13.5	0.207	0.00005 U	0.00294	2.3	0.0004 U	0.000005 U	9.51	0.000002 U	0.0016	0.0038 J
	2708-090817-MW-19-22-140	17-Aug-09		8.2	0.00171 J	0.002	0.08	0.001 U	0.001 U	51.7	0.0149	0.0145	10.5	0.0163	20.4	0.235	0.0001 U	0.0223	2.97	0.001 U	0.001 U	11.9	0.001 U	0.0303	0.0528
MW-19-125	2708-070627-MW-19-125-110	27-Jun-07	115 - 125	0.505	0.001 U	0.00617	0.086	0.001 U	0.00038 U	63.	0.0039	0.0027 U	38.1	0.00054 U	21.7	2.72	0.0002 U	0.00478	3.72	0.005 U	0.00012 U	12.7	0.001 U	0.005 U	0.033 U
	2708-080514-MW19-125-117	14-May-08	(alluvial WBZ)	0.0151	0.00002 U	0.00786	0.0656	0.00002 J	0.000008 U	61.	0.0008	0.00018	35.8	0.000016 J	22.2	2.49	0.00005 U	0.00406	3.85	0.0003 J	0.000003 U	11.2	0.000003 U	0.00023	0.0008
	2708-080910-MW-19-125-106	10-Sep-08		-	0.00002 U	0.00715	0.0776	0.0001	0.000022	61.4	0.00422	0.00345	40.5	0.000622 J	22.9 J	2.66	0.00005 U	0.00741	4.05	0.0002 U	0.000006 U*	11.6	0.000012	0.00431	0.0055
	2708-081209-MW-19-125-013	9-Dec-08		0.199	0.000005 U	0.0089	0.0644	0.00002 J	0.000013 J	60.1	0.000894	0.00065	35.2	0.000089	22.3	2.49	0.00005 U	0.0024	3.81	0.0004 U	0.000005 U	10.7	0.000002 U	0.00069	0.0024
	2708-090330-MW19-125-110	30-Mar-09		0.0716	0.000005 U	0.0083	0.0582	0.00001 U	0.000005 U	60.	0.00059	0.00034	35.	0.000003 U	21.8	2.57	0.00005 U	0.00164	3.84	0.0007 J	0.000005 U	10.8	0.000002 U	0.00002 U	0.0018 J
	2708-090813-MW-19-125-123	13-Aug-09		0.1 U	0.001 U	0.00842	0.0622	0.001 U	0.001 U	58.9	0.00101	0.004 U	35.1	0.001 U	21.5	2.55	0.0001 U	0.0025	3.58	0.0013	0.001 U	10.3	0.001 U	0.002 U	0.004 U

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
				Analytical Results - mg/l (ppm)																					
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEQ 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [9]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [9]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
MW-19-180	2708-070627-MW-19-180-111	27-Jun-07	170 - 180	0.22	0.001 U	0.00088	0.035	0.001 U	0.00038 U	49.5	0.00103	0.0027 U	10.6	0.00054 U	28.5	0.415	0.0002 U	0.002 U	4.75	0.005 U	0.00012 U	25.1	0.001 U	0.005 U	0.033 U
	2708-080513-MW19-180-115	13-May-08	(alluvial WBZ)	0.376	0.00002 J	0.00099	0.0332	0.00004	0.000008 U	52.	0.00115	0.00129	13.1	0.000265	32.3	0.463	0.00003 U	0.00132	4.41	0.0002 U	0.000003 U	17.1	0.000003 U	0.00123	0.00435
	2708-080910-MW-19-180-104	10-Sep-08		-	0.00002 U*	0.00111	0.0302	0.00002 U*	0.000008 U	52.8	0.00077 J	0.00079	13.4	0.000222 J	33. J	0.463	0.00005 U	0.00079	4.5	0.0002 U	0.000005 U*	18.1	0.000004	0.00038	0.00423
	2708-081209-MW-19-180-012	9-Dec-08		0.0488	0.000005 U	0.001	0.0313	0.00001 U	0.000007 J	51.8	0.000451	0.00037	12.5	0.000079	33.4	0.452	0.00005 U	0.00095	4.35	0.0004 U	0.000005 U	17.	0.000002 U	0.00014 J	0.0023
	2708-090330-MW19-180-108	30-Mar-09		0.0321	0.000005 U	0.0008	0.0294	0.00001 U	0.000005 U	49.6	0.00022 J	0.00022	12.4	0.000003 U	31.3	0.489	0.00005 U	0.00081	4.15	0.0004 U	0.000005 U	16.	0.000002 U	0.000002 U	0.0018 J
	2708-090813-MW-19-180-125	13-Aug-09		0.331	0.001 U	0.00138	0.0328	0.001 U	0.001 U	51.3	0.00173	0.004 U	12.7	0.001 U	31.8	0.513	0.0001 U	0.00132	4.06	0.001 U	0.001 U	15.8	0.001 U	0.002 U	0.004 U
MW-20-120	2708-070628-MW-20-120-114	28-Jun-07	110 - 120	1.37	0.001 U	0.00535	0.0564	0.001 UJ	0.00038 U	57.8	0.00206	0.00394	9.34	0.000664	11.3	1.7	0.0002 U	0.00269	7.59	0.005 U	0.00012 U	19.7	0.001 U	0.00669	0.033 U
	2708-080515-MW20-120-126	15-May-08	(alluvial WBZ)	7.49	0.00019	0.00599	0.103	0.00025	0.000068	72.2	0.00674	0.0181	23.6	0.00309	18.	2.97 J	0.00005 U	0.00645	6.82	0.0008 J	0.000067	18.6	0.000033	0.0227	0.0169
	2708-080910-MW-20-120-103	10-Sep-08		-	0.00008 U*	0.00536	0.11	0.00032	0.00012	73.5	0.00836	0.0237	29.5	0.00501 J	19.8 J	2.99	0.00005 U	0.00772	6.5	0.0008	0.000039 U*	19.5	0.0001	0.0308	0.0247
	2708-081209-MW-20-120-010	9-Dec-08		4.69	0.000068	0.0049	0.105	0.00021	0.000062	70.3	0.00557	0.0143	19.5	0.00258	19.3	2.93	0.00005 U	0.0058	5.69	0.0004 U	0.000021	17.	0.000029	0.0207	0.0147
	2708-081209-MW-20-120-011	9-Dec-08		5.04	0.000071	0.005	0.108	0.00022	0.000072	70.7	0.00597	0.0152	20.7	0.0028	19.7	2.98	0.00005 U	0.00609	5.85	0.0004 U	0.000029	17.3	0.000032	0.022	0.0171
	2708-090330-MW20-120-113	30-Mar-09		4.2	0.000049 J	0.0056	0.0914	0.00012	0.000032	71.5	0.00354	0.00814	21.7	0.00146	20.2	3.72	0.00005 U	0.00412	5.44	0.0005 J	0.000005 U	16.9	0.000002 U	0.0118	0.0099 J
	2708-090812-MW-20-120-116	12-Aug-09		2.12	0.001 U	0.00451	0.0937	0.001 U	0.001 U	71.6	0.00282	0.0051	14.1	0.00106	19.9	3.35	0.0001 U	0.00331	5.31	0.0011	0.001 U	17.	0.001 U	0.00928	0.0096
MW-21-12	2708-070719-MW-21-12-129	19-Jul-07	7 - 12	0.24	0.0008 U	0.000384 U*	0.0826	0.0008 U	0.00038 U	52.2	0.001 U	0.0027 UJ	26.2	0.00054 U	1.83	0.265	0.0002 U	0.00349	5.56	0.005 U	0.00012 U	23.1	0.0008 U	0.00639	0.033 U
	2708-080514-MW21-12-122	14-May-08	(fill WBZ)	4.22	0.00011	0.00075	0.0822	0.00018	0.000074	34.	0.00289	0.0078	25.5	0.00749	11.7	1.87	0.00005 U	0.0137	4.75	0.0002 J	0.000029	18.1	0.000023	0.0514	0.0114
	NS (Dry)	15-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2708-081208-MW-21-12-007	8-Dec-08		0.264	0.000042 J	0.0002 U	0.0766	0.00001 J	0.000005 U	54.2	0.000774	0.0007	26.6	0.000967	18.5	2.48	0.00005 U	0.00441	5.44	0.0004 U	0.000008 J	24.4	0.000004 J	0.0041	0.0022
	2708-090401-MW21-12-126	1-Apr-09		18.6	0.000005 U	0.0014	0.209	0.00066	0.000192	49.3	0.0126 J	0.0218 J	54.	0.000003 U	20.2	2.63	0.00005 J	0.0654	5.8	0.0004 U	0.000005 U	22.4	0.00012	0.146	0.0516 J
	2708-090811-MW-21-12-105	11-Aug-09		0.146	0.001 U	0.001 U	0.0661	0.001 U	0.001 U	43.8	0.00197	0.004 U	22.3	0.001 U	16.2	2.25	0.0001 U	0.00276	4.88 J	0.001 U	0.001 U	23.1	0.001 U	0.002 U	0.00609
MW-21-75	2708-070718-MW-21-75-124	18-Jul-07	65 - 75	0.0419	0.0008 U	0.00641	0.0818	0.008 U	0.00038 U	79.5	0.0014	0.0027 U	12.4	0.00054 U	20.8	1.86	0.0002 U	0.00564	4.98	0.005 U	0.00012 U	15.6	0.0008 U	0.004 U	0.033 U
	2708-080514-MW21-75-123	14-May-08	(alluvial WBZ)	0.0104	0.00002 U	0.011	0.113	0.00001 J	0.000008 U	85.2	0.00196	0.00042	44.4	0.000032	26.3	3.77	0.00005 U	0.00558	5.42	0.0007 J	0.000003 U	20.3	0.000003 U	0.00054	0.00172
	2708-080915-MW-21-75-125	15-Sep-08		-	0.00002 U	0.0133	0.0939	0.00001 J	0.000008 U	76.7	0.00069	0.00031	46.	0.000027	24.1	3.84	0.00005 U	0.00171	5.08	0.004 U	0.000003 U	20.2	0.000005 J	0.00061	0.004
	2708-081208-MW-21-75-004	8-Dec-08		0.0078	0.000018 J	0.0134	0.0992	0.00001 U	0.000005 U	75.5	0.000429	0.00018	44.8	0.000064	24.2	3.42	0.00005 U	0.00179	5.	0.0004 U	0.00001 J	18.6	0.000002 U	0.00053	0.0018
	2708-090331-MW21-75-124	31-Mar-09		0.0005 U	0.000005 U	0.0151	0.0966	0.000008 UJ	0.000005 U	72.1	0.00035 J	0.00027	44.2	0.000015 J	24.	3.6	0.00005 U	0.00228	4.77	0.0004 U	0.000005 U	17.7	0.000002 UJ	0.00053	0.0035
	2708-090817-MW-21-75-136	17-Aug-09		0.1 U	0.001 U	0.0168	0.0963	0.001 U	0.001 U	72.2	0.00146	0.004 U	45.	0.001 U	23.8	3.59	0.0001 U	0.0021	4.58	0.001 U	0.001 U	16.9	0.001 U	0.002 U	0.004 U
MW-21-115	2708-070718-MW-21-115-123	18-Jul-07	105 - 115	0.275	0.0008 U	0.00472	0.0158	0.0008 U	0.00038 U	58.3	0.001 U	0.0027 U	0.405	0.00054 U	7.22	0.0578	0.0002 U	0.00228	3.55	0.005 U	0.00012 U	12.4	0.0008 U	0.004 U	0.033 U
	2708-080515-MW21-115-125	15-May-08	(alluvial WBZ)	0.0323 J	0.00003 J	0.00672	0.0324	0.00001 J	0.000008 U	42.	0.00031	0.00013	8.24	0.000018 J	15.6	1.7 J	0.00005 U	0.00149	3.62	0.0005 J	0.000036	13.9	0.000003 U	0.00034	0.00238
	2708-080915-MW-21-115-126	15-Sep-08		-	0.00003 J	0.00671	0.0438	0.00006	0.000015 J	45.6	0.00714	0.00195	13.7	0.000437	17.5	2.07	0.00005 U	0.00768	3.85	0.004 U	0.000004 J	15.4	0.00001 J	0.00459	0.0058
	2708-081208-MW-21-115-005	8-Dec-08		0.0626	0.000014 J	0.006	0.0317	0.00001 U	0.000005 U	38.7	0.000481	0.00012	10.8	0.000053	15.2	1.66	0.00005 U	0.00171	3.56	0.0004 U	0.000005 U	13.8	0.000002 U	0.0005	0.0009
	2708-090331-MW21-115-120	31-Mar-09		0.142	0.000005 U	0.0062	0.032	0.000008 UJ	0.000005 U	34.6	0.00061	0.00034	10.6	0.000104	14.1	1.66	0.00005 U	0.00207	3.17	0.0004 U	0.000005 U	13.2	0.000002 UJ	0.00108	0.0096
	2708-090811-MW-21-115-101	11-Aug-09		0.884	0.001 U	0.00728	0.0404	0.001 U	0.001 U	35.5	0.00829	0.004 U	12.2	0.001 U	15.6	1.63	0.0001 U	0.00672	3.27 J	0.001 U	0.001 U	13.7	0.001 U	0.00304	0.00566
MW-21-165	2708-070718-MW-21-165-122	18-Jul-07	156 - 166	0.617	0.0008 U	0.00176	0.0504	0.0008 U	0.00038 U	183.	0.00373	0.0027 U	0.685	0.00054 U	1.15	0.0499	0.0002 U	0.00538	15.6	0.005 U	0.00012 U	17.4	0.0008 U	0.0126	0.033 U
	2708-080514-MW21-166-124	14-May-08	(alluvial WBZ)	0.281	0.00013	0.00298	0.0191	0.000003 U	0.000008 U	44.3	0.0037	0.00063	0.783	0.000069	3.48	0.188	0.00005 U	0.00276	9.65	0.0004 J	0.000003 U	17.6	0.000003 U	0.00798	0.00096
	2708-080915-MW-21-166-124	15-Sep-08		-	0.0001	0.0044	0.0188	0.00001 J	0.000009 J	47.3	0.0156	0.00098	2.41	0.000104	5.03	0.349	0.00005 U	0.0102	7.5	0.004 U	0.000005 J	18.1	0.000006 J	0.00443	0.00348
	2708-081208-MW-21-166-006	8-Dec-08		0.324	0.000104	0.004	0.0213	0.00001 U	0.000014 J	44.7	0.00192	0.00095	3.17	0.000202	6.61	0.417	0.00005 U	0.00218	7.74	0.0004 U	0.000005 J	17.	0.000002 U	0.00378	0.0028
	2708-090331-MW21-165-122	31-Mar-09		0.425	0.00009	0.0039	0.0228	0.000008 UJ	0.000014 J	41.8	0.00195	0.00158	3.12	0.000295	7.31	0.44	0.00005 U	0.00187	8.71	0.0004 U	0.000005 U	18.	0.000002 UJ	0.00273	0.0024
	2708-090811-MW-21-166	11-Aug-09		4.66	0.001 U	0.00511	0.0484	0.001 U	0.001 U	43.4	0.0143	0.0102	8.4	0.0022	9.45	0.613	0.0001 U	0.0079	8.22 J	0.001 U	0.001 U	16.6	0.001 U	0.0139	0.0119
PW-01	061012-PW-01-102	12-Oct-06	40 - 80	-	-	0.00491	-	-	0.00003	-	0.00072	0.00007 J	-	0.000009 J	-	-	0.00002 J	0.0005	-	0.0006 J	0.000007 U	-	-	-	0.0016
	2708-070731-PW-01-80-147	31-Jul-07	(alluvial WBZ)	0.02 UJ	0.00109 U*	0.00356 U*	0.0779	0.0008 U	0.000744	91.2	0.001 UJ	0.0027 U	37.9	0.00054 U	62.8 J	3.58	0.0002 U	0.00222	3.43	0.005 UJ	0.00012 U	36.1	0.0008 U	0.004 UJ	0.0664
	2708-080604-PW01-80-107	4-Jun-08		0.03 UJ	0.00002 U	0.00174	0.0707	0.00001 U*	0.000339	75.	0.00058	0.00018 J	38.7	0.000008 U*	48.1	3.75	0.00005 U	0.00143	3.21	0.0012 J	0.000011 U*	32.1	0.000003 U	0.00026	0.00432
	NS*	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7 and/or 7000 Series
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium [4]	Calcium	Chromium	Copper [4]	Iron	Lead [4]	Magnesium	Manganese	Mercury	Nickel [4]	Potassium	Selenium	Silver [4]	Sodium	Thallium	Vanadium	Zinc [4]
				Analytical Results - mg/l (ppm)																					
HUMAN HEALTH SCREENING LEVEL VALUES [8,10]																									
Fish Consumption																									
	EPA 2004 NRWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	#	4.6	#	4.2	#	#	#	#	26.
	Portland Harbor specific fish consumption rate			#	0.064	0.000014	#	#	#	#	#	#	#	#	#	0.01	0.0000146	0.46	#	0.42	#	#	#	#	2.6
	DEQ 2004 AWQC (organism only)			#	0.64	0.00014	#	#	#	#	#	#	#	#	#	0.1	0.000146	4.6	#	4.2	#	#	#	#	26.
Drinking Water																									
	MCL			0.2 [9]	0.006	0.01	2.	0.004	0.005	#	0.1	1.3	0.3 [9]	0.015	#	0.05 [9]	0.002	#	#	0.05	0.1 [9]	#	0.002	#	5.0 [9]
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			37.	0.015	0.000045	7.3	0.073	0.018	#	#	1.5	26.	#	#	0.88	0.00057	0.73	#	0.18	0.18	#	#	0.26	11.
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [8,10]																									
	EPA 2004 NRWQC (chronic)			87.	#	0.15	#	#	0.000094	#	#	0.0027	#	0.00054	#	#	0.00077	0.016	#	0.005	#	#	#	#	0.036
	DEQ 2004 AWQC (chronic)			#	1.6 [3]	#	#	#	0.00038 [7]	#	#	0.0036 [7]	#	0.00054 [7]	#	#	0.000012	0.049 [7]	#	0.035 [7]	0.00012 [7]	#	#	#	0.033
	Oak Ridge National Laboratory (Tier II SCV) [2]			#	0.03	0.0031 [3]	#	#	#	#	#	#	#	#	#	0.12	0.0013	#	#	#	0.00036	#	#	#	#
Temporary Well Point Samples 2004																									
B-56	040602-101	2-Jun-04	18 - 22	-	-	0.00177	-	-	-	-	0.00803	0.00856	-	0.00446	-	-	-	0.0121	-	-	-	-	-	-	0.0288
	040603-102	3-Jun-04	40 - 44	-	-	0.00401	-	-	-	-	0.0595	0.0202	-	0.00232	-	-	-	0.0256	-	-	-	-	-	-	0.27
	040603-103	3-Jun-04	60 - 64	-	-	0.0143	-	-	-	-	0.046	0.0336	-	0.0046 U	-	-	-	0.117	-	-	-	-	-	-	0.224
	040603-104	3-Jun-04	80 - 84	-	-	0.0179	-	-	-	-	0.316	0.194	-	0.0256	-	-	-	0.145	-	-	-	-	-	-	0.702
	040604-106	4-Jun-04	100 - 104	-	-	0.00869	-	-	-	-	0.0375	0.0415	-	0.00457	-	-	-	0.0505	-	-	-	-	-	-	0.1
	040614-115	14-Jun-04	136 - 140	-	-	0.029	-	-	-	-	0.827	0.457	-	0.0306	-	-	-	0.291	-	-	-	-	-	-	6.51
	040614-116	14-Jun-04	174 - 178	-	-	0.00369	-	-	-	-	0.0351	0.0218	-	0.00204	-	-	-	0.0246	-	-	-	-	-	-	0.177

Note:
'-' = not analyzed
# = Reference Level not established
AWQC = Ambient Water Quality Criteria
DEQ = Oregon Department of Environmental Quality
EPA = U.S. Environmental Protection Agency

J = Estimated Concentration
MCL = Maximum Contaminant Level
mg/l = milligrams/liter
NRWQC = National Recommended Water Quality Criteria
ND = not detected above detection limit indicated

NS = No Sample
ppm = parts per million
PRG = Potential Remediation Goal
R = Original result identified as an unusable positive result during validation review (result removed from data set).

SCV = Secondary Chronic Value
U = Non-detect above method reporting limit
U* = Compound considered non-detect because it was also detected in associated blank at similar concentration levels.
UJ = Compound not detected, but the reporting limit is probably higher

1 = Sample number prefix: 2708-
2 = Tier II SCV values were taken from Suter II, G.W. and Tasco, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2
3 = value for Arsenic V
4 = This is a hardness dependent metal. All values were calculated based on 25 mg// of $CaCO_3$
5 = Due to mislabeling in the field or due to laboratory misidentification, the laboratory report transposed results for MW4-35 and MW-4-57 in August 1997. Tables attribute data to the correct well.
6 = Monitoring well purged & sampled with low-flow protocol as per EPA/540/S-95/504 (April 1996)
7 = These values were taken from OAR 340-41 Table 20 because they will remain the enforceable values for these particular analytes.
8 = Unless otherwise noted Screening Level Values are from *Portland Harbor Joint Service Control Strategy, Final*, December 2005 (7/16/07 revision)
9 = National Secondary Drinking Water Standards
10 = EPA, under CERCLA authority, has identified the Safe Drinking Water Acts MCLs and AWQCs (federal and state once approved) as potential ARARs under CERCLA. The final determination will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to The EPA Portland Harbor ROD, due to an exceedance of an SLV in upland stormwater will be evaluated and prioritized on a case by case basis.

*Location PW-01 was converted to an extraction well following 2nd quarter of 2008.

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
MW-1-22	061030-MW-1-22-123	30-Oct-06	11 - 21	3.9	5.2	6.6	5.3	2.1 J	7.4 J	-	320.	0.48 U	0.53 U	-	-	-	-	-	-	0.57 U	0.67 U	0.63 U	0.72 U	-	-	Acetone=38 J Carbon Disulfide = 900 Methylene Chloride = 2.2 J
	2708-070720-MW-1-22-131	20-Jul-07		2.88	4.6	6.	-	-	7.42		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW1-22-105	12-May-08		1.8	2.9	3.9	3.1	1.3	4.4	0.06 J	330.	0.039 U	0.19 J	0.05 J	-	0.97 J	0.36 J	0.044 U	0.041 U	0.054 U	0.09 J	0.11 J	0.048 U	0.045 U	0.071 U	Acetone = 17 J Carbon Disulfide = 390. p-IPT = 0.21J
	NS (Dry)	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW1-22-132	2-Apr-09		0.73	0.76	1.	0.75	0.32 J	1.07 J	0.045 U	54.	0.04 J	0.05 J	0.037 U	-	0.23 J	0.09 J	0.044 U	0.041 U	0.054 U	0.07 J	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090820-MW-1-22-163	20-Aug-09		3.37	4.44	7.3	5.41	1.84	7.25	0.5 U	375.	0.5 U	0.5 U	0.5 U	-	1.57	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-1-55	2708-070719-MW-1-55-127	19-Jul-07	45 - 55	0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW1-55-104	12-May-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.2 J
	2708-080915-MW-1-55-121	15-Sep-08		0.045 U	0.52	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-1-55-002	8-Dec-08		0.045 U	0.12 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.09
	2708-090401-MW1-55-130	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.06 J
	2708-090820-MW-1-55-164	20-Aug-09		0.25 U	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-1-82	2708-070719-MW-1-82-126	19-Jul-07	72 - 82	0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW1-82-103	12-May-08		0.11 J	0.1 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.05 J
	2708-080915-MW-1-82-119	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-1-82-001	8-Dec-08		0.07 J	0.22 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.10 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.05 Chloroform = 0.13 Chloromethane = 0.08
	2708-090401-MW1-82-128	1-Apr-09		0.05 J	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090820-MW-1-82-161	20-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5.42	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	2708-090820-MW-1-82-162	20-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-2-32	061016-MW-2-32-107	16-Oct-06	21.5 - 31.5	0.14 U	1.1	0.13 U	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	Acetone=13 J
	2708-070712-MW-2-32-120	12-Jul-07		0.5 UJ	0.5 UJ	0.5 UJ	-	-	1. UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW2-32-101	12-May-08		0.045 U	0.14 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.07 J	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080915-MW-2-32-120	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090401-MW2-32-127	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.09 U	0.045 U	2. U	0.039 U	0.09 J	0.04 J	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Chloromethane = 0.09 J
	2708-090812-MW-2-32-113	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	1. U	0.5 U	0.5 U	2. U	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-2-61	061011-MW-2-61-101	11-Oct-06	50 - 60	0.14 U	0.72	0.13 U	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	
	2708-070719-MW-2-61-128	19-Jul-07		0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW2-61-100	12-May-08		0.045 U	0.09 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080915-MW-2-61-118	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090401-MW2-61-125	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Chloromethane = 0.13 J
	2708-090812-MW-2-61-115	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	1. U	0.5 U	0.5 U	2. U	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-2-104	2708-070712-MW-2-104-119	12-Jul-07	94 - 104	0.5 UJ	0.54	0.5 UJ	-	-	1. UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW2-104-102	12-May-08		0.045 U	0.14 J	0.042 U	0.11 J	0.037 U	0.11 J	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.05 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon disulfide = 0.05 J
	2708-080915-MW-2-104-122	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080915-MW-2-104-123	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-2-104-003	8-Dec-09		0.045 U	0.16 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.10 UJ	0.039 U	0.031 U	0.037 U	-	0.04 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.07 J
	2708-090401-MW2-104-129	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.05 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Bromodichloromethane = 0.08 J Chloromethane = 0.14 J Dibromochloromethane = 0.09 J
	2708-090812-MW-2-104-111	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	1. U	0.5 U	0.5 U	2. U	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-3-26	061017-MW-3-26-110	17-Oct-06	15 - 25	0.14 U	0.11 U	0.13 U	0.22 U	0.11 U	0.22 U	-	0.65 J	0.095 U	0.11 U	-	-	-	-	-	-	0.14 J	0.14 U	0.13 U	0.15 U	-	-	
	2708-070629-MW-3-26-119	29-Jun-07		14.3 J	0.5 UJ	0.5 UJ	-	-	1.45 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW3-26-107	12-May-08		0.045 U	0.1 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.06 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080911-MW-3-26-115	11-Sep-08		0.05 J	0.66 U*	0.042 U	0.08 J	0.037 U	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW3-26-123	31-Mar-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090817-MW-3-26-139	17-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-3-56	040823-MW3-56-011	23-Aug-04	45 - 55	10.6	1. U	1. U	2. U	1. U	2. U	-	2. U	1. U	1. U	1. U	1. U	1. U	1. U	-	-	-	1. U	1. U	-	-	-	
	061024-MW-3-56-116	24-Oct-06		2.6	0.3 J	0.18 J	1.1	0.67	1.77	-	1.1 J	0.095 U	0.89 J	-	-	-	-	-	-	0.21 J	0.14 U	0.13 U	0.15 U	-	-	Acrylonitrile = 1.2 J 1,1,-DCA = 0.3 J
	2708-070626-MW-3-56-108	26-Jun-07		5.83	0.5 U	0.5 U	-	-	1.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW3-56-106	12-May-08		0.91	0.35 J	0.14 J	1.3	0.83	2.13	0.045 U	0.93 J	0.039 U	1.2 J	0.19 J	-	0.65 J	0.17 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,1-DCA = 0.22 J Acetone = 2.8 J n-B = 0.08 J, sec-B= 0.17 J
	2708-080911-MW-3-56-116	11-Sep-08		0.84	1.5 U*	0.09 J	1.1	0.63	1.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
MW-3-56	2708-090326-MW3-56-105	26-Mar-09	45 - 55	0.56	0.4 J	0.13 J	1.4	1.1	2.5	0.045 U	1.5 J	0.05 J	1.4 J	0.27 J	-	0.95 J	0.19 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,1-DCA = 0.29 J Acetone = 5.2 J n-B = 0.11 J, sec-B = 0.25 J tert-B = 0.1 J
	2708-090811-MW-3-56-107	11-Aug-09		5.33 J	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	1. U	0.5 UJ	1. UJ	0.5 UJ	1.09 J	2. UJ	-	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	
MW-4-35	061018-MW-4-35-113	18-Oct-06	24 - 34	3.	0.48 J	0.13 U	1.3	0.81	2.11	-	3.9	0.095 U	0.38 J	-	-	-	-	-	-	0.12 U	0.16 J	0.13 U	0.15 U	-	-	Acetone=30
	2708-070726-MW-4-35-137	26-Jul-07		0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW4-35-112	13-May-08		0.12 J	0.43 J	0.042 U	0.31 J	0.14 J	0.45 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW4-35-113	13-May-08		0.12 J	0.27 J	0.06 J	0.3 J	0.17 J	0.2 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080911-MW-4-35-109	11-Sep-08		6.5	1.4 U*	0.18 J	1.9	1.4	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW4-35-119	31-Mar-09		0.34 J	0.59	0.05 J	0.44 J	0.23 J	0.67 J	0.045 U	0.83 J	0.039 U	0.33 J	0.08 J	-	0.11 J	0.07 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090813-MW-4-35-121	13-Aug-09		2.63	0.5 U	0.5 U	1.31	0.81	2.12	0.5 U	2.66	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-4-57	960321-MW4-57-01	21-Mar-96	46 - 56	3,700.	35.	540.	80.	140.	220.	-	1,700.	10. U	10. U	10. U	22.	19.	13.	-	-	-	10. U	10. U	-	-	-	
	020405-MW4-57-117	5-Apr-02		18,800.	500. U	805.	-	-	1,000. U	-	-	-	-	-	-	-	-	-	-	-	500. U	-	-	-	-	
	040824-MW4-57-016	24-Aug-04		15,000.	100. U	748.	200. U	122.	122.	-	3,640.	100. U	100. U	100. U	100. U	100. U	100. U	-	-	-	100. U	100. U	-	-	-	
	061030-MW-4-57-122	30-Oct-06		7,100.	11. J	450.	24.	130.	154.	-	730.	2.4 U	10. J	-	-	-	-	-	-	2.9 U	3.4 U	3.2 U	3.6 U	-	-	Carbon Disulfide = 4 J Methylene Chloride = 9.3 J
	2708-070622-MW-4-57-101	22-Jun-07		0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-070723-MW-4-57-135	23-Jul-07		3,870. J	25. UJ	249. J	-	-	82. U*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW4-57-111	13-May-08		5,400.	13.	520.	30.	130.	160.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080911-MW-4-57-108	11-Sep-08		710.	3.8 U*	43.	15.	46.	61.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW4-57-121	31-Mar-09		6,700.	8.8 J	330.	22.	93.	115.	0.9 U	410.	0.78 U	11. J	2.4 J	-	38. J	4.2 J	0.88 U	0.82 U	1.1 U	1.3 U	1.6 U	0.96 U	0.9 U	1.5 U	
	2708-090817-MW-4-57-138	17-Aug-09		508.	5. U	32.1	12.7	31.2	43.9	5. U	50. U	5. U	5. U	5. U	-	16.4	10. U	5. U	5. U	5. U	5. U	5. U	5. U	5. U	5. U	
MW-4-101	061018-MW-4-101-112	18-Oct-06	89.5 - 99.5	170. U	2.	0.63	1.2	5.1	6.3	-	5.9	0.095 U	1.6 J	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	
	2708-070625-MW-4-101-106	25-Jun-07		39.5	1.14	0.5 U	-	-	3.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW4-101-114	13-May-08		11.	1.2	0.4 J	0.61	5.	5.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080910-MW-4-101-107	10-Sep-08		25.	2.	0.5	0.71	5.1	5.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW4-101-115	31-Mar-09		9.7	2.1	0.59	0.76	6.3	7.06	0.045 U	5.5	0.039 U	3.1	0.19 J	-	0.92 J	0.14 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090331-MW4-101-117	31-Mar-09		7.8	1.6	0.46 J	0.64	5.4	6.04	0.045 U	3.8	0.039 U	2.7	0.16 J	-	0.76 J	0.11 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090813-MW-4-101-119	13-Aug-09		4.66 J	1. J	0.5 U	1. U	3.88	3.88	0.5 U	3.08	0.5 U	2.25	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-5-32	951205-MW5-32-01	5-Dec-95	21 - 31	5. U	5. U	5. U	5. U	5. U	5. U	-	11.	5. U	5. U	5. U	5. U	5. U	5. U	-	-	-	5. U	5. U	-	-	-	
	061018-MW-5-32-114	18-Oct-06		0.14 U	0.11 U	0.13 U	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.12 J	0.14 U	0.13 U	0.15 U	-	-	
	2708-070625-MW-5-32-104	25-Jun-07		0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW5-32-118	14-May-08		0.045 U	0.08 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080910-MW-5-32-102	10-Sep-08		0.34 J	0.91 U*	0.05 J	0.078 U	0.04 J	0.04	0.045 U	0.47 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Acetone = 2.7
	2708-090330-MW5-32-111	30-Mar-09		0.07 J	0.21 J	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090812-MW-5-32-114	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	2. U	0.5 U	0.5 U	0.5 U	-	1. UJ	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-5-100	020405-MW5-100-114	5-Apr-02	88 - 98	8,750.	500. U	500. U	-	-	1,000. U	-	-	-	-	-	-	-	-	-	-	-	500. U	-	-	-	-	
	020405-MW5-100-115	5-Apr-02		8,950.	500. U	500. U	-	-	1,000. U	-	-	-	-	-	-	-	-	-	-	-	500. U	-	-	-	-	
	040824-MW5-100-015	24-Aug-04		11,500.	100. U	683.	200. U	253.	253.	-	12,100.	100. U	100. U	100. U	100. U	100. U	100. U	-	-	-	100. U	100. U	-	-	-	
	061027-MW-5-100-120	27-Oct-06		11,000.	18. J	560.	58.	240.	298.	-	8,700.	9.5 U	19. J	-	-	-	-	-	-	12. U	14. U	13. U	20. J	-	-	
	2708-070625-MW-5-100-103	25-Jun-07		10,100.	40. U	532.	200. U	223.	294.	-	7,320.	40. U	100. U	-	-	-	-	-	-	-	40. U	40. U	40. U	162.	-	
	2708-080514-MW5-100-119	14-May-08		12,000.	26. J	690.	89.	210.	299.	4.5 U	21,000.	3.9 U	20. J	5. J	-	120. J	6. J	4.4 U	4.1 U	5.4 U	6.1 U	7.7 U	19. J	300.	11. J	
	2708-080910-MW-5-100-100	10-Sep-08		11,000.	25. U*	640.	110.	210.	320.	4.5 U	22,000. J	3.9 U	18. J	5. J	-	110. J	6. J	4.4 U	4.1 U	5.4 U	6.1 U	7.7 U	31. J	350.	19. J	
	2708-090330-MW5-100-109	30-Mar-09		12,000.	25. J	710.	100.	140.	240.	2.3 U	12,000.	2. U	22. J	4.5 J	-	110.	6. J	2.2 U	2.1 U	2.7 U	3.1 U	3.9 U	32.	280.	19. J	p-IPT = 3. J
	2708-090812-MW-5-100-112	12-Aug-09		11,800.	50. U	703.	110.	151.	261.	50. U	12,400.	50. U	50. U	50. U	-	119. J	100. U	50. U	50. U	50. U	50. U	50. U	50. U	284.	50. U	
MW-5-175	020404-MW5-175-105	4-Apr-02	163 - 173	1. U	1. U	1. U	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061016-MW-5-175-05	16-Oct-06		0.14 U	1.1	0.13 U	0.22 U	0.11 U	0.22 U	-	0.61 J	0.095 U	0.11 U	-	-	-	-	-	-	0.12	0.14 U	0.13 U	0.15 U	-	-	
	2708-070625-MW-5-175-105	25-Jun-07		0.5 U	0.86	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW5-175-116	14-May-08		0.05 J	0.1 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.17 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080910-MW-5-175-101	10-Sep-08		0.045 U	0.57 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090330-MW5-175-107	30-Mar-09		0.06 J	0.05 J	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Bromodichloromethane = 0.16 J Bromoform = 0.1 J Dibromochloromethane = 0.16 J
	2708-090812-MW-5-175-110	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	2. U	0.5 U	0.5 U	0.5 U	-	1. UJ	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-8-29	061031-MW-8-29-124	31-Oct-06	18 - 28	93.	17.	16.	14.	12.	26.	-	2,100.	0.95 U	1.1 U	-	-	-	-	-	-	1.2 U	1.4 U	1.3 U	1.5 U	-	-	
	2708-080603-MW8-29-100	3-Jun-08		88.	26.	38.	30.	23.	53.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080911-MW-8-27-113	11-Sep-08		85.	14. U*	30.	23.	18.	41.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW8-29-118	31-Mar-09		200.	46.	36.	29.	21.	50.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090811-MW-8-29-106	11-Aug-09		78.4 J	13.4 J	26.4 J	-	- J	38. J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590	#	#
MW-8-56	951207-MW8-56-01	7-Dec-95	45 - 55	18600	1,400.	590.	600.	200.	800.	-	13,300.	100. U	100. U	100. U	100. U	110.	100. U	-	-	-	100. U	100. U	-	-	-	
	020405-MW8-56-118	5-Apr-02		26,400.	1. U	1,000.	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061031-MW-8-56-125	31-Oct-06		22,000.	270.	670.	420.	220.	640.	-	10,000.	19. U	21. U	-	-	-	-	-	-	23. U	27. U	26. U	29. U	-	-	
	061031-MW-8-56-126	31-Oct-06		21,000.	270.	710.	440.	230.	670.	-	9,600.	19. U	21. U	-	-	-	-	-	-	23. U	27. U	26. U	29. U	-	-	
	2708-080603-MW8-56-101	3-Jun-08		17,000.	240.	870.	640.	340.	980.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080915-MW-8-56-117	15-Sep-08		15,000.	270.	640.	430.	230.	660.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW8-56-116	31-Mar-09		20,000.	280.	900.	570.	310.	880.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090811-MW-8-56-104	11-Aug-09		17,800. J	256. J	1,070. J	-	-	1,130. J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-9-29	061013-MW-9-103	13-Oct-06	18 - 28	0.14 U	0.27 J	0.13 U	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	
	2708-080604-MW9-29-109	4-Jun-08		0.045 U	0.24 J	0.18 J	0.41 J	0.16 J	0.57 J	0.045 U	0.35 U*	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080604-MW9-29-110 (DUP)	4-Jun-08		0.045 U	0.21 J	0.16 J	0.35 J	0.14 J	0.49 J	0.045 U	0.27 U*	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080916-MW-9-29-132	16-Sep-08		0.045 U	0.38 J	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090326-MW9-29-102	26-Mar-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090813-MW-9-29-120	13-Aug-09		0.25 U	0.5 U	0.5 U	-	- J	1.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-10-25	061213-MW-10-25-131	13-Dec-06	14 - 24	120,000.	32,000.	770.	2,800.	1,300.	4,100.	-	11,000.	800.	20. J	-	-	-	-	-	-	12. U	14. U	13. U	15. U	-	-	Acrylonitrile = 100 J Acetone = 720 J Carbon Disulfide = 6,000 2-Butanone = 710
	2708-080604-MW10-25-108	4-Jun-08		180,000.	53,000.	970.	3,500.	1,600.	5,100.	45. U	11,000.	950.	31. U	37. U	-	240. J	70. J	44. U	41. U	54. U	61. U	77. U	48. U	45. U	71. U	Acetone = 2,600 J Carbon Disulfide = 5,500 J
	2708-080917-MW-10-25-136	17-Sep-08		170,000.	53,000.	1,000.	3,500.	1,700.	5,200.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090326-MW10-25-101	26-Mar-09		200,000.	47,000.	1,200.	4,700.	2,100.	6,800.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090813-MW-10-25-124	13-Aug-09		171,000.	51,300.	825.	-	-	4,470.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-10-61	020404-MW10-61-109	4-Apr-02	50 - 60	1. U	1. U	1. U	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061017-MW-10-61-108	17-Oct-06		0.14 U	0.24 J	0.13 U	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.18 J	0.14 U	0.13 U	0.15 U	-	-	
	2708-080604-MW10-61-105	4-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080917-MW-10-61-135	17-Sep-08		0.045 U	0.31 J	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090326-MW10-61-100	26-Mar-09		0.045 U	0.5 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090813-MW-10-61-122	13-Aug-09		0.25 U	0.5 U	0.5 U	-	-	1.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-11-32	960320-MW11-32-01	20-Mar-96	21 - 31	16,700.	3,300.	620.	840.	400.	1,240.	-	8,600.	2. U	42.	18.	110.	250.	79.	-	-	-	2. U	2.2	-	-	-	sec-B = 9, p-IPT = 35
	960617-MW11-32-01	17-Jun-96		2,800.	2,000.	1,000.	1,300.	640.	1,940.	-	4,100.	5. U	70.	17.	100.	260.	82.	-	-	-	5. U	5. U	-	-	-	sec-B = 10
	960617-MW11-32-02	17-Jun-96		4,100.	2,600.	960.	1,200.	580.	1,780.	-	5,600.	10. U	59.	14.	86.	220.	70.	-	-	-	10. U	10. U	-	-	-	sec-B = 8.8
	960930-MW11-32-01	30-Sep-96		17,000.	3,300.	900.	1,200.	560.	1,760.	-	13,900.	1,200. U	1,200. U	1,200. U	1,200. U	1,200. U	-	-	-	-	1,200. U	1,200. U	-	-	-	
	061212-MW-11-32-130	12-Dec-06		24,000.	5,500.	1,200.	1,800.	860.	2,660.	-	18,000.	86. J	38. J	-	-	-	-	-	-	23. U	28. J	26. U	29. U	-	-	
	2708-080604-MW11-32-111	4-Jun-08		16,000.	3,200.	990.	1,400.	690.	2,090.	9. U	16,000.	64. J	36. J	18. J	-	230. J	68. J	8.8 U	8.2 U	11. U	13. U	16. U	9.6 U	9. U	15. U	
	2708-080917-MW-11-32-134	17-Sep-08		17,000.	3,600.	1,200.	1,600.	800.	2,400.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW11-32-136	2-Apr-09		19,000.	4,600.	1,300.	1,900.	890.	2,790.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090811-MW-11-32-100	11-Aug-09		16,900. J	4,100. J	1,260. J	-	- J	2,630. J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-12-36	951207-MW12-36-01	7-Dec-95	25 - 35	92.	510.	150.	460.	170.	630.	-	2,300.	100.	50. U	50. U	36.	88.	57.	-	-	-	5,010. U	50. U	-	-	-	
	960321-MW12-36-01	21-Mar-96		210.	220.	140.	310.	180.	490.	-	1,900.	130.	10. U	10. U	22.	51.	37.	-	-	-	10. U	10. U	-	-	-	
	960620-MW12-36-01	20-Jun-96		250.	250.	120.	280.	160.	440.	-	1,500.	140.	10. U	10. U	16.	42.	13.	-	-	-	10. U	10. U	-	-	-	
	961002-MW12-36-01	2-Oct-96		330.	390.	130.	330.	180.	510.	-	1,100.	170.	50. U	50. U	18.	42.	14.	-	-	-	50. U	50. U	-	-	-	
	970226-MW12-36-01	26-Feb-97		260.	310.	120.	290.	180.	470.	-	960.	150.	4.	3.	1. U	31.	11.	-	-	-	1. U	1. U	-	-	-	p-IPT = 1
	970828-MW12-36-01	28-Aug-97		230.	430.	110.	280.	150.	430.	-	820.	150.	4.2	2.8	12.	30.	8.5	-	-	-	1. U	1. U	-	-	-	p-IPT = 1.9
	980218-MW12-36-01	18-Feb-98		140.	370.	82.	180.	100.	280.	-	530.	94.	2.2	1.8	-	22.	6.2	-	-	-	1. U	1. U	-	-	-	p-IPT = 1.1
	061024-MW-12-36-115	24-Oct-06		290.	790.	800.	1,000.	420.	1,420.	-	960.	0.48 U	11.	-	-	-	-	-	-	0.57 U	0.95 J	0.63 U	0.72 U	-	-	Acrolein = 41 J Methylene Chloride = 8.4 J
	2708-080604-MW12-36-106	4-Jun-08		79.	200.	140.	250.	100.	350.	0.045 U	210.	15.	2.3	1.3 J	-	17.	4.	0.044 U	0.041 U	0.054 U	0.15 J	0.077 U	0.048 U	0.15 J	0.071 U	n-B = 0.28 J, p-IPT = 0.46 J
	2708-080916-MW-12-36-127	16-Sep-08		290.	570.	600.	840.	330.	1,170.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW12-36-134	2-Apr-09		140.	270.	380.	560.	190.	750.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090817-MW-12-36-137	17-Aug-09		577.	1,480.	1,260.	-	-	2,530.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-13-30	061027-MW-13-30-121	27-Oct-06	19 - 29	350.	3.3	86.	21.	34.	55.	-	260.	0.095 U	38.	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	Chloroethane = 0.35 J 1,1-DCA = 1
	2708-080604-MW13-30-112	4-Jun-08		4,500.	55. J	1,600.	370.	400.	770.	23. U	21,000.	20. U	120. J	30. J	-	410. J	130. J	22. U	21. U	27. U	31. U	39. U	24. U	23. U	36. U	p-IPT = 35 J
MW-14-110	020404-MW14-110-108	4-Apr-02	98 - 108	1. U	1. U	1. U	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061013-MW-14-110-104	13-Oct-06		0.14 U	0.5	0.14 J	0.56	0.23 J	0.79 J	-	0.39 J	0.1 J	0.11 U	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	Acetone = 4.9 J
	2708-080603-MW14-110-104	3-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080916-MW-14-110-131	16-Sep-08		0.045 U	0.6	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090326-MW14-110-103	26-Mar-09		0.43 J	0.26 J	0.57	0.47 J	0.16 J	0.63 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090812-MW-14-110-117	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	1. U	0.5 U	0.5 U	2. U	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-15-50	020405-MW15-50-119	5-Apr-02	40 - 50	57,000.	1. U	1. U	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061031-MW-15-50-127	31-Oct-06		33,000.	200.	180.	240.	190.	430.	-	4,100.	67.	11. U	-	-	-	-	-	-	12. U	14. U	13. U	15. U	-	-	
	2708-080603-MW15-50-103	3-Jun-08		42000	200.	290.	360.	210.	570.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590	#	#
MW-15-50	2708-080916-MW-15-50-128	16-Sep-08	40 - 50	27000	150.	180.	230.	150.	380.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW15-50-131	2-Apr-09		59,000.	300.	350.	480.	270.	750.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090817-MW-15-50-133	17-Aug-09		51,600.	320.	335.	-	-	765.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15-66	020404-MW15-66-107	4-Apr-02	60.5 - 66.5	1. U	1. U	1. U	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061017-MW-15-66-109	17-Oct-06		0.14 U	0.11 U	0.13 U	0.22 U	0.11 U	0.22 U	-	1.5 J	0.095 U	0.11 U	-	-	-	-	-	-	0.2 J	0.14 U	0.13 U	0.15 U	-	-	Methylene Chloride = 0.23 J
	2708-080603-MW15-66-102	3-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080916-MW-15-66-129	16-Sep-08		27.	0.86	0.8	1.	0.66	1.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW15-66-133	2-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090817-MW-15-66-135	17-Aug-09		0.5 U	0.5 U	0.5 U	-	-	1.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16-45	040826-MW16-45-028	26-Aug-04	30 - 45	2,880.	959.	460.	546.	321.	867.	-	7,590.	50. U	50. U	50. U	50. U	50. U	50. U	-	-	-	50. U	50. U	50. U	-	-	
	061212-MW-16-45-129	12-Dec-06		5,000.	2,200.	770.	970.	480.	1,450.	-	14,000.	9.5 U	33. J	-	-	-	-	-	-	12. U	14. U	13. U	15. U	-	-	
	2708-070731-MW-16-45-148	31-Jul-07		4,230.	1,540.	615.	-	-	1,140.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080521-MW16-45-128	21-May-08		4,800.	1,400.	530.	620.	340.	960.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080917-MW-16-45-133	17-Sep-08		5,600.	1,800.	740.	910.	480.	1,390.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW16-45-135	2-Apr-09		4,200.	1,700.	810.	980.	490.	1,470.	2.3 U	12,000.	2. U	40. J	12. J	-	240.	68. J	2.2 U	2.1 U	2.7 U	3.1 U	3.9 U	2.4 U	2.3 U	3.6 U	
	2708-090814-MW-16-45-130	17-Aug-09		2,060.	832.	405.	484.	234.	718.	50. U	6,020.	50. U	50. U	50. U	-	139.	100. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	
MW-16-65	040826-MW16-65-026	26-Aug-04	55 - 65	1,370.	388.	236.	371.	181.	562.	-	4,890.	50. U	50. U	50. U	50. U	50. U	50. U	-	-	-	50. U	50. U	50. U	-	-	
	040826-MW16-65-027	26-Aug-04		1,250.	339.	223.	-	-	486.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	061023-MW-16-65-114	23-Oct-06		930.	4.8 J	170.	54.	56.	110.	-	3,600.	1.9 U	12. J	-	-	-	-	-	-	2.3 U	2.7 U	2.6 U	2.9 U	-	-	Acrolein = 35 J Acrylonitrile = 23 J Iodomethane = 9.6 J
	2708-070628-MW-16-65-115	28-Jun-07		698.	2.75 U*	95.7	-	-	59.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW16-65-109	13-May-08		690.	9.8 J	130.	81.	41.	122.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080911-MW-16-65-112	11-Sep-08		680. J	9.8	120. J	41.	38.	79.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090330-MW16-65-114	30-Mar-09		860.	6.5	130.	44.	36.	80.	0.45 U	2,500.	0.39 U	11. J	2.5 J	-	46.	11. J	0.44 U	0.41 U	0.54 U	0.61 U	0.77 U	0.48 U	0.45 U	0.71 U	p-IPT = 1.7 J n-B = 1.5 J, sec-B = 0.6 J
	2708-090813-MW-16-65-126	13-Aug-09		582.	25. U	102.	50. U	27.	27.	25. U	2,020.	25. U	25. U	25. U	-	58.	50. U	25. U	25. U	25. U	25. U	25. U	25. U	25. U	25. U	Methylene Chloride = 294.
	2708-090813-MW-16-65-128	13-Aug-09		597.	25. U	105.	50. U	29.	29.	25. U	2,670.	25. U	25. U	25. U	-	51.5	50. U	25. U	25. U	25. U	25. U	25. U	25. U	25. U	25. U	Methylene Chloride = 384.
MW-16-125	040826-MW16-125-025	26-Aug-04	115 - 125	1. U	1. U	1. U	2. U	1. U	2. U	-	22.2	1. U	1. U	1. U	1. U	1. U	1. U	-	-	-	1. U	1. U	1. U	-	-	
	061016-MW-16-125-106	16-Oct-06		0.26 J	0.94	0.18 J	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	0.06 J	
	2708-070628-MW-16-125-116	28-Jun-07		0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080515-MW16-125-127	15-May-08		160.	55.	60.	61.	37.	98.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-17-79	050926-MW-17-79-110	26-Sep-05	38.5 - 78.5	2.82	1. U	8.8	1.72	1.72	1.72	-	82.4	1. U	2. U	1. U	-	1.	1. U	-	-	-	1. U	1. U	1. U	-	-	
	061026-MW-17-79-119	26-Oct-06		1.5	0.48 J	5.7	0.93	1.1	2.03	-	5.2	0.095 U	0.27 J	-	-	-	-	-	-	0.14 J	0.14 U	0.13 U	0.15 U	-	-	
	2708-070627-MW-17-79-112	27-Jun-07		1.34	0.4 U	4.39	2. U	1.02	2. U	-	-	0.4 U	1. U	-	-	-	-	-	-	-	0.4 U	0.4 U	0.4 U	0.4 U	-	
	2708-080514-MW17-79-120	14-May-08		1.4	0.44 J	1.6	0.58	0.74	1.32	0.045 U	4.3	0.039 U	0.33 J	0.06 J	-	0.35 J	0.06 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080911-MW-17-79-110	11-Sep-08		5.4	0.87 U*	5.1	1.	1.4	2.4	0.045 U	4.4 J	0.039 U	0.46 J	0.12 J	-	0.84 J	0.08 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,2-DCA = 0.17 p-IPT = 0.06, sec-B = 0.06
	2708-081209-MW-17-79-009	9-Dec-08		6.1	0.46 J	4.7	0.93	1.2	2.13	0.045 U	3.4	0.039 U	0.46 J	0.12 J	-	0.75 J	0.07 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.09 J	0.071 U	1,1-DCA = 0.2 Carbon Disulfide = 0.08 Chloromethane = 0.12 p-IPT = 0.07, sec-B = 0.07
	2708-090326-MW17-79-106	26-Mar-09		6.9	0.37 J	3.7	0.65	1.1	1.75	0.045 U	3.4	0.05 J	0.39 J	0.11 J	-	0.61 J	0.07 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Bromodichloromethane = 0.39 J Bromoform = 0.27 J Dibromochloromethane = 0.5 p-IPT = 0.05 J, sec-B = 0.06 J
	2708-090817-MW-17-79-134	17-Aug-09		5.48	0.5 U	3.19	1. U	1.	1.	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-18-30	2708-070731-MW-18-30-146	31-Jul-07	19 - 29	10,100.	1,470.	537.	-	-	1,360.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW18-30-121	14-May-08		8,600.	1,300.	420.	880.	470.	1,350.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NS (Dry)	17-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NS (Dry)	9-Dec-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW18-30-137	2-Apr-09		11,000.	3,000.	690.	1,500.	730.	2,230.	4.5 U	14,000.	3.9 U	36. J	18. J	-	340.	96. J	4.4 U	4.1 U	5.4 U	6.1 U	7.7 U	4.8 U	4.5 U	7.1 U	
	2708-090812-MW-18-30-102	12-Aug-09		9,370.	2,140.	480.	1,000.	500.	1,500.	250. U	500. U	250. U	250. U	10,200.	-	250. U	250. U	500. U	250. U	250. U	250. U	250. U	250. U	250. U	250. U	
MW-18-180	2708-070628-MW-18-180-117	28-Jun-07	170 - 180	0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW18-180-108	13-May-08		0.045 U	0.12 J	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080911-MW-18-180-111	11-Sep-08		0.07 J	0.67 U*	0.06 J	0.08 J	0.037 U	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081209-MW-18-180-008	9-Dec-08		0.045 U	0.09 J	0.042 U	0.078 U	0.037 U	0.078 U	0.2 J	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.92	0.041 U	0.22 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.05 Chloromethane = 0.1
	2708-090326-MW18-180-104	26-Mar-09		0.045 U	0.5 U	0.042 U	0.078 U	0.037 U	0.031 U	0.22 J	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	1.2	0.041 U	0.23 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Acetone = 3. J Chloromethane = 0.07 J
	2708-090817-MW-18-180-132	17-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	1.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590	#	#
MW-19-22	2708-070730-MW-19-22-143	30-Jul-07	12 - 22	6.58	1.65	3.02	-	-	7.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW19-22-110	13-May-08		1.	0.4 J	1.7	2.2	2.8	5.	0.045 U	320.	0.039 U	0.75 J	0.22 J	-	2.6	0.96 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon disulfide = 0.09 p-IPT = 0.21 J sec-B = 0.24 J, tert-B = 0.07 J
	2708-080910-MW-19-22-105	10-Sep-08		3.4	2.	2.6	3.6	4.5	8.1	0.09 U	170. J	0.078 U	0.62 J	0.16 J	-	4.	1.5 J	0.088 U	0.082 U	0.11 U	0.13 U	0.16 U	0.096 U	0.09 U	0.15 U	Acetone = 6.2 p-IPT= 0.26, sec-B = 0.16
	2708-081209-MW-19-22-014	9-Dec-08		4.	0.76	1.6	2.1	2.4	4.5	0.045 U	140.	0.039 U	0.63 J	0.15 J	-	1.7 J	0.87 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Chloromethane = 0.11 p-IPT = 0.15 sec-B = 0.17, tert-B = 0.05
	2708-090330-MW19-22-112	30-Mar-09		4.4	0.4 J	3.4	2.8	2.9	5.7	0.045 U	330.	0.039 U	0.75 J	0.2 J	-	2.2	0.91 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	p-IPT = 0.2 J sec-B = 0.2 J, tert-B = 0.05 J
	2708-090817-MW-19-22-140	17-Aug-09		5.89	0.95	3.99	2.46	3.02	5.48	0.5 U	247. J	0.5 U	0.73	0.5 U	-	1.45	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-19-125	2708-070627-MW-19-125-110	27-Jun-07	115 - 125	16.7	11.3	0.4 U	2. U	2.24	2.99	-	-	0.4 U	1. U	-	-	-	-	-	-	-	0.4 U	0.4 U	0.4 U	0.4 U	-	
	2708-080514-MW19-125-117	14-May-08		13.	1.5	0.32 J	0.6	4.2	4.8	0.045 U	110.	0.039 U	1.6 J	0.09 J	-	0.54 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080910-MW-19-125-106	10-Sep-08		2.7	1.9	0.16 J	0.55	3.1	3.65	0.045 U	31. J	0.11 J	1. J	0.06 J	-	0.39 J	0.08 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-081209-MW-19-125-013	9-Dec-08		0.58	0.36 J	0.09 J	0.38 J	2.8	3.18	0.045 U	24.	0.039 U	0.81 J	0.05 J	-	0.33 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.07 Chloromethane = 0.09
	2708-090330-MW19-125-110	30-Mar-09		0.51	0.19 J	0.05 J	0.27 J	2.4	2.67 J	0.045 U	11.	0.039 U	0.53 J	0.037 U	-	0.18 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090813-MW-19-125-123	13-Aug-09		0.56	0.5 U	0.5 U	1. U	2.72	2.72	0.5 U	8.91	0.5 U	0.63	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-19-180	2708-070627-MW-19-180-111	27-Jun-07	170 - 180	0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW19-180-115	13-May-08		0.17 J	0.07 J	0.042 U	0.078 U	0.037 U	0.078 U	0.11 J	0.22 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.09 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.12 J	0.071 U	
	2708-080910-MW-19-180-104	10-Sep-08		0.19 J	0.33 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.11 J	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.09 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.16 J	0.071 U	
	2708-081209-MW-19-180-012	9-Dec-08		0.22 J	0.09 J	0.042 U	0.078 U	0.037 U	0.078 U	0.14 J	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.13 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.13 J	0.071 U	Chloromethane = 0.19
	2708-090330-MW19-180-108	30-Mar-09		0.21 J	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.15 J	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.17 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.12 J	0.071 U	
	2708-090813-MW-19-180-125	13-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	11.7	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	2708-080515-MW20-120-126	15-May-08		120.	0.51	1.2	12.	6.3	18.3	0.05 J	210.	0.039 U	2.1	0.18 J	-	1.6 J	0.13 J	0.06 J	0.041 U	0.08 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon disulfide = 0.06 J p-IPT = 0.06 J
	2708-080910-MW-20-120-103	10-Sep-08		55.	1.2	1.	7.9	5.3	13.2	0.045 U	110. J	0.039 U	1.9 J	0.18 J	-	1.6 J	1. J	0.06 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Acetone = 3.5
	2708-081209-MW-20-120-010	9-Dec-08		70.	0.69	0.94	6.	6.2	12.2	0.05 J	130.	0.039 U	2.1	0.2 J	-	1.2 J	0.08 J	0.06 J	0.041 U	0.054 U	0.1 J	0.4 J	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.9 J Chloromethane = 0.1 J p-IPT = 0.05 J
	2708-081209-MW-20-120-011	9-Dec-08		73.	0.52	1.	6.2	6.3	12.5	0.045 U	160.	0.039 U	2.1	0.18 J	-	1.3 J	0.07 J	0.05 J	0.041 U	0.054 U	0.061 U	0.23 J	0.048 U	0.045 U	0.071 U	Carbon disulfide = 0.08 J p-IPT = 0.05 J
	2708-090330-MW20-120-113	30-Mar-09		71.	0.64	1.1	4.4	7.	11.4	0.045 U	130.	0.039 U	2.7	0.25 J	-	1.8 J	0.1 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	p-IPT = 0.08 J Carbon Disulfide = 0.05 J
	2708-090812-MW-20-120-116	12-Aug-09		62.	0.5 U	0.5 U	1.07	1.91	2.98	0.5 U	29.7	0.5 U	0.79	0.5 U	-	1. UJ	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-21-12	2708-070719-MW-21-12-129	19-Jul-07	7 - 12	0.5 U	0.5 U	0.5 U	-	-	1.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW21-12-122	14-May-08		0.2 J	0.24 J	0.16 J	1.6	0.13 J	1.73 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NS (Dry)	15-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-21-12-007	8-Dec-08		0.31 J	0.43 J	0.13 J	0.92	0.15 J	1.07	0.045 U	0.56 J	0.039 U	5.3	3.	-	0.17 J	0.12 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,1-DCA = 0.13 J Acetone = 2.6 J Carbon Disulfide = 0.06 J n-B = 1.6 J, sec-B = 1.8 J tert-B = 2.3 J, t-1,3-D = 0.23 J
	2708-090401-MW21-12-126	1-Apr-09		0.44 J	0.19 J	0.16 J	1.7	0.18 J	1.88 J	0.045 U	0.1 U	0.039 U	8.1	5.	-	0.17 J	0.23 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,1-DCA = 0.05 J Chloroethane = 0.23 J n-B = 3.2, sec-B = 3.2 tert-B = 0.37 J
	2708-090811-MW-21-12-105	11-Aug-09		0.48 J	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	1. U	0.5 UJ	1.19 J	0.5 UJ	5.12 J	16.3 J	-	0.5 UJ	0.5 UJ	1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	n-B = 1.19 J, sec-B = 1.68 J
MW-21-75	2708-070718-MW-21-75-124	18-Jul-07	65 - 75	0.5 UJ	0.5 UJ	0.5 UJ	-	-	1. UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW21-75-123	14-May-08		0.045 U	0.048 U	0.042 U	0.08 J	0.037 U	0.08 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080915-MW-21-75-125	15-Sep-08		0.045 U	0.62	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-21-75-004	8-Dec-08		0.045 U	0.14 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,1-DCA = 0.6 J
	2708-090331-MW21-75-124	31-Mar-09		0.045 U	0.5 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090817-MW-21-75-136	17-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1,1-DCA = 0.58
MW-21-115	2708-070718-MW-21-115-123	18-Jul-07	105 - 115	0.5 UJ	0.5 UJ	0.5 UJ	-	-	1. UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080515-MW21-115-125	15-May-08		0.045 U	0.08 J	0.042 U	0.12 J	0.037 U	0.12 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080915-MW-21-115-126	15-Sep-08		0.045 U	0.76	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-21-115-005	8-Dec-08		0.045 U	0.13 U*	0.042 U	0.08 J	0.037 U	0.08	0.045 U	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.05 J

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590	#	#
MW-21-115	2708-090331-MW21-115-120	31-Mar-09	105 - 115	0.045 U	0.5 U	0.042 U	0.09 J	0.04 J	0.13 J	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.04 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090811-MW-21-115-101	11-Aug-09		0.25 UJ	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	1. U	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	2. UJ	-	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	
MW-21-165	2708-070718-MW-21-165-122	18-Jul-07	156 - 166	0.5 UJ	0.5 UJ	0.5 UJ	-	-	1. UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW21-165-124	14-May-08		0.14 J	0.23 J	0.06 J	0.17 J	0.08 J	0.25 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080915-MW-21-166-124	15-Sep-08		0.045 U	0.5	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-21-166-006	8-Dec-08		0.14 J	0.2 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.15 J
	2708-090331-MW21-165-122	31-Mar-09		0.08 J	0.5 U	0.042 U	0.078 U	0.04 J	0.04 J	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090811-MW-21-166	11-Aug-09		0.25 UJ	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	1. U	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	2. UJ	-	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	
PW-01	061012-PW-01-102	12-Oct-06	40 - 80	7,300.	100.	520.	220.	130.	350.	-	6,000.	2.4 U	8.8 J	-	-	-	-	-	-	2.9 U	3.4 U	3.2 U	3.6 U	-	-	
	2708-070731-PW-01-80-147	31-Jul-07		7,060.	59.5	457.	-	-	238.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080604-PW01-80-107	4-Jun-08		3,700.	27.	170.	37.	34.	71.	2.3 U	3,200.	2. U	5. J	1.9 U	-	32. J	8.5 J	2.2 U	2.1 U	2.7 U	3.1 U	3.9 U	2.4 U	2.3 U	3.6 U	
	NS*	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Temporary Well Point Samples 2004																										
B-56	040602-101	2-Jun-04	18 - 22	8.	5. U	5. U	10. U	5. U	10. U	-	328.	5. U	10. U	5. U	-	5. U	5. U	-	-	-	5. U	5. U	5. U	-	-	
	040603-102	3-Jun-04	40 - 44	1. U	1. U	1. U	2. U	1. U	2. U	-	2.57	1. U	10. U	1. U	-	1. U	1. U	-	-	-	1. U	1. U	1. U	-	-	
	040603-103	3-Jun-04	60 - 64	3.62	1. U	70.	10.5	8.14	18.64	-	140.	1. U	2. U	1. U	-	2.06	1. U	-	-	-	1. U	1. U	1. U	-	-	
	040603-104	3-Jun-04	80 - 84	5. U	5. U	5. U	10. U	10.6	10.6	-	441.	5. U	10. U	5. U	-	5. U	5. U	-	-	-	5. U	5. U	5. U	-	-	
	040603-105	3-Jun-04	80 - 84	3.1	2. U	2.02	6.96	4. U	6.96	-	273.	2. U	4. U	2. U	-	2. U	2. U	-	-	-	2. U	2. U	2. U	-	-	
	040604-106	4-Jun-04	100 - 104	1. U	1. U	1. U	2. U	1. U	2. U	-	2. U	1. U	2. U	1. U	-	1. U	1. U	-	-	-	1. U	1. U	1. U	-	-	
	040614-115	14-Jun-04	136 - 140	1. U	1. U	1. U	2. U	1. U	2. U	-	3.26	1. U	2. U	1. U	-	1. U	1. U	-	-	-	1. U	1. U	1. U	-	-	
	040614-116	14-Jun-04	174 - 178	1. U	1. U	1. U	2. U	1. U	2. U	-	4.2	1. U	2. U	1. U	-	1. U	1. U	-	-	-	1. U	1. U	1. U	-	-	
B-59	040611-108	11-Jun-04	46-50	5,570.	50. U	317.	50. U	85.5	85.5	-	4,460.	50. U	100. U	50. U	-	63.	50. U	-	-	-	50. U	50. U	50. U	-	-	
	040611-109	11-Jun-04	76-80	230.	12.4	25.8	13.8	12.2	26.	-	582.	10. U	10. U	5. U	-	6.65	5. U	-	-	-	5. U	5. U	5. U	-	-	
	040611-110	11-Jun-04	96-100	113.	6.16	9.78	6.04	5.24	11.28	-	272.	2. U	4. U	2. U	-	2.58	-	-	-	-	2. U	2. U	2. U	-	-	
	040611-112	11-Jun-04	116-120	166.	2.16	3.02	5.42	1.63	7.05	-	116.	1. U	2. U	1. U	-	1.51	-	-	-	-	1. U	1. U	1. U	-	-	
	040611-113	11-Jun-04	144-148	19.3	1.43	2.58	2.37	1.31	3.58	-	119.	1. U	2. U	1. U	-	1.17	-	-	-	-	1. U	1. U	1. U	-	-	
	040614-114	14-Jun-04	171-175	2.29	1. U	1. U	2. U	1. U	2. U	-	3.46	1. U	2. U	1. U	-	1.	-	-	-	-	1. U	1. U	1. U	-	-	
Quality Control Samples (HAI)																										
	2708-080512-TB1-37492	12-May-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Chloromethane = 0.08 J
	2708-080513-TB2-37493	13-May-08		0.045 U	0.05 J	0.16 J	0.68	0.32 J	1.	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.07 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Methylene chloride = 1.0 J
	2708-080514-TB3-37552	14-May-18		0.045 U	0.1 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.06 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080515-TB4-37553	15-May-08		0.045 U	0.09 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	TB5-37589	21-May-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080603-TB-37649	3-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080604-TB6-37648	4-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080910-TB 38520	10-Sep-08		0.045 U	0.19 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080911-TB 38519	11-Sep-08		0.045 U	0.37 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080915-TB-38518	15-Sep-08		0.045 U	0.81	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080916-TB 38517	16-Sep-08		0.045 U	1.2	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080917-TB 38516	17-Sep-08		0.045 U	2.1	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-TB-39353	8-Dec-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Chloromethane = 0.06 J
	2708-081209-TB-39350	8-Dec-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090326-TB39765	26-Mar-09		0.045 U	0.05 J	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090330-TB-39763	30-Mar-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090331-TB39825	31-Mar-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090401-TB39764	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090402-TB39827	2-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.14 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090811-TB-108	11-Aug-09		0.25 UJ	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	1. U	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	2. UJ	-	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	
	2708-090812-TB-109	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	2. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	2708-090813-TB-118	13-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	2. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	2708-090817-TB-131	17-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	2. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	2708-090820-TB-160	20-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	

Note:
" - " = Parameter not analyzed or data unavailable (sampler other than HAI)
# = Reference Level not established
DEQ = Oregon Department of Environmental Quality
EPA = U.S. Environmental Protection Agency
J = Estimated Concentration
MCL = Maximum Contaminant Level

NRWQC = National Recommended Water Quality Criteria
NS = No Sample
ppb = parts per billion
PRG = Potential Remediation Goal
SCV = Secondary Chronic Value

ug/l = micrograms per liter
U = Non-detect above method reporting limit
U* = Compound considered non-detect because it was also detected in associated blank at similar concentration levels.
UJ = Compound not detected, but the reporting limit is probably higher due to a low bias identified during the quality assurrance review.
UR = Unusable Reportling Limit, compound may or may not be present in this sample.

1,1-DCA = 1,1-Dichloroethane
1,2-DCA = 1,2-Dichloroethane
n-B = n-Butylbenzene
sec-B = sec-Butylbenzene
tert-B = tert-Butylbenzene
p-IPT = p-Isopropyltoluene (4-Isopropyltoluene)
t-1,3-D = trans 1,3-Dichloropropene

Note: Reference Level is lowest of EPA AWQC for aquatic life protection, AWQC for human consumption of organisms only, or DEQ SLV for aquatic receptors
1 = Sample number prefix: 2708-
2 = Tier II SCV values were taken from Suter II, G.W. and Tasco, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2
3 = MCL is based on benzo(a)pyrene
4 = Unless otherwise noted Screening Level Values are from Portland Harbor Joint Source Control Strategy, Final, December 2005 (7/16/07 revision)
5 = EPA, under CERCLA authority, has identified the Safe Drinking Water Acts MCLs and AWQCs (federal and state once approved as potential ARARs under CERCLA. The final determination will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to The EPA Portland Harbor ROD, due to an exceedance of an SLV in upland stormwater will be evaluated and prioritized on a case by case basis.
6 = Values were taken from Table 33c (OAR 340-41), which are Water Quality Guidance Vales, not criteria, that can be used in the application of Oregon's Narrative Toxics Criteria to waters of the state in order to protect aquatic life.

*Location PW-01 was converted to an extraction well following 2nd quarter of 2008.

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
MW-1-22	061030-MW-1-22-123	30-Oct-06	11 - 21	3.9	5.2	6.6	5.3	2.1 J	7.4 J	-	320.	0.48 U	0.53 U	-	-	-	-	-	-	0.57 U	0.67 U	0.63 U	0.72 U	-	-	Acetone=38 J Carbon Disulfide = 900 Methylene Chloride = 2.2 J
	2708-070720-MW-1-22-131	20-Jul-07		2.88	4.6	6.	-	-	7.42		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW1-22-105	12-May-08		1.8	2.9	3.9	3.1	1.3	4.4	0.06 J	330.	0.039 U	0.19 J	0.05 J	-	0.97 J	0.36 J	0.044 U	0.041 U	0.054 U	0.09 J	0.11 J	0.048 U	0.045 U	0.071 U	Acetone = 17 J Carbon Disulfide = 390. p-IPT = 0.21J
	NS (Dry)	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW1-22-132	2-Apr-09		0.73	0.76	1.	0.75	0.32 J	1.07 J	0.045 U	54.	0.04 J	0.05 J	0.037 U	-	0.23 J	0.09 J	0.044 U	0.041 U	0.054 U	0.07 J	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090820-MW-1-22-163	20-Aug-09		3.37	4.44	7.3	5.41	1.84	7.25	0.5 U	375.	0.5 U	0.5 U	0.5 U	-	1.57	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-1-55	2708-070719-MW-1-55-127	19-Jul-07	45 - 55	0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW1-55-104	12-May-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.2 J
	2708-080915-MW-1-55-121	15-Sep-08		0.045 U	0.52	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-1-55-002	8-Dec-08		0.045 U	0.12 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.09
	2708-090401-MW1-55-130	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.06 J
	2708-090820-MW-1-55-164	20-Aug-09		0.25 U	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-1-82	2708-070719-MW-1-82-126	19-Jul-07	72 - 82	0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW1-82-103	12-May-08		0.11 J	0.1 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.05 J
	2708-080915-MW-1-82-119	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-1-82-001	8-Dec-08		0.07 J	0.22 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.10 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.05 Chloroform = 0.13 Chloromethane = 0.08
	2708-090401-MW1-82-128	1-Apr-09		0.05 J	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090820-MW-1-82-161	20-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5.42	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	2708-090820-MW-1-82-162	20-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-2-32	061016-MW-2-32-107	16-Oct-06	21.5 - 31.5	0.14 U	1.1	0.13 U	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	Acetone=13 J
	2708-070712-MW-2-32-120	12-Jul-07		0.5 UJ	0.5 UJ	0.5 UJ	-	-	1. UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW2-32-101	12-May-08		0.045 U	0.14 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.07 J	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080915-MW-2-32-120	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090401-MW2-32-127	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.09 U	0.045 U	2. U	0.039 U	0.09 J	0.04 J	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Chloromethane = 0.09 J
	2708-090812-MW-2-32-113	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	1. U	0.5 U	0.5 U	2. U	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-2-61	061011-MW-2-61-101	11-Oct-06	50 - 60	0.14 U	0.72	0.13 U	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	
	2708-070719-MW-2-61-128	19-Jul-07		0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW2-61-100	12-May-08		0.045 U	0.09 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080915-MW-2-61-118	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090401-MW2-61-125	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Chloromethane = 0.13 J
	2708-090812-MW-2-61-115	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	1. U	0.5 U	0.5 U	2. U	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-2-104	2708-070712-MW-2-104-119	12-Jul-07	94 - 104	0.5 UJ	0.54	0.5 UJ	-	-	1. UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW2-104-102	12-May-08		0.045 U	0.14 J	0.042 U	0.11 J	0.037 U	0.11 J	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.05 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon disulfide = 0.05 J
	2708-080915-MW-2-104-122	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080915-MW-2-104-123	15-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-2-104-003	8-Dec-09		0.045 U	0.16 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.10 UJ	0.039 U	0.031 U	0.037 U	-	0.04 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.07 J
	2708-090401-MW2-104-129	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.05 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Bromodichloromethane = 0.08 J Chloromethane = 0.14 J Dibromochloromethane = 0.09 J
	2708-090812-MW-2-104-111	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	1. U	0.5 U	0.5 U	2. U	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-3-26	061017-MW-3-26-110	17-Oct-06	15 - 25	0.14 U	0.11 U	0.13 U	0.22 U	0.11 U	0.22 U	-	0.65 J	0.095 U	0.11 U	-	-	-	-	-	-	0.14 J	0.14 U	0.13 U	0.15 U	-	-	
	2708-070629-MW-3-26-119	29-Jun-07		14.3 J	0.5 UJ	0.5 UJ	-	-	1.45 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW3-26-107	12-May-08		0.045 U	0.1 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.06 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080911-MW-3-26-115	11-Sep-08		0.05 J	0.66 U*	0.042 U	0.08 J	0.037 U	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW3-26-123	31-Mar-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090817-MW-3-26-139	17-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-3-56	040823-MW3-56-011	23-Aug-04	45 - 55	10.6	1. U	1. U	2. U	1. U	2. U	-	2. U	1. U	1. U	1. U	1. U	1. U	1. U	-	-	-	1. U	1. U	-	-	-	
	061024-MW-3-56-116	24-Oct-06		2.6	0.3 J	0.18 J	1.1	0.67	1.77	-	1.1 J	0.095 U	0.89 J	-	-	-	-	-	-	0.21 J	0.14 U	0.13 U	0.15 U	-	-	Acrylonitrile = 1.2 J 1,1,-DCA = 0.3 J
	2708-070626-MW-3-56-108	26-Jun-07		5.83	0.5 U	0.5 U	-	-	1.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080512-MW3-56-106	12-May-08		0.91	0.35 J	0.14 J	1.3	0.83	2.13	0.045 U	0.93 J	0.039 U	1.2 J	0.19 J	-	0.65 J	0.17 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,1-DCA = 0.22 J Acetone = 2.8 J n-B = 0.08 J, sec-B= 0.17 J
	2708-080911-MW-3-56-116	11-Sep-08		0.84	1.5 U*	0.09 J	1.1	0.63	1.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
MW-3-56	2708-090326-MW3-56-105	26-Mar-09	45 - 55	0.56	0.4 J	0.13 J	1.4	1.1	2.5	0.045 U	1.5 J	0.05 J	1.4 J	0.27 J	-	0.95 J	0.19 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,1-DCA = 0.29 J Acetone = 5.2 J n-B = 0.11 J, sec-B = 0.25 J tert-B = 0.1 J
	2708-090811-MW-3-56-107	11-Aug-09		5.33 J	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	1. U	0.5 UJ	1. UJ	0.5 UJ	1.09 J	2. UJ	-	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	
MW-4-35	061018-MW-4-35-113	18-Oct-06	24 - 34	3.	0.48 J	0.13 U	1.3	0.81	2.11	-	3.9	0.095 U	0.38 J	-	-	-	-	-	-	0.12 U	0.16 J	0.13 U	0.15 U	-	-	Acetone=30
	2708-070726-MW-4-35-137	26-Jul-07		0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW4-35-112	13-May-08		0.12 J	0.43 J	0.042 U	0.31 J	0.14 J	0.45 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW4-35-113	13-May-08		0.12 J	0.27 J	0.06 J	0.3 J	0.17 J	0.2 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080911-MW-4-35-109	11-Sep-08		6.5	1.4 U*	0.18 J	1.9	1.4	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW4-35-119	31-Mar-09		0.34 J	0.59	0.05 J	0.44 J	0.23 J	0.67 J	0.045 U	0.83 J	0.039 U	0.33 J	0.08 J	-	0.11 J	0.07 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090813-MW-4-35-121	13-Aug-09		2.63	0.5 U	0.5 U	1.31	0.81	2.12	0.5 U	2.66	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-4-57	960321-MW4-57-01	21-Mar-96	46 - 56	3,700.	35.	540.	80.	140.	220.	-	1,700.	10. U	10. U	10. U	22.	19.	13.	-	-	-	10. U	10. U	-	-	-	
	020405-MW4-57-117	5-Apr-02		18,800.	500. U	805.	-	-	1,000. U	-	-	-	-	-	-	-	-	-	-	-	500. U	-	-	-	-	
	040824-MW4-57-016	24-Aug-04		15,000.	100. U	748.	200. U	122.	122.	-	3,640.	100. U	100. U	100. U	100. U	100. U	100. U	-	-	-	100. U	100. U	-	-	-	
	061030-MW-4-57-122	30-Oct-06		7,100.	11. J	450.	24.	130.	154.	-	730.	2.4 U	10. J	-	-	-	-	-	-	2.9 U	3.4 U	3.2 U	3.6 U	-	-	Carbon Disulfide = 4 J Methylene Chloride = 9.3 J
	2708-070622-MW-4-57-101	22-Jun-07		0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-070723-MW-4-57-135	23-Jul-07		3,870. J	25. UJ	249. J	-	-	82. U*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW4-57-111	13-May-08		5,400.	13.	520.	30.	130.	160.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080911-MW-4-57-108	11-Sep-08		710.	3.8 U*	43.	15.	46.	61.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW4-57-121	31-Mar-09		6,700.	8.8 J	330.	22.	93.	115.	0.9 U	410.	0.78 U	11. J	2.4 J	-	38. J	4.2 J	0.88 U	0.82 U	1.1 U	1.3 U	1.6 U	0.96 U	0.9 U	1.5 U	
	2708-090817-MW-4-57-138	17-Aug-09		508.	5. U	32.1	12.7	31.2	43.9	5. U	50. U	5. U	5. U	5. U	-	16.4	10. U	5. U	5. U	5. U	5. U	5. U	5. U	5. U	5. U	
MW-4-101	061018-MW-4-101-112	18-Oct-06	89.5 - 99.5	170. U	2.	0.63	1.2	5.1	6.3	-	5.9	0.095 U	1.6 J	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	
	2708-070625-MW-4-101-106	25-Jun-07		39.5	1.14	0.5 U	-	-	3.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW4-101-114	13-May-08		11.	1.2	0.4 J	0.61	5.	5.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080910-MW-4-101-107	10-Sep-08		25.	2.	0.5	0.71	5.1	5.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW4-101-115	31-Mar-09		9.7	2.1	0.59	0.76	6.3	7.06	0.045 U	5.5	0.039 U	3.1	0.19 J	-	0.92 J	0.14 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090331-MW4-101-117	31-Mar-09		7.8	1.6	0.46 J	0.64	5.4	6.04	0.045 U	3.8	0.039 U	2.7	0.16 J	-	0.76 J	0.11 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090813-MW-4-101-119	13-Aug-09		4.66 J	1. J	0.5 U	1. U	3.88	3.88	0.5 U	3.08	0.5 U	2.25	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-5-32	951205-MW5-32-01	5-Dec-95	21 - 31	5. U	5. U	5. U	5. U	5. U	5. U	-	11.	5. U	5. U	5. U	5. U	5. U	5. U	-	-	-	5. U	5. U	-	-	-	
	061018-MW-5-32-114	18-Oct-06		0.14 U	0.11 U	0.13 U	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.12 J	0.14 U	0.13 U	0.15 U	-	-	
	2708-070625-MW-5-32-104	25-Jun-07		0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW5-32-118	14-May-08		0.045 U	0.08 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080910-MW-5-32-102	10-Sep-08		0.34 J	0.91 U*	0.05 J	0.078 U	0.04 J	0.04	0.045 U	0.47 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Acetone = 2.7
	2708-090330-MW5-32-111	30-Mar-09		0.07 J	0.21 J	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090812-MW-5-32-114	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	2. U	0.5 U	0.5 U	0.5 U	-	1. UJ	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-5-100	020405-MW5-100-114	5-Apr-02	88 - 98	8,750.	500. U	500. U	-	-	1,000. U	-	-	-	-	-	-	-	-	-	-	-	500. U	-	-	-	-	
	020405-MW5-100-115	5-Apr-02		8,950.	500. U	500. U	-	-	1,000. U	-	-	-	-	-	-	-	-	-	-	-	500. U	-	-	-	-	
	040824-MW5-100-015	24-Aug-04		11,500.	100. U	683.	200. U	253.	253.	-	12,100.	100. U	100. U	100. U	100. U	100. U	100. U	-	-	-	100. U	100. U	-	-	-	
	061027-MW-5-100-120	27-Oct-06		11,000.	18. J	560.	58.	240.	298.	-	8,700.	9.5 U	19. J	-	-	-	-	-	-	12. U	14. U	13. U	20. J	-	-	
	2708-070625-MW-5-100-103	25-Jun-07		10,100.	40. U	532.	200. U	223.	294.	-	7,320.	40. U	100. U	-	-	-	-	-	-	-	40. U	40. U	40. U	162.	-	
	2708-080514-MW5-100-119	14-May-08		12,000.	26. J	690.	89.	210.	299.	4.5 U	21,000.	3.9 U	20. J	5. J	-	120. J	6. J	4.4 U	4.1 U	5.4 U	6.1 U	7.7 U	19. J	300.	11. J	
	2708-080910-MW-5-100-100	10-Sep-08		11,000.	25. U*	640.	110.	210.	320.	4.5 U	22,000. J	3.9 U	18. J	5. J	-	110. J	6. J	4.4 U	4.1 U	5.4 U	6.1 U	7.7 U	31. J	350.	19. J	
	2708-090330-MW5-100-109	30-Mar-09		12,000.	25. J	710.	100.	140.	240.	2.3 U	12,000.	2. U	22. J	4.5 J	-	110.	6. J	2.2 U	2.1 U	2.7 U	3.1 U	3.9 U	32.	280.	19. J	p-IPT = 3. J
	2708-090812-MW-5-100-112	12-Aug-09		11,800.	50. U	703.	110.	151.	261.	50. U	12,400.	50. U	50. U	50. U	-	119. J	100. U	50. U	50. U	50. U	50. U	50. U	50. U	284.	50. U	
MW-5-175	020404-MW5-175-105	4-Apr-02	163 - 173	1. U	1. U	1. U	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061016-MW-5-175-05	16-Oct-06		0.14 U	1.1	0.13 U	0.22 U	0.11 U	0.22 U	-	0.61 J	0.095 U	0.11 U	-	-	-	-	-	-	0.12	0.14 U	0.13 U	0.15 U	-	-	
	2708-070625-MW-5-175-105	25-Jun-07		0.5 U	0.86	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW5-175-116	14-May-08		0.05 J	0.1 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.17 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080910-MW-5-175-101	10-Sep-08		0.045 U	0.57 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090330-MW5-175-107	30-Mar-09		0.06 J	0.05 J	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Bromodichloromethane = 0.16 J Bromoform = 0.1 J Dibromochloromethane = 0.16 J
	2708-090812-MW-5-175-110	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	2. U	0.5 U	0.5 U	0.5 U	-	1. UJ	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-8-29	061031-MW-8-29-124	31-Oct-06	18 - 28	93.	17.	16.	14.	12.	26.	-	2,100.	0.95 U	1.1 U	-	-	-	-	-	-	1.2 U	1.4 U	1.3 U	1.5 U	-	-	
	2708-080603-MW8-29-100	3-Jun-08		88.	26.	38.	30.	23.	53.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080911-MW-8-27-113	11-Sep-08		85.	14. U*	30.	23.	18.	41.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW8-29-118	31-Mar-09		200.	46.	36.	29.	21.	50.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090811-MW-8-29-106	11-Aug-09		78.4 J	13.4 J	26.4 J	-	- J	38. J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590	#	#
MW-8-56	951207-MW8-56-01	7-Dec-95	45 - 55	18600	1,400.	590.	600.	200.	800.	-	13,300.	100. U	100. U	100. U	100. U	110.	100. U	-	-	-	100. U	100. U	-	-	-	
	020405-MW8-56-118	5-Apr-02		26,400.	1. U	1,000.	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061031-MW-8-56-125	31-Oct-06		22,000.	270.	670.	420.	220.	640.	-	10,000.	19. U	21. U	-	-	-	-	-	-	23. U	27. U	26. U	29. U	-	-	
	061031-MW-8-56-126	31-Oct-06		21,000.	270.	710.	440.	230.	670.	-	9,600.	19. U	21. U	-	-	-	-	-	-	23. U	27. U	26. U	29. U	-	-	
	2708-080603-MW8-56-101	3-Jun-08		17,000.	240.	870.	640.	340.	980.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080915-MW-8-56-117	15-Sep-08		15,000.	270.	640.	430.	230.	660.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090331-MW8-56-116	31-Mar-09		20,000.	280.	900.	570.	310.	880.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090811-MW-8-56-104	11-Aug-09		17,800. J	256. J	1,070. J	-	-	1,130. J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-9-29	061013-MW-9-103	13-Oct-06	18 - 28	0.14 U	0.27 J	0.13 U	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	
	2708-080604-MW9-29-109	4-Jun-08		0.045 U	0.24 J	0.18 J	0.41 J	0.16 J	0.57 J	0.045 U	0.35 U*	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080604-MW9-29-110 (DUP)	4-Jun-08		0.045 U	0.21 J	0.16 J	0.35 J	0.14 J	0.49 J	0.045 U	0.27 U*	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080916-MW-9-29-132	16-Sep-08		0.045 U	0.38 J	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090326-MW9-29-102	26-Mar-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090813-MW-9-29-120	13-Aug-09		0.25 U	0.5 U	0.5 U	-	- J	1.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-10-25	061213-MW-10-25-131	13-Dec-06	14 - 24	120,000.	32,000.	770.	2,800.	1,300.	4,100.	-	11,000.	800.	20. J	-	-	-	-	-	-	12. U	14. U	13. U	15. U	-	-	Acrylonitrile = 100 J Acetone = 720 J Carbon Disulfide = 6,000 2-Butanone = 710
	2708-080604-MW10-25-108	4-Jun-08		180,000.	53,000.	970.	3,500.	1,600.	5,100.	45. U	11,000.	950.	31. U	37. U	-	240. J	70. J	44. U	41. U	54. U	61. U	77. U	48. U	45. U	71. U	Acetone = 2,600 J Carbon Disulfide = 5,500 J
	2708-080917-MW-10-25-136	17-Sep-08		170,000.	53,000.	1,000.	3,500.	1,700.	5,200.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090326-MW10-25-101	26-Mar-09		200,000.	47,000.	1,200.	4,700.	2,100.	6,800.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090813-MW-10-25-124	13-Aug-09		171,000.	51,300.	825.	-	-	4,470.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-10-61	020404-MW10-61-109	4-Apr-02	50 - 60	1. U	1. U	1. U	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061017-MW-10-61-108	17-Oct-06		0.14 U	0.24 J	0.13 U	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.18 J	0.14 U	0.13 U	0.15 U	-	-	
	2708-080604-MW10-61-105	4-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080917-MW-10-61-135	17-Sep-08		0.045 U	0.31 J	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090326-MW10-61-100	26-Mar-09		0.045 U	0.5 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090813-MW-10-61-122	13-Aug-09		0.25 U	0.5 U	0.5 U	-	-	1.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-11-32	960320-MW11-32-01	20-Mar-96	21 - 31	16,700.	3,300.	620.	840.	400.	1,240.	-	8,600.	2. U	42.	18.	110.	250.	79.	-	-	-	2. U	2.2	-	-	-	sec-B = 9, p-IPT = 35
	960617-MW11-32-01	17-Jun-96		2,800.	2,000.	1,000.	1,300.	640.	1,940.	-	4,100.	5. U	70.	17.	100.	260.	82.	-	-	-	5. U	5. U	-	-	-	sec-B = 10
	960617-MW11-32-02	17-Jun-96		4,100.	2,600.	960.	1,200.	580.	1,780.	-	5,600.	10. U	59.	14.	86.	220.	70.	-	-	-	10. U	10. U	-	-	-	sec-B = 8.8
	960930-MW11-32-01	30-Sep-96		17,000.	3,300.	900.	1,200.	560.	1,760.	-	13,900.	1,200. U	1,200. U	1,200. U	1,200. U	1,200. U	-	-	-	-	1,200. U	1,200. U	-	-	-	
	061212-MW-11-32-130	12-Dec-06		24,000.	5,500.	1,200.	1,800.	860.	2,660.	-	18,000.	86. J	38. J	-	-	-	-	-	-	23. U	28. J	26. U	29. U	-	-	
	2708-080604-MW11-32-111	4-Jun-08		16,000.	3,200.	990.	1,400.	690.	2,090.	9. U	16,000.	64. J	36. J	18. J	-	230. J	68. J	8.8 U	8.2 U	11. U	13. U	16. U	9.6 U	9. U	15. U	
	2708-080917-MW-11-32-134	17-Sep-08		17,000.	3,600.	1,200.	1,600.	800.	2,400.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW11-32-136	2-Apr-09		19,000.	4,600.	1,300.	1,900.	890.	2,790.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090811-MW-11-32-100	11-Aug-09		16,900. J	4,100. J	1,260. J	-	- J	2,630. J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-12-36	951207-MW12-36-01	7-Dec-95	25 - 35	92.	510.	150.	460.	170.	630.	-	2,300.	100.	50. U	50. U	36.	88.	57.	-	-	-	5,010. U	50. U	-	-	-	
	960321-MW12-36-01	21-Mar-96		210.	220.	140.	310.	180.	490.	-	1,900.	130.	10. U	10. U	22.	51.	37.	-	-	-	10. U	10. U	-	-	-	
	960620-MW12-36-01	20-Jun-96		250.	250.	120.	280.	160.	440.	-	1,500.	140.	10. U	10. U	16.	42.	13.	-	-	-	10. U	10. U	-	-	-	
	961002-MW12-36-01	2-Oct-96		330.	390.	130.	330.	180.	510.	-	1,100.	170.	50. U	50. U	18.	42.	14.	-	-	-	50. U	50. U	-	-	-	
	970226-MW12-36-01	26-Feb-97		260.	310.	120.	290.	180.	470.	-	960.	150.	4.	3.	1. U	31.	11.	-	-	-	1. U	1. U	-	-	-	p-IPT = 1
	970828-MW12-36-01	28-Aug-97		230.	430.	110.	280.	150.	430.	-	820.	150.	4.2	2.8	12.	30.	8.5	-	-	-	1. U	1. U	-	-	-	p-IPT = 1.9
	980218-MW12-36-01	18-Feb-98		140.	370.	82.	180.	100.	280.	-	530.	94.	2.2	1.8	-	22.	6.2	-	-	-	1. U	1. U	-	-	-	p-IPT = 1.1
	061024-MW-12-36-115	24-Oct-06		290.	790.	800.	1,000.	420.	1,420.	-	960.	0.48 U	11.	-	-	-	-	-	-	0.57 U	0.95 J	0.63 U	0.72 U	-	-	Acrolein = 41 J Methylene Chloride = 8.4 J
	2708-080604-MW12-36-106	4-Jun-08		79.	200.	140.	250.	100.	350.	0.045 U	210.	15.	2.3	1.3 J	-	17.	4.	0.044 U	0.041 U	0.054 U	0.15 J	0.077 U	0.048 U	0.15 J	0.071 U	n-B = 0.28 J, p-IPT = 0.46 J
	2708-080916-MW-12-36-127	16-Sep-08		290.	570.	600.	840.	330.	1,170.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW12-36-134	2-Apr-09		140.	270.	380.	560.	190.	750.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090817-MW-12-36-137	17-Aug-09		577.	1,480.	1,260.	-	-	2,530.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-13-30	061027-MW-13-30-121	27-Oct-06	19 - 29	350.	3.3	86.	21.	34.	55.	-	260.	0.095 U	38.	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	Chloroethane = 0.35 J 1,1-DCA = 1
	2708-080604-MW13-30-112	4-Jun-08		4,500.	55. J	1,600.	370.	400.	770.	23. U	21,000.	20. U	120. J	30. J	-	410. J	130. J	22. U	21. U	27. U	31. U	39. U	24. U	23. U	36. U	p-IPT = 35 J
MW-14-110	020404-MW14-110-108	4-Apr-02	98 - 108	1. U	1. U	1. U	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061013-MW-14-110-104	13-Oct-06		0.14 U	0.5	0.14 J	0.56	0.23 J	0.79 J	-	0.39 J	0.1 J	0.11 U	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	-	Acetone = 4.9 J
	2708-080603-MW14-110-104	3-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080916-MW-14-110-131	16-Sep-08		0.045 U	0.6	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090326-MW14-110-103	26-Mar-09		0.43 J	0.26 J	0.57	0.47 J	0.16 J	0.63 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090812-MW-14-110-117	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	1. U	0.5 U	0.5 U	2. U	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-15-50	020405-MW15-50-119	5-Apr-02	40 - 50	57,000.	1. U	1. U	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061031-MW-15-50-127	31-Oct-06		33,000.	200.	180.	240.	190.	430.	-	4,100.	67.	11. U	-	-	-	-	-	-	12. U	14. U	13. U	15. U	-	-	
	2708-080603-MW15-50-103	3-Jun-08		42000	200.	290.	360.	210.	570.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590	#	#
MW-15-50	2708-080916-MW-15-50-128	16-Sep-08	40 - 50	27000	150.	180.	230.	150.	380.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW15-50-131	2-Apr-09		59,000.	300.	350.	480.	270.	750.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090817-MW-15-50-133	17-Aug-09		51,600.	320.	335.	-	-	765.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15-66	020404-MW15-66-107	4-Apr-02	60.5 - 66.5	1. U	1. U	1. U	-	-	2. U	-	-	-	-	-	-	-	-	-	-	-	1. U	-	-	-	-	
	061017-MW-15-66-109	17-Oct-06		0.14 U	0.11 U	0.13 U	0.22 U	0.11 U	0.22 U	-	1.5 J	0.095 U	0.11 U	-	-	-	-	-	-	0.2 J	0.14 U	0.13 U	0.15 U	-	-	Methylene Chloride = 0.23 J
	2708-080603-MW15-66-102	3-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080916-MW-15-66-129	16-Sep-08		27.	0.86	0.8	1.	0.66	1.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW15-66-133	2-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090817-MW-15-66-135	17-Aug-09		0.5 U	0.5 U	0.5 U	-	-	1.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16-45	040826-MW16-45-028	26-Aug-04	30 - 45	2,880.	959.	460.	546.	321.	867.	-	7,590.	50. U	50. U	50. U	50. U	50. U	50. U	-	-	-	50. U	50. U	50. U	-	-	
	061212-MW-16-45-129	12-Dec-06		5,000.	2,200.	770.	970.	480.	1,450.	-	14,000.	9.5 U	33. J	-	-	-	-	-	-	12. U	14. U	13. U	15. U	-	-	
	2708-070731-MW-16-45-148	31-Jul-07		4,230.	1,540.	615.	-	-	1,140.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080521-MW16-45-128	21-May-08		4,800.	1,400.	530.	620.	340.	960.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080917-MW-16-45-133	17-Sep-08		5,600.	1,800.	740.	910.	480.	1,390.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW16-45-135	2-Apr-09		4,200.	1,700.	810.	980.	490.	1,470.	2.3 U	12,000.	2. U	40. J	12. J	-	240.	68. J	2.2 U	2.1 U	2.7 U	3.1 U	3.9 U	2.4 U	2.3 U	3.6 U	
	2708-090814-MW-16-45-130	17-Aug-09		2,060.	832.	405.	484.	234.	718.	50. U	6,020.	50. U	50. U	50. U	-	139.	100. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	50. U	
MW-16-65	040826-MW16-65-026	26-Aug-04	55 - 65	1,370.	388.	236.	371.	181.	562.	-	4,890.	50. U	50. U	50. U	50. U	50. U	50. U	-	-	-	50. U	50. U	50. U	-	-	
	040826-MW16-65-027	26-Aug-04		1,250.	339.	223.	-	-	486.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	061023-MW-16-65-114	23-Oct-06		930.	4.8 J	170.	54.	56.	110.	-	3,600.	1.9 U	12. J	-	-	-	-	-	-	2.3 U	2.7 U	2.6 U	2.9 U	-	-	Acrolein = 35 J Acrylonitrile = 23 J Iodomethane = 9.6 J
	2708-070628-MW-16-65-115	28-Jun-07		698.	2.75 U*	95.7	-	-	59.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW16-65-109	13-May-08		690.	9.8 J	130.	81.	41.	122.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080911-MW-16-65-112	11-Sep-08		680. J	9.8	120. J	41.	38.	79.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090330-MW16-65-114	30-Mar-09		860.	6.5	130.	44.	36.	80.	0.45 U	2,500.	0.39 U	11. J	2.5 J	-	46.	11. J	0.44 U	0.41 U	0.54 U	0.61 U	0.77 U	0.48 U	0.45 U	0.71 U	p-IPT = 1.7 J n-B = 1.5 J, sec-B = 0.6 J
	2708-090813-MW-16-65-126	13-Aug-09		582.	25. U	102.	50. U	27.	27.	25. U	2,020.	25. U	25. U	25. U	-	58.	50. U	25. U	25. U	25. U	25. U	25. U	25. U	25. U	25. U	Methylene Chloride = 294.
	2708-090813-MW-16-65-128	13-Aug-09		597.	25. U	105.	50. U	29.	29.	25. U	2,670.	25. U	25. U	25. U	-	51.5	50. U	25. U	25. U	25. U	25. U	25. U	25. U	25. U	25. U	Methylene Chloride = 384.
MW-16-125	040826-MW16-125-025	26-Aug-04	115 - 125	1. U	1. U	1. U	2. U	1. U	2. U	-	22.2	1. U	1. U	1. U	1. U	1. U	1. U	-	-	-	1. U	1. U	1. U	-	-	
	061016-MW-16-125-106	16-Oct-06		0.26 J	0.94	0.18 J	0.22 U	0.11 U	0.22 U	-	0.29 U	0.095 U	0.11 U	-	-	-	-	-	-	0.12 U	0.14 U	0.13 U	0.15 U	-	0.06 J	
	2708-070628-MW-16-125-116	28-Jun-07		0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080515-MW16-125-127	15-May-08		160.	55.	60.	61.	37.	98.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-17-79	050926-MW-17-79-110	26-Sep-05	38.5 - 78.5	2.82	1. U	8.8	1.72	1.72	1.72	-	82.4	1. U	2. U	1. U	-	1.	1. U	-	-	-	1. U	1. U	1. U	-	-	
	061026-MW-17-79-119	26-Oct-06		1.5	0.48 J	5.7	0.93	1.1	2.03	-	5.2	0.095 U	0.27 J	-	-	-	-	-	-	0.14 J	0.14 U	0.13 U	0.15 U	-	-	
	2708-070627-MW-17-79-112	27-Jun-07		1.34	0.4 U	4.39	2. U	1.02	2. U	-	-	0.4 U	1. U	-	-	-	-	-	-	-	0.4 U	0.4 U	0.4 U	0.4 U	-	
	2708-080514-MW17-79-120	14-May-08		1.4	0.44 J	1.6	0.58	0.74	1.32	0.045 U	4.3	0.039 U	0.33 J	0.06 J	-	0.35 J	0.06 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080911-MW-17-79-110	11-Sep-08		5.4	0.87 U*	5.1	1.	1.4	2.4	0.045 U	4.4 J	0.039 U	0.46 J	0.12 J	-	0.84 J	0.08 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,2-DCA = 0.17 p-IPT = 0.06, sec-B = 0.06
	2708-081209-MW-17-79-009	9-Dec-08		6.1	0.46 J	4.7	0.93	1.2	2.13	0.045 U	3.4	0.039 U	0.46 J	0.12 J	-	0.75 J	0.07 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.09 J	0.071 U	1,1-DCA = 0.2 Carbon Disulfide = 0.08 Chloromethane = 0.12 p-IPT = 0.07, sec-B = 0.07
	2708-090326-MW17-79-106	26-Mar-09		6.9	0.37 J	3.7	0.65	1.1	1.75	0.045 U	3.4	0.05 J	0.39 J	0.11 J	-	0.61 J	0.07 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Bromodichloromethane = 0.39 J Bromoform = 0.27 J Dibromochloromethane = 0.5 p-IPT = 0.05 J, sec-B = 0.06 J
	2708-090817-MW-17-79-134	17-Aug-09		5.48	0.5 U	3.19	1. U	1.	1.	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-18-30	2708-070731-MW-18-30-146	31-Jul-07	19 - 29	10,100.	1,470.	537.	-	-	1,360.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW18-30-121	14-May-08		8,600.	1,300.	420.	880.	470.	1,350.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NS (Dry)	17-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NS (Dry)	9-Dec-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-090402-MW18-30-137	2-Apr-09		11,000.	3,000.	690.	1,500.	730.	2,230.	4.5 U	14,000.	3.9 U	36. J	18. J	-	340.	96. J	4.4 U	4.1 U	5.4 U	6.1 U	7.7 U	4.8 U	4.5 U	7.1 U	
	2708-090812-MW-18-30-102	12-Aug-09		9,370.	2,140.	480.	1,000.	500.	1,500.	250. U	500. U	250. U	250. U	10,200.	-	250. U	250. U	500. U	250. U	250. U	250. U	250. U	250. U	250. U	250. U	
MW-18-180	2708-070628-MW-18-180-117	28-Jun-07	170 - 180	0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW18-180-108	13-May-08		0.045 U	0.12 J	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080911-MW-18-180-111	11-Sep-08		0.07 J	0.67 U*	0.06 J	0.08 J	0.037 U	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081209-MW-18-180-008	9-Dec-08		0.045 U	0.09 J	0.042 U	0.078 U	0.037 U	0.078 U	0.2 J	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.92	0.041 U	0.22 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.05 Chloromethane = 0.1
	2708-090326-MW18-180-104	26-Mar-09		0.045 U	0.5 U	0.042 U	0.078 U	0.037 U	0.031 U	0.22 J	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	1.2	0.041 U	0.23 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Acetone = 3. J Chloromethane = 0.07 J
	2708-090817-MW-18-180-132	17-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	1.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590	#	#
MW-19-22	2708-070730-MW-19-22-143	30-Jul-07	12 - 22	6.58	1.65	3.02	-	-	7.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW19-22-110	13-May-08		1.	0.4 J	1.7	2.2	2.8	5.	0.045 U	320.	0.039 U	0.75 J	0.22 J	-	2.6	0.96 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon disulfide = 0.09 p-IPT = 0.21 J sec-B = 0.24 J, tert-B = 0.07 J
	2708-080910-MW-19-22-105	10-Sep-08		3.4	2.	2.6	3.6	4.5	8.1	0.09 U	170. J	0.078 U	0.62 J	0.16 J	-	4.	1.5 J	0.088 U	0.082 U	0.11 U	0.13 U	0.16 U	0.096 U	0.09 U	0.15 U	Acetone = 6.2 p-IPT= 0.26, sec-B = 0.16
	2708-081209-MW-19-22-014	9-Dec-08		4.	0.76	1.6	2.1	2.4	4.5	0.045 U	140.	0.039 U	0.63 J	0.15 J	-	1.7 J	0.87 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Chloromethane = 0.11 p-IPT = 0.15 sec-B = 0.17, tert-B = 0.05
	2708-090330-MW19-22-112	30-Mar-09		4.4	0.4 J	3.4	2.8	2.9	5.7	0.045 U	330.	0.039 U	0.75 J	0.2 J	-	2.2	0.91 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	p-IPT = 0.2 J sec-B = 0.2 J, tert-B = 0.05 J
	2708-090817-MW-19-22-140	17-Aug-09		5.89	0.95	3.99	2.46	3.02	5.48	0.5 U	247. J	0.5 U	0.73	0.5 U	-	1.45	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-19-125	2708-070627-MW-19-125-110	27-Jun-07	115 - 125	16.7	11.3	0.4 U	2. U	2.24	2.99	-	-	0.4 U	1. U	-	-	-	-	-	-	-	0.4 U	0.4 U	0.4 U	0.4 U	-	
	2708-080514-MW19-125-117	14-May-08		13.	1.5	0.32 J	0.6	4.2	4.8	0.045 U	110.	0.039 U	1.6 J	0.09 J	-	0.54 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080910-MW-19-125-106	10-Sep-08		2.7	1.9	0.16 J	0.55	3.1	3.65	0.045 U	31. J	0.11 J	1. J	0.06 J	-	0.39 J	0.08 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-081209-MW-19-125-013	9-Dec-08		0.58	0.36 J	0.09 J	0.38 J	2.8	3.18	0.045 U	24.	0.039 U	0.81 J	0.05 J	-	0.33 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.07 Chloromethane = 0.09
	2708-090330-MW19-125-110	30-Mar-09		0.51	0.19 J	0.05 J	0.27 J	2.4	2.67 J	0.045 U	11.	0.039 U	0.53 J	0.037 U	-	0.18 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090813-MW-19-125-123	13-Aug-09		0.56	0.5 U	0.5 U	1. U	2.72	2.72	0.5 U	8.91	0.5 U	0.63	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-19-180	2708-070627-MW-19-180-111	27-Jun-07	170 - 180	0.5 U	0.5 U	0.5 U	-	-	1. U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080513-MW19-180-115	13-May-08		0.17 J	0.07 J	0.042 U	0.078 U	0.037 U	0.078 U	0.11 J	0.22 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.09 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.12 J	0.071 U	
	2708-080910-MW-19-180-104	10-Sep-08		0.19 J	0.33 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.11 J	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.09 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.16 J	0.071 U	
	2708-081209-MW-19-180-012	9-Dec-08		0.22 J	0.09 J	0.042 U	0.078 U	0.037 U	0.078 U	0.14 J	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.13 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.13 J	0.071 U	Chloromethane = 0.19
	2708-090330-MW19-180-108	30-Mar-09		0.21 J	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.15 J	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.17 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.12 J	0.071 U	
	2708-090813-MW-19-180-125	13-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	11.7	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	2708-080515-MW20-120-126	15-May-08		120.	0.51	1.2	12.	6.3	18.3	0.05 J	210.	0.039 U	2.1	0.18 J	-	1.6 J	0.13 J	0.06 J	0.041 U	0.08 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon disulfide = 0.06 J p-IPT = 0.06 J
	2708-080910-MW-20-120-103	10-Sep-08		55.	1.2	1.	7.9	5.3	13.2	0.045 U	110. J	0.039 U	1.9 J	0.18 J	-	1.6 J	1. J	0.06 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Acetone = 3.5
	2708-081209-MW-20-120-010	9-Dec-08		70.	0.69	0.94	6.	6.2	12.2	0.05 J	130.	0.039 U	2.1	0.2 J	-	1.2 J	0.08 J	0.06 J	0.041 U	0.054 U	0.1 J	0.4 J	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.9 J Chloromethane = 0.1 J p-IPT = 0.05 J
	2708-081209-MW-20-120-011	9-Dec-08		73.	0.52	1.	6.2	6.3	12.5	0.045 U	160.	0.039 U	2.1	0.18 J	-	1.3 J	0.07 J	0.05 J	0.041 U	0.054 U	0.061 U	0.23 J	0.048 U	0.045 U	0.071 U	Carbon disulfide = 0.08 J p-IPT = 0.05 J
	2708-090330-MW20-120-113	30-Mar-09		71.	0.64	1.1	4.4	7.	11.4	0.045 U	130.	0.039 U	2.7	0.25 J	-	1.8 J	0.1 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	p-IPT = 0.08 J Carbon Disulfide = 0.05 J
	2708-090812-MW-20-120-116	12-Aug-09		62.	0.5 U	0.5 U	1.07	1.91	2.98	0.5 U	29.7	0.5 U	0.79	0.5 U	-	1. UJ	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
MW-21-12	2708-070719-MW-21-12-129	19-Jul-07	7 - 12	0.5 U	0.5 U	0.5 U	-	-	1.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW21-12-122	14-May-08		0.2 J	0.24 J	0.16 J	1.6	0.13 J	1.73 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NS (Dry)	15-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-21-12-007	8-Dec-08		0.31 J	0.43 J	0.13 J	0.92	0.15 J	1.07	0.045 U	0.56 J	0.039 U	5.3	3.	-	0.17 J	0.12 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,1-DCA = 0.13 J Acetone = 2.6 J Carbon Disulfide = 0.06 J n-B = 1.6 J, sec-B = 1.8 J tert-B = 2.3 J, t-1,3-D = 0.23 J
	2708-090401-MW21-12-126	1-Apr-09		0.44 J	0.19 J	0.16 J	1.7	0.18 J	1.88 J	0.045 U	0.1 U	0.039 U	8.1	5.	-	0.17 J	0.23 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,1-DCA = 0.05 J Chloroethane = 0.23 J n-B = 3.2, sec-B = 3.2 tert-B = 0.37 J
	2708-090811-MW-21-12-105	11-Aug-09		0.48 J	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	1. U	0.5 UJ	1.19 J	0.5 UJ	5.12 J	16.3 J	-	0.5 UJ	0.5 UJ	1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	n-B = 1.19 J, sec-B = 1.68 J
MW-21-75	2708-070718-MW-21-75-124	18-Jul-07	65 - 75	0.5 UJ	0.5 UJ	0.5 UJ	-	-	1. UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW21-75-123	14-May-08		0.045 U	0.048 U	0.042 U	0.08 J	0.037 U	0.08 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080915-MW-21-75-125	15-Sep-08		0.045 U	0.62	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-21-75-004	8-Dec-08		0.045 U	0.14 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,1-DCA = 0.6 J
	2708-090331-MW21-75-124	31-Mar-09		0.045 U	0.5 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090817-MW-21-75-136	17-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1,1-DCA = 0.58
MW-21-115	2708-070718-MW-21-115-123	18-Jul-07	105 - 115	0.5 UJ	0.5 UJ	0.5 UJ	-	-	1. UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080515-MW21-115-125	15-May-08		0.045 U	0.08 J	0.042 U	0.12 J	0.037 U	0.12 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080915-MW-21-115-126	15-Sep-08		0.045 U	0.76	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-21-115-005	8-Dec-08		0.045 U	0.13 U*	0.042 U	0.08 J	0.037 U	0.08	0.045 U	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.05 J

Table 3d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatiles by EPA Method 8260
Gasco Property Wells

Well Number	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylene	o-Xylene	Xylene (total)	Chlorobenzene	Naphthalene	Styrene	Isopropylbenzene	n-Propylbenzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Others
				Analytical Results - ug/l (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																										
Fish Consumption																										
	EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																										
	MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100.	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600.	680.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																										
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#	#	#
	DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.		#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590	#	#
MW-21-115	2708-090331-MW21-115-120	31-Mar-09	105 - 115	0.045 U	0.5 U	0.042 U	0.09 J	0.04 J	0.13 J	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.04 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090811-MW-21-115-101	11-Aug-09		0.25 UJ	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	1. U	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	2. UJ	-	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	
MW-21-165	2708-070718-MW-21-165-122	18-Jul-07	156 - 166	0.5 UJ	0.5 UJ	0.5 UJ	-	-	1. UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080514-MW21-165-124	14-May-08		0.14 J	0.23 J	0.06 J	0.17 J	0.08 J	0.25 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080915-MW-21-166-124	15-Sep-08		0.045 U	0.5	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-MW-21-166-006	8-Dec-08		0.14 J	0.2 U*	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 UJ	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.15 J
	2708-090331-MW21-165-122	31-Mar-09		0.08 J	0.5 U	0.042 U	0.078 U	0.04 J	0.04 J	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090811-MW-21-166	11-Aug-09		0.25 UJ	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	1. U	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	2. UJ	-	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	
PW-01	061012-PW-01-102	12-Oct-06	40 - 80	7,300.	100.	520.	220.	130.	350.	-	6,000.	2.4 U	8.8 J	-	-	-	-	-	-	2.9 U	3.4 U	3.2 U	3.6 U	-	-	
	2708-070731-PW-01-80-147	31-Jul-07		7,060.	59.5	457.	-	-	238.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080604-PW01-80-107	4-Jun-08		3,700.	27.	170.	37.	34.	71.	2.3 U	3,200.	2. U	5. J	1.9 U	-	32. J	8.5 J	2.2 U	2.1 U	2.7 U	3.1 U	3.9 U	2.4 U	2.3 U	3.6 U	
	NS*	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Temporary Well Point Samples 2004																										
B-56	040602-101	2-Jun-04	18 - 22	8.	5. U	5. U	10. U	5. U	10. U	-	328.	5. U	10. U	5. U	-	5. U	5. U	-	-	-	5. U	5. U	5. U	-	-	
	040603-102	3-Jun-04	40 - 44	1. U	1. U	1. U	2. U	1. U	2. U	-	2.57	1. U	10. U	1. U	-	1. U	1. U	-	-	-	1. U	1. U	1. U	-	-	
	040603-103	3-Jun-04	60 - 64	3.62	1. U	70.	10.5	8.14	18.64	-	140.	1. U	2. U	1. U	-	2.06	1. U	-	-	-	1. U	1. U	1. U	-	-	
	040603-104	3-Jun-04	80 - 84	5. U	5. U	5. U	10. U	10.6	10.6	-	441.	5. U	10. U	5. U	-	5. U	5. U	-	-	-	5. U	5. U	5. U	-	-	
	040603-105	3-Jun-04	80 - 84	3.1	2. U	2.02	6.96	4. U	6.96	-	273.	2. U	4. U	2. U	-	2. U	2. U	-	-	-	2. U	2. U	2. U	-	-	
	040604-106	4-Jun-04	100 - 104	1. U	1. U	1. U	2. U	1. U	2. U	-	2. U	1. U	2. U	1. U	-	1. U	1. U	-	-	-	1. U	1. U	1. U	-	-	
	040614-115	14-Jun-04	136 - 140	1. U	1. U	1. U	2. U	1. U	2. U	-	3.26	1. U	2. U	1. U	-	1. U	1. U	-	-	-	1. U	1. U	1. U	-	-	
	040614-116	14-Jun-04	174 - 178	1. U	1. U	1. U	2. U	1. U	2. U	-	4.2	1. U	2. U	1. U	-	1. U	1. U	-	-	-	1. U	1. U	1. U	-	-	
B-59	040611-108	11-Jun-04	46-50	5,570.	50. U	317.	50. U	85.5	85.5	-	4,460.	50. U	100. U	50. U	-	63.	50. U	-	-	-	50. U	50. U	50. U	-	-	
	040611-109	11-Jun-04	76-80	230.	12.4	25.8	13.8	12.2	26.	-	582.	10. U	10. U	5. U	-	6.65	5. U	-	-	-	5. U	5. U	5. U	-	-	
	040611-110	11-Jun-04	96-100	113.	6.16	9.78	6.04	5.24	11.28	-	272.	2. U	4. U	2. U	-	2.58	-	-	-	-	2. U	2. U	2. U	-	-	
	040611-112	11-Jun-04	116-120	166.	2.16	3.02	5.42	1.63	7.05	-	116.	1. U	2. U	1. U	-	1.51	-	-	-	-	1. U	1. U	1. U	-	-	
	040611-113	11-Jun-04	144-148	19.3	1.43	2.58	2.37	1.31	3.58	-	119.	1. U	2. U	1. U	-	1.17	-	-	-	-	1. U	1. U	1. U	-	-	
	040614-114	14-Jun-04	171-175	2.29	1. U	1. U	2. U	1. U	2. U	-	3.46	1. U	2. U	1. U	-	1.	-	-	-	-	1. U	1. U	1. U	-	-	
Quality Control Samples (HAI)																										
	2708-080512-TB1-37492	12-May-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Chloromethane = 0.08 J
	2708-080513-TB2-37493	13-May-08		0.045 U	0.05 J	0.16 J	0.68	0.32 J	1.	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.07 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Methylene chloride = 1.0 J
	2708-080514-TB3-37552	14-May-18		0.045 U	0.1 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.06 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080515-TB4-37553	15-May-08		0.045 U	0.09 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	TB5-37589	21-May-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080603-TB-37649	3-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080604-TB6-37648	4-Jun-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080910-TB 38520	10-Sep-08		0.045 U	0.19 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080911-TB 38519	11-Sep-08		0.045 U	0.37 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-080915-TB-38518	15-Sep-08		0.045 U	0.81	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080916-TB 38517	16-Sep-08		0.045 U	1.2	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-080917-TB 38516	17-Sep-08		0.045 U	2.1	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2708-081208-TB-39353	8-Dec-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Chloromethane = 0.06 J
	2708-081209-TB-39350	8-Dec-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090326-TB39765	26-Mar-09		0.045 U	0.05 J	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090330-TB-39763	30-Mar-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090331-TB39825	31-Mar-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090401-TB39764	1-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090402-TB39827	2-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.14 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
	2708-090811-TB-108	11-Aug-09		0.25 UJ	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	1. U	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	2. UJ	-	0.5 UJ	0.5 UJ	1. UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	
	2708-090812-TB-109	12-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	2. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	2708-090813-TB-118	13-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	2. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	2708-090817-TB-131	17-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	2. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	2708-090820-TB-160	20-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	

Note:
" - " = Parameter not analyzed or data unavailable (sampler other than HAI)
# = Reference Level not established
DEQ = Oregon Department of Environmental Quality
EPA = U.S. Environmental Protection Agency
J = Estimated Concentration
MCL = Maximum Contaminant Level

NRWQC = National Recommended Water Quality Criteria
NS = No Sample
ppb = parts per billion
PRG = Potential Remediation Goal
SCV = Secondary Chronic Value

ug/l = micrograms per liter
U = Non-detect above method reporting limit
U* = Compound considered non-detect because it was also detected in associated blank at similar concentration levels.
UJ = Compound not detected, but the reporting limit is probably higher due to a low bias identified during the quality assurrance review.
UR = Unusable Reportling Limit, compound may or may not be present in this sample.

1,1-DCA = 1,1-Dichloroethane
1,2-DCA = 1,2-Dichloroethane
n-B = n-Butylbenzene
sec-B = sec-Butylbenzene
tert-B = tert-Butylbenzene
p-IPT = p-Isopropyltoluene (4-Isopropyltoluene)
t-1,3-D = trans 1,3-Dichloropropene

Note: Reference Level is lowest of EPA AWQC for aquatic life protection, AWQC for human consumption of organisms only, or DEQ SLV for aquatic receptors
1 = Sample number prefix: 2708-
2 = Tier II SCV values were taken from Suter II, G.W. and Tasco, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2
3 = MCL is based on benzo(a)pyrene
4 = Unless otherwise noted Screening Level Values are from Portland Harbor Joint Source Control Strategy, Final, December 2005 (7/16/07 revision)
5 = EPA, under CERCLA authority, has identified the Safe Drinking Water Acts MCLs and AWQCs (federal and state once approved as potential ARARs under CERCLA. The final determination will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to The EPA Portland Harbor ROD, due to an exceedance of an SLV in upland stormwater will be evaluated and prioritized on a case by case basis.
6 = Values were taken from Table 33c (OAR 340-41), which are Water Quality Guidance Vales, not criteria, that can be used in the application of Oregon's Narrative Toxics Criteria to waters of the state in order to protect aquatic life.

*Location PW-01 was converted to an extraction well following 2nd quarter of 2008.

Table 3e - Summary of Historical Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270 or 8270C
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Analytical Results - ug/L (ppb)														
				Bis(2-ethylhexyl)phthalate	Carbazole	Dibenzofuran	Diethylphthalate	2,4-Dimethylphenol	Di-n-butyl-phthalate	1-Methylnaphthalene	2-Methylnapthalene	2-Methylphenol (o-Cresol)	4-Methylphenol (p-Cresol)	4-Nitrophenol	Pentachlorophenol	Phenol	PAHs (See Table 3b)	Other Detects
HUMAN HEALTH SCREENING LEVEL VALUES [7,8]																		
Fish Consumption																		
	EPA 2004 NRWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
	Portland Harbor specific fish consumption rate			0.22	#	#	4,400.	85.	450.	#	#	#	#	#	0.3	170,000.		
	DEQ 2004 AWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
Drinking Water																		
	MCL			6.	#	#	#	#	#	#	0.2 [10]	#	#	#	1.	#		
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			4.8	#	37.	29,000.	730.	3,700.	2.3	150.	1,800.	180.	#	0.56	11,000.		
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [7,8]																		
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	15 [6]	#		
	DEQ 2004 AWQC (chronic) [2]			3 [3]	#	#	3 [2]	#	3 [2]	#	#	#	#	150.	13 [3,4]	2,560.		
	Oak Ridge National Laboratory (Tier II SCV) [9]			#	#	#	210.	#	#	#	2.1	13.	#	300.	#	#		
MW-1-22	061013-MW-1-22-123	13-Oct-06	11 - 21	0.27 U	120.	5.7	0.026 U	0.71 J	0.027 U	-	53.	-	31.	0.54 U	0.029 U	2.1		
	2708-070720-MW-1-22-131	20-Jul-07		-	94.	4.44	-	-	-	-	29.6	-	-	-	-	-		
	2708-080512-MW1-22-105	12-May-08		-	20.	1.1	-	-	-	6.7	8.7	-	-	-	-	-		
	NS (Dry)	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-		
	2708-090402-MW1-22-132	2-Apr-09		-	3.	0.77	-	-	-	2.4	3.3	-	-	-	-	-		
	2708-090820-MW-1-22-163	20-Aug-09		-	115.	8.95	-	-	-	35.7	49.7	-	-	-	-	-		
MW-1-55	2708-070719-MW-1-55-127	19-Jul-07	45 - 55	-	0.0966 U	0.0966 U	-	-	-	-	0.0966 U	-	-	-	-	-		
	2708-080512-MW1-55-104	12-May-08		-	0.0045 U	0.0046 U	-	-	-	0.0035 U	0.0089 J	-	-	-	-	-		
	2708-080915-MW-1-55-121	15-Sep-08		-	0.0045 U	0.0046 U	-	-	-	0.0094 J	0.013 J	-	-	-	-	-		
	2708-081208-MW-1-55-002	8-Dec-08		-	0.0045 U	0.0046 U	-	-	-	0.0035 U	0.013 J	-	-	-	-	-		
	2708-090401-MW1-55-130	1-Apr-09		-	0.0045 U	0.0046 U	-	-	-	0.0035 U	0.04 U	-	-	-	-	-		
	2708-090820-MW-1-55-164	20-Aug-09		-	0.0374 U	0.0374 U	-	-	-	0.0374 U	0.0374 U	-	-	-	-	-		
MW-1-82	2708-070719-MW-1-82-126	19-Jul-07	72 - 82	-	0.0962 U	0.0962 U	-	-	-	-	0.0962 U	-	-	-	-	-		
	2708-080512-MW1-82-103	12-May-08		-	0.0045 U	0.0046 U	-	-	-	0.0035 U	0.0042 J	-	-	-	-	-		
	2708-080915-MW-1-82-119	15-Sep-08		-	0.0045 U	0.0046 U	-	-	-	0.0049 J	0.0072 J	-	-	-	-	-		
	2708-081208-MW-1-82-001	8-Dec-08		-	0.0045 U	0.0046 U	-	-	-	0.0035 U	0.0038 J	-	-	-	-	-		
	2708-090401-MW1-82-128	1-Apr-09		-	0.0045 U	0.0046 U	-	-	-	0.0035 U	0.0023 U	-	-	-	-	-		
	2708-090820-MW-1-82-161	20-Aug-09		-	0.0374 U	0.0374 U	-	-	-	0.0374 U	0.0374 U	-	-	-	-	-		
	2708-090820-MW-1-82-162	20-Aug-09		-	0.0377 U	0.0377 U	-	-	-	0.0377 U	0.0377 U	-	-	-	-	-		
MW-2-32	061016-MW-2-32-107	16-Oct-06	21.5 - 31.5	0.27 U	0.013 U	0.014 U	0.026 U	0.32 U	0.027 U	-	0.012 U	-	0.051 U	0.54 U	0.029 U	0.099 J		
	2708-070712-MW-2-32-120	12-Jul-07		-	0.0962 UJ	0.202 J	-	-	-	-	0.0962 UJ	-	-	-	-	-		
	2708-080512-MW2-32-101	12-May-08		-	0.031	0.017 J	-	-	-	0.052	0.011 J	-	-	-	-	-		
	2708-080915-MW-2-32-120	15-Sep-08		-	0.0047 U	0.0048 U	-	-	-	0.0068 J	0.0067 J	-	-	-	-	-		
	2708-090401-MW2-32-127	1-Apr-09		-	0.017 U	0.014 J	-	-	-	0.013 J	0.015 J	-	-	-	-	-		
	2708-090812-MW-2-32-113	12-Aug-09		-	0.0383 U	0.0383 U	-	-	-	0.0383 U	0.0534	-	-	-	-	-		
MW-2-61	061011-MW-2-61-101	11-Oct-06	50 - 60	0.27 U	0.013 U	0.014 U	0.035 J	0.32 U	0.054 J	-	0.012 U	-	0.051 U	0.54 U	0.029 U	0.02 U		
	2708-070719-MW-2-61-128	19-Jul-07		-	0.098 U	0.098 U	-	-	-	-	0.098 U	-	-	-	-	-		
	2708-080512-MW2-61-100	12-May-08		-	0.0045 U	0.0046 U	-	-	-	0.0035 U	0.0027 J	-	-	-	-	-		
	2708-080915-MW-2-61-118	15-Sep-08		-	0.0045 U	0.0046 U	-	-	-	0.021	0.019 J	-	-	-	-	-		
	2708-090401-MW2-61-125	1-Apr-09		-	0.0045 U	0.0046 U	-	-	-	0.007 J	0.016 J	-	-	-	-	-		
	2708-090812-MW-2-61-115	12-Aug-09		-	0.04 U	0.04 U	-	-	-	0.04 U	0.04 U	-	-	-	-	-		
MW-2-104	2708-070712-MW-2-104-119	12-Jul-07	94 - 104	-	0.0962 UJ	0.0962 UJ	-	-	-	-	0.0962 UJ	-	-	-	-	-		
	2708-080512-MW2-104-102	12-May-08		-	0.0045 U	0.0046 U	-	-	-	0.011 J	0.026	-	-	-	-	-		
	2708-080915-MW-2-104-122	15-Sep-08		-	0.0045 U	0.0046 U	-	-	-	0.01 J	0.022	-	-	-	-	-		
	2708-080915-MW-2-104-123	15-Sep-08		-	0.0045 U	0.0046 U	-	-	-	0.01 J	0.023	-	-	-	-	-		
	2708-081208-MW-2-104-003	8-Dec-08		-	0.0045 U	0.0046 U	-	-	-	0.011 J	0.024	-	-	-	-	-		
	2708-090401-MW2-104-129	1-Apr-09		-	0.0045 U	0.0046 U	-	-	-	0.0088 J	0.021	-	-	-	-	-		
	2708-090812-MW-2-104-111	12-Aug-09		-	0.039 U	0.039 U	-	-	-	0.039 U	0.039 U	-	-	-	-	-		
MW-3-26	061017-MW-3-26-110	17-Oct-06	15 - 25	0.27 U	0.013 U	0.014 U	0.026 U	0.32 U	0.059 J	-	0.012 U	-	0.051 U	0.54 U	0.029 U	0.02 U		1,4-DCB = 0.078 J
	2708-070629-MW-3-26-119	29-Jun-07		-	4.9 UJ	6.93 J	-	-	-	-	11.8 J	-	-	-	-	-		
	2708-080512-MW3-26-107	12-May-08		-	0.044	0.13	-	-	-	0.038	0.052	-	-	-	-	-		
	2708-080911-MW-3-26-115	11-Sep-08		-	0.037	0.032	-	-	-	0.052	0.1	-	-	-	-	-		
	2708-090331-MW3-26-123	31-Mar-09		-	0.0095 J	0.019 J	-	-	-	0.011 J	0.019 J	-	-	-	-	-		
	2708-090817-MW-3-26-139	17-Aug-09		-	0.0396 U	0.0396 U	-	-	-	0.0829	0.073	-	-	-	-	-		

Table 3e - Summary of Historical Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270 or 8270C
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Analytical Results - ug/L (ppb)																											
				Bis(2-ethylhexyl)phthalate		Carbazole		Dibenzofuran		Diethylphthalate		2,4-Dimethylphenol		Di-n-butyl-phthalate		1-Methylnaphthalene		2-Methylnapthalene		2-Methylphenol (o-Cresol)		4-Methylphenol (p-Cresol)		4-Nitrophenol		Pentachlorophenol		Phenol		PAHs (See Table 3b)	Other Detects
HUMAN HEALTH SCREENING LEVEL VALUES [7,8]																															
Fish Consumption																															
	EPA 2004 NRWQC (organism only)			2.2		#		#		44,000.		850.		4,500.		#		#		#		#		#		3.		1,700,000.			
	Portland Harbor specific fish consumption rate			0.22		#		#		4,400.		85.		450.		#		#		#		#		#		0.3		170,000.			
	DEQ 2004 AWQC (organism only)			2.2		#		#		44,000.		850.		4,500.		#		#		#		#		#		3.		1,700,000.			
Drinking Water																															
	MCL			6.		#		#		#		#		#		#		0.2 [10]		#		#		#		1.		#			
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			4.8		#		37.		29,000.		730.		3,700.		2.3		150.		1,800.		180.		#		0.56		11,000.			
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [7,8]																															
	EPA 2004 NRWQC (chronic)			#		#		#		#		#		#		#		#		#		#		#		15 [6]		#			
	DEQ 2004 AWQC (chronic) [2]			3 [3]		#		#		3 [2]		#		3 [2]		#		#		#		#		150.		13 [3,4]		2,560.			
	Oak Ridge National Laboratory (Tier II SCV) [9]			#		#		#		210.		#		#		#		2.1		13.		#		300.		#		#			
MW-3-56	951206-MW3-56-01	6-Dec-95	45 - 55	-		-		-		-		5.	U	-		-		-		5.	U	5.	U	5.	U	5.	U	5.	U		
	040823-MW3-56-011	23-Aug-04		-		18.6		-		-		-		-		-		-		-		-		-		-		-			
	061024-MW-3-56-116	24-Oct-06		0.45	J	4.3		6.7		0.11	J	0.36	U	0.2	BJ	-		8.6		-		0.057	U	0.6	U	0.032	U	0.022	U		1,4-DCB = 0.17 J
	2708-070626-MW-3-56-108	26-Jun-07		-		6.46		4.85	U	-		-		-		-		23.3		-		-		-		-		-			
	2708-080512-MW3-56-106	12-May-08		-		4.3		4.8		-		-		-		25.		11.		-		-		-		-		-			
	2708-080911-MW-3-56-116	11-Sep-08		-		0.99		4.2		-		-		-		30.		2.5		-		-		-		-		-			
	2708-090326-MW3-56-105	26-Mar-09		-		1.5		5.8		-		-		-		32.		10.		-		-		-		-		-			
	2708-090811-MW-3-56-107	11-Aug-09		-		1.92	U	4.9		-		-		-		34.		1.92		-		-		-		-		-			
MW-4-35	960618-MW4-35-01	18-Jun-96	24 - 34	-		-		-		-		5.	U	-		-		-		5.	U	5.	U	5.	U	5.	U	5.	U		
	961001-MW4-35-01	1-Oct-96		-		-		-		-		5.	U	-		-		-		5.	U	5.	U	5.	U	5.	U	5.	U		
	970225-MW4-35-01	25-Feb-97		-		-		-		-		5.	U	-		-		-		5.	U	5.	U	5.	U	5.	U	5.	U		
	980827-MW4-35-01	27-Aug-97		-		-		-		-		20.	U	-		-		-		50.	U	50.	U	50.	U	10.	U	10.	U		
	980217-MW4-35-01	17-Feb-98		-		-		-		-		20.	U	-		-		-		5.	U	5.	U	5.	U	10.	U	10.	U		
	061018-MW-4-35-113	18-Oct-06		0.71	J	0.32		0.63		0.0653	U	0.32	U	0.077	J	-		0.18	J	0.06	U	0.051	U	0.54	U	0.029	U	0.33	J		
	2708-070726-MW-4-35-137	26-Jul-07		-		0.0971	U	0.113		-		-		-		-		0.0971	U	-		-		-		-		-			
	2708-080513-MW4-35-112	13-May-08		-		0.0045	U	0.17		-		-		-		2.5		0.076		-		-		-		-		-			
	2708-080513-MW4-35-113 (DUP)	13-May-08		-		0.0045	U	0.15		-		-		-		2.1		0.066		-		-		-		-		-			
	2708-080911-MW-4-35-109	11-Sep-08		-		0.58		1.1		-		-		-		13.		0.27		-		-		-		-		-			
	2708-090331-MW4-35-119	31-Mar-09		-		0.051	U	0.1		-		-		-		1.9		0.061		-		-		-		-		-			
	2708-090813-MW-4-35-121	13-Aug-09		-		0.4	U	0.4	U	-		-		-		2.77		0.4	U	-		-		-		-		-			
MW-4-57	960620-MW4-57-01	20-Jun-96	46 - 56	-		-		-		-		5.	U	-		-		-		5.	U	5.	U	5.	U	5.	U	2.8			
	961002-MW4-57-01	2-Oct-96		-		-		-		-		5.	U	-		-		-		5.	U	5.	U	5.	U	5.	U	9.			
	970226-MW4-57-01	26-Feb-97		-		-		-		-		5.	U	-		-		-		5.	U	5.	U	5.	U	5.	U	4.8			
	970828-MW4-57-01	28-Aug-97		-		-		-		-		5.	U	-		-		-		5.	U	5.	U	5.	U	10.	U	4.6			
	980218-MW4-57-01	18-Feb-98		-		-		-		-		50.	U	-		-		-		50.	U	50.	U	5.	U	10.	U	47.			
	040824-MW4-57-016	24-Aug-04		-		500.	U	-		-		-		-		-		-		-		-		-		-		-			
	061030-MW-4-57-122	30-Oct-06		1.4	U	57.		3.5		0.13	U	1.6	U	0.14	U	-		41.		0.3	U	0.26	U	2.7	U	0.15	U	66.			
	2708-070622-MW-4-57-101	22-Jun-07		-		0.971	U	0.971	U	-		-		-		-		0.971	U	-		-		-		-		-			
	2708-080513-MW4-57-111	13-May-08		-		61.		3.1		-		-		-		200.		42.		-		-		-		-		-			
	2708-080911-MW-4-57-108	11-Sep-08		-		72.		5.9		-		-		-		160.		28.		-		-		-		-		-			
	2708-090331-MW4-57-121	31-Mar-09		-		48.		2.6		-		-		-		130.		32.		-		-		-		-		-			
	2708-090817-MW-4-57-138	17-Aug-09		-		88.5		5.29		-		-		-		122.		19.8		-		-		-		-		-			
MW-4-101	061018-MW-4-101-112	18-Oct-06	89.5 - 99.5	0.27	U	0.013	U	0.014	U	0.026	U	0.5	J	0.027	U	-		0.65		0.06	U	0.3	J	0.54	U	0.029	U	9.1			
	2708-070625-MW-4-101-106	25-Jun-07		-		0.198	U	0.099	U	-		-		-		-		0.299		-		-		-		-		-			
	2708-080513-MW4-101-114	13-May-08		-		0.13		0.0046	U	-		-		-		1.9		0.72		-		-		-		-		-			
	2708-080910-MW-4-101-107	10-Sep-08		-		0.1		0.0047	U	-		-		-		1.4		0.57		-		-		-		-		-			

Table 3e - Summary of Historical Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270 or 8270C
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Analytical Results - ug/L (ppb)														
				Bis(2-ethylhexyl)phthalate	Carbazole	Dibenzofuran	Diethylphthalate	2,4-Dimethylphenol	Di-n-butyl-phthalate	1-Methylnaphthalene	2-Methylnapthalene	2-Methylphenol (o-Cresol)	4-Methylphenol (p-Cresol)	4-Nitrophenol	Pentachlorophenol	Phenol	PAHs (See Table 3b)	Other Detects
HUMAN HEALTH SCREENING LEVEL VALUES [7,8]																		
Fish Consumption																		
	EPA 2004 NRWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
	Portland Harbor specific fish consumption rate			0.22	#	#	4,400.	85.	450.	#	#	#	#	#	0.3	170,000.		
	DEQ 2004 AWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
Drinking Water																		
	MCL			6.	#	#	#	#	#	#	0.2 [10]	#	#	#	1.	#		
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			4.8	#	37.	29,000.	730.	3,700.	2.3	150.	1,800.	180.	#	0.56	11,000.		
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [7,8]																		
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	15 [6]	#		
	DEQ 2004 AWQC (chronic) [2]			3 [3]	#	#	3 [2]	#	3 [2]	#	#	#	#	150.	13 [3,4]	2,560.		
	Oak Ridge National Laboratory (Tier II SCV) [9]			#	#	#	210.	#	#	#	2.1	13.	#	300.	#	#		
MW-4-101	2708-090331-MW4-101-115	31-Mar-09	89.5 - 99.5	-	0.1	0.0046 U	-	-	-	2.	0.89	-	-	-	-	-		
	2708-090331-MW4-101-117	31-Mar-09		-	0.11	0.0046 U	-	-	-	1.7	0.72	-	-	-	-	-		
	2708-090813-MW-4-101-119	13-Aug-09		-	0.128	0.0381 U	-	-	-	1.81	0.799	-	-	-	-	-		
MW-5-32	061018-MW-5-32-114	18-Oct-06	21 - 31	0.27 U	0.013 U	0.0144 U	0.33 J	0.32 U	0.081 J	-	0.028 J	0.06 U	0.051 U	0.54 U	0.029 U	0.02 U		
	2708-070625-MW-5-32-104	25-Jun-07		-	1.92 U	1.92 U	-	-	-	-	1.92 U	-	-	-	-	-		
	2708-080514-MW5-32-118	14-May-08		-	0.031	0.011 J	-	-	-	0.018 J	0.059	-	-	-	-	-		
	2708-080910-MW-5-32-102	10-Sep-08		-	0.025	0.014 J	-	-	-	0.015 J	0.042	-	-	-	-	-		
	2708-090330-MW5-32-111	30-Mar-09		-	0.038	0.013 J	-	-	-	0.018 J	0.062	-	-	-	-	-		
	2708-090812-MW-5-32-114	12-Aug-09		-	0.0374 U	0.0374 U	-	-	-	0.0374 U	0.0374 U	-	-	-	-	-		
MW-5-100	040824-MW5-100-015	24-Aug-04	88 - 98	-	500. U	-	-	1,000. U	-	-	-	1,000. U	500. U	2,500. U	1,000. U	500. U		
	061027-MW-5-100-120	27-Oct-06		27. U	27.	1.4 U	2.6 U	34. J	2.7 U	-	110.	-	5.1 U	54. U	2.9 U	89.		
	2708-070625-MW-5-100-103	25-Jun-07		-	47.6 U	47.6 U	-	-	-	-	2,380. U	-	-	-	-	-		
	2708-080514-MW5-100-119	14-May-08		-	38.	0.095	-	-	-	88.	110.	-	-	-	-	-		
	2708-080910-MW-5-100-100	10-Sep-08		-	38.	0.18	-	-	-	78.	100.	-	-	-	-	-		
	2708-090330-MW5-100-109	30-Mar-09		-	38.	0.25	-	-	-	190.	240.	-	-	-	-	-		
	2708-090812-MW-5-100-112	12-Aug-09		-	94.3 U	94.3 U	-	-	-	298.	408.	-	-	-	-	-		
MW-5-175	061016-MW-5-175-05	16-Oct-06	163 - 173	0.27 U	0.013 U	0.0144 U	0.061 J	0.32 U	0.061 J	-	0.012 U	-	0.051 J	0.54 U	0.029 U	0.1 J		
	2708-070625-MW-5-175-105	25-Jun-07		-	0.1 U	0.1 U	-	-	-	-	0.1 U	-	-	-	-	-		
	2708-080514-MW5-175-116	14-May-08		-	0.0045 U	0.0046 U	-	-	-	0.015 J	0.023	-	-	-	-	-		
	2708-080910-MW-5-175-101	10-Sep-08		-	0.0046 U	0.0047 U	-	-	-	0.0036 U	0.0051 J	-	-	-	-	-		
	2708-090330-MW5-175-107	30-Mar-09		-	0.0045 U	0.0046 U	-	-	-	0.0065 J	0.012 J	-	-	-	-	-		
	2708-090812-MW-5-175-110	12-Aug-09		-	0.0377 U	0.0377 U	-	-	-	0.0377 U	0.0377 U	-	-	-	-	-		
MW-6-32	951207-MW6-32-01	7-Dec-95	21 - 31	-	-	-	-	50. U	-	-	-	50. U	50. U	50. U	50. U	50. U		
MW-6-61	951206-MW6-61-01	6-Dec-95	50 - 60	-	-	-	-	5. U	-	-	-	5. U	5. U	5. U	5. U	5. U		
MW-8-29	960321-MW8-29-01	21-Mar-96	18 - 28	-	-	-	-	69.	-	-	-	29.	15.	50. U	50. U	16.		
	960619-MW8-29-02	20-Jun-96		-	-	-	-	10.	-	-	-	5. U	5. U	5. U	5. U	5. U		
	961002-MW8-29-01	2-Oct-96		-	-	-	-	500. U	-	-	-	500. U	500. U	500. U	500. U	500. U		
	970226-MW8-29-01	26-Feb-97		-	-	-	-	82.	-	-	-	9.8	5. U	2.6	5. U	5.5		
	970828-MW8-29-01	28-Aug-97		-	-	-	-	23.	-	-	-	50. U	50. U	50. U	10. U	13.		
	980218-MW8-29-01	18-Feb-98		-	-	-	-	50. U	-	-	-	50. U	50. U	50. U	100. U	100. U		
	061031-MW-8-29-124	31-Oct-06		14. U	74.	9.8	1.3 U	16. J	1.4 U	-	91.	10. J	4.4 J	27. U	1.5 U	0.98 U		
	2708-080603-MW8-29-100	3-Jun-08		-	91.	11.	-	-	-	130.	130.	-	-	-	-	-		
	2708-080911-MW-8-27-113	11-Sep-08		-	92.	12.	-	-	-	130.	150.	-	-	-	-	-		
	2708-090331-MW8-29-118	31-Mar-09		-	140.	12.	-	-	-	190.	230.	-	-	-	-	-		
	2708-090811-MW-8-29-106	11-Aug-09		-	118.	13.8	-	-	-	156.	175.	-	-	-	-	-		
MW-8-56	061031-MW-8-56-125	31-Oct-06	45 - 55	14. U	180.	15.	1.3 U	170.	1.4 U	-	560.	45.	20. J	27. U	1.5 U	190.		N-Nitrosodiphenylamine = 4.5 J Benzoic Acid = 430

Table 3e - Summary of Historical Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270 or 8270C
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Analytical Results - ug/L (ppb)														
				Bis(2-ethylhexyl)phthalate	Carbazole	Dibenzofuran	Diethylphthalate	2,4-Dimethylphenol	Di-n-butyl-phthalate	1-Methylnaphthalene	2-Methylnapthalene	2-Methylphenol (o-Cresol)	4-Methylphenol (p-Cresol)	4-Nitrophenol	Pentachlorophenol	Phenol	PAHs (See Table 3b)	Other Detects
HUMAN HEALTH SCREENING LEVEL VALUES [7,8]																		
Fish Consumption																		
	EPA 2004 NRWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
	Portland Harbor specific fish consumption rate			0.22	#	#	4,400.	85.	450.	#	#	#	#	#	0.3	170,000.		
	DEQ 2004 AWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
Drinking Water																		
	MCL			6.	#	#	#	#	#	#	0.2 [10]	#	#	#	1.	#		
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			4.8	#	37.	29,000.	730.	3,700.	2.3	150.	1,800.	180.	#	0.56	11,000.		
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [7,8]																		
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	15 [6]	#		
	DEQ 2004 AWQC (chronic) [2]			3 [3]	#	#	3 [2]	#	3 [2]	#	#	#	#	150.	13 [3,4]	2,560.		
	Oak Ridge National Laboratory (Tier II SCV) [9]			#	#	#	210.	#	#	#	2.1	13.	#	300.	#	#		
MW-8-56	061031-MW-8-56-126	31-Oct-06	45 - 55	14. U	180.	15.	1.3 U	180.	1.4 U	-	550.	39.	19. J	27. U	1.5 U	130.		
	2708-080603-MW8-56-101	3-Jun-08		-	160.	24.	-	-	-	430.	700.	-	-	-	-	-		
	2708-080915-MW-8-56-117	15-Sep-08		-	130.	18.	-	-	-	210.	380.	-	-	-	-	-		
	2708-090331-MW8-56-116	31-Mar-09		-	140.	10.	-	-	-	200.	320.	-	-	-	-	-		
	2708-090811-MW-8-56-104	11-Aug-09		-	211.	47.2 U	-	-	-	339.	549.	-	-	-	-	-		
MW-9-29	061013-MW-9-29-103	13-Oct-06	18 - 28	2.9	0.013 U	0.014 U	0.042 J	0.32 U	0.064 J	-	0.048 J	-	0.051 U	0.54 U	5.1	0.02 U		
	2708-080604-MW9-29-109	4-Jun-08		-	0.0045 U	0.0046 U	-	-	-	0.006 J	0.008 J	-	-	-	-	-		
	2708-080604-MW9-29-110 (DUP)	4-Jun-08		-	0.0045 U	0.0046 U	-	-	-	0.0079 J	0.0093 J	-	-	-	-	-		
	2708-080916-MW-9-29-132	16-Sep-08		-	0.0076 U	0.0048 U	-	-	-	0.0041 J	0.0072 J	-	-	-	-	-		
	2708-090326-MW9-29-102	26-Mar-09		-	0.0045 U	0.0046 U	-	-	-	0.0035 U	0.0039 J	-	-	-	-	-		
	2708-090813-MW-9-29-120	13-Aug-09		-	0.0374 U	0.0374 U	-	-	-	0.0374 U	0.0374 U	-	-	-	-	-		
MW-10-25	951207-MW10-25-01	7-Dec-95	14 - 24	-	-	-	-	490.	-	-	-	1,600.	930.	50. U	50. U	470.		
	960320-MW10-25-01	20-Mar-96		-	-	-	-	760.	-	-	-	1,300.	810.	20. U	20. U	630.		
	960617-MW10-25-01	17-Jun-96		-	-	-	-	440.	-	-	-	1,100.	670.	500. U	500. U	280.		
	960930-MW10-25-01	30-Sep-96		-	-	-	-	550.	-	-	-	2,800.	1,700.	50. U	50. U	1,000.		
	970224-MW10-25-01	25-Feb-97		-	-	-	-	5,000. U	-	-	-	5,000. U	5,000. U	5,000. U	5,000. U	5,000. U		
	970827-MW10-25-01	27-Aug-97		-	-	-	-	350.	-	-	-	730.	1,200.	20. U	50. U	680.		
	980216-MW10-25-01	16-Feb-98		-	-	-	-	250.	-	-	-	650.	930.	50. U	100. U	790.		
	061213-MW-10-25-131	13-Dec-06		140. U	110.	33. J	13. U	250. J	14. U	-	770.	1,300.	2,700. U	270. U	15. U	2,900.		
	2708-080604-MW10-25-108	4-Jun-08		-	94.	20.	-	-	-	370.	580.	-	-	-	-	-		
	2708-080917-MW-10-25-136	17-Sep-08		-	140.	81.	-	-	-	630.	1,500.	-	-	-	-	-		
	2708-090326-MW10-25-101	26-Mar-09		-	130.	70.	-	-	-	770.	1,200.	-	-	-	-	-		
	2708-090813-MW-10-25-124	13-Aug-09		-	137.	48.	-	-	-	606.	980.	-	-	-	-	-		
MW-10-61	951206-MW10-61-01	6-Dec-95	50 - 60	-	-	-	-	5. U	-	-	-	5. U	5. U	5. U	5. U	5. U		
	960620-MW10-61-01	20-Jun-96		-	-	-	-	5. U	-	-	-	5. U	5. U	5. U	5. U	5. U		
	960930-MW10-61-01	2-Oct-96		-	-	-	-	5. U	-	-	-	5. U	5. U	5. U	5. U	5. U		
	970226-MW10-61-01	26-Feb-97		-	-	-	-	5. U	-	-	-	5. U	5. U	5. U	5. U	8.4		
	970828-MW10-61-01	28-Aug-97		-	-	-	-	5. U	-	-	-	5. U	5. U	5. U	10. U	10. U		
	980218-MW10-61-01	18-Feb-98		-	-	-	-	5. U	-	-	-	5. U	5. U	5. U	10. U	10. U		
	061017-MW-10-61-108	17-Oct-06		0.3 J	0.013 U	0.014 U	0.16 J	0.32 U	0.12 J	-	0.055 J	-	0.051 U	0.54 U	0.029 U	0.02 U		
	2708-080604-MW10-61-105	4-Jun-08		-	0.0045 U	0.0046 U	-	-	-	0.011 J	0.013 J	-	-	-	-	-		
	2708-080917-MW-10-61-135	17-Sep-08		-	0.098 U	0.015 J	-	-	-	0.05	0.1	-	-	-	-	-		
	2708-090326-MW10-61-100	26-Mar-09		-	0.074 U	0.0047 J	-	-	-	0.0092 J	0.016 J	-	-	-	-	-		
	2708-090813-MW-10-61-122	13-Aug-09		-	0.0377 U	0.0377 U	-	-	-	0.105	0.168	-	-	-	-	-		
MW-11-32	951207-MW11-32-01	7-Dec-95	21 - 31	-	-	-	-	1,200.	-	-	-	1,200.	590.	50. U	50. U	120.		
	960320-MW11-32-01	20-Mar-96		-	-	-	-	820.	-	-	-	540.	230.	20. U	20. U	60.		

Table 3e - Summary of Historical Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270 or 8270C
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Analytical Results - ug/L (ppb)														
				Bis(2-ethylhexyl)phthalate	Carbazole	Dibenzofuran	Diethylphthalate	2,4-Dimethylphenol	Di-n-butyl-phthalate	1-Methylnaphthalene	2-Methylnapthalene	2-Methylphenol (o-Cresol)	4-Methylphenol (p-Cresol)	4-Nitrophenol	Pentachlorophenol	Phenol	PAHs (See Table 3b)	Other Detects
HUMAN HEALTH SCREENING LEVEL VALUES [7,8]																		
Fish Consumption																		
	EPA 2004 NRWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
	Portland Harbor specific fish consumption rate			0.22	#	#	4,400.	85.	450.	#	#	#	#	#	0.3	170,000.		
	DEQ 2004 AWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
Drinking Water																		
	MCL			6.	#	#	#	#	#	#	0.2 [10]	#	#	#	1.	#		
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			4.8	#	37.	29,000.	730.	3,700.	2.3	150.	1,800.	180.	#	0.56	11,000.		
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [7,8]																		
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	15 [6]	#		
	DEQ 2004 AWQC (chronic) [2]			3 [3]	#	#	3 [2]	#	3 [2]	#	#	#	#	150.	13 [3,4]	2,560.		
	Oak Ridge National Laboratory (Tier II SCV) [9]			#	#	#	210.	#	#	#	2.1	13.	#	300.	#	#		
MW-11-32	960617-MW11-32-01	17-Jun-96	21 - 31	-	-	-	-	540.	-	-	-	420.	170.	500. U	500. U	500. U		
	960930-MW11-32-01	30-Sep-96		-	-	-	-	650.	-	-	-	960.	540.	100. U	100. U	71.		
	970224-MW11-32-01	25-Feb-97		-	-	-	-	500. U	-	-	-	240.	500. U	500. U	500. U	500. U		
	970826-MW11-32-01	26-Aug-97		-	-	-	-	600.	-	-	-	210.	120.	20. U	50. U	31.		
	980216-MW11-32-01	16-Feb-98		-	-	-	-	200.	-	-	-	130.	120.	50. U	100. U	100. U		
	061212-MW-11-32-130	12-Dec-06		140. U	160.	55. J	13. U	190. J	16. J	-	610.	270.	190. J	270. U	15. U	200. J		
	2708-080604-MW11-32-111	4-Jun-08		-	170.	77.	-	-	-	400.	570.	-	-	-	-	-		
	2708-080917-MW-11-32-134	17-Sep-08		-	1,200.	2,400.	-	-	-	6,300.	13,000.	-	-	-	-	-		
	2708-090402-MW11-32-136	2-Apr-09		-	260.	340.	-	-	-	910.	1,500.	-	-	-	-	-		
	2708-090811-MW-11-32-100	11-Aug-09		-	298.	149.	-	-	-	681.	1,070.	-	-	-	-	-		
MW-12-36	960321-MW12-36-01	21-Mar-96	25 - 35	-	-	-	-	5. U	-	-	-	5. U	5. U	5. U	5. U	5. U		
	061024-MW-12-36-115	24-Oct-06		5.4 U	12.	25.	0.52 U	6.4 U	0.53 U	-	22.	1.2 U	1.1 U	11. U	0.57 U	0.4 U		
	2708-080604-MW12-36-106	4-Jun-08		-	8.6	15.	-	-	-	9.1	6.8	-	-	-	-	-		
	2708-080916-MW-12-36-127	16-Sep-08		-	24.	27.	-	-	-	24.	21.	-	-	-	-	-		
	2708-090402-MW12-36-134	2-Apr-09		-	9.2	14.	-	-	-	14.	6.9	-	-	-	-	-		
	2708-090817-MW-12-36-137	17-Aug-09		-	44.7	25.5	-	-	-	28.9	27.4	-	-	-	-	-		
MW-13-30	061027-MW-13-30-121	27-Oct-06	19 - 29	1.4 U	100.	8.	0.13 U	1.6 U	0.14 U	-	150.	0.3 U	0.26 U	2.7 U	0.15 U	5.9		
	2708-080604-MW13-30-112	4-Jun-08		-	3,900.	2,300.	-	-	-	280,000.	380,000.	-	-	-	-	-		
MW-14-110	061013-MW-14-110-104	13-Oct-06	98 - 108	0.58 J	0.013 U	0.014 U	0.063 J	0.35 J	0.096 J	-	0.053 J	0.06 U	0.051 U	0.54 U	0.029 U	0.02 U		
	2708-080603-MW-14-110-104	3-Jun-08		-	0.0045 U	0.01 J	-	-	-	0.013 J	0.011 J	-	-	-	-	-		
	2708-080916-MW-14-110-131	16-Sep-08		-	0.019 U	0.011 J	-	-	-	0.01 J	0.0085 J	-	-	-	-	-		
	2708-090326-MW14-110-103	26-Mar-09		-	0.0045 U	0.01 J	-	-	-	0.019 J	0.03	-	-	-	-	-		
	2708-090812-MW-14-110-117	12-Aug-09		-	0.0381 U	0.0381 U	-	-	-	0.0381 U	0.0381 U	-	-	-	-	-		
MW-15-50	061031-MW-15-50-127	31-Oct-06	40 - 50	14. U	24.	12.	1.3 U	28. J	1.4 U	-	42.	20.	37. U	27. U	1.5 U	84.		
	2708-080603-MW-15-50-103	3-Jun-08		-	47.	48.	-	-	-	620.	71.	-	-	-	-	-		
	2708-080916-MW-15-50-128	16-Sep-08		-	28.	36.	-	-	-	460.	70.	-	-	-	-	-		
	2708-090402-MW15-50-131	2-Apr-09		-	43.	28.	-	-	-	620.	60.	-	-	-	-	-		
	2708-090817-MW-15-50-133	17-Aug-09		-	64.9	38.7	-	-	-	652.	150.	-	-	-	-	-		
MW-15-66	061017-MW-15-66-109	17-Oct-06	60.5 - 66.5	1.3 J	0.53	0.08 J	0.056 J	0.32 U	0.068 J	-	0.054 J	0.06 U	0.051 U	0.54 U	0.029 U	0.02 U		
	2708-080603-MW-15-66-102	3-Jun-08		-	0.009 J	0.0046 U	-	-	-	0.0038 J	0.0064 J	-	-	-	-	-		
	2708-080916-MW-15-66-129	16-Sep-08		-	0.079	0.09	-	-	-	1.8	0.23	-	-	-	-	-		
	2708-090402-MW15-66-133	2-Apr-09		-	0.0048 U	0.0065 J	-	-	-	0.019 J	0.016 J	-	-	-	-	-		
	2708-090817-MW-15-66-135	17-Aug-09		-	0.04 U	0.04 U	-	-	-	0.0895	0.0543	-	-	-	-	-		
MW-16-45	040826-MW16-45-028	26-Aug-04	30 - 45	-	137.	-	-	100. U	-	-	-	100. U	100. U	100. U	200. U	100. U		
	061212-MW-16-45-129	12-Dec-06		140. U	150.	20. J	13. U	160. U	14. U	-	790.	59.	140. J	270. U	15. U	57. J		
	2708-070731-MW-16-45-148	31-Jul-07		-	1,410.	752.	-	-	-	-	19,600.	-	-	-	-	-		

Table 3e - Summary of Historical Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270 or 8270C
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Analytical Results - ug/L (ppb)													
				Bis(2-ethylhexyl)phthalate	Carbazole	Dibenzofuran	Diethylphthalate	2,4-Dimethylphenol	Di-n-butyl-phthalate	1-Methylnaphthalene	2-Methylnapthalene	2-Methylphenol (o-Cresol)	4-Methylphenol (p-Cresol)	4-Nitrophenol	Pentachlorophenol	Phenol	PAHs (See Table 3b)	Other Detects
HUMAN HEALTH SCREENING LEVEL VALUES [7,8]																		
Fish Consumption																		
	EPA 2004 NRWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
	Portland Harbor specific fish consumption rate			0.22	#	#	4,400.	85.	450.	#	#	#	#	#	0.3	170,000.		
	DEQ 2004 AWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
Drinking Water																		
	MCL			6.	#	#	#	#	#	#	0.2 [10]	#	#	#	1.	#		
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			4.8	#	37.	29,000.	730.	3,700.	2.3	150.	1,800.	180.	#	0.56	11,000.		
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [7,8]																		
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	15 [6]	#		
	DEQ 2004 AWQC (chronic) [2]			3 [3]	#	#	3 [2]	#	3 [2]	#	#	#	#	150.	13 [3,4]	2,560.		
	Oak Ridge National Laboratory (Tier II SCV) [9]			#	#	#	210.	#	#	#	2.1	13.	#	300.	#	#		
MW-16-45	2708-080521-MW16-45-128	21-May-08	30 - 45	-	110.	23.	-	-	-	520.	800.	-	-	-	-	-		
	2708-080917-MW-16-45-133	17-Sep-08		-	180.	82.	-	-	-	1,600.	2,800.	-	-	-	-	-		
	2708-090402-MW16-45-135	2-Apr-09		-	850.	440.	-	-	-	7,700.	14,000.	-	-	-	-	-		
	2708-090814-MW-16-45-130	14-Aug-09		-	197.	80. U	-	-	-	707.	1,230.	-	-	-	-	-		
MW-16-65	040826-MW16-65-026	26-Aug-04	55 - 65	-	100. U	-	-	100. U	-	-	-	100. U	100. U	100. U	200. U	100. U		
	061023-MW-16-65-114	23-Oct-06		2.7 U	38.	3.5	0.26 U	3.2 U	0.27 U	-	48.	0.6 U	0.51 U	5.4 U	0.29 U	3.4 J		
	2708-070628-MW-16-65-115	28-Jun-07		-	46.	4.76 U	-	-	-	-	27.5	-	-	-	-	-		
	2708-080513-MW16-65-109	13-May-08		-	52.	7.2	-	-	-	270.	250.	-	-	-	-	-		
	2708-080911-MW-16-65-112	11-Sep-08		-	35.	3.7	-	-	-	130.	49.	-	-	-	-	-		
	2708-090330-MW16-65-114	30-Mar-09		-	43.	3.2	-	-	-	150.	120.	-	-	-	-	-		
	2708-090813-MW-16-65-126	13-Aug-09		-	108.	18.7 U	-	-	-	492.	227.	-	-	-	-	-		
	2708-090813-MW-16-65-128	13-Aug-09		-	105.	18.7 U	-	-	-	518.	256.	-	-	-	-	-		
MW-16-125	040826-MW16-125-025	26-Aug-04	115 - 125	-	5. U	-	-	5. U	-	-	-	5. U	5. U	5. U	5. U	5. U		
	061016-MW-16-125-106	16-Oct-06		0.27 U	0.013 J	0.063 J	0.026 U	0.49 J	0.033 J	-	0.012 U	0.06 U	0.051 U	0.38 J	0.029 U	1.3		
	2708-070628-MW-16-125-116	28-Jun-07		-	0.0952 U	0.0952 U	-	-	-	-	0.0952 U	-	-	-	-	-		
	2708-080515-MW16-125-127	15-May-08		-	19.	3.4	-	-	-	75.	120.	-	-	-	-	-		
MW-17-79	061026-MW-17-79-119	26-Oct-06	38.5 - 78.5	0.69 J	0.71	0.14 J	0.09 J	0.32 U	0.051 J	-	0.31	0.06 U	0.051 U	0.54 U	0.029 U	0.22 J		1,4-DCB = 0.0215 J
	2708-070627-MW-17-79-112	27-Jun-07		-	0.19 U	0.19 U	-	-	-	-	0.19 U	-	-	-	-	-		
	2708-080514-MW17-79-120	14-May-08		-	0.24	0.1	-	-	-	1.4	0.053	-	-	-	-	-		
	2708-080911-MW-17-79-110	11-Sep-08		-	0.21	0.089	-	-	-	1.4	0.044	-	-	-	-	-		
	2708-081209-MW-17-79-009	9-Dec-08		-	0.37	0.12	-	-	-	1.5	0.05	-	-	-	-	-		
	2708-090326-MW17-79-106	26-Mar-09		-	0.25	0.11	-	-	-	1.7	0.054	-	-	-	-	-		
	2708-090817-MW-17-79-134	17-Aug-09		-	0.317	0.111	-	-	-	1.7	0.0526	-	-	-	-	-		
MW-18-30	2708-080514-MW18-30-121	14-May-08	19 - 29	-	30,000.	27,000.	-	-	-	300,000.	530,000.	-	-	-	-	-		
	NS (Dry)	17-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-		
	NS (Dry)	9-Dec-08		-	-	-	-	-	-	-	-	-	-	-	-	-		
	2708-090402-MW18-30-137	2-Apr-09		-	1,600. J	1,400. J	-	-	-	13,000. J	23,000. J	-	-	-	-	-		
	2708-090812-MW-18-30-102	12-Aug-09		-	400. U	400. U	-	-	-	941.	1,640.	-	-	-	-	-		
MW-18-180	2708-070628-MW-18-180-117	28-Jun-07	170 - 180	-	0.0952 U	0.0952 U	-	-	-	-	0.0952 U	-	-	-	-	-		
	2708-080513-MW18-180-108	13-May-08		-	0.021	0.0046 U	-	-	-	0.018 J	0.013 J	-	-	-	-	-		
	2708-080911-MW-18-180-111	11-Sep-08		-	0.019 J	0.0046 U	-	-	-	0.025	0.019 J	-	-	-	-	-		
	2708-081209-MW-18-180-008	9-Dec-08		-	0.022	0.0047 U	-	-	-	0.0056 J	0.0062 J	-	-	-	-	-		
	2708-090326-MW18-180-104	26-Mar-09		-	0.018 J	0.0046 U	-	-	-	0.005 J	0.0031 J	-	-	-	-	-		
	2708-090817-MW-18-180-132	17-Aug-09		-	0.0374 U	0.0374 U	-	-	-	0.14	0.0478	-	-	-	-	-		
MW-19-22	2708-070730-MW-19-22-143	30-Jul-07	12 - 22	-	209.	476. U	-	-	-	-	79.7	-	-	-	-	-		
	2708-080513-MW19-22-110	13-May-08		-	37.	6.7	-	-	-	34.	22.	-	-	-	-	-		

Table 3e - Summary of Historical Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270 or 8270C
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Analytical Results - ug/L (ppb)													
				Bis(2-ethylhexyl)phthalate	Carbazole	Dibenzofuran	Diethylphthalate	2,4-Dimethylphenol	Di-n-butyl-phthalate	1-Methylnaphthalene	2-Methylnapthalene	2-Methylphenol (o-Cresol)	4-Methylphenol (p-Cresol)	4-Nitrophenol	Pentachlorophenol	Phenol	PAHs (See Table 3b)	Other Detects
HUMAN HEALTH SCREENING LEVEL VALUES [7,8]																		
Fish Consumption																		
	EPA 2004 NRWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
	Portland Harbor specific fish consumption rate			0.22	#	#	4,400.	85.	450.	#	#	#	#	#	0.3	170,000.		
	DEQ 2004 AWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
Drinking Water																		
	MCL			6.	#	#	#	#	#	#	0.2 [10]	#	#	#	1.	#		
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			4.8	#	37.	29,000.	730.	3,700.	2.3	150.	1,800.	180.	#	0.56	11,000.		
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [7,8]																		
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	15 [6]	#		
	DEQ 2004 AWQC (chronic) [2]			3 [3]	#	#	3 [2]	#	3 [2]	#	#	#	#	150.	13 [3,4]	2,560.		
	Oak Ridge National Laboratory (Tier II SCV) [9]			#	#	#	210.	#	#	#	2.1	13.	#	300.	#	#		
MW-19-22	2708-080910-MW-19-22-105	10-Sep-08	12 - 22	-	32.	6.4	-	-	-	31.	19.	-	-	-	-	-		
	2708-081209-MW-19-22-014	9-Dec-08		-	20.	5.	-	-	-	24.	14.	-	-	-	-	-		
	2708-090330-MW19-22-112	30-Mar-09		-	15.	2.9	-	-	-	23.	16.	-	-	-	-	-		
	2708-090817-MW-19-22-140	17-Aug-09		-	55.5	18.9 U	-	-	-	64.5	30.1	-	-	-	-	-		
MW-19-125	2708-070627-MW-19-125-110	27-Jun-07	115 - 125	-	0.0962 U	0.0962 U	-	-	-	-	0.0962 U	-	-	-	-	-		
	2708-080514-MW19-125-117	14-May-08		-	0.031	0.0046 U	-	-	-	0.19	0.12	-	-	-	-	-		
	2708-080910-MW-19-125-106	10-Sep-08		-	0.02 J	0.0046 U	-	-	-	0.12	0.078	-	-	-	-	-		
	2708-081209-MW-19-125-013	9-Dec-08		-	0.018 J	0.0046 U	-	-	-	0.14	0.089	-	-	-	-	-		
	2708-090330-MW19-125-110	30-Mar-09		-	0.014 J	0.0046 U	-	-	-	0.14	0.089	-	-	-	-	-		
	2708-090813-MW-19-125-123	13-Aug-09		-	0.192 U	0.192 U	-	-	-	0.192 U	0.192 U	-	-	-	-	-		
MW-19-180	2708-070627-MW-19-180-111	27-Jun-07	170 - 180	-	0.0952 U	0.0952 U	-	-	-	-	0.0952 U	-	-	-	-	-		
	2708-080513-MW19-180-115	13-May-08		-	0.0045 U	0.0046 U	-	-	-	0.013 J	0.019 J	-	-	-	-	-		
	2708-080910-MW-19-180-104	10-Sep-08		-	0.0045 U	0.0046 U	-	-	-	0.0059 J	0.0087 J	-	-	-	-	-		
	2708-081209-MW-19-180-012	9-Dec-08		-	0.0045 U	0.0046 U	-	-	-	0.0042 J	0.0063 J	-	-	-	-	-		
	2708-090330-MW19-180-108	30-Mar-09		-	0.0045 U	0.0046 U	-	-	-	0.0035 U	0.0029 J	-	-	-	-	-		
	2708-090813-MW-19-180-125	13-Aug-09		-	0.0381 U	0.0381 U	-	-	-	0.0452	0.0752	-	-	-	-	-		
MW-20-120	2708-070628-MW-20-120-114	28-Jun-07	110 - 120	-	0.109	0.0952 U	-	-	-	-	4.76 U	-	-	-	-	-		
	2708-080515-MW20-120-126	15-May-08		-	0.063	0.0093 J	-	-	-	0.33	0.2	-	-	-	-	-		
	2708-080910-MW-20-120-103	10-Sep-08		-	0.073	0.012 J	-	-	-	0.27	0.14	-	-	-	-	-		
	2708-081209-MW-20-120-010	9-Dec-08		-	0.094	0.013 J	-	-	-	0.26	0.061	-	-	-	-	-		
	2708-081209-MW-20-120-011	9-Dec-08		-	0.083	0.01 J	-	-	-	0.25	0.054	-	-	-	-	-		
	2708-090330-MW20-120-113	30-Mar-09		-	0.041	0.0074 J	-	-	-	0.28	0.058	-	-	-	-	-		
	2708-090812-MW-20-120-116	12-Aug-09		-	1.89 U	1.89 U	-	-	-	1.89 U	1.89 U	-	-	-	-	-		
MW-21-12	2708-070719-MW-21-12-129	19-Jul-07	7 - 12	-	2.42 U	1.25	-	-	-	-	0.483 U	-	-	-	-	-		
	2708-080514-MW21-12-122	14-May-08		-	0.11 U	2.1	-	-	-	2.2	0.13	-	-	-	-	-		
	NS (Dry)	15-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-		
	2708-081208-MW-21-12-007	8-Dec-08		-	0.0045 U	1.8	-	-	-	2.6	0.098	-	-	-	-	-		
	2708-090401-MW21-12-126	1-Apr-09		-	0.0045 U	2.3	-	-	-	3.	0.06 U	-	-	-	-	-		
	2708-090811-MW-21-12-105	11-Aug-09		-	0.461	2.01	-	-	-	2.8	2.62	-	-	-	-	-		
MW-21-75	2708-070718-MW-21-75-124	18-Jul-07	65 - 75	-	0.0966 UJ	0.0966 UJ	-	-	-	-	0.0966 UJ	-	-	-	-	-		
	2708-080514-MW21-75-123	14-May-08		-	0.0056 J	0.0046 U	-	-	-	0.014 J	0.024	-	-	-	-	-		
	2708-080915-MW-21-75-125	15-Sep-08		-	0.0046 U	0.0047 U	-	-	-	0.017 J	0.032	-	-	-	-	-		
	2708-081208-MW-21-75-004	8-Dec-08		-	0.006 J	0.0046 U	-	-	-	0.012 J	0.016 J	-	-	-	-	-		
	2708-090331-MW21-75-124	31-Mar-09		-	0.0045 U	0.0046 U	-	-	-	0.013 J	0.019 J	-	-	-	-	-		
	2708-090817-MW-21-75-136	17-Aug-09		-	0.0374 U	0.0374 U	-	-	-	0.0992	0.0488	-	-	-	-	-		
MW-21-115	2708-070718-MW-21-115-123	18-Jul-07	105 - 115	-	0.0976 UJ	0.0976 UJ	-	-	-	-	0.0976 UJ	-	-	-	-	-		
	2708-080515-MW21-115-125	15-May-08		-	0.0045 U	0.0046 U	-	-	-	0.0071 J	0.014 J	-	-	-	-	-		

Table 3e - Summary of Historical Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270 or 8270C
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	Screen Interval (feet bgs)	Analytical Results - ug/L (ppb)														
				Bis(2-ethylhexyl)phthalate	Carbazole	Dibenzofuran	Diethylphthalate	2,4-Dimethylphenol	Di-n-butyl-phthalate	1-Methylnaphthalene	2-Methylnapthalene	2-Methylphenol (o-Cresol)	4-Methylphenol (p-Cresol)	4-Nitrophenol	Pentachlorophenol	Phenol	PAHs (See Table 3b)	Other Detects
HUMAN HEALTH SCREENING LEVEL VALUES [7,8]																		
Fish Consumption																		
	EPA 2004 NRWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
	Portland Harbor specific fish consumption rate			0.22	#	#	4,400.	85.	450.	#	#	#	#	#	0.3	170,000.		
	DEQ 2004 AWQC (organism only)			2.2	#	#	44,000.	850.	4,500.	#	#	#	#	#	3.	1,700,000.		
Drinking Water																		
	MCL			6.	#	#	#	#	#	#	0.2 [10]	#	#	#	1.	#		
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)			4.8	#	37.	29,000.	730.	3,700.	2.3	150.	1,800.	180.	#	0.56	11,000.		
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [7,8]																		
	EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	15 [6]	#		
	DEQ 2004 AWQC (chronic) [2]			3 [3]	#	#	3 [2]	#	3 [2]	#	#	#	#	150.	13 [3,4]	2,560.		
	Oak Ridge National Laboratory (Tier II SCV) [9]			#	#	#	210.	#	#	#	2.1	13.	#	300.	#	#		
MW-21-115	2708-080915-MW-21-115-126	15-Sep-08	105 - 115	-	0.0045 U	0.0046 U	-	-	-	0.011 J	0.025	-	-	-	-	-		
	2708-081208-MW-21-115-005	8-Dec-08		-	0.0045 U	0.0046 U	-	-	-	0.0059 J	0.013 J	-	-	-	-	-		
	2708-090331-MW21-115-120	31-Mar-09		-	0.0045 U	0.0046 U	-	-	-	0.011 J	0.019	-	-	-	-	-		
	2708-090811-MW-21-115-101	11-Aug-09		-	0.0381 U	0.0381 U	-	-	-	0.0381 U	0.0381 U	-	-	-	-	-		
MW-21-165	2708-070718-MW-21-165-122	18-Jul-07	156 - 166	-	0.0971 UJ	0.0971 UJ	-	-	-	-	0.0971 UJ	-	-	-	-	-		
	2708-080514-MW21-166-124	14-May-08		-	0.0045 U	0.0046 U	-	-	-	0.014 J	0.023	-	-	-	-	-		
	2708-080915-MW-21-166-124	15-Sep-08		-	0.0045 U	0.0046 U	-	-	-	0.0083 J	0.013 J	-	-	-	-	-		
	2708-081208-MW-21-166-006	8-Dec-08		-	0.0045 U	0.0046 U	-	-	-	0.0046 J	0.0067 J	-	-	-	-	-		
	2708-090331-MW21-165-122	31-Mar-09		-	0.0045 U	0.0046 U	-	-	-	0.0046 J	0.0069 J	-	-	-	-	-		
	2708-090811-MW-21-166	11-Aug-09		-	0.0385 U	0.0385 U	-	-	-	0.0385 U	0.0385 U	-	-	-	-	-		
PW-01	061012-PW-01-102	12-Oct-06	40 - 80	27. U	22.	3.2 J	2.6 U	32. U	2.7 U	-	160.	6. U	5.1 U	54. U	2.9 U	80.		1,4-DCB = 0.11 J
	2708-070731-PW-01-80-147	31-Jul-07		-	37.	10.9	-	-	-	-	237.	-	-	-	-	-		
	2708-080604-PW01-80-107	4-Jun-08		-	8.2	8.3	-	-	-	160.	230.	-	-	-	-	-		
	NS*	16-Sep-08		-	-	-	-	-	-	-	-	-	-	-	-	-		
Temporary Well Point Samples 1995										-								
B-19	950920-BW19-02	20-Sep-95	25 - 28	-	-	-	-	120.	-	-	-	27.	5. U	5. U	1.5	16.		
B-21	951003-BW21-01	3-Oct-95	15.5 - 19.5	-	-	-	-	5. U	-	-	-	5. U	5. U	5. U	5. U	5. U		
Temporary Well Point Samples 2004																		
B-56	040602-101	2-Jun-04	18 - 22	-	-	-	-	50. U	-	-	-	50.	25.	125. U	50. U	25. U		
	040603-102	3-Jun-04	40 - 44	-	-	-	-	10. U	-	-	-	10.	5.	25. U	10. U	5. U		
	040603-103	3-Jun-04	60 - 64	-	-	-	-	10. U	-	-	-	10.	5.	25. U	10. U	5. U		
	040603-104	3-Jun-04	80 - 84	-	-	-	-	10. U	-	-	-	10.	5.	25. U	10. U	5. U		
	040604-106	4-Jun-04	100 - 104	-	-	-	-	10. U	-	-	-	10.	5.	25. U	10. U	5. U		
	040614-115	14-Jun-04	136 - 140	-	-	-	-	10. U	-	-	-	10.	5.	25. U	10. U	5. U		
	040614-116	14-Jun-04	174 - 178	-	-	-	-	10. U	-	-	-	10.	5.	25. U	10. U	5. U		

Note:
" - " = Parameter not analyzed or data unavailable (sampler other than HAI)
# = Reference Levels not established
B = The analyte was found in the associated method blank at a level that is significant relative to sample result
EPA = U.S. Environmental Protection Agency
J = Estimated Concentration
MCL = Maximum Contaminant Level
NRWQC = National Recommended Water Quality Criteria

ND = Not detected above detection limit indicated
NS = No Sample
ppb = parts per billion
PRG = Potential Remediation Goal
SCV = secondary Chronic Value
U = Non-detect above method reporting limit

U* = Compound considered non-detect because it was also detected in associated blank at similar concentration levels.
UJ = Compound not detected, but the reporting limit is probably higher due to a low bias identified during the quality assurrance review.
ug/l = micrograms/liter
X = laboratory contaminant
1,4-DCB = 1,4-Dichlorobenzene

1 = Sample number prefix: 2708-
2 = Values were taken from Table 33c (OAR 340-41), which are Water Quality Guidance Vales, not criteria, that can be used in the application of Oregon's Narrative Toxics Criteria to waters of the state in order to protect aquatic life.
3 = These values were taken form OAR 340-41 Table 20 because they will remain the enforceable values for these particular analytes.
4 = Freshwater aquatic life values for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Chronic = exp(1.005(ph)-5.29). The value displayed in the table corresponds to a pH of 7.8.
5 = Due to mislabeling in the field or due to laboratory misidentification, the laboratory report transposed results for MW4-35 and MW-4-57 in August 1997. Tables attribute data to the correct well.
6 = Freshwater aquatic life values for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Chronic = exp(1.005(ph)-5.134). The value displayed in the table corresponds to a pH of 7.8.
7 = Unless otherwise noted Screening Level Values are from *Portland Harbor Joint Source Control Strategy*, Final, December 2005 (7/16/07 revision)
8 = EPA, under CERCLA authority, has identified the Safe Drinking Water Acts MCLs and AWQCs (federal and state once approved as potential ARARs under CERCLA. The final determination will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to The EPA Portland Harbor ROD, due to an exceedance of an SLV in upland stormwater will be evaluated and prioritized on a case by case basis.
9 = Tier II SCV values were taken from Suter II, G.W. and Tasco, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2
10 = MCL is based on benzo(a)pyrene

Table 3f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurements						
			Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
		Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
MW-1-22	0401-MW-1-22-014	1-Apr-05	499.	-	-	-	-	-	0.1 U	176.	3.	0.8	-6.3	6.28	851.	1.73	11.57
	0928-MW1-22-120	28-Sep-05	-	-	-	-	-	-	-	-	-	13.05	37.1	3.08	2,902.	4.1	12.72
	060403-MW-1-22-117	3-Apr-06	5. U	-	-	-	-	2.	1.6	1,610.	3.4	0.07	148.1	2.78	1,354.	3.26	11.93
	061030-MW-1-22-123	30-Oct-06	0.8 U	-	-	-	6.4	2.6	0.008 U	1,190.	-	0.36	-32.3	4.19	1,766.	6.17	12.77
	070720-MW1-22-131	20-Jul-07	-	-	-	-	-	6.96	0.37	1,520.	-	2.69	0.4	3.22	3,719.	30.	13.14
	2708-080512-MW1-22-105	12-May-08	99.	99.	1. U	-	-	2.2	0.4	419.	-	2.14	-36.7	6.38	941.	36.2	12.32
	NS	16-Sep-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2708-090402-MW1-22-132	2-Apr-09	242.	242.	2. U	-	-	4.2	1. U	309.	-	1.09	-41.	6.36	936.	19.3	11.67
	2708-090820-MW-1-22-163	20-Aug-09	-	-	-	-	-	-	-	-	-	0.05	209.	2.99	2,270.	66.5	14.93
MW-1-55	2708-070719-MW-1-55-127	19-Jul-07	67.8 J	67.8 J	5. UJ	5. UJ	-	6.69	0.1 U	3,910.	-	1.33	-93.3	6.78	4,058.	180.	15.06
	2708-080512-MW1-55-104	12-May-08	280.	280.	1. U	-	-	6.2	0.008 U	3,860.	-	0.76	-55.6	6.18	5,225.	29.9	13.35
	2708-080915-MW-1-55-121	15-Sep-08	163.	163.	1. U	-	-	0.3	0.008 U	3,410.	-	3.18	-39.9	5.95	3,890.	10.	15.6
	2708-081208-MW-1-55-002	8-Dec-08	238.	238.	1. U	-	-	3.5	0.008 U	4,020.	-	4.21	-55.	6.12	4,810.	34.	12.1
	2708-090401-MW1-55-130	1-Apr-09	240.	240.	2. U	-	-	9.8 J	2. U	3,600.	-	0.57	-67.	6.1	495.	26.8	12.14
	2708-090820-MW-1-55-164	20-Aug-09	-	-	-	-	-	-	-	-	-	0.	15.	6.62	4,200.	583.	18.01
MW-1-82	2708-070719-MW-1-82-126	19-Jul-07	108. J	108. J	5. UJ	5. UJ	-	4.78	0.1 U	18.8	-	2.08	-131.8	7.77	384.	100.	15.05
	2708-080512-MW1-82-103	12-May-08	112.	112.	1. U	-	-	4.2	0.008 U	6.1	-	0.62	-116.3	7.	248.	18.7	13.55
	2708-080915-MW-1-82-119	15-Sep-08	110.	110.	1. U	-	-	4.1	0.008 U	2.6	-	0.97	-103.9	7.02	214.	15.	14.39
	2708-081208-MW-1-82-001	8-Dec-08	108.	108.	1. U	-	-	4.2	0.042	3.4	-	6.4	14.	5.79	211.	27.5	12.
	2708-090401-MW1-82-128	1-Apr-09	105.	105.	2. U	-	-	4.4 J	0.1 U	4.3	-	1.48	-118.	6.94	257.	22.4	12.35
	2708-090820-MW-1-82-161	20-Aug-09	-	-	-	-	-	-	-	-	-	0.36	-56.	7.14	239.	15.5	14.63
MW-2-32	0331-MW-2-32-009	31-Mar-05	147.	-	-	-	-	-	2.62	67.8	0.	3.54	30.2	6.47	381.	4.31	19.71
	0927-MW-2-32-118	27-Sep-05	-	-	-	-	-	-	-	-	-	1.81	30.5	6.39	459.	4.5	22.19
	060328-MW-2-32-102	28-Mar-06	106.	-	-	-	-	3.8	0.1 U	4.32	0.	0.09	137.3	6.42	226.	7.21	21.36
	061016-MW2-32-107	16-Oct-06	147.	-	-	-	0.65	3.5	0.064 J	1.1	-	0.39	-82.7	6.17	225.	22.4	18.12
	2708-070712-MW-2-32-120	12-Jul-07	144. J	144. J	5. UJ	5. UJ	-	3.52 J	0.54 J	3.72 J	-	0.6	38.8	6.86	536.	40.	21.16
	2708-080512-MW2-32-101	12-May-08	117.	117.	1. U	-	-	5.3	0.021 J	0.7	-	0.238	84.6	6.45	233.	7.16	20.03
	2708-080915-MW-2-32-120	15-Sep-08	140.	140.	1. U	-	-	3.3	0.032 J	2.	-	0.	87.	5.88	239.	196.	21.
	2708-090401-MW2-32-127	1-Apr-09	144.	144.	2. U	-	-	4.8 J	0.5	1.1	-	5.3	-10.	5.98	258.	207.	9.7
	2708-090812-MW-2-32-113	12-Aug-09	-	-	-	-	-	-	-	-	-	0.	42.	6.76	237.	12.5	20.77
MW-2-61	0926-MW-2-61-111	26-Sep-05	-	-	-	-	-	-	-	-	-	3.17	29.8	6.99	1,208.	25.	18.97
	060329-MW-2-61-104	29-Mar-06	368.	-	-	-	-	4.32	0.1 U	33.4	4.8	0.14	-67.2	6.46	713.	22.9	17.67
	061011-MW-2-61-101	11-Oct-06	351.	-	-	-	1.55	4.5	2. U	39.4	-	0.27	-142.5	8.19	668.	10.75	20.32
	2708-070719-MW-2-61-128	19-Jul-07	322. J	322. J	5. UJ	5. UJ	-	27.5	0.1 U	29.4	-	1.45	-109.8	6.99	1,210.	55.	20.01
	2708-080512-MW2-61-100	12-May-08	381.	381.	1. U	-	-	4.5	0.056 J	26.4	-	0.273	-44.2	6.48	749.	6.45	19.04
	2708-080915-MW-2-61-118	15-Sep-08	362.	362.	1. U	-	-	5.4	0.008 U	22.2	-	0.	-114.	6.33	641.	19.5	20.9
	2708-090401-MW2-61-125	1-Apr-09	354.	354.	2. U	-	-	6. J	0.1 U	22.4	-	2.81	-143.	6.25	652.	219.	14.5
	2708-090812-MW-2-61-115	12-Aug-09	-	-	-	-	-	-	-	-	-	0.75	-97.	7.18	687.	8.4	22.06

Table 3f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurements						
			Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
		Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
MW-2-104	2708-070712-MW-2-104-119	12-Jul-07	241. J	241. J	25. UJ	25. UJ	-	6.18 J	0.1 UJ	39.8 J	-	0.27	-221.2	7.89	1,153.	70.	22.94
	2708-080512-MW2-104-102	12-May-08	342.	342.	1. U	-	-	5.4	0.008 U	0.5	-	0.01	-81.6	6.47	680.	4.48	17.81
	2708-080915-MW-2-104-122	15-Sep-08	298.	298.	1. U	-	-	7.2	0.008 U	1.7	-	0.	-154.	6.61	568.	20.2	20.2
	2708-080915-MW-2-104-123 (DUP)	15-Sep-08	282.	282.	1. U	-	-	7.1	0.008 U	1.9	-	-	-	-	-	-	-
	2708-081208-MW-2-104-003	8-Dec-08	313.	313.	1. U	-	-	7.2	0.008 U	1.8	-	0.5	-105.	6.49	581.	40.	17.1
	2708-090401-MW2-104-129	1-Apr-09	320.	320.	2. U	-	-	5.8 J	0.3	0.9	-	2.81	-173.	6.23	623.	162.	15.4
	2708-090812-MW-2-104-111	12-Aug-09	-	-	-	-	-	-	-	-	-	0.51	-115.	7.31	628.	38.	18.16
MW-3-26	0330-MW-3-26-004	30-Mar-05	96.8	-	-	-	-	-	4.28	46.	0.8	1.47	41.7	5.83	262.	13.9	14.34
	0922-MW-3-26-105	22-Sep-05	-	-	-	-	-	-	-	-	-	7.55	26.4	6.92	760.	5.6	17.6
	060330-MW-3-26-110	30-Mar-06	188.	-	-	-	-	2.08	0.1 U	13.6	3.3	0.03	14.9	6.29	309.	4.62	13.76
	061017-MW-3-26-110	17-Oct-06	291.	-	-	-	0.45	2.9	0.008 U	8.8	-	0.56	-193.8	7.33	334.	8.64	15.55
	2708-070629-MW-3-26-119	29-Jun-07	298. J	298. J	25. UJ	25. UJ	-	3.77 J	0.1 UJ	1. UJ	-	1.74	-88.6	6.5	541.	-	15.51
	2708-080512-MW3-26-107	12-May-08	184.	184.	1. U	-	-	2.	0.008 U	13.7	-	0.241	52.4	6.29	353.	27.6	13.56
	2708-080911-MW-3-26-115	11-Sep-08	392.	392.	1. U	-	-	2.8	0.008 U	7.5	-	1.5	-115.6	6.74	672.	39.	16.42
	2708-090331-MW3-26-123	31-Mar-09	132.	132.	2. U	-	-	2.	0.4	24.9	-	3.39	-25.	6.02	285.	254.	12.5
	2708-090817-MW-3-26-139	17-Aug-09	-	-	-	-	-	-	-	-	-	0.	-17.	6.8	400.	34.	22.95
MW-3-56	0330-MW-3-56-003	30-Mar-05	307.	-	-	-	-	-	0.1 U	1. U	8.	0.72	10.2	6.6	441.	0.75	14.68
	0922-MW-3-56-106	22-Sep-05	-	-	-	-	-	-	-	-	-	5.46	25.6	7.22	844.	11.	15.35
	060330-MW-3-56-111	30-Mar-06	304.	-	-	-	-	3.47	0.1 U	1. U	2.7	0.15	-73.	6.7	464.	6.81	14.6
	061024-MW-3-56-116	24-Oct-06	302.	-	-	-	0.62	3.3	0.039 J	0.18 J	-	0.6	-174.8	7.03	340.	39.7	14.48
	2708-070626-MW-3-56-108	26-Jun-07	289.	289.	50. U	50. U	-	9.75	0.1 U	1. U	-	1.55	-101.5	6.71	536.	-	16.36
	2708-080512-MW3-56-106	12-May-08	294.	294.	1. U	-	-	3.	0.008 U	0.012 U	-	1.73	-65.6	6.74	563.	243.	15.44
	2708-080911-MW-3-56-116	11-Sep-08	280.	280.	1. U	-	-	2.6	0.008 U	0.174 J	-	1.3	-140.7	6.7	414.	>999	15.98
	2708-090326-MW3-56-105	26-Mar-09	281.	281.	2. U	-	-	2.5	0.3	0.6	-	4.35	-139.	6.5	499.	533.	14.6
	2708-090811-MW-3-56-107	11-Aug-09	-	-	-	-	-	-	-	-	-	0.	-119.	7.51	501.	351.	15.68
MW-4-35	0331-MW-4-35-005	31-Mar-05	309.	-	-	-	-	-	0.1 U	19.5	6.	0.54	0.	6.51	519.	2.47	14.12
	0928-MW-4-35-123	28-Sep-05	-	-	-	-	-	-	-	-	-	2.1	36.1	7.34	2,190.	23.	14.66
	060331-MW-4-35-113	31-Mar-06	517.	-	-	-	-	30.8	0.1 U	1. U	5.	0.04	-95.9	6.84	806.	9.17	13.61
	061018-MW-4-35-113	18-Oct-06	700.	-	-	-	2.88	30.4	0.008 U	0.4	-	0.51	-130.6	6.13	695.	13.8	13.92
	070622-MW-4-35-101	22-Jun-07	-	-	-	-	-	-	-	-	-	1.08	-168.6	7.24	1,774.	8.95	16.12
	070723-MW-4-35-133	23-Jul-07	-	-	-	-	-	-	-	-	-	2.85	107.5	7.25	1,842.	17.	15.27
	2708-070726-MW-4-35-137	26-Jul-07	681.	681.	5. U	5. U	-	29.	0.1 U	1. U	-	2.84	-113.6	7.92	1,571.	12.	13.66
	2708-080513-MW4-35-112	13-May-08	497.	497.	1. U	-	-	14.	0.008 U	2.9	-	0.39	-105.3	6.87	961.	9.48	12.33
	2708-080513-MW4-35-113	13-May-08	487.	487.	1. U	-	-	14.2	0.008 U	3.1	-	--	-	-	-	-	-
	2708-080911-MW-4-35-109	11-Sep-08	738.	738.	1. U	-	-	22.8	0.008 U	0.6	-	1.71	-84.	6.56	1,058.	9.	15.28
	2708-090331-MW4-35-119	31-Mar-09	637.	637.	2. U	-	-	17.4	0.1 U	0.7	-	2.9	-169.	6.49	119.	220.	12.3
	2708-090813-MW-4-35-121	13-Aug-09	-	-	-	-	-	-	-	-	-	0.	-139.	7.35	1,180.	8.1	14.4

Table 3f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurements						
			Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
		Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
MW-4-57	0331-MW-4-57-008	31-Mar-05	733.	-	-	-	-	-	0.1 U	1. U	-	0.89	10.5	6.53	1,073.	3.07	14.23
	1003-MW-4-57-133	3-Oct-05	-	-	-	-	-	-	-	-	-	0.26	-	6.69	1,165.	9.1	14.4
	060331-MW-4-57-114	31-Mar-06	723.	-	-	-	-	0.69	0.1 U	1. U	3.8	0.08	-66.8	6.5	932.	10.6	13.91
	061030-MW-4-57-122	30-Oct-06	708.	-	-	-	0.24	10.8	0.1	0.1 J	-	0.32	-110.5	6.63	821.	9.4	13.53
	2708-070622-MW-4-57-101	22-Jun-07	574.	574.	25. U	25. U	-	28.	-	1. U	-	-	-	-	-	-	-
	070723-MW-4-57-135	23-Jul-07	-	-	-	-	-	-	-	-	-	2.05	-84.6	7.14	1,880.	700.	15.24
	2708-080513-MW4-57-111	13-May-08	768.	768.	1. U	-	-	13.7	0.008 U	0.091 J	-	0.92	-66.7	6.59	1,405.	142.	12.82
	2708-080911-MW-4-57-108	11-Sep-08	782.	782.	1. U	-	-	15.6	0.008 U	0.099 J	-	0.91	-61.	6.49	1,168.	100.	13.82
	2708-090331-MW4-57-121	31-Mar-09	765.	765.	2. U	-	-	13.	0.1 U	0.4	-	3.1	-140.	6.28	140.	615.	12.6
	2708-090817-MW-4-57-138	17-Aug-09	-	-	-	-	-	-	-	-	-	0.7	-228.4	6.67	991.	250.	16.8
MW-4-101	0330-MW-4-101-002	30-Mar-05	419.	-	-	-	-	-	0.1 U	1. U	7.2	0.57	-16.7	6.36	704.	12.7	13.69
	0928-MW-4-101-122	28-Sep-05	-	-	-	-	-	-	-	-	-	5.46	34.6	7.29	1,172.	3.	14.25
	060329-MW-4-101-106	29-Mar-06	415.	-	-	-	-	9.66	0.1 U	1. U	3.	0.	-105.8	6.61	676.	8.	13.48
	061018-MW-4-101-112	18-Oct-06	393.	-	-	-	5.6	10.	0.011 J	0.2	-	0.6	-158.5	6.11	466.	4.06	13.53
	2708-070625-MW-4-101-106	25-Jun-07	409.	409.	25. U	25. U	-	17.	0.1 U	1. U	-	0.71	-124.8	6.54	831.	47.5	15.36
	2708-080513-MW4-101-114	13-May-08	391.	391.	1. U	-	-	8.7	0.008 U	0.012 U	-	3.69	-119.4	6.65	840.	8.2	13.19
	2708-080910-MW-4-101-107	10-Sep-08	398.	398.	1. U	-	-	10.3	0.008 U	0.147 J	-	0.65	-160.4	6.72	1,237.	8.	15.02
	2708-090331-MW4-101-115	31-Mar-09	390.	390.	2. U	-	-	9.9	1. U	2. U	-	3.33	-183.	6.35	750.	140.	12.9
	2708-090813-MW-4-101-119	13-Aug-09	-	-	-	-	-	-	-	-	-	0.	-135.	7.36	746.	31.	14.49
MW-5-32	0401-MW-5-32-011	1-Apr-05	311.	-	-	-	-	-	0.1 U	19.7	2.2	0.75	36.	5.96	480.	5.12	14.07
	0927-MW-5-32-117	27-Sep-05	-	-	-	-	-	-	-	-	-	1.86	36.9	7.28	745.	90.	14.06
	060329-MW-5-32-107	29-Mar-06	290.	-	-	-	-	2.13	0.01 U	24.3	1.2	0.	74.3	6.39	443.	32.4	13.4
	061018-MW-5-32-112	18-Oct-06	260.	-	-	-	0.08	2.1	0.008 U	20.5	-	0.59	-95.9	6.89	294.	10.4	13.82
	070625-MW5-32-104	22-Jun-07	-	-	-	-	-	-	-	-	-	2.61	-41.9	6.39	492.	31.7	14.82
	2708-070625-MW-5-32-104	25-Jun-07	231.	231.	5. U	5. U	-	7.73	0.1 U	18.	-	2.44	-11.7	7.07	687.	280.	16.43
	2708-080514-MW5-32-118	14-May-08	240.	240.	1. U	-	-	1.9	0.008 U	15.1	-	0.95	90.	6.46	464.	54.7	14.36
	2708-080910-MW-5-32-102	10-Sep-08	228.	228.	1. U	-	-	1.8	0.008 U	14.2	-	0.89	19.8	6.35	381.	14.	13.6
	2708-090330-MW5-32-111	30-Mar-09	250.	250.	2. U	-	-	1.9	0.3	14.5	-	4.7	-42.	6.12	452.	578.	12.8
	2708-090812-MW-5-32-114	12-Aug-09	-	-	-	-	-	-	-	-	-	0.88	-133.2	6.65	366.	25.	15.41
MW-5-100	0401-MW-5-100-012	1-Apr-05	407.	-	-	-	-	-	0.1 U	1. U	7.4	0.77	7.1	6.13	727.	1.12	13.84
	0921-MW-5-100-102	21-Sep-05	-	-	-	-	-	-	-	-	-	6.87	22.	5.61	1,294.	0.55	16.38
	060404-MW-5-100-121	4-Apr-06	411.	-	-	-	-	33.2	0.1 U	1. U	2.	0.31	-48.6	6.41	666.	6.76	14.08
	061027-MW-5-100-120	27-Oct-06	386.	-	-	-	1.77	35.1	2. U	0.06 U	-	0.9	-90.3	6.44	847.	10.47	14.51
	2708-070625-MW-5-100-103	25-Jun-07	403.	403.	25. U	25. U	-	42.1	0.1 U	1. U	-	1.04	-132.8	6.83	1,347.	7.29	14.53
	2708-080514-MW5-100-119	14-May-08	414.	414.	1. U	-	-	32.8	0.008 U	0.134 J	-	-	-84.2	6.46	900.	12.8	17.85
	2708-080910-MW-5-100-100	10-Sep-08	393.	393.	1. U	-	-	31.	0.008 U	0.089 J	-	1.12	-59.	6.31	751.	1.1	14.53
	2708-090330-MW5-100-109	30-Mar-09	400.	400.	2. U	-	-	26.3	0.3	0.4	-	3.71	-157.	6.17	813.	42.	12.8
	2708-090812-MW-5-100-112	12-Aug-09	-	-	-	-	-	-	-	-	-	0.53	-198.5	6.52	701.	15.	15.3

Table 3f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurements						
			Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
		Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
MW-5-175	0921-MW-5-175-101	21-Sep-05	-	-	-	-	-	-	-	-	-	-	17.8	6.03	874.	0.5	15.95
	060329-MW-5-175-105	29-Mar-06	231.	-	-	-	-	36.1	0.1 U	1. U	4.	0.12	-107.8	684.	470.	5.02	12.76
	061016-MW-5-175-105	16-Oct-06	229.	-	-	-	2.45	37.2	0.008 U	0.06 U	-	0.98	-158.3	6.96	343.	10.6	13.49
	070625-MW-5-175-105	25-Jun-07	-	-	-	-	-	-	-	-	-	1.12	-129.3	6.8	584.	73.4	16.95
	2708-070625-MW-5-175-105	25-Jun-07	213.	213.	25. U	25. U	-	37.9	0.1 U	1. U	-	1.12	-129.3	6.8	584.	73.7	16.95
	2708-080514-MW5-175-116	14-May-08	235.	235.	1. U	-	-	30.6	0.008 U	0.093 J	-	0.053	-85.9	6.77	568.	35.9	13.78
	2708-080910-MW-5-175-101	10-Sep-08	224.	224.	1. U	-	-	26.3	0.01 J	0.035 J	-	0.74	-156.3	6.33	821.	36.	14.26
	2708-090330-MW5-175-107	30-Mar-09	230.	230.	2. U	-	-	30.6	0.3	0.4	-	3.72	-177.	6.55	520.	288.	11.5
	2708-090812-MW-5-175-110	12-Aug-09	-	-	-	-	-	-	-	-	-	0.73	-229.5	6.89	455.	31.	14.76
MW-8-29	0929-MW-8-29-127	29-Sep-05	-	-	-	-	-	-	-	-	-	4.77	34.4	7.89	1.918	16.	18.96
	061031-MW-8-29-124	31-Oct-06	696.	-	-	-	5.5	18.4	0.008 U	0.1 J	-	0.26	-174.5	6.33	918.	4.39	13.58
	2708-080603-MW8-29-100	3-Jun-08	703.	703.	1. U	-	-	21.9	0.008 U	0.3	-	0.07	-96.	6.74	112.	35.	14.2
	2708-080911-MW-8-27-113	11-Sep-08	631.	631.	1. U	-	-	21.8	0.008 U	0.3	-	1.05	-55.	6.72	1,040.	35.	16.01
	2708-090331-MW8-29-118	31-Mar-09	808.	808.	2. U	-	-	20.7	1. U	2. U	-	1.54	-98.	6.65	1,520.	30.9	13.8
	2708-090811-MW-8-29-106	11-Aug-09	-	-	-	-	-	-	-	-	-	0.86	-204.7	6.7	1,041.	23.	17.42
MW-8-56	0929-MW-8-56-128	29-Sep-05	-	-	-	-	-	-	-	-	-	2.3	35.1	8.1	1,910.	50.	18.51
	061031-MW-8-56-126	31-Oct-06	609.	-	-	-	1.12	7.6	0.008 U	0.13 J	-	0.8	-115.	4.52	924.	9.8	14.54
	2708-080603-MW8-56-101	3-Jun-08	590.	590.	1. U	-	-	7.1	0.008 U	0.115 J	-	1.36	-93.7	6.68	1,037.	248.	14.32
	2708-080915-MW-8-56-117	15-Sep-08	632.	632.	1. U	-	-	8.8	0.008 U	0.184 J	-	0.79	-107.	6.59	978.	25.	15.52
	2708-090331-MW8-56-116	31-Mar-09	650.	650.	2. U	-	-	9.	1. U	2. U	-	3.05	-111.	6.7	1,240.	13.2	12.37
	2708-090811-MW-8-56-104	11-Aug-09	-	-	-	-	-	-	-	-	-	0.51	-266.1	6.85	964.	37.	16.75
MW-9-29	0926-MW-9-29-109	26-Sep-05	-	-	-	-	-	-	-	-	-	7.51	29.9	6.55	264.	28.	14.23
	061013-MW-9-103	13-Oct-06	86.	-	-	-	0.014 J	2.6	0.8	9.1	-	1.52	-78.5	8.99	145.	27.4	13.82
	2708-080604-MW9-29-109	4-Jun-08	70.	70.	1. U	-	-	2.8	0.8	10.	-	2.17	-49.7	6.79	164.	-	13.14
	2708-080604-MW9-29-110	4-Jun-08	76.	76.	1. U	-	-	2.6	0.9	10.1	-	-	-	-	-	-	-
	2708-080916-MW-9-29-132	16-Sep-08	94.	94.	1. U	-	-	2.	0.8	9.5	-	2.97	-256.5	6.96	276.	>999	17.3
	2708-090326-MW9-29-102	26-Mar-09	87.	87.	2. U	-	-	2.6	0.9	10.7	-	2.08	-192.5	6.78	154.	470.	12.48
	2708-090813-MW-9-29-120	13-Aug-09	-	-	-	-	-	-	-	-	-	0.7	-1.8	6.91	171.	145.	14.1
MW-10-25	061212-MW-10-25-131	12-Dec-06	0.8 U	-	-	-	7.8	8. J	0.2 i	3,340.	-	-	-	5.66	5.66	-	17.8
	2708-080604-MW10-25-108	4-Jun-08	1. U	1. U	1. U	-	-	4.8	0.041 J	3,640.	-	-	-	3.71	2,964.	-	13.6
	2708-080917-MW-10-25-136	17-Sep-08	1. U	1. U	1. U	-	-	6.2	0.7	3,300.	-	-	-	3.82	1,123.	-	20.5
	2708-090326-MW10-25-101	26-Mar-09	2. U	2. U	2. U	-	-	5.2	1.5	3,470.	-	-	-	6.08	2,556.	-	11.5
	2708-090813-MW-10-25-124	13-Aug-09	-	-	-	-	-	-	-	-	-	-	-	5.7	564.	-	14.5
MW-10-61	0928-MW10-61-121	28-Sep-05	-	-	-	-	-	-	-	-	-	3.64	30.	6.18	932.	80.	14.31
	061017-MW-10-61-108	17-Oct-06	224.	-	-	-	0.13	5.1	0.008 U	140.	-	0.57	-196.5	8.03	413.	53.2	14.99
	2708-080604-MW10-61-105	4-Jun-08	199.	199.	1. U	-	-	4.4	0.008 U	145.	-	2.99	-109.	6.86	584.	28.	14.2
	2708-080917-MW-10-61-135	17-Sep-08	213.	213.	1. U	-	-	4.3	0.008 U	138.	-	1.86	6.9	6.63	546.	7.	16.44
	2708-090326-MW10-61-100	26-Mar-09	204.	204.	2. U	-	-	4.	0.3	134.	-	1.23	-162.5	6.9	495.	28.	12.61
	2708-090813-MW-10-61-122	13-Aug-09	-	-	-	-	-	-	-	-	-	0.59	-28.1	7.26	540.	55.	15.76

Table 3f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurements						
			Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
		Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
MW-11-32	061212-MW-11-32-120	12-Dec-06	159.	-	-	-	1.32	2.7 J	0.2	1.5	-	-	-	6.06	382.	-	13.8
	2708-080604-MW11-32-111	4-Jun-08	98.	98.	1. U	-	-	1.7	0.019	12.5	-	-	-	6.4	230.	-	12.5
	2708-080917-MW-11-32-134	17-Sep-08	124.	124.	1. U	-	-	1.4	0.008 U	0.012 U	-	-	-	6.86	278.	-	16.3
	2708-090402-MW11-32-136	2-Apr-09	141.	141.	2. U	-	-	3.3	1. U	2. U	-	-	-	7.46	153.	-	15.7
	2708-090811-MW-11-32-100	11-Aug-09	-	-	-	-	-	-	-	-	-	-	-	6.83	97.	-	14.9
MW-12-36	0927-MW-12-36-116	27-Sep-05	-	-	-	-	-	-	-	-	-	3.46	34.	7.29	538.	3.3	14.25
	061024-MW-12-36-115	24-Oct-06	198.	-	-	-	0.035 J	4.5	0.016 J	16.2	-	0.57	-173.8	7.87	259.	2.62	13.66
	2708-080604-MW12-36-106	4-Jun-08	188.	188.	1. U	-	-	4.4	0.2	18.5	-	0.13	-149.4	7.04	411.	17.4	13.15
	2708-080916-MW-12-36-127	16-Sep-08	244.	244.	1. U	-	-	4.7	0.008 U	15.6	-	2.54	-59.	6.05	483.	5.	14.22
	2708-090402-MW12-36-134	2-Apr-09	200.	200.	2. U	-	-	7.7	1. U	20.1	-	0.67	-61.	6.72	432.	0.8	12.58
	2708-090817-MW-12-36-137	17-Aug-09	-	-	-	-	-	-	-	-	-	0.29	-88.	7.73	499.	47.	26.66
MW-13-30	1003-MW-13-30-132	3-Oct-05	-	-	-	-	-	-	-	-	-	0.3	-	6.63	793.	8.	13.5
	060404-MW-13-30--122	4-Apr-06	391.	-	-	-	-	3.88	0.1 U	1. U	3.3	0.12	-65.2	6.45	618.	10.4	15.63
	061027-MW-13-30-121	27-Oct-06	262.	-	-	-	0.98	3.	0.027 J	3.9	-	0.89	-118.	6.55	567.	9.46	15.52
	2708-080604-MW13-30-112	4-Jun-08	256.	256.	1. U	-	-	2.9	0.2 U	1.32	-	-	-	6.71	445.	-	15.5
MW-13-61	0927-MW-13-61-114	27-Sep-05	-	-	-	-	-	-	-	-	-	3.06	36.	5.87	1,103.	83.	15.44
	060404-MW-13-61-123	4-Apr-06	376.	-	-	-	-	10.	0.1 U	1. U	2.	0.26	-27.4	6.38	605.	7.61	15.95
MW-14-110	0922-MW-14-110-104	22-Sep-05	-	-	-	-	-	-	-	-	-	3.53	22.1	6.51	2,283.	0.8	16.13
	061013-MW-14-110-104	13-Oct-06	342.	-	-	-	0.04 J	5.	0.008 U	565.	-	1.05	-114.9	9.02	832.	7.11	15.65
	2708-080603-MW14-110-104	3-Jun-08	346.	346.	1. U	-	-	5.5	0.008 U	551.	-	2.14	-78.	6.88	143.	36.	15.
	2708-080916-MW-14-110-131	16-Sep-08	336.	336.	1. U	-	-	4.4	0.008 U	540.	-	6.43	-23.	6.67	1,206.	10.	15.04
	2708-090326-MW14-110-103	26-Mar-09	328.	328.	2. U	-	-	3.5	0.3	532.	-	0.27	-138.	6.54	153.	29.	13.2
	2708-090812-MW-14-110-117	12-Aug-09	-	-	-	-	-	-	-	-	-	3.68	-39.	7.46	1,210.	51.	17.53
MW-15-50	0929-MW-15-50-126	29-Sep-05	-	-	-	-	-	-	-	-	-	2.06	18.1	7.55	2,988.	90.	24.7
	061031-MW-15-50-127	31-Oct-06	717.	-	-	-	0.2	9.8	0.008 U	317.	-	0.63	-114.5	4.08	1,342.	58.1	21.65
	2708-080603-MW15-50-103	3-Jun-08	741.	741.	1. U	-	-	10.	0.008 U	342.	-	0.56	-150.6	6.73	1,806.	1,000.	21.8
	2708-080916-MW-15-50-128	16-Sep-08	790.	790.	1. U	-	-	16.1	0.008 U	190.	-	2.34	-115.	6.65	420.	>999	27.34
	2708-090402-MW15-50-131	2-Apr-09	765.	765.	2. U	-	-	10.	1. U	383.	-	3.19	-308.	6.29	186.	>999	21.7
	2708-090817-MW-15-50-133	17-Aug-09	-	-	-	-	-	-	-	-	-	0.	-112.	7.37	1,590.	>800	22.64
MW-15-66	0929-MW-15-66-125	29-Sep-05	-	-	-	-	-	-	-	-	-	2.02	37.6	7.3	297.	370.	19.74
	061017-MW-15-66-109	17-Oct-06	75.	-	-	-	0.006 U	4.5	0.3	15.5	-	0.34	-193.4	6.18	198.	126.	25.57
	2708-080603-MW15-66-102	3-Jun-08	65.	65.	1. U	-	-	4.1	0.3	14.6	-	0.28	97.	6.47	190.	616.	24.3
	2708-080916-MW-15-66-129	16-Sep-08	80.	80.	1. U	-	-	4.1	0.3	14.6	-	2.14	-144.3	7.06	284.	>999	27.62
	2708-090402-MW15-66-133	2-Apr-09	90.	90.	2. U	-	-	4.2	0.5	14.1	-	3.39	-228.	6.44	180.	>999	25.2
	2708-090817-MW-15-66-135	17-Aug-09	-	-	-	-	-	-	-	-	-	0.	6.	7.25	185.	>800	28.48
MW-16-45	0401-MW-16-45-013	1-Apr-05	431.	-	-	-	-	-	0.1 U	1. U	7.	0.56	-0.1	6.41	838.	2.79	16.92
	0622-MW-16-45-5	22-Jun-05	-	-	-	-	-	-	-	-	-	4.48	29.5	6.47	707.	-	15.17
	1003-MW-16-45-136	3-Oct-05	-	-	-	-	-	-	-	-	-	4.21	-	6.91	595.	160.	13.1

Table 3f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurements						
			Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
		Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
	060403-MW-16-45-118	3-Apr-06	367.	-	-	-	-	4.61	0.1 U	1. U	1.4	-	-	6.81	724.	-	13.
	2708-080917-MW-16-45-133	17-Sep-08	-	-	-	-	-	-	-	-	-	-	-	6.88	6.52	-	16.3
	061212-MW-16-45-129	12-Dec-06	374.	-	-	-	0.08	5. J	0.2	1.5	-	-	-	7.14	1,162.	-	15.8
	2708-070731-MW-16-45-148	31-Jul-07	622.	622.	500. U	500. U	-	18.	0.1 U	1. U	-	-	-	6.52	779.	20.	21.7
	2708-080521-MW16-45-128	21-May-08	388.	388.	1. U	-	-	14.2	0.008 U	0.012 U	-	-	-	6.39	807.	-	14.4
	2708-080917-MW-16-45-133	17-Sep-08	590.	590.	1. U	-	-	21.7	0.008 U	0.183 J	-	-	-	6.88	652.	-	16.3
	2708-090402-MW16-45-135	2-Apr-09	413.	413.	2. U	-	-	10.8	1. U	2. U	-	-	-	6.67	461.	-	15.7
	2708-090814-MW-16-45-130	14-Aug-09	-	-	-	-	-	-	-	-	-	-	-	7.19	432.	-	15.6
MW-16-65	0331-MW-16-65-006	31-Mar-05	350.	-	-	-	-	-	0.1 U	99.8	8.4	0.61	-5.5	6.55	898.	7.03	14.42
	0621-MW-16-65-04	21-Jun-05	-	-	-	-	-	-	-	-	-	0.21	22.7	5.83	736.	9.71	14.38
	1003-MW-16-65-135	3-Oct-05	-	-	-	-	-	-	-	-	-	0.4	-	6.86	702.	8.4	14.1
	060403-MW-16-45-119	3-Apr-06	357.	-	-	-	-	11.2	0.1 U	1.01	3.4	0.07	-93.7	6.66	612.	4.38	14.15
	061023-MW-16-65-114	23-Oct-06	340.	-	-	-	2.27	7.4	0.008 U	0.13 J	-	0.6	-162.2	7.74	396.	7.42	14.2
	2708-070628-MW-16-65-115	28-Jun-07	303.	303.	25. U	25. U	-	5.64	0.1 U	1. U	-	1.42	-100.	6.62	626.	74.8	15.44
	2708-080513-MW16-65-109	13-May-08	332.	332.	1. U	-	-	4.4	0.2	0.119 J	-	11.7	-59.8	6.56	655.	6.36	14.16
	2708-080911-MW-16-65-112	11-Sep-08	312.	312.	1. U	-	-	4.5	0.008 U	0.3	-	0.85	-80.	6.78	526.	8.	16.2
	2708-090330-MW16-65-114	30-Mar-09	316.	316.	2. U	-	-	3.	0.3	0.4	-	5.59	-99.	6.63	637.	0.1	13.62
	2708-090813-MW-16-65-126	13-Aug-09	-	-	-	-	-	-	-	-	-	0.6	-88.2	6.81	497.	30.	15.05
MW-16-125	0330-MW-16-125-001	30-Mar-05	399.	-	-	-	-	-	0.1 U	38.1	6.	0.82	-22.7	6.33	754.	3.16	14.19
	0621-MW-16-125-003	21-Jun-05	-	-	-	-	-	-	-	-	-	0.18	15.	6.22	729.	25.	14.58
	0930-MW-16-125-130	30-Sep-05	-	-	-	-	-	-	-	-	-	6.79	41.7	7.62	1,188.	2.5	16.22
	060330-MW-16-125-109	30-Mar-06	375.	-	-	-	-	8.84	0.1 U	6.57	2.8	0.32	-78.2	6.6	646.	4.14	13.37
	061016-MW-16-125-106	16-Oct-06	350.	-	-	-	18.5	9.5	0.008 U	3.1	-	0.47	-153.4	6.1	511.	3.41	14.97
	2708-070628-MW-16-125-116	28-Jun-07	322.	322.	25. U	25. U	-	8.94	0.1 U	7.46	-	1.73	-121.5	7.02	1,237.	400.	15.55
	2708-080515-MW16-125-127	15-May-08	396.	396.	1. U	-	-	6.8	0.008 U	1.6	-	-	-	6.46	663.	13.76	20.5
MW-17-79	0926-MW-17-79-110	26-Sep-05	-	-	-	-	-	-	-	-	-	3.15	30.5	7.19	1,596.	3.2	14.46
	061026-MW-17-79-119	26-Oct-06	625.	-	-	-	0.53	7.7	0.07	15.9	-	0.62	-133.3	5.59	772.	11.7	15.06
	2708-070627-MW-17-79-112	27-Jun-07	575.	575.	25. U	25. U	-	8.51	0.1 U	5.3	-	0.88	-120.2	6.98	1,805.	12.2	17.33
	2708-080514-MW17-79-120	14-May-08	567.	567.	1. U	-	-	6.8	0.008 U	0.3	-	0.91	-39.	6.49	1,050.	0.12	14.26
	2708-080911-MW-17-79-110	11-Sep-08	620.	620.	1. U	-	-	9.5	0.008 U	10.5	-	2.32	-172.5	6.63	737.	10.	14.59
	2708-081209-MW-17-79-009	9-Dec-08	638.	638.	1. U	-	-	9.6	0.008 U	18.9	-	0.3	-68.	6.52	1,100.	2.	12.28
	2708-090326-MW17-79-106	26-Mar-09	620.	620.	2. U	-	-	4.7	0.3	5.1	-	0.8	-110.4	6.75	817.	25.	14.04
	2708-090817-MW-17-79-134	17-Aug-09	-	-	-	-	-	-	-	-	-	0.5	-227.5	6.63	867.	0.1	16.45
MW-18-30	070731-MW-18-30-146	31-Jul-07	-	-	-	-	-	-	-	-	-	-	-	7.41	1,158.	250.	21.2
	2708-080514-MW18-30-121	14-May-08	894.	894.	1. U	-	-	225.	0.008 U	36.8	-	-	-	6.54	1,795.	-	18.1
	NS	17-Sep-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NS	9-Dec-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NS	1-Apr-09	-	-	-	-	-	-	-	-	-	-	-	6.23**	856**	-	14.5**
	2708-090812-MW-18-30-102	12-Aug-09	-	-	-	-	-	-	-	-	-	-	-	7.91**	760**	-	16.5**

Table 3f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurements						
			Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
		Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
MW-18-180	2708-070628-MW-18-180-117	28-Jun-07	200.	200.	5. U	5. U	-	6.65	0.1 U	9.92	-	0.82	-102.5	7.36	383.	15.2	15.87
	2708-080513-MW18-180-108	13-May-08	206.	206.	1. U	-	-	6.1	0.01 J	13.9	-	0.167	-69.1	7.09	401.	2.29	14.46
	2708-080911-MW-18-180-111	11-Sep-08	696.	696.	1. U	-	-	5.8	0.008 U	15.5	-	2.98	-226.6	7.12	342.	8.	16.98
	2708-081209-MW-18-180-008	9-Dec-08	208.	208.	1. U	-	-	5.8	0.008 U	16.	-	1.07	-92.	7.05	364.	4.	13.41
	2708-090326-MW18-180-104	26-Mar-09	233.	233.	2. U	-	-	5.	1.5	16.1	-	0.64	-174.8	6.87	350.	50.	13.93
	2708-090817-MW-18-180-132	17-Aug-09	-	-	-	-	-	-	-	-	-	0.75	-236.8	7.12	356.	7.1	15.16
MW-19-22	2708-070730-MW-19-22-143	30-Jul-07	500. U	500. U	500. U	500. U	-	2.6	0.1 U	1. U	-	1.08	-65.6	7.27	725.	330.	15.48
	2708-080513-MW19-22-110	13-May-08	186.	186.	1. U	-	-	1.8	0.041 J	0.7	-	1.7	-27.	6.32	364.	-	11.83
	2708-080910-MW-19-22-105	10-Sep-08	234.	234.	1. U	-	-	2.	0.008 U	0.08 J	-	1.62	-110.1	6.65	664.	>999	15.08
	2708-081209-MW-19-22-014	9-Dec-08	257.	257.	1. U	-	-	2.9	0.008 J	22.4	-	0.36	-69.2	6.52	413.	140.	12.9
	2708-090330-MW19-22-112	30-Mar-09		144.	2. U	-	-	2.1	0.3	17.6	-	0.44	7.	6.23	345.	95.	11.83
	2708-090817-MW-19-22-140	17-Aug-09	-	-	-	-	-	-	-	-	-	-	-	6.59	-	>1000	14.9
MW-19-125	2708-070627-MW-19-125-110	27-Jun-07	256.	256.	25. U	25. U	-	27.3	0.1 U	1. U	-	1.1	-109.5	6.59	618.	26.7	13.92
	2708-080514-MW19-125-117	14-May-08	266.	266.	1. U	-	-	30.	0.008 U	0.082 J	-	0.53	-102.9	6.68	644.	3.62	13.34
	2708-080910-MW-19-125-106	10-Sep-08	254.	254.	1. U	-	-	26.3	0.008 J	0.085 J	-	1.36	-89.5	6.58	556.	8.	14.22
	2708-081209-MW-19-125-013	9-Dec-08	254.	254.	1. U	-	-	33.4	0.009 J	0.056 J	-	0.59	-118.3	6.59	516.	4.3	13.13
	2708-090330-MW19-125-110	30-Mar-09	276.	276.	2. U	-	-	29.2	0.3	0.4	-	0.61	-116.	6.42	659.	12.7	12.98
	2708-090813-MW-19-125-123	13-Aug-09	-	-	-	-	-	-	-	-	-	0.	-115.	7.22	576.	267.	14.86
MW-19-180	2708-070627-MW-19-180-111	27-Jun-07	242.	242.	5. U	5. U	-	24.2	0.1 U	4.51	-	1.98	-126.5	7.36	885.	27.	14.55
	2708-080513-MW19-180-115	13-May-08	268.	268.	1. U	-	-	20.7	0.008 U	0.6	-	0.98	-55.1	6.9	589.	13.6	13.1
	2708-080910-MW-19-180-104	10-Sep-08	282.	282.	1. U	-	-	19.2	0.008 U	0.4	-	0.84	-86.	6.73	513.	18.	14.93
	2708-081209-MW-19-180-012	9-Dec-08	279.	279.	1. U	-	-	19.4	0.011 J	0.2	-	0.44	-116.1	6.78	470.	5.	12.68
	2708-090330-MW19-180-108	30-Mar-09	282.	282.	2. U	-	-	21.2	0.4	0.5	-	1.29	-95.	6.6	621.	1.	12.38
	2708-090813-MW-19-180-125	13-Aug-09	-	-	-	-	-	-	-	-	-	2.14	-99.	7.42	490.	23.	21.18
MW-20-120	2708-070628-MW-20-120-114	28-Jun-07	225.	225.	5. U	5. U	-	12.	0.1 U	7.23	-	0.21	-195.8	7.6	490.	54.	14.34
	2708-080515-MW20-120-126	15-May-08	282.	282.	1. U	-	-	10.5	0.008 U	7.1	-	0.1	-88.2	6.89	552.	159.1	15.57
	2708-080910-MW-20-120-103	10-Sep-08	260.	260.	1. U	-	-	10.8	0.008 U	7.9	-	0.85	-175.2	7.1	750.	410.	14.69
	2708-081209-MW-20-120-010	9-Dec-08	277.	277.	1. U	-	-	10.6	0.008 U	3.3	-	0.26	-153.	7.17	469.	24.	13.09
	2708-081209-MW-20-120-011	9-Dec-08	288.	288.	1. U	-	-	10.5	0.008 U	3.2	-	-	-	-	-	-	-
	2708-090330-MW20-120-113	30-Mar-09	290.	290.	2. U	-	-	8.6	0.3	1.1	-	4.	-182.	6.6	545.	333.	13.2
	2708-090812-MW-20-120-116	12-Aug-09	-	-	-	-	-	-	-	-	-	0.73	-115.3	7.28	493.	40.	19.91
MW-21-12	2708-070719-MW-21-12-129	19-Jul-07	246. J	246. J	5. UJ	5. UJ	-	8.62	0.1 U	1. U	-	1.5	-97.1	6.9	930.	23.	21.43
	2708-080514-MW21-12-122	14-May-08	168.	168.	1. U	-	-	4.2	0.008 U	0.186 J	-	0.22	-52.7	6.46	396.	152.	18.41
	NS	15-Sep-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2708-081208-MW-21-12-007	8-Dec-08	254.	254.	1. U	-	-	6.6	0.057	26.8	-	3.05	-30.5	6.52	459.	12.	19.1
	2708-090401-MW21-12-126	1-Apr-09	208.	208.	2. U	-	-	8.2 J	1. U	6.7	-	-	-	6.43	212.	-	14.63
	2708-090811-MW-21-12-105	11-Aug-09	-	-	-	-	-	-	-	-	-	3.21	-94.	7.11	482.	6.4	23.35

Table 3f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Gasco Property Wells

Well Number	HAI Sample Number [1]	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurements						
			Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
		Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
MW-21-75	2708-070718-MW-21-75-124	18-Jul-07	322. J	322. J	5. UJ	5. UJ	-	8.95 J	0.1 UJ	9.6 J	-	7.59	-164.3	7.59	1,096.	9.9	21.01
	2708-080514-MW21-75-123	14-May-08	387.	387.	1. U	-	-	8.6	0.012 J	0.2	-	0.16	-102.3	6.68	798.	10.22	18.75
	2708-080915-MW-21-75-125	15-Sep-08	334.	334.	1. U	-	-	10.1	0.008 U	0.4	-	5.61	-141.	6.47	643.	24.1	22.5
	2708-081208-MW-21-75-004	8-Dec-08	352.	352.	1. U	-	-	9.5	0.008 U	0.117	-	0.42	-96.3	6.23	628.	2.7	17.37
	2708-090331-MW21-75-124	31-Mar-09	383.	383.	2. U	-	-	8.6	0.1 U	0.4	-	1.64	-98.	6.61	771.	0.1	16.7
	2708-090817-MW-21-75-136	17-Aug-09	-	-	-	-	-	-	-	-	-	0.48	-251.5	6.63	599.	0.7	20.65
MW-21-115	2708-070718-MW-21-115-123	18-Jul-07	201. J	158. J	42.8 J	5. UJ	-	5.69 J	0.1 UJ	9.9 J	-	1.12	-208.6	9.6	637.	13.	19.21
	2708-080515-MW21-115-125	15-May-08	198.	198.	1. U	-	-	5.2	0.008 U	7.2	-	0.64	-94.8	6.9	404.	1.04	18.28
	2708-080915-MW-21-115-126	15-Sep-08	202.	202.	1. U	-	-	5.1	0.008 U	17.1	-	2.51	-114.	7.24	371.	5.	21.24
	2708-081208-MW-21-115-005	8-Dec-08	185.	185.	1. U	-	-	5.2	0.008 U	7.7	-	1.45	-66.7	6.39	328.	3.5	18.24
	2708-090331-MW21-115-120	31-Mar-09	181.	181.	2. U	-	-	5.3	0.1 U	7.4	-	1.89	-119.	6.92	407.	0.1	17.45
	2708-090811-MW-21-115-101	11-Aug-09	-	-	-	-	-	-	-	-	-	2.72	-108.	7.15	386.	30.	19.09
MW-21-165	2708-070718-MW-21-165-122	18-Jul-07	373. J	5. UJ	41.6 J	331. J	-	4.27 J	0.1 UJ	77.4 J	-	1.26	-220.5	12.37	3,607.	34.	20.88
	2708-080514-MW21-166-124	14-May-08	126.	1. U	68.	-	-	4.1	0.008 U	49.	-	-	-83.5	10.53	355.	17.	21.79
	2708-080915-MW-21-166-124	15-Sep-08	122.	1. U	40.	-	-	4.5	0.008 U	51.	-	0.91	-203.	9.94	267.	35.	19.45
	2708-081208-MW-21-166-006	8-Dec-08	148.	29.	119.	-	-	4.9	0.008	62.4	-	0.35	-196.8	9.79	263.	18.	17.92
	2708-090331-MW21-165-122	31-Mar-09	105.	22.	82.	-	-	5.	0.1 U	73.9	-	0.29	-393.	9.17	353.	29.4	17.46
	2708-090811-MW-21-166-103	11-Aug-09	-	-	-	-	-	-	-	-	-	0.	-395.	9.27	345.	125.	19.91
PW-01	060720-PW-01-100	20-Jul-06	-	-	-	-	-	-	-	-	-	-	-	6.73	614.	-	15.
	061012-PW-01-102	12-Dec-06	492.	-	-	-	1.84	14.	0.008 U	2.2	-	2.	-94.6	6.92	614.	-	15.
	2708-070731-PW-01-80-147	31-Jul-07	559.	559.	50. U	50. U	-	15.4	0.1 U	3.83	-	2.22	-45.7	6.76	1,553.	12.	16.82
	2708-080604-PW01-80-107	4-Jun-08	442.	442.	1. U	-	-	9.8	0.008 U	0.3	-	-	-	6.38	743.	-	14.3
	NS	16-Sep-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

1 = HAI Sample Identification Number is 2708-
"-" = Measurement not taken, parameter not analyzed, or data unavailable (samper other than HAI)
** = Insufficient recharge volume to ensure parameter stabilzation criteria meet. Values stated as final recordings prior to well purging dry.

Note:
°C = Degrees Celcius
EPA = Environmental Protection Agency
J - Estimated Concentration
mg/l = milligrans per liter
mV = millivolts
NS = No Sample
NTU = nephelometric units
ORP = Oxidation Reduciton Potential
ppm = parts per million
U = Non-detect above method reporting/detection limits
UJ = Compound not detected, but the reporting limit is probably higher due to a low bias identified during the quality assurance review.
uS/cm = microsiemens per centimeter

4a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
WS-1	CH2M HILL		Aug-85	7-22	1,100.	U	410.	1,200.	0.18	-	-	151.	1,012.
WS-2	CH2M HILL		Aug-85	7.5-22	100.	U	U	32.	0.058	-	-	2,710.	10,630.
WS-3S	CH2M HILL		Aug-85	12-27	390.	U	U	U	0.13	-	-	ND	712.
	URS		6-Apr-00		U	-	-	-	-	-	-	-	-
			13-Oct-00		U	-	-	-	-	-	-	-	-
			25-Jun-01		0.3	-	-	-	-	-	-	-	-
	AMEC		16-Apr-02		4.	-	-	-	-	-	-	-	-
WS-3I	G&M		Oct-90	55-60	U	U	U	U	0.107	-	-	ND	904.
	URS		6-Apr-00		- U	-	-	-	-	-	-	-	-
			13-Oct-00		- U	-	-	-	-	-	-	-	-
			25-Jun-01		- U	-	-	-	-	-	-	-	-
	AMEC		16-Apr-02		0.14	-	-	-	-	-	-	-	-
			13-Apr-04		U	U	U	U	-	-	-	-	-
W-03-81	URS		6-Apr-00	75-80	U	-	-	-	-	-	-	-	-
			13-Oct-00		U	-	-	-	-	-	-	-	-
			25-Jun-01		0.17	-	-	-	-	-	-	-	-
	AMEC		16-Apr-02		U	-	-	-	-	-	-	-	-
			13-Apr-04		U	U	U	U	-	-	-	-	-
WS-4	CH2M HILL		Aug-85	6.5-21.5	U	U	U	15.	0.93	-	-	ND	795.
WS-5	CH2M HILL		Aug-85	5-20	-	-	-	-	0.13	-	-	ND	186.
WS-6	CH2M HILL		Aug-85	9-24	1,200.	-	350.	430.	0.04	-	-	ND	2,433.
			6-Apr-00		40.4	-	-	-	-	-	-	-	-
			13-Oct-00		614.	-	-	-	-	-	-	-	-
WS-7	CH2M HILL		Aug-85	10-25	U	U	U	U	0.033	-	-	37.	90.
	URS		Oct-90		U	U	U	U	0.031	-	-	ND	13.
			6-Apr-00		U	-	-	-	-	-	-	-	-
			13-Oct-00		U	-	-	-	-	-	-	-	-
WS-8-33	HAI	5237-011009-107	9-Oct-01	23-33	107.	10. U	27.9	20. U	0.02 U,J	0.02 U,J	-	1.72	728.14
		5237-011213-105	13-Dec-01		68.	5. U	29.6	23.2	0.854	0.02 U	-	1.03	524.18
		5237-020403-105	3-Apr-02		89.1	2.07	19.5	20.48	0.416	0.064 J	-	0.73	274.61
		5237-020403-106	3-Apr-02		87.4	2.14	18.	18.5	0.615	0.183 J	-	0.76	262.17
		5237-020710-104	10-Jul-02		65.9	1.24	31.6	53.1	0.724	0.08 U	-	1.44	340.28
		5237-020710-105	10-Jul-02		68.1	1.29	30.4	49.8	0.726	0.08 U	-	2.1	354.13
		5237-080521-WS8-33-105	21-May-08		76.	1.4	12.	30.	0.6	0.02	0.006	5.39	387.4
		5237-080929-WS-8-33-145	29-Sep-08		110.	2.2	23.	51.	0.77	0.05	0.01	4.11	398.43
		5237-090408-WS8-33-119	8-Apr-09		73.	1.2	11.	32.	0.75	0.03 J	0.003 U	3.07	302.79
		5327-090819-WS-8-33-159	19-Aug-09		58.8	5. U	7.3	8.5	0.789	0.0539	0.01 U	ND	268.5
WS-8-59	HAI	5237-011008-104	8-Oct-01	49-59	14.7	1. U	1. U	2. U	0.468	0.02 U,J	-	0.54	98.22
		5237-011008-105 (duplicate)	8-Oct-01		21.4	2.02	1. U	2. U	0.456	0.02 U,J	-	0.44	95.83
		5237-011212-103	12-Dec-01		26.8	1.27	1. U	2.66	0.725 J	0.263	-	1.07	65.14
		5237-011212-104 (duplicate)	12-Dec-01		27.	1.32	1. U	2.57	0.066 J	0.02 U,J	-	0.52	62.97
		5237-020403-104	3-Apr-02		13.	1. U	1. U	1.11	1.42	0.4 U	-	0.4	26.78
		5237-0207103	10-Jul-02		20.8	1.17	1. U	2.29	0.459	0.04 U	-	0.4	18.88
		5237-070716-WS-8-59-108	16-Jul-07		7.08	0.53	0.06 U	0.26 U	0.538	0.181	0.0061	0.69132	2.90432
		5237-080521-WS8-56-106	21-May-08		13.	0.8	0.04 U	0.96	0.45	0.11	0.004	4.67	9.95
		5237-080929-WS-8-56-146	29-Sep-08		2.7	0.57	0.04 U	0.14	0.63	0.08	0.003 U	2.668	5.629

4a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
WS-8-59	HAI	5237-090408-WS8-59-115	8-Apr-09	49-59	8.3	0.68	0.04 U	0.53 J	0.31	0.07 J	0.003 U	2.679	6.239
		5237-090408-WS8-59-117	8-Apr-09		9.7	4. J	0.12 J	1.28	0.042 U	0.007 J	0.003 U	1.659	4.181
		5327-090819-WS-8-59-157	19-Aug-09		1.67	0.5 U	0.5 U	1. U	0.754	0.0556	0.01 U	7.06	12.714
WS-9-34	HAI	5237-011008-102	8-Oct-01	24-34	1. U	1. U	1. U	2. U	0.14	0.02 U,J	-	ND	3.59
		5237-011212-101	12-Dec-01		1. U	1. U	1. U	2. U	0.074	0.02 U	-	0.75	32.31
		5237-020402-101	2-Apr-02		1. U	1. U	1. U	2. U	0.11	0.04 U	-	ND	26.33
		5237-020710-101	10-Jul-02		1. U	1. U	1. U	2. U	0.074 J	0.04 U,J	-	ND	17.81
		5237-090410-WS9-34-122	10-Apr-09		0.12 J	0.39 J	0.07 J	0.24 J	0.06	0.003 U	0.003 UJ	0.6827	29.4367
		5327-090819-WS-9-34-156	19-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.0868 UV	0.01 U	0.01 U	ND	41.009
WS-10-27	MFA	WS-10-27	27-Oct-03	11-26	8,060.	150.	716.	1,472.	-	-	-	-	-
			29-Jan-04		5,040.	76.3	518.	265.7	1.18	-	-	-	-
			29-Apr-04		7,640.	337.	570.	548.	1.46	-	-	59.72	4,514.76
			16-Nov-04		7,170.	376.	617.	984.	-	-	-	670.4	12,719.7
			17-Feb-05		5,070.	380.	557.	964.	-	-	-	-	-
			23-May-05		5,090.	222.	288.	335.	-	-	-	-	-
			9-Aug-05		5,240.	228.	230.	389.	-	-	-	-	-
			15-Nov-05		10,600.	428.	468.	678.	-	-	-	-	-
			16-Feb-06		572.	22.7	75.1	238.7	-	-	-	-	-
			10-May-06		83.5	1.66	23.2	78.1	-	-	-	-	-
			22-Aug-06		7,160.	278.	266.	248.5	-	-	-	-	-
			15-Nov-06		1,510.	79.3	154.	363.	-	-	-	-	-
			20-Feb-07		326.	5.31	61.6	81.3	-	-	-	-	-
			24-May-07		12.3	0.5 U	2.9	3.86	-	-	-	-	-
			16-Aug-07		7,820.	442.	296.	531.	-	-	-	-	-
			20-Nov-07		6,160.	282.	281.	549.	1.1	-	0.01 U	-	-
			8-Feb-08		244.	5.1	53.1	124.7	0.23	-	0.01 U	-	-
			13-May-08		2,420.	29.1	118.	198.7	0.4	-	0.01 U	-	-
			18-Aug-08		7,760.	360.	376.	400.5	0.3	-	0.01 U	-	-
WS-11-125	MFA	WS-11-125	28-Oct-03	109-124	252.	56.1	87.6	92.9	-	-	-	-	-
			30-Jan-04		328.	68.5	124.	125.3	-	-	-	-	-
			29-Apr-04		379.	84.2	155.	207.7	0.427	-	-	680.3	8,137.9
			16-Nov-04		536.	120.	182.	256.	0.574	-	-	48.78	3,012.37
			16-Feb-05		5,540.	40.8	50.1	43.5	-	-	-	-	-
			18-May-05		525.	71.2	94.9	78.2	-	-	-	-	-
			10-Aug-05		136.	13.4	22.4	18.28	-	-	-	-	-
			15-Nov-05		447.	57.6	91.2	82.8	-	-	-	-	-
			15-Feb-05		554.	55.2	94.4	91.3	-	-	-	-	-
			11-May-05		344.	32.2	47.	47.9	-	-	-	-	-
			28-Jun-05		1,340.	252.	358.	409.	0.48	-	-	-	-
			27-Jul-06		908.	173.	367.	382.	0.42	-	0.4	-	-
			23-Aug-06		780.	154.	303.	296.	0.44	-	0.48	-	-
			26-Sep-06		717.	175.	225.	430.	0.47	-	0.37	-	-
			23-Oct-06		673.	135.	253.	342.	0.48	-	0.54	-	-
			18-Dec-06		813.	202.	395.	512.	0.56	-	0.019	-	-
			25-Jan-07		947.	167.	367.	357.	0.38	-	0.024	-	-
			21-Feb-07		918.	250.	478.	418.	0.51	-	0.21	-	-
			21-Mar-07		862.	219.	474.	474.	0.51	-	0.012	-	-
			23-Apr-07		972.	246.	575.	513.	0.61	-	0.059	-	-

4a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
WS-11-125	MFA	WS-11-125	22-May-07	109-124	1,680.	365.	696.	900.	0.42	-	0.062	-	-
			15-Nov-07		985.	229.	495.	587.	0.56	-	0.01 U	-	-
			14-Feb-08		799.	135.	541.	673.	0.62	-	0.01 U	-	-
			15-May-08		448.	133.	392.	510.	0.47	-	0.044	-	-
			6-Aug-08		290.	133.	225.	257.	0.46	-	0.031	-	-
		5237-080515-WS11-125-102	15-May-08		560.	190.	490.	620.	0.61	0.1	0.006 J	12.76	11,537.86
		5237-080929-WS-11-125-144	29-Sep-08		350.	120.	340.	440.	0.53	0.002 U	0.003 U	11.16	11,524.66
		5237-090407-WS11-125-102	7-Apr-09		610.	150.	410.	520.	0.5	0.08 J	0.003 U	34.94	12,625.54
		5237-090818-WS-11-125-149	18-Aug-09		480.	104.	298.	389.	0.537	0.01 U	0.01 R	ND	9,760.
WS-11-161	MFA	WS-11-161	27-Oct-03	145-160	0.56	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			29-Jan-04		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			27-Apr-04		0.2 U	0.2 U	0.2 U	0.4 U	0.01 U	-	-	0.5045	2.8069
			16-Nov-04		0.2 U	0.2 U	0.2 U	0.4 U	0.01 U	-	-	ND	2.0558
			16-Feb-05		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			18-May-05		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			10-Aug-05		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			15-Nov-05		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			14-Feb-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			11-May-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			21-Aug-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			13-Nov-06		0.3 U	0.5 U	0.5 U	1. U	-	-	-	-	-
			21-Feb-07		0.3 U	0.5 U	0.5 U	1. U	-	-	-	-	-
			29-May-07		0.3 U	0.5 U	0.5 U	1. U	-	-	-	-	-
			15-Aug-07		3.2	0.88	0.85	1. U	-	-	-	-	-
			15-Nov-07		2.83	1.15	1.56	0.62	0.01 U	-	0.01 U	-	-
			11-Feb-08		7.59	2.59	3.71	3.22	0.01 U	-	0.01 U	-	-
			15-May-08		23.	7.74	11.	10.4	0.01 U	-	0.01 U	-	-
			6-Aug-08		19.8	4.7	8.31	5.95	0.01 U	-	0.01 U	-	-
	HAI	5237-070712-WS11-161	12-Jul-07		8.53	3.02	3.91	4.36	0.005 U	0.005 U	0.003 UR	0.06749	50.09
		5237-080515-WS11-161-103	15-May-08		25.	8.6	12.	13.7	0.01 J	0.002 U	0.004 J	ND	110.82
		5237-080929-WS-11-161-142	29-Sep-08		25.	9.7	15.	16.4	0.002 U	0.002 U	0.003 U	ND	89.63
		5237-080929-WS-11-161-143	29-Sep-08		23.	9.7	16.	17.	0.002 U	0.002 U	0.003 U	ND	141.02
		5237-090407-WS11-161-100	7-Apr-09		18.	7.7	13.	14.8	0.009 J	0.003 U	0.003 U	ND	110.9989
		5237-090818-WS-11-161-147	18-Aug-09		11.3	5.25	9.69	6.84	0.0159 UV	0.005 U	0.01 R	ND	87.7
WS-12-125	MFA	WS-12-125	28-Oct-03	109-124	8.53	0.2 U	0.2 U	1.1	-	-	-	-	-
			30-Jan-04		2.91	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			26-Apr-04		9.56	0.2 U	0.2 U	1.35	-	-	-	ND	2.535
			17-Nov-04		4.01	0.2 U	0.2 U	0.4 U	0.5	-	-	ND	1.0063
			16-Feb-05		4.63	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			18-May-05		1.46	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			16-Aug-05		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			15-Nov-05		6.	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			14-Feb-06		4.78	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			9-May-06		5.16	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			21-Aug-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			12-Nov-06		7.9	0.5 U	0.5 U	1. U	-	-	-	-	-
			21-Feb-07		6.29	0.5 U	0.5 U	1. U	-	-	-	-	-
			29-May-07		6.25	0.5 U	0.5 U	1. U	-	-	-	-	-

4a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
WS-12-125	MFA	WS-12-125	15-Aug-07	109-124	6.89	0.5 U	0.5 U	1. U	-	-	-	-	-
			13-Nov-07		6.71	0.5 U	0.5 U	1. U	0.53	-	0.01 U	-	-
			11-Feb-08		4.88	0.5 U	0.5 U	1. U	0.52	-	0.01 U	-	-
			21-May-08		3.28	0.5 U	0.5 U	1. U	0.49	-	0.034	-	-
			6-Aug-08		4.58	0.5 U	0.5 U	1. U	0.35	-	0.027	-	-
	HAI	5237-070712-WS12-125	12-Jul-07		6.44	0.11 U	0.06 U	0.26 U	0.452	0.258	0.0078 J	0.0051	0.8151
		5237-080521-WS12-126-104	21-May-08		6.6	0.1 J	0.05 J	0.07	0.53	0.04	0.007	0.007	0.366
		5237-080925-WS-12-125-140	25-Sep-08		6.2	0.45 J	0.08 J	0.04	0.43	0.05	0.149	ND	0.4828
		5237-090407-WS12-125-106	7-Apr-09		5.5	0.09 J	0.04 U	0.08 U	0.42	0.003 U	0.003 U	0.0035	0.5354
		5237-090818-WS-12-125-145	18-Aug-09		5.66	0.5 U	0.5 U	1. U	0.437	0.01 U	0.01 R	ND	0.3592
WS-12-161	MFA	WS-12-161	27-Oct-03	145-160	0.55	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			29-Jan-04		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			26-Apr-04		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	ND	0.7919
			17-Nov-04		446.	0.2 U	79.7	87.1	0.01 U	-	-	ND	1.25
			18-Feb-05		5.88	1.36	0.2 U	1.01	-	-	-	-	-
			20-May-05		0.2 U	0.29	0.2 U	0.4 U	-	-	-	-	-
			16-Aug-05		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			15-Nov-05		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			14-Feb-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			9-May-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			21-Aug-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			13-Nov-06		0.3 U	0.5 U	0.5 U	1. U	-	-	-	-	-
			21-Feb-07		0.3 U	0.5 U	0.5 U	1. U	-	-	-	-	-
			29-May-07		0.3 U	0.5 U	0.5 U	1. U	-	-	-	-	-
			15-Aug-07		0.3 U	0.5 U	0.5 U	1. U	-	-	-	-	-
			13-Nov-07		0.3 U	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			11-Feb-08		4.74	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			21-May-08		0.3 U	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			5-Aug-08		0.3 U	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
	HAI	5237-070712-WS12-161	12-Jul-07		0.09 U	0.11 U	0.06 U	0.26 U	0.006 J	0.0054 J	0.003 UR	0.02338	0.02338
		5237-080521-WS12-161-107	21-May-08		0.07 J	0.05 U	0.04 U	0.08 U	0.008	0.002 U	0.005	ND	0.0484
		5237-080925-WS-12-161-141	25-Sep-08		0.06 J	0.74	0.04 U	0.08 U	0.002 U	0.002 U	0.006 J	ND	0.035
		5237-090407-WS12-161-104	7-Apr-09		0.06 J	0.06 J	0.04 U	0.08 U	0.006 J	0.003 U	0.003 U	ND	0.0072
		5237-090818-WS-12-161-143	18-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.0118 UV	0.005 U	0.01 R	ND	0.0404
WS-13-69	MFA	WS-13-69	29-Oct-03	52.6-67.6	129.	46.9	60.1	87.3	-	-	-	-	-
			30-Jan-04		680.	58.6	153.	196.7	-	-	-	-	-
			28-Apr-04		587.	57.5	123.	124.4	0.446	-	-	0.23	673.08
			18-Nov-04		764.	57.3	732.	159.4	0.483	-	-	ND	813.46
			17-Feb-05		963.	63.4	198.	211.3	-	-	-	-	-
			20-May-05		340.	30.7	114.	79.3	-	-	-	-	-
			10-Aug-05		271.	13.6	65.4	62.5	-	-	-	-	-
			16-Nov-05		988.	57.9	312.	221.6	-	-	-	-	-
			16-Feb-05		1,160.	51.4	388.	179.9	-	-	-	-	-
			10-May-06		1,510.	80.7	380.	279.7	-	-	-	-	-
			19-Jul-06		1,140.	53.	243.	183.2	0.51	-	0.52	-	-
			24-Aug-06		1,120.	31.2	115.	124.	0.62	-	0.54	-	-
			27-Sep-06		937.	39.6	194.	131.	0.58	-	0.57	-	-
			25-Oct-06		1,020.	40.3	189.	115.6	0.53	-	0.43	-	-

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Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results								
					EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
WS-13-69	MFA	WS-13-69	15-Nov-06	52.6-67.6	2,150.	172.	720.	774.	0.58	-	0.54	-	-
			25-Jan-07		1,120.	45.8	274.	183.1	0.68	-	0.44	-	-
			21-Feb-07		1,360.	63.2	327.	198.6	0.67	-	0.36	-	-
			22-Mar-07		1,170.	44.8	276.	135.4	0.55	-	0.46	-	-
			24-Apr-07		1,140.	46.8	310.	37.	0.67	-	0.36	-	-
			23-May-07		1,160.	34.4	206.	118.3	0.53	-	0.12	-	-
			17-Aug-07		1,480.	47.4	309.	130.6	-	-	-	-	-
			15-Nov-07		1,620.	50.4	352.	172.2	0.79	-	0.01 U	-	-
			12-Feb-08		1,610.	44.6	338.	161.4	0.63	-	0.01 U	-	-
			14-May-08		1,000.	28.9	291.	103.9	0.61	-	0.045	-	-
			8-Aug-08		1,600.	47.9	299.	168.	0.68	-	0.01 U	-	-
WS-13-105	MFA	WS-13-105	29-Oct-03	89-104	2.14	1.34	6.14 U	5.09 U	-	-	-	-	-
		Duplicate	29-Oct-03		1.09	0.2 U	1.29	2.2	-	-	-	-	-
			30-Jan-04		11.7	1.18	3.32	2.09	-	-	-	-	-
		Duplicate	30-Jan-04		3.23	1.79	4.14	3.6	-	-	-	-	-
			28-Apr-04		U	U	U	U	0.0164	-	-	0.2404	33.99
		Duplicate	28-Apr-04		U	U	U	U	0.01 U	-	-	ND	17.3
			18-Nov-04		0.2 U	0.2 U	0.2 U	0.4 U	0.01 U	-	-	ND	0.494
		Duplicate	18-Nov-04		0.2 U	0.2 U	0.2 U	0.4 U	0.01 U	-	-	ND	0.237
			17-Feb-05		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			20-May-05		0.29	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			9-Aug-05		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			16-Nov-05		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			16-Feb-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			10-May-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			19-Jul-06		0.3 U	1. U	1. U	2. U	0.01 U	-	0.01 U	-	-
			24-Aug-06		0.3 U	0.3 U	0.3 U	0.4 U	0.01 U	-	0.01 U	-	-
			27-Sep-06		0.47	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			25-Oct-06		0.3	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			15-Nov-06		0.3 U	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			25-Jan-07		0.3 U	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			21-Feb-07		0.3 U	0.5 U	0.5 U	1. U	0.01	-	0.01 U	-	-
			21-Mar-07		0.3 U	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			24-Apr-07		0.3 U	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			23-May-07		0.3 U	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			16-Aug-07		0.3 U	0.5 U	0.5 U	1. U	-	-	-	-	-
			19-Nov-07		0.3 U	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			12-Feb-08		0.3 U	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			13-May-08		0.78	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
			8-Aug-08		0.3 U	0.5 U	0.5 U	1. U	0.01 U	-	0.01 U	-	-
WS-14-125	MFA	WS-14-125	16-Nov-04	109-124	3,630.	410.	514.	675.	0.254	-	-	39.04	5,100.81
			21-Feb-05		4,060.	287.	498.	594.	-	-	-	-	-
			23-May-05		3,740.	165.	269.	276.	-	-	-	-	-
			9-Aug-05		2,610.	101.	154.	284.	-	-	-	-	-
			16-Nov-05		5,240.	306.	539.	745.	-	-	-	-	-
			15-Feb-06		5,140.	217.	421.	547.	-	-	-	-	-
			9-May-06		7,300.	284.	456.	573.	-	-	-	-	-
			22-Aug-06		4,370.	217.	412.	404.	-	-	-	-	-

4a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
WS-14-125	MFA	WS-14-125	14-Nov-06	109-124	10,300.	239.	368.	448.	-	-	-	-	-
			21-Feb-07		9,820.	288.	608.	700.	-	-	-	-	-
			24-May-07		5,000.	160.	369.	482.	-	-	-	-	-
			18-Jul-07		7,440.	350.	525.	718.	-	-	-	-	-
			19-Jul-07		9,070.	366.	556.	764.	-	-	-	-	-
			16-Aug-07		7,450.	294.	532.	731.	-	-	-	-	-
			14-Nov-07		5,780.	292.	636.	809.	0.32	-	0.022	-	-
			11-Feb-08		5,650.	228.	525.	572.	0.29	-	0.011	-	-
			15-May-08		4,700.	178.	447.	322.	0.34	-	0.01 U	-	-
			4-Aug-08		4,000.	205.	395.	444.	0.11	-	0.014	-	-
	HAI	5237-070712-WS14-125	12-Jul-07		5,430.	202.	505.	631.	0.273	0.266	0.00563 J	7.1	7,889.52
		5237-080515-WS14-125-100	15-May-08		6,400.	160.	640.	820.	0.33	0.002 U	0.008 J	1.94	8,117.58
		5237-080925-WS-14-125-138	25-Sep-08		4,500.	190.	480.	590.	0.29	0.002 U	0.032	1.729	7,111.569
		5237-090408-WS14-125-110	8-Apr-09		5,900.	170.	530.	680.	0.27	0.04 J	0.003 U	3.912	6,873.692
		5327-090819-WS-14-125-155	19-Aug-09		5,670.	158.	558.	666.	0.31	0.01 U	0.01 U	ND	5,120.
WS-14-161	MFA	WS-14-161	16-Nov-04	145-160	0.43	0.2 U	0.2 U	0.4 U	0.01 U	-	-	ND	0.7078
			21-Feb-05		2.06	0.46	0.2 U	0.4 U	-	-	-	-	-
			23-May-05		0.34	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			9-Aug-05		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			16-Nov-05		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			15-Feb-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			9-May-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			22-Aug-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			14-Nov-06		0.65	0.5 U	0.5 U	1. U	-	-	-	-	-
			21-Feb-07		0.51	0.5 U	0.5 U	1. U	-	-	-	-	-
			24-May-07		0.52	0.5 U	1.51	1.93	-	-	-	-	-
			18-Jul-07		0.63	0.5 U	0.82	1. U	-	-	-	-	-
			19-Jul-07		0.6	0.5 U	1.12	0.33	-	-	-	-	-
			16-Aug-07		0.38	0.5 U	0.72	1. U	-	-	-	-	-
			14-Nov-07		0.39	0.5 U	4.93	5.8	0.01 U	-	0.01 U	-	-
			11-Feb-08		0.32	0.5 U	4.1	3.43	0.01 U	-	0.01 U	-	-
			15-May-08		0.88	0.63	4.08	4.92	0.01 U	-	0.01 U	-	-
			4-Aug-08		0.34	0.8	6.96	5.63	0.01 U	-	0.01 U	-	-
	HAI	5237-070712-WS14-161	12-Jul-07		0.09 U	0.11 U	0.68	0.26 U	0.005 U	0.005 U	0.003 UR	ND	15.88
		5237-080515-WS14-161-101	15-May-08		0.44 J	0.94	7.6	10.	0.002 U	0.002 U	0.003 J	0.0047	143.74
		5237-080925-WS-14-161-139	25-Sep-08		0.79	1.5	9.6	12.	0.002 U	0.002 U	0.003 J	0.0202	123.5
		5237-090408-WS14-161-108	8-Apr-09		0.85 J	1.2 J	18.	24.1	0.003 U	0.003 U	0.003 U	0.0607	731.75
		5237-090818-WS-14-161-151	18-Aug-09		0.88	1.05	22.1	23.2	0.005 U	0.005 U	0.01 R	ND	788.
WS-15-85	MFA	WS-15-85	18-Nov-04	70-85	3,650.	268.	285.	297.	0.0233	-	-	1.0708	2,382.29
			17-Feb-05		17,300.	555.	1,320.	1,478.	-	-	-	-	-
			19-May-05		13,000.	410.	1,030.	1,133.	-	-	-	-	-
			10-Aug-05		5,130.	119.	270.	348.	-	-	-	-	-
			14-Nov-05		10,800.	258.	860.	765.	-	-	-	-	-
			16-Feb-06		21,600.	578.	1,970.	2,082.	-	-	-	-	-
			10-May-06		20,300.	314.	1,290.	1,434.	-	-	-	-	-
			25-Aug-06		21,500.	362.	1,120.	1,460.	-	-	-	-	-
			14-Nov-06		10,500.	197.	632.	731.	-	-	-	-	-
			21-Feb-07		12,900.	282.	1,190.	1,394.	-	-	-	-	-

4a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results								
					EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
WS-15-85	MFA	WS-15-85	24-May-07	70-85	9,320.	7.57	32.3	42.4	-	-	-	-	-
			17-Aug-07		3,540.	125.	502.	1,048.	-	-	-	-	-
			15-Nov-07		4,840.	236.	1,040.	1,338.	0.49	-	0.01 U	-	-
			12-Feb-08		8,580.	266.	950.	1,268.	6.4	-	0.013	-	-
			14-May-08		5,100.	175.	788.	1,029.	0.77	-	0.01 U	-	-
			8-Aug-08		3,860.	175.	993.	1,210.	0.34	-	0.01 U	-	-
WS-15-140	MFA	WS-15-140	18-Nov-04	125-140	7.99	0.32	0.79	0.4 U	0.135	-	-	0.0517	18.182
			17-Feb-05		18.	0.96	0.25	1.49	-	-	-	-	-
			19-May-05		6.67	0.75	0.52	0.4 U	-	-	-	-	-
			10-Aug-05		1,010.	16.5	67.2	81.4	-	-	-	-	-
			14-Nov-05		2,460.	24.4	155.	129.	-	-	-	-	-
			15-Feb-06		2,220.	21.1	229.	126.9	-	-	-	-	-
			10-May-06		2,110.	9.71	204.	97.4	-	-	-	-	-
			25-Aug-06		1,460.	4.7	62.7	37.32	-	-	-	-	-
			14-Nov-06		1,110.	10.7	120.	42.3	-	-	-	-	-
			21-Feb-07		815.	4.44	85.2	25.19	-	-	-	-	-
			24-May-07		26.2	0.5 U	3.97	2.01	-	-	-	-	-
			17-Aug-07		822.	3.33	93.3	23.6	-	-	-	-	-
			15-Nov-07		866.	2.75	103.	25.43	0.088	-	0.01 U	-	-
			12-Feb-08		546.	2.76	97.2	22.96	0.12	-	0.01 U	-	-
			14-May-08		424.	2.3	94.	21.01	0.12	-	0.022	-	-
			8-Aug-08		509.	5.3	130.	33.3	0.082	-	0.01 U	-	-
WS-16-125	MFA	WS-16-125	17-Nov-04	109-124	0.2 U	0.2 U	0.2 U	0.4 U	0.01 U	-	-	ND	155.64
			21-Feb-05		698.	3.02	111.	117.8	-	-	-	-	-
			23-May-05		224.	1.22	41.9	35.8	-	-	-	-	-
			9-Aug-05		237.	0.2 U	38.5	38.7	-	-	-	-	-
			16-Nov-05		449.	1.65	92.	105.7	-	-	-	-	-
			15-Feb-06		552.	1.17	96.8	101.	-	-	-	-	-
			11-May-06		474.	0.75	57.5	56.5	-	-	-	-	-
			22-Aug-06		522.	0.3 U	93.6	95.2	-	-	-	-	-
			15-Nov-06		534.	1.56	89.5	92.9	-	-	-	-	-
			21-Feb-07		1,060.	0.9	96.8	98.	-	-	-	-	-
			24-May-07		16.3	0.5 U	2.73	3.07	-	-	-	-	-
			16-Aug-07		562.	0.78	80.3	87.7	-	-	-	-	-
			19-Nov-07		481.	1.91	75.7	79.7	0.01 U	-	0.01 U	-	-
			12-Feb-08		624.	0.9	91.8	92.	0.01 U	-	0.01 U	-	-
			14-May-08		398.	0.93	86.7	91.3	0.013	-	0.01 U	-	-
			5-Aug-08		543.	0.86	78.	74.7	0.01 U	-	0.01 U	-	-
WS-16-161	MFA	WS-16-161	17-Nov-04	145-160	2.4	0.75	0.77	1.32	0.01 U	-	-	ND	9.2733
			18-Feb-05		1.66	3.84	0.2 U	0.63	-	-	-	-	-
			20-May-05		0.25	0.77	0.2 U	0.4 U	-	-	-	-	-
			9-Aug-05		0.2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	-
			16-Nov-05		0.3 U	1.45	0.3 U	0.4 U	-	-	-	-	-
			15-Feb-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			10-May-06		0.3 U	0.67	0.3 U	0.4 U	-	-	-	-	-
			22-Aug-06		0.3 U	0.3 U	0.3 U	0.4 U	-	-	-	-	-
			15-Nov-06		0.3 U	0.5 U	0.5 U	1. U	-	-	-	-	-
			21-Feb-07		0.3 U	0.5 U	0.5 U	1. U	-	-	-	-	-

4a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results																							
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					Benzene			Toluene			Ethylbenzene			Xylenes			Total Cyanide			Amenable Cyanide			Free Cyanide			Carcinogenic PAHs			Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]																													
Fish Consumption																													
		EPA 2004 NRWQC (organism only)			51.			15,000.			2,100.			#			#			#			0.14			#			#
		Portland Harbor specific fish consumption rate			5.1			1,500.			210.			#			#			#			0.014			#			#
		DEQ 2004 AWQC (organism only)			51.			15,000.			2,100.			#			#			#			0.14			#			#
Drinking Water																													
		MCL			5.			1,000.			700.			10,000.			#			#			0.2			#			#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41			2,300.			1,500.			200.			#			#			0.73			#			#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]																													
		EPA 2004 NRWQC (chronic)			#			#			#			#			#			#			0.0052			#			#
		DEQ 2004 AWQC (chronic)			#			#			#			#			#			#			0.0052			#			#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.			9.8			7.3			13.			#			#			#			#			#
WS-16-161	MFA	WS-16-161	24-May-07	145-160	2.25			0.5		U	0.7			1.43			-			-			-			-			-
			16-Aug-07		0.3		U	0.5		U	0.5		U	1.		U	-			-			-			-			-
			15-Nov-07		0.3		U	0.5		U	0.5		U	1.		U	0.01		U	-			0.01		U	-			-
			8-Feb-08		1.08			0.5		U	0.5		U	1.		U	0.01		U	-			0.01		U	-			-
			16-May-08		0.3		U	0.5		U	0.5		U	1.		U	0.01		U	-			0.01		U	-			-
			5-Aug-08		0.3		U	0.5		U	0.5		U	1.		U	0.01		U	-			0.01		U	-			-
WS-17-52	MFA	WS-17-52	16-Nov-04	41-51	105.			0.2		U	90.1			102.4			0.149			-			-			0.5003			322.05
			17-Feb-05		52.7			0.96			54.1			39.4			-			-			-			-			-
			20-May-05		12.3			0.24			15.8			4.55			-			-			-			-			-
			9-Aug-05		10.7			0.2		U	6.13			0.4		U	-			-			-			-			-
			15-Nov-05		18.4			0.3		U	8.75			2.28			-			-			-			-			-
			16-Feb-06		7.96			0.3		U	7.65			2.39			-			-			-			-			-
			10-May-06		5.23			0.3		U	6.78			0.49			-			-			-			-			-
			22-Aug-06		5.93			0.3		U	8.94			0.54			-			-			-			-			-
			15-Nov-06		5.27			0.5		U	3.68			0.94			-			-			-			-			-
			20-Feb-07		4.06			0.5		U	3.46			0.58			-			-			-			-			-
			24-May-07		3.07			0.5		U	3.18			1.96			-			-			-			-			-
			17-Aug-07		3.59			0.5		U	2.17			0.4			-			-			-			-			-
			14-Nov-07		2.67			0.5		U	1.45			0.38			0.18			-			0.01		U	-			-
			8-Feb-08		1.63			0.5		U	1.1			1.		U	0.22			-			0.014			-			-
			13-May-08		1.28			0.5		U	0.77			1.		U	0.16			-			0.018			-			-
			18-Aug-08		0.78			0.5		U	0.8			1.		U	0.14			-			0.01		U	-			-
WS-17-94	MFA	WS-17-94	17-Nov-04	78-93	7.67			4.39			8.94			10.89			0.01		U	-			-			ND			114.09
			18-Feb-05		13.6			4.46			13.4			17.36			-			-			-			-			-
			18-May-05		2.08			1.22			5.77			4.58			-			-			-			-			-
			8-Aug-05		0.2		U	0.2		U	0.22			0.4		U	-			-			-			-			-
			15-Nov-05		2.			0.75			6.33			6.13			-			-			-			-			-
			16-Feb-06		2.99			0.3		U	6.51			7.7			-			-			-			-			-
			9-May-06		1.35			0.57			5.55			4.16			-			-			-			-			-
			21-Aug-06		0.3		U	0.3		U	1.16			0.47			-			-			-			-			-
			14-Nov-06		1.68			0.5		U	0.5		U	1.84			-			-			-			-			-
			20-Feb-07		1.51			0.5		U	3.12			3.92			-			-			-			-			-
			24-May-07		0.97			0.5		U	2.75			4.09			-			-			-			-			-
			17-Aug-07		1.35			0.5		U	2.04			2.3			-			-			-			-			-
			14-Nov-07		0.85			0.5		U	1.43			2.11			0.01		U	-			0.01		U	-			-
			8-Feb-08		0.63			0.5		U	0.78			0.34			0.01		U	-			0.01		U	-			-
			13-May-08		0.41			0.5		U	0.5		U	1.		U	0.01		U	-			0.01		U	-			-
			18-Aug-08		0.51			0.5		U	0.5		U	1.		U	0.01		U	-			0.01		U	-			-
WS-18-71	MFA	WS-18-71	27-Jun-06	61 - 71	558.			24.1			30.2			16.96			-			-			-			-			-
			19-Jul-06		574.			26.7			32.6			12.81			0.75			-			0.88			-			-
			29-Aug-06		570.			19.7			23.			8.66			1.1			-			0.81			-			-
			26-Sep-06		296.			226.			262.			90.2			0.89			-			0.9			-			-
			24-Oct-06		521.			21.7			25.6			6.61			0.87			-			0.81			-			-
			16-Nov-06		530.			21.7			27.9			3.82			0.91			-			0.99			-			-
			26-Jan-07		520.			18.7			24.1			8.3			1.2			-			0.48			-			-
			22-Feb-07		549.			19.4			23.1			7.78			1.			-			0.49			-			-
			22-Mar-07		481.			20.2			26.1			7.06			0.85			-			0.036			-			-
			24-Apr-07		320.			18.5			28.5			2.34			0.7			-			0.026			-			-

4a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results								
					EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
WS-18-71	MFA	WS-18-71	22-May-07	61 - 71	345.	15.9	19.6	7.07	0.99	-	0.2	-	-
			16-Nov-07		523.	19.4	26.6	10.05	0.79	-	0.01 U	-	-
			13-Feb-08		480.	16.9	26.1	10.33	0.77	-	0.02	-	-
			20-May-08		573.	24.1	33.	7.48	0.87	-	0.01 U	-	-
			12-Aug-08		606.	18.2	29.1	6.7	0.68	-	0.01 U	-	-
WS-18-101	MFA	WS-18-101	28-Jun-06	92 - 102	106.	13.4	19.	20. U	-	-	-	-	-
			19-Jul-06		125.	14.	24.2	21.93	0.036	-	0.03	-	-
			28-Aug-06		117.	13.6	27.3	29.	0.053	-	0.051	-	-
			26-Sep-06		148.	18.5	34.7	27.4	0.033	-	0.026	-	-
			24-Oct-06		124.	18.2	28.7	20.9	0.026	-	0.027	-	-
			16-Nov-06		126.	20.8	52.2	46.4	0.034	-	0.031	-	-
			26-Jan-07		105.	16.9	36.2	33.2	0.051	-	0.022	-	-
			22-Feb-07		79.6	22.	49.4	41.2	0.036	-	0.014	-	-
			22-Mar-07		89.6	16.8	49.	21.2	0.028	-	0.023	-	-
			24-Apr-07		69.6	13.	43.	8.8	0.027	-	0.01 U	-	-
			22-May-07		72.8	14.7	34.9	34.9	0.02	-	0.01 U	-	-
			16-Nov-07		60.5	13.1	44.4	41.3	0.02	-	0.01 U	-	-
			12-Feb-08		59.5	11.9	41.6	38.4	0.018	-	0.01 U	-	-
			22-May-08		47.4	11.9	41.1	38.9	0.011	-	0.01 U	-	-
			12-Aug-08		40.4	10.7	39.9	31.9	0.01	-	0.01 U	-	-
WS-19-71	MFA	WS-19-71	27-Jun-06	61 - 71	564.	28.1	48.3	20.47	-	-	-	-	-
			20-Jul-06		753.	48.8	79.8	29.65	0.64	-	0.65	-	-
			29-Aug-06		729.	34.3	66.3	26.61	0.8	-	0.75	-	-
			27-Sep-06		554.	26.1	51.6	10. U	0.63	-	0.66	-	-
			24-Oct-06		650.	29.2	62.5	25.44	0.59	-	0.69	-	-
			16-Nov-06		706.	42.1	98.1	29.56	0.73	-	0.64	-	-
			26-Jan-07		694.	38.	85.2	27.83	0.86	-	0.035	-	-
			23-Feb-07		659.	33.7	68.8	23.28	0.79	-	0.29	-	-
			22-Mar-07		655.	37.6	84.6	23.58	0.76	-	0.09	-	-
			23-Mar-07		629.	30.9	72.1	22.69	-	-	-	-	-
			24-Apr-07		630.	38.	95.1	26.5	0.68	-	0.021	-	-
			23-May-07		566.	34.2	68.9	26.31	0.72	-	0.041	-	-
			19-Nov-07		812.	37.3	101.	35.31	0.72	-	0.01 U	-	-
			13-Feb-08		998.	47.2	130.	50.4	0.72	-	0.019	-	-
			22-May-08		19.5	7.41	10.3	12.56	0.6	-	0.01 U	-	-
			12-Aug-08		1,130.	37.3	123.	32.66	0.53	-	0.01 U	-	-
WS-20-112	MFA	WS-20-112	28-Jun-06	97 - 112	132.	2.05	1. U	2. U	0.47	-	-	-	-
			27-Jul-06		161.	13.8	4.39	20.89	0.47	-	0.44	-	-
			28-Aug-06		143.	5.47	1.57	5.62	0.61	-	0.5	-	-
			25-Sep-06		130.	3.55	1. U	2.81	0.49	-	0.47	-	-
			23-Oct-06		110.	2.71	1.74	2.64	0.5	-	0.51	-	-
			18-Dec-06		128.	2.47	0.5 U	0.9	0.5	-	0.083	-	-
			25-Jan-07		145.	3.52	4.51	5.85	0.58	-	0.35	-	-
			21-Feb-07		179.	2.21	0.89	0.54	0.48	-	0.047	-	-
			21-Mar-07		206.	1.9	0.91	1. U	0.49	-	0.37	-	-
			23-Apr-07		177.	1.63	0.69	0.35	0.48	-	0.35	-	-
			21-May-07		252.	2.18	1.31	0.79	0.34	-	0.19	-	-
			15-Nov-07		241.	1.31	1.27	0.92	0.24	-	0.01 U	-	-

4a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results								
					EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
WS-20-112	MFA	WS-20-112	14-Feb-08	97 - 112	175.	1.63	1.05	0.71	0.28	-	0.01 U	-	-
			16-May-08		151.	1.57	1.5	0.74	0.36	-	0.088	-	-
			6-Aug-08		150.	1.53	1.88	1.28	0.14	-	0.01 U	-	-
WS-21-112	MFA	WS-21-112	28-Jun-06	97 - 112	1,120.	7.71	31.7	27.93	0.76	-	-	-	-
			28-Jul-06		1,410.	14.7	27.8	33.6	0.68	-	0.73	-	-
			28-Aug-06		1,670.	14.4	37.9	45.	0.82	-	0.76	-	-
WS-21-112	MFA	WS-21-112	25-Sep-06	97 - 112	1,420.	13.5	67.6	58.2	0.66	-	0.73	-	-
			24-Oct-06		1,320.	8.97	48.9	28.3	0.71	-	0.73	-	-
			14-Nov-06		1,300.	5.19	31.7	5.73	-	-	-	-	-
			19-Dec-06		1,170.	8.9	50.6	8.99	0.78	-	0.83	-	-
			24-Jan-07		1,170.	8.3	31.1	17.1	0.97	-	0.31	-	-
			22-Feb-07		1,190.	7.83	24.3	14.48	0.75	-	0.28	-	-
			21-Mar-07		1,070.	6.43	15.7	9.88	0.82	-	0.56	-	-
			23-Apr-07		802.	7.5	28.8	14.	0.78	-	0.29	-	-
			22-May-07		846.	7.37	27.7	25.47	0.48	-	0.21	-	-
			16-Aug-07		850.	7.21	39.7	34.82	-	-	-	-	-
			14-Nov-07		715.	7.33	43.1	38.93	0.87	-	0.01 U	-	-
			11-Feb-08		735.	6.9	47.1	35.65	0.86	-	0.01 U	-	-
			21-May-08		243.	2.8	14.6	13.27	0.68	-	0.018	-	-
			13-Aug-08		530.	5.7	36.1	24.27	0.69	-	0.01 U	-	-
		5237-070712-WS21-112	12-Jul-07		930.	9.1	45.2	39.3	0.0755	0.005 U	0.0113 J	0.00673	5.81673
		5237-080521-WS21-112-108	21-May-08		510.	6.2	35.	30.1	0.84	0.16	0.005	ND	10.98
		5237-080925-WS-21-112-137	25-Sep-08		380.	7.3	48.	40.2	0.78	0.002 U	0.029	ND	9.58
		5237-090407-WS21-112-108	7-Apr-09		210.	4. J	5. J	8.5 J	0.61	0.21 J	0.003 U	0.0026	4.78
		5237-090820-WS-21-112-165	20-Aug-09		114.	50. U	50. U	100. U	0.56	0.066	0.01 U	ND	9.81
		5237-090820-WS-21-112-166	20-Aug-09		115.	50. U	50. U	100. U	0.562	0.0578	0.01 U	ND	8.51
WS-22-112	MFA	WS-22-112	28-Jun-06	97 - 112	157.	1. U	1. U	2. U	0.46	-	-	-	-
			27-Jul-06		722.	3.7	18.3	13.4	0.39	-	0.32	-	-
			25-Aug-06		628.	2.46	8.5	5.08	0.57	-	0.46	-	-
			25-Sep-06		493.	2.65	7.05	3.89	0.26	-	0.5	-	-
			24-Oct-06		424.	2.5	7.97	5.49	0.54	-	0.46	-	-
			19-Dec-06		263.	2.92	4.94	4.47	0.6	-	0.071	-	-
			24-Jan-07		177.	3.67	4.73	4.26	0.72	-	0.096	-	-
			22-Feb-07		148.	7.47	5.12	4.25	0.64	-	0.18	-	-
			21-Mar-07		157.	7.85	3.12	1.74	0.64	-	0.46	-	-
			23-Apr-07		141.	12.3	4.44	2.54	0.73	-	0.38	-	-
			22-May-07		118.	14.4	3.2	3.94	0.49	-	0.24	-	-
			16-Nov-07		66.1	15.8	1.57	1.42	0.65	-	0.01 U	-	-
			14-Feb-08		74.3	13.6	1.02	1.06	0.66	-	0.01 U	-	-
			16-May-08		89.	11.	1.07	0.83	0.49	-	0.022	-	-
			13-Aug-08		69.3	10.6	0.97	0.32	0.52	-	0.01 U	-	-
RP-01-31	URS		17-Apr-00	25-30	0.16	-	-	-	-	-	-	-	-
			Fall-00		U	-	-	-	-	-	-	-	-
			26-Jun-01		U	-	-	-	-	-	-	-	-
	AMEC		5-Apr-02		U	-	-	-	-	-	-	-	-
			15-Apr-04		U	U	U	U	-	-	-	-	-
RP-01-51	URS		17-Apr-00	45-50	1.12	-	-	-	-	-	-	-	-
			Fall-00		0.16	-	-	-	-	-	-	-	-

4a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
RP-01-51	URS		26-Jun-01	45-50	0.18	-	-	-	-	-	-	-	-
	AMEC		8-Apr-02		0.5	-	-	-	-	-	-	-	-
			15-Apr-04		0.64	U	U	U	-	-	-	-	-
		(duplicate)	15-Apr-04		0.6	U	U	U	-	-	-	-	-
RP-01-65	URS		17-Apr-00	59-64	27.4	-	-	-	-	-	-	-	-
			Fall-00		13.7	-	-	-	-	-	-	-	-
			26-Jun-01		41.4	-	-	-	-	-	-	-	-
RP-01-65	AMEC		5-Apr-02	59-64	4.75	-	-	-	-	-	-	-	-
			15-Apr-04		7.7	U	U	U	-	-	-	-	-
RP-03-26	URS		7-Apr-00	20-25	U	-	-	-	-	-	-	-	-
RP-03-30R	URS		Fall-00	23-28	U	-	-	-	-	-	-	-	-
			27-Jun-01		U	-	-	-	-	-	-	-	-
RP-03-30R	AMEC		10-Apr-02	23-28	U	-	-	-	-	-	-	-	-
			19-Apr-04		U	-	5.1	8.9	-	-	-	0.602	2,365.24
RP-03-52R	URS		Fall-00	46-51	U	-	-	-	-	-	-	-	-
			27-Jun-01		U	-	-	-	-	-	-	-	-
	AMEC		10-Apr-02		U	-	-	-	-	-	-	-	-
			19-Apr-04		U	-	-	-	-	-	-	ND	0.3897
		(duplicate)	19-Apr-04		U	U	U	U	-	-	-	ND	0.3976
RP-06-31	URS		14-Apr-00	24.5-29.5	0.45	-	-	-	-	-	-	-	-
			Fall-00		0.18	-	-	-	-	-	-	-	-
			27-Jun-01		U	-	-	-	-	-	-	-	-
	AMEC		10-Apr-02		U	-	-	-	-	-	-	-	-
RP-06-87	URS		14-Apr-00	81-86	3.1	-	-	-	-	-	-	-	-
			Fall-00		1.85	-	-	-	-	-	-	-	-
			27-Jun-01		1.85	-	-	-	-	-	-	-	-
	AMEC		10-Apr-02		1.65	-	-	-	-	-	-	-	-
			15-Apr-04		1.5	U	U	U	-	-	-	-	-
RP-07-30	AMEC		3-May-02	25-30	U	-	-	-	-	-	-	-	-
	HAI	5237-070828-RP-7-30-106	28-Aug-07		0.09 U	0.11 U	0.06 U	0.26 U	0.0094	0.0094	0.003 U	0.01774	12.52
RP-07-55	AMEC		3-May-02	50-55	U	-	-	-	-	-	-	ND	ND
	HAI	5237-070827-RP-7-55-104	27-Aug-07		0.09 U	0.11 U	0.06 U	0.26 U	0.005 UJ	0.005 U	0.003 J	ND	ND
RP-07-84	AMEC		3-May-02	79-84	U	-	-	-	-	-	-	-	-
			13-Apr-04		1.9	U	U	U	-	-	-	ND	ND
	HAI	5237-070828-RP-7-84-107	28-Aug-07		1.39	0.11 U	0.06 U	0.26 U	0.005 U	0.005 U	0.003 U	ND	ND
	HAI	5237-070828-RP-7-84-108 (DUP)	28-Aug-07		1.31	0.11 U	0.06 U	0.26 U	0.005 U	0.005 U	0.003 U	-	-
RP-07-119	AMEC		Spring-02	114-119	U	-	-	-	-	-	-	-	-
			13-Apr-04		U	U	U	U	-	-	-	ND	ND
RP-11-30	HAI	5237-070827-RP-11-30-101	27-Aug-07	15 - 30	0.09 U	0.75	0.06 U	0.26 U	0.0262 J	0.0217	0.003 UR	0.1125	6.5145
RP-11-160	HAI	5237-070827-RP-11-160-102	27-Aug-07	150 - 160	0.09 U	0.11 U	0.06 U	0.26 U	0.005 UJ	0.005 U	0.003 UR	ND	ND
RP-11-216	HAI	5237-070827-RP-11-216-103	27-Aug-07	211 - 216	0.47	0.11 U	0.06 U	0.26 U	0.005 UJ	0.005 U	0.003 UR	ND	ND
RP-24-30	HAI	5237-070829-RP-24-30-109	29-Aug-07	25 - 30	0.09 U	0.11 U	0.06 U	0.26 U	0.0269	0.0174	0.003 U	0.0622	0.4082
RP-24-60	HAI	5237-070828-RP-24-60-110	28-Aug-07	55 - 60	0.09 U	0.11 U	0.06 U	0.26 U	0.0582	0.0431	0.003 U	ND	1.584
RP-24-73	HAI	5237-070829-RP-24-73-113	29-Aug-07	68 - 73	0.09 U	0.11 U	0.06 U	0.26 U	0.0596	0.0592	0.003 U	ND	ND
RP-24-85	HAI	5237-070828-RP-24-85-111	28-Aug-07	80 - 85	1.86	0.11 U	0.06 U	0.26 U	0.0293	0.0201	0.003 U	ND	ND
NWN-1-20	HAI	5237-080807-NWN-1-20-107	7-Aug-08	10 - 20	610.	44.	88.	187.	74.	31.5	0.16 J	91.3	5,845.3
		5237-081211-NWN-1-20-019	11-Dec-08		690.	45.	120.	330.	69.	3.5 J	0.124	66.7	5,079.9
		5237-090407-NWN1-20-105	7-Apr-09		440.	35.	91.	370.	63.7	6.7 J	0.24	148.5	3,724.5

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Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
NWN-1-20	HAI	5237-090604-NWN-1-20-103	4-Jun-09	10 - 20	480.	40.	110.	410.	71.8	4. J	0.07	507.	6,138.
		5237-090818-NWN-1-20-148	18-Aug-09		470.	36.6	105.	330.	9.31	0.5 U	0.0636 J	ND	3,410.
NWN-2-20	HAI	5237-080730-NWN2-20-101	30-Jul-08	10 - 20	18.	2.7	7.7	8.2	11.	2.09	0.583	18.5	344.97
		5237-081211-NWN-2-20-017	11-Dec-08		58.	3.5	8.5	7.2	8.3	0.07 J	0.025	16.85	327.47
		5237-090407-NWN2-20-107	7-Apr-09		64.	1.3	2.2	3.3	3.93	0.72 J	0.031	44.04	373.14
		5237-090604-NWN-2-20-101	4-Jun-09		56.	1.4	3.8	3.5	6.16	0.39 J	0.06	54.92	432.82
		5237-090818-NWN-2-20-142	18-Aug-09		32.3	1.84	5.52	3.5	14.4	0.336	0.0126 J	107.85	709.57
NWN-3-17	HAI	5237-080730-NWN3-17-100	30-Jul-08	7 - 17	0.08 J	0.22 J	0.04 U	0.2	1.99	0.002 U	0.011	0.63	3.154
		NS (Dry)	11-Dec-08		-	-	-	-	-	-	-	-	-
		5237-090407-NWN3-17-101	7-Apr-09		0.05 U	0.05 U	0.04 U	0.05 J	0.29	0.003 U	0.003 U	0.0615	2.1341
		5237-090604-NWN-3-17-102	4-Jun-09		0.04 U	0.05 U	0.05 U	0.12 J	0.7	0.04 J	0.009 J	0.154	2.858
		NS (Dry)	19-Aug-09		-	-	-	-	-	-	-	-	-
NWN-4-15	HAI	NS (Dry)	30-Jul-08	5 - 15	-	-	-	-	-	-	-	-	-
		5237-081211-NWN-4-15-021[9]	12/11 & 12/12/08		0.98	0.2 U*	0.13 J	0.3	0.08	0.08 J	0.005	0.612	2.625
		5237-090407-NWN4-15-103	7-Apr-09		0.05 U	0.06 J	0.04 U	0.08 U	0.03	0.01 J	0.003 U	0.517	1.1637
		5237-090604-NWN-4-15-100	4-Jun-09		0.19 J	0.08 J	0.06 J	0.09 U	0.05	0.02 J	0.008 J	7.19	14.886
		5327-090818-NWN-4-15-152*	18-Aug-09		2.5 U	5. U	5. U	10. U	-	-	-	-	-
NWN-5-20	HAI	5237-080730-NWN5-20-103	30-Jul-08	10 - 20	8.1	6.4	13.	20.8	0.46	0.11	0.009 J	3.148	735.926
		5237-081211-NWN-5-20-018	11-Dec-08		0.4 UR	0.46 J	5.2	4.4	0.48	0.002 UJ	0.014	2.093	411.082
		5237-090408-NWN5-20-111	8-Apr-09		0.38 J	0.35 J	0.38 J	1.04 J	0.09	0.02 J	0.003 U	2.597	64.527
		5237-090604-NWN-5-20-104	4-Jun-09		0.66	0.51	0.73	1.61	0.09 J	0.003 UJ	0.006 J	0.572	142.313
		5237-090818-NWN-5-20-150	18-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.209	0.01 U	0.01 R	ND	49.03
NWN-6-31	HAI	5237-080730-NWN6-31-104	30-Jul-08	21 - 31	24.	1.2 J	32.	13.4	0.09	0.002 U	0.003 J	1.054	2,083.617
		5237-081211-NWN-6-31-020	11-Dec-08		29.	1. U*	31.	14.6	0.08	0.01 J	0.006	2.105	1,831.078
		5237-090408-NWN6-31-109	8-Apr-09		27.	0.9 J	29.	13.6 J	0.09	0.02 J	0.003 U	1.293	1,497.527
		5237-090604-NWN-6-31-106	4-Jun-09		26.	1.1 J	43.	19.9	0.1	0.03 J	0.004 J	1.075	2,221.397
		5327-090819-NWN-6-31-154	19-Aug-09		19.4	5. U	35.1	11.4	0.0644	0.01 U	0.01 U	ND	1,216.
NWN-7-30	HAI	5237-080807-NWN-7-30-106	7-Aug-08	20 - 30	1.2	0.86	1.5	3.7	2.25	0.57	0.007 J	0.2773	88.7923
		5237-081211-NWN-7-30-016	11-Dec-08		0.81	1.1	1.4	4.3	2.28	0.01 J	0.01	1.589	99.149
		5237-090408-NWN7-30-112	8-Apr-09		37.	1.	1.1	4.9	8.57	0.58 J	0.031	0.437	106.43
		5237-090604-NWN-7-30-108	4-Jun-09		4.2	0.46 J	0.56	2.3 J	12.7	0.7 J	0.069	0.445	114.388
		5237-090818-NWN-7-30-144	18-Aug-09		0.72	0.52	0.5 U	1.64	8.16	0.1 U	0.01 R	ND	66.109
NWN-8-30	HAI	5237-080730-NWN8-30-105	30-Jul-08	15 - 30	0.51	0.22 J	5.7	0.36	1.27	0.24	0.008 J	0.829	15.644
		5237-081211-NWN-8-30-022	11-Dec-08		0.55	0.21 U*	2.3	0.34	1.75	0.07 J	0.009	5.13	30.53
		5237-090408-NWN8-30-113	8-Apr-09		0.65	0.22 J	3.4	0.22 J	0.94	0.23 J	0.003 U	0.3651	8.6531
		5237-090604-NWN-8-30-105	4-Jun-09		0.61	0.11 J	1.5	0.1 J	0.51	0.06 J	0.008 J	0.93	10.637
		5237-090818-NWN-8-30-146	18-Aug-09		0.58	0.5 U	0.5 U	1. U	0.553	0.01 U	0.01 R	0.823	8.9096
NWN-9-31	HAI	5237-080807-NWN-9-31-108	7-Aug-08	16 - 31	4.4	0.3 J	2.8	5.1	0.06	0.002 UJ	0.003 U	2.213	75.573
		5237-081211-NWN-9-31-023	11-Dec-08		20.	0.55	4.7	5.4	0.14	0.002 UJ	0.005	0.7211	38.1721
		5237-090409-NWN9-31-121	9-Apr-09		16.	0.52	9.4	9.6	0.07	0.003 U	0.003 UJ	0.4615	64.4775
		5237-090604-NWN-9-31-107	4-Jun-09		21.	1.1	20.	22.1	0.08	0.01 J	0.003 U	0.735	259.41
		5237-090604-NWN-9-31-109	4-Jun-09		21.	1.	19.	21.	0.11	0.04 J	0.003 J	0.735	273.439
		5327-090819-NWN-9-31-158	19-Aug-09		11.3	2.5 U	6.75	2.55	0.092 UV	0.01 U	0.01 U	ND	51.91
NWN-10-26	HAI	5237-080807-NWN-10-26-109	7-Aug-08	11 - 26	0.05 U	0.05 U	0.04 U	0.08 U	0.07	0.002 U	0.003 U	0.0742	2.8296
		5237-080807-NWN-10-26-110 (DUP)	7-Aug-08		0.05 U	0.05 U	0.04 U	0.08 U	0.07	0.002 U	0.003 U	0.2947	3.1777
		NS (Dry)	11-Dec-08		-	-	-	-	-	-	-	-	-
		5237-090410-NWN10-26-123	10-Apr-09		0.05 U	0.12 J	0.05 J	0.15 J	0.05	0.003 U	0.003 UJ	0.871	6.081
		5237-090604-NWN-10-26-111	4-Jun-09		0.04 U	0.05 U	0.1 J	0.09 J	0.02 J	0.003 UJ	0.004 J	0.0062	4.3852
		NS (Dry)	19-Aug-09		-	-	-	-	-	-	-	-	-

4a - Summary of Historical Analytical Results for Groundwater Samples : BTEX, Total PAHs, and Cyanide
Siltronic Corporation Property Monitoring Wells

Well Number	Sample Collected by	HAI Sample Number[1]	Sample Date	Screen Interval (feet bgs)	Analytical Results: EPA Method 8020/8021B/8260 or 8260B ug/l (ppb)				EPA Method 9012A, 9010A, D4282-95M or 335.4 mg/l (ppm)			EPA Method 8270 SIM or 8270C ug/l (ppb)	
					Benzene	Toluene	Ethylbenzene	Xylenes	Total Cyanide	Amenable Cyanide	Free Cyanide	Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [3,8]													
Fish Consumption													
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	0.014	#	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	0.14	#	#
Drinking Water													
		MCL			5.	1,000.	700.	10,000.	#	#	0.2	#	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	200.	#	#	0.73	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [3,8]													
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		DEQ 2004 AWQC (chronic)			#	#	#	#	#	#	0.0052	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	13.	#	#	#	#	#
Quality Control Samples (HAI)													
Trip Blanks	HAI	5237-011008-101	8-Oct-01		1. U	1. U	1. U	2. U	-	-	-	-	-
		5237-011212-100	12-Dec-01		1. U	1. U	1. U	2. U	-	-	-	-	-
		5237-011213-106	13-Dec-01		1. U	1. U	1. U	2. U	-	-	-	-	-
		5237-011009-106	9-Oct-01		1. U	1. U	1. U	2. U	-	-	-	-	-
		5237-020402-100	2-Apr-02		1. U	1. U	1. U	2. U	-	-	-	-	-
		5237-020403-103	3-Apr-02		1. U	1. U	1. U	2. U	-	-	-	-	-
		5237-020710-100	10-Jul-02		1. U	1. U	1. U	2. U	-	-	-	-	-
		5237-070712-MW-7	12-Jul-07		0.09 U	0.11 U	0.06 U	0.26 U	-	-	-	-	-
		2708-080515-TB4-37553	15-May-08		0.045 U	0.09 J	0.042 U	0.078 U			-	-	-
		TB5-37589	21-May-08		0.045 U	0.048 U	0.042 U	0.078 U	-	-	-	-	-
		5237-080730-TB-38071	30-Jul-08		0.045 U	0.048 U	0.042 U	0.078 U	-	-	-	-	-
		TB080807	7-Aug-08		0.045 U	0.048 U	0.042 U	0.078 U	-	-	-	-	-
		5237-080925-TB38515	25-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	-	-	-	-	-
		5237-080929-TB38875	29-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	-	-	-	-	-
		5237-081211-TB-39349	11-Dec-08		0.045 U	0.08 J	0.042 U	0.078 U	-	-	-	-	-
		5237-090407-TB39828	7-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	-	-	-	-	-
		5237-090408-TB39826	8-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	-	-	-	-	-
		5237-090409-TB40002	9-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	-	-	-	-	-
		5237-090604-TB-40272	4-Jun-09		0.038 U	0.052 U	0.05 U	0.091 U	-	-	-	-	-
		5237-090818-TB-141	18-Aug-09		0.25 U	0.5 U	0.5 U	1. U	-	-	-	-	-
		5327-090819-TB-153	19-Aug-09		0.25 U	0.5 U	0.5 U	1. U	-	-	-	-	-
Water EB	HAI	5237-011008-103	8-Oct-01		1. U	1. U	1. U	2. U	0.02 U	0.02 U	-	ND	ND
		5237-011212-102	12-Dec-01		1. U	1. U	1. U	2. U	0.02 U	0.02 U	-	ND	ND
		5237-020402-102	2-Apr-02		1. U	1. U	1. U	2. U	0.04 U	-	-	ND	ND
		5237-020710-102	10-Jul-02		1. U	1. U	1. U	2. U	0.04 U	0.04 U	-	ND	ND

Note:
A = this analysis was performed on a VOA sample containing headspace
AWQC = Ambient Water Quality Criteria
BTEX = benzene, toluene, ethylbenzene, and xylenes
DEQ = Oregon Department of Environmental Quality
EPA = U.S. Environmental Protection Agency
J = Estimated Concentration
MCL = Maximum Contaminant Level
mg/l = milligrams per liter
ND = not detected above detection limit indicated
NRWQC = National Recommended Water Quality Criteria
NS = No Sample
PRG = Potential Remediation Goal
PAHs = polynuclear aromatic hydrocarbons
ppb = parts per billion
ppm = parts per million
SCV = Secondary Chronic Value
ug/l = micrograms per liter
U = Non-detect above method reporting limit
U* = Compound considered non-detect because it was also detected in associated blank at similar concentration levels.
UJ = Compound not detected, but the reporting limit is probably higher due to a low bias identified during the quality assurrance review.
UR = Unusable Reportling Limit, compound may or may not be present in this sample.

"-" = Measurement not taken, parameter not analyzed, or data unavailable (samper other than HAI)
* = Partial sample obtained, but sample volume completely used during other analysis (i.e 8260B), insufficient volume to analyze for additional determinants.
# = Reference Level not established

Note: Reference Level is lowest of EPA AWQC for aquatic life protection, AWQC for human consumption of organisms only, or DEQ SLV for aquatic receptors
1 = Sample number prefix: 2708-
2 = Tier II values were taken from Suter II, G.W. and Tasco, C.L., 1996. Toxilogical Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2
3 = Unless otherwise noted Screening Level Values are from *Portland Harbor Joint Source Control Strategy*, Final, December 2005 (7/16/07 revision)
4 = Due to mislabeling in the field or due to laboratory misidentification, the laboratory report transposed results for MW4-35 and MW-4-57 in August 1997. Tables attribute data to the correct well.
5 = Sample Numbers (980603-) MW4-57-18 & MW8-56-21 were analyzed for Amenable Cyanide outside of recommended holding time.
6 = PAH results for sample 960620-MW8-56-01 should be considered qualitative due to an apparent error concerning sample identity.
7 = Monitoring well purged & sampled with low-flow protocol as per EPA/540/S-95/504 (April 1996)
8 = EPA, under CERCLA authority, has identified the Safe Drinking Water Acts MCLs and AWQCs (federal and state once approved) as potential ARARs under CERCLA. The final determination will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to The EPA Portland Harbor ROD, due to an exceedance of an SLV in upland stormwater will be evaluated and prioritized on a case by case basis.
9 = Sample collected over the course of 24 hours (BTEX collected on 12/11 and CN samples collected on 12/12/08)

Table 4b - Summary of Analytical Results for Groundwater Samples: Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270 SIM or 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3 cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
					Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																						
Fish Consumption																						
	EPA 2004 NRWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate				99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																						
	MCL [3]				0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																						
	EPA 2004 NRWQC (chronic)				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)				#	520 [5]	#	#	#	#	#	#	#	#	#	#	#	620 [5]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [4]				#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
WS-1	CH2M HILL		Aug-85	7-22	270.	88.	39.	31.	40.	24.	25.	U	36.	U	73.	95.	20.	U	190.	81.	151.	1,012.
WS-2	CH2M HILL		Aug-85	7.5-22	940.	200.	630.	480.	760.	400.	370.	120.	650.	U	1,380.	440.	300.	1,900.	630.	1,430.	2,710.	10,630.
WS-3S	CH2M HILL		Aug-85	12-27	86.	U	U	U	U	U	U	U	U	U	U	13.	U	600.	13.	U	ND	712.
WS-3I	G&M		Oct-90	55-60	93.	2.	2.	U	U	U	U	U	U	U	5.	22.	U	770.	6.	4.	ND	904.
WS-4	CH2M HILL		Aug-85	6.5-21.5	350.	U	U	U	U	U	U	U	U	U	U	53.	U	350.	28.	14.	ND	795.
WS-5	CH2M HILL		Aug-85	5-20	54.	31.	U	U	U	U	U	U	U	U	U	12.	U	58.	21.	10.	ND	186.
WS-6	CH2M HILL		Aug-85	9-24	200.	32.	U	U	U	U	U	U	U	U	U	35.	U	2,100.	56.	10.	ND	2,433.
WS-7	CH2M HILL		Aug-85	10-25	19.	U	U	12.	10.	U	U	U	15.		23.	U	U	U	U	11.	37.	90.
			Oct-90		2.	U	U	U	U	U	U	U	U	U	3.	3.	U	5.	U	U	ND	13.
WS-8-33	HAI	011009-107	9-Oct-01	23-33	98.7	1.17	8.42	0.55	0.27	0.19	0.15	0.1 U	0.6	0.1 U	7.83	32.5	0.11	485.	85.	7.65	1.72	728.14
		011213-105	13-Dec-01		105. J	2.35	11.9	0.25	0.27	0.1	0.1 U	0.1 U	0.3	0.1 U	7.35	31.9 J	0.11	287. J	70.5 J	7.15	1.03	524.18
		020403-105	3-Apr-02		91.6	1.01	6.43	0.31	0.1 U	0.1 U	0.1 U	0.1 U	0.42	0.1 U	7.18	18.4	0.1 U	110.	34.1	5.16	0.73	274.61
		020403-106D	3-Apr-02		84.	1.39	7.14	0.32	0.1 U	0.1 U	0.1 U	0.1 U	0.44	0.1 U	8.2	19.5	0.1 U	101.	33.8	6.38	0.76	262.17
		020710-104	10-Jul-02		129.	1.65	8.42	0.53	0.15	0.11	0.11	0.12	0.53	0.1 U	7.7	34.4	0.1 U	77.4	72.	8.16	1.44	340.28
		020710-105D	10-Jul-02		132.	1.48	8.63	0.68	0.26	0.19	0.2	0.17	0.67	0.1 U	8.15	36.2	0.13	77.6	80.4	7.37	2.1	354.13
		5237-080521-WS8-33-105	21-May-08		140.	2.	8.4	1.2	0.91	0.91	0.61	0.28	1.4	0.099	10.	29.	0.59	130. J	50. J	12.	5.389	387.399
		5237-080929-WS-8-33-145	29-Sep-08		110.	1.3	6.	0.92	0.73	0.6	0.52	0.2	1.1	0.071	9.5	31.	0.49	170.	54.	12.	4.111	398.431
		5237-090408-WS8-33-119	8-Apr-09		99.	1.3	5.3	0.66	0.56	0.51	0.32	0.17	0.8	0.048	6.	30.	0.32	100.	50.	7.8	3.068	302.788
		5327-090819-WS-8-33-159	19-Aug-09		140.	46.5 U	46.5 U	46.5 U	46.5 U	46.5 U	46.5 U	46.5 U	46.5 U	46.5 U	46.5 U	46.5 U	46.5 U	72.	56.5	46.5 U	ND	268.5
WS-8-59	HAI	011008-104	8-Oct-01	49-59	18.5	0.38	4.2	0.25	0.1 U	0.1 U	0.1 U	0.1 U	0.29	0.1 U	5.8	7.9	0.1 U	22.7	31.8	6.4	0.54	98.22
		011008-105D	8-Oct-01		18.9	0.39	4.1	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.24	0.1 U	5.5	7.9	0.1 U	22.5	29.8	6.3	0.44	95.83
		011212-103	12-Dec-01		12.9	0.24	2.97	0.32	0.14	0.1	0.1	0.1	0.41	0.1 U	4.72	4.77	0.1 U	10.5	22.8	5.07	1.07	65.14
		011212-104D	12-Dec-01		12.6	0.23	2.94	0.23	0.1 U	0.1 U	0.1 U	0.1 U	0.29	0.1 U	4.46	5.13	0.1 U	10.8	21.8	4.49	0.52	62.97
		020403-104	3-Apr-02		5.03	0.1 U	1.91	0.16	0.1 U	0.1 U	0.1 U	0.1 U	0.24	0.1 U	3.5	2.34	0.1 U	1.13	9.9	2.57	0.4	26.78
		020710-103	10-Jul-02		4.53	0.1 U	1.31	0.17	0.1 U	0.1 U	0.1 U	0.1 U	0.23	0.1 U	3.15	1.92	0.1 U	0.63	3.45	3.49	0.4	18.88
		5237-070716-WS-8-59-108	16-Jul-07		0.254 J	0.0971 U	0.0971 U	0.147	0.121	0.0863	0.0971 U	0.101	0.206	0.00542	0.634	0.133	0.0246	0.0971 U	0.122	1.07 J	0.69132	2.90432
		5237-080521-WS8-56-106	21-May-08		0.4	0.28	0.22	0.74	0.92	0.94	0.7	0.3	1.	0.11	1.1	0.18	0.66	0.37 J	0.43 J	1.6	4.67	9.95
		5237-080929-WS-8-56-146	29-Sep-08		0.18	0.12	0.099	0.42	0.54	0.47	0.48	0.17	0.58	0.058	0.7	0.092	0.43	0.16	0.16	0.97	2.668	5.629
		5237-090408-WS8-59-115	8-Apr-09		0.35	0.13	0.13	0.44	0.53	0.5	0.41	0.17	0.59	0.049	0.78	0.16	0.4	0.28	0.32	1.	2.679	6.239
		5237-090408-WS8-59-117	8-Apr-09		0.29	0.082	0.13	0.28	0.32	0.31	0.25	0.11	0.38	0.029	0.54	0.12	0.23	0.18	0.25	0.68	1.659	4.181
		5327-090819-WS-8-59-157	19-Aug-09		0.339	0.43	0.194	0.952	1.68	1.96	1.28	- BK	1.26	0.158	1.22	0.155	1.05	0.122	0.244	1.67	7.06	12.714
WS-9-34	HAI	011008-102	8-Oct-01	24-34	2.07	0.15	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.36	0.18	0.1 U	0.45	0.1 U	0.38	ND	3.59
		011212-101	12-Dec-01		17.8	0.33	0.33	0.11	0.15	0.1	0.17	0.1	0.17	0.1 U	1.91	6.43	0.12	0.4	2.45	1.74	0.75	32.31
		020402-101	2-Apr-02		17.5	0.19	0.44	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.59	1.8	0.1 U	0.1 U	4.81	0.1 U	ND	26.33
		020710-101	10-Jul-02		11.1	0.17	0.22	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.91 J	2.09 J	0.1 U	0.13	2.06 J	1.13	ND	17.81
		5237-090410-WS9-34-122	10-Apr-09		15.	0.14	0.19	0.14	0.1	0.11	0.094	0.035	0.21	0.0097 J	1.8	4.	0.078	0.73	5.	1.8	0.6827	29.4367
		5327-090819-WS-9-34-156	19-Aug-09		24.2	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	1.	6.23	0.755 U	0.755 U	8.59	0.989	ND	41.009
WS-10-27	MFA	WS-10-27	29-Apr-04	11-26	189.	14.6	27.2	11.8	11.9	10.3	8.64	3.41	14.4	1.57	45.	54.1	6.34	3,990.	83.1	43.4	59.72	4,514.76
		WS-10-27	16-Nov-04		542.	41.8	221.	137.	148.	131.	92.5	38.4	130.	15.1	438.	263.	70.9	8,960.	1,070.	421.	670.4	12,719.7

Table 4b - Summary of Analytical Results for Groundwater Samples: Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270 SIM or 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3 cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
					Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																						
Fish Consumption																						
	EPA 2004 NRWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate				99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																						
	MCL [3]				0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																						
	EPA 2004 NRWQC (chronic)				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)				#	520 [5]	#	#	#	#	#	#	#	#	#	#	#	620 [5]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [4]				#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
WS-11-125	MFA	WS-11-125	29-Apr-04	109-124	436.	81.5	257.	147.	144.	126.	53.1	29.9	174.	11.7	407.	304.	47.7	4,000.	1,510.	409.	680.3	8,137.9
			16-Nov-04		53.	22.1	20.1	10.	9.62	9.27	7.19	2.92	10.7	1.14	35.	24.9	5.13	2,680.	80.5	40.8	48.78	3,012.37
			28-Jun-06		90.6	22.2	30.7	13.4	18.5	16.4	12.2	4.9	17.	1.51	54.1	43.7	8.73	-	148.	54.8	80.44	-
			27-Jul-06		57.3	16.5	5.7	0.701	0.631	0.601	0.42	0.17	0.811	0.0701	4.29	21.3	0.28	-	34.8	4.85	3.2641	-
			23-Aug-06		58.6	17.6	6.4	0.441	0.323	0.343	0.196	0.0979	0.617	<0.049 U	3.79	21.4	0.147	-	36.4	4.7	1.9689	-
			26-Sep-06		28.7	8.82	3.38	0.414	0.337	0.337	0.231	0.135	0.423	<0.0481 U	3.14	11.6	0.144	-	18.4	3.35	1.79	-
			23-Oct-06		46.8	13.4	5.73	0.303	0.18	0.152	0.114	0.0569	0.322	<0.0474 U	3.59	16.8	0.114	-	27.9	3.23	1.1279	-
			18-Dec-06		78.4	16.6	13.	4.73	7.04	6.06	5.15	1.91	6.05	0.709	18.4	29.7	3.48	-	79.3	23.2	29.979	-
			25-Jan-07		55.6	14.2	7.33	1.92	2.31	1.97	1.68	0.768	2.05	0.253	7.	20.4	1.17	-	37.1	7.96	10.441	-
			21-Feb-07		48.1	9.3	5.75	2.29	2.96	2.71	2.08	0.832	2.41	0.369	6.49	15.5	1.54	-	35.3	7.5	13.111	-
			21-Mar-07		99.9	21.	11.	2.45	2.96	2.73	2.42	0.87	2.54	0.38	9.07	37.5	1.67	-	60.9	10.2	13.6	-
			23-Apr-07		98.1	21.4	11.5	2.81	2.96	2.65	1.99	0.88	3.12	0.31	10.8	35.6	1.36	-	64.	13.1	14.09	-
			22-May-07		105.	22.1	15.2	8.47	8.59	7.24	6.44	2.64	8.69	1.07	22.8	39.9	4.35	-	84.9	29.4	41.05	-
		5237-080515-WS11-125-102	15-May-08		250.	5.5	21.	2.5	2.3	2.2	1.6	0.88	3.1	0.28 J	16.	74.	1.5	11,000.	140.	17.	12.76	11,537.86
		5237-080929-WS-11-125-144	29-Sep-08		250.	3.7	17.	2.1	2.1	1.8	1.8	0.56	2.6	0.3	14.	82.	1.7	11,000.	130.	15.	11.16	11,524.66
		5237-090407-WS11-125-102	7-Apr-09		250.	4.6	21.	6.3	6.	6.5	6.	2.2	7.8	0.74	26.	87.	5.4	12,000.	170.	26.	34.94	12,625.54
		5237-090818-WS-11-125-149	18-Aug-09		465. U	465. U	465. U	465. U	465. U	465. U	465. U	465. U	465. U	465. U	465. U	465. U	465. U	9,760.	465. U	465. U	ND	9,760.
WS-11-161	MFA	WS-11-161	27-Apr-04	145-160	0.253	0.0707	0.0707	0.0808	0.131	0.111	0.111	U	0.111	U	0.232	0.131	0.0707	0.707	0.424	0.303	0.5045	2.8069
			16-Nov-04		0.049	0.049 U	0.0784	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	1.85	0.0784	0.049 U	ND	2.0558
	HAI	5237-070712-WS11-161	12-Jul-07		0.125 J	0.0952 U	0.0952 U	0.00745	0.00698	0.0171	0.0952 U	0.012	0.0162	0.00476 U	0.0952 U	0.0952 U	0.00776	49.9	0.0952 U	0.0952 U	0.06749	50.09249
		5237-080515-WS11-161-103	15-May-08		0.45	0.15	0.01 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.013 J	0.091	0.0026 U	110.	0.1	0.01 J	ND	110.824
		5237-080929-WS-11-161-142	29-Sep-08		0.35	0.089	0.012 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.016 J	0.073	0.0026 U	89.	0.08	0.011 J	ND	89.631
		5237-080929-WS-11-161-143 (DUP)	29-Sep-08		0.62	0.14	0.013 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.013 J	0.12	0.0026 U	140.	0.1	0.0097 J	ND	141.0157
		5237-090407-WS11-161-100	7-Apr-09		0.64	0.086	0.0099 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.013 J	0.12	0.0026 U	110.	0.12	0.01 J	ND	110.9989
		5237-090818-WS-11-161-147	18-Aug-09		0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	87.7	0.93 U	0.93 U	ND	87.7
WS-12-125	MFA	WS-12-125	27-Apr-04	109-124	0.929	U	0.13	U	U	U	U	U	U	U	U	0.4	U	0.519	0.557	U	ND	2.535
			17-Nov-04		0.166	0.0488 U	0.0488 U	0.0488 U	0.0488 U	0.0488 U	0.0488 U	0.0488 U	0.0488 U	0.0488 U	0.0488 U	0.0684	0.0488 U	0.684	0.0879	0.0488 U	ND	1.0063
	HAI	5237-070712-WS12-125	12-Jul-07		0.266 J	0.0952 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.0051	0.00476 U	0.0952 U	0.0952 U	0.00476 U	0.544	0.0952 U	0.0952 U	0.0051	0.8151
		5237-080521-WS12-126-104	21-May-08		0.19	0.0087 J	0.034	0.0026 U	0.0043 U	0.0023 U	0.0034 J	0.0025 U	0.0034 U	0.0031 J	0.024	0.068	0.0039 J	0.088 U*	0.0089 J	0.022	0.007	0.366
		5237-080925-WS-12-125-140	25-Sep-08		0.25	0.0034 U	0.029	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.029	0.087	0.0026 U	0.056	0.0078 J	0.024	ND	0.4828
		5237-090407-WS12-125-106	7-Apr-09		0.27	0.0069 J	0.062	0.0035 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.047	0.091	0.0026 U	0.003 U	0.011 J	0.044	0.0035	0.5354
		5237-090818-WS-12-125-145	18-Aug-09		0.199	0.0374 U	0.0412	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0662	0.0374 U	0.0528	0.0374 U	0.0374 U	ND	0.3592
WS-12-161	MFA	WS-12-161	27-Apr-04	145-160	0.0926	U	U	U	U	U	U	U	U	U	0.072	0.072	U	0.154	0.319	0.0823	ND	0.7919
			17-Nov-04		0.0493 U	0.0493 U	0.0493 U	0.0493 U	0.0493 U	0.0493 U	0.0493 U	0.0493 U	0.0493 U	0.0493 U	0.0493 U	0.0493 U	0.0493 U	1.25	0.0493 U	0.0493 U	ND	1.25
	HAI	5237-070712-WS12-161	12-Jul-07		0.0952 U	0.0952 U	0.0952 U	0.00476 U	0.0107	0.00497	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.0952 U	0.00771	0.0952 U	0.0952 U	0.0952 U	0.02338	0.02338
		5237-080521-WS12-161-107	21-May-08		0.012 J	0.0034 U	0.0038 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0059 J	0.0056 J	0.0026 U	0.021 U*	0.016 J	0.0051 J	ND	0.0484
		5237-080925-WS-12-161-141	25-Sep-08		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.025	0.01 J	0.0035 U	ND	0.035
		5237-090407-WS12-161-104	7-Apr-09		0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.003 U	0.0072 J	0.0035 U	ND	0.0072
		5237-090818-WS-12-161-143	18-Aug-09		0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U	0.0404	0.0374 U	0.0374 U	ND	0.0404

Table 4b - Summary of Analytical Results for Groundwater Samples: Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270 SIM or 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3 cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
					Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																						
Fish Consumption																						
	EPA 2004 NRWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate				99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																						
	MCL [3]				0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																						
	EPA 2004 NRWQC (chronic)				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)				#	520 [5]	#	#	#	#	#	#	#	#	#	#	#	620 [5]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [4]				#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
WS-13-69	MFA	WS-13-69	28-Apr-04	52.6-67.6	8.99	4.54	10.6	0.06	0.05	0.05	U	U	0.07	U	0.8	5.38	U	632.	9.8	0.74	0.23	673.08
			18-Nov-04		5.79	2.48	1.02	0.0506 U	0.0506 U	0.0506 U	0.0506 U	0.0506 U	0.0506 U	0.0506 U	0.466	3.04	0.0506 U	793.	7.33	0.334	ND	813.46
			19-Jul-06		4.72	1.91	0.336	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	0.59	2.94	<0.0509 U	-	5.91	0.58	ND	-
			24-Aug-06		4.08	1.66	0.0772	<0.0551 U	<0.0551 U	<0.0551 U	<0.0551 U	<0.0551 U	<0.0551 U	<0.0551 U	0.441	2.71	<0.0551 U	-	5.3	0.474	ND	-
			27-Sep-06		5.15	2.2	0.302	<0.0487 U	<0.0487 U	<0.0487 U	<0.0487 U	<0.0487 U	<0.0487 U	<0.0487 U	0.526	3.17	<0.0487 U	-	5.77	0.526	ND	-
			25-Oct-06		2.36	0.9	0.18	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	0.322	1.41	<0.0474 U	-	2.88	0.284	ND	-
			15-Nov-06		3.03	1.13	0.127	<0.049 U	<0.049 U	<0.049 U	<0.049 U	<0.049 U	<0.049 U	<0.049 U	0.324	1.76	<0.049 U	-	3.55	0.314	ND	-
			25-Jan-07		1.72	0.621	0.0776	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	0.223	1.03	<0.0485 U	-	2.04	0.242	ND	-
			21-Feb-07		2.99	1.16	0.219	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	0.372	1.78	<0.0477 U	-	3.4	0.382	ND	-
			22-Mar-07		2.22	0.779	0.154	<0.0512 U	<0.0512 U	<0.0512 U	<0.0512 U	<0.0512 U	<0.0512 U	<0.0512 U	0.318	1.41	<0.0512 U	-	2.74	0.307	ND	-
			24-Apr-07		1.72	0.627	0.118	<0.049 U	<0.049 U	<0.049 U	<0.049 U	<0.049 U	<0.049 U	<0.049 U	0.206	0.989	<0.049 U	-	2.04	0.235	ND	-
			23-May-07		4.33	1.57	0.391	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	0.508	2.48	<0.0488 U	-	5.19	0.596	ND	-
WS-13-105	MFA	WS-13-105	28-Apr-04	89-104	2.23	0.271	0.15	0.0601	0.0601	0.0501	0.0601	U	0.0701	U	0.251	0.671	U	28.9	0.962	0.251	0.2404	33.9865
		Duplicate	28-Apr-04		1.53	0.18	0.08	U	U	U	U	U	U	U	0.13	0.47	U	14.1	0.68	0.13	ND	17.3
			18-Nov-04		0.0474 U	0.0474 U	0.0474 U	0.0474 U	0.0474 U	0.0474 U	0.0474 U	0.0474 U	0.0474 U	0.0474 U	0.0474 U	0.0474 U	0.0474 U	0.38	0.114	0.0474 U	ND	0.494
		Duplicate	18-Nov-04		0.0475 U	0.0475 U	0.0475 U	0.0475 U	0.0475 U	0.0475 U	0.0475 U	0.0475 U	0.0475 U	0.0475 U	0.0475 U	0.0475 U	0.0475 U	0.114	0.123	0.0475 U	ND	0.237
			19-Jul-06		<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	0.0509	<0.0509 U	<0.0509 U	-	0.143	<0.0509 U	ND	-
			24-Aug-06		0.0777	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	-	0.107	<0.0485 U	ND	-
			27-Sep-06		<0.0478 U	<0.0478 U	<0.0478 U	<0.0478 U	<0.0478 U	<0.0478 U	<0.0478 U	<0.0478 U	<0.0478 U	<0.0478 U	<0.0478 U	<0.0478 U	<0.0478 U	-	0.0764	<0.0478 U	ND	-
			25-Oct-06		1.45	0.232	0.302	0.0806	<0.0504 U	<0.0504 U	<0.0504 U	<0.0504 U	0.0706	<0.0504 U	0.454	0.877	<0.0504 U	-	2.33	0.393	0.1512	-
			15-Nov-06		<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	-	0.0668	<0.0477 U	ND	-
			25-Jan-07		<0.053 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	-	<0.053 U	<0.053 U	ND	-
			21-Feb-07		<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	-	<0.0488 U	<0.0488 U	ND	-
			21-Mar-07		<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	-	0.0904	<0.0502 U	ND	-
			24-Apr-07		<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	-	<0.0513 U	<0.0513 U	ND	-
			23-May-07		<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	-	<0.0515 U	<0.0515 U	ND	-
WS-14-125	MFA	WS-14-125	16-Nov-04	109-124	130.	3.2	22.1	8.06	7.89	7.96	5.17	2.27	8.46	0.594	30.	38.1	3.81	4,710.	90.1	33.1	39.044	5,100.814
	HAI	5237-070712-WS14-125	12-Jul-07		143. J	2.22	11.4	1.4	1.38	0.84	1.9 U	0.837	1.77	0.155	10.9	41.	0.718	7,580.	83.7	10.2 J	7.1	7,889.52
		5237-080515-WS14-125-100	15-May-08		150.	1.9	14.	0.66	0.25	0.25	0.14	0.067	0.56	0.023	6.5	46.	0.13	7,800.	88.	9.1	1.94	8,117.58
		5237-080925-WS-14-125-138	25-Sep-08		160.	1.9	11.	0.49	0.23	0.2	0.14	0.066	0.58	0.023	7.1	45.	0.14	6,800.	76.	8.7	1.729	7,111.569
		5237-090408-WS14-125-110	8-Apr-09		130.	1.9	9.4	0.85	0.71	0.6	0.48	0.21	1.	0.072	7.	43.	0.47	6,600.	70.	8.	3.912	6,873.692
		5327-090819-WS-14-125-155	19-Aug-09		186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	5,120.	186. U	186. U	ND	5,120.
WS-14-161	MFA	WS-14-161	16-Nov-04	145-160	0.0478 U	0.0478 U	0.0478 U	0.0478 U	0.0478 U	0.0478 U	0.0478 U	0.0478 U	0.0478 U	0.0478 U	0.0478 U	0.0478 U	0.0478 U	0.66	0.0478	0.0478 U	ND	0.7078
	HAI	5237-070712-WS14-161	12-Jul-07		0.178 J	0.0952 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.0952 U	0.00476 U	15.7	0.0952 U	0.0952 U	ND	15.878
		5237-080515-WS14-161-101	15-May-08		2.	0.045	0.12	0.0047 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.064	0.54	0.0026 U	140.	0.9	0.069	0.0047	143.7427
		5237-080925-WS-14-161-139	25-Sep-08		1.8	0.036	0.11	0.0095 J	0.0043 U	0.0036 J	0.003 J	0.0025 U	0.0071 J	0.0025 U	0.079	0.51	0.0026 U	120.	0.86	0.077	0.0202	123.4952
		5237-090408-WS14-161-108	8-Apr-09		22.	0.43	1.4	0.026	0.0043 U	0.0037 J	0.0029 U	0.0025 U	0.031	0.0025 U	0.75	6.4	0.0026 U	690.	10.	0.71	0.0607	731.7507
		5237-090818-WS-14-161-151	18-Aug-09		186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	788.	186. U	186. U	ND	788.
WS-15-85	MFA	WS-15-85	18-Nov-04	70-85	39.3	1.79	3.05	0.224	0.224	0.204	0.146	0.0778	0.224	0.0486 U	2.94	11.	0.117	2,300.	19.9	3.09	1.0708	2,382.2868

Table 4b - Summary of Analytical Results for Groundwater Samples: Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270 SIM or 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3 cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
					Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																						
Fish Consumption																						
	EPA 2004 NRWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate				99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																						
	MCL [3]				0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																						
	EPA 2004 NRWQC (chronic)				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)				#	520 [5]	#	#	#	#	#	#	#	#	#	#	#	620 [5]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [4]				#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
WS-15-140	MFA	WS-15-140	18-Nov-04	125-140	1.05	0.0517 U	0.062	0.0517 U	0.0517 U	0.0517 U	0.0517 U	0.0517	0.0517 U	0.0517 U	0.0723	0.176	0.0517 U	15.7	1.07	0.0517 U	0.0517	18.182
WS-16-125	MFA	WS-16-125	17-Nov-04	109-124	1.33	0.0672	0.0768	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.0864	0.365	0.048 U	153.	0.643	0.0672	ND	155.6356
WS-16-161	MFA	WS-16-161	17-Nov-04	145-160	0.186	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.127	0.0784	0.049 U	8.49	0.294	0.0979	ND	9.2733
WS-17-52	MFA	WS-17-52	16-Nov-04	41-51	27.	0.712	4.39	0.135	0.0866	0.0866	0.0674	0.0481 U	0.144	0.0481 U	4.35	12.2	0.0481	241.	27.6	4.23	0.5003	322.0497
WS-17-94	MFA	WS-17-94	17-Nov-04	78-93	5.5	0.119	0.258	0.0497 U	0.0497 U	0.0497 U	0.0497 U	0.0497 U	0.0497 U	0.0497 U	0.209	1.79	0.0497 U	102.	4.06	0.149	ND	114.085
WS-18-71	MFA	WS-18-71	27-Jun-06	61 - 71	6.79	0.892	3.67	2.12	2.29	2.05	1.55	0.725	2.27	0.279	9.12	5.07	1.03	-	20.7	9.6	10.764	-
			19-Jul-06		0.794	0.115	0.641	0.306	0.182	0.153	0.115	0.067	0.392	<0.0478 U	2.57	0.612	0.0766	-	4.9	3.06	1.1766	-
			29-Aug-06		0.283	<0.0488 U	0.078	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	0.0683	<0.0488 U	0.634	0.185	<0.0488 U	-	0.634	0.907	0.0683	-
			26-Sep-06		0.219	<0.0475 U	0.076	0.057	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	0.057	<0.0475 U	0.513	0.133	<0.0475 U	-	0.589	0.57	0.114	-
			24-Oct-06		0.163	<0.0479 U	0.0863	0.144	0.0767	0.0767	0.0767	0.0479	0.153	0.0575	0.738	0.105	0.0767	-	0.633	0.844	0.6325	-
			16-Nov-06		0.274	<0.049 U	0.0979	0.0881	<0.049 U	<0.049 U	<0.049 U	<0.049 U	0.127	<0.049 U	0.852	0.157	<0.049 U	-	0.891	1.02	0.2151	-
			26-Jan-07		0.203	<0.0507 U	<0.0507 U	0.101	<0.0507 U	<0.0507 U	<0.0507 U	<0.0507 U	0.101	<0.0507 U	0.619	0.0913	<0.0507 U	-	0.274	0.882	0.202	-
			22-Feb-07		0.355	<0.0494 U	0.079	0.0987	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	0.0987	<0.0494 U	0.74	0.217	<0.0494 U	-	0.918	0.888	0.1974	-
			22-Mar-07		0.125	<0.048 U	0.0576	0.048	<0.048 U	<0.048 U	<0.048 U	<0.048 U	<0.048 U	<0.048 U	0.298	0.0576	<0.048 U	-	0.279	0.346	0.048	-
			24-Apr-07		0.116	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	0.223	0.0582	<0.0485 U	-	0.291	0.301	ND	-
			22-May-07		0.213	<0.0508 U	0.0915	0.0813	0.0508	<0.0508 U	<0.0508 U	<0.0508 U	0.0915	<0.0508 U	0.427	0.102	<0.0508 U	-	0.457	0.661	0.2236	-
WS-18-101	MFA	WS-18-101	28-Jun-06	92 - 102	3.58	0.377	0.439	0.22	0.251	0.241	0.188	0.0837	0.251	<0.0523 U	0.868	1.45	0.136	-	2.98	0.889	1.1827	-
			19-Jul-06		5.14	0.421	0.738	0.297	0.192	0.192	0.115	0.0766	0.364	<0.0479 U	1.45	2.	0.0766	-	5.34	1.71	1.1982	-
			28-Aug-06		4.15	0.314	0.213	0.142	0.132	0.142	0.071	0.0507	0.162	<0.0507 U	0.659	1.59	0.0507	-	3.58	0.892	0.6794	-
			26-Sep-06		2.23	0.193	0.102	0.0916	<0.0509 U	0.061	<0.0509 U	<0.0509 U	0.102	<0.0509 U	0.448	0.793	<0.0509 U	-	1.67	0.468	0.2546	-
			24-Oct-06		1.37	0.105	0.084	0.0945	0.063	0.0525	0.0525	<0.0525 U	0.084	<0.0525 U	0.315	0.515	0.0525	-	1.13	0.336	0.3465	-
			16-Nov-06		5.58	0.436	0.778	0.323	0.294	0.266	0.218	0.0854	0.398	<0.0474 U	1.34	2.13	0.142	-	5.26	1.58	1.5084	-
			26-Jan-07		3.08	0.24	0.12	0.12	0.11	0.1	0.0802	<0.0501 U	0.13	<0.0501 U	0.461	1.04	0.0501	-	1.57	0.581	0.5101	-
			22-Feb-07		6.42	0.495	0.466	0.233	0.175	0.175	0.097	0.0582	0.242	<0.0485 U	0.951	2.22	0.0679	-	4.3	1.16	0.9511	-
			22-Mar-07		4.15	0.284	0.253	0.0737	<0.0526 U	<0.0526 U	<0.0526 U	<0.0526 U	0.0632	<0.0526 U	0.421	1.4	<0.0526 U	-	2.47	0.442	0.1369	-
			24-Apr-07		2.18	0.163	0.123	<0.0511 U	<0.0511 U	<0.0511 U	<0.0511 U	<0.0511 U	<0.0511 U	<0.0511 U	0.204	0.684	<0.0511 U	-	1.24	0.235	ND	-
			22-May-07		4.94	0.351	0.261	0.0902	0.0802	0.0701	0.0601	<0.0501 U	0.12	<0.0501 U	0.461	1.49	<0.0501 U	-	2.62	0.561	0.3605	-
WS-19-71	MFA	WS-19-71	27-Jun-06	61 - 71	5.19	1.28	0.659	0.335	0.335	0.355	0.243	0.122	0.375	0.0507	1.69	4.52	0.162	-	5.35	2.	1.7347	-
			20-Jul-06		0.675	0.139	0.0596	0.0695	<0.0497 U	<0.0497 U	<0.0497 U	<0.0497 U	0.0794	<0.0497 U	0.228	0.427	<0.0497 U	-	0.794	0.258	0.1489	-
			29-Aug-06		0.766	0.191	0.124	0.293	0.327	0.349	0.214	0.124	0.315	<0.0563 U	1.1	0.991	0.146	-	1.19	1.95	1.554	-
			27-Sep-06		0.728	0.118	0.0591	0.0492	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	0.0492	<0.0492 U	0.453	0.423	<0.0492 U	-	0.915	0.482	0.0984	-
			24-Oct-06		0.554	0.113	0.0719	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	<0.0513 U	0.349	0.349	<0.0513 U	-	0.883	0.37	ND	-
			16-Nov-06		0.463	0.142	0.132	0.0756	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	0.0662	<0.0473 U	0.416	0.265	<0.0473 U	-	0.813	0.605	0.1418	-
			26-Jan-07		0.404	0.0888	0.069	0.0592	<0.0493 U	<0.0493 U	<0.0493 U	<0.0493 U	0.0493	<0.0493 U	0.325	0.197	<0.0493 U	-	0.493	0.503	0.1085	-
			23-Feb-07		0.442	0.0925	0.0822	<0.0514 U	<0.0514 U	<0.0514 U	<0.0514 U	<0.0514 U	<0.0514 U	<0.0514 U	0.298	0.206	<0.0514 U	-	0.493	0.432	ND	-
			22-Mar-07		0.271	0.0502	0.0602	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	<0.0502 U	0.201	0.11	<0.0502 U	-	0.291	0.241	ND	-
			24-Apr-07		0.138	<0.0493 U	<0.0493 U	<0.0493 U	<0.0493 U	<0.0493 U	<0.0493 U	<0.0493 U	<0.0493 U	<0.0493 U	0.0986	0.0592	<0.0493 U	-	0.138	0.158	ND	-
			23-May-07		0.385	0.0889	0.0791	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	0.267	0.168	<0.0494 U	-	0.375	0.435	ND	-

Table 4b - Summary of Analytical Results for Groundwater Samples: Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270 SIM or 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results in ug/L (ppb)																	
					Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3 cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
WS-19-101	MFA	WS-19-101	27-Jun-06	92 - 102	1.16	0.235	0.182	0.192	0.214	0.235	0.182	0.0855	0.224	<0.0534 U	0.63	0.694	0.128	-	1.06	0.641	1.0785	-
			20-Jul-06		0.76	0.109	0.138	0.118	0.079	0.079	0.0691	0.0691	0.118	<0.0494 U	0.296	0.385	0.0592	-	0.701	0.355	0.5223	-
			29-Aug-06		0.436	0.0608	0.0608	<0.0507 U	<0.0507 U	<0.0507 U	<0.0507 U	<0.0507 U	<0.0507 U	<0.0507 U	0.0811	0.193	<0.0507 U	-	0.365	0.101	ND	-
			27-Sep-06		0.402	<0.0479 U	0.0766	<0.0479 U	<0.0479 U	<0.0479 U	<0.0479 U	<0.0479 U	<0.0479 U	<0.0479 U	0.144	0.192	<0.0479 U	-	0.45	0.144	ND	-
			25-Oct-06		0.514	0.0494	0.0593	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	0.119	0.217	<0.0494 U	-	0.356	0.109	ND	-
			15-Nov-06		1.6	0.145	0.31	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	<0.0485 U	0.398	0.727	<0.0485 U	-	1.63	0.369	ND	-
			25-Jan-07		0.561	0.0529	0.0635	<0.0529 U	<0.0529 U	<0.0529 U	<0.0529 U	<0.0529 U	<0.0529 U	<0.0529 U	0.0741	0.212	<0.0529 U	-	0.392	0.0741	ND	-
			23-Feb-07		0.844	0.107	0.165	0.116	0.107	0.116	0.0776	<0.0485 U	0.107	<0.0485 U	0.456	0.407	<0.0485 U	-	1.02	0.504	0.446	-
			22-Mar-07		0.742	0.0618	0.0927	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	0.165	0.309	<0.0515 U	-	0.577	0.185	ND	-
			24-Apr-07		0.448	<0.0498 U	<0.0498 U	<0.0498 U	<0.0498 U	<0.0498 U	<0.0498 U	<0.0498 U	<0.0498 U	<0.0498 U	<0.0498 U	0.169	<0.0498 U	-	0.289	0.0697	ND	-
			23-May-07		0.716	0.0668	0.0859	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	0.0954	0.277	<0.0477 U	-	0.468	0.124	ND	-
WS-20-112	MFA	WS-20-112	28-Jun-06	97 - 112	0.438	<0.0476 U	0.0951	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	0.133	0.238	<0.0476 U	-	0.647	0.124	ND	-
			27-Jul-06		0.391	<0.0477 U	0.0668	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	0.21	<0.0477 U	-	0.506	<0.0477 U	ND	-
			28-Aug-06		0.197	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	0.118	<0.0492 U	-	0.324	<0.0492 U	ND	-
			25-Sep-06		0.162	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	0.0951	<0.0475 U	-	0.304	<0.0475 U	ND	-
			23-Oct-06		0.18	<0.0475 U	0.057	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	0.104	<0.0475 U	-	0.37	<0.0475 U	ND	-
			18-Dec-06		0.0569	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	-	0.133	<0.0474 U	ND	-
			25-Jan-07		0.0988	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	<0.0494 U	0.0593	<0.0494 U	-	0.208	<0.0494 U	ND	-
			21-Feb-07		0.104	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	0.0662	<0.0473 U	-	0.208	<0.0473 U	ND	-
			21-Mar-07		0.213	<0.0483 U	0.058	<0.0483 U	<0.0483 U	<0.0483 U	<0.0483 U	<0.0483 U	<0.0483 U	<0.0483 U	0.0773	0.126	<0.0483 U	-	0.444	0.0773	ND	-
			23-Apr-07		0.09	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	-	0.15	<0.05 U	ND	-
			21-May-07		0.134	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	<0.0477 U	0.0668	<0.0477 U	-	0.21	<0.0477 U	ND	-
WS-21-112	MFA	WS-21-112	28-Jun-06	97 - 112	2.13	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	0.051	0.0714	<0.051 U	-	0.194	0.051	ND	-
			28-Jul-06		4.34	0.0916	0.0713	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	<0.0509 U	0.0509	<0.0509 U	-	0.122	0.0509	ND	-
			28-Aug-06		2.19	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	<0.0476 U	-	<0.0476 U	<0.0476 U	ND	-
			25-Sep-06		1.96	<0.0503 U	<0.0503 U	<0.0503 U	<0.0503 U	<0.0503 U	<0.0503 U	<0.0503 U	<0.0503 U	<0.0503 U	<0.0503 U	<0.0503 U	<0.0503 U	-	<0.0503 U	<0.0503 U	ND	-
			24-Oct-06		1.39	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	<0.0473 U	-	<0.0473 U	<0.0473 U	ND	-
			19-Dec-06		1.94	0.0474	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	-	<0.0474 U	<0.0474 U	ND	-
			24-Jan-07		2.18	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	<0.0515 U	-	<0.0515 U	<0.0515 U	ND	-
			22-Feb-07		3.66	0.076	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	<0.0475 U	-	<0.0475 U	<0.0475 U	ND	-
			21-Mar-07		3.17	0.0586	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	<0.0488 U	-	<0.0488 U	<0.0488 U	ND	-
			23-Apr-07		3.47	0.08	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	0.05	<0.05 U	-	0.08	<0.05 U	ND	-
			22-May-07		3.57	0.0699	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	-	<0.05 U	<0.05 U	ND	-
	HAI	5237-070712-WS21-112	12-Jul-07		3.36 J	0.0952 U	0.381 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.00673	0.00476 U	0.381 U	0.0952 U	0.00476 U	2.45	0.381 U	0.0952 U	0.00673	5.81673
		5237-080521-WS21-112-108	21-May-08		7.4	0.18	0.11	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0082 J	0.047	0.0026 U	3.2 J	0.031 J	0.0078 J	ND	10.984
		5237-080925-WS-21-112-137	25-Sep-08		6.8	0.081	0.049	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.026	0.0026 U	2.6	0.023	0.0035 U	ND	9.579
		5237-090407-WS21-112-108	7-Apr-09		3.4	0.06	0.06	0.0026 U	0.0043 U	0.0026 J	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0053 J	0.023	0.0026 U	1.2	0.021	0.0057 J	0.0026	4.7776
		5237-090820-WS-21-112-165	20-Aug-09		2.85	2.04 U	2.04 U	2.04 U	2.04 U	2.04 U	2.04 U	2.04 U	2.04 U	2.04 U	2.04 U	2.04 U	2.04 U	6.96	2.04 U	2.04 U	ND	9.81
		5237-090820-WS-21-112-166	20-Aug-09		2.32	1.96 U	1.96 U	1.96 U	1.96 U	1.96 U	1.96 U	1.96 U	1.96 U	1.96 U	1.96 U	1.96 U	1.96 U	6.19	1.96 U	1.96 U	ND	8.51

Table 4b - Summary of Analytical Results for Groundwater Samples: Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270 SIM or 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3 cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
					Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																						
Fish Consumption																						
	EPA 2004 NRWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate				99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																						
	MCL [3]				0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																						
	EPA 2004 NRWQC (chronic)				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)				#	520 [5]	#	#	#	#	#	#	#	#	#	#	#	620 [5]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [4]				#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
WS-22-112	MFA	WS-22-112	28-Jun-06	97 - 112	0.402	0.0721	0.154	0.124	0.227	0.196	0.185	0.0618	0.154	<0.0515 U	0.505	0.165	0.124	-	0.577	0.422	0.8868	-
			27-Jul-06		0.629	0.136	0.271	0.223	0.339	0.29	0.31	0.0968	0.213	0.0484	0.755	0.252	0.184	-	0.852	0.929	1.3942	-
			25-Aug-06		0.631	0.0584	0.187	0.105	0.164	0.14	0.117	<0.0584 U	0.14	<0.0584 U	0.421	0.234	0.0701	-	0.678	0.549	0.6191	-
			25-Sep-06		0.238	<0.0496 U	<0.0496 U	<0.0496 U	<0.0496 U	<0.0496 U	<0.0496 U	<0.0496 U	<0.0496 U	<0.0496 U	0.0694	0.0694	<0.0496 U	-	0.159	0.0694	ND	-
			24-Oct-06		0.277	<0.0494 U	0.0889	0.306	0.287	0.287	0.336	0.287	0.296	0.583	0.346	0.109	0.445	-	0.217	0.267	2.491	-
			19-Dec-06		0.222	<0.0484 U	0.116	<0.0484 U	<0.0484 U	<0.0484 U	<0.0484 U	<0.0484 U	<0.0484 U	<0.0484 U	0.135	0.087	<0.0484 U	-	0.329	0.116	ND	-
			24-Jan-07		0.192	<0.0505 U	<0.0505 U	<0.0505 U	<0.0505 U	<0.0505 U	<0.0505 U	<0.0505 U	<0.0505 U	<0.0505 U	0.0505	0.0606	<0.0505 U	-	0.242	0.0606	ND	-
			22-Feb-07		0.361	<0.0474 U	0.0664	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	<0.0474 U	0.0949	0.133	<0.0474 U	-	0.285	0.104	ND	-
			21-Mar-07		0.334	<0.0492 U	0.059	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	<0.0492 U	0.108	0.108	<0.0492 U	-	0.364	0.128	ND	-
			23-Apr-07		0.17	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	0.05	<0.05 U	-	0.16	0.05	ND	-
			22-May-07		0.426	<0.0496 U	0.0595	<0.0496 U	<0.0496 U	<0.0496 U	<0.0496 U	<0.0496 U	<0.0496 U	<0.0496 U	0.139	0.159	<0.0496 U	-	0.337	0.178	ND	-
RP-03-30R	AMEC		19-Apr-04	23-28	483.	U	7.04	0.602	U	U	U	U	U	U	18.2	204.	U	1,440.	198.	14.4	0.602	2,365.242
RP-03-52R	AMEC		19-Apr-04	46-51	0.0796	U	U	U	U	U	U	U	U	U	U	0.0891	U	0.117	0.104	U	ND	0.3897
(duplicate)			19-Apr-04		0.079	U	U	U	U	U	U	U	U	U	U	0.0936	U	0.118	0.107	U	ND	0.3976
RP-07-30	AMEC		13-Apr-04	25-30	7.78	0.0964	0.144	U	U	U	U	U	U	U	1.19	2.32	U	U	2.88	0.933	ND	15.3434
	HAI	5237-070828-RP-7-30-106	28-Aug-07		7.24 J	0.19 U	0.0952 U	0.00809	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.00965	0.00476 U	0.66 J	3.04 J	0.00476 U	0.0952 U	1.07 J	0.494 J	0.01774	12.52174
RP-07-55	AMEC		3-May-02	50-55	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	ND	ND
	HAI	5237-070827-RP-7-55-104	27-Aug-07		0.0952 U	0.0952 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.0952 U	0.00476 U	0.0952 U	0.0952 U	0.0952 U	ND	ND
RP-07-84	AMEC		13-Apr-04	79-84	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	ND	ND
		5237-070828-RP-7-84-107	28-Aug-07		0.0966 U	0.0966 U	0.0966 U	0.00483 U	0.00483 U	0.00483 U	0.0966 U	0.00483 U	0.00483 U	0.00483 U	0.0966 U	0.0966 U	0.00483 U	0.0966 U	0.0966 U	0.0966 U	ND	ND
		5237-070828-RP-7-84-108 (DUP)	28-Aug-07		0.0962 UJ	0.0962 UJ	0.0962 UJ	0.00834 J	0.00962 UJ	0.0166 J	0.0962 UJ	0.00816 J	-	0.00481 UJ	0.0962 UJ	0.0962 UJ	0.0093 J	0.962 UJ	0.0962 UJ	0.0962 UJ	-	-
RP-07-119	AMEC		13-Apr-04	114-119	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	ND	ND
RP-11-30	HAI	5237-070827-RP-11-30-101	27-Aug-07	15 - 30	4.47 J	0.0952 U	0.0952 U	0.0225	0.0169	0.0177	0.0952 U	0.0124	0.0318	0.00476 U	0.373 J	0.595 J	0.0112	0.106	0.532 J	0.326 J	0.1125	6.5145
RP-11-160	HAI	5237-070827-RP-11-160-102	27-Aug-07	150 - 160	0.0957 U	0.0957 U	0.0957 U	0.00478 U	0.00478 U	0.00478 U	0.0957 U	0.00478 U	0.00478 U	0.00478 U	0.0957 U	0.0957 U	0.00478 U	0.0957 U	0.0957 U	0.0957 U	ND	ND
RP-11-216	HAI	5237-070827-RP-11-216-103	27-Aug-07	211 - 216	0.0952 U	0.0952 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.0952 U	0.00476 U	0.0952 U	0.0952 U	0.0952 U	ND	ND
RP-24-30	HAI	5237-070829-RP-24-30-109	29-Aug-07	25 - 30	0.233 J	0.1 U	0.1 U	0.00853	0.0121	0.0097	0.1 U	0.00896 J	0.00981	0.005 U	0.1 U	0.1 U	0.0131	0.1 U	0.113 J	0.1 U	0.0622	0.4082
RP-24-60	HAI	5237-070828-RP-24-60-110	28-Aug-07	55 - 60	0.143 J	0.0952 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.512 J	0.394	0.00476 U	0.0952 U	0.239 J	0.296 J	ND	1.584
RP-24-73	HAI	5237-070829-RP-24-73-113	29-Aug-07	68 - 73	0.0952 U	0.0952 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.0952 U	0.00476 U	0.0952 U	0.0952 U	0.0952 U	ND	ND
RP-24-85	HAI	5237-070828-RP-24-85-111	28-Aug-07	80 - 85	0.0952 U	0.0952 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.00476 U	0.00476 U	0.00476 U	0.0952 U	0.0952 U	0.00476 U	0.0952 U	0.0952 U	0.0952 U	ND	ND
NWN-1-20	HAI	5237-080807-NWN-1-20-107	7-Aug-08	10 - 20	66.	110.	28.	17.	14.	17.	13.	5.8	25.	1.5	63.	61.	11.	5,100.	240.	73.	91.3	5,845.3
		5237-081211-NWN-1-20-019	11-Dec-08		70.	83.	28.	13.	13.	11.	9.2	4.2	15.	1.6	47.	61.	8.9	4,500.	160.	55.	66.7	5,079.9
		5237-090407-NWN1-20-105	7-Apr-09		63.	54.	39.	27.	27.	26.	21.	8.8	37.	2.7	91.	68.	20.	2,900.	240.	100.	148.5	3,724.5
		5237-090604-NWN-1-20-103	4-Jun-09		110.	110.	110.	94.	100.	84.	71.	26.	120.	11.	230.	150.	72.	3,900.	610.	340.	507.	6,138.
		5237-090818-NWN-1-20-148	18-Aug-09		930. U	930. U	930. U	930. U	930. U	930. U	930. U	930. U	930. U	930. U	930. U	930. U	930. U	3,410.	930. U	930. U	ND	3,410.
NWN-2-20	HAI	5237-080730-NWN2-20-101	30-Jul-08	10 - 20	23.	0.94	15.	5.1	1.8	2.5	0.53	0.64	7.6	0.18	33.	18.	0.68	85.	110.	41.	18.5	344.97
		5237-081211-NWN-2-20-017	11-Dec-08		35.	1.8	18.	5.	1.8	2.	0.82	0.59	6.5	0.19	31.	25.	0.77	55.	110.	34.	16.85	327.47
		5237-090407-NWN2-20-107	7-Apr-09		33.	1.8	16.	12.	4.3	5.6	2.3	1.7	18.	0.44	56.	25.	2.	25.	100.	70.	44.04	373.14
		5237-090604-NWN-2-20-101	4-Jun-09		32.	2.3	27.	16.	6.1	6.7	2.6	2.	21.	0.52	61.	28.	2.6	17.	110.	98.	54.92	432.82
		5237-090818-NWN-2-20-142	18-Aug-09		36.8	2.12	45.4	27.6	12.7	19.9	5.1	- BK	42.7	1.87 U	112.	28.	4.95	18.3	211.	143.	107.85	709.57

Table 4b - Summary of Analytical Results for Groundwater Samples: Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270 SIM or 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results in ug/L (ppb)																	
					Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3 cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																						
Fish Consumption																						
	EPA 2004 NRWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate				99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																						
	MCL [3]				0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																						
	EPA 2004 NRWQC (chronic)				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)				#	520 [5]	#	#	#	#	#	#	#	#	#	#	#	620 [5]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [4]				#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
NWN-3-17	HAI	5237-080730-NWN3-17-100	30-Jul-08	7 - 17	1.2	0.048	0.071	0.088	0.083	0.15	0.17	0.044	0.16	0.014 J	0.29	0.081	0.091	0.074 B	0.25	0.34	0.63	3.154
		NS (Dry)	11-Dec-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		5237-090407-NWN3-17-101	7-Apr-09		1.7	0.035	0.046	0.012 J	0.011 J	0.012 J	0.0096 J	0.0036 J	0.014 J	0.0026 U	0.038	0.035	0.0089 J	0.11	0.054	0.045	0.0615	2.1341
		5237-090604-NWN-3-17-102	4-Jun-09		2.1	0.088	0.073	0.031	0.023	0.032	0.025	0.019 U	0.046	0.019 U	0.062	0.054	0.022	0.042	0.12 J	0.14	0.154	2.858
		NS (Dry)	19-Aug-09		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NWN-4-15	HAI	NS (Dry)	30-Jul-08	5 - 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		5237-081211-NWN-4-15-021	11-Dec-08		0.066	0.059	0.084	0.098	0.12	0.12	0.11	0.039	0.12	0.017 J	0.42	0.044	0.098	0.43	0.3	0.5	0.612	2.625
		5237-090407-NWN4-15-103	7-Apr-09		0.01 J	0.041	0.023	0.048	0.12	0.11	0.14	0.037	0.049	0.013 J	0.11	0.0067 J	0.14	0.12	0.066	0.13	0.517	1.1637
		5237-090604-NWN-4-15-100	4-Jun-09		0.076	0.49	0.3	0.68	1.6	1.6	1.5	0.53	0.96	0.22	1.2	0.17	1.6	1.2	0.76	2.	7.19	14.886
		5237-090818-NWN-4-15-152*	18-Aug-09		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NWN-5-20	HAI	5237-080730-NWN5-20-103	30-Jul-08	10 - 20	110.	1.7	11.	1.2	0.26	0.43	0.078	0.15	1.	0.02	19.	47.	0.088	470.	61.	13.	3.148	735.926
		5237-081211-NWN-5-20-018	11-Dec-08		55.	0.62	5.	0.73	0.18	0.3	0.069	0.11	0.68	0.018 J	8.5	22.	0.075	280.	32.	5.8	2.093	411.082
		5237-090408-NWN5-20-111	8-Apr-09		16.	0.28	1.2	0.64	0.29	0.44	0.15	0.16	0.89	0.027	3.9	2.4	0.15	32.	3.5	2.5	2.597	64.527
		5237-090604-NWN-5-20-104	4-Jun-09		31.	0.42	1.6	0.21	0.042	0.072	0.021	0.026	0.2	0.02 U	2.6	5.1	0.022	94.	4.1	2.9	0.572	142.313
		5237-090818-NWN-5-20-150	18-Aug-09		24.3	0.748 U	2.07	0.748 U	0.748 U	0.748 U	0.748 U	0.748 U	0.748 U	0.748 U	3.85	2.63	0.748 U	8.76	4.57	2.85	ND	49.03
NWN-6-31	HAI	5237-080730-NWN6-31-104	30-Jul-08	21 - 31	460.	0.94	2.5	0.41	0.11	0.19	0.023	0.056	0.24	0.011 J	7.5	120.	0.037	1,400.	85.	6.6	1.054	2,083.617
		5237-081211-NWN-6-31-020	11-Dec-08		430.	2.7	2.	0.78	0.24	0.36	0.073	0.13	0.47	0.028	8.7	110.	0.097	1,200.	69.	6.5	2.105	1,831.078
		5237-090408-NWN6-31-109	8-Apr-09		400.	1.2	1.7	0.54	0.13	0.21	0.034	0.067	0.29	0.012 J	7.2	110.	0.044	910.	60.	6.1	1.293	1,497.527
		5237-090604-NWN-6-31-106	4-Jun-09		480.	1.9	1.9	0.47	0.097	0.17	0.022	0.048	0.26	0.02 U	6.7	140.	0.03	1,500.	83.	6.8	1.075	2,221.397
		5327-090819-NWN-6-31-154	19-Aug-09		295.	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	186. U	921.	186. U	186. U	ND	1,216.
NWN-7-30	HAI	5237-080807-NWN-7-30-106	7-Aug-08	20 - 30	68.	0.72	0.58	0.086	0.025	0.036	0.015 J	0.0093 J	0.11	0.0025 U	1.7	6.6	0.011 J	6.1	2.9	1.9	0.2773	88.7923
		5237-081211-NWN-7-30-016	11-Dec-08		81.	0.82	0.93	0.31	0.28	0.28	0.21	0.085	0.43	0.024	2.3	6.4	0.18	1.5	2.	2.4	1.589	99.149
		5237-090408-NWN7-30-112	8-Apr-09		88. J	0.48 J	0.67 J	0.097 J	0.07 J	0.073 J	0.043 J	0.022 J	0.13 J	0.004 J	1.2 J	6. J	0.041 J	7.4 J	1.1 J	1.1 J	0.437	106.43
		5237-090604-NWN-7-30-108	4-Jun-09		95.	1.6	1.1	0.11	0.074	0.069	0.043	0.023	0.13	0.019 U	1.1	11.	0.039	1.4	1.2	1.5	0.445	114.388
		5237-090818-NWN-7-30-144	18-Aug-09		57.8	0.799	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	1.23	5.07	0.755 U	2. U	0.755 U	1.21	ND	66.109
NWN-8-30	HAI	5237-080730-NWN8-30-105	30-Jul-08	15 - 30	3.4	0.045	0.21	0.13	0.094	0.18	0.12	0.063	0.22	0.022	0.56	0.42	0.12	8.5	0.98	0.58	0.829	15.644
		5237-081211-NWN-8-30-022	11-Dec-08		4.3	0.14	1.4	0.79	0.64	0.99	0.96	0.33	1.4	0.13	4.	1.	0.85	4.3	5.1	4.2	5.13	30.53
		5237-090408-NWN8-30-113	8-Apr-09		3.8	0.034	0.12	0.052	0.05	0.08	0.074	0.028	0.084	0.0071 J	0.2	0.27	0.064	3.3	0.29	0.2	0.3651	8.6531
		5237-090604-NWN-8-30-105	4-Jun-09		5.7	0.047	0.17	0.14	0.12	0.2	0.17	0.062	0.23	0.018 J	0.41	0.35	0.16	1.8	0.42 J	0.64	0.93	10.637
		5237-090818-NWN-8-30-146	18-Aug-09		5.38	0.0526	0.148	0.116	0.136	0.262	0.168	- BK	0.17	0.0377 U	0.334	0.307	0.139	1.05	0.246	0.401	0.823	8.9096
NWN-9-31	HAI	5237-080807-NWN-9-31-108	7-Aug-08	16 - 31	42.	0.75	1.2	0.44	0.34	0.4	0.31	0.13	0.61	0.033	4.2	7.3	0.26	6.7	6.5	4.4	2.213	75.573
		5237-081211-NWN-9-31-023	11-Dec-08		13. J	0.69 J	0.81 J	0.21 J	0.096 J	0.091 J	0.051 J	0.029 J	0.24 J	0.0091 J	2.4 J	3.3 J	0.046 J	11. J	3.6 J	2.6 J	0.7211	38.1721
		5237-090409-NWN9-31-121	9-Apr-09		18.	0.56	0.83	0.14	0.046	0.053	0.026	0.016 J	0.18	0.0035 J	2.1	4.4	0.023	32.	4.	2.1	0.4615	64.4775
		5237-090604-NWN-9-31-107	4-Jun-09		37.	0.91	1.1	0.2	0.1	0.1	0.065 J	0.031	0.24	0.021 UJ	2.2	9.2	0.064 J	200.	4.9	3.3	0.735	259.41
		5237-090604-NWN-9-31-109	4-Jun-09		40.	0.94	1.3	0.21	0.1	0.091	0.064	0.031	0.24	0.02 U	2.3	9.3	0.063	210.	5.5	3.3	0.735	273.439
		5327-090819-NWN-9-31-158	19-Aug-09		13.9	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	0.755 U	1.47	3.21	0.755 U	29.3	2.35	1.68	ND	51.91

Table 4b - Summary of Analytical Results for Groundwater Samples: Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270 SIM or 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3 cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Total Carcinogenic PAHs	Total PAHs
					Analytical Results in ug/L (ppb)																	
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																						
Fish Consumption																						
	EPA 2004 NRWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
	Portland Harbor specific fish consumption rate				99.	#	4,000.	0.0018	0.0018	0.0018	#	0.0018	0.0018	0.0018	14.	530.	0.0018	#	#	400.	#	#
	DEQ 2004 AWQC (organism only)				990.	#	40,000.	0.018	0.018	0.018	#	0.018	0.018	0.018	140.	5,300.	0.018	#	#	4,000.	#	#
Drinking Water																						
	MCL [3]				0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	#	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				2,200.	#	11,000.	0.029	0.0029	0.029	#	0.29	2.9	0.0029	1,500.	1,500.	0.029	0.14	#	1,100.	#	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																						
	EPA 2004 NRWQC (chronic)				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic)				#	520 [5]	#	#	#	#	#	#	#	#	#	#	#	620 [5]	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [4]				#	#	0.73	0.027	0.014	#	#	#	#	#	#	3.9	#	12.	#	#	#	#
NWN-10-26	HAI	5237-080807-NWN-10-26-109	7-Aug-08	11 - 26	1.7	0.0094 J	0.0036 U	0.018 J	0.0098 J	0.013 J	0.011 J	0.0039 J	0.021	0.0025 U	0.095	0.011 J	0.0085 J	0.079 B	0.63	0.22	0.0742	2.8296
		5237-080807-NWN-10-26-110 (DUP)	7-Aug-08		1.6	0.017 J	0.02 J	0.048	0.051	0.056	0.058	0.02 J	0.067	0.0067 J	0.15	0.015 J	0.046	0.083	0.6	0.34	0.2947	3.1777
		NS (Dry)	11-Dec-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		5237-090410-NWN10-26-123	9-Apr-09		2.4	0.041	0.035	0.14	0.17	0.16	0.17	0.053	0.19	0.018 J	0.54	0.054	0.14	0.18	1.	0.79	0.871	6.081
		5237-090604-NWN-10-26-111	4-Jun-09		3.5	0.047	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0062 J	0.02 U	0.02 U	0.046	0.02 U	0.73	0.02 U	0.056	0.0062	4.3852
		NS (Dry)	19-Aug-09		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quality Control Samples (HAI)																						
Water EB	HAI	5237-011008-103	8-Oct-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND	ND
		5237-011212-102	12-Dec-01		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND	ND
		5237-020402-102	2-Apr-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND	ND
		5237-020710-102	10-Jul-02		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	ND	ND

Note:

AWQC = Ambient Water Quality Criteria
BK = Benzo(b)fluoranthene and Benzo(k)fluoranthene were indistinguishable. Lab reported as one number sum.
DEQ = Oregon Department of Environmental Quality
EPA = U.S. Environmental Protection Agency
J = Estimated Concentration
MCL = Maximum Contaminant Level
ND or U = not detected above detection limit indicated
NRWQC = National Recommended Water Quality Criteria
NS = No Sample
PAHs = polynuclear aromatic hydrocarbons
ppb = parts per billion
UJ = Compound not detected, but the reporting limit is probably higher due to a low bias identified during the quality assurrance review.
PRG = Preliminary Remediation Goal
SCV = Secondary Chronic Value
ug/l = micrograms per liter
U = Non-detect above method reporting limit

"-" = Measurement not taken, parameter not analyzed, or data unavailable (samper other than HAI)
* = Partial sample obtained, but sample volume completely used during other analysis (i.e 8260B), insufficient volume to analyze for additional determinants.
# = Reference Level not established

1 = Unless otherwise noted Screening Level Values are from *Portland Harbor Joint Service Control Strategy, Final*, December 2005 (7/16/07 revision)
2 = EPA, under CERCLA authority, has identified the Safe Drinking Water Acts MCLs and AWQCs (federal and state once approved) as potential ARARs under CERCLA. The final determination will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to The EPA Portland Harbor ROD, due to an exceedance of an SLV in upland stormwater will be evaluated and prioritized on a case by case basis.
3 = MCL is based on benzo(a)pyrene
4 = Tier II SCV values were taken from Suter II, G.W. and Tasco, C.L., 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota*: 1996 Revision. ORNL publication ES/ER/TM-96/R2

Table 4c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7, and/or 7000 Series
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Total Antimony	Dissolved Antimony	Total Arsenic	Dissolved Arsenic	Total Barium	Dissolved Barium	Total Cadmium [5]	Dissolved Cadmium	Total Chromium	Dissolved Chromium	Total Cobalt	Dissolved Cobalt	Total Copper [5]	Dissolved Copper	Total Iron	Dissolved Iron	Total lead [5]	Dissolved Lead	Total Magnesium	Dissolved Magnesium	Total Manganese	Dissolved Manganese	Mercury	Total Nickel [5]	Dissolved Nickel	Total Selenium	Dissolved Selenium	Total Silver [5]	Dissolved Silver	Total Titanium	Dissolved Titanium	Total Vanadium	Dissolved Vanadium	Total Zinc [5]	Dissolved Zinc
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																																							
Fish Consumption																																							
		EPA 2004 NRWQC (organism only)			0.64	#	0.00014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.0000146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
		Portland Harbor specific fish consumption rate			0.064	#	0.000014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.01	#	3.	0.46	#	0.42	#	#	#	#	#	#	#	2.6	#
		DEQ 2004 AWQC (organism only)			0.64	#	0.000014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.00146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
Drinking Water																																							
		MCL			0.006	#	0.01	#	2.	#	0.005	#	0.1	#	#	#	1.3	#	0.3 [7]	#	0.015	#	#	#	0.05 [7]	#	0.002	#	#	0.05	#	0.1 [7]	#	0.002	#	#	#	5 [7]	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.015	#	0.000045	#	7.3	#	0.018	#	#	#	11.	#	1.5	#	#	#	#	#	#	#	0.88	#	0.0057	0.73	#	0.18	#	0.18	#	#	#	0.26	#	11.	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																																							
		EPA 2004 NRWQC (chronic)			#	#	0.15	#	#	#	0.000094	#	#	#	#	#	0.0027	#	#	#	0.00054	#	#	#	#	#	0.00077	0.016	#	0.005 [8]	#	#	#	#	#	#	0.036	#
		DEQ 2004 AWQC (chronic)			1.6 [3]	#	#	#	#	#	0.00038 [6]	#	#	#	#	#	0.0036 [6]	#	#	#	0.00054 [6]	#	#	#	#	#	0.000012	0.049 [6]	#	0.035	#	0.00012 [6]	#	#	#	#	#	0.033	#
		Oak Ridge National Laboratory (Tier II SCV) [10]			0.03	#	0.0031 [9]	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.12	#	0.0013	#	#	#	#	0.00036	#	#	#	#	#	#	#
WS-1	CH2M HILL		Aug-85	7-22	-	-	0.005	-	-	-	0.003	-	0.01	-	-	-	0.002	-	-	-	0.052	-	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-	0.026	-
WS-2	CH2M HILL		Aug-85	7.5-22	-	-	0.005 U	-	-	-	0.002	-	0.008	-	-	-	0.007	-	-	-	0.04	-	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	0.016	-
WS-3S	CH2M HILL		Aug-85	12-27	-	-	0.005	-	-	-	0.001	-	0.005	-	-	-	0.001	-	-	-	0.025	-	-	-	-	-	-	0.005	-	-	-	-	-	-	-	-	-	0.017	-
WS-3I	G&M		Oct-90	55-60	-	-	U	-	-	-	U	-	U	-	-	-	U	-	-	-	U	-	-	-	-	-	-	U	-	-	-	-	-	-	-	-	-	U	U
	AMEC		13-Apr-04		-	-	0.00181	0.00146	-	-	-	-	-	-	-	-	0.00221	-	10.5	-	0.00043	-	55.	-	5.5	-	-	0.00452	0.00456	-	-	-	-	-	-	-	-	0.00653	0.00738
W-03-81	URS		6-Apr-00	75-80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	AMEC		13-Apr-04		-	-	0.00337	0.00305	-	-	-	-	-	-	-	-	0.00156	-	46.3	-	-	-	25.1	-	2.47	-	-	0.00476	0.00413	-	-	-	-	-	-	0.00188	-	0.00633	0.0035
WS-4	CH2M HILL		Aug-85	6.5-21.5	-	-	0.005 U	-	-	-	0.003	-	0.009	-	-	-	0.002	-	-	-	0.049	-	-	-	-	-	-	0.011	-	-	-	-	-	-	-	-	-	0.05	-
WS-5	CH2M HILL		Aug-85	5-20	-	-	0.005 U	-	-	-	0.002	-	0.006	-	-	-	0.02	-	-	-	0.028	-	-	-	-	-	-	0.006	-	-	-	-	-	-	-	-	-	0.011	-
WS-6	CH2M HILL		Aug-85	9-24	-	-	0.01	-	-	-	0.002	-	0.006	-	-	-	0.001	-	-	-	0.03	-	-	-	-	-	-	0.006	-	-	-	-	-	-	-	-	-	0.011	-
WS-7	CH2M HILL		Aug-85	10-25	-	-	0.005 U	-	-	-	0.001 U	-	0.004	-	-	-	0.004	-	-	-	0.02	-	-	-	-	-	-	0.003	-	-	-	-	-	-	-	-	-	0.047	-
			Oct-90		-	-	0.005 U	-	-	-	0.001 U	-	U	-	-	-	U	-	-	-	U	-	-	-	-	-	-	U	-	-	-	-	-	-	-	-	-	0.026	-
WS-8-33	HAI	011009-107	9-Oct-01	23-33	0.003 U	-	0.0063	-	0.184	-	0.001 U	-	0.0069	-	0.0041	-	0.0264	-	117.	-	0.0082	-	27.2	-	5.07	-	-	0.0039	-	0.005 U	-	0.0019 U	-	0.766	-	0.0397	-	0.0496	-
		011213-105	13-Dec-01		0.005 U	-	0.0162	-	0.142	-	0.002 U	-	0.005	-	0.005	-	0.005	-	76.6	-	0.005 U	-	30.	-	5.57	-	-	0.005 U	-	0.0063	-	0.005 U	-	0.0762	-	0.0059	-	0.0147	-
		020403-105	3-Apr-02		0.005 U	0.005 U	0.018	0.0148	0.115	0.104	0.005 U	0.002 U	0.005 U	0.005	0.005 U	0.005 U	0.005 U	0.015 U	90.9	81.5	0.005 U	0.01 U	21.8	19.9	4.88	4.51	-	0.005 U	0.005 U	0.005 U	0.0084	0.005 U	0.005 U	0.022 J	0.01 U	0.005 U	0.005 U	0.0243	0.015 U
		020403-106D	3-Apr-02		0.005 U	-	0.0174	-	0.114	-	0.002 U	-	0.005 U	-	0.005 U	-	0.005 U	-	89.6	-	0.005 U	-	21.5	-	4.85	-	-	0.005 U	-	0.005 U	-	0.005 U	-	0.013 J	-	0.005 U	-	0.005 U	-
		020710-104	10-Jul-02		0.005 U	0.005 U	0.0152	0.0198	0.117	0.114	0.002 U	0.0222 U	0.005 U	0.00556	0.005 U	0.0056 U	0.005 U	0.00556 U	80.6	80.7	0.005 U	0.00556 U	24.1	24.3	4.89	5.02	-	0.005 U	0.00556 U	0.005 U	0.00556 U	0.005 U	0.00556 U	0.0286	0.0111 U	0.0053	0.00556 U	0.0053 U	0.00556 U
		020710-105D	10-Jul-02		0.005 U	-	0.0173	-	0.116	-	0.002 U	-	0.005 U	-	0.005 U	-	0.005 U	-	80.3	-	0.005 U	-	24.2	-	4.89	4.89	-	0.005 U	-	0.005 U	-	0.005 U	-	0.0171	-	0.005 U	-	0.005 U	-
		5237-080521-WS8-33-105	21-May-08		0.00004 J	-	0.0151	-	0.109	-	0.000179	-	0.0011	-	-	-	0.00068	-	86.1	-	0.00104	-	27.	-	4.61	-	0.00005 U	0.00312	-	0.0004 U*	-	0.000018 U*	-	-	-	0.00415	-	0.00343 J	-
		5237-080929-WS-8-33-145	2-Sep-08		0.00009	0.00005 U	0.0132	0.0135	0.134	0.111	0.0001	0.00002 U	0.0041	0.0006	-	-	0.0098	0.0002	91.2	86.7	0.0103	0.00002 U	29.1	27.6	4.18	4.04	0.0002 U	0.0084	0.0039	0.001 U	0.001 U	0.00003	0.00002 U	-	-	0.0179	0.0032	0.0316	0.0091
		5237-090408-WS8-33-119	8-Apr-09		0.000005 U	-	0.015	-	0.118	-	0.000111	-	0.00105	-	-	-	0.00148	-	78.9	-	0.0012	-	24.1	-	4.04	-	0.00005 U	0.00406	-	0.0006 J	-	0.000005 U	-	-	-	0.00502	-	0.0047	-
		5327-090819-WS-8-33-159			0.001 U	-	0.0152	-	0.109	-	0.001 U	-	0.00209	-	-	-	0.004 U	-	91.3	-	0.00189	-	24.1	-	3.76	-	0.0001 U	0.00452	-	0.001 U	-	0.001 U	-	-	-	0.0062	-	0.00834	-
WS-8-59	HAI	011008-104	8-Oct-01	49-59	0.003 U	-	0.005 U	-	0.153	-	0.001 U	-	0.005 U	-	0.001 U	-	0.0055	-	49.6	-	0.005 U	-	0.05 U	-	2.85	-	-	0.003 U	-	0.005 U	-	0.0019 U	-	0.564	-	0.0233	-	0.0307	-
		011008-105D	8-Oct-01		0.003 U	-	0.005 U	-	0.142	-	0.001 U	-	0.005 U	-	0.001 U	-	0.0037	-	47.	-	0.005 U	-	0.05 U	-	2.84	-	-	0.003 U	-	0.005 U	-	0.0019 U	-	0.448	-	0.0173	-	0.0236	-
		011212-103	12-Dec-01		0.005 U	-	0.005 U	-	0.123	-	0.002 U	-	0.005 U	-	0.005 U	-	0.005 U	-	48.1	-	0.005 U	-	54.7	-	1.83	-	-	0.0056 U	-	0.005 U	-	0.005 U	-	0.169	-	0.0084	-	0.0104	-
		011212-104D	12-Dec-01		0.005 U	-	0.005 U	-	0.119	-	0.002 U	-	0.005 U	-	0.005 U	-	0.005 U	-	47.2	-	0.005 U	-	54.2	-	1.83	-	-	0.0055 U	-	0.005 U	-	0.005 U	-	0.132	-	0.0066	-	0.0094	-
		020403-104	3-Apr-02		0.005 U	-	0.005 U	-	0.0931	-	0.002 U	-	0.005 U	-	0.005 U	-	0.005 U	-	46.8	-	0.005 U	-	39.9	-	3.33	-	-	0.005 U	-	0.005 U	-	0.005 U	-	0.0694	-	0.005 U	-	0.0086	-
		020710-103	10-Jul-02		0.005 U	-	0.005 U	-	0.1	-	0.002 U	-	0.005 U	-	0.005 U	-	0.005 U	-	45.7	-	0.005 U	-	46.4	-	2.19	-	-	0.005 U	-	0.005 U	-	0.005 U	-	0.108	-	0.0063	-	0.0055 U	-
	HAI	5237-070716-WS-8-59-108	16-Jul-07		0.0008 U	-	0.00627	-	0.172	-	0.00038 U	-	0.0199	-	-	-	0.0277	-	72.2	-	0.00654	-	43.5	-	2.82	-	0.0002 U	0.02 U	-	0.005 U	-	0.00012 U	-	-	-	0.0668	-	0.0526 J	-
		5237-080521-WS8-56-106	21-May-08		0.00004 J	-	0.00309	-	0.177	-	0.000213 J	-	0.0113	-	-	-	0.0257	-	68.8	-	0.00627	-	61.9	-	2.	-	0.00005 U	0.0179	-	0.0006 U*	-	0.000048 U*	-	-	-	0.0403	-	0.0402 J	-
		5237-080929-WS-8-56-146	29-Sep-08		0.00005 U	0.00005 U	0.003	0.0045	0.158	0.0815	0.00016	0.00002 U	0.0192	0.0002	-	-	0.0264	0.0002	61.3	45.1	0.00804	0.00002 U	27.2	43.4	2.05	3.22	0.0002 U	0.0196	0.0031	0.001 U	0.0011	0.00005	0.00002 U	-	-	0.0583	0.0007	0.0585	0.0033
		5237-090408-WS8-59-115	8-Apr-09		0.000001 U	0.000005 U	0.0042	0.0023	0.304	0.0827	0.000383	0.000005 U	0.0363	0.00012 J	-	-	0.0647	0.00018	98.2	33.4	0.0136	0.000003 U	62.4	53.4	1.76	1.18	0.00006 J	0.0458	0.00735	0.0008 U	0.0004 U	0.000084	0.000005 U	-	-	0.107	0.00064	0.104	0.0011
		5237-090408-WS8-59-117	8-Apr-09		0.00001 U	-	0.0046	-	0.316	-	0.000379	-	0.0388	-	-	-	0.0672	-	102.	-	0.0143	-	64.4	-	1.88	-	0.00005 U	0.0476	-	0.0008 U	-	0.000084	-	-	-	0.115	-	0.111	-
		5327-090819-WS-8-59-157			-	0.001 U	-	0.00442	-	0.0737	-	0.001 U	-	0.001 U	-	-	-	0.004 U	-	45.1	-	0.001 U	-	40.7	-	3.28	-	-	0.00352	-	0.00296	-	0.001 U	-	-	-	0.002 U	-	0.004 U
WS-9-34	HAI	011008-102	8-Oct-01	24-34	0.003 U	-	0.005 U	-	0.246	-	0.001 U	-	0.005 U	-	0.0281	-	0.0074	-	33.9	-	0.005 U	-	53.3	-	4.31	-	-	0.003 U	-	0.005 U	-	0.0019 U	-	0.0055	-	0.001 U	-	0.0055	-
		011212-101	12-Dec-01		0.0067	0.0108	0.0607	0.005 U	0.923	0.0348	0.002 U	0.002 U	0.0207	0.005	0.0437	0.0112	0.0431	0.005 U	188.	88.	0.197	0.005 U	60.2	15.6	7.1	2.24	-	0.0369	0.006	0.005 U	0.005 U	0.005 U	0.005 U	0.217	0.001 U	0.0548	0.005 U	0.376	0.0155
		020402-101	2-Apr-02		0.005 U	0.0086	0.038	0.007	0.607	0.0467	0.002 U	0.002 U	0.0187	0.005	0.0273	0.0132	0.0391	0.015 U	150.	37.7	0.0948	0.01 U	45.5	22.7	4.35	2.59	-	0.0229	0.0087	0.005 U	0.0054	0.005 U	0.005 U	0.254	0.01 U	0.0482	0.005 U	0.197	0.015 U
		020710-101	10-Jul-02		0.005 U	0.00556 U	0.0311	0.00556 U	0.553	0.081	0.002 U	0.00222 U	0.0326	0.00556	0.0404	0.0231	0.0359	0.00556 U	146.	64.3	0.131	0.00556 U	57.1	36.4	6.66	4.73	-	0.0365	0.00644	0.005 U	0.00556 U	0.005 U	0.00556 U	0.27	0.0111 U	0.043	0.00556 U	0.224	0.0153
		5237-090410-WS9-34-122	10-Apr-09		0.00001 U	0.000005 U	0.0208	0.0044	0.377	0.0664	0.00267	0.000005 U	0.00962	0.00019 J	-	-	0.0575	0.00018	91.1	30.9	0.0835	0.000003 U	42.7	25.5	2.78	1.6	0.00008 J	0.0196	0.00358	0.0013 J	0.0004 U	0.000162	0.000005 U	-	-	0.0371	0.00044	0.373	0.0063
		5327-090819-WS-9-34-156			0.001 U	0.001 U	0.011	0.0108	0.0958	0.0861	0.001 U	0.001 U	0.00181	0.001 U	-	-	0.004 U	0.004 U	63.5	62.3	0.00177	0.001 U	35.9	36.2	1.75	1.74	0.0001 U	0.00523	0.0049	0.001 U	0.00161	0.001 U	0.001 U	-	-	0.00341	0.002 U	0.0111	0.004 U
WS-10-27	MFA	WS-10-27	27-Oct-03	11-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.4	-	-	-	-	-	2.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			29-Jan-04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	53.5	-	-	-	-	-	2.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			29-Apr-04		-	-	0.02 U	-	-	-	-	-	0.0133	-	0.005 U	-	0.01 U	-	48.5	-	0.02 U	-	23.4	-	3.2	-	-	0.005 U	-	0.02 U	-	0.01 U	-	0.02	-	0.0152	-	0.01 U	-
			16-Nov-04		0.02 U	-	0.02 U	-	-	-	-	-	0.0165	-	0.0073	-	0.01 U	-	63.2	-	0.02 U	-	39.1	-	7.93	-	-	0.005 U	-	0.02 U	-	0.01 U	-	0.264	-	0.0216	-	0.0405	-
			20-Nov-07		0.02 U	0.02 U	0.0032	0.0039	-	-	0.001 U	0.001 U	0.005 U	0.005 U	-	-	0.01 U	0.01 U	43.1	39.5	0.02 U	0.02 U	-	-	11.	10.6	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			8-Feb-08		0.02 U	0.02 U	0.0011	0.0011	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	12.6	10.5	0.02 U	0.02 U	-	-	1.7	1.57	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0402	0.01 U
			13-May-08		0.02 U	0.02 U	0.0039	0.004	-	-	0.001 U	0.001	0.0051	0.005 U	-	-	0.01 U	0.01 U	21.3	21.6	0.02 U	0.02 U	-	-	3.42	3.13	0.0001 U	0.0053	0.0056	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			18-Aug-08		0.02 U	0.02 U	0.0049	0.0018	-	-	0.001 U	0.001	0.0062	0.005 U	-	-	0.01 U	0.01 U	28.8	30.2	0.02 U	0.02 U	-	-	8.29	8.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
WS-11-125	MFA	WS-11-125	28-Oct-03	109-124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.5	-	-	-	-	-	1.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			30-Jan-04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	36.9	-	-	-	-	-	1.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			29-Apr-04		0.02 U	0.02 U	0.02 U	0.02 U	-	-	-	-	0.0115	-	0.005 U	-	0.01 U	-	36.7	-	0.02 U	-	46.8	-	1.88	-	-	0.005 U	-	0.02 U	-	0.01 U	-	0.0069	-	0.01 U	-	0.01 U	-
			16-Nov-04		0.02 U	-	0.02 U	0.02 U	-	-	-	-	0.0156	-	0.005 U	-	0.01 U	-	36.7	-	0.02 U	-	50.4	-	1.81	-	-	0.005 U	-	0.02 U	-	0.01 U	-	0.005	-	0.01 U	-	0.01 U	-
			28-Jun-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	183.	168.	0.02 U	0.02 U	-	-	4.49	4.76	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0114	0.01 U

Table 4c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7, and/or 7000 Series
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Total Antimony	Dissolved Antimony	Total Arsenic	Dissolved Arsenic	Total Barium	Dissolved Barium	Total Cadmium [5]	Dissolved Cadmium	Total Chromium	Dissolved Chromium	Total Cobalt	Dissolved Cobalt	Total Copper [5]	Dissolved Copper	Total Iron	Dissolved Iron	Total lead [5]	Dissolved Lead	Total Magnesium	Dissolved Magnesium	Total Manganese	Dissolved Manganese	Mercury	Total Nickel [5]	Dissolved Nickel	Total Selenium	Dissolved Selenium	Total Silver [5]	Dissolved Silver	Total Titanium	Dissolved Titanium	Total Vanadium	Dissolved Vanadium	Total Zinc [5]	Dissolved Zinc
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																																							
Fish Consumption																																							
		EPA 2004 NRWQC (organism only)			0.64	#	0.00014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.0000146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
		Portland Harbor specific fish consumption rate			0.064	#	0.000014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.01	#	3.	0.46	#	0.42	#	#	#	#	#	#	#	2.6	#
		DEQ 2004 AWQC (organism only)			0.64	#	0.000014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.00146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
Drinking Water																																							
		MCL			0.006	#	0.01	#	2.	#	0.005	#	0.1	#	#	#	1.3	#	0.3 [7]	#	0.015	#	#	#	0.05 [7]	#	0.002	#	#	0.05	#	0.1 [7]	#	0.002	#	#	#	5 [7]	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.015	#	0.000045	#	7.3	#	0.018	#	#	#	11.	#	1.5	#	#	#	#	#	#	#	0.88	#	0.0057	0.73	#	0.18	#	0.18	#	#	#	0.26	#	11.	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																																							
		EPA 2004 NRWQC (chronic)			#	#	0.15	#	#	#	0.000094	#	#	#	#	#	0.0027	#	#	#	0.00054	#	#	#	#	#	0.00077	0.016	#	0.005 [8]	#	#	#	#	#	#	#	0.036	#
		DEQ 2004 AWQC (chronic)			1.6 [3]	#	#	#	#	#	0.00038 [3]	#	#	#	#	#	0.0036 [3]	#	#	#	0.00054 [3]	#	#	#	#	#	0.000012	0.049 [3]	#	0.035	#	0.00012 [3]	#	#	#	#	#	0.033	#
		Oak Ridge National Laboratory (Tier II SCV) [10]			0.03	#	0.0031 [9]	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.12	#	0.0013	#	#	#	#	0.00036	#	#	#	#	#	#	#
WS-11-125	MFA	WS-11-125	27-Jul-06	109-124	0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	122.	118.	0.02 U	0.02 U	-	-	2.92	2.71	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			23-Aug-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	142.	135.	0.02 U	0.02 U	-	-	3.5	3.46	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			26-Sep-06		0.02 U	0.02 U	0.00158	0.0027	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	175.	173.	0.02 U	0.02 U	-	-	5.11	5.44	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0106	0.01 U
			23-Oct-06		0.02 U	0.02 U	0.00101	0.0029	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	168.	169.	0.02 U	0.02 U	-	-	5.9	5.76	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			18-Dec-06		0.02 U	0.02 U	0.00114	0.0021	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	290.	315.	0.02 U	0.02 U	-	-	9.28	9.36	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0163	0.0134
			25-Jan-07		0.02 U	0.02 U	0.001 U	0.0026	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	304.	308.	0.02 U	0.02 U	-	-	10.6	10.9	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0163	0.0137
			21-Feb-07		0.02 U	0.02 U	0.001 U	0.0027	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	332.	327.	0.02 U	0.02 U	-	-	12.5	13.4	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			21-Mar-07		0.02 U	0.02 U	0.00142	0.0043	-	-	0.0013	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	336.	318.	0.02 U	0.02 U	-	-	12.8	12.5	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0177	0.0139
			23-Apr-07		0.02 U	0.02 U	0.00198	0.0026	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	330.	328.	0.02 U	0.02 U	-	-	12.7	13.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0175	0.0141
			22-May-07		0.02 U	0.02 U	0.0027	0.0049	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	224.	256.	0.02 U	0.02 U	-	-	8.98	10.3	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0107	0.01 U
			15-Nov-07		0.02 U	0.02 U	0.0082	0.0011	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	57.5	60.9	0.02 U	0.02 U	-	-	1.45	1.64	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			14-Feb-08		0.02 U	0.02 U	0.0095	0.001	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	42.2	42.8	0.02 U	0.02 U	-	-	0.958	0.949	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			15-May-08		0.02 U	0.02 U	0.0088	0.001	-	0.224	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	36.6	36.	0.02 U	0.02 U	-	94.	0.842	0.866	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			6-Aug-08		0.02 U	0.02 U	0.0079	0.0012	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	35.	34.	0.02 U	0.02 U	-	-	0.874	0.849	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
	HAI	5237-080515-WS11-125-102	15-May-08		0.00003 J	-	0.00951	-	0.155	-	0.000008 U	-	0.0003	-	-	-	0.00037	-	35.6	-	0.000016 J	-	95.5	-	0.878 J	-	0.00005 U	0.00379	-	0.0011	-	0.000018 J	-	-	-	-	0.00037	-	0.00112	-
		5237-080929-WS-11-125-144	29-Sep-08		0.00005	0.00005	0.009	0.0082	0.136	0.0417	0.00002 U	0.00002 U	0.0003	0.0002 U	-	-	0.0003	0.0002	38.9	0.216	0.00002 U	0.00002 U	81.	76.6	1.15	0.999	0.0002 U	0.0023	0.0022	0.0018	0.0013	0.00004	0.00002 U	-	-	-	0.0003	0.0002 U	0.0081	0.0005
		5237-090407-WS11-125-102	7-Apr-09		0.00005 U	-	0.0064	-	0.128	-	0.000005 U	-	0.00031	-	-	-	0.00027 J	-	31.7	-	0.00003 U	-	64.9	-	1.01	-	0.00005 U	0.00223	-	0.001 J	-	0.00005 U	-	-	-	-	0.00026	-	0.0012	-
		5237-090818-WS-11-125-149			0.001 U	-	0.00439	-	0.114	-	0.001 U	-	0.001 U	-	-	-	0.004 U	-	35.	-	0.001 U	-	61.3	-	1.16 J	-	0.0001 U	0.00152	-	0.00171	-	0.001 U	-	-	-	-	0.002 U	-	0.00488 J	-
WS-11-161	MFA	WS-11-161	27-Oct-03	145-160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.91	-	-	-	-	-	1.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			29-Jan-04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.6	-	-	-	-	-	2.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			27-Apr-04		0.02 U	-	0.02 U	-	-	-	-	-	0.015	-	0.005 U	-	0.01 U	-	22.7	-	0.02 U	-	20.2	-	1.85	-	-	0.005 U	-	0.02 U	-	0.01 U	-	0.005 U	-	0.01 U	-	0.0125	-
			16-Nov-04		0.02 U	-	0.02 U	-	-	-	-	-	0.0189	-	0.005 U	-	0.01 U	-	25.5	-	0.02 U	-	24.3	-	2.34	-	-	0.005 U	-	0.02 U	-	0.01 U	-	0.005 U	-	0.01 U	-	0.01 U	-
			15-Nov-07		0.02 U	0.02 U	0.0063	0.007	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	32.2	32.8	0.02 U	0.02 U	-	-	2.95	3.07	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			11-Feb-08		0.02 U	0.02 U	0.0061	0.0068	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	36.9	35.6	0.02 U	0.02 U	-	-	2.81	2.85	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			15-May-08		0.02 U	0.02 U	0.0068	0.008	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	34.7	68.5	0.02 U	0.02 U	-	-	3.2	2.92	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			6-Aug-08		0.02 U	0.02 U	0.0065	0.0086	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	36.	35.	0.02 U	0.02 U	-	-	3.16	0.292	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
	HAI	5237-070712-WS11-161	12-Jul-07		0.0008 U	-	0.0065	-	0.0766	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	28.4	-	0.00054 U	-	21.	-	1.93	-	0.0002 U	0.002 U	-	0.005 U	-	0.00012 U	-	-	-	-	0.004 U	-	0.033 U	-
		5237-080515-WS11-161-103	15-May-08		0.00002 U	-	0.00735	-	0.0868	-	0.000008 U	-	0.00033	-	-	-	0.00019	-	34.8	-	0.000003 U	-	28.3	-	2.83 J	-	0.00005 U	0.00096	-	0.0002 J	-	0.000003 U	-	-	-	-	0.0002	-	0.00081	-
		5237-080929-WS-11-161-142	29-Sep-08		0.00005 U	0.00005 U	0.0083	0.0007	0.0836	0.024	0.00002 U	0.00002 U	0.0004	0.0002 U	-	-	0.0002	0.0001	33.9	0.02 U	0.00002 U	0.00002 U	27.6	28.7	2.85	2.82	0.0002 U	0.0011	0.0011	0.001 U	0.001 U	0.00002 U	0.00002 U	-	-	0.0002 U	0.0002 U	0.0029	0.0005
		5237-080929-WS-11-161-143	29-Sep-08		0.00005 U	0.00005 U	0.0084	0.0009	0.0811	0.0258	0.00002 U	0.00002 U	0.0003	0.0002 U	-	-	0.0003	0.0002	31.8	0.043	0.00004	0.00002 U	25.9	27.6	2.67	2.68	0.0002 U	0.001	0.0011	0.001 U	0.001 U	0.00002 U	0.00002 U	-	-	0.0002 U	0.0002 U	0.0035	0.0012
		5237-090407-WS11-161-100	7-Apr-09		0.000005 U	-	0.0075	-	0.0774	-	0.000005 U	-	0.00031	-	-	-	0.00017 J	-	30.	-	0.000003 U	-	25.	-	2.62	-	0.00005 U	0.00102	-	0.0004 U	-	0.000005 U	-	-	-	-	0.00016 J	-	0.0013	-
		5237-090818-WS-11-161-147			0.001 U	-	0.00719	-	0.0739	-	0.001 U	-	0.001 U	-	-	-	0.004 U	-	29.	-	0.001 U	-	23.7	-	2.5 J	-	0.0001 U	0.00108	-	0.001 U	-	0.001 U	-	-	-	-	0.002 U	-	0.00462 J	-
WS-12-125	MFA	WS-12-125	28-Oct-03	109-124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.9	-	-	-	-	-	1.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			30-Jan-04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	42.7	-	-	-	-	-	1.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			26-Apr-04		0.02 U	-	0.02 U	-	-	-	-	-	0.0102	-	0.005 U	-	0.01 U	-	44.3	-	0.02 U	-	31.	-	1.76	-	-	0.005 U	-	-	-	0.01 U	-	0.0086	-	0.01 U	-	0.01 U	-
			17-Nov-04		0.02 U	-	0.02 U	-	-	-	-	-	0.0177	-	0.005 U	-	0.01 U	-	43.7	-	0.02 U	-	37.1	-	1.88	-	-	0.005 U	-	-	-	0.01 U	-	0.005 U	-	0.01 U	-	0.01 U	-
			13-Nov-07		0.02 U	0.02 U	0.0013	0.0017	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	45.8	47.3	0.02 U	0.02 U	-	-	2.31	2.43	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			11-Feb-08		0.02 U	0.02 U	0.0014	0.0017	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	51.3	53.2	0.02 U	0.02 U	-	-	2.46	2.47	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			21-May-08		0.02 U	0.02 U	0.0012	0.0017	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	46.6	47.7	0.02 U	0.02 U	-	-	2.54	2.6	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			6-Aug-08		0.02 U	0.02 U	0.0014	0.0019	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	49.2	47.3	0.02 U	0.02 U	-	-	2.66	0.246	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
	HAI	5237-070712-WS12-125	12-Jul-07		0.0008 U	-	0.00171	-	0.0953	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	44.1	-	0.00054 U	-	35.5	-	2.17	-	0.0002 U	0.002 U	-	0.005 U	-	0.00012 U	-	-	-	-	0.004 U	-	0.033 U	-
		5237-080521-WS12-126-104	21-May-08		0.00002 U	-	0.0021	-	0.0878	-	0.000008 U	-	0.00034 J	-	-	-	0.00013	-	45.3	-	0.000037 J	-	37.2	-	2.45	-	0.00005 U	0.00174	-	0.0017	-	0.000003 U	-	-	-	-	0.00024	-	0.00068 J	-
		5237-080925-WS-12-125-140	25-Sep-08		0.00001 U	-	0.00133	-	0.0908 N	-	0.000007 J	-	0.00044	-	-	-	0.00015	-	44.1	-	0.000013 J	-	35.1	-	2.36	-	0.00005 U	0.00198	-	0.0005 U	-	0.000009 U	-	-	-	-	0.00023	-	0.00192	-
		5237-090407-WS12-125-106	7-Apr-09		0.000005 U	-	0.0018	-	0.105	-	0.000008 J	-	0.00029	-	-	-	0.00047 J	-	46.	-	0.000061	-	36.8	-	2.58	-	0.00005 U	0.0023	-	0.0014	-	0.000005 U	-	-	-	-	0.00016 J	-	0.0094	-
		5237-090818-WS-12-125-145			0.001 U	-	0.00242	-	0.0836	-	0.001 U	-	0.001 U	-	-	-	0.004 U	-	45.6	-	0.001 U	-	35.5	-	2.41 J	-	0.0001 U	0.00243	-	0.00541	-	0.001 U	-	-	-	-	0.002 U	-	0.0089 J	-
WS-12-161	MFA	WS-12-161	27-Oct-03	145-160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.67	-	-	-	-	-	1.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			29-Jan-04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.8	-	-	-	-	-	1.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			26-Apr-04		0.02 U	-	0.02 U	-	-	-	-	-	0.0126	-	0.005 U	-	0.01 U	-	16.5	-	0.02 U	-	20.2	-	1.27	-	-	0.005 U	-	-	0.02 U	0.01 U	-	0.005 U	-	0.01 U	-	0.0271	-
			17-Nov-04		0.02 U	-	0.02 U	-	-	-	-	-	0.0253	-	0.005 U	-	0.01 U	-	26.7	-	0.02 U	-	28.5	-	2.04	-	-	0.005 U	-	-	0.02 U	0.01 U	-	0.0292	-	0.01 U	-	0.0102	-
			13-Nov-07		0.02 U	0.02 U	0.0019	0.0023	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	20.	19.	0.02 U	0.02 U	-	-	1.82	1.83	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			11-Feb-08		0.02 U	0.02 U	0.0017	0.0022	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	20.1	21.3	0.02 U	0.02 U	-	-	1.83	1.85	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			21-May-08		0.02 U	0.02 U	0.0018	0.0022	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	19.8	20.2	0.02 U	0.02 U	-	-	2.18	2.	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			5-Aug-08		0.02 U	0.02 U	0.0019	0.0025	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	19.8	19.1	0.02 U	0.02 U	-	-	1.93	1.85	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
	HAI	5237-070712-WS12-161	12-Jul-07		0.0008 U	-	0.0019	-	0.0606	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	18.2	-	0.00054 U	-	22.	-	1.69	-	0.0002 U	0.002 U	-	0.005 U	-	0.00012 U	-	-	-	-	0.004 U	-	0.033 U	-
		5237-080521-WS12-161-107	21-May-08		0.00002 U	-	0.00207	-	0.0569	-	0.000008 U	-	0.00017 J	-	-	-	0.0001	-	18.7	-	0.000005 J	-	25.1	-	2.	-	0.00005 U	0.00055	-	0.0003 U*	-	0.000004 U*	-	-	-	-	0.00007	-	0.00063 J	-
		5237-080925-WS-12-161-141	25-Sep-08		0.00001 U	-	0.00237	-	0.0566 N	-	0.000005 U	-	0.00021	-	-	-	0.00008 J	-	17.6	-	0.000006 U	-	23.6	-	1.92	-	0.00005 U	0.0006	-	0.0005 U	-	0.000009 U*	-	-	-	-	0.0001 J	-	0.00136	-
		5237-090407-WS12-161-104	7-Apr-09		0.000005 U	-	0.0023	-	0.0552	-	0.000005 U	-	0.00009 J	-	-	-	0.0002 J	-	17.9	-	0.00003 U	-	23.9	-	1.92	-	0.00005 U	0.00068	-	0.0004 U	-	0.000005 U	-	-	-	-	0.00006 J	-	0.0022	-
		5237-090818-WS-12-161-143			0.001 U	-	0.00252	-	0.0549	-	0.001 U	-	0.001 U	-	-	-	0.004 U	-	17.9	-	0.001 U	-	23.1	-	1.89 J	-	0.0001 U	0.001 U	-	0.001 U	-	0.001 U	-	-	-	-	0.002 U	-	0.00506 J	-
WS-13-69	MFA	WS-13-69	29-Oct-03	52.6-67.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31.	-	-	-	-	-	6.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			30-Jan-04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	65.7	-	-	-	-	-	6.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			28-Apr-04		0.02 U	-	0.02 U	-	-	-	-	-	0.0114	-	0.009	-	0.01 U	-	74.1	-	0.02 U	-	40.1	-	6.93	-	-	0.0131	-	0.02 U	-	0.01 U	-	0.005 U	-	0.01 U	-	0.0117	-
			18-Nov-04		0.02 U	-	0.02 U	-	-	-	-	-	0.0265	-	0.007	-	0.01 U	-	88.3	-	0.02 U	-	49.3	-	9.1	-	-	0.005 U	-	0.02 U	-	0.01 U	-	0.005	-	0.01 U	-	0.0117	-
			19-Jul-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	98.8	95.1	0.02 U	0.02 U	-	-	10.9	10.4	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			24-Aug-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	98.8	101.	0.02 U	0.02 U	-	-	10.4	10.6	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			27-Sep-06		0.02 U	0.02 U	0.00852	0.0044	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	94.6	97.2	0.02 U	0.02 U	-	-	11.1	10.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			25-Oct-06		0.02 U	0.02 U	0.00838	0.001	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	106.	104.	0.02 U	0.02 U	-	-	10.7	10.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			15-Nov-06		0.02 U	0.02 U	0.00863	0.001	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	94.	93.5	0.02 U	0.02 U	-	-	10.3	9.86	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			25-Jan-07		0.02 U	0.02 U	0.00813	0.001	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	97.7	102.	0.02 U	0.02 U	-	-	10.2	10.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			21-Feb-07		0.02 U	0.02 U	0.00812	0.0011	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	89.6	89.1	0.02 U	0.02 U	-	-	10.3	10.9	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			22-Mar-07		0.02 U	0.02 U	0.00891	0.0011	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	95.1	89.7	0.02 U	0.02 U	-	-	10.2	9.76	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			24-Apr-07		0.02 U	0.02 U	0.00836	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	90.3	89.9	0.02 U	0.02 U	-	-	9.86	10.4	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			23-May-07		0.02 U	0.02 U	0.0089	0.0011	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	91.	95.5	0.02 U	0.02 U	-	-	10.7	10.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			15-Nov-07		0.02 U	0.02 U	0.0095	0.0011	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	92.6	96.2	0.02 U	0.02 U	-	-	11.4	10.2	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			12-Feb-08		0.02 U	0.02 U	0.0088	0.001	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	95.	102.	0.02 U	0.02 U	-	-	11.	10.5	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			14-May-08		0.0292	0.02 U	0.0089	0.0012	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	114.	99.4	0.02 U	0.02 U	-	-	11.5	11.4	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			8-Aug-08		0.02 U	0.02 U	0.0082	0.0087	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	98.1	96.2	0.02 U	0.02 U	-	-	12.	11.1	0.0001 U	0.005 U	0.005 U	0.02 U

Table 4c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7, and/or 7000 Series
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Total Antimony	Dissolved Antimony	Total Arsenic	Dissolved Arsenic	Total Barium	Dissolved Barium	Total Cadmium [5]	Dissolved Cadmium	Total Chromium	Dissolved Chromium	Total Cobalt	Dissolved Cobalt	Total Copper [5]	Dissolved Copper	Total Iron	Dissolved Iron	Total lead [5]	Dissolved Lead	Total Magnesium	Dissolved Magnesium	Total Manganese	Dissolved Manganese	Mercury	Total Nickel [5]	Dissolved Nickel	Total Selenium	Dissolved Selenium	Total Silver [5]	Dissolved Silver	Total Titanium	Dissolved Titanium	Total Vanadium	Dissolved Vanadium	Total Zinc [5]	Dissolved Zinc
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																																							
Fish Consumption																																							
		EPA 2004 NRWQC (organism only)			0.64	#	0.00014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.0000146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
		Portland Harbor specific fish consumption rate			0.064	#	0.000014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.01	#	3.	0.46	#	0.42	#	#	#	#	#	#	#	2.6	#
		DEQ 2004 AWQC (organism only)			0.64	#	0.000014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.00146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
Drinking Water																																							
		MCL			0.006	#	0.01	#	2.	#	0.005	#	0.1	#	#	#	1.3	#	0.3 [7]	#	0.015	#	#	#	0.05 [7]	#	0.002	#	#	0.05	#	0.1 [7]	#	0.002	#	#	#	5 [7]	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.015	#	0.000045	#	7.3	#	0.018	#	#	#	11.	#	1.5	#	#	#	#	#	#	#	0.88	#	0.0057	0.73	#	0.18	#	0.18	#	#	#	0.26	#	11.	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																																							
		EPA 2004 NRWQC (chronic)			#	#	0.15	#	#	#	0.000094	#	#	#	#	#	0.0027	#	#	#	0.00054	#	#	#	#	#	0.00077	0.016	#	0.005 [8]	#	#	#	#	#	#	#	0.036	#
		DEQ 2004 AWQC (chronic)			1.6 [3]	#	#	#	#	#	0.00038 [3]	#	#	#	#	#	0.0036 [3]	#	#	#	0.00054 [3]	#	#	#	#	#	0.000012	0.049 [3]	#	0.035	#	0.00012 [3]	#	#	#	#	#	0.033	#
		Oak Ridge National Laboratory (Tier II SCV) [10]			0.03	#	0.0031 [9]	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.12	#	0.0013	#	#	#	#	0.00036	#	#	#	#	#	#	#
WS-13-105	MFA	WS-13-105	29-Oct-03	89-104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.9	-	-	-	-	-	2.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			30-Jan-04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	47.6	-	-	-	-	-	2.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			28-Apr-04		0.02 U	-	0.02 U	-	-	-	-	-	0.0153	-	0.005 U	-	0.01 U	-	26.6	-	-	0.02 U	19.6	-	1.94	-	-	0.005 U	-	0.02 U	-	0.01 U	-	0.005 U	-	0.01 U	-	0.0246	-
		Duplicate	28-Apr-04		0.02 U	-	-	-	-	-	-	-	0.0147	-	0.005 U	-	-	-	27.1	-	-	-	19.8	-	1.95	-	-	0.005 U	-	-	-	-	-	0.005 U	-	0.01 U	-	0.0282	-
			18-Nov-04		0.02 U	-	0.02 U	-	-	-	-	-	0.0359	-	0.005 U	-	0.01 U	-	50.1	-	-	0.02 U	26.4	-	2.57	-	-	0.005 U	-	0.02 U	-	0.01 U	-	0.0855	-	0.01 U	-	0.01 U	-
		Duplicate	18-Nov-04		0.02 U	-	-	-	-	-	-	-	0.0221	-	0.005 U	-	0.01 U	-	52.4	-	-	-	27.5	-	2.61	-	-	0.005 U	-	-	-	-	-	0.0786	-	0.01 U	-	0.01 U	-
			19-Jul-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	56.3	52.5	0.02 U	0.02 U	-	-	2.83	2.7	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			24-Aug-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	61.8	52.1	0.02 U	0.02 U	-	-	2.81	2.77	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			27-Sep-06		0.02 U	0.02 U	0.00884	0.0088	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	54.5	52.2	0.02 U	0.02 U	-	-	2.65	2.62	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			25-Oct-06		0.02 U	0.02 U	0.00887	0.001	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	59.9	57.9	0.02 U	0.02 U	-	-	2.83	2.56	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0115	0.01 U
			15-Nov-06		0.02 U	0.02 U	0.00869	0.0091	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	51.2	56.2	0.02 U	0.02 U	-	-	2.63	2.52	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			25-Jan-07		0.02 U	0.02 U	0.00798	0.0096	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	54.1	50.3	0.02 U	0.02 U	-	-	2.73	2.65	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			21-Feb-07		0.02 U	0.02 U	0.00863	0.0094	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	51.	48.7	0.02 U	0.02 U	-	-	2.65	2.51	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			21-Mar-07		0.02 U	0.02 U	0.00836	0.0095	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	51.5	50.5	0.02 U	0.02 U	-	-	2.57	2.52	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			24-Apr-07		0.02 U	0.02 U	0.00811	0.0055	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	50.7	49.5	0.02 U	0.02 U	-	-	2.62	2.64	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			23-May-07		0.02 U	0.02 U	0.0084	0.0095	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	52.4	51.4	0.02 U	0.02 U	-	-	2.72	2.6	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			19-Nov-07		0.02 U	0.02 U	0.0089	0.0088	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	46.6	40.8	0.02 U	0.02 U	-	-	2.65	2.68	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0106	0.01 U
			12-Feb-08		0.02 U	0.02 U	0.0083	0.0087	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	51.4	57.3	0.02 U	0.02 U	-	-	2.79	2.57	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			13-May-08		0.02 U	0.02 U	0.0083	0.0099	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	53.8	53.8	0.02 U	0.02 U	-	-	2.83	2.79	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			8-Aug-08		0.02 U	0.02 U	0.0083	0.0086	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	52.7	53.1	0.02 U	0.02 U	-	-	2.84	2.66	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	0.0124	<0.01 U	-	-	-	-	0.01 U	0.01 U
WS-14-125	MFA	WS-14-125	16-Nov-04	109-124	0.02 U	-	-	-	-	-	-	-	0.0153	-	0.005 U	-	0.01 U	-	23.6	-	-	-	23.	-	1.46	-	-	0.005 U	-	-	-	-	-	0.0113	-	0.01 U	-	0.0151	-
			14-Nov-07		0.02 U	0.02 U	0.012	0.013	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	17.7	17.7	0.02 U	0.02 U	-	-	1.19	1.31	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			11-Feb-08		0.02 U	0.02 U	0.012	0.013	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	17.	19.6	0.02 U	0.02 U	-	-	1.24	1.28	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			15-May-08		0.02 U	0.02 U	0.011	0.013	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	18.4	18.4	0.02 U	0.02 U	-	-	1.34	1.38	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			4-Aug-08		0.02 U	0.02 U	0.012	0.016	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	17.5	17.2	0.02 U	0.02 U	-	-	1.34	1.33	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
	HAI	5237-070712-WS14-125	12-Jul-07		0.0008 U	-	0.0119	-	0.0469	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	18.2	-	0.00054 U	-	22.2	-	1.28	-	0.0002 U	0.002 U	-	0.005 U	-	0.00012 U	-	-	-	0.004 U	-	0.033 U	-
		5237-080515-WS14-125-100	15-May-08		0.00002 U	-	0.012	-	0.048	-	0.000008 U	-	0.00027	-	-	-	0.00014	-	17.1	-	0.000003 U	-	24.1	-	1.34 J	-	0.00005 U	0.0009	-	0.0005 J	-	0.000005 J	-	-	-	0.00024	-	0.00095	-
		5237-080925-WS-14-125-138	25-Sep-08		0.00001 U	-	0.0137	-	0.0476 N	-	0.000005 U	-	0.00021	-	-	-	0.00013	-	15.7	-	0.000007 J	-	22.8	-	1.32	-	0.00005 U	0.00103	-	0.0005 U	-	0.00001 J	-	-	-	0.00023	-	0.00165	-
		5237-090408-WS14-125-110	8-Apr-09		0.000005 U	0.000007 J	0.0128	0.0002 J	0.0473	0.0396	0.000008 J	0.000075	0.00015 J	0.00031	-	-	0.00023	0.00064	16.1	0.0507	0.000028	0.000011 J	22.7	5.58	1.29	0.391	0.00005 U	0.0011	0.0097	0.0004 J	0.0004 U	0.000005 U	0.000005 U	-	-	0.00025	0.00047	0.0035	0.0057
		5327-090819-WS-14-125-155			0.001 U	-	0.0127	-	0.0482	-	0.001 U	-	0.001 U	-	-	-	0.004 U	-	16.4	-	0.001 U	-	23.3	-	1.36	-	0.0001 U	0.00103	-	0.001 U	-	0.001 U	-	-	-	0.002 U	-	0.004 U	-
WS-14-161	MFA	WS-14-161	16-Nov-04	145-160	0.02 U	-	0.02 U	-	-	-	-	-	0.0122	-	0.0072	-	0.01 U	-	29.1	-	-	-	28.6	-	1.96	-	-	0.005 U	-	-	-	-	-	0.005 U	-	0.01 U	-	0.0378	-
			14-Nov-07		0.02 U	0.02 U	0.011	0.012	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	29.4	29.3	0.02 U	0.02 U	-	-	1.96	2.12	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			11-Feb-08		0.02 U	0.02 U	0.0096	0.012	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	31.7	33.6	0.02 U	0.02 U	-	-	2.24	2.23	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			15-May-08		0.02 U	0.02 U	0.012	0.012	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	31.	30.4	0.02 U	0.02 U	-	-	2.36	2.33	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			4-Aug-08		0.02 U	0.02 U	0.011	0.014	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	29.4	29.8	0.02 U	0.02 U	-	-	2.35	2.32	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
	HAI	5237-070712-WS14-161	12-Jul-07		0.0008 U	-	0.0113	-	0.0395	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	30.4	-	0.00054 U	-	27.2	-	1.89	-	0.0002 U	0.00247	-	0.005 U	-	0.00012 U	-	-	-	0.004 U	-	0.033 U	-
		5237-080515-WS14-161-101	15-May-08		0.00002 U	-	0.0118	-	0.0395	-	0.000008 U	-	0.00016 J	-	-	-	0.0001	-	28.9	-	0.000003 U	-	28.3	-	2.18 J	-	0.00005 U	0.00218	-	0.0004 J	-	0.000015 J	-	-	-	0.00022	-	0.00135	-
		5237-080925-WS-14-161-139	25-Sep-08		0.00001 U	-	0.0123	-	0.0382 N	-	0.000005 U	-	0.00025	-	-	-	0.00014	-	27.5	-	0.000008 J	-	27.3	-	2.24	-	0.00005 U	0.00206	-	0.0005 U	-	0.00001 J	-	-	-	0.00021	-	0.00313	-
		5237-090408-WS14-161-108	8-Apr-09		0.000005 U	-	0.0117	-	0.0389	-	0.000005 U	-	0.0002 J	-	-	-	0.00019	-	27.6	-	0.000003 U	-	27.2	-	2.15	-	0.00005 U	0.00223	-	0.0004 U	-	0.000005 U	-	-	-	0.0002 J	-	0.0028	-
		5237-090818-WS-14-161-151			0.001 U	-	0.0114	-	0.0374	-	0.001 U	-	0.001 U	-	-	-	0.004 U	-	27.8	-	0.001 U	-	27.3	-	2.14 J	-	0.0001 U	0.00191	-	0.001 U	-	0.001 U	-	-	-	0.002 U	-	0.0206 J	-
WS-15-85	MFA	WS-15-85	18-Nov-04	70-85	0.0212	-	0.02 U	-	-	-	-	-	0.0449	-	0.0116	-	0.0106	-	39.6	-	-	-	32.4	-	7.82	-	-	0.005 U	-	-	-	-	-	0.25	-	0.0193	-	0.0275	-
			15-Nov-07		0.02 U	0.02 U	0.0082	0.0098	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	40.4	54.9	0.02 U	0.02 U	-	-	7.16	9.04	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			12-Feb-08		0.02 U	0.02 U	0.004	0.0045	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	47.4	57.7	0.02 U	0.02 U	-	-	5.06	5.41	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0135	0.01 U
			14-May-08		0.02 U	0.02 U	0.009	0.011	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	55.2	56.5	0.02 U	0.02 U	-	-	9.61	9.54	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			8-Aug-08		0.02 U	0.02 U	0.0011	0.01	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	52.2	52.4	0.02 U	0.02 U	-	-	10.2	9.9	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.557	0.01 U
WS-15-140	MFA	WS-15-140	18-Nov-04	125-140	0.02 U	-	0.02 U	-	-	-	-	-	0.0704	-	0.005 U	-	0.01 U	-	12.	-	-	-	32.1	-	1.16	-	-	0.005 U	-	-	-	-	-	0.005 U	-	0.01 U	-	0.0216	-
			15-Nov-07		0.02 U	0.02 U	0.0022	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	14.7	14.9	0.02 U	0.02 U	-	-	1.27	1.3	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			12-Feb-08		0.02 U	0.02 U	0.0017	0.0019	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	14.9	14.7	0.02 U	0.02 U	-	-	1.24	1.27	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			14-May-08		0.02 U	0.02 U	0.0015	0.0018	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	13.	13.3	0.02 U	0.02 U	-	-	1.32	1.36	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			8-Aug-08		0.02 U	0.02 U	0.0015	0.0014	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	13.2	12.4	0.02 U	0.02 U	-	-	1.34	1.31	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
WS-16-125	MFA	WS-16-125	17-Nov-04	109-124	0.02 U	-	0.02 U	-	-	-	-	-	0.0135	-	0.005 U	-	0.01 U	-	48.8	-	-	-	32.1	-	4.48	-	-	0.005 U	-	-	-	-	-	0.005 U	-	0.01 U	-	0.0291	-
			19-Nov-07		0.02 U	0.02 U	0.0068	0.0078	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	39.8	41.6	0.02 U	0.02 U	-	-	4.72	5.03	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			12-Feb-08		0.02 U	0.02 U	0.0061	0.0073	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	51.1	50.	0.02 U	0.02 U	-	-	5.1	5.07	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			14-May-08		0.02 U	0.02 U	0.0066	0.0079	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	50.8	49.6	0.02 U	0.02 U	-	-	5.9	5.24	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			5-Aug-08		0.02 U	0.02 U	0.0066	0.0097	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	46.8	47.6	0.02 U	0.02 U	-	-	5.29	0.519	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
WS-16-161	MFA	WS-16-161	17-Nov-04	145-160	0.02 U	-	0.02 U	-	-	-	-	-	0.005 U	-	0.0066	-	0.01 U	-	30.3	-	-	-	29.2	-	2.56	-	-	0.005 U	-	-	-	-	-	0.0572	-	0.0108	-	0.162	-
			15-Nov-07		0.02 U	0.02 U	0.0051	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	26.8	29.4	0.02 U	0.02 U	-	-	3.13	2.9	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			8-Feb-08		0.02 U	0.02 U	0.005	0.0055	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	31.5	32.	0.02 U	0.02 U	-	-	2.98	3.	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			16-May-08		0.02 U	0.02 U	0.0051	0.0059	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	28.5	28.6	0.02 U	0.02 U	-	-	3.23	2.78	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0128	0.01 U
			5-Aug-08		0.02 U	0.02 U	0.0057	0.0067	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	30.8	29.6	0.02 U	0.02 U	-	-	3.11	3.02	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0507	0.01 U
WS-17-52	MFA	WS-17-52	16-Nov-04	41-51	0.02 U	-	0.02 U	-	-	-	-	-	0.0627	-	0.0225	-	0.0174	-	48.7	-	-	-	31.4	-	4.78	-	-	0.245	-	-	-	-	-	0.329	-	0.0202	-	0.0489	-
			14-Nov-07		0.02 U	0.02 U	0.0017	0.0019	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	29.2	28.5	0.02 U	0.02 U	-	-	4.18	4.42	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0207	0.01
			8-Feb-08		0.02 U	0.02 U	0.001 U	0.001	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	4.26	3.65	0.02 U	0.02 U	-	-	3.58	3.71	0.0001 U	0.0137	0.0138	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0161	0.022
			13-May-08		0.02 U	0.02 U	0.001	0.001 U	-	-	0.001 U	0.001	0.005	0.005 U	-	-	0.01 U	0.01 U	9.2	7.26	0.02 U	0.02 U	-	-	4.32	3.93	0.0001 U	0.0108	0.0081	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0151	0.01 U
			18-Aug-08		0.02 U	0.02 U	0.0016	0.0017	-	-	0.001 U	0.001	0.005 U	0.005	-	-	0.01 U	0.01 U	18.	18.6	0.02 U	0.02 U	-	-	4.16	4.16	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0129	0.0127
WS-17-94	MFA	WS-17-94	17-Nov-04	78-93	0.02 U	-	0.02 U	-	-	-	-	-	0.0163	-	0.005 U	-	0.01 U	-	31.9	-	-	-	24.6	-	3.44	-	-	0.005 U	-	-	-	-	-	0.0216	-	0.0101	-	0.0171	-
			14-Nov-07		0.02 U	0.02 U	0.0068	0.0072	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	45.8	52.	0.02 U	0.02 U	-	-	2.63	2.64	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			8-Feb-08		0.02 U	0.02 U	0.0064	0.0071	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	54.3	53.	0.02 U	0.02 U	-	-	2.81	2.81	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			13-May-08		0.02 U	0.02 U	0.0065	0.0078	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	49.1	49.	0.02 U	0.02 U	-	-	2.92	2.87	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			18-Aug-08		0.02 U	0.02 U	0.0069	0.0072	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	53.3	54.9	0.02 U	0.02 U	-	-	3.03	2.85	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
WS-18-71	MFA	WS-18-71	27-Jun-06	61 - 71	0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0713	0.005 U	-	-	0.0872	0.01 U	176.	0.01 U	0.02 U	0.02 U	-	-	17.	15.1	0.0001 U	0.043	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.162	0.0164
			19-Jul-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0136	0.005 U	-	-	0.01 U	0.01 U	92.3	76.7	0.02 U	0.02 U	-	-	17.2	16.5	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0314	0.01 U
			29-Aug-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0051	0.005 U	-	-	0.01 U	0.01 U	91.3	77.8	0.02 U	0.02 U	-	-	15.5	15.8	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0178	0.01 U
			26-Sep-06		0.02 U	0.02 U	0.00385	0.0041

Table 4c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7, and/or 7000 Series
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Total Antimony	Dissolved Antimony	Total Arsenic	Dissolved Arsenic	Total Barium	Dissolved Barium	Total Cadmium [5]	Dissolved Cadmium	Total Chromium	Dissolved Chromium	Total Cobalt	Dissolved Cobalt	Total Copper [5]	Dissolved Copper	Total Iron	Dissolved Iron	Total lead [5]	Dissolved Lead	Total Magnesium	Dissolved Magnesium	Total Manganese	Dissolved Manganese	Mercury	Total Nickel [5]	Dissolved Nickel	Total Selenium	Dissolved Selenium	Total Silver [5]	Dissolved Silver	Total Titanium	Dissolved Titanium	Total Vanadium	Dissolved Vanadium	Total Zinc [5]	Dissolved Zinc
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																																							
Fish Consumption																																							
		EPA 2004 NRWQC (organism only)			0.64	#	0.00014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.0000146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
		Portland Harbor specific fish consumption rate			0.064	#	0.000014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.01	#	3.	0.46	#	0.42	#	#	#	#	#	#	#	2.6	#
		DEQ 2004 AWQC (organism only)			0.64	#	0.00014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.00146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
Drinking Water																																							
		MCL			0.006	#	0.01	#	2.	#	0.005	#	0.1	#	#	#	1.3	#	0.3 [7]	#	0.015	#	#	#	0.05 [7]	#	0.002	#	#	0.05	#	0.1 [7]	#	0.002	#	#	#	5 [7]	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.015	#	0.000045	#	7.3	#	0.018	#	#	#	11.	#	1.5	#	#	#	#	#	#	#	0.88	#	0.0057	0.73	#	0.18	#	0.18	#	#	#	0.26	#	11.	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																																							
		EPA 2004 NRWQC (chronic)			#	#	0.15	#	#	#	0.000094	#	#	#	#	#	0.0027	#	#	#	0.00054	#	#	#	#	#	0.00077	0.016	#	0.005 [8]	#	#	#	#	#	#	#	0.036	#
		DEQ 2004 AWQC (chronic)			1.6 [3]	#	#	#	#	#	0.00038 [6]	#	#	#	#	#	0.0036 [6]	#	#	#	0.00054 [6]	#	#	#	#	#	0.000012	0.049 [6]	#	0.035	#	0.00012 [6]	#	#	#	#	#	0.033	#
		Oak Ridge National Laboratory (Tier II SCV) [10]			0.03	#	0.0031 [9]	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.12	#	0.0013	#	#	#	#	0.00036	#	#	#	#	#	#	#
WS-18-71	MFA	WS-18-71	22-Mar-07	61 - 71	0.02 U	0.02 U	0.001 U	0.0025	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	43.	46.2	0.02 U	0.02 U	-	-	15.8	17.	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0212	0.01 U
			24-Apr-07		0.02 U	0.02 U	0.001 U	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	20.2	27.7	0.02 U	0.02 U	-	-	15.9	18.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			22-May-07		0.02 U	0.02 U	0.001 U	0.0017	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	22.9	34.8	0.02 U	0.02 U	-	-	14.5	17.4	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0193	0.01 U
			16-Nov-07		0.02 U	0.02 U	0.0014	0.0016	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	70.7	74.8	0.02 U	0.02 U	-	-	24.6	26.8	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			13-Feb-08		0.02 U	0.02 U	0.001 U	0.001 U	-	-	0.001 U	0.001	0.0065	0.0068	-	-	0.01 U	0.01 U	54.3	68.7	0.02 U	0.02 U	-	-	17.4	21.	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			20-May-08		0.024	0.0251	0.0013	0.0018	-	-	0.001 U	0.001	0.0075	0.0062	-	-	0.01 U	0.01 U	94.2	92.	0.02 U	0.02 U	-	-	26.1	28.4	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			12-Aug-08		0.029	0.02 U	0.0054	0.0023	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	96.2	96.5	0.02 U	0.02 U	-	-	26.4	27.5	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
WS-18-101	MFA	WS-18-101	28-Jun-06	92 - 102	0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0311	0.005 U	-	-	0.0194	0.01 U	68.4	0.01 U	0.02 U	0.02 U	-	-	7.	6.38	0.0001 U	0.0677	0.0361	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.114	0.0483
			19-Jul-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0133	0.005 U	-	-	0.01 U	0.01 U	53.5	37.8	0.02 U	0.02 U	-	-	7.22	6.43	0.0001 U	0.0114	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.079	0.0614
			28-Aug-06		0.0425	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0086	0.005 U	-	-	0.01 U	0.01 U	53.	42.4	0.02 U	0.02 U	-	-	6.78	6.5	0.0001 U	0.0116	0.0068	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0531	0.0261
			26-Sep-06		0.02 U	0.02 U	0.00511	0.0032	-	-	0.001 U	0.001	0.0118	0.005 U	-	-	0.01 U	0.01 U	63.9	50.5	0.02 U	0.02 U	-	-	7.2	7.1	0.0001 U	0.0091	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0332	0.01 U
			24-Oct-06		0.02 U	0.02 U	0.00573	0.0053	-	-	0.001 U	0.001	0.014	0.005 U	-	-	0.01 U	0.01 U	58.5	46.6	0.02 U	0.02 U	-	-	7.44	6.51	0.0001 U	0.0117	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.059	0.01 U
			16-Nov-06		0.02 U	0.02 U	0.00493	0.0051	-	-	0.001 U	0.001	0.0145	0.005 U	-	-	0.01 U	0.01 U	61.1	49.5	0.02 U	0.02 U	-	-	7.04	6.43	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0262	0.01 U
			26-Jan-07		0.02 U	0.02 U	0.00442	0.0052	-	-	0.001 U	0.001	0.0098	0.005 U	-	-	0.01 U	0.01 U	58.4	52.7	0.02 U	0.02 U	-	-	6.97	6.84	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0307	0.01 U
			22-Feb-07		0.02 U	0.02 U	0.00476	0.004	-	-	0.001 U	0.001	0.0108	0.005 U	-	-	0.01 U	0.01 U	73.6	56.9	0.02 U	0.02 U	-	-	7.7	6.93	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			22-Mar-07		0.02 U	0.02 U	0.00466	0.0056	-	-	0.001 U	0.001	0.0076	0.005 U	-	-	0.01 U	0.01 U	66.9	60.7	0.02 U	0.02 U	-	-	7.58	7.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0181	0.01 U
			24-Apr-07		0.02 U	0.02 U	0.00478	0.0013	-	-	0.001 U	0.001	0.0109	0.005 U	-	-	0.01 U	0.01 U	68.2	61.8	0.02 U	0.02 U	-	-	7.74	7.8	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0196	0.01 U
			22-May-07		0.02 U	0.02 U	0.0053	0.0054	-	-	0.001 U	0.001	0.0102	0.005 U	-	-	0.01 U	0.01 U	69.7	66.5	0.02 U	0.02 U	-	-	7.75	7.6	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0191	0.01 U
			16-Nov-07		0.02 U	0.02 U	0.0058	0.0056	-	-	0.001 U	0.001	0.0068	0.005 U	-	-	0.01 U	0.01 U	96.9	88.6	0.02 U	0.02 U	-	-	11.6	10.8	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0172	0.0302
			12-Feb-08		0.02 U	0.02 U	0.0051	0.0046	-	-	0.001 U	0.001	0.0126	0.005 U	-	-	0.01 U	0.01 U	100.	98.	0.02 U	0.02 U	-	-	11.5	10.9	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0241	0.01 U
			22-May-08		0.02 U	0.02 U	0.0061	0.0062	-	-	0.001 U	0.001	0.0176	0.005 U	-	-	0.01 U	0.01 U	125.	111.	0.02 U	0.02 U	-	-	13.2	11.7	0.00014	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0326	0.01 U
			12-Aug-08		0.02 U	0.02 U	0.0015	0.0045	-	-	0.001 U	0.001	0.013	0.005 U	-	-	0.01 U	0.01 U	135.	98.9	0.02 U	0.02 U	-	-	12.9	11.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0285	0.01 U
WS-19-71	MFA	WS-19-71	27-Jun-06	61 - 71	0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0331	0.005 U	-	-	0.0256	0.01 U	111.	62.8	0.02 U	0.02 U	-	-	12.4	12.4	0.0001 U	0.0187	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0704	0.0117
			20-Jul-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	66.4	63.9	0.02 U	0.02 U	-	-	13.3	11.2	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			29-Aug-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0342	0.005 U	-	-	0.0139	0.01 U	90.2	59.7	0.02 U	0.02 U	-	-	11.7	11.7	0.0001 U	0.013	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0538	0.01 U
			27-Sep-06		0.02 U	0.02 U	0.00319	0.0019	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	55.3	54.	0.02 U	0.02 U	-	-	11.8	11.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0127	0.01 U
			24-Oct-06		0.02 U	0.02 U	0.00227	0.0035	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	50.4	49.	0.02 U	0.02 U	-	-	12.6	11.4	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			16-Nov-06		0.02 U	0.02 U	0.00227	0.0028	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	59.2	51.	0.02 U	0.02 U	-	-	13.	12.2	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			26-Jan-07		0.02 U	0.02 U	0.00148	0.0036	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	81.	75.4	0.02 U	0.02 U	-	-	16.8	16.3	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			23-Feb-07		0.02 U	0.02 U	0.00225	0.0032	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	83.2	90.8	0.02 U	0.02 U	-	-	16.2	17.5	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			22-Mar-07		0.02 U	0.02 U	0.00193	0.0034	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	108.	93.7	0.02 U	0.02 U	-	-	19.6	19.4	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.011	0.01 U
			24-Apr-07		0.02 U	0.02 U	0.00229	0.0018	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	129.	118.	0.02 U	0.02 U	-	-	21.9	22.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0222	0.01 U
			23-May-07		0.02 U	0.02 U	0.0022	0.0037	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	131.	118.	0.02 U	0.02 U	-	-	22.9	22.	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0208	0.01 U
			19-Nov-07		0.02 U	0.02 U	0.0029	0.0035	-	-	0.001 U	0.0013	0.005 U	0.005 U	-	-	0.01 U	0.01 U	128.	130.	0.02 U	0.02 U	-	-	26.5	26.5	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0117	0.01 U
			13-Feb-08		0.02 U	0.02 U	0.0025	0.0032	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	139.	145.	0.02 U	0.02 U	-	-	28.3	26.4	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			22-May-08		0.0225	0.02 U	0.0029	0.0044	-	-	0.001	0.001	0.005	0.005 U	-	-	0.01 U	0.01 U	160.	190.	0.02 U	0.02 U	-	-	29.9	32.5	0.000134	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0116	0.01 U
			12-Aug-08		0.0242	0.02 U	0.0033	0.0042	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	156.	147.	0.02 U	0.02 U	-	-	30.6	28.4	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0103	0.01 U
WS-19-101	MFA	WS-19-101	27-Jun-06	92 - 102	0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0421	0.005 U	-	-	0.0403	0.01 U	116.	0.01 U	0.02 U	0.02 U	-	-	9.48	8.52	0.0001 U	0.0585	0.0251	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.118	0.01 U
			20-Jul-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0125	0.005 U	-	-	0.01 U	0.01 U	71.1	60.2	0.02 U	0.02 U	-	-	12.2	11.3	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0282	0.01 U
			29-Aug-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0107	0.005 U	-	-	0.01 U	0.01 U	162.	130.	0.02 U	0.02 U	-	-	16.5	16.6	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0311	0.01 U
			27-Sep-06		0.02 U	0.02 U	0.0025	0.0013	-	-	0.001 U	0.001	0.0138	0.005 U	-	-	0.01 U	0.01 U	283.	296.	0.02 U	0.02 U	-	-	25.	27.2	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0436	0.0149
			25-Oct-06		0.02 U	0.02 U	0.005 U	0.005 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	376.	447.	0.02 U	0.02 U	-	-	31.8	36.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0224	0.0172
			15-Nov-06		0.02 U	0.02 U	0.001 U	0.0013	-	-	0.0015	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	493.	533.	0.0258	0.02 U	-	-	39.9	40.7	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0252	0.0268
			25-Jan-07		0.02 U	0.02 U	0.001 U	0.0019	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	445.	439.	0.02 U	0.02 U	-	-	32.9	33.6	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.026	0.0189
			23-Feb-07		0.02 U	0.02 U	0.00515	0.0021	-	-	0.0014	0.001	0.0369	0.005 U	-	-	0.01 U	0.01 U	411.	341.	0.0264	0.02 U	-	-	27.5	26.6	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0937	0.0144
			22-Mar-07		0.02 U	0.02 U	0.00188	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	450.	346.	0.02 U	0.02 U	-	-	28.1	25.8	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0443	0.0133
			24-Apr-07		0.02 U	0.02 U	0.00288	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	394.	312.	0.02 U	0.02 U	-	-	25.3	21.5	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0443	0.0129
			23-May-07		0.02 U	0.02 U	0.0015	0.0018	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	400.	390.	0.02 U	0.02 U	-	-	24.1	24.6	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0358	0.0173
			19-Nov-07		0.02 U	0.02 U	0.0037	0.0023	-	-	0.001	0.001	0.0055	0.005 U	-	-	0.01 U	0.01 U	247.	237.	0.02 U	0.02 U	-	-	14.5	14.8	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0433	0.0161
			13-Feb-08		0.02 U	0.02 U	0.0033	0.0025	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	270.	265.	0.02 U	0.02 U	-	-	14.	13.5	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0337	0.01 U
			22-May-08		0.0268	0.02 U	0.0042	0.0046	-	-	0.001 U	0.001	0.006	0.005 U	-	-	0.01 U	0.01 U	119.	147.	0.02 U	0.02 U	-	-	4.39	6.38	0.000136	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0228	0.01 U
			12-Aug-08		0.0206	0.02 U	0.0031	0.0033	-	-	0.001 U	0.001	0.0054	0.005 U	-	-	0.01 U	0.01 U	81.9	76.2	0.02 U	0.02 U	-	-	3.22	3.01	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0125	0.01 U
WS-20-112	MFA	WS-20-112	28-Jun-06	97 - 112	0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0109	0.005 U	-	-	0.01 U	0.01 U	417.	247.	0.02 U	0.02 U	-	-	5.54	4.03	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0376	0.012
			27-Jul-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	310.	296.	0.02 U	0.02 U	-	-	4.34	4.01	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0218	0.0149
			28-Aug-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	297.	286.	0.02 U	0.02 U	-	-	3.51	3.43	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0191	0.0139
			25-Sep-06		0.02 U	0.02 U	0.00149	0.0027	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	155.	132.	0.02 U	0.02 U	-	-	1.33	1.53	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0104	0.01 U
			23-Oct-06		0.02 U	0.02 U	0.0015	0.0025	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	133.	120.	0.02 U	0.02 U	-	-	1.25	1.43	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			18-Dec-06		0.02 U	0.02 U	0.001 U	0.0012	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	43.3	88.3	0.02 U	0.02 U	-	-	0.207	1.09	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0202	0.01 U
			25-Jan-07		0.02 U	0.02 U	0.001 U	0.0019	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	24.3	61.3	0.02 U	0.02 U	-	-	0.0962	1.01	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			21-Feb-07		0.02 U	0.02 U	0.001 U	0.0019	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	15.	36.9	0.02 U	0.02 U	-	-	0.0404	0.59	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			21-Mar-07		0.02 U	0.02 U	0.001 U	0.0026	-	-	0.001 U	0.001	0.0058	0.005 U	-	-	0.01 U	0.01 U	26.5	52.6	0.02 U	0.02 U	-	-	0.226	1.09	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			23-Apr-07		0.02 U	0.02 U	0.001 U	0.0011	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	17.4	17.1	0.02 U	0.02 U	-	-	0.133	0.167	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			21-May-07		0.02 U	0.02 U	0.001 U	0.0011	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	4.99	7.01	0.02 U	0.02 U	-	-	0.0154	0.0346	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			15-Nov-07		0.02 U	0.02 U	0.001 U	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	3.18	7.23	0.02 U	0.02 U	-	-	0.0109	0.0438	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			14-Feb-08		0.02 U	0.02 U	0.001 U	0.0054	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	3.74	29.9	0.02 U	0.02 U	-	-	0.0191	0.243	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			16-May-08		0.02 U	0.02 U	0.0029	0.003	-	0.0599	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	18.7	22.1	0.02 U	0.02 U	-	53.7	0.169	0.201	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			6-Aug-08		0.02 U	0.02 U	0.001 U	0.001 U	-	-	0.001 U	0.001	0.0053	0.0053	-	-	0.01 U	0.01 U	3.66	6.81	0.02 U	0.02 U	-	-	0.0124	0.0284	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
WS-21-112	MFA	WS-21-112	28-Jun-06	97 - 112	0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	51.1	47.4	0.02 U	0.02 U	-	-	2.59	2.54	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0107	0.01 U
			28-Jul-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U

Table 4c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7, and/or 7000 Series
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Total Antimony	Dissolved Antimony	Total Arsenic	Dissolved Arsenic	Total Barium	Dissolved Barium	Total Cadmium [5]	Dissolved Cadmium	Total Chromium	Dissolved Chromium	Total Cobalt	Dissolved Cobalt	Total Copper [5]	Dissolved Copper	Total Iron	Dissolved Iron	Total lead [5]	Dissolved Lead	Total Magnesium	Dissolved Magnesium	Total Manganese	Dissolved Manganese	Mercury	Total Nickel [5]	Dissolved Nickel	Total Selenium	Dissolved Selenium	Total Silver [5]	Dissolved Silver	Total Titanium	Dissolved Titanium	Total Vanadium	Dissolved Vanadium	Total Zinc [5]	Dissolved Zinc
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																																							
Fish Consumption																																							
		EPA 2004 NRWQC (organism only)			0.64	#	0.00014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.0000146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
		Portland Harbor specific fish consumption rate			0.064	#	0.000014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.01	#	3.	0.46	#	0.42	#	#	#	#	#	#	#	2.6	#
		DEQ 2004 AWQC (organism only)			0.64	#	0.00014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.00146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
Drinking Water																																							
		MCL			0.006	#	0.01	#	2.	#	0.005	#	0.1	#	#	#	1.3	#	0.3 [7]	#	0.015	#	#	#	0.05 [7]	#	0.002	#	#	0.05	#	0.1 [7]	#	0.002	#	#	#	5 [7]	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.015	#	0.000045	#	7.3	#	0.018	#	#	#	11.	#	1.5	#	#	#	#	#	#	#	0.88	#	0.0057	0.73	#	0.18	#	0.18	#	#	#	0.26	#	11.	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																																							
		EPA 2004 NRWQC (chronic)			#	#	0.15	#	#	#	0.000094	#	#	#	#	#	0.0027	#	#	#	0.00054	#	#	#	#	#	0.00077	0.016	#	0.005 [8]	#	#	#	#	#	#	#	0.036	#
		DEQ 2004 AWQC (chronic)			1.6 [3]	#	#	#	#	#	0.00038 [6]	#	#	#	#	#	0.0036 [6]	#	#	#	0.00054 [6]	#	#	#	#	#	0.000012	0.049 [6]	#	0.035	#	0.00012 [6]	#	#	#	#	#	0.033	#
		Oak Ridge National Laboratory (Tier II SCV) [10]			0.03	#	0.0031 [9]	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.12	#	0.0013	#	#	#	#	0.00036	#	#	#	#	#	#	#
WS-21-112	MFA	WS-21-112	22-May-07	97 - 112	0.02 U	0.02 U	0.0013	0.0027	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	31.7	33.7	0.02 U	0.02 U	-	-	1.03	1.08	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			16-Aug-07		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			14-Nov-07		0.02 U	0.02 U	0.001 U	0.0011	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	31.8	30.9	0.02 U	0.02 U	-	-	0.911	0.954	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			11-Feb-08		0.02 U	0.02 U	0.001 U	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	33.9	33.4	0.02 U	0.02 U	-	-	0.94	0.925	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			21-May-08		0.02 U	0.02 U	0.001 U	0.001 U	-	0.0922	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	31.	30.1	0.02 U	0.02 U	-	41.6	0.983	0.987	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			13-Aug-08		0.02 U	0.02 U	0.001 U	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	30.8	30.9	0.02 U	0.02 U	-	-	0.866	0.891	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
	HAI	5237-070712-WS21-112	12-Jul-07		0.0008 U	-	0.00177	-	0.0734	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	31.8	-	0.00054 U	-	32.5	-	0.844	-	0.0002 U	0.002 U	-	0.005 U	-	0.00012 U	-	-	-	0.004 U	-	0.033 U	-
		5237-080521-WS21-112-108	21-May-08		0.00002 U	-	0.00087	-	0.0765	-	0.000008 U	-	0.00048	-	-	-	0.00013	-	30.1	-	0.000005 J	-	44.2	-	1.01	-	0.00005 U	0.00085	-	0.0007 U*	-	0.000004 U*	-	-	-	0.00036	-	0.00039 U*	-
		5237-080925-WS-21-112-137	25-Sep-08		0.00001 U	-	0.00103	-	0.0778 N	-	0.000005 U	-	0.00031	-	-	-	0.00014	-	28.2	-	0.000006 U	-	41.5	-	0.906	-	0.00005 U	0.00098	-	0.0005 U	-	0.000009 U	-	-	-	0.00026	-	0.00164	-
		5237-090407-WS21-112-108	7-Apr-09		0.000005 U	0.000005 U	0.0028	0.0025	0.0811	0.0675	0.000005 U	0.000016 J	0.00016 J	0.00031	-	-	0.00025 J	0.00035	31.2	28.5	0.000003 U	0.000006 J	43.5	21.2	1.23	2.41	0.00005 U	0.00094	0.00486	0.001	0.0004 U	0.000005 U	0.000005 U	-	-	0.00017 J	0.00049	0.0049	0.0086
		5237-090820-WS-21-112-165			0.001 U	-	0.00509	-	0.0773	-	0.001 U	-	0.001 U	-	-	-	0.004 U	-	33.	-	0.001 U	-	46.9	-	1.11 J	-	0.0001 U	0.00106	-	0.00617	-	0.001 U	-	-	-	0.002 U	-	0.00424	-
		5237-090820-WS-21-112-166			0.001 U	-	0.00472	-	0.0778	-	0.001 U	-	0.001 U	-	-	-	0.004 U	-	32.6	-	0.001 U	-	46.6	-	1.1 J	-	0.0001 U	0.001 U	-	0.00454	-	0.001 U	-	-	-	0.002 U	-	0.004 U	-
WS-22-112	MFA	WS-22-112	28-Jun-06	97 - 112	0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.0815	0.005 U	-	-	0.01 U	0.01 U	2,210.	1,890.	0.113	0.109	-	-	17.7	17.1	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.379	0.242
			27-Jul-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	1,580.	1,470.	0.0914	0.0812	-	-	11.4	10.5	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.138	0.0989
			25-Aug-06		0.02 U	0.02 U	0.02 U	0.02 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	1,870.	1,640.	0.128	0.124	-	-	9.72	10.2	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.113	0.0975
			25-Sep-06		0.02 U	0.02 U	0.001 U	0.002 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	1,900.	1,920.	0.115	0.11	-	-	8.59	9.29	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.119	0.103
			24-Oct-06		0.02 U	0.02 U	0.005 U	0.0012	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	990.	970.	0.0366	0.0363	-	-	3.51	4.22	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.057	0.0488
			19-Dec-06		0.02 U	0.02 U	0.001 U	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.0406	0.01 U	198.	243.	0.02 U	0.02 U	-	-	0.384	0.885	0.0001 U	0.005 U	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0496	0.0118
			24-Jan-07		0.02 U	0.02 U	0.001 U	0.0017	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	84.5	88.7	0.02 U	0.02 U	-	-	0.112	0.338	0.0001 U	0.0126	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.0128	0.01 U
			22-Feb-07		0.02 U	0.02 U	0.001 U	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	60.	67.5	0.02 U	0.02 U	-	-	0.118	0.278	0.0001 U	0.0164	0.0074	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			21-Mar-07		0.02 U	0.02 U	0.001 U	0.0023	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	68.9	82.4	0.02 U	0.02 U	-	-	0.489	0.931	0.0001 U	0.0114	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			23-Apr-07		0.02 U	0.02 U	0.001 U	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	56.	54.7	0.02 U	0.02 U	-	-	0.443	0.486	0.0001 U	0.0072	0.0062	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			22-May-07		0.02 U	0.02 U	0.001 U	0.0018	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	21.	37.3	0.02 U	0.02 U	-	-	0.0999	0.284	0.0001 U	0.0076	0.0068	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			16-Nov-07		0.02 U	0.02 U	0.001 U	0.0012	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	8.22	12.4	0.02 U	0.02 U	-	-	0.0519	0.144	0.0001 U	0.0164	0.012	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			14-Feb-08		0.02 U	0.02 U	0.001 U	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	6.79	9.65	0.02 U	0.02 U	-	-	0.0519	0.103	0.0001 U	0.0171	0.012	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			16-May-08		0.02 U	0.02 U	0.0011	0.0012	-	0.0457	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	11.1	15.1	0.02 U	0.02 U	-	33.3	0.2	0.309	0.0001 U	0.0058	0.005 U	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
			13-Aug-08		0.02 U	0.02 U	0.001 U	0.001 U	-	-	0.001 U	0.001	0.005 U	0.005 U	-	-	0.01 U	0.01 U	3.67	0.473	0.02 U	0.02 U	-	-	0.0252	0.107	0.0001 U	0.0121	0.0072	0.02 U	0.02 U	<0.01 U	<0.01 U	-	-	-	-	0.01 U	0.01 U
RP-06-87	URS		14-Apr-00	81-86	-	-	0.0143	0.0102	-	-	-	0.00024	0.00091	-	-	-	0.00586	0.00143	6.5	-	-	0.00011	177.	-	25.9	-	-	0.0241	0.0144	-	-	-	-	-	-	0.0038	0.00306	0.0134	0.00344
RP-7-30	HAI	5237-070828-RP-7-30-106	28-Aug-07	25 - 30	0.001 U	-	0.0108	-	0.0792	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	53.8	-	0.00054 U	-	37.3 J	-	6.28	-	0.0002 U	0.002 U	-	0.005 U	-	0.00012 U	-	-	-	0.005 U	-	0.033 U	-
RP-7-55	HAI	5237-070827-RP-7-55-104	27-Aug-07	50 - 55	0.001 U	-	0.00983	-	0.102	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	6.66	-	0.00054 U	-	48.4	-	5.66	-	0.0002 U	0.00439	-	0.005 U	-	0.00012 U	-	-	-	0.005 U	-	0.033 U	-
RP-07-84	AMEC		13-Apr-04	79-84	-	-	0.00483	0.00408	-	-	-	-	0.00296	-	-	-	0.00749	-	3.73	-	0.00066	-	127.	-	0.556	-	-	0.0186	0.0165	-	-	-	-	-	-	0.00854	-	0.0144	0.00803
	HAI	5237-070828-RP-7-84-107	28-Aug-07		0.001 U	-	0.00175	-	0.132 J	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	0.779	-	0.00054 U	-	111.	-	0.27 J	-	0.0002 U	0.00845	-	0.00625	-	0.00012 U	-	-	-	0.005 U	-	0.033 U	-
	HAI	5237-070828-RP-7-84-108 (DUP)	28-Aug-07		0.001 U	-	0.00161	-	0.136 J	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	0.786	-	0.00054 U	-	118.	-	0.269 J	-	0.0002 U	0.00829	-	0.00562	-	0.00012 U	-	-	-	0.005 U	-	0.033 U	-
RP-07-119	AMEC		13-Apr-04	114-119	-	-	-	-	-	-	-	-	-	-	-	-	0.00181	-	0.485	-	-	-	57.5	-	0.255	-	-	0.00781	0.00792	-	-	-	-	-	-	0.00323	0.00277	0.0101	0.00999
RP-11-30	HAI	5237-070827-RP-11-30-101	27-Aug-07	15 - 30	0.001 U	-	0.00723	-	0.0596	-	0.00038 U	-	0.00238	-	-	-	0.0027 U	-	50.1	-	0.00202	-	26.	-	3.62	-	0.0002 U	0.0024	-	0.005 U	-	0.00012 U	-	-	-	0.00575	-	0.0689	-
RP-11-160	HAI	5237-070827-RP-11-160-102	27-Aug-07	150 - 160	0.001 U	-	0.00524	-	0.0279	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	18.6	-	0.00054 U	-	40.	-	3.16	-	0.0002 U	0.002 U	-	0.005 U	-	0.00012 U	-	-	-	0.005 U	-	0.165	-
RP-11-216	HAI	5237-070827-RP-11-216-103	27-Aug-07	211 - 216	0.001 U	-	0.0002 U*	-	0.0812	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	3.76	-	0.00054 U	-	53.4	-	2.75	-	0.0002 U	0.00321	-	0.005 U	-	0.00012 U	-	-	-	0.005 U	-	0.033 U	-
RP-24-30	HAI	5237-070829-RP-24-30-109	29-Aug-07	25 - 30	0.001 U	-	0.00466	-	0.184	-	0.00038 U	-	0.00129	-	-	-	0.0027 U	-	78.8	-	0.00452	-	47.	-	6.49	-	0.0002 U	0.002 U	-	0.005 U	-	0.00012 U	-	-	-	0.005 U	-	0.033 U	-
RP-24-60	HAI	5237-070828-RP-24-60-110	28-Aug-07	55 - 60	0.001 U	-	0.00822	-	0.137	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	18.6	-	0.00054 U	-	32.9	-	5.82 J	-	0.0002 U	0.00214	-	0.005 U	-	0.00012 U	-	-	-	0.005 U	-	0.033 U	-
RP-24-73	HAI	5237-070829-RP-24-73-113	29-Aug-07	68 - 73	0.001 U	-	0.00184	-	0.0906	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	3.39	-	0.00054 U	-	32.3	-	5.41	-	0.0002 U	0.00798	-	0.005 U	-	0.00012 U	-	-	-	0.005 U	-	0.033 U	-
RP-24-85	HAI	5237-070828-RP-24-85-111	28-Aug-07	80 - 85	0.001 U	-	0.00137	-	0.229	-	0.00038 U	-	0.001 U	-	-	-	0.0027 U	-	0.626	-	0.00054 U	-	128.	-	1.73	-	0.0002 U	0.00608	-	0.005 U	-	0.00012 U	-	-	-	0.005 U	-	0.033 U	-
NWN-1-20	HAI	5237-080807-NWN-1-20-107	7-Aug-08	10 - 20	0.00156	0.00037	0.00458	0.00357	0.261	0.22	0.000157	0.000008 U	0.0124	0.00606	-	-	0.00148	0.00023	30.8	30.1	0.0213	0.00004	35.3	34.3	1.22	1.17	0.00009 J	0.0643	0.00454	0.0005 J	0.0002 J	0.00001 J	0.000009 J	-	-	0.163	0.19	0.0204	0.00057
		5237-081211-NWN-1-20-019	11-Dec-08		0.000582	0.000378	0.0043	0.0039	0.245	0.229	0.00008	0.000006	0.00888	0.00613	-	-	0.00122	0.00031	26.	25.	0.00834	0.000059	30.5	32.2	0.607	0.644	0.00005	0.0134	0.00242	0.0006	0.0004 U	0.000013 U*	0.000006 U*	-	-	0.0377	0.0197	0.0145	0.0006
		5237-090407-NWN1-20-105	7-Apr-09		0.00183	0.000005 U	0.004	0.0025	0.178	0.153	0.000053	0.000005 U	0.0115	0.00661	-	-	0.00036 J	0.00027 J	13.7	22.1	0.013	0.000003 U	14.7	28.7	0.314	0.534	0.00006 J	0.0337	0.0044	0.0008 U	0.0004 U	0.00001 U	0.000005 U	-	-	0.043	0.0731	0.0037	0.0017
		5237-090604-NWN-1-20-103	4-Jun-09		0.00219 J	0.000168 J	0.0038	0.0024	0.175	0.148	0.000001 U	0.000005 U	0.0132	0.0069	-	-	0.00046	0.00037	31.4	24.4	0.0153	0.000017 J	30.1 J	29.8 J	0.569	0.528	0.00006 J	0.0382	0.00393	0.0004 U	0.0004 J	0.000036 J	0.000006 J	-	-	0.0251	0.0592	0.0025	0.0002 U
		5237-090818-NWN-1-20-148			0.0012	0.001 U	0.00308	0.00294	0.196	0.188	0.001 U	0.001 U	0.00892	0.00669	-	-	0.004 U	0.004 U	21.1	20.8	0.00351	0.001 U	31.1	31.2	0.519 J	0.519	0.0001 U	0.0167	0.00522	0.001 U	0.00141	0.001 U	0.001 U	-	-	0.138	0.14	0.0102 J	0.004 UJ
NWN-2-20	HAI	5237-080730-NWN2-20-101	30-Jul-08	10 - 20	0.00012 U	0.00005 J	0.00162	0.00055	0.242	0.21	0.000365	0.000008 U	0.0737	0.00185	-	-	0.00442	0.00026	54.1	46.	0.0247	0.000024	44.8	45.1	6.36	6.43	0.00005 U	0.0311	0.00192	0.0004 J	0.0002 U	0.00001 J	0.000003 U	-	-	0.0305	0.0125	0.0817	0.0007
		5237-081211-NWN-2-20-017	11-Dec-08		0.000159	0.000045	0.0032	0.0016	0.155	0.131	0.000495	0.000005 U	0.00682	0.00109	-	-	0.00327	0.00017	34.9	31.	0.0284	0.000044	26.	27.3	3.48	3.69	0.00005 U	0.015	0.00207	0.0004 U	0.0004 U	0.000016 U*	0.000005 U	-	-	0.0314	0.0122	0.106	0.0011
		5237-090407-NWN2-20-107	7-Apr-09		0.00005 U	0.000005 U	0.0012	0.0006	0.0609	0.0485	0.000186	0.000005 U	0.00311	0.0005	-	-	0.00329 J	0.00015 J	18.9	14.7	0.0115	0.000003 U	18.	16.8	2.12	1.98	0.00005 U	0.00814	0.00145	0.0004 U	0.0004 J	0.000005 U	0.000005 U	-	-	0.0118	0.00089	0.0622	0.0013
		5237-090604-NWN-2-20-101	4-Jun-09		0.000258 J	0.000165 J	0.0045	0.0031	0.119	0.0814	0.000685	0.000005 U	0.00965	0.0009	-	-	0.00911	0.00024	24.3	13.7	0.0416	0.000013 J	21.3 J	20.9 J	2.63	2.57	0.00002 J	0.0282	0.0104	0.0004 J	0.0002 U	0.000035	0.000007 J	-	-	0.0328	0.00432	0.189	0.006
		5237-090818-NWN-2-20-142			0.001 U	-	0.00107	-	0.229	-	0.001 U	-	0.0206	-	-	-	0.004 U	-	55.3	-	0.00884	-	52.5	-	6.82 J	-	0.0001 U	0.0148	-	0.001 U	-	0.001 U	-	-	-	0.0245	-	0.0252 J	-
NWN-3-17	HAI	5237-080730-NWN3-17-100	30-Jul-08	7 - 17	0.00024	0.00013	0.0124	0.0141	0.454	0.108	0.00557	0.000045	0.131	0.0008	-	-	0.608	0.00047	128.	50.7	0.276	0.000169	63.2	56.8	9.	9.	0.00033	0.127	0.0198	0.0009 J	0.0005 J	0.000305 J	0.000009 J	-	-	0.113	0.00271	0.532	0.0107
		NS (Dry)	11-Dec-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		5237-090407-NWN3-17-101	7-Apr-09		0.000005 U	-	0.0135	-	0.0861	-	0.000014 J	-	0.00159	-	-	-	0.00103 J	-	41.5	-	0.000259	-	54.3	-	13.1	-	0.00005 U	0.0106	-	0.0005 J	-	0.000005 U	-	-	-	0.00228	-	0.0065	-
		5237-090604-NWN-3-17-102	4-Jun-09		0.000214 J	0.000005 UJ	0.0123	0.0128	0.0871	0.0751	0.000786	0.000005 U	0.00391	0.00056	-	-	0.0169	0.00044	44.4	42.5	0.00603	0.000043	49.3 J	49.2 J	12.3	11.6	0.00002 U	0.0154	0.0106	0.0003 J	0.0002 J	0.000042	0.000008 J	-	-	0.00643	0.00174	0.0222	0.0073
		NS (Dry)	19-Aug-09		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NWN-4-15	HAI	NS (Dry)	30-Jul-08	5 - 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		5237-081212-NWN-4-15-021	12-Dec-08		0.000211	-	0.0093	-	0.696	-	0.00156	-	0.05	-	-	-	0.065	-	80.8	-	0.0525	-	19.3	-	2.67	-	0.00014	0.22	-	0.0004 U	-	0.000095 J	-	-	-	0.124	-	0.176	-
		5237-090407-NWN4-15-103	7-Apr-09		0.00005 U	0.00005 U	0.0011	0.0002 J	0.07	0.0396	0.000113	0.000075	0.00453	0.00031	-	-	0.00427 J	0.00064 J	4.84	0.0507	0.00369	0.000003 U	6.32	5.58	0.45	0.391	0.00005 U	0.0129	0.0097	0.0004 U	0.0004 U	0.00005 U	0.000005 U	-	-	0.00803	0.00047	0.019	0.0057
		5237-090604-NWN-4-15-100	4-Jun-09		0.000492 J	-	0.0021	-	0.138	-	0.000502	-	0.0173	-	-	-	0.0122	-	13.2	-	0.00878	-	8.8 J	-	1.59	-	0.00002 U	0.0594	-	0.0004 J	-	0.000108	-	-	-	0.0196	-	0.0438	-
		5237-090818-NWN-4-25-152*	18-Aug-09		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NWN-5-20	HAI	5237-080730-NWN5-20-103	30-Jul-08	10 - 20	0.00009	0.00008	0.0026	0.00219	0.16	0.135	0.000026	0.000016 J	0.169	0.00083	-	-	0.00318	0.00045	43.7	38.4	0.00196	0.000037	34.5	33.1	4.54	4.34	0.00005 U	0.0845	0.00967	0.0005 J	0.0004 J	0.000012 J	0.000003 J	-	-	0.00766	0.0008	0.00922	0.00353
		5237-081211-NWN-5-20-018	11-Dec-08		0.000059	0.000034	0.0033	0.0033	0.139	0.12	0.000036	0.000009	0.00547	0.00069	-	-	0.00341	0.00033	51.7	47.1	0.00248	0.000064	31.8	30.8	4.45	4.27	0.00005 U	0.0101	0.00684	0.0007	0.0005	0.000014 U*	0.000005 U	-	-	0.00963	0.00065	0.0093	0.0037
		5237-090408-NWN5-20-111	8-Apr-09		0.000005 U	0.000005 U	0.0028	0.0025	0.0902	0.0675	0.000051	0.000016 J	0.00384	0.00031	-	-	0.00635	0.00035	35.4	28.5	0.0027	0.000003 U	21.	21.2	2.42	2.41	0.00005 U	0.00753	0.00486	0.0004 U	0.0004 U	0.000005 U	0.000005 U	-	-	0.0112	0.00049	0.0101	0.0086
		5237-090604-NWN-5-20-104	4-Jun-09		0.000088 J	-	0.0025	-	0.0922	-	0.000002 U	-	0.0015	-	-	-	0.0017	-	39.	-	0.000334	-	30.8 J	-	3.64	-	0.00002 U	0.00639	-	0.0002 U	-	0.000014 J	-	-	-	0.00191	-	0.0053	-
		5237-090818-NWN-5-20-150			0.001 U	-	0.00371	-	0.0956	-	0.001 U	-	0.0211	-	-	-	0.004 U	-	50.9	-	0.001 U	-	31.1	-	3.67 J	-	0.0001 U	0.0146	-	0.001 U	-	0.001 U	-	-	-	0.00299	-	0.00567 J	-
NWN-6-31	HAI	5237-080730-NWN6-31-104	30-Jul-08	21 - 31	0.0001	0.00005	0.0545	0.063	0.276	0.231	0.000071	0.000008 U	0.00409	0.00126	-	-	0.0106	0.00036	66.	55.3	0.00492	0.000058	59.8	59.8	9.	9.	0.00005 U	0.0165	0.00809	0.0007 J	0.0005 J	0.00003 J	0.000004 J	-	-	0.0102	0.00108	0.0141	0.00244
		5237-081211-NWN-6-31-020	11-Dec-08		0.000114	-	0.0645	-	0.278	-	0.000117	-	0.00446	-	-	-	0.0125	-	67.4	-	0.00608	-	60.5	-	15.4	-	0.00005 U	0.00964	-	0.0008	-	0.000031	-	-	-	0.0136	-	0.014	-
		5237-090408-NWN6-31-109	8-Apr-09		0.000005 U	0.000005 U	0.0744	0.0759	0.382	0.215	0.000178	0.000005 U	0.0124	0.0007	-	-	0.029	0.00033	92.2	57.8	0.000003 U	0.000015 J	64.4	60.7	15.9	16.1	0.00005 U	0.0203	0.00294	0.0004 U	0.0007 J	0.000087	0.000005 U	-	-	0.0437	0.00068	0.0546	0

Table 4c - Summary of Historical Analytical Results for Groundwater Samples: Priority Pollutant Metals by EPA Methods 6010, 200.7, and/or 7000 Series
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	Sample Number	Sample Date	Screen Interval (feet bgs)	Total Antimony	Dissolved Antimony	Total Arsenic	Dissolved Arsenic	Total Barium	Dissolved Barium	Total Cadmium [5]	Dissolved Cadmium	Total Chromium	Dissolved Chromium	Total Cobalt	Dissolved Cobalt	Total Copper [5]	Dissolved Copper	Total Iron	Dissolved Iron	Total lead [5]	Dissolved Lead	Total Magnesium	Dissolved Magnesium	Total Manganese	Dissolved Manganese	Mercury	Total Nickel [5]	Dissolved Nickel	Total Selenium	Dissolved Selenium	Total Silver [5]	Dissolved Silver	Total Titanium	Dissolved Titanium	Total Vanadium	Dissolved Vanadium	Total Zinc [5]	Dissolved Zinc
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																																							
Fish Consumption																																							
		EPA 2004 NRWQC (organism only)			0.64	#	0.00014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.0000146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
		Portland Harbor specific fish consumption rate			0.064	#	0.000014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.01	#	3.	0.46	#	0.42	#	#	#	#	#	#	#	2.6	#
		DEQ 2004 AWQC (organism only)			0.64	#	0.00014	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.1	#	0.00146	4.6	#	4.2	#	#	#	#	#	#	#	26.	#
Drinking Water																																							
		MCL			0.006	#	0.01	#	2.	#	0.005	#	0.1	#	#	#	1.3	#	0.3 [7]	#	0.015	#	#	#	0.05 [7]	#	0.002	#	#	0.05	#	0.1 [7]	#	0.002	#	#	#	5 [7]	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.015	#	0.000045	#	7.3	#	0.018	#	#	#	11.	#	1.5	#	#	#	#	#	#	#	0.88	#	0.0057	0.73	#	0.18	#	0.18	#	#	#	0.26	#	11.	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																																							
		EPA 2004 NRWQC (chronic)			#	#	0.15	#	#	#	0.000094	#	#	#	#	#	0.0027	#	#	#	0.00054	#	#	#	#	#	0.00077	0.016	#	0.005 [8]	#	#	#	#	#	#	#	0.036	#
		DEQ 2004 AWQC (chronic)			1.6 [3]	#	#	#	#	#	0.00038 [8]	#	#	#	#	#	0.0036 [4]	#	#	#	0.00054 [4]	#	#	#	#	#	0.000012	0.049 [4]	#	0.035	#	0.00012 [4]	#	#	#	#	#	0.033	#
		Oak Ridge National Laboratory (Tier II SCV) [10]			0.03	#	0.0031 [4]	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0.12	#	0.0013	#	#	#	#	0.00036	#	#	#	#	#	#	#
NWN-8-30	HAI	5237-080730-NWN8-30-105	30-Jul-08	15 - 30	0.00012	0.0001	0.0205	0.0198	0.112	0.0592	0.000091	0.000044	0.0834	0.00224	-	-	0.00858	0.00017	28.3	17.5	0.00583	0.000079	6.09	4.69	0.959	0.862	0.00005 U	0.0335	0.00694	0.0003 J	0.0003 J	0.000053 J	0.000008 J	-	-	0.0178	0.00365	0.0159	0.00316
		5237-081211-NWN-8-30-022	11-Dec-08		0.000173	0.0001	0.0279	0.0274	0.574	0.0417	0.000667 J	0.000005 U	0.0301	0.0006	-	-	0.0618	0.00011	80.9	11.	0.0555	0.000149	12.7	2.96	1.28	0.525	0.00018	0.0335	0.00156	0.0007	0.0008	0.000127 J	0.000005 U	-	-	0.112	0.00411	0.102	0.0015
		5237-090408-NWN8-30-113	8-Apr-09		0.000005 U	-	0.0283	-	0.119	-	0.000118	-	0.00755	-	-	-	0.0106	-	31.8	-	0.00811	-	6.23	-	0.966	-	0.00005 U	0.00859	-	0.0004 U	-	0.000005 U	-	-	-	0.024	-	0.0194	-
		5237-090604-NWN-8-30-105	4-Jun-09		0.000155 J	0.000093 J	0.0257	0.0259	0.11	0.0485	0.000107	0.000005 U	0.00698	0.00098	-	-	0.00952	0.00002 U	25.1	15.6	0.00799	0.000011 J	5.49 J	4.24 J	0.89	0.805	0.00002 U	0.00728	0.0012	0.0006 J	0.0004 J	0.000035	0.000004 U	-	-	0.0201	0.00355	0.0173	0.0002 U
		5237-090818-NWN-8-30-146			0.001 U	0.001 U	0.0278	0.0293	0.117	0.0472	0.001 U	0.001 U	0.0325	0.00183	-	-	0.0131	0.004 U	26.1	13.	0.00528	0.001 U	6.06	3.89	0.969 J	0.678	0.0001 U	0.0198	0.00262	0.00106	0.00221	0.001 U	0.001 U	-	-	0.0218	0.00361	0.0184 J	0.00466 J
NWN-9-31	HAI	5237-080807-NWN-9-31-108	7-Aug-08	16 - 31	0.00005	0.00004 J	0.0278	0.0294	0.138	0.109	0.000113	0.000008 U	0.00351	0.00047	-	-	0.0113	0.00014	106.	93.5	0.00504	0.000014 J	21.8	20.	5.18	4.84	0.00005 U	0.00726	0.00428	0.0003 J	0.0002 U	0.00002 J	0.000003 U	-	-	0.0117	0.00237	0.0214	0.00398
		5237-081211-NWN-9-31-023	11-Dec-08		0.000053	-	0.0335	-	0.177	-	0.000064	-	0.00205	-	-	-	0.00525	-	123.	-	0.00251	-	25.2	-	6.54	-	0.00005 U	0.00844	-	0.0004 U	-	0.000017 U*	-	-	-	0.00703	-	0.0106	-
		5237-090409-NWN9-31-121	10-Apr-09		0.000005 U	0.000005 U	0.0337	0.0342	0.144	0.145	0.000007 J	0.000005 U	0.00085	0.00049	-	-	0.00052	0.00018	106.	104.	0.000184	0.000003 U	22.	21.2	5.83	5.65	0.00005 U	0.00627	0.00606	0.0004 U	0.0004 J	0.000005 U	0.000005 U	-	-	0.00295	0.00262	0.0036	0.0023
		5237-090604-NWN-9-31-107	4-Jun-09		0.000005 UJ	-	0.0309	-	0.142	-	0.000005 U	-	0.00143	-	-	-	0.00177	-	112.	-	0.000657	-	24.1	-	5.67 J	-	0.00002 U	0.00695	-	0.0002 U	-	0.000011 J	-	-	-	0.00355	-	0.0044	-
		5237-090604-NWN-9-31-109	4-Jun-09		0.000005 UJ	-	0.0307	-	0.141	-	0.000005 U	-	0.00148	-	-	-	0.0018	-	109.	-	0.00066	-	23.9 J	-	5.59	-	0.00002 U	0.00698	-	0.0003 J	-	0.000011 J	-	-	-	0.00355	-	0.0045	-
		5327-090819-NWN-9-31-158			0.001 U	-	0.0339	-	0.173	-	0.001 U	-	0.00697	-	-	-	0.004 U	-	131.	-	0.001 U	-	27.	-	6.99	-	0.0001 U	0.00978	-	0.001 U	-	0.001 U	-	-	-	0.00423	-	0.0162	-
NWN-10-26	HAI	5237-080807-NWN-10-26-109	7-Aug-08	11 - 26	0.00007	0.00003 J	0.00864	0.00887	0.0936	0.0811	0.00007	0.000008 U	0.0027	0.0006	-	-	0.00543	0.00007 J	52.1	47.2	0.00492	0.000009 J	18.5	17.8	2.34	2.25	0.00005 U	0.00245	0.00076	0.0002 U	0.0002 U	0.000059	0.000003 U	-	-	0.00815	0.00136	0.0192	0.00103
		5237-080807-NWN-10-26-110	7-Aug-08		0.00008	0.00003 J	0.00901	0.0089	0.0963	0.081	0.00006	0.000008 U	0.00271	0.0006	-	-	0.00562	0.0001 J	51.2	48.9	0.00536	0.000016 J	18.3	18.3	2.28	2.32	0.00005 U	0.00253	0.00075	0.0003 J	0.0002 U	0.000045	0.000003 U	-	-	0.00815	0.0013	0.0204	0.00253
		NS (Dry)	11-Dec-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		5237-090410-NWN10-26-123	10-Apr-09		0.000285	0.000005 U	0.02	0.008	0.668	0.102	0.00227	0.000014 J	0.09	0.00086	-	-	0.172	0.00084	174.	49.5	0.182	0.000725	36.9	18.6	4.27	2.66	0.0007	0.211	0.0136	0.0008 U	0.0004 U	0.00112	0.000005 U	-	-	0.217	0.00246	0.652	0.0034
		5237-090604-NWN-10-26-111	4-Jun-09		0.000306 J	-	0.0066	-	0.0812	-	0.00006	-	0.00198	-	-	-	0.00147	-	45.4	-	0.000615	-	17. J	-	2.38	-	0.00002 U	0.00367	-	0.0002 U	-	0.00001 J	-	-	-	0.00179	-	0.0036	-
		NS (Dry)	19-Aug-09		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quality Control Samples (HAI)																																							
Water EB	HAI	011212-102	12-Dec-01		0.003 U	-	0.005 U	-	0.005 U	-	0.002 U	-	0.005 U	-	0.005 U	-	0.005 U	-	0.0222	-	0.005 U	-	0.05	-	0.005 U	-	-	0.005 U	-	0.005 U	-	0.005 U	-	0.01 U	-	0.005 U	-	0.01 U	-
		011008-103	8-Oct-01		0.003 U	-	0.005 U	-	0.005 U	-	0.001 U	-	0.005 U	-	0.001 U	-	0.001 U	-	0.0417	-	0.005 U	-	0.0775	-	0.005 U	-	-	0.003 U	-	0.005 U	-	0.0019 U	-	0.001 U	-	0.005 U	-	0.005 U	-
		020402-102	2-Apr-02		0.005 U	-	0.005 U	-	0.005 U	-	0.002 U	-	0.005 U	-	0.005 U	-	0.0052	-	0.142	-	0.005 U	-	0.05 U	-	0.0059	-	-	0.005 U	-	0.005 U	-	0.005 U	-	0.01 U	-	0.005 U	-	0.0359	-
		020710-102	10-Jul-02		0.005 U	-	0.005 U	-	0.005 U	-	0.002 U	-	0.005 U	-	0.005 U	-	0.005 U	-	0.01 U	-	0.005 U	-	0.05 U	-	0.005 U	-	-	0.005 U	-	0.005 U	-	0.005 U	-	0.01 U	-	0.005 U	-	0.0079	-

AWQC = Ambient Water Quality Criteria
bgs = below ground surface
DEQ = Oregon Department of Environmental Quality
EB = equipment blank
EPA = U.S. Environmental Protection Agency
J = Estimated Concentration

MCL = Maximum Contaminant Level
mg/l = milligrams/liter
ND = not detected above detection limit indicated
NS = No Sample
NT = Not Analyzed

NRWQC = National Recommended Water Quality Criteria
ppm = parts per million
PRG = Potential Remediation Goal
SCV = Secondary Chronic Value
U = not detected above method reporting limit indicated
U* = Compound considered non-detect because it was also detected in associated blank at similar concentration levels.
ug/l = micrograms per liter

"-" = Measurement not taken, parameter not analyzed, or data unavailable (samper other than HAI)
* = Partial sample obtained, but sample volume completely used during other analysis (i.e 8260B), insufficient volume to analyze for additional determinants.
# = Reference Level not established

1 = Unless otherwise noted Screening Level Values are from *Portland Harbor Joint Service Control Strategy, Final*, December 2005 (7/16/07 revision)
2 = EPA, under CERCLA authority, has identified the Safe Drinking Water Acts MCLs and AWQCs (federal and state once approved) as potential ARARs under CERCLA. The final determination will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to The EPA Portland Harbor ROD, due to an exceedance of an SLV in upland stormwater will be evaluated and prioritized on a case by case basis.
3 = Values were taken from Table 33c (OAR 340-41), which are Water Quality Guidance Values, not criteria, that can be used in application of Oregon's Narrative Toxics Criteria to waters of the state in order to protect aquatic life
4 = Value for Arsenic V.
5 = This is a hardness dependent metal. All values were calculated based on 25 mg/l of CaCO3.
6 = These values were taken from OAR 340-41 Table 20 because they will remain the enforceable values for these particular analytes.
7 = National Secondary Drinking Water Standards.
8 = This metal is listed as the total recoverable metal in the water column.
9 = Cyanide value is based on a free cyanide value per DEQ OAR 340-41 Table 33, and EPA values are based on total Cyanide.
10 = Tier II SCV values were taken from Suter II, G.W. and Tasco, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2.

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results – ug/L (ppb)																					
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
	EPA 2004 NRWQC (organism only)				51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate				5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)				51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
	MCL				5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
	EPA 2004 NRWQC (chronic)				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic) [6]				#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]				130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
WS-1	CH2M HILL		Aug-85	7-22	1,100.	U	410.	-	-	1,200.	-	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WS-2	CH2M HILL		Aug-85	7.5-22	100.	U	U	-	-	32.	-	1,900.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WS-3S	CH2M HILL		Aug-85	12-27	390.	U	U	-	-	U	-	600.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	URS		6-Apr-00		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			13-Oct-00		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			25-Jun-01		0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	AMEC		16-Apr-02		4.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WS-3I	G&M		Oct-90	55-60	U	U	U	-	-	U	-	770.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	URS		6-Apr-00		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			13-Oct-00		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			25-Jun-01		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	AMEC		16-Apr-02		0.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			13-Apr-04		U	U	U	-	-	-	U	3.3	U	-	U	U	-	U	U	0.8	-	0.3	U	-	U	U	U	
W-03-81	URS		6-Apr-00	75-80	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			13-Oct-00		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			25-Jun-01		0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	AMEC		16-Apr-02		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			13-Apr-04		U	U	U	-	-	U	-	U	-	U	U	-	U	U	0.09	-	-	U	-	U	U	U	
WS-4	CH2M HILL		Aug-85	6.5-21.5	U	U	U	-	-	15.	-	350.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WS-5	CH2M HILL		Aug-85	5-20	U	U	U	-	-	U	-	58.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WS-6	CH2M HILL		Aug-85	9-24	1,200.	-	350.	-	-	430.	-	2,100.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	URS		6-Apr-00		40.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			13-Oct-00		614.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WS-7	CH2M HILL		Aug-85	10-25	U	U	U	-	-	U	-	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	URS		Oct-90		U	U	U	-	-	U	-	5.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			6-Apr-00		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			13-Oct-00		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WS-8-33	HAI	5237-011009-107	9-Oct-01	23-33	107.	10. U	27.9	-	-	20. U	-	841.	-	1. U	1. U	-	18.8	1. U	-	-	-	10. U	-	10. U	10. U	12. U	
		5237-011213-105	13-Dec-01		68.	5. U	29.6	-	-	23.2	-	455.	-	1. U	1. U	-	23.1	1. U	-	-	-	5. U	-	5. U	5. U	6. U	
		5237-020403-105	3-Apr-02		89.1	2.07	19.5	-	-	20.48	-	327.	-	2.38	1. U	-	9.56	2.49	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-020403-106	3-Apr-02		87.4	2.14	18.	-	-	18.5	-	216.	-	2.12	1. U	-	7.78	2.16	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-020710-104	10-Jul-02		65.9	1.24	31.6	-	-	53.1	-	135.	-	4.46	1.19	-	31.2	8.28	-	-	-	1. U	-	1. U	1. U	1.2 U	p-IPT=1.33
		5237-020710-105	10-Jul-02		68.1	1.29	30.4	-	-	49.8	-	145.	-	4.26	1.27	-	30.8	8.39	-	-	-	1. U	-	1. U	1. U	1.2 U	p-IPT=1.47
		5237-080521-WS8-33-105	21-May-08		76.	1.4	12.	17.	13.	30.	0.23 J	210.	0.039 U	5.2	1.6 J	-	17.	4.2	0.52	0.041 U	0.23 J	0.07 J	0.077 U	0.14 J	0.52	1.	Chloroethane = 0.19 J n-B = 1 J, p-IPT = 0.8 sec-B = 0.44 J, tert-B = 0.08 J
		5237-080929-WS-8-33-145	29-Sep-08		110.	2.2	23.	29.	22.	51.	0.3 J	270.	0.098 U	6.	2.5 J	-	28.	7.1	0.83 J	0.11 U	0.43 J	0.16 U	0.6 J	0.23 J	0.5 J	0.9 J	n-B = 1.4 J sec-B = 0.28 J p-IPT = 1.4 J
		5237-090408-WS8-33-119	8-Apr-09		73.	1.2	11.	17.	15.	32.	0.21 J	220.	0.039 U	4.7	1.8 J	-	22.	5.7	0.58	0.041 U	0.23 J	0.061 U	0.077 U	0.15 J	0.32 J	0.54	Chloroethane = 0.15 J p-IPT = 0.96 J, n-B = 0.8 J sec-B = 0.36 J, tert-B =0.07J
		5327-090819-WS-8-33-159	19-Aug-09		58.8	5. U	7.3	10. U	8.5	8.5	5. U	102.	5. U	5. U	5. U	-	10.	10. U	5. U	5. U	5. U	5. U	5. U	5. U	5. U	5. U	
WS-8-59	HAI	5237-011008-104	8-Oct-01	49-59	14.7	1. U	1. U	-	-	2. U	-	38.9	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	251.	92.4	
		5237-011008-105 (duplicate)	8-Oct-01		21.4	2.02	1. U	-	-	2. U	-	49.9	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	345.	129.	
		5237-011212-103	12-Dec-01		26.8	1.27	1. U	-	-	2.66	-	13.9	-	1. U	1. U	-	1. U	1. U	-	-	-	3.53	-	2.2	409.	332.	
		5237-011212-104 (duplicate)	12-Dec-01		27.	1.32	1. U	-	-	2.57	-	12.4	-	1. U	1. U	-	1. U	1. U	-	-	-	3.39	-	2.15	398.	306.	
		5237-020403-104	3-Apr-02		13.	1. U	1. U	-	-	1.11	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	99.6	136.	
		5237-0207103	10-Jul-02		20.8	1.17	1. U	-	-	2.29	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1.19	-	1. U	117.	160.	
	HAI	5237-070716-WS-8-59-108	16-Jul-07		7.08	0.53	0.06 U	0.21 U	0.07 U	0.26 U	0.05 U	0.0971	0.04 U	0.07 U	-	-	-	-	-	-	-	0.08 U	0.11 U	0.1 U	21.2	15.	
		5237-080521-WS8-56-106	21-May-08		13.	0.8	0.042 U	0.13 J	0.83	0.96	0.045 U	0.1 U	0.039 U	0.86 J	0.037 U	-	0.037 U	0.042 U	0.06 J	0.041 U	0.054 U	0.52	0.077 U	0.08 J	25.	18.	1,1-DCA = 0.08 J Chloroethane = 0.39 J sec-B = 0.04 J
		5237-080929-WS-8-56-146	29-Sep-08		2.7	0.57	0.042 U	0.078 U	0.14 J	0.14	0.045 U	0.1 U	0.039 U	0.21 J	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.09 J	0.061 U	0.077 U	0.048 U	0.32 J	3.7	Carbon Disulfide = 0.05 n-B = 0.1 J
		5237-090408-WS8-59-115	8-Apr-09		8.3	0.68	0.042 U	0.1 J	0.43 J	0.53 J	0.06 J	0.26 J	0.039 U	0.82 J	0.037 U	-	0.037 U	0.042 U	0.07 J	0.041 U	0.054 U	0.14 J	0.077 U	0.048 U	0.26 J	0.81	sec-B = 0.04 J
		5237-090408-WS8-59-117	8-Apr-09		9.7	0.77	0.042 U	0.12 J	0.51	0.63 J	0.045 U	0.1 J	0.039 U	0.93 J	0.037 U	-	0.037 U	0.042 U	0.08 J	0.041 U	0.054 U	0.15 J	0.077 U	0.048 U	0.29 J	0.87	1,1-DCA = 0.05 J sec-B = 0.05 J
		5327-090819-WS-8-59-157	19-Aug-09		1.67	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	6.38	
WS-9-34	HAI	5237-011008-102	8-Oct-01	24-34	1. U	1. U	1. U	-	-	2. U	-	5. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-011212-101	12-Dec-01		1. U	1. U	1. U	-	-	2. U	-	2.04	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-020402-101	2-Apr-02		1. U	1. U	1. U	-	-	2. U	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-020710-101	10-Jul-02		1. U	1. U	1. U	-	-	2. U	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
WS-9-34	HAI	5237-090410-WS9-34-122	10-Apr-09	24-34	0.12 J	0.39 J	0.07 J	0.15 J	0.09 J	0.24 J	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.04 J	0.042 U	0.044 U	0.041 U	0.12 J	0.061 U	0.077 U	0.048 U	0.045 U	0.07 U	Acetone = 14. J
		5327-090819-WS-9-34-156	19-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	7.36	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results – ug/L (ppb)																					
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
		MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
		DEQ 2004 AWQC (chronic) [6]			#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
WS-10-27	MFA	WS-10-27	27-Oct-03	11-26	8,060.	150.	716.	947.	525.	1,472.	<1 U	13,600.	1.46	33.3	11.1	-	136.	47.5	<1 U	<1 U	<1 U	1. U	<1 U	1. U	1. U	1. U	p-IPT= 7.28 n-B=3.42
			29-Jan-04		5,040.	76.3	518.	195.	70.7	265.7	<1 U	8,350.	12.8	1. U	1. U	-	20.7	26.8	<1 U	<1 U	<1 U	1.75	<1 U	1. U	1. U	1. U	p-IPT= 2.84
			29-Apr-04		7,640.	337.	570.	276.	272.	548.	<1 U	7,110.	5.38	15.8	7.74	-	117.	36.	<1 U	<1 U	<1 U	7.15	<1 U	1. U	16.3	1.83	p-IPT = 2.68
			16-Nov-04		7,170.	376.	617.	642.	342.	984.	<0.2 U	8,670.	7.	23.3	7.8	-	101.	42.6	<0.3 U	<0.3 U	<0.3 U	0.2 U	<0.5 U	0.3 U	0.2 U	0.2 U	p-IPT=4.3 n-B=1.22 tert-B=0.94 Carbon disulfide=0.22
			17-Feb-05		5,070.	380.	557.	606.	358.	964.	<0.2 U	-	10.4	16.6	10.6	-	176.	52.4	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	1.42	<0.2 U	Acetone = 11.2 p-IPT = 5.34 n-B = 1.73
			23-May-05		5,090.	222.	288.	189.	146.	335.	<0.2 U	-	3.59	5.85	3.14	-	65.6	18.4	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	1.52	0.76	p-IPT = 1.53 n-B = 0.52
			29-Aug-05		5,240.	228.	230.	253.	136.	389.	<0.2 U	-	2.38	2.42	0.87	-	50.3	12.	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			15-Nov-05		10,600.	428.	468.	350.	328.	678.	<0.3 U	-	11.6	12.2	6.68	-	127.	38.8	<0.3 U	<0.3 U	<0.3 U	19.4	<0.5 U	0.95	27.2	0.84	p-IPT = 4.02 n-B = 0.93 sec-B = 1.76 tert-B = 1.91
			16-Feb-06		572.	22.7	75.1	151.	87.7	238.7	<0.3 U	-	<0.3 U	3.91	2.01	-	57.8	17.8	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	p-IPT = 1.81 n-B = 0.88
			10-May-06		83.5	1.66	23.2	47.1	31.	78.1	<0.3 U	-	<0.3 U	<0.3 U	0.66	-	26.	5.67	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	Acetone = 16.2
			22-Aug-06		7,160.	278.	266.	80.5	168.	248.5	<0.3 U	-	1.89	5.77	1.89	-	81.4	24.1	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	1.4	2.82	
			15-Nov-06		1,510.	79.3	154.	247.	116.	363.	<0.5 U	-	1.92	4.62	<0.5 U	-	83.3	24.	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	0.42	<0.3 U	
			20-Feb-07		326.	5.31	61.6	31.7	49.6	81.3	<0.5 U	-	0.98	2.6	2.	-	38.	11.9	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	2-Chlorotoluene = 1.68 p-IPT = 1.46 n-B = 1.18 sec-B = 0.6
			24-May-07		12.3	<0.5 U	2.9	2.35	1.51	3.86	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	1.32	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			16-Aug-07		7,820.	442.	296.	369.	162.	531.	<0.5 U	-	0.96	7.33	4.01	-	85.	26.	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	p-IPT = 2.21 n-B = 0.85
			20-Nov-07		6,160.	282.	281.	360.	189.	549.	<0.5 U	-	1.92	8.14	6.46	-	121.	32.1	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	p-IPT = 2.23 n-B = 0.89
			8-Feb-08		244.	5.1	53.1	73.4	51.3	124.7	<0.5 U	-	<0.5 U	2.24	1.72	-	33.1	9.38	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	p-IPT = 0.99
			13-May-08		2,420.	29.1	118.	123.	75.7	198.7	<0.5 U	-	<0.5 U	3.98	2.71	-	50.4	15.1	<1 U	<0.5 U	<1 U	5.5	<1 U	<0.5 U	2.09	<0.3 U	p-IPT = 1.32
			18-Aug-08		7,760.	360.	376.	306.	94.5	400.5	<0.5 U	-	<0.5 U	7.72	4.99	-	93.6	24.6	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	p-IPT = 1.81
WS-11-125	MFA	WS-11-125	28-Oct-03	109-124	252.	56.1	87.6	54.4	38.5	92.9	<1 U	1,660.	<1 U	1. U	1. U	-	12.6	3.67	<1 U	<1 U	<1 U	2,020.	<1 U	17.5	5,340.	961.	1,1-DCE = 14.2
			30-Jan-04		328.	68.5	124.	78.4	46.9	125.3	<0.2 U	2,340.	1.41	4.61	2.17	-	45.2	15.6	<0.2 U	<0.2 U	<0.2 U	1,100.	<0.5 U	35.	3,740.	936.	Acetone = 10.5 Carbon disulfide = 3.04 Chloroform = 4.59 p-IPT = 1.62 n-B = 0.34 1,1-DCA = 0.22 1,1-DCE = 11.3
			29-Apr-04		379.	84.2	155.	90.7	117.	207.7	<1 U	6,520.	<1 U	5.58	2.4	-	78.5	25.	<1 U	<1 U	<1 U	1,120.	<1 U	48.9	7,020.	1,010.	p-IPT=1.82 1,1-DCE = 23.4
			16-Nov-04		536.	120.	182.	144.	112.	256.	<0.2 U	1,770.	1.76	5.06	0.56	-	34.8	9.72	<0.3 U	<0.3 U	<0.3 U	484.	<0.5 U	88.2	10,500.	1,150.	p-IPT=1. 1,1-DCE = 26.8
			16-Feb-05		5,540.	40.8	50.1	19.7	23.8	43.5	<0.2 U	-	<0.2 U	1.66	<0.3 U	-	8.24	3.07	<0.3 U	<0.3 U	<0.3 U	8,640.	<0.5 U	1,050.	21,000.	2,130.	Chloroethane = 4.58 1,1-DCE = 50.1
			18-May-05		525.	71.2	94.9	41.7	36.5	78.2	<0.2 U	-	<0.2 U	2.15	2.07	-	17.8	7.1	<0.3 U	<0.3 U	<0.3 U	61.7	<0.5 U	111.	14,200.	2,660.	1,1-DCE = 16.4
			10-Aug-05		136.	13.4	22.4	8.41	9.87	18.28	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	264.	<0.5 U	47.7	7,810.	814.	1,1-DCE = 10.2
			15-Nov-05		447.	57.6	91.2	40.8	42.	82.8	<0.3 U	-	<0.3 U	<0.3 U	0.9	-	11.5	4.54	<0.3 U	<0.3 U	<0.3 U	319.	<0.5 U	93.4	15,200.	2,220.	1,1-DCE = 23.6
			15-Feb-06		554.	55.2	94.4	44.1	47.2	91.3	<0.3 U	-	<0.3 U	2.1	0.96	-	15.3	5.03	<0.3 U	<0.3 U	<0.3 U	848.	<0.5 U	96.4	22,700.	4,850.	1,1-DCE = 26.4
			11-May-06		344.	32.2	47.	25.	22.9	47.9	<0.3 U	-	<0.3 U	<0.3 U	0.47	-	6.85	0.9	<0.3 U	<0.3 U	<0.3 U	158.	<0.5 U	84.4	34,000.	5,170.	Chloromethane = 0.42 1,1-DCE = 19.8
			28-Jun-06		1,340.	252.	358.	245.	164.	409.	<1 U	-	<1 U	6.37	2.11	-	54.8	15.6	<1 U	<1 U	<1 U	22.9	<1 U	47.5	10,500.	2,490.	2-Butanone = 113 p-IPT = 1.11 1,1-DCE = 9.81
			27-Jul-06		908.	173.	367.	222.	160.	382.	<1 U	-	<1 U	7.39	2.52	-	71.9	21.2	<1 U	<1 U	<1 U	21.1	<1 U	36.5	9,080.	2,620.	2-Butanone = 25.2 p-IPT = 1.01 1,1-DCE = 15.8
			23-Aug-06		780.	154.	303.	174.	122.	296.	<0.3 U	-	0.64	4.76	<0.3 U	-	60.5	16.8	<0.3 U	<0.3 U	<0.3 U	3.22	<0.5 U	26.5	13,000.	5,480.	2-Butanone = 80.4 Acetone = 26. 1,1-DCE = 11.6
			26-Sep-06		717.	175.	225.	255.	175.	430.	<0.5 U	-	<0.5 U	7.82	2.25	-	68.6	20.4	<1 U	<0.5 U	<1 U	8.05	<1 U	45.8	6,240.	2,740.	1,2,3-Trichloropropane = 0.6 2-Butanone = 159. Acetone = 21.4 p-IPT = 1.14 1,1-DCE = 11.5
			23-Oct-06		673.	135.	253.	204.	138.	342.	<0.5 U	-	1.01	6.83	2.29	-	54.7	17.2	<1 U	<0.5 U	<1 U	5.7	<1 U	11.6	1,380.	1,370.	2-Butanone = 422 Acetone = 67.7 p-IPT = 1.13 1,1-DCE = 2.12
			18-Dec-06		813.	202.	395.	335.	177.	512.	<0.5 U	-	1.54	9.91	0.51	-	94.4	28.	<1 U	<0.5 U	<1 U	5.55	<1 U	4.75	934.	811.	2-Butanone = 2160. Acetone = 528. 1,1-DCE = 1.54
			25-Jan-07		947.	167.	367.	207.	150.	357.	<0.5 U	-	0.91	5.39	0.95	-	57.7	16.2	<1 U	<0.5 U	<1 U	3.24	<1 U	2.6	765.	494.	2-Butanone = 1690. Acetone = 675. p-IPT = 1.21 1,1-DCE = 0.66
			21-Feb-07		918.	250.	478.	252.	166.	418.	<0.5 U	-	1.37	7.25	2.44	-	74.1	21.4	<1 U	<0.5 U	<1 U	27.9	<1 U	4.08	669.	438.	2-Butanone = 1,950. Acetone = 622. p-IPT = 1.26

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results – ug/L (ppb)																					
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
		MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
		DEQ 2004 AWQC (chronic) [6]			#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
WS-11-125	MFA	WS-11-125	21-Mar-07	109-124	862.	219.	474.	307.	167.	474.	<0.5 U	-	<0.5 U	9.04	3.19	-	87.	25.8	<1 U	<0.5 U	<1 U	0.81	<1 U	3.02	838.	462.	2-Butanone = 1,920. Acetone = 523. p-IPT = 1.52 1,1-DCE = 0.97
			23-Apr-07		972.	246.	575.	280.	233.	513.	<0.5 U	-	<0.5 U	9.86	<0.5 U	-	104.	28.6	<1 U	<0.5 U	<1 U	1.94	<1 U	3.58	1,060.	565.	2-Butanone = 2,220. Acetone = 1,890. 1,1-DCE = 1.1
			22-May-07		1,680.	365.	696.	530.	370.	900.	<0.5 U	-	<0.5 U	8.56	1.12	-	84.1	24.2	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	2.58	1,640.	422.	2-Butanone = 1,290. Acetone = 2,830. p-IPT = 0.83 1,1-DCE = 0.82
			15-Nov-07		985.	229.	495.	362.	225.	587.	<0.5 U	-	<0.5 U	11.5	4.23	-	135.	34.6	<1 U	<0.5 U	<1 U	1.01	<1 U	0.84	332.	78.5	2-Butanone = 668. Acetone = 254. p-IPT = 2.29
			14-Feb-08		799.	135.	541.	419.	254.	673.	<0.5 U	-	<0.5 U	8.89	3.21	-	103.	28.3	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	79.5	16.4	2-Butanone = 307. Acetone = 195. p-IPT = 1.93
			15-May-08		448.	133.	392.	292.	218.	510.	<0.5 U	-	<0.5 U	10.5	3.21	-	134.	34.6	<1 U	<0.5 U	<1 U	0.92	<1 U	<0.5 U	13.7	5.93	2-Butanone = 12.5 p-IPT = 2.41
			6-Aug-08		290.	133.	225.	148.	109.	257.	<0.5 U	-	<0.5 U	7.47	2.38	-	99.6	23.2	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	10.6	4.54	p-IPT = 1.58
	HAI	5237-080515-WS11-125-102	15-May-08		560.	190.	490.	380.	240.	620.	0.14 J	21,000.	0.039 U	16.	5.5	-	160.	46.	0.044 U	0.041 U	0.054 U	0.32 J	0.077 U	0.3 J	20.	6.7	Acetone = 25. Carbon disulfide = 0.2 J Chloroethane = 0.56 p-IPT = 3.8, sec-B = 0.25 J
		5237-080929-WS-11-125-144	29-Sep-08		350.	120.	340.	270.	170.	440.	2.3 U	16,000.	2. U	11. J	3.5 J	-	98. J	28. J	2.2 U	2.1 U	2.7 U	3.1 U	3.9 U	2.4 U	14. J	5. J	n-B= 3 J, p-IPT = 3.
		5237-090407-WS11-125-102	7-Apr-09		610.	150.	410.	320.	200.	520.	4.5 U	18,000.	3.9 U	15. J	6. J	-	120. J	39. J	4.4 U	4.1 U	5.4 U	6.1 U	7.7 U	4.8 U	31. J	10. J	
		5237-090818-WS-11-125-149	18-Aug-09		480.	104.	298.	230.	159.	389.	0.5 U	1. U	0.5 U	14.4	10,800.	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	21.1	8.16	
WS-11-161	MFA	WS-11-161	27-Oct-03	145-160	0.56	0.2 U	0.2 U	<0.4 U	<0.2 U	0.4 U	<0.2 U	0.2 U	<0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	<0.2 U	<0.2 U	<0.2 U	1.6 U	<0.5 U	0.2 U	1.	0.2 U	Chloroform = 0.95
			29-Jan-04		0.2 U	0.2 U	0.2 U	<0.4 U	<0.2 U	0.4 U	<0.2 U	0.2 U	<0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	<0.2 U	<0.2 U	<0.2 U	0.2 U	<0.5 U	0.2 U	0.2 U	0.2 U	
			27-Apr-04		0.2 U	0.2 U	U	<0.4 U	<0.2 U	0.4 U	<0.2 U	1.24	<0.2 U	-	U	-	0.2 U	U	<0.2 U	<0.2 U	<0.2 U	0.64	<0.5 U	0.2 U	0.78	0.2 U	
			16-Nov-04		0.2 U	0.2 U	0.2 U	<0.4 U	<0.2 U	0.4 U	<0.2 U	1. U	<0.2 U	0.3 U	0.3 U	-	1. U	0.3 U	<0.3 U	<0.3 U	<0.3 U	0.2 U	<0.5 U	0.3 U	0.2 U	0.2 U	
			16-Feb-05		<0.2 U	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	1.22	<0.2 U	
			18-May-05		<0.2 U	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			10-Aug-05		<0.2 U	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			15-Nov-05		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			14-Feb-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			11-May-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	6.56	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			21-Aug-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			13-Nov-06		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.5 U	<0.3 U	
			21-Feb-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			29-May-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	0.82	
			15-Aug-07		3.2	0.88	0.85	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	2.04	<0.3 U	
			15-Nov-07		2.83	1.15	1.56	<1 U	0.62	0.62	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	0.58	0.57	
			11-Feb-08		7.59	2.59	3.71	2.01	1.21	3.22	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			15-May-08		23.	7.74	11.	6.16	4.24	10.4	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.65	<0.5 U	<1 U	<0.5 U	<1 U	0.81	<1 U	<0.5 U	<0.3 U	<0.3 U	n-B = 1.21
			6-Aug-08		19.8	4.7	8.31	3.62	2.33	5.95	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.87	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
	HAI	5237-070712-WS11-161	12-Jul-07		8.53	3.02	3.91	2.67	1.69	4.36	0.05 U	49.9	0.04 U	0.07 U	-	-	-	-	'-	-	-	0.08 U	0.11 U	0.1 U	6.18	0.1 U	
		5237-080515-WS11-161-103	15-May-08		25.	8.6	12.	8.	5.7	13.7	0.045 U	190.	0.039 U	0.19 J	0.05 J	-	1.4 J	0.44 J	0.07 J	0.041 U	0.06 J	0.11 J	0.077 U	0.048 U	0.42 J	0.1 J	
		5237-080929-WS-11-161-142	29-Sep-08		25.	9.7	15.	9.7	6.7	16.4	0.045 U	140.	0.039 U	0.22 J	0.05 J	-	1.3 J	0.44 J	0.07 J	0.041 U	0.054 U	0.08 J	0.077 U	0.048 U	0.52	0.23 J	n-B= 0.07 J, p-IPT = 0.06
		5237-080929-WS-11-161-143	29-Sep-08		23.	9.7	16.	10.	7.	17.	0.045 U	190.	0.039 U	0.24 J	0.07 J	-	1.5 J	0.52 J	0.07 J	0.041 U	0.054 U	0.08 J	0.077 U	0.048 U	0.49 J	0.16 J	n-B= 0.15 J, p-IPT = 0.07
		5237-090407-WS11-161-100	7-Apr-09		18.	7.7	13.	8.8	6.	14.8	0.045 U	170.	0.039 U	0.22 J	0.05 J	-	1.4 J	0.51 J	0.07 J	0.041 U	0.06 J	0.15 J	0.077 U	0.048 U	0.35 J	0.16 J	
		5237-090818-WS-11-161-147	18-Aug-09		11.3	5.25	9.69	3.94	2.9	6.84	0.5 U	1. U	0.5 U	0.5 U	131.	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
WS-12-125	MFA	WS-12-125	28-Oct-03	109-124	8.53	0.2 U	0.2 U	<0.4 U	1.1	1.1	<0.2 U	11.4 U	<0.2 U	0.52	0.2 U	-	0.2 U	0.2 U	0.26	<0.2 U	<0.2 U	4.89 U	<0.5 U	0.2 U	28.	63.5	Acetone = 768.
			30-Jan-04		2.91	0.2 U	0.2 U	<0.4 U	<0.2 U	0.4 U	<0.2 U	5.27	<0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	<0.2 U	<0.2 U	<0.2 U	1.86	<0.5 U	0.2 U	14.7	39.6	
			26-Apr-04		9.56	0.2 U	0.2 U	<0.4 U	1.35	1.35	<0.2 U	7.83	<0.2 U	0.45	0.2 U	-	0.2 U	0.2 U	<0.2 U	<0.2 U	<0.2 U	1.35	<0.5 U	0.2 U	11.5	12.7	
			17-Nov-04		4.01	0.2 U	0.2 U	<0.4 U	<0.2 U	0.4 U	<0.2 U	1. U	<0.2 U	0.3 U	0.3 U	-	1. U	0.3 U	<0.3 U	<0.3 U	<0.3 U	0.2 U	<0.5 U	0.3 U	0.2 U	4.58	
			16-Feb-05		4.63	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	0.2	<0.5 U	<0.3 U	1.99	4.33	
			18-May-05		1.46	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	2.98	
			16-Aug-05		<0.2 U	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	0.74	
			15-Nov-05		6.	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	2.21	3.96	
			14-Feb-06		4.78	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	4.16	
			9-May-06		5.16	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	4.56	
			21-Aug-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	0.94	
			13-Nov-06		7.9	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	1.53	4.46	
			21-Feb-07		6.29	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	3.54	
			29-May-07		6.25	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	13.3	<1 U	<0.5 U	0.61	3.75	
			15-Aug-07		6.89	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	6.84	<1 U	<0.5 U	1.15	3.59	
			13-Nov-07		6.71	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	4.23	<1 U	<0.5 U	1.14	4.14	
			11-Feb-08		4.88	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	3.05	<1 U	<0.5 U	1.2	3.62	
			21-May-08		3.28	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	2.4	<1 U	<0.5 U	0.61	3.47	
			6-Aug-08		4.58	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	1.58	<1 U	<0.5 U	1.04	1.91	

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results – ug/L (ppb)																						
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
		MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
		DEQ 2004 AWQC (chronic) [6]			#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
WS-12-125	HAI	5237-070712-WS12-125	12-Jul-07	109-124	6.44	0.11	0.06 U	0.21 U	0.07 U	0.26 U	0.05 U	0.544	0.04 U	0.07 U	-	-	-	-	-	-	-	6.5	0.11 U	0.1 U	1.82	3.58	
		5237-080521-WS12-126-104	21-May-08		6.6	0.1 J	0.05 J	0.078 U	0.07 J	0.07	0.045 U	0.14 U*	0.039 U	0.16 J	0.037 U	-	0.037 U	0.042 U	0.1 J	0.041 U	0.054 U	2.9	0.077 U	0.048 U	2.4	5.6	Chloromethane = 0.06 J
		5237-080925-WS12-125-140	25-Sep-08		6.2	0.45 J	0.08 J	0.078 U	0.04 J	0.04	0.045 U	3.1	0.039 U	0.19 J	0.037 U	-	0.037 U	0.042 U	0.08 J	0.041 U	0.054 U	3.	0.077 U	0.048 U	1.5	3.5	
		5237-090407-WS12-125-106	7-Apr-09		5.5	0.09 J	0.042 U	0.078 U	0.037 U	0.17 U	0.045 U	0.1 U	0.039 U	0.17 J	0.037 U	-	0.037 U	0.042 U	0.09 J	0.041 U	0.054 U	2.	0.077 U	0.048 U	1.7	4.3	Chloroethane = 0.2 J
		5237-090818-WS-12-125-145	18-Aug-09		5.66	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	1. U	0.5 U	0.5 U	2. U	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	2.87	0.5 U	0.5 U	1.73	3.87	
WS-12-161	MFA	WS-12-161	27-Oct-03	145-160	0.55	0.2 U	0.2 U	<0.4 U	<0.2 U	0.4 U	1.52	0.46 U	<0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1.76	<0.2 U	<0.2 U	3.74 U	<0.5 U	0.2 U	0.9	0.3 U	Acetone = 1120. Chloroform = 0.36 MTBE = 1.45
			29-Jan-04		0.2 U	0.2 U	0.2 U	<0.4 U	<0.2 U	0.4 U	<0.2 U	0.2 U	<0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1.44	<0.2 U	<0.2 U	1.54	<0.5 U	0.2 U	0.8	0.33	Acetone = 3570. MTBE = 1.71
			26-Apr-04		0.2 U	0.2 U	0.2 U	<0.4 U	<0.2 U	0.4 U	1.01	0.29	<0.2 U	0.2	0.2 U	-	0.2 U	0.2 U	1.11	<0.2 U	<0.2 U	0.2 U	<0.5 U	0.2 U	1.31	0.2 U	Acetone=2360. MTBE = 1.49
			17-Nov-04		446.	0.2 U	79.7	51.4	35.7	87.1	<0.2 U	202.	<0.2 U	1.28	0.3 U	-	2.03	0.51	<0.3 U	<0.3 U	<0.3 U	0.2 U	<0.5 U	0.3 U	0.2 U	0.2 U	Chloromethane = 0.34
			18-Feb-05		5.88	1.36	<0.2 U	1.01	<0.2 U	1.01	2.25	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	2.22	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	1.35	<0.2 U	MTBE = 6.9
			20-May-05		<0.2 U	0.29	<0.2 U	<0.4 U	<0.2 U	<0.4 U	1.	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	0.41	<0.3 U	<0.3 U	1.51	<0.5 U	<0.3 U	<0.2 U	0.65	MTBE = 4.58
			16-Aug-05		<0.2 U	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	MTBE = 4.5
			15-Nov-05		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	2.48	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	1.06	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	MTBE = 5.31
			14-Feb-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	1.78	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	MTBE = 5.84
			9-May-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	2.94	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	1.65	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	MTBE = 3.72
			21-Aug-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	MTBE = 1.66
			13-Nov-06		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	2.98	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.5 U	<0.3 U	MTBE = 7.31
			21-Feb-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	2.39	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	1.6	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	MTBE = 8.29
			29-May-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	2.34	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	0.79	MTBE = 9.81
			15-Aug-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	2.49	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	1.73	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	MTBE = 9.
			13-Nov-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	2.35	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	2.	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	MTBE = 6.51
			11-Feb-08		4.74	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	2.76	<1 U	<0.5 U	1.27	3.48	
			21-May-08		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	2.85	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	2.41	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	MTBE = 8.81
			5-Aug-08		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	2.54	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	2.41	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	MTBE = 10.8
	HAI	5237-070712-WS12-161	12-Jul-07		0.09 U	0.11	0.06 U	0.21 U	0.07 U	0.26 U	2.82	0.095	0.04 U	0.07 U	-	-	-	-	-	-	-	0.08 U	0.11 U	0.1 U	0.09 U	0.1 U	MTBE = 8.84
		5237-080521-WS12-161-107	21-May-08		0.07 J	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	3.4	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	3.3	0.041 U	0.06 J	0.08 J	0.077 U	0.05 J	0.34 J	0.07 U	1,2-DCA = 0.17 J
		5237-080925-WS-12-161-141	25-Sep-08		0.06 J	0.74	0.042 U	0.078 U	0.037 U	0.078 U	3.	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	2.8	0.041 U	0.054 U	0.07 J	0.077 U	0.048 U	0.31 J	0.07 U	1,2-DCA = 0.16 J Acetone = 6.1 J
		5237-090407-WS12-161-104	7-Apr-09		0.06 J	0.06 J	0.042 U	0.078 U	0.037 U	0.031 U	3.1	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	3.	0.041 U	0.054 U	0.1 J	0.077 U	0.048 U	0.34 J	0.07 U	1,2-DCA = 0.19 J
		5237-090818-WS-12-161-143	18-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	3.11	2. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	2.68	0.5 U	0.5 U	1.67	0.5 U	0.5 U	0.5 U	0.5 U	MTBE = 15.4
WS-13-69	MFA	WS-13-69	29-Oct-03	52.6-67.6	129.	46.9	60.1	56.	31.3	87.3	<1 U	343.	<1 U	1.31	1. U	-	8.07	2.13	<1 U	<1 U	<1 U	55,200.	1.12	89.8	7,040.	5.28	1,1,2-TCA = 12.2 Chloroform = 2.05 1,1-DCE = 29.
			30-Jan-04		680.	58.6	153.	125.	71.7	196.7	<1 U	833.	<1 U	2.73	1. U	-	16.6	3.76	1.53	<1 U	<1 U	116,000.	1.62	109.	17,300.	24.1	1,1,2-TCA = 12.2 Chloroform = 3.84 1,1-DCE = 119.
			28-Apr-04		587.	57.5	123.	62.9	61.5	124.4	<1 U	527.	<1 U	2.98	1. U	-	18.4	4.32	1.19	<0.998 U	<0.998 U	117,000.	3.26	68.4	14,200.	12.4	1,1,2-TCA=13.7 1,1-DCE = 79.1
			18-Nov-04		764.	57.3	732.	103.	56.4	159.4	<0.2 U	648.	1.13	2.3	0.3 U	-	11.6	2.18	<0.3 U	<0.3 U	<0.3 U	198,000.	1.08	89.9	20,900.	20.7	1,1,2-TCA = 13. Chloromethane = 0.41 1,1-DCE = 96.6
			17-Feb-05		963.	63.4	198.	141.	70.3	211.3	<0.2 U	-	<0.2 U	3.53	0.69	-	18.2	3.85	<0.3 U	<0.3 U	<0.3 U	246,000.	1.26	166.	32,000.	22.	1,1,2-TCA = 15.6 1,1-DCE = 89.9
			20-May-05		340.	30.7	114.	50.4	28.9	79.3	<0.2 U	-	0.31	0.51	<0.3 U	-	8.96	1.82	<0.3 U	<0.3 U	<0.3 U	131,000.	1.09	104.	12,500.	8.62	1,1,2-TCA = 12. 1,1-DCE = 43.3
			10-Aug-05		271.	13.6	65.4	41.2	21.3	62.5	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	1.76	<0.3 U	<0.3 U	<0.3 U	<0.3 U	90,500.	<0.5 U	106.	9,920.	13.6	1,1,2-TCA = 8.82 1,1-DCE = 56.
			16-Nov-05		988.	57.9	312.	153.	68.6	221.6	<0.3 U	-	2.22	2.77	1.01	-	21.9	5.97	0.33	<0.3 U	<0.3 U	204,000.	1.57	312.	23,100.	24.3	1,1,2-TCA = 14. Chloromethane = 0.6 1,1-DCE = 138.
			16-Feb-06		1,160.	51.4	388.	119.	60.9	179.9	<0.3 U	-	<0.3 U	3.44	0.67	-	18.	4.11	0.3	<0.3 U	<0.3 U	131,000.	1.34	130.	16,300.	16.7	1,1,2-TCA = 17.3 Dichlorodifluoromethane = 98.6 1,1-DCE = 106.
			10-May-06		1,510.	80.7	380.	194.	85.7	279.7	0.34	-	0.79	4.39	1.32	-	32.	5.93	0.57	0.31	0.47	259,000.	2.32	84.5	24,100.	34.9	1,1,2-TCA = 24.4 1,2,4-Trichlorobenzene = 0.65 1,2-DCA = 0.6 Acetone = 16.6 1,1-DCE = 202.
			19-Jul-06		1,140.	53.	243.	131.	52.2	183.2	<1 U	-	<1 U	4.95	1.11	-	29.	3.18	<1 U	<1 U	<1 U	178,000.	1.54	148.	36,000.	28.4	1,1,2-TCA = 13.5 1,1-DCE = 133.
			24-Aug-06		1,120.	31.2	115.	85.2	38.8	124.	<0.5 U	-	0.63	3.05	0.7	-	17.6	4.13	<1 U	<0.5 U	<1 U	118,000.	<1 U	134.	13,500.	11.4	1,1,2-TCA = 13.5 1,1-DCE = 65.
			27-Sep-06		937.	39.6	194.	107.	24.	131.	<5 U	-	<5 U	<3 U	<5 U	-	9.7	<5 U	<10 U	<5 U	<10 U	142,000.	<10 U	137.	16,100.	<3 U	1,1,2-TCA = 10.6 1,1-DCE = 62.9
			25-Oct-06		1,020.	40.3	189.	97.2	18.4	115.6	<5 U	-	<5 U	<3 U	<5 U	-	6.8	<5 U	<10 U	<5 U	<10 U	220,000.	<10 U	111.	29,000.	25.5	n-B = 8.2 1,1-DCE = 91.2
			15-Nov-06		2,150.	172.	720.	569.	205.	774.	<10 U	-	<10 U	<6 U	<10 U	-	177.	<10 U	<20 U	<10 U	<20 U	172,000.	<20 U	162.	44,200.	28.	1,1-DCE = 159.

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results – ug/L (ppb)																					
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
		MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
		DEQ 2004 AWQC (chronic) [6]			#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
WS-13-69	MFA	WS-13-69	25-Jan-07	52.6-67.6	1.120.	45.8	274.	134.	49.1	183.1	<0.5 U	-	0.79	5.25	2.12	-	33.7	8.79	<1 U	<0.5 U	<1 U	150,000.	1.43	179.	52,800.	46.4	1,1,2-TCA = 11.9 1,1-DCA = 0.31 1,1-DCE = 160.
			21-Feb-07		1,360.	63.2	327.	158.	40.6	198.6	<10 U	-	<10 U	<6 U	<10 U	-	31.6	12.	<20 U	<10 U	<20 U	135,000.	<20 U	216.	45,400.	3,840.	1,1-DCE = 181.
			22-Mar-07		1,170.	44.8	276.	107.	28.4	135.4	<10 U	-	<10 U	<6 U	<10 U	-	19.2	<10 U	<20 U	<10 U	<20 U	141,000.	<20 U	147.	38,500.	349.	1,1-DCE = 176.
			24-Apr-07		1,140.	46.8	310.	<20 U	37.	37.	<10 U	-	<10 U	<6 U	<10 U	-	<10 U	<10 U	<20 U	<10 U	<20 U	253,000.	<20 U	161.	67,800.	30.2	1,1-DCE = 175.
			23-May-07		1,160.	34.4	206.	85.7	32.6	118.3	<2.5 U	-	<2.5 U	3.85	<2.5 U	-	27.	6.5	<5 U	<2.5 U	<5 U	191,000.	<5 U	122.	51,400.	378.	1,1,2-TCA = 9.45 2-Butanone = 144. 1,1-DCE - 150.
			17-Aug-07		1,480.	47.4	309.	99.2	31.4	130.6	<10 U	-	<10 U	<6 U	<10 U	-	31.	<10 U	<20 U	<10 U	<20 U	64,900.	<20 U	130.	21,200.	39.8	Dichlorodifluoromethane = 216. 1,1-DCE = 156.
			15-Nov-07		1,620.	50.4	352.	129.	43.2	172.2	<10 U	-	<10 U	<6 U	<10 U	-	53.4	12.2	<20 U	<10 U	<20 U	128,000.	<20 U	161.	37,200.	56.6	1,1-DCE = 190.
			12-Feb-08		1,610.	44.6	338.	121.	40.4	161.4	<0.5 U	-	0.53	7.14	1.8	-	56.9	13.	<1 U	<0.5 U	<1 U	129,000.	1.68	149.	33,600.	35.2	1,1,2-TCA = 9.18 2-Butanone = 32.5 1,1-DCE = 184.
			14-May-08		1,000.	28.9	291.	74.2	29.7	103.9	<0.5 U	-	<0.5 U	4.48	1.03	-	37.9	8.55	<1 U	<0.5 U	<1 U	160,000.	<1 U	164.	40,400.	26.1	1,1,2-TCA = 6.65 1,1-DCE = 122.
			8-Aug-08		1,600.	47.9	299.	125.	43.	168.	<0.5 U	-	0.61	6.45	1.2	-	52.7	10.5	<1 U	<0.5 U	<1 U	208,000.	1.11	151.	56,500.	28.8	1,1,2-TCA = 11.1 1,1-DCE = 162.
WS-13-105	MFA	WS-13-105	29-Oct-03	89-104	2.14	1.34	6.14 U	<5.09 U	<2.78 U	5.09 U	<0.2 U	226.	<0.2 U	0.46	0.2 U	-	2.78	0.5	<0.2 U	<0.2 U	<0.2 U	10,600.	<0.5 U	3.67	360.	0.52 U	Chloroform = 0.61 p-IPT = 0.22 1,1-DCE = 1.61
		Duplicate	29-Oct-03		1.09	0.2 U	1.29	-	-	2.2	-	25.8	-	0.2	2. U	-	2. U	2. U	-	-	-	1,390.	-	1.51	61.9	0.2 U	
			30-Jan-04		11.7	1.18	3.32	2.09	<1 U	2.09	<1 U	78.7	<1 U	1. U	1. U	-	1. U	1. U	<1 U	<1 U	<1 U	949.	<1 U	43.6	1,360.	1.62	1,1-DCE = 4.18
		Duplicate	30-Jan-04		3.23	1.79	4.14	-	-	3.6	-	114.	-	1. U	1. U	-	1. U	1. U	-	-	-	641.	-	88.	1,520.	2.	
			28-Apr-04		0.3 U	0.2 U	0.2 U	<2 U	<1 U	2. U	<1 U	48.8	<1 U	0.3 U	0.3 U	-	1. U	0.3 U	<1 U	<1 U	<1 U	340.	<1 U	7.86	868.	44.5	
		Duplicate	28-Apr-04		0.3 U	0.2 U	0.2 U	-	-	2. U	-	41.	-	-	0.3 U	-	1. U	0.3 U	-	-	-	260.	-	5.45	1,150.	36.9	
			18-Nov-04		0.2 U	0.2 U	0.2 U	<0.4 U	<0.2 U	0.4 U	<0.2 U	1. U	<0.2 U	0.3 U	0.3 U	-	1. U	0.3 U	<0.3 U	<0.3 U	<0.3 U	7.72	<0.5 U	0.3 U	12.4	5.79	Chloromethane = 0.4
		Duplicate	18-Nov-04		0.2 U	0.2 U	0.2 U	-	-	0.4 U	-	1. U	-	0.3 U	0.3 U	-	1. U	0.3 U	-	-	-	25.9	-	0.3 U	14.3	5.58	Chloromethane = 0.45
			17-Feb-05		<0.2 U	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	10.7	<0.5 U	0.32	10.8	1.9	
			20-May-05		0.29	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	6.66	<0.5 U	<0.3 U	4.36	0.93	
			9-Aug-05		<0.2 U	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	0.65	<0.2 U	
			16-Nov-05		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	1.39	<0.5 U	<0.3 U	5.24	1.15	
			16-Feb-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	1.73	<0.5 U	<0.3 U	5.72	1.83	
			10-May-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	3.05	1.37	
			19-Jul-06		<0.3 U	<1 U	<1 U	<2 U	<1 U	<2 U	<1 U	-	<1 U	<1 U	<1 U	-	<1 U	<1 U	<1 U	<1 U	<1 U	3.49	<1 U	<1 U	8.52	<1 U	
			24-Aug-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	1.74	<0.5 U	<0.3 U	17.4	1.36	
			27-Sep-06		0.47	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	56.3	<1 U	<0.5 U	19.4	1.54	
			25-Oct-06		0.3	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	3.13	<1 U	<0.5 U	11.7	1.66	
			15-Nov-06		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	2.81	<1 U	<0.5 U	19.1	2.27	
			25-Jan-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<1 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	3.28	<1 U	<0.5 U	12.1	1.78	
			21-Feb-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	0.69	-	0.52	0.51	<1 U	<0.5 U	<1 U	2.23	<1 U	<0.5 U	8.65	2.02	p-IPT = 0.62 sec-B = 0.54
			21-Mar-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	0.84	<1 U	<0.5 U	5.42	<0.3 U	
			24-Apr-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	3.51	<1 U	<0.5 U	10.4	2.88	
			23-May-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	1.93	<1 U	<0.5 U	7.15	1.27	
			16-Aug-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	1.61	<1 U	<0.5 U	5.81	0.93	
			19-Nov-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	1.04	<1 U	<0.5 U	4.63	0.94	
			12-Feb-08		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	1.39	<1 U	<0.5 U	6.33	1.19	
			13-May-08		0.78	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	2.7	<1 U	<0.5 U	7.03	0.93	
			8-Aug-08		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	5.87	1.44	
WS-14-125	MFA	WS-14-125	16-Nov-05	109-124	3,630.	410.	514.	443.	232.	675.	<0.2 U	9,170.	<0.2 U	19.6	2.43	-	86.2	25.1	<0.3 U	<0.3 U	<0.3 U	0.2 U	0.5 U	0.3 U	8.54	4.09	p-IPT=2.18 n-B=0.97 Chloroform=0.97
			21-Feb-05		4,060.	287.	498.	375.	219.	594.	<0.2 U	-	<0.2 U	17.4	3.77	-	90.1	27.8	<0.3 U	<0.3 U	<0.3 U	0.25	<0.5 U	<0.3 U	9.52	5.2	p-IPT = 2.9
			23-May-05		3,740.	165.	269.	173.	103.	276.	<0.2 U	-	<0.2 U	6.89	1.61	-	45.7	12.6	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	11.4	2.77	p-IPT = 0.99
			9-Aug-05		2,610.	101.	154.	181.	103.	284.	<0.2 U	-	<0.2 U	4.16	<0.3 U	-	29.7	6.47	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	4.21	<0.2 U	
			16-Nov-05		5,240.	306.	539.	498.	247.	745.	<0.3 U	-	<0.3 U	19.6	3.65	-	97.3	29.7	<0.3 U	<0.3 U	<0.3 U	3.14	<0.5 U	<0.3 U	52.4	9.9	p-IPT = 3.51
			15-Feb-06		5,140.	217.	421.	346.	201.	547.	<0.3 U	-	<0.3 U	14.4	2.72	-	74.1	21.5	<0.3 U	<0.3 U	<0.3 U	2.7	<0.5 U	<0.3 U	33.8	5.38	p-IPT = 3.44
			9-May-06		7,300.	284.	456.	392.	181.	573.	<0.3 U	-	<0.3 U	10.9	2.73	-	82.9	22.6	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	26.7	5.26	1,2,3-Trichloropropane = 0.46 tert-B = 1.5 p-IPT = 0.64
			22-Aug-06		4,370.	217.	412.	256.	148.	404.	<0.3 U	-	<0.3 U	9.61	<0.3 U	-	65.4	18.	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	20.4	4.01	
			14-Nov-06		10,300.	239.	368.	279.	169.	448.	<0.5 U	-	<0.5 U	26.6	2.15	-	164.	50.2	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	61.2	11.2	
			21-Feb-07		9,820.	288.	608.	462.	238.	700.	<0.5 U	-	<0.5 U	15.7	3.46	-	90.3	25.9	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	42.3	11.3	p-IPT = 1.73
			24-May-07		5,000.	160.	369.	306.	176.	482.	<0.5 U	-	<0.5 U	16.5	2.67	-	92.8	28.8	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	28.3	7.47	p-IPT = 2.2
			18-Jul-07		7,440.	350.	525.	456.	262.	718.	<0.5 U	-	<0.5 U	17.4	3.33	-	80.7	26.1	<1 U	<0.5 U	<1 U	0.63	<1 U	<0.5 U	52.1	11.4	n-B = 0.57 p-IPT = 2.57
			19-Jul-07		9,070.	366.	556.	488.	276.	764.	<0.5 U	-	<0.5 U	18.7	3.73	-	88.8	29.1	<1 U	<0.5 U	<1 U	0.63	<1 U	<0.5 U	59.	12.5	n-B = 0.56 p-IPT = 2.8
			16-Aug-07		7,450.	294.	532.	473.	258.	731.	<0.5 U	-	<0.5 U	17.5	3.65	-	90.6	26.8	<1 U	<0.5 U	<1 U	0.45	<1 U	<0.5 U	45.7	11.2	n-B = 0.8 p-IPT = 2.56

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results – ug/L (ppb)																					
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
		MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
		DEQ 2004 AWQC (chronic) [6]			#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
WS-14-125	MFA	WS-14-125	14-Nov-07	109-124	5,780.	292.	636.	533.	276.	809.	<0.5 U	-	<0.5 U	16.4	4.56	-	113.	31.	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	53.3	13.	n-B = 0.65 p-IPT = 2.4
			11-Feb-08		5,650.	228.	525.	386.	186.	572.	<0.5 U	-	<0.5 U	13.9	3.05	-	102.	27.5	<1 U	<0.5 U	<1 U	0.41	<1 U	<0.5 U	34.1	6.49	n-B = 0.51 p-IPT = 2.17
			15-May-08		4,700.	178.	447.	189.	133.	322.	<0.5 U	-	<0.5 U	19.4	4.49	-	127.	36.1	<1 U	<0.5 U	<1 U	1.62	<1 U	0.6	66.9	15.4	p-IPT = 3.13
			4-Aug-08		4,000.	205.	395.	279.	165.	444.	<0.5 U	-	<0.5 U	12.8	3.32	-	97.	25.	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	40.8	9.75	p-IPT = 2.15 sec-B = 0.55
	HAI	5237-070712-WS14-125	12-Jul-07		5,430.	202.	505.	419.	212.	631.	5. U	7,580.	4. U	7. U	-	-	-	-	-	-	-	8. U	11. U	10. U	48.	10. U	
		5237-080515-WS14-125-100	15-May-08		6,400.	160.	640.	540.	280.	820.	0.18 J	11,000.	0.039 U	21.	5.	-	120.	37.	0.044 U	0.041 U	0.054 U	0.83	0.077 U	1.1	76.	12.	1,1-DCE = 0.12 J Methylene Chloride = 0.3 J p-IPT = 3.2, sec-B = 0.25 J
		5237-080925-WS-14-125-138	25-Sep-08		4,500.	190.	480.	390.	200.	590.	2.3 U	6,800.	2. U	15. J	3.5 J	-	73. J	22. J	2.2 U	2.1 U	2.7 U	3.1 U	3.9 U	2.4 U	50.	11. J	p-IPT = 3 J
		5237-090408-WS14-125-110	8-Apr-09		5,900.	170.	530.	440.	240.	680.	2.3 U	11,000.	2. U	18. J	4.5 J	-	97. J	29. J	2.2 U	2.1 U	2.7 U	3.1 U	3.9 U	2.4 U	83.	18. J	n-B = 3.5 J p-IPT = 3. J
		5327-090819-WS-14-125-155	19-Aug-09		5,670.	158.	558.	458.	208.	666.	100. U	20,200.	100. U	100. U	100. U	-	200. U	200. U	100. U	100. U	100. U	100. U	100. U	100. U	110.	100. U	
WS-14-161	MFA	WS-14-161	16-Nov-04	145-160	0.43	0.2 U	0.2 U	<0.4 U	<0.2 U	0.4 U	0.2 U	3.92	0.2 U	0.3 U	0.3 U	-	1. U	0.3 U	<0.3 U	<0.3 U	<0.3 U	0.2 U	0.5 U	0.3 U	0.2 U	0.2 U	Carbon disulfide = 0.26 Chloromethane = 0.32
			21-Feb-05		2.06	0.46	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			23-May-05		0.34	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			9-Aug-05		<0.2 U	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			16-Nov-05		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			15-Feb-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			9-May-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			22-Aug-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			14-Nov-06		0.65	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			21-Feb-07		0.51	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			24-May-07		0.52	<0.5 U	1.51	1.4	0.53	1.93	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			18-Jul-07		0.63	<0.5 U	0.82	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	0.64	<1 U	<0.5 U	<0.3 U	<0.3 U	
			19-Jul-07		0.6	<0.5 U	1.12	<1 U	0.33	0.33	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	0.54	<1 U	<0.5 U	<0.3 U	<0.3 U	
			16-Aug-07		0.38	<0.5 U	0.72	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			14-Nov-07		0.39	<0.5 U	4.93	3.89	1.91	5.8	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.98	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			11-Feb-08		0.32	<0.5 U	4.1	2.34	1.09	3.43	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.53	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			15-May-08		0.88	0.63	4.08	3.04	1.88	4.92	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.89	<0.5 U	<1 U	<0.5 U	<1 U	2.71	<1 U	<0.5 U	0.33	<0.3 U	
			4-Aug-08		0.34	0.8	6.96	4.06	1.57	5.63	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.78	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
	HAI	5237-070712-WS14-161	12-Jul-07		0.09 U	0.11	0.68	0.21 U	0.07 U	0.26 U	0.05 U	15.7	0.04 U	0.07 U	-	-	-	-	-	-	-	0.08 U	0.11 U	0.1 U	0.09 U	0.1 U	
		5237-080515-WS14-161-101	15-May-08		0.44 J	0.94	7.6	6.5	3.5	10.	0.045 U	240.	0.039 U	0.38 J	0.12 J	-	2. J	0.61 J	0.044 U	0.041 U	0.054 U	0.25 J	0.077 U	0.048 U	0.045 U	0.071 U	n-B = 0.06 J, p-IPT = 0.06 J
		5237-080925-WS-14-161-139	25-Sep-08		0.79	1.5	9.6	8.1	3.9	12.	0.045 U	180. J	0.039 U	0.37 J	0.08 J	-	1.8 J	0.56 J	0.044 U	0.041 U	0.054 U	0.3 J	0.077 U	0.048 U	0.045 U	0.071 U	Carbon disulfide=0.07 J p-IPT = 0.06 J
		5237-090408-WS14-161-108	8-Apr-09		0.85 J	1.2 J	18.	16.	8.1	24.1	0.23 U	960.	0.2 U	1.7 J	0.55 J	-	10.	3.5 J	0.22 U	0.21 U	0.27 U	0.31 U	0.39 U	0.24 U	0.23 U	0.36 U	n-B = 0.5 J p-IPT = 0.45 J
		5237-090818-WS-14-161-151	18-Aug-09		0.88	1.05	22.1	15.3	7.9	23.2	0.5 U	961.	0.5 U	1.61	0.5 U	-	6.81	1.38	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
WS-15-85	MFA	WS-15-85	18-Nov-04	70-85	3,650.	268.	285.	194.	103.	297.	0.2 U	3,470.	0.2 U	8.7	1.03	-	44.4	11.7	<0.3 U	<0.3 U	<0.3 U	186.	0.5 U	23.6	2,640.	4.42	p-IPT = 1.26 Chloroform = 0.45 Chloromethane = 0.33 1,1-DCE = 12.2
			17-Feb-05		17,300.	555.	1,320.	894.	584.	1,478.	<0.2 U	-	<0.2 U	57.6	20.1	-	285.	110.	<0.3 U	<0.3 U	<0.3 U	14.7	<0.5 U	2.13	464.	2.12	n-B = 5.47 tert-B = 0.92 p-IPT = 17. 1,1-DCE = 1.52
			19-May-05		13,000.	410.	1,030.	733.	400.	1,133.	<0.2 U	-	1.8	33.1	11.4	-	208.	59.4	<0.3 U	<0.3 U	<0.3 U	7.88	<0.5 U	<0.3 U	525.	5.67	n=B = 5.07 p-IPT = 7.11 sec-B = 3.66
			10-Aug-05		5,130.	119.	270.	234.	114.	348.	<0.2 U	-	<0.2 U	7.01	0.46	-	58.	13.8	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	206.	9.01	
			14-Nov-05		10,800.	258.	860.	412.	353.	765.	<0.3 U	-	<0.3 U	34.2	8.94	-	175.	55.2	<0.3 U	<0.3 U	<0.3 U	20.5	<0.5 U	2.26	487.	8.07	n-B = 1.35 tert-B = 2.22 sec-B = 1.91 p-IPT = 7.27 1,1-DCE = 1.05
			16-Feb-06		21,600.	578.	1,970.	1,440.	642.	2,082.	<0.3 U	-	<0.3 U	33.9	9.79	-	270.	60.2	<0.3 U	<0.3 U	<0.3 U	21.8	<0.5 U	4.38	1,180.	16.	n-B = 1.67 p-IPT = 14.7 1,1-DCE = 0.93
			10-May-06		20,300.	314.	1,290.	1,040.	394.	1,434.	<0.3 U	-	<0.3 U	30.5	8.96	-	<50 U	59.6	<0.3 U	<0.3 U	<0.3 U	6.48	<0.5 U	<0.3 U	742.	14.8	Acetone = 12.1 Chloromethane = 0.44 tert-B = 1.7 p-IPT = 4.25
			25-Aug-06		21,500.	362.	1,120.	977.	483.	1,460.	<0.5 U	-	<0.5 U	31.5	8.1	-	145.	48.5	<1 U	<0.5 U	<1 U	2,210.	<1 U	4.72	1,270.	4.96	n-B = 1.7 tert-B = 0.71 sec-B = 0.53 p-IPT = 5.42 1,1-DCE = 1.6
			14-Nov-06		10,500.	197.	632.	457.	274.	731.	<0.5 U	-	0.66	40.	7.71	-	40.2	75.5	<1 U	<0.5 U	<1 U	3.73	<1 U	1.66	593.	13.8	p-IPT = 3.43 1,1-DCE = 1.33
			21-Feb-07		12,900.	282.	1,190.	918.	476.	1,394.	<0.5 U	-	<0.5 U	33.6	9.35	-	160.	56.5	<1 U	<0.5 U	<1 U	3.79	<1 U	<0.5 U	574.	10.6	p-IPT = 4.7 sec-B = 0.64
			24-May-07		9,320.	7.57	32.3	27.1	15.3	42.4	<0.5 U	-	0.54	0.94	<0.5 U	-	6.36	1.99	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	20.6	0.37	
			17-Aug-07		3,540.	125.	502.	690.	358.	1,048.	<0.5 U	-	<0.5 U	18.7	0.78	-	147.	43.3	<1 U	<0.5 U	<1 U	3.	<1 U	0.69	331.	9.44	p-IPT = 4.43

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results – ug/L (ppb)																					
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
		MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
		DEQ 2004 AWQC (chronic) [6]			#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
WS-15-85	MFA	WS-15-85	15-Nov-07	70-85	4,840.	236.	1,040.	884.	454.	1,338.	<0.5 U	-	<0.5 U	24.7	8.04	-	213.	52.4	<1 U	<0.5 U	<1 U	2.47	<1 U	0.94	434.	10.7	p-IPT = 4.56
			12-Feb-08		8,580.	266.	950.	852.	416.	1,268.	<0.5 U	-	<0.5 U	28.6	7.45	-	183.	58.6	<1 U	<0.5 U	<1 U	2.39	<1 U	0.97	303.	11.	p-IPT = 5.39 1,1-DCE = 0.5
			14-May-08		5,100.	175.	788.	657.	372.	1,029.	<0.5 U	-	<0.5 U	37.9	10.2	-	177.	74.8	<1 U	<0.5 U	<1 U	3.52	<1 U	1.74	374.	7.62	p-IPT = 7.96 1,1-DCE = 0.97
			8-Aug-08		3,860.	175.	993.	996.	214.	1,210.	<0.5 U	-	<0.5 U	25.2	4.92	-	230.	51.6	<1 U	<0.5 U	<1 U	2.15	<1 U	1.43	513.	6.92	n-B = 1.11 p-IPT = 4.37 1,1-DCE = 1.09
WS-15-140	MFA	WS-15-140	18-Nov-04	125-140	7.99	0.32	0.79	<0.4 U	<0.2 U	0.4 U	4.42	23.9	0.2 U	0.3 U	0.3 U	-	1. U	0.3 U	1.61	0.3 U	0.3 U	2.62	0.5 U	0.3 U	7.12	0.2 U	Chloromethane = 0.37 MTBE = 2.3
			17-Feb-05		18.	0.96	0.25	1.49	<0.2 U	1.49	7.64	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	2.89	<0.3 U	<0.3 U	3.08	<0.5 U	<0.3 U	7.36	<0.2 U	MTBE = 3.06
			19-May-05		6.67	0.75	0.52	<0.4 U	<0.2 U	<0.4 U	4.72	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	3.37	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	3.81	<0.2 U	MTBE = 4.03
			10-Aug-05		1,010.	16.5	67.2	49.6	31.8	81.4	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	5.26	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	49.2	<0.2 U	
			14-Nov-05		2,460.	24.4	155.	61.3	67.7	129.	2.43	-	<0.3 U	3.53	<0.3 U	-	14.6	4.34	0.56	<0.3 U	<0.3 U	36.	<0.5 U	1.32	128.	2.25	MTBE = 2.42 p-IPT = 2.09
			15-Feb-06		2,220.	21.1	229.	50.4	76.5	126.9	2.03	-	<0.3 U	4.29	1.01	-	22.5	6.29	<0.3 U	<0.3 U	<0.3 U	1.79	<0.5 U	<0.3 U	130.	1.54	MTBE = 1.92 p-IPT = 1.29
			10-May-06		2,110.	9.71	204.	28.8	68.6	97.4	1.4	-	1.61	2.23	0.91	-	24.	4.72	0.39	<0.3 U	<0.3 U	261.	<0.5 U	<0.3 U	115.	2.86	2-Chlorotoluene = 0.81 Trans-1,3-Dichloropropene = 0.77
			25-Aug-06		1,460.	4.7	62.7	9.52	27.8	37.32	0.53	-	0.88	1.75	0.61	-	8.86	2.41	<1 U	<0.5 U	<1 U	448.	<1 U	5.77	98.8	1.73	MTBE = 1.01 1,1-DCE = 1.16
			14-Nov-06		1,110.	10.7	120.	11.1	31.2	42.3	0.87	-	<0.5 U	<0.3 U	<0.5 U	-	15.7	2.35	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	82.6	3.49	MTBE = 1.1
			21-Feb-07		815.	4.44	85.2	8.09	17.1	25.19	<0.5 U	-	<0.5 U	1.52	<0.5 U	-	9.35	2.62	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	41.8	3.07	MTBE = 0.69
			24-May-07		26.2	<0.5 U	3.97	1.17	0.84	2.01	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.6	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			17-Aug-07		822.	3.33	93.3	6.4	17.2	23.6	0.71	-	<0.5 U	2.24	0.88	-	13.6	3.41	<1 U	<0.5 U	<1 U	6.57	<1 U	<0.5 U	19.	4.28	MTBE = 0.98
			15-Nov-07		866.	2.75	103.	7.63	17.8	25.43	<0.5 U	-	<0.5 U	2.77	1.22	-	12.1	5.11	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	10.7	3.46	
			12-Feb-08		546.	2.76	97.2	6.56	16.4	22.96	0.66	-	<0.5 U	2.66	1.32	-	10.1	4.34	<1 U	<0.5 U	<1 U	0.58	<1 U	<0.5 U	6.93	2.25	MTBE = 0.85
			14-May-08		424.	2.3	94.	6.91	14.1	21.01	0.79	-	<0.5 U	3.03	1.9	-	8.27	5.44	<1 U	<0.5 U	<1 U	0.98	<1 U	<0.5 U	2.34	0.67	MTBE = 1.12 p-IPT = 0.59
			8-Aug-08		509.	5.3	130.	10.7	22.6	33.3	<0.5 U	-	<0.5 U	1.89	1.24	-	8.93	3.28	<1 U	<0.5 U	<1 U	0.62	<1 U	<0.5 U	3.93	1.75	MTBE = 1.08
WS-16-125	MFA	WS-16-125	17-Nov-04	109-124	0.2 U	0.2 U	0.2 U	<0.4 U	<0.2 U	0.4 U	2.21	275.	0.2 U	0.3 U	0.3 U	-	1. U	0.3 U	<0.3 U	<0.3 U	<0.3 U	0.2 U	0.5 U	0.3 U	0.2 U	0.2 U	2-Butanone=15.4 Acetone=512 n-B=0.4 MTBE=5.06
			21-Feb-05		698.	3.02	111.	65.7	52.1	117.8	<0.2 U	-	<0.2 U	0.51	<0.3 U	-	8.66	1.71	<0.3 U	<0.3 U	<0.3 U	0.57	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			23-May-05		224.	1.22	41.9	20.1	15.7	35.8	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	2.93	0.7	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	1.84	0.86	
			9-Aug-05		237.	<0.2 U	38.5	21.5	17.2	38.7	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			16-Nov-05		449.	1.65	92.	64.1	41.6	105.7	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	5.49	2.37	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			15-Feb-06		552.	1.17	96.8	57.7	43.3	101.	<0.3 U	-	<0.3 U	1.03	<0.3 U	-	5.78	1.27	<0.3 U	<0.3 U	<0.3 U	0.98	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			11-May-06		474.	0.75	57.5	32.	24.5	56.5	<0.3 U	-	0.77	0.88	<0.3 U	-	3.63	0.69	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			22-Aug-06		522.	<0.3 U	93.6	57.6	37.6	95.2	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	3.92	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	0.41	
			15-Nov-06		534.	1.56	89.5	57.	35.9	92.9	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	5.49	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	0.5	<0.3 U	
			21-Feb-07		1,060.	0.9	96.8	55.1	42.9	98.	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	5.35	1.3	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			24-May-07		16.3	<0.5 U	2.73	1.97	1.1	3.07	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			16-Aug-07		562.	0.78	80.3	51.1	36.6	87.7	<0.5 U	-	<0.5 U	0.88	<0.5 U	-	5.96	1.48	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			19-Nov-07		481.	1.91	75.7	46.2	33.5	79.7	<0.5 U	-	<0.5 U	1.09	<0.5 U	-	7.54	1.65	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	0.57	
			12-Feb-08		624.	0.9	91.8	53.7	38.3	92.	<0.5 U	-	<0.5 U	1.3	<0.5 U	-	8.76	1.94	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			14-May-08		398.	0.93	86.7	49.3	42.	91.3	<0.5 U	-	<0.5 U	1.75	<0.5 U	-	10.1	2.41	<1 U	<0.5 U	<1 U	0.73	<1 U	<0.5 U	<0.3 U	<0.3 U	
			5-Aug-08		543.	0.86	78.	40.8	33.9	74.7	<0.5 U	-	<0.5 U	0.83	<0.5 U	-	6.95	1.36	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
WS-16-161	MFA	WS-16-161	17-Nov-04	145-160	2.4	0.75	0.77	<0.4 U	1.32	1.32	0.2 U	13.9	0.2 U	0.3 U	0.3 U	-	1. U	0.3 U	<0.3 U	<0.3 U	<0.3 U	0.2 U	0.5 U	0.3 U	0.2 U	0.2 U	
			18-Feb-05		1.66	3.84	<0.2 U	0.63	<0.2 U	0.63	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	0.53	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			20-May-05		0.25	0.77	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	1.24	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			9-Aug-05		<0.2 U	<0.2 U	<0.2 U	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			16-Nov-05		<0.3 U	1.45	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			15-Feb-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			10-May-06		<0.3 U	0.67	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			22-Aug-06		<0.3 U	<0.3 U	<0.3 U	<0.4 U	<0.3 U	<0.4 U	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			15-Nov-06		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			21-Feb-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			24-May-07		2.25	<0.5 U	0.7	1.1	0.33	1.43	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			16-Aug-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			15-Nov-07		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			8-Feb-08		1.08	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			16-May-08		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	0.72	<1 U	<0.5 U	<0.3 U	<0.3 U	
			5-Aug-08		<0.3 U	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
WS-17-52	MFA	WS-17-52	16-Nov-04	41-51	105.	0.2 U	90.1	58.4	44.	102.4	0.2 U	1,780.	0.2 U	3.66	0.31	-	28.5	7.68	<0.3 U	<0.3 U	<0.3 U	0.2 U	0.5 U	0.3 U	0.2 U	0.2 U	p-IPT=1.29 n-B=0.71 Carbon disulfide=0.26
			17-Feb-05		52.7	0.96	54.1	22.2	17.2	39.4	<0.2 U	-	<0.2 U	2.78	0.84	-	24.7	7.49	<0.3 U	<0.3 U	<0.3 U	0.29	<0.5 U	<0.3 U	<0.2 U	<0.2 U	Acetone = 7.81 p-IPT = 1.16
			20-May-05		12.3	0.24	15.8	2.8	1.75	4.55	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	5.54	1.41	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			9-Aug-05		10.7	<0.2 U	6.13	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	1.77	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
					Analytical Results – ug/L (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
		MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
		DEQ 2004 AWQC (chronic) [6]			#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
WS-17-52	MFA	WS-17-52	15-Nov-05	41-51	18.4	<0.3 U	8.75	<0.4 U	2.28	2.28	<0.3 U	-	<0.3 U	2.06	<0.3 U	-	5.99	1.91	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	p-IPT = 2.17
			16-Feb-06		7.96	<0.3 U	7.65	0.98	1.41	2.39	<0.3 U	-	<0.3 U	<0.3 U	0.39	-	3.01	0.35	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			10-May-06		5.23	<0.3 U	6.78	0.49	<0.3 U	0.49	<0.3 U	-	<0.3 U	<0.3 U	0.35	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	Acetone = 18.6
			22-Aug-06		5.93	<0.3 U	8.94	<0.4 U	0.54	0.54	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			15-Nov-06		5.27	<0.5 U	3.68	<1 U	0.94	0.94	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			20-Feb-07		4.06	<0.5 U	3.46	<1 U	0.58	0.58	<0.5 U	-	<0.5 U	0.58	0.74	-	0.97	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	Acetone = 10.9
			24-May-07		3.07	<0.5 U	3.18	1.19	0.77	1.96	<0.5 U	-	<0.5 U	0.6	<0.5 U	-	1.11	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			17-Aug-07		3.59	<0.5 U	2.17	<1 U	0.4	0.4	<0.5 U	-	<0.5 U	0.36	<0.5 U	-	0.56	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			14-Nov-07		2.67	<0.5 U	1.45	<1 U	0.38	0.38	<0.5 U	-	<0.5 U	0.32	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			8-Feb-08		1.63	<0.5 U	1.1	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			13-May-08		1.28	<0.5 U	0.77	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	0.68	<1 U	<0.5 U	<0.3 U	<0.3 U	
			18-Aug-08		0.78	<0.5 U	0.8	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	Acetone = 12.4
WS-17-94	MFA	WS-17-94	17-Nov-04	78-93	7.67	4.39	8.94	7.18	3.71	10.89	0.2 U	164.	0.2 U	0.98	0.3 U	-	1.05	0.3 U	<0.3 U	<0.3 U	<0.3 U	0.81	0.5 U	0.3 U	0.2 U	0.2 U	Carbon disulfide=0.2 Chloroform=0.3
			18-Feb-05		13.6	4.46	13.4	10.9	6.46	17.36	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	3.91	1.02	<0.3 U	<0.3 U	<0.3 U	0.82	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			18-May-05		2.08	1.22	5.77	1.13	3.45	4.58	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	4.14	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			8-Aug-05		<0.2 U	<0.2 U	0.22	<0.4 U	<0.2 U	<0.4 U	<0.2 U	-	<0.2 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.2 U	<0.5 U	<0.3 U	<0.2 U	<0.2 U	
			15-Nov-05		2.	0.75	6.33	2.96	3.17	6.13	<0.3 U	-	<0.3 U	1.73	<0.3 U	-	2.34	1.58	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			16-Feb-06		2.99	<0.3 U	6.51	5.23	2.47	7.7	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	2.38	0.72	<0.3 U	<0.3 U	<0.3 U	0.76	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			9-May-06		1.35	0.57	5.55	3.75	0.41	4.16	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	<0.3 U	
			21-Aug-06		<0.3 U	<0.3 U	1.16	<0.4 U	0.47	0.47	<0.3 U	-	<0.3 U	<0.3 U	<0.3 U	-	<1 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.3 U	<0.5 U	<0.3 U	<0.3 U	0.85	
			14-Nov-06		1.68	<0.5 U	<0.5 U	<1 U	1.84	1.84	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	0.5	<0.3 U	
			20-Feb-07		1.51	<0.5 U	3.12	2.7	1.22	3.92	<0.5 U	-	<0.5 U	0.45	0.59	-	1.89	0.81	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			24-May-07		0.97	<0.5 U	2.75	2.86	1.23	4.09	<0.5 U	-	<0.5 U	0.39	<0.5 U	-	2.37	0.87	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			17-Aug-07		1.35	<0.5 U	2.04	1.55	0.75	2.3	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	1.62	0.57	<1 U	<0.5 U	<1 U	3.06	<1 U	<0.5 U	0.97	<0.3 U	
			14-Nov-07		0.85	<0.5 U	1.43	1.4	0.71	2.11	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	1.83	0.56	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			8-Feb-08		0.63	<0.5 U	0.78	<1 U	0.34	0.34	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	1.	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			13-May-08		0.41	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.75	<0.5 U	<1 U	<0.5 U	<1 U	0.49	<1 U	<0.5 U	<0.3 U	<0.3 U	
			18-Aug-08		0.51	<0.5 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
WS-18-71	MFA	WS-18-71	27-Jun-06	61 - 71	558.	24.1	30.2	12.9	4.06	16.96	<1 U	-	<1 U	<1 U	<1 U	-	1.72	<1 U	<1 U	<1 U	<1 U	7,990.	<1 U	626.	90,800.	25.8	1,1,2-TCA = 1.11 1,1-DCE = 198.
			19-Jul-06		574.	26.7	32.6	9.21	3.6	12.81	<1 U	-	<1 U	<1 U	<1 U	-	<1 U	<1 U	<1 U	<1 U	<1 U	2,960.	<1 U	563.	83,700.	24.9	1,1-DCE = 166.
			29-Aug-06		570.	19.7	23.	6.23	2.43	8.66	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	1,980.	<1 U	478.	66,200.	17.5	1,1-DCE = 114.
			26-Sep-06		296.	226.	262.	66.6	23.6	90.2	<5 U	-	<5 U	<3 U	<5 U	-	<5 U	<5 U	<10 U	<5 U	<10 U	2,010.	<10 U	241.	57,000.	279.	Chloromethane = 31.9 1,1-DCE = 1470.
			24-Oct-06		521.	21.7	25.6	5.24	1.37	6.61	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	996.	<1 U	412.	69,700.	28.8	n-B = 0.56 1,1-DCE = 143.
			16-Nov-06		530.	21.7	27.9	1.02	2.8	3.82	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	700.	<1 U	496.	88,900.	52.7	2-Butanone = 12.9 1,1-DCE = 161.
			26-Jan-07		520.	18.7	24.1	5.89	2.41	8.3	<0.5 U	-	<0.5 U	<1 U	<0.5 U	-	1.75	<0.5 U	<1 U	<0.5 U	<1 U	1,180.	<1 U	453.	77,300.	4,290.	2-Butanone = 107. 1,1-DCE = 162.
			22-Feb-07		549.	19.4	23.1	5.7	2.08	7.78	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.55	<0.5 U	<1 U	<0.5 U	<1 U	587.	<1 U	471.	43,100.	3,340.	2-Butanone = 112. 1,1-DCE = 126.
			22-Mar-07		481.	20.2	26.1	5.12	1.94	7.06	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	678.	<1 U	318.	42,100.	21,200.	2-Butanone = 149. 1,1-DCE = 84.2
			24-Apr-07		320.	18.5	28.5	<1 U	2.34	2.34	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	251.	<1 U	193.	42,600.	34,000.	2-Butanone = 325. Acetone = 15.2 1,1-DCE = 84.3
			22-May-07		345.	15.9	19.6	5.14	1.93	7.07	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	111.	<1 U	162.	180,000.	8,680.	2-Butanone = 1,640. 1,1-DCE = 51.4
			16-Nov-07		523.	19.4	26.6	7.11	2.94	10.05	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.75	<0.5 U	<1 U	<0.5 U	<1 U	900.	<1 U	104.	8,640.	23,300.	2-Butanone = 530. Acetone = 28.3 1,1-DCE = 29.
			13-Feb-08		480.	16.9	26.1	7.2	3.13	10.33	<0.5 U	-	<0.5 U	0.32	<0.5 U	-	0.93	<0.5 U	<1 U	<0.5 U	<1 U	102.	<1 U	107.	6,400.	16,600.	2-Butanone = 187. Acetone = 31.4 n-B = 0.98 1,1-DCE = 34.2
			20-May-08		573.	24.1	33.	5.75	1.73	7.48	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	227.	<1 U	28.3	1,780.	4,350.	2-Butanone = 501. Acetone = 149. 1,1-DCE = 7.68
			12-Aug-08		606.	18.2	29.1	5.06	1.64	6.7	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.52	<0.5 U	<1 U	<0.5 U	<1 U	23.3	<1 U	64.	2,480.	10,100.	2-Butanone = 888. Acetone = 51.6 1,1-DCE = 24.5
WS-18-101	MFA	WS-18-101	28-Jun-06	97 - 102	106.	13.4	19.	<20 U	<10 U	<20 U	<10 U	-	<10 U	<10 U	<10 U	-	<10 U	<10 U	<10 U	<10 U	<10 U	198,000.	<10 U	408.	33,600.	40.6	1,1-DCE = 125.
			19-Jul-06		125.	14.	24.2	13.2	8.73	21.93	<1 U	-	<1 U	<1 U	<1 U	-	3.03	<1 U	<1 U	<1 U	<1 U	103,000.	<1 U	590.	55,400.	57.2	1,1-DCE = 176.
			28-Aug-06		117.	13.6	27.3	17.2	11.8	29.	<0.5 U	-	<0.5 U	1.07	<0.5 U	-	4.29	1.14	<1 U	<0.5 U	<1 U	101,000.	<1 U	634.	53,800.	36.6	Acetone = 44.2 1,1-DCE = 135.
			26-Sep-06		148.	18.5	34.7	19.9	7.5	27.4	<5 U	-	<5 U	<3 U	<5 U	-	5.9	<5 U	<10 U	<5 U	<10 U	150,000.	<10 U	911.	43,000.	81.8	1,1-DCE = 191.
			24-Oct-06		124.	18.2	28.7	14.6	6.3	20.9	<5 U	-	<5 U	<3 U	<5 U	-	<5 U	<5 U	<10 U	<5 U	<10 U	236,000.	<10 U	660.	72,500.	78.7	Dichlorofluoromethane = 16.9 1,1-DCE = 187.
			16-Nov-06		126.	20.8	52.2	28.2	18.2	46.4	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	5.06	<0.5 U	<1 U	<0.5 U	<1 U	199,000.	<1 U	618.	90,300.	162.	Acetone = 14.6 1,1-DCE = 240.
			26-Jan-07		105.	16.9	36.2	19.9	13.3	33.2	<0.5 U	-	<0.5 U	1.04	1.43	-	5.31	2.57	<1 U	<0.5 U	<1 U	97,700.	<1 U	1,070.	93,000.	2,840.	Acetone = 38.1 n-Butylebenzene = 1.77 1,1-DCE = 330.
			22-Feb-07		79.6	22.	49.4	28.4	12.8	41.2	<10 U	-	<10 U	<6 U	<10 U	-	<10 U	<10 U	<20 U	<10 U	<20 U	52,200.	<20 U	1,140.	153,000.	6,200.	1,1-DCE = 336.
			22-Mar-07		89.6	16.8	49.	21.2	<6 U	21.2	<10 U	-	<10 U	<6 U	<10 U	-	<10 U	<10 U	<20 U	<10 U	<20 U	36,800.	<20 U	900.	150,000.	5,190.	1,1-DCE = 277.

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results – ug/L (ppb)																					
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
		MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
		DEQ 2004 AWQC (chronic) [6]			#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
WS-18-101	MFA	WS-18-101	24-Apr-07	97 - 102	69.6	13.	43.	<20 U	8.8	8.8	<10 U	-	<10 U	<6 U	<10 U	-	<10 U	<10 U	<20 U	<10 U	<20 U	53,500.	<20 U	567.	239,000.	9,170.	1,1-DCE = 200.
			22-May-07		72.8	14.7	34.9	20.2	14.7	34.9	<0.5 U	-	<0.5 U	1.13	<0.5 U	-	5.21	1.34	<1 U	<0.5 U	<1 U	11,800.	<1 U	959.	176,000.	7,980.	2-Butanone = 63.6 1,1-DCE = 299.
			16-Nov-07		60.5	13.1	44.4	25.	16.3	41.3	<0.5 U	-	<0.5 U	1.81	0.68	-	9.01	2.29	<1 U	<0.5 U	<1 U	2,340.	<1 U	763.	89,700.	32,400.	1,1-DCE = 167.
			12-Feb-08		59.5	11.9	41.6	23.7	14.7	38.4	<0.5 U	-	<0.5 U	1.83	0.66	-	9.92	2.53	<1 U	<0.5 U	<1 U	2,920.	<1 U	757.	96,400.	24,900.	1,1-DCE = 158.
			22-May-08		47.4	11.9	41.1	23.7	15.2	38.9	<2.5 U	-	<2.5 U	1.75	<2.5 U	-	10.4	2.8	<5 U	<2.5 U	<5 U	2,070.	<5 U	461.	106,000.	45,200.	2-Butanone = 121. 1,1-DCE = 166.
			12-Aug-08		40.4	10.7	39.9	19.5	12.4	31.9	<0.5 U	-	<0.5 U	1.37	0.65	-	8.57	1.87	<1 U	<0.5 U	<1 U	1,470.	<1 U	113.	33,900.	21,200.	2-Butanone = 233. Acetone = 17.3 1,1-DCE = 144.
WS-19-71	MFA	WS-19-71	27-Jun-06	61 - 71	564.	28.1	48.3	14.5	5.97	20.47	<1 U	-	<1 U	<1 U	<1 U	-	3.3	<1 U	<1 U	<1 U	<1 U	6,500.	<1 U	482.	88,400.	29.5	1,1,2-TCA = 1.02 1,1-DCE = 128.
			20-Jul-06		753.	48.8	79.8	20.6	9.05	29.65	<1 U	-	<1 U	<1 U	<1 U	-	3.49	<1 U	<1 U	<1 U	<1 U	611.	<1 U	459.	61,300.	67.5	
			29-Aug-06		729.	34.3	66.3	18.1	8.51	26.61	<0.5 U	-	<0.5 U	0.63	<0.5 U	-	2.9	0.59	<1 U	<0.5 U	<1 U	549.	<1 U	547.	89,500.	50.6	1,1-DCE = 105.
			27-Sep-06		554.	26.1	51.6	<10 U	<3 U	<10 U	<5 U	-	<5 U	<3 U	<5 U	-	<5 U	<5 U	<10 U	<5 U	<10 U	77.1	<10 U	441.	58,800.	115.	Dichlorodifluoromethane = 5.5 1,1-DCE = 65.1
			24-Oct-06		650.	29.2	62.5	16.8	8.64	25.44	<0.5 U	-	<0.5 U	0.58	<0.5 U	-	2.64	0.55	<1 U	<0.5 U	<1 U	38.3	<1 U	385.	67,000.	1,430.	2-Butanone = 46.4 1,1-DCE = 105.
			16-Nov-06		706.	42.1	98.1	19.8	9.76	29.56	<0.5 U	-	0.63	<0.3 U	<0.5 U	-	0.81	<0.5 U	<1 U	<0.5 U	<1 U	15.6	<1 U	617.	87,500.	8,700.	2-Butanone = 59.9 1,1-DCE = 136.
			26-Jan-07		694.	38.	85.2	19.9	7.93	27.83	<0.5 U	-	<0.5 U	<1 U	<0.5 U	-	2.94	0.65	<1 U	<0.5 U	<1 U	11.8	<1 U	393.	49,500.	44,500.	2-Butanone = 417. Acetone = 13.3 1,1-DCE = 168.
			23-Feb-07		659.	33.7	68.8	16.3	6.98	23.28	<0.5 U	-	0.96	0.52	<0.5 U	-	3.02	0.71	<1 U	<0.5 U	<1 U	16.6	<1 U	299.	25,500.	37,900.	2-Butanone = 312. Dichlorodifluoromethane = 2.68 1,1-DCE = 40.4.
			22-Mar-07		655.	37.6	84.6	16.7	6.88	23.58	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	2.27	<0.5 U	<1 U	<0.5 U	<1 U	33.5	<1 U	227.	7,350.	43,300.	2-Butanone = 312. 1,1-DCE = 17.4
			23-Mar-07		629.	30.9	72.1	14.8	7.89	22.69	<0.5 U	-	<0.5 U	0.67	<0.5 U	-	3.59	<0.5 U	<1 U	<0.5 U	<1 U	15.9	<1 U	217.	12,200.	21,500.	2-Butanone = 375. 1,1-DCE = 22.6
			24-Apr-07		630.	38.	95.1	16.7	9.8	26.5	<0.5 U	-	<0.5 U	0.62	<0.5 U	-	1.5	<0.5 U	<1 U	<0.5 U	<1 U	9.76	<1 U	169.	10,900.	69,300.	2-Butanone = 1,160. Acetone = 35.4 1,1-DCE = 14.9
			23-May-07		566.	34.2	68.9	17.8	8.51	26.31	<0.5 U	-	<0.5 U	0.54	<0.5 U	-	3.44	0.75	<1 U	<0.5 U	<1 U	142.	<1 U	121.	3,300.	54,600.	2-Butanone = 689. Acetone = 32.7 1,1-DCE = 9.11
			19-Nov-07		812.	37.3	101.	25.4	9.91	35.31	<0.5 U	-	<0.5 U	0.83	<0.5 U	-	5.83	1.34	<1 U	<0.5 U	<1 U	1.73	<1 U	2.64	208.	13,100.	2-Butanone = 1,040. Acetone = 34.6
			13-Feb-08		998.	47.2	130.	36.2	14.2	50.4	<0.5 U	-	<0.5 U	1.27	0.5	-	9.55	2.15	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	1.63	73.2	10,500.	2-Butanone = 1,230. Acetone = 45.3
			22-May-08		19.5	7.41	10.3	7.87	4.69	12.56	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	1.63	<0.5 U	<1 U	<0.5 U	<1 U	0.96	<1 U	<0.5 U	135.	436.	2-Butanone = 25.5
			12-Aug-08		1,130.	37.3	123.	23.7	8.96	32.66	<0.5 U	-	<0.5 U	0.8	<0.5 U	-	6.4	1.29	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	64.4	342.	2-Butanone = 1,960 Acetone = 51.3 Carbon Disulfide = 5.38
WS-19-101	MFA	WS-19-101	27-Jun-06	92 - 102	110.	17.4	20.4	13.9	6.87	20.77	<1 U	-	<1 U	<1 U	<1 U	-	1.96	<1 U	<1 U	<1 U	<1 U	92,900.	<1 U	338.	39,100.	22.2	1,1-DCE = 58.9
			20-Jul-06		78.5	19.8	13.	13.8	6.55	20.35	<1 U	-	<1 U	<1 U	<1 U	-	1.93	<1 U	<1 U	<1 U	<1 U	1,700.	<1 U	861.	114,000.	23.1	2-Butanone = 263. 1,1-DCE = 58.3
			29-Aug-06		74.1	18.7	14.6	16.4	8.46	24.86	<0.5 U	-	<0.5 U	0.38	0.62	-	2.17	0.78	<1 U	<0.5 U	<1 U	836.	<1 U	766.	110,000.	121.	2-Butanone = 353. Acetone = 18. 1,1-DCE = 51.4
			27-Sep-06		47.2	14.4	12.6	<10 U	3.	3.	<5 U	-	<5 U	<3 U	<5 U	-	<5 U	<5 U	<10 U	<5 U	<10 U	102.	<10 U	944.	72,800.	1,340.	2-Butanone = 1,260. 1,1-DCE = 73.4
			25-Oct-06		50.3	14.4	14.3	12.7	7.05	19.75	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	1.74	0.5	<1 U	<0.5 U	<1 U	44.4	<1 U	610.	86,600.	3,460.	2-Butanone = 1,510. Acetone = 102. Chloromethane = 0.53 n-B = 0.57 1,1-DCE = 119.
			15-Nov-06		160.	30.4	<10 U	<20 U	22.6	22.6	<10 U	-	<10 U	<6 U	<10 U	-	<10 U	<10 U	<20 U	<10 U	<20 U	<6 U	<20 U	670.	108,000.	5,060.	2-Butanone = 1,800. 1,1-DCE = 232.
			25-Jan-07		46.2	15.1	16.9	13.2	6.97	20.17	<0.5 U	-	<0.5 U	<1 U	<0.5 U	-	1.78	<0.5 U	<1 U	<0.5 U	<1 U	2.78	<1 U	387.	78,800.	18,200.	2-Butanone = 4,830. Acetone = 160. 1,1-DCE = 146.
			23-Feb-07		44.4	14.8	15.7	12.4	5.8	18.2	<0.5 U	-	0.67	0.3	<0.5 U	-	1.76	0.74	<1 U	<0.5 U	<1 U	56.2	<1 U	351.	54,800.	14,200.	2-Butanone = 2,170. Acetone = 126. 1,1-DCE = 89.8
			22-Mar-07		35.	12.1	15.9	10.4	4.95	15.35	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	1.13	<0.5 U	<1 U	<0.5 U	<1 U	62.5	<1 U	230.	50,600.	15,500.	2-Butanone = 3,270. Acetone = 356. 1,1-DCE = 83.7
			24-Apr-07		37.1	12.4	18.	6.05	6.31	12.36	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	9.	<1 U	222.	66,900.	23,200.	2-Butanone = 6,320. Acetone = 333. Trans-1,3-D = 0.87 1,1-DCE = 102.
			23-May-07		33.5	11.3	14.	10.7	5.8	16.5	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	1.45	<0.5 U	<1 U	<0.5 U	<1 U	35.3	<1 U	203.	52,400.	15,600.	2-Butanone = 2,670. Acetone = 338. 1,1-DCE = 90.9
			19-Nov-07		23.6	7.67	10.9	8.29	4.38	12.67	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	1.45	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	3.91	4,090.	11,800.	2-Butanone = 3,340. Acetone = 343. 1,1-DCE = 4.69
			13-Feb-08		23.8	8.63	9.87	7.51	4.	11.51	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	1.41	<0.5 U	<1 U	<0.5 U	<1 U	0.37	<1 U	<0.5 U	94.3	156.	2-Butanone = 2,800. Acetone = 348.
			22-May-08		15.8	41.4	124.	32.6	14.1	46.7	<0.5 U	-	<0.5 U	1.44	<0.5 U	-	10.2	2.31	<1 U	<0.5 U	<1 U	1.35	<1 U	1.97	77.5	200.	2-Butanone = 31.3. Acetone = 46.9
			12-Aug-08		11.4	5.27	7.52	4.15	2.08	6.23	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.62	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	133.	235.	Carbon Disulfide = 17.9

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results – ug/L (ppb)																					
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
		MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
		DEQ 2004 AWQC (chronic) [6]			#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
WS-20-112	MFA	WS-20-112	28-Jun-06	97 - 112	132.	2.05	<1 U	<2 U	<1 U	<2 U	<1 U	-	<1 U	<1 U	<1 U	-	<1 U	<1 U	<1 U	<1 U	<1 U	1,100.	<1 U	47.	10,000.	1,610.	2-Butanone = 71.2 1,1-DCE = 19.7
			27-Jul-06		161.	13.8	4.39	14.8	6.09	20.89	<1 U	-	<1 U	<1 U	<1 U	-	4.01	<1 U	<1 U	<1 U	<1 U	827.	<1 U	46.7	6,320.	1,080.	2-Butanone = 94.4 1,1-DCE = 17.9
			28-Aug-06		143.	5.47	1.57	3.7	1.92	5.62	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.92	<0.5 U	<1 U	<0.5 U	<1 U	885.	<1 U	32.1	10,000.	1,010.	2-Butanone = 74.5 1,1-DCE = 10.4
			25-Sep-06		130.	3.55	<1 U	1.77	1.04	2.81	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	1.14	<1 U	94.5	6,280.	1,010.	2-Butanone = 121. Acetone = 27.9 n-B = 0.51 1,1-DEC = 13.5
			23-Oct-06		110.	2.71	1.74	1.42	1.22	2.64	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.65	<0.5 U	<1 U	<0.5 U	<1 U	1.57	<1 U	57.7	7,480.	1,160.	2-Butanone = 139. Acetone = 30.6 1,1-DCE = 11.
			18-Dec-06		128.	2.47	<0.5 U	<1 U	0.9	0.9	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	3.	<1 U	2.28	458.	736.	Acetone = 88.8
			25-Jan-07		145.	3.52	4.51	3.75	2.1	5.85	<0.5 U	-	<0.5 U	<1 U	<0.5 U	-	0.68	<0.5 U	<1 U	<0.5 U	<1 U	0.68	<1 U	1.05	17.9	41.5	2-Butanone = 448. Acetone = 93.9
			21-Feb-07		179.	2.21	0.89	<1 U	0.54	0.54	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	0.56	6.11	5.85	2-Butanone = 150. Acetone = 42.6
			21-Mar-07		206.	1.9	0.91	<1 U	<0.3 U	<1 U	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	0.38	<0.3 U	2-Butanone = 210. Acetone = 58.3
			23-Apr-07		177.	1.63	0.69	<1 U	0.35	0.35	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	0.72	<1 U	<0.5 U	1.78	<0.3 U	
			21-May-07		252.	2.18	1.31	<1 U	0.79	0.79	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	0.6	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	1.42	
			15-Nov-07		241.	1.31	1.27	<1 U	0.92	0.92	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	1.1	0.61	
			14-Feb-08		175.	1.63	1.05	<1 U	0.71	0.71	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	0.73	<0.3 U	
			16-May-08		151.	1.57	1.5	<1 U	0.74	0.74	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	1.01	<1 U	<0.5 U	1.	<0.3 U	
			6-Aug-08		150.	1.53	1.88	<1 U	1.28	1.28	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.61	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	1.83	<0.3 U	
WS-21-112	MFA	WS-21-112	28-Jun-06	97 - 112	1,120.	7.71	31.7	6.83	21.1	27.93	<1 U	-	<1 U	1.18	<1 U	-	3.02	<1 U	<1 U	<1 U	<1 U	572.	<1 U	49.6	2,960.	548.	1,1-DCE = 4.13
			28-Jul-06		1,410.	14.7	27.8	14.4	19.2	33.6	<5 U	-	<5 U	<5 U	<5 U	-	6.7	<5 U	<5 U	<5 U	<5 U	164.	<5 U	5.85	1,130.	105.	
			28-Aug-06		1,670.	14.4	37.9	15.8	29.2	45.	<0.5 U	-	<0.5 U	0.69	0.56	-	3.29	<0.5 U	<1 U	<0.5 U	<1 U	273.	<1 U	6.02	775.	62.5	n-B = 0.52 1,1-DCE = 0.95
			25-Sep-06		1,420.	13.5	67.6	20.9	37.3	58.2	<0.5 U	-	<0.5 U	1.31	0.67	-	5.54	0.66	<1 U	<0.5 U	<1 U	201.	<1 U	9.52	950.	137.	1,1-DCE = 1.44
			24-Oct-06		1,320.	8.97	48.9	14.4	13.9	28.3	<0.5 U	-	<0.5 U	1.	<0.5 U	-	4.22	0.63	<1 U	<0.5 U	<1 U	339.	<1 U	15.8	1,910.	315.	1,1-DCE = 2.7
			14-Nov-06		1,300.	5.19	31.7	<1 U	5.73	5.73	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	239.	<1 U	8.87	1,050.	122.	1,1-DCE = 2.1
			19-Dec-06		1,170.	8.9	50.6	<1 U	8.99	8.99	<0.5 U	-	<0.5 U	2.15	<0.5 U	-	4.1	<0.5 U	<1 U	<0.5 U	<1 U	246.	<1 U	12.7	853.	153.	1,1-DCE = 3.76
			24-Jan-07		1,170.	8.3	31.1	6.4	10.7	17.1	<0.5 U	-	<0.5 U	1.46	<0.5 U	-	2.82	<0.5 U	<1 U	<0.5 U	<1 U	208.	<1 U	11.1	707.	124.	1,1-DCE = 2.2
			22-Feb-07		1,190.	7.83	24.3	6.09	8.39	14.48	<0.5 U	-	0.83	1.19	0.5	-	2.93	0.83	<1 U	<0.5 U	<1 U	218.	<1 U	10.6	740.	114.	
			21-Mar-07		1,070.	6.43	15.7	3.12	6.76	9.88	<0.5 U	-	<0.5 U	0.66	<0.5 U	-	1.49	<0.5 U	<1 U	<0.5 U	<1 U	263.	<1 U	12.6	1,280.	334.	
			23-Apr-07		802.	7.5	28.8	<1 U	14.	14.	<0.5 U	-	<0.5 U	1.18	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	129.	<1 U	10.7	620.	184.	1,1-DCE = 2.48
			22-May-07		846.	7.37	27.7	6.07	19.4	25.47	<0.5 U	-	<0.5 U	1.36	<0.5 U	-	2.86	0.66	<1 U	<0.5 U	<1 U	113.	<1 U	11.5	1,520.	395.	1,1-DCE = 4.84
			16-Aug-07		850.	7.21	39.7	7.02	27.8	34.82	<0.5 U	-	<0.5 U	1.33	<0.5 U	-	3.53	<0.5 U	<1 U	<0.5 U	<1 U	0.77	<1 U	7.46	463.	383.	1,1-DCE = 1.01
			14-Nov-07		715.	7.33	43.1	8.93	30.	38.93	<0.5 U	-	0.96	1.97	0.56	-	5.26	0.55	<1 U	<0.5 U	<1 U	1.	<1 U	4.14	237.	370.	1,1-DCE = 0.79
			11-Feb-08		735.	6.9	47.1	7.35	28.3	35.65	<0.5 U	-	<0.5 U	1.6	0.59	-	4.01	<0.5 U	<1 U	<0.5 U	<1 U	1.67	<1 U	2.51	122.	444.	1,1-DCE = 0.8
			21-May-08		243.	2.8	14.6	2.37	10.9	13.27	<0.5 U	-	<0.5 U	0.49	<0.5 U	-	1.17	<0.5 U	<1 U	<0.5 U	<1 U	76.4	<1 U	1.18	622.	308.	1,1-DCE = 1.67
			13-Aug-08		530.	5.7	36.1	3.87	20.4	24.27	<0.5 U	-	<0.5 U	0.61	<0.5 U	-	1.44	<0.5 U	<1 U	<0.5 U	<1 U	8.25	<1 U	<0.5 U	109.	159.	1,1-DCE = 1.44
	HAI	5237-070712-WS21-112	12-Jul-07		930.	9.1	45.2	2.1 U	30.6	39.3	0.5 U	2.45	0.4 U	0.7 U	-	-	-	-	-	-	-	0.8 U	1.1 U	9.9	610.	284.	
		5237-080521-WS21-112-108	21-May-08		510.	6.2	35.	7.1	23.	30.1	0.23 U	4.7 J	0.2 U	2. J	0.5 J	-	3.5 J	0.6 J	0.22 U	0.21 U	0.27 U	310.	0.39 U	4.8	1,500.	640.	1,1-DCE = 8.
		5237-080925-WS-21-112-137	25-Sep-08		380.	7.3	48.	9.2	31.	40.2	0.045 U	3.6	0.039 U	2.6	0.67 J	-	4.7	0.57 J	0.044 U	0.041 U	0.054 U	3.8	0.077 U	1.6	81.	220.	1,1-DCA = 0.2 J 1,1-DCE = 1.5 Acetone = 2.8 J Carbon Disulfide = 0.07 J p-IPT = 0.12 J sec-B = 0.08 J tert-B = 0.05 J
		5237-090407-WS21-112-108	7-Apr-09		210.	4. J	5. J	3.9 U	8.5 J	8.5 J	2.3 U	100. U	2. U	1.6 U	1.9 U	-	1.9 U	2.1 U	2.2 U	2.1 U	2.7 U	1,500.	3.9 U	17. J	7,200.	1,300.	1,1-DCE = 24. J
		5237-090820-WS-21-112-165	20-Aug-09		114.	50. U	50. U	100. U	50. U	100. U	50. U	500. U	50. U	50. U	50. U	-	100. U	100. U	50. U	50. U	50. U	1,370.	50. U	50. U	6,040.	1,340.	
		5237-090820-WS-21-112-166	20-Aug-09		115.	50. U	50. U	100. U	50. U	100. U	50. U	500. U	50. U	50. U	50. U	-	100. U	100. U	50. U	50. U	50. U	1,300.	50. U	50. U	6,010.	1,130.	
WS-22-112	MFA	WS-22-112	28-Jun-06	97 - 112	157.	<1 U	<1 U	<2 U	<1 U	<2 U	<1 U	-	<1 U	<1 U	<1 U	-	<1 U	<1 U	<1 U	<1 U	<1 U	584.	<1 U	7.21	3,060.	474.	2-Butanone = 1,280. Acetone = 70.3 1,1-DCE = 6.95
			27-Jul-06		722.	3.7	18.3	2.2	11.2	13.4	<1 U	-	<1 U	<1 U	<1 U	-	<1 U	<1 U	<1 U	<1 U	<1 U	592.	<1 U	6.91	2,130.	346.	2-Butanone = 382. Acetone = 105.
			25-Aug-06		628.	2.46	8.5	1.34	3.74	5.08	<1 U	-	<1 U	<0.6 U	<1 U	-	<1 U	<1 U	<2 U	<1 U	<2 U	482.	<2 U	5.38	2,490.	305.	2-Butanone = 153. Acetone = 43.1 n-B = 1.08 1,1-DCE = 6.06
			25-Sep-06		493.	2.65	7.05	1.01	2.88	3.89	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.59	<0.5 U	<1 U	<0.5 U	<1 U	83.6	<1 U	16.6	2,780.	324.	2-Butanone = 542. Acetone = 173. n-B = 0.54 1,1-DCE = 5.94
			24-Oct-06		424.	2.5	7.97	1.16	4.33	5.49	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.51	<0.5 U	<1 U	<0.5 U	<1 U	31.4	<1 U	24.	3,590.	607.	2-Butanone = 959. Acetone = 175. 1,1-DCE = 4.75
			19-Dec-06		263.	2.92	4.94	<1 U	4.47	4.47	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	1.65	<1 U	1.	195.	171.	2-Butanone = 2,630. Acetone = 388.
			24-Jan-07		177.	3.67	4.73	1.18	3.08	4.26	<0.5 U	-	<0.5 U	<1 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	2.14	<1 U	<0.5 U	20.5	25.2	2-Butanone = 3,210. Acetone = 544.
			22-Feb-07		148.	7.47	5.12	1.23	3.02	4.25	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	0.51	<0.5 U	<1 U	<0.5 U	<1 U	0.42	<1 U	<0.5 U	1.39	17.2	2-Butanone = 151. Acetone = 34.
			21-Mar-07		157.	7.85	3.12	<1 U	1.74	1.74	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	4.33	34.	2-Butanone = 134. Acetone = 54.4
			23-Apr-07		141.	12.3	4.44	<1 U	2.54	2.54	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	26.3	80.2	2-Butanone = 36.7 Acetone = 13.1

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results – ug/L (ppb)																					
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
	EPA 2004 NRWQC (organism only)				51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
	Portland Harbor specific fish consumption rate				5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
	DEQ 2004 AWQC (organism only)				51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
	MCL				5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
	EPA 2004 NRWQC (chronic)				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	DEQ 2004 AWQC (chronic) [6]				#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
	Oak Ridge National Laboratory (Tier II SCV) [2]				130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
WS-22-112	MFA	WS-22-112	22-May-07	97 - 112	118.	14.4	3.2	1.36	2.58	3.94	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	2.35	
			16-Nov-07		66.1	15.8	1.57	<1 U	1.42	1.42	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	0.72	
			14-Feb-08		74.3	13.6	1.02	<1 U	1.06	1.06	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	<0.3 U	
			16-May-08		89.	11.	1.07	<1 U	0.83	0.83	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	0.93	<1 U	<0.5 U	0.51	0.58	
			13-Aug-08		69.3	10.6	0.97	<1 U	0.32	0.32	<0.5 U	-	<0.5 U	<0.3 U	<0.5 U	-	<0.5 U	<0.5 U	<1 U	<0.5 U	<1 U	<0.3 U	<1 U	<0.5 U	<0.3 U	1.18	
RP-01-31	URS		17-Apr-00	25-30	0.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			Fall-00		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RP-01-31	URS		26-Jun-01	25-30	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	AMEC		5-Apr-02		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			15-Apr-04		U	U	U	-	-	U	-	U	-	U	U	-	U	U	-	-	-	U	-	U	U	U	
RP-01-51	URS		17-Apr-00	45-50	1.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			Fall-00		0.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			26-Jun-01		0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	AMEC		8-Apr-02		0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			15-Apr-04		0.64	U	U	-	-	U	37.	U	-	U	U	-	U	U	270.	8.1	76.8	4.52	-	0.48	4.64	10.1	
			15-Apr-04		0.6	U	U	-	-	U	35.	U	-	U	U	-	U	U	270.	8.1	76.8	4.56	-	0.52	4.62	9.98	
RP-01-65	URS		17-Apr-00	59-64	27.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			Fall-00		13.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			26-Jun-01		41.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	AMEC		5-Apr-02		4.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			15-Apr-04		7.7	U	U	-	-	U	84.	U	-	U	U	-	U	U	678.	20.3	186.	11.8	-	1.1	9.95	19.7	
RP-03-26	URS		7-Apr-00	20-25	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RP-03-30R	URS		Fall-00	23-28	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			27-Jun-01		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	AMEC		10-Apr-02		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			19-Apr-04		U	-	5.1	-	-	8.9	7.2	1,720.	-	2.5	U	-	18.9	7.8	-	-	-	U	-	U	U	U	
RP-03-52R	URS		Fall-00	46-51	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			27-Jun-01		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	AMEC		10-Apr-02		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			19-Apr-04		U	U	U	-	-	U	-	U	-	U	U	-	U	U	-	-	-	U	-	U	U	U	
RP-06-31	URS		14-Apr-00	24.5-29.5	0.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			Fall-00		0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			27-Jun-01		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	AMEC		10-Apr-02		U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RP-06-87	URS		14-Apr-00	81-86	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			Fall-00		1.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			27-Jun-01		1.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	AMEC		10-Apr-02		1.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			15-Apr-04		1.5	U	U	-	-	U	103.	U	-	U	U	-	U	U	583.	13.5	146.	18.6	-	1.15	10.9	19.8	
RP-07-30	AMEC		3-May-02	25-30	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	HAI	5237-070828-RP-7-30-106	28-Aug-07		0.09 U	0.11	0.06 U	0.21 U	0.07 U	0.26 U	0.05 U	0.095	0.04 U	0.07 U	-	-	-	-	-	-	-	0.08 U	0.11 U	0.1 U	0.09 U	0.1 U	
RP-07-55	AMEC		3-May-02	50-55	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	HAI	5237-070827-RP-7-55-104	27-Aug-07		0.09 U	0.11	0.06 U	0.21 U	0.07 U	0.26 U	0.05 U	0.095	0.04 U	0.07 U	-	-	-	-	-	-	-	0.08 U	0.11 U	0.1 U	0.09 U	0.1 U	
RP-07-84	AMEC		3-May-02	79-84	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			13-Apr-04		1.9	U	U	-	-	U	107.	U	-	U	U	-	U	U	704.	19.6	190.	5.5	-	1.35	26.6	16.3	
	HAI	5237-070828-RP-7-84-107	28-Aug-07		1.39	0.11	0.06 U	0.21 U	0.07 U	0.26 U	140.	0.097	0.04 U	0.07 U	-	-	-	-	-	-	-	15.4	0.11 U	1.18	18.4	12.9	1,1-DCE = 2.4 MTBE = 1.57
	HAI	5237-070828-RP-7-84-108 (DUP)	28-Aug-07		1.31	0.11	0.06 U	0.21 U	0.07 U	0.26 U	136.	-	0.04 U	0.07 U	-	-	-	-	-	-	-	14.8	0.11 U	1.25	18.1	12.3	1,1-DCE = 2.33 MTBE = 1.56
RP-07-119	AMEC		Spring-02	114-119	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			13-Apr-04		U	U	U	-	-	U	4.1	U	-	U	U	-	U	U	54.9	3.56	16.8	5.88	-	U	6.02	U	Chloroform = 0.44
RP-11-30	HAI	5237-070827-RP-11-30-101	27-Aug-07	15 - 30	0.09 U	0.75	0.06 U	0.21 U	0.07 U	0.26 U	0.05 U	0.106	0.04 U	0.07 U	-	-	-	-	-	-	-	0.08 U	0.11 U	0.1 U	0.09 U	0.1 U	
RP-11-160	HAI	5237-070827-RP-11-160-102	27-Aug-07	150 - 160	0.09 U	0.11	0.06 U	0.21 U	0.07 U	0.26 U	0.05 U	0.096	0.04 U	0.07 U	-	-	-	-	-	-	-	0.08 U	0.11 U	0.1 U	0.09 U	0.1 U	
RP-11-216	HAI	5237-070827-RP-11-216-103	27-Aug-07	211 - 216	0.47	0.11	0.06 U	0.21 U	0.07 U	0.26 U	23.2	0.095	0.04 U	0.07 U	-	-	-	-	-	-	-	2.98	0.11 U	0.1 U	6.28	2.34	1,1-DCE = 0.63 Chloroform = 0.53 MTBE = 3.94
RP-24-30	HAI	5237-070829-RP-24-30-109	29-Aug-07	25 - 30	0.09 U	0.11	0.06 U	0.21 U	0.07 U	0.26 U	0.05 U	0.1	0.04 U	0.07 U	-	-	-	-	-	-	-	0.08 U	0.11 U	0.1 U	0.09 U	0.1 U	
RP-24-60	HAI	5237-070828-RP-24-60-110	28-Aug-07	55 - 60	0.09 U	0.11	0.06 U	0.21 U	0.07 U	0.26 U	0.05 U	0.095	0.04 U	0.07 U	-	-	-	-	-	-	-	0.08 U	0.11 U	0.1 U	0.09 U	0.1 U	
RP-24-73	HAI	5237-070829-RP-24-73-113	29-Aug-07	68 - 73	0.09 U	0.11	0.06 U	0.21 U	0.07 U	0.26 U	0.62	0.095	0.04 U	0.07 U	-	-	-	-	-	-	-	0.08 U	0.11 U	0.1 U	0.09 U	-	
RP-24-85	HAI	5237-070828-RP-24-85-111	28-Aug-07	80 - 85	1.86	0.11	0.06 U	0.21 U	0.07 U	0.26 U	59.3	0.095	0.04 U	0.07 U	-	-	-	-	-	-	-	14.	0.11 U	0.66	7.76	10.2	1,1-DCE = 1.68 Chloroform = 1.08

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results – ug/L (ppb)																					
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
		MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
		DEQ 2004 AWQC (chronic) [6]			#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
NWN-1-20	HAI	5237-080807-NWN-1-20-107	7-Aug-08	10 - 20	610.	44.	88.	100.	87.	187.	2.3 U	6,600.	2. U	7.5 J	8. J	-	89. J	27. J	2.2 U	2.1 U	2.7 U	3.1 U	3.9 U	2.4 U	2.3 U	3.6 U	Carbon Disulfide = 5.5 J p-IPT = 2.5 J
		5237-081211-NWN-1-20-019	11-Dec-08		690.	45.	120.	170.	160.	330.	1.2 U	8,400.	0.98 U	12. J	14. J	-	160.	47. J	1.1 U	1.1 U	1.4 U	1.6 U	2. U	1.2 U	1.2 U	1.8 U	1,2-DCA = 20. Carbon Disulfide = 26. p-IPT = 5.3 J, sec-B = 2.5 J
		5237-090407-NWN1-20-105	7-Apr-09		440.	35.	91.	180.	190.	370.	1.2 U	4,300.	0.98 U	13. J	16. J	-	190.	55.	1.1 U	1.1 U	1.4 U	1.6 U	2. U	1.2 U	1.2 U	1.8 U	Acetone = 110. J Carbon Disulfide = 35. n-B = 8.3 J p-IPT = 4.8 J sec-B = 3.3 J
		5237-090604-NWN-1-20-103	4-Jun-09		480.	40.	110.	200.	210.	410.	1.1 U	3,600.	1.2 U	14. J	17. J	-	220.	68.	1.2 U	1. U	1.2 U	1. U	0.66 U	0.91 U	0.67 U	0.75 U	Acetone = 77. J Carbon Disulfide = 44. J n-B = 9.3 J p-IPT = 6.1 J
		5237-090818-NWN-1-20-148	18-Aug-09		470.	36.6	105.	174.	156.	330.	5. U	10. U	5. U	11.7	3,580.	-	5. U	5. U	10. U	5. U	5. U	5. U	5. U	5. U	5. U	5. U	
NWN-2-20	HAI	5237-080730-NWN2-20-101	30-Jul-08	10 - 20	18.	2.7	7.7	4.9	3.3	8.2	0.045 U	130.	0.039 U	1.4 J	0.53 J	-	3.8	1.1 J	0.05 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,2-DCA = 0.56 Acetone = 4.2 J Carbon Disulfide = 2.2 J n-B = 5.5, sec-B = 0.33 J p-IPT = 0.68 J
		5237-081211-NWN-2-20-017	11-Dec-08	10 - 20	58.	3.5	8.5	3.5	3.7	7.2	0.045 U	82.	0.039 U	1.9 J	0.96 J	-	2.6	0.64 J	0.09 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	1,2-DCA = 1.7 Acetone = 2.5 J p-IPT = 0.49 J sec-B = 1.1 J, tert-B = 0.11 J
		5237-090407-NWN2-20-107	7-Apr-09		64.	1.3	2.2	1.4	1.9	3.3	0.045 U	36.	0.13 J	1.3 J	0.93 J	-	0.99 J	0.36 J	0.05 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	n-B = 0.66 J p-IPT = 0.14 J sec-B = 1.2 J tert-B = 0.11 J
		5237-090604-NWN-2-20-101	4-Jun-09		56.	1.4	3.8	1.4	2.1	3.5	0.11 U	29.	0.22 J	1.2 J	0.8 J	-	0.97 J	0.38 J	0.12 U	0.1 U	0.12 U	0.1 U	0.066 U	0.091 U	0.067 U	0.075 U	Bromomethane = 0.1 J Carbon Disulfide = 0.24 J Chloromethane = 0.06 J n-B = 0.58 J sec-B = 1.1 J tert-B = 0.13 J
		5237-090818-NWN-2-20-142	18-Aug-09		32.3	1.84	5.52	1.61	1.89	3.5	0.5 U	1. U	0.5 U	1.07	29.3	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	2.19	0.5 U	0.5 U	0.5 U	0.5 U	
NWN-3-17	HAI	5237-080730-NWN3-17-100	30-Jul-08	7 - 17	0.08 J	0.22 J	0.042 U	0.09 J	0.11 J	0.2	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.04 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Acetone = 2.8 J Carbon Disulfide = 0.05 J Methylene Chloride = 1.1 J n-B = 0.09 J
		NS (Dry)	11-Dec-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		5237-090407-NWN3-17-101	7-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.05 J	0.05 J	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	tert-B = 0.05 J
		5237-090604-NWN-3-17-102	4-Jun-09		0.038 U	0.052 U	0.05 U	0.091 U	0.12 J	0.12 J	0.11 U	2. U	0.12 U	0.091 U	0.53 U	-	0.069 U	0.089 U	0.12 U	0.1 U	0.12 U	0.1 U	0.066 U	0.091 U	0.067 U	0.075 U	Carbon Disulfide = 0.1 J Chloromethane = 0.06 J
		NS (Dry)	19-Aug-09		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NWN-4-15	HAI	NS (Dry)	30-Jul-08	5 - 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		5237-081211-NWN-4-15-021	11-Dec-08		0.98	0.2 U*	0.13 J	0.16 J	0.14 J	0.3 J	0.045 U	22.	0.039 U	0.031 U	0.037 U	-	0.09 J	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
		5237-090407-NWN4-15-103	7-Apr-09		0.045 U	0.06 J	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Chloromethane = 0.09 J
		5237-090604-NWN-4-15-100	4-Jun-09		0.19 J	0.08 J	0.06 J	0.091 U	0.074 U	0.091 U	0.11 U	2. U	0.12 U	0.091 U	0.53 U	-	0.069 U	0.089 U	0.12 U	0.1 U	0.12 U	0.1 U	0.066 U	0.091 U	0.067 U	0.075 U	Methylene Chloride = 0.63 J
		5327-090818-NWN-4-15-152	18-Aug-09		2.5 U	5. U	5. U	10. U	5. U	10. U	5. U	748.	5. U	5. U	5. U	-	10. U	10. U	5. U	5. U	5. U	5. U	5. U	5. U	5. U	5. U	
NWN-5-20	HAI	5237-080730-NWN5-20-103	30-Jul-08	10 - 20	8.1	6.4	13.	14.	6.8	20.8	0.45 U	740.	0.39 U	0.7 J	0.37 U	-	6.3 J	2.9 J	0.44 U	0.41 U	0.54 U	0.61 U	0.77 U	0.48 U	0.45 U	0.71 U	n-B = 12 J
		5237-081211-NWN-5-20-018	11-Dec-08		0.4 UR	0.46 J	5.2	1.7	2.7	4.4	0.06 J	450.	0.039 U	0.89 J	0.18 J	-	2.1	0.11 J	0.05 J	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Bromodichloromethane = 0.21 J Bromoform = 0.51 Dibromochloromethane = 0.6 sec-B = 0.07 J, tert-B = 0.05 J
		5237-090408-NWN5-20-111	8-Apr-09		0.38 J	0.35 J	0.38 J	0.38 J	0.66	1.04 J	0.045 U	82.	0.039 U	0.2 J	0.04 J	-	0.51 J	0.15 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	tert-B = 0.04 J
		5237-090604-NWN-5-20-104	4-Jun-09		0.66	0.51	0.73	0.63	0.98	1.61	0.11 U	110.	0.12 U	0.19 J	0.53 U	-	0.74 J	0.22 J	0.12 U	0.1 U	0.12 U	0.1 U	0.066 U	0.091 U	0.067 U	0.075 U	
		5237-090818-NWN-5-20-150	18-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	1. U	0.5 U	0.5 U	12.5	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
NWN-6-31	HAI	5237-080730-NWN6-31-104	30-Jul-08	21 - 31	24.	1.2 J	32.	3.4 J	10.	13.4	15.	1,700.	0.78 U	7. J	1.8 J	-	17. J	8.2 J	2.8 J	0.82 U	4.6 J	1.3 U	1.6 U	0.96 U	2.4 J	1.5 U	
		5237-081211-NWN-6-31-020	11-Dec-08		29.	1. U*	31.	3.6	11.	14.6	18.	1,600. J	0.2 U	7.3 J	1.8 J	-	19.	8.3 J	3.3	0.65 J	6.	0.31 U	0.39 U	0.24 U	1.3 J	0.36 U	1,2-DCA = 0.9 J p-IPT = 0.85 J, sec-B = 0.35 J
		5237-090408-NWN6-31-109	8-Apr-09		27.	0.9 J	29.	3.6 J	10.	13.6 J	17.	1,900.	0.39 U	7.2 J	1.8 J	-	18. J	8.1 J	3.1 J	0.6 J	6.3	0.61 U	0.77 U	0.48 U	0.8 J	0.71 U	n-B = 1. J p-IPT = 0.8 J sec-B = 0.4 J
		5237-090604-NWN-6-31-106	4-Jun-09		26.	1.1 J	43.	5.9	14.	19.9	20.	1,900.	0.6 U	9.2 J	2.7 U	-	29.	13.	3.9	0.75 J	6.3	0.5 U	0.33 U	0.46 U	0.8 J	0.38 U	
		5327-090819-NWN-6-31-154	19-Aug-09		19.4	5. U	35.1	10. U	11.4	11.4	19.1	1,360.	5. U	6.8	5. U	-	18.7	10. U	5. U	5. U	6.7	5. U	5. U	5. U	5. U	5. U	
NWN-7-30	HAI	5237-080807-NWN-7-30-106	7-Aug-08	20 - 30	1.2	0.86	1.5	1.	2.7	3.7	1.2	13.	0.11 J	13.	1.2 J	-	0.77 J	0.16 J	0.19 J	0.041 U	0.15 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.06 J p-IPT = 0.09 J, n-B = 0.17 J sec-B = 0.44 J, tert-B = 0.2 J
		5237-081211-NWN-7-30-016	11-Dec-08		0.81	1.1	1.4	1.1	3.2	4.3	1.4	2.5	0.14 J	15.	1.5 J	-	0.77 J	0.17 J	0.26 J	0.041 U	0.18 J	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	2-Chlorotoluene = 0.04 J p-IPT = 0.12 J sec-B = 0.67 J, tert-B = 0.27 J
		5237-090408-NWN7-30-112	8-Apr-09		37.	1.	1.1	1.2	3.7	4.9	0.81	15.	0.05 J	12.	3.3	-	2.1	1.2 J	0.2 J	0.041 U	0.09 J	0.061 U	0.077 U	0.048 U	0.05 J	0.071 U	n-B = 0.47 J p-IPT = 0.23 J sec-B = 1.1 J tert-B = 0.28 J
		5237-090604-NWN-7-30-108	4-Jun-09		4.2	0.46 J	0.56	0.4 J	1.9	2.3 J	0.94	2. J	0.12 U	5.4	1.1 J	-	0.42 J	0.21 J	0.22 J	0.1 U	0.12 J	0.1 U	0.066 U	0.091 U	0.067 U	0.075 U	2-Chlorotoluene = 0.15 J Methylene Chloride = 0.27 J tert-B = 0.23 J
		5237-090818-NWN-7-30-144	18-Aug-09		0.72	0.52	0.5 U	1. U	1.64	1.64	1.33	1. U	0.5 U	4.29	0.755 U	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	1.49	0.5 U	0.5 U	0.5 U	0.5 U	

Table 4d - Summary of Historical Analytical Results for Groundwater Samples: Detected Volatile Organic Compounds (VOCs) by EPA Method 8260 or 8021
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (total)	Chlorobenzene	Naphthalene	Styrene	Isopropyl-benzene	n-Propyl-benzene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Trichloroethene	Tetrachloroethene (PCE)	Trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Other VOCs
					Analytical Results – ug/L (ppb)																						
HUMAN HEALTH SCREENING LEVEL VALUES [4,5]																											
Fish Consumption																											
		EPA 2004 NRWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
		Portland Harbor specific fish consumption rate			5.1	1,500.	210.	#	#	#	160.	#	#	#	#	#	#	#	130.	96.	19.	3.	0.33	1,000.	#	0.24	#
		DEQ 2004 AWQC (organism only)			51.	15,000.	2,100.	#	#	#	1,600.	#	#	#	#	#	#	#	1,300.	960.	190.	30.	3.3	10,000.	#	2.4	#
Drinking Water																											
		MCL			5.	1,000.	700.	#	#	10,000.	100.	0.2 [3]	100	#	#	#	#	#	600.	#	75.	5.	5.	100.	70.	2.	#
		EPA Region 3,6,9 Tap Water PRGs (12/09 update)			0.41	2,300.	1,500.	1,200.	1,200.	200.	91.	0.14	1,600	660.	#	#	15.	370.	370.	#	0.43	2.	0.11	110.	370.	0.016	#
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [4,5]																											
		EPA 2004 NRWQC (chronic)			#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
		DEQ 2004 AWQC (chronic) [6]			#	840.	#	#	#	#	50.	620.	#	#	#	#	#	#	763.	763.	763.	21,900.	840.	#	#	#	#
		Oak Ridge National Laboratory (Tier II SCV) [2]			130.	9.8	7.3	1.8	13.	#	64.	12.	#	#	#	#	#	#	14.	71.	15.	47.	98.	590.	590.	#	#
NWN-8-30	HAI	5237-080730-NWN8-30-105	30-Jul-08	15 - 30	0.51	0.22 J	5.7	0.19 J	0.17 J	0.36	12.	9.3	0.039 U	0.18 J	0.037 U	-	0.17 J	0.042 U	1.1	0.15 J	1.1	0.061 U	0.077 U	0.048 U	0.19 J	0.071 U	Carbon Disulfide = 0.05 J n-B = 0.37 J, sec-B = 0.04 J tert-B = 0.11J
		5237-081211-NWN-8-30-022	11-Dec-08		0.55	0.21 U*	2.3	0.17 J	0.17 J	0.34 J	16.	4.8	0.039 U	0.15 J	0.037 U	-	0.16 J	0.042 U	1.2	0.21 J	1.7	0.061 U	0.077 U	0.048 U	0.19 J	0.071 U	Bromodichloromethane = 0.08 J Bromoform = 0.14 J p-IPT = 0.11 J sec-B = 0.04 J, tert-B = 0.13 J
		5237-090408-NWN8-30-113	8-Apr-09		0.65	0.22 J	3.4	0.09 J	0.13 J	0.22 J	11.	5.1	0.039 U	0.17 J	0.037 U	-	0.07 J	0.042 U	1.1	0.16 J	1.3	0.061 U	0.077 U	0.048 U	0.11 J	0.071 U	tert-B = 0.09 J
		5237-090604-NWN-8-30-105	4-Jun-09		0.61	0.11 J	1.5	0.091 U	0.1 J	0.1 J	13.	3.2	0.12 U	0.15 J	0.53 U	-	0.069 U	0.089 U	1.1	0.19 J	1.4	0.1 U	0.066 U	0.091 U	0.13 J	0.075 U	tert-B = 0.12 J
		5237-090818-NWN-8-30-146	18-Aug-09		0.58	0.5 U	0.5 U	1. U	0.5 U	1. U	13.5	1. U	0.5 U	0.5 U	2. U	-	0.5 U	0.5 U	1. U	0.5 U	1.41	1.01	0.5 U	0.5 U	0.5 U	0.5 U	
NWN-9-31	HAI	5237-080807-NWN-9-31-108	7-Aug-08	16 - 31	4.4	0.3 J	2.8	1.6	3.5	5.1	0.045 U	14.	0.039 U	0.89 J	0.16 J	-	1.8 J	0.52 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.33 J	0.33 J	n-B = 0.13 J, sec-B = 0.19 J tert-B = 0.07 J
		5237-081211-NWN-9-31-023	11-Dec-08		20.	0.55	4.7	2.	3.4	5.4	0.06 J	11.	0.039 U	1.1 J	0.23 J	-	1.7 J	0.41 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	U	0.4 J	0.48 J	1,2-DCA = 0.56, p-IPT = 0.1 J sec-B = 0.15 J, tert-B = 0.08 J
		5237-090409-NWN9-31-121	10-Apr-09		16.	0.52	9.4	3.9	5.7	9.6	0.06 J	73.	0.06 J	1.1 J	0.25 J	-	3.1	0.7 J	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.27 J	0.41 J	n-B = 0.14 J p-IPT = 0.11 J sec-B = 0.12 J tert-B = 0.08 J
		5237-090604-NWN-9-31-107	4-Jun-09		21.	1.1	20.	9.1	13.	22.1	0.11 U	360.	0.12 U	2.2	0.53 U	-	11.	2.6	0.12 U	0.1 U	0.12 U	0.1 U	0.066 U	0.091 U	0.32 J	0.35 J	tert-B = 0.09 J
		5237-090604-NWN-9-31-109	4-Jun-09		21.	1.	19.	9.	12.	0.63 J	0.11 U	410.	0.12 U	2.1	0.53 U	-	11.	2.4	0.12 U	0.1 U	0.12 U	0.1 U	0.066 U	0.091 U	0.27 J	0.4 J	p-IPT = 0.36 J tert-B = 0.11 J
		5327-090819-NWN-9-31-158	19-Aug-09		11.3	2.5 U	6.75	5. U	2.55	2.55	2.5 U	72.4	2.5 U	2.5 U	2.5 U	-	5. U	5. U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	Methylene Chloride = 25.2
NWN-10-26	HAI	5237-080807-NWN-10-26-109	7-Aug-08	11 - 26	0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.93 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
		5237-080807-NWN-10-26-110 (DUP)	7-Aug-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.29 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	
		NS (Dry)	11-Dec-08		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		5237-090410-NWN10-26-123	10-Apr-09		0.045 U	0.5 U	0.05 J	0.09 J	0.06 J	0.15 J	0.045 U	2. U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.071 U	Carbon Disulfide = 0.16 J
		5237-090604-NWN-10-26-111	4-Jun-09		0.038 U	0.052 U	0.1 J	0.091 U	0.09 J	0.09 J	0.11 U	2. U	0.12 U	0.091 U	0.53 U	-	0.069 U	0.089 U	0.12 U	0.1 U	0.12 U	0.1 U	0.066 U	0.091 U	0.067 U	0.075 U	
		NS (Dry)	19-Aug-09		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Quality Control Samples (HAI)																											
Trip Blanks	HAI	5237-011008-101	8-Oct-01		1. U	1. U	1. U	-	-	2. U	-	5. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-011212-100	12-Dec-01		1. U	1. U	1. U	-	-	2. U	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-011213-106	13-Dec-01		1. U	1. U	1. U	-	-	2. U	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-011009-106	9-Oct-01		1. U	1. U	1. U	-	-	2. U	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-020402-100	2-Apr-02		1. U	1. U	1. U	-	-	2. U	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-020403-103	3-Apr-02		1. U	1. U	1. U	-	-	2. U	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-020710-100	10-Jul-02		1. U	1. U	1. U	-	-	2. U	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-070712-MW-7	12-Jul-07		0.09 U	0.11 U	0.06 U	0.21 U	0.21 U	0.26 U	0.21 U	-	0.21 U	0.07 U	-	0.21	-	-	0.21	0.21	0.21	0.08 U	0.21 U	0.1 U	0.09 U	0.1 U	
		2708-080515-TB4-37553	15-May-08		0.045 U	0.09 J	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		TB5-37589	21-May-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.07 U	
		5237-080730-TB-38071	30-Jul-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.99 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.07 U	
		TB080807	8-Aug-07		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.07 U	
		5237-080925-TB38515	25-Sep-08		0.045 U	0.72	0.042 U	0.078 U	0.037 U	0.078 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		5237-080929-TB38875	29-Sep-08		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.07 U	Chloromethane = 0.14 J
		5237-081211-TB-39349	11-Dec-08		0.045 U	0.08 J	0.042 U	0.078 U	0.037 U	0.078 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.07 U	Carbon Disulfide = 0.09 J Chloromethane = 0.1 J
		5237-090407-TB39828	7-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.19 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.07 U	
		5237-090408-TB39826	8-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.17 J	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.07 U	
Trip Blanks	HAI	5237-090409-TB40002	9-Apr-09		0.045 U	0.048 U	0.042 U	0.078 U	0.037 U	0.031 U	0.045 U	0.1 U	0.039 U	0.031 U	0.037 U	-	0.037 U	0.042 U	0.044 U	0.041 U	0.054 U	0.061 U	0.077 U	0.048 U	0.045 U	0.07 U	
		5237-090604-TB-40272	4-Jun-09		0.038 U	0.052 U	0.05 U	0.091 U	0.074 U	0.091 U	0.11 U	0.15 J	0.12 U	0.091 U	0.53 U	-	0.069 U	0.089 U	0.12 U	0.1 U	0.12 U	0.1 U	0.066 U	0.091 U	0.067 U	0.08 U	
		5237-090818-TB-141	18-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	1. U	0.5 U	0.5 U	5. U	-	0.5 U	0.5 U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
		5327-090819-TB-153	19-Aug-09		0.25 U	0.5 U	0.5 U	1. U	0.5 U	1. U	0.5 U	5. U	0.5 U	0.5 U	0.5 U	-	1. U	1. U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
Equipment Blanks	HAI	5237-011008-103	8-Oct-01		1. U	1. U	1. U	-	-	2. U	-	5. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	Acetone = 149.0
		5237-011212-102	12-Dec-01		1. U	1. U	1. U	-	-	2. U	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	Acetone = 54.7
		5237-020402-102	2-Apr-02		1. U	1. U	1. U	-	-	2. U	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	
		5237-020710-102	10-Jul-02		1. U	1. U	1. U	-	-	2. U	-	2. U	-	1. U	1. U	-	1. U	1. U	-	-	-	1. U	-	1. U	1. U	1.2 U	

Note: "-" = Measurement not taken, parameter not analyzed, or data unavailable (samper other than HAI)
# = Reference Level not established
AWQC = Ambient Water Quality Criteria
bgs = below ground surface
DEQ = Oregon Department of Environmental Quality
EPA = U.S. Environmental Protection Agency

J = Estimated Concentration
MCL = Maximum Contaminant Level
NRWQC = National Recommended Water Quality Criteria
NS = No Sample
ppb = parts per billion
PRG = Preliminary Remediation Goal

SCV = Secondary Chronic Value
ug/L = micrograms per liter
U = Non-detect above method detection limit
U* = Compound considered non-detect because it was also detected in associated blank at similar concentration levels.
UJ = Compound not detected, but the reporting limit is probably higher due to a low bias identified during the quality assurrance review.
UR = Unusable Reportling Limit, compound may or may not be present in this sample.

1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
1,1,2-TCA = 1,1,2-Trichloroethane
MTBE = Methyl Tert-butyl Ether
p-IPT = p-Isopropyltoluene
n-B = n-Butylbenzene
sec-B = sec-Butylbenzene
tert-B = tert-Butylbenzene

Note: Reference Level is lowest of EPA AWQC for aquatic life protection, AWQC for human consumption of organisms only, or DEQ SLV for aquatic receptors
1 = Sample number prefix: 5237-
2 = Tier II SCV values were taken from Suter II, G.W. and Tasco, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2
3 = MCL is based on benzo(a)pyrene
4 = Unless otherwise noted Screening Level Values are from *Portland Harbor Joint Source Control Strategy*, Final, December 2005 (7/16/07 revision)
5 = EPA, under CERCLA authority, has identified the Safe Drinking Water Acts MCLs and AWQCs (federal and state once approved as potential ARARs under CERCLA. The final determination will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to The EPA Portland Harbor ROD, due to an exceedance of an SLV in upland stormwater will be evaluated and prioritized on a case by case basis.
6 = Values were taken from Table 33c (OAR 340-41), which are Water Quality Guidance Vales, not criteria, that can be used in the application of Oregon's Narrative Toxics Criteria to waters of the state in order to protect aquatic life.

Table 4e - Summary of Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results in ug/L (ppb)					
					Carbazole	Dibenzofuran	1-Methylnapthalene	2-Methylnapthalene	PAHs	Other SVOCs
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]										
Fish Consumption										
	EPA 2004 NRWQC (organism only)				#	#	#	#	#	
	Portland Harbor specific fish consumption rate				#	#	#	#	#	
	DEQ 2004 AWQC (organism only)				#	#	#	#	#	
Drinking Water										
	MCL				#	#	#	0.2 [4]	#	
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				#	37.	2.3	150.	#	
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]										
	EPA 2004 NRWQC (chronic)				#	#	#	#	#	
	DEQ 2004 AWQC (chronic)				#	#	#	#	#	
	Oak Ridge National Laboratory (Tier II SCV) [3]				#	#	#	2.1	#	
WS-1	CH2M HILL		Aug-85	7-22	-	77.	-	-	See PAH Table	
WS-2	CH2M HILL		Aug-85	7.5-22	-	75.	-	260.	See PAH Table	
WS-3S	CH2M HILL		Aug-85	12-27	-	U	-	67.	See PAH Table	
WS-3I	G&M		Oct-90	55-60	-	4.	-	-	See PAH Table	
WS-4	CH2M HILL		Aug-85	6.5-21.5	-	U	-	19.	See PAH Table	
WS-5	CH2M HILL		Aug-85	5-20	-	U	-	12.	See PAH Table	
WS-6	CH2M HILL		Aug-85	9-24	-	24.	-	41.	See PAH Table	
WS-7	CH2M HILL		Aug-85	10-25	-	U	-	U	See PAH Table	
			Oct-90		-	3.	-	U	See PAH Table	
WS-8-33	HAI	011009-107	9-Oct-01	23-33	14.7	4.26	-	59.2	See PAH Table	
		011213-105	13-Dec-01		45.2	3.97	-	65.8	See PAH Table	
		020403-105	3-Apr-02		11.5	2.12	-	5.48	See PAH Table	
		020710-104	10-Jul-02		18.3	3.05	-	41.9	See PAH Table	
		5237-080521-WS8-33-105	21-May-08		38.	4.1	96.	27.	See PAH Table	
		5237-080929-WS-8-33-145	29-Sep-08		44.	3.9	110.	48.	See PAH Table	
		5237-090408-WS8-33-119	8-Apr-09		37.	3.2	84.	38.	See PAH Table	
		5327-090819-WS-8-33-159	19-Aug-09		46.5 U	46.5 U	93.3	46.5 U	See PAH Table	
WS-8-59	HAI	011008-104	8-Oct-01	49-59	4. U	2. U	-	6.74	See PAH Table	
		011008-105D	8-Oct-01		4. U	2. U	-	7.17	See PAH Table	
		011212-103	12-Dec-01		4. U	2. U	-	2. U	See PAH Table	
		011212-104D	12-Dec-01		4. U	2. U	-	2. U	See PAH Table	
		020403-104	3-Apr-02		8. U	4. U	-	4. U	See PAH Table	
		020710-103	10-Jul-02		4. U	2. U	-	2. U	See PAH Table	
		5237-070716-WS-8-59-108	16-Jul-07		0.0971 U	0.0971 U	-	0.0971 U	See PAH Table	
		5237-080521-WS8-56-106	21-May-08		0.029	0.011 J	0.12	0.072	See PAH Table	
		5237-080929-WS-8-56-146	29-Sep-08		0.026	0.007 J	0.033	0.039	See PAH Table	
		5237-090408-WS8-59-115	8-Apr-09		0.034	0.013 J	0.045	0.033	See PAH Table	
		5237-090408-WS8-59-117	8-Apr-09		0.017 U	0.0085 J	0.038	0.022	See PAH Table	
		5327-090819-WS-8-59-157	19-Aug-09		0.0374 U	0.0374 U	0.0374 U	0.0374 U	See PAH Table	
WS-9-34	HAI	011008-102	8-Oct-01	24-34	4. U	2. U	-	2. U	See PAH Table	
		011212-101	12-Dec-01		4. U	2. U	-	2. U	See PAH Table	
		020402-101	2-Apr-02		8. U	4. U	-	4. U	See PAH Table	
		020710-101	10-Jul-02		4. U	2. U	-	2. U	See PAH Table	
		5237-090410-WS9-34-122	10-Apr-09		0.017 J	0.051	0.27	0.037	See PAH Table	
		5327-090819-WS-9-34-156	19-Aug-09		0.755 U	0.755 U	0.755 U	0.755 U	See PAH Table	

Table 4e - Summary of Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results in ug/L (ppb)					
					Carbazole	Dibenzofuran	1-Methylnapthalene	2-Methylnapthalene	PAHs	Other SVOCs
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]										
Fish Consumption										
	EPA 2004 NRWQC (organism only)				#	#	#	#	#	
	Portland Harbor specific fish consumption rate				#	#	#	#	#	
	DEQ 2004 AWQC (organism only)				#	#	#	#	#	
Drinking Water										
	MCL				#	#	#	0.2 [4]	#	
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				#	37.	2.3	150.	#	
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]										
	EPA 2004 NRWQC (chronic)				#	#	#	#	#	
	DEQ 2004 AWQC (chronic)				#	#	#	#	#	
	Oak Ridge National Laboratory (Tier II SCV) [3]				#	#	#	2.1	#	
WS-10-27	MFA	WS-10-27	29-Apr-04	11-26	245.	12.6	-	70.5	See PAH Table	BEHP = 1.34 2,4-DMP = 57.9 2-Methylphenol = 7.59 Phenol = 20.8
			16-Nov-04		338.	25.2	-	510.	See PAH Table	2,4-DMP = 75. 2-Methylphenol = 6.76 Phenol = 38.6 3- & 4-Methylphenol = 10.9
WS-11-125	MFA	WS-11-125	29-Apr-04	109-124	153.	46.9	-	1,260.	See PAH Table	BEHP = 3.94 Di-n-butylphthalate = 1.16
			16-Nov-04		136.	1. U	-	122.	See PAH Table	
	HAI	5237-080515-WS11-125-102	15-May-08		290.	18.	520.	810.	See PAH Table	
		5237-080929-WS-11-125-144	29-Sep-08		260.	17.	340.	570.	See PAH Table	
		5237-090407-WS11-125-102	7-Apr-09		220.	19.	410.	640.	See PAH Table	
		5237-090818-WS-11-125-149	18-Aug-09		465. U	465. U	465.	753.	See PAH Table	
WS-11-161	MFA	WS-11-161	27-Apr-04	145-160	U	U	-	U	See PAH Table	
			16-Nov-04		0.987 U	0.987 U	-	0.987 U	See PAH Table	
	HAI	5237-070712-WS11-161	12-Jul-07		0.348	0.0952 U	-	4.76 U	See PAH Table	
		5237-080515-WS11-161-103	15-May-08		1.9	0.023	1.6	2.2	See PAH Table	
		5237-080929-WS-11-161-142	29-Sep-08		2.	0.021	0.96	1.4	See PAH Table	
		5237-080929-WS-11-161-143	29-Sep-08		3.	0.033	1.4	2.1	See PAH Table	
		5237-090407-WS11-161-100	7-Apr-09		2.8	0.033	1.7	2.5	See PAH Table	
		5237-090818-WS-11-161-147	18-Aug-09		3.29	0.93 U	1.48	2.2	See PAH Table	
WS-12-125	MFA	WS-12-125	17-Nov-04	109 - 124	1.01 U	1.01 U	-	1.01 U	See PAH Table	
	HAI	5237-070712-WS12-125	12-Jul-07		0.0952 U	0.0952 U	-	0.0952 U	See PAH Table	
		5237-080521-WS12-126-104	21-May-08		0.0045 U	0.01 J	0.0093 J	0.0032 U*	See PAH Table	
		5237-080925-WS-12-125-140	25-Sep-08		0.0045 U	0.013 J	0.0082 J	0.005 J	See PAH Table	
		5237-090407-WS12-125-106	7-Apr-09		0.0045 U	0.011 J	0.0067 J	0.0064 J	See PAH Table	
		5237-090818-WS-12-125-145	18-Aug-09		0.0374 U	0.0374 U	0.0374 U	0.0374 U	See PAH Table	
WS-12-161	MFA	WS-12-161	17-Nov-04	145 - 160	0.952 U	0.952 U	-	0.952 U	See PAH Table	
	HAI	5237-070712-WS12-161	12-Jul-07		0.0952 U	0.0952 U	-	0.0952 U	See PAH Table	
		5237-080521-WS12-161-107	21-May-08		0.0093 J	0.0046 U	0.0075 J	0.0064 U*	See PAH Table	
		5237-080925-WS-12-161-141	25-Sep-08		0.0045 U	0.0046 U	0.0035 U	0.0031 J	See PAH Table	
		5237-090407-WS12-161-104	7-Apr-09		0.0045 U	0.0046 U	0.0046 J	0.0068 J	See PAH Table	
		5237-090818-WS-12-161-143	18-Aug-09		0.0374 U	0.0374 U	0.0374 U	0.0374 U	See PAH Table	
WS-13-69	MFA	WS-13-69	28-Apr-04	52.6-67.6	7.86	U	-	23.	See PAH Table	BEHP = 6.03
			18-Nov-04		6.28	0.959 U	-	15.3	See PAH Table	p-Chloro-m-cresol = 3.18
WS-13-105	MFA	WS-13-105	28-Apr-04	89-104	1.	U	-	5.25	See PAH Table	BEHP = 7.01 Diethylphthalate = 1.11
		Duplicate	28-Apr-04		1.55	U	-	4.63	See PAH Table	
			18-Nov-04		1.05 U	1.05 U	-	1.05 U	See PAH Table	

Table 4e - Summary of Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results in ug/L (ppb)										
					Carbazole		Dibenzofuran		1-Methylnapthalene		2-Methylnapthalene		PAHs	Other SVOCs
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]														
Fish Consumption														
	EPA 2004 NRWQC (organism only)				#		#		#		#		#	
	Portland Harbor specific fish consumption rate				#		#		#		#		#	
	DEQ 2004 AWQC (organism only)				#		#		#		#		#	
Drinking Water														
	MCL				#		#		#		0.2 [4]		#	
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				#		37.		2.3		150.		#	
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]														
	EPA 2004 NRWQC (chronic)				#		#		#		#		#	
	DEQ 2004 AWQC (chronic)				#		#		#		#		#	
	Oak Ridge National Laboratory (Tier II SCV) [3]				#		#		#		2.1		#	
WS-13-105	MFA	Duplicate	18-Nov-04	89-104	1.02	U	1.02	U	-		-		See PAH Table	
WS-14-125	MFA	WS-14-125	16-Nov-04	109-124	217.		8.33		-		288.		See PAH Table	2,4-DMP = 29.4 2-methylphenol = 3.4 Phenol = 6.67 Dimethylphthalate = 211.
	HAI	5237-070712-WS14-125	12-Jul-07		166.		6.99		-		2,380.	U	See PAH Table	
		5237-080515-WS14-125-100	15-May-08		190.		8.5		270.		430.		See PAH Table	
		5237-080925-WS-14-125-138	25-Sep-08		150.		8.1		270.		390.		See PAH Table	
		5237-090408-WS14-125-110	8-Apr-09		150.		7.3		180.		420.		See PAH Table	
		5327-090819-WS-14-125-155	19-Aug-09		186.	U	186.	U	186.	U	280.		See PAH Table	
WS-14-161	MFA	WS-14-161	16-Nov-04	145-160	0.95	U	0.95	U	-		0.95	U	See PAH Table	
	HAI	5237-070712-WS14-161	12-Jul-07		0.295		0.0952	U	-		0.511		See PAH Table	
		5237-080515-WS14-161-101	15-May-08		3.4		0.14		4.4		6.7		See PAH Table	
		5237-080925-WS-14-161-139	25-Sep-08		3.3		0.13		2.9		4.7		See PAH Table	
		5237-090408-WS14-161-108	8-Apr-09		21.		1.5		37.		58.		See PAH Table	
		5237-090818-WS-14-161-151	18-Aug-09		186.	U	186.	U	186.	U	186.	U	See PAH Table	
WS-15-85	MFA	WS-15-85	18-Nov-04	70-85	128.		2.46		-		106.		See PAH Table	BEHP = 4.18 2,4-DMP = 26.5 2-Methylphenol = 2.41 Phenol = 24.7 Dimethylphthalate = 6.45
WS-15-140	MFA	WS-15-140	18-Nov-04	125-140	0.951	U	0.951	U	-		1.47		See PAH Table	2-Chlorophenol = 1.51 Dimethylphthalate = 8.89
WS-16-125	MFA	WS-16-125	17-Nov-04	109-124	0.976	U	0.976	U	-		2.8		See PAH Table	Phenol = 4.84
WS-16-161	MFA	WS-16-161	17-Nov-04	145-160	0.967	U	0.967	U	-		0.967	U	See PAH Table	3- & 4-Methylphenol = 9.84 Dimethylphthalate = 1.1
WS-17-52	MFA	WS-17-52	16-Nov-04	41-51	16.2		1.03	U	-		22.8		See PAH Table	BEHP = 17.5
WS-17-94	MFA	WS-17-94	17-Nov-04	78-93	2.89		0.973	U	-		10.1		See PAH Table	Di-n-butylphthalate = 1.3
WS-21-112	HAI	5237-070712-WS21-112	12-Jul-07	97 - 112	0.382		0.0952	U	-		0.69		See PAH Table	
		5237-080521-WS21-112-108	21-May-08		0.38		0.019	J	20.		1.		See PAH Table	
		5237-080925-WS-21-112-137	25-Sep-08		0.38		0.0094	J	24.		1.8		See PAH Table	
		5237-090407-WS21-112-108	7-Apr-09		0.17		0.0095	J	5.2		0.16		See PAH Table	
		5237-090820-WS-21-112-165	20-Aug-09		2.04	U	2.04	U	7.18		2.04	U	See PAH Table	
		5237-090820-WS-21-112-166	20-Aug-09		1.96	U	1.96	U	5.75		1.96	U	See PAH Table	
RP-7-30	HAI	5237-070828-RP-7-30-106	28-Aug-07	25 - 30	0.0952	U	0.0952	U	-		0.0952	U	See PAH Table	
RP-7-55	HAI	5237-070827-RP-7-55-104	27-Aug-07	50 - 55	0.0952	U	0.0952	U	-		0.0952	U	See PAH Table	
RP-7-84	HAI	5237-070828-RP-7-84-107	28-Aug-07	79 - 84	0.0966	U	0.0966	U	-		0.0966	U	See PAH Table	
		5237-070828-RP-7-84-108 (DUP)	28-Aug-07		0.0962	UJ	0.0962	UJ	-		0.0962	UJ	See PAH Table	
RP-11-30	HAI	5237-070827-RP-11-30-101	27-Aug-07	15 - 30	0.0952	U	0.0952	U	-		0.0952	U	See PAH Table	
RP-11-160	HAI	5237-070827-RP-11-160-102	27-Aug-07	150 - 160	0.0957	U	0.0957	U	-		0.0957	U	See PAH Table	
RP-11-216	HAI	5237-070827-RP-11-216-103	27-Aug-07	211 - 216	0.0952	U	0.0952	U	-		0.0952	U	See PAH Table	

Table 4e - Summary of Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results in ug/L (ppb)										
					Carbazole		Dibenzofuran		1-Methylnapthalene		2-Methylnapthalene		PAHs		Other SVOCs
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]															
Fish Consumption															
	EPA 2004 NRWQC (organism only)				#		#		#		#		#		
	Portland Harbor specific fish consumption rate				#		#		#		#		#		
	DEQ 2004 AWQC (organism only)				#		#		#		#		#		
Drinking Water															
	MCL				#		#		#		0.2 [4]		#		
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				#		37.		2.3		150.		#		
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]															
	EPA 2004 NRWQC (chronic)				#		#		#		#		#		
	DEQ 2004 AWQC (chronic)				#		#		#		#		#		
	Oak Ridge National Laboratory (Tier II SCV) [3]				#		#		#		2.1		#		
RP-24-30	HAI	5237-070829-RP-24-30-109	29-Aug-07	25 - 30	0.1	U	0.1	U	-		0.1	U	See PAH Table		
RP-24-60	HAI	5237-070828-RP-24-60-110	28-Aug-07	55 - 60	0.0952	U	0.0952	U	-		0.0952	U	See PAH Table		
RP-24-73	HAI	5237-070829-RP-24-73-113	29-Aug-07	68 - 73	0.0952	U	0.0952	U	-		0.0952	U	See PAH Table		
RP-24-85	HAI	5237-070828-RP-24-85-111	28-Aug-07	80 - 85	0.0952	U	0.0952	U	-		0.0952	U	See PAH Table		
NWN-1-20	HAI	5237-080807-NWN-1-20-107	7-Aug-08	10 - 20	150.		12.		180.		300.		See PAH Table		
		5237-081211-NWN-1-20-019	11-Dec-08		150.		12.		190.		280.		See PAH Table		
		5237-090407-NWN1-20-105	7-Apr-09		130.		13.		190.		230.		See PAH Table		
		5237-090604-NWN-1-20-103	4-Jun-09		180.		24.		310.		410.		See PAH Table		
		5237-090818-NWN-1-20-148	18-Aug-09		930.	U	930.	U	930.	U	930.	U	See PAH Table		
NWN-2-20	HAI	5237-080730-NWN2-20-101	30-Jul-08	10 - 20	71.		2.4		23.		17.		See PAH Table		
		5237-081211-NWN-2-20-017	11-Dec-08		50.		2.6		20.		6.5		See PAH Table		
		5237-090407-NWN2-20-107	7-Apr-09		13.		2.8		10.		2.4		See PAH Table		
		5237-090604-NWN-2-20-101	4-Jun-09		26.		3.		9.8		0.96		See PAH Table		
		5237-090818-NWN-2-20-142	18-Aug-09		62.6		3.1		17.4		1.87	U	See PAH Table		
NWN-3-17	HAI	5237-080730-NWN3-17-100	30-Jul-08	7 - 17	0.0045	U	0.012	J	0.042		0.018	J	See PAH Table		
		NS (Dry)	11-Dec-08		-		-		-		-		-		
		5237-090407-NWN3-17-101	7-Apr-09		0.013	U	0.0053	J	0.011	J	0.0097	J	See PAH Table		
		5237-090604-NWN-3-17-102	4-Jun-09		0.019	U	0.0046	J	0.037		0.019	U	See PAH Table		
		NS (Dry)	19-Aug-09		-		-		-		-		-		
NWN-4-15	HAI	NS (Dry)	30-Jul-08	5 - 15	-		-		-		-		-		
		5237-081211-NWN-4-15-021	11-Dec-08		0.061		0.022		0.041		0.04		See PAH Table		
		5237-090407-NWN4-15-103	7-Apr-09		0.0081	J	0.0046	U	0.0076	J	0.011	J	See PAH Table		
		5237-090604-NWN-4-15-100	4-Jun-09		0.063		0.025		0.1		0.093		See PAH Table		
		5327-090818-NWN-4-15-152*	18-Aug-09		-		-		-		-		-		
NWN-5-20	HAI	5237-080730-NWN5-20-103	30-Jul-08	10 - 20	29.		36.		52.		73.		See PAH Table		
		5237-081211-NWN-5-20-018	11-Dec-08		21.		24.		5.		0.84		See PAH Table		
		5237-090408-NWN5-20-111	8-Apr-09		4.7		5.2		1.9		1.1		See PAH Table		
		5237-090604-NWN-5-20-104	4-Jun-09		7.8		9.7		5.2		1.5		See PAH Table		
		5237-090818-NWN-5-20-150	18-Aug-09		6.61		9.28		1.		0.748	U	See PAH Table		
NWN-6-31	HAI	5237-080730-NWN6-31-104	30-Jul-08	21 - 31	170.		200.		240.		150.		See PAH Table		
		5237-081211-NWN-6-31-020	11-Dec-08		140.		120.		240.		130.		See PAH Table		
		5237-090408-NWN6-31-109	8-Apr-09		130.		130.		190.		110.		See PAH Table		
		5237-090604-NWN-6-31-106	4-Jun-09		180.		170.		260.		180.		See PAH Table		
		5327-090819-NWN-6-31-154	19-Aug-09		186.	U	186.	U	186.	U	186.	U	See PAH Table		

Table 4e - Summary of Analytical Results for Groundwater Samples: Detected SVOCs by EPA Method 8270C
Siltronic Corporation Property Monitoring Wells

Well Number	Collected By	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results in ug/L (ppb)											
					Carbazole		Dibenzofuran		1-Methylnapthalene		2-Methylnapthalene		PAHs		Other SVOCs	
HUMAN HEALTH SCREENING LEVEL VALUES [1,2]																
Fish Consumption																
	EPA 2004 NRWQC (organism only)				#		#		#		#		#			
	Portland Harbor specific fish consumption rate				#		#		#		#		#			
	DEQ 2004 AWQC (organism only)				#		#		#		#		#			
Drinking Water																
	MCL				#		#		#		0.2 [4]		#			
	EPA Region 3,6,9 Tap Water PRGs (12/09 update)				#		37.		2.3		150.		#			
ECOLOGICAL RECEPTOR SCREENING LEVEL VALUES [1,2]																
	EPA 2004 NRWQC (chronic)				#		#		#		#		#			
	DEQ 2004 AWQC (chronic)				#		#		#		#		#			
	Oak Ridge National Laboratory (Tier II SCV) [3]				#		#		#		2.1		#			
NWN-7-30	HAI	5237-080807-NWN-7-30-106	7-Aug-08	20 - 30	0.13		0.16		13.		0.19		See PAH Table			
		5237-081211-NWN-7-30-016	11-Dec-08		0.082		0.13		8.4		0.048		See PAH Table			
		5237-090408-NWN7-30-112	8-Apr-09		0.047	J	0.26	J	24.	J	0.19	J	See PAH Table			
		5237-090604-NWN-7-30-108	4-Jun-09		0.034		0.35	J	5.1		0.074		See PAH Table			
		5237-090818-NWN-7-30-144	18-Aug-09		0.755	U	0.755	U	0.94		0.755	U	See PAH Table			
NWN-8-30	HAI	5237-080730-NWN8-30-105	30-Jul-08	15 - 30	0.3		0.047		0.36		0.28		See PAH Table			
		5237-081211-NWN-8-30-022	11-Dec-08		0.5		0.11		0.33		0.15		See PAH Table			
		5237-090408-NWN8-30-113	8-Apr-09		0.23		0.029		0.24		0.026		See PAH Table			
		5237-090604-NWN-8-30-105	4-Jun-09		0.21		0.035		0.22		0.019	J	See PAH Table			
		5237-090818-NWN-8-30-146	18-Aug-09		0.191		0.0377	U	0.188		0.047		See PAH Table			
NWN-9-31	HAI	5237-080807-NWN-9-31-108	7-Aug-08	16 - 31	0.53		0.9		4.9		0.49		See PAH Table			
		5237-081211-NWN-9-31-023	11-Dec-08		0.079	J	0.21	J	1.3	J	0.49	J	See PAH Table			
		5237-090409-NWN9-31-121	9-Apr-09		0.43		0.4		3.6		1.1		See PAH Table			
		5237-090604-NWN-9-31-107	4-Jun-09		3.5		0.93		16.		10.		See PAH Table			
		5237-090604-NWN-9-31-109	4-Jun-09		3.6		0.95		17.		11.		See PAH Table			
		5327-090819-NWN-9-31-158	19-Aug-09		0.755	U	0.755	U	2.54		5.3		See PAH Table			
NWN-10-26	HAI	5237-080807-NWN-10-26-109	7-Aug-08	11 - 26	0.0045	U	0.0046	U	0.0083	J	0.0051	J	See PAH Table			
		5237-080807-NWN-10-26-110 (DUP)	7-Aug-08		0.0045	U	0.006	J	0.01	J	0.011	J	See PAH Table			
		NS (Dry)	11-Dec-08		-		-		-		-		-			
		5237-090410-NWN10-26-123	10-Apr-09		0.012	U	0.013	J	0.019	J	0.028		See PAH Table			
		5237-090604-NWN-10-26-111	4-Jun-09		0.02	U	0.0055	J	0.045		0.04		See PAH Table			
		NS (Dry)	19-Aug-09		-		-		-		-		-			
Quality Control Samples (HAI)																
Equipment	HAI	5237-011008-103	8-Oct-01		4.	U	2.	U	-		2.	U	See PAH Table			
Blank		5237-011212-102	12-Dec-01		4.	U	2.	U	-		2.	U	See PAH Table			

Note:
AWQC = Ambient Water Quality Criteria
bgs = below ground surface
DEQ = Oregon Department of Environmental Quality
EPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
ND = Not detected above detection limit indicated
NRWQC = National Recommended Water Quality Criteria
NS = No Sample
ppb = parts per billion
PRG = Potential Remediation Goal
SCV = secondary Chronic Value
U = not detected above method reporting limit indicated
ug/l = micrograms per liter

"-" = Measurement not taken, parameter not analyzed, or data unavailable (sampler other than HAI)
* = Partial sample obtained, but sample volume completely used during other analysis (i.e 8260B), insufficient volume to analyze for additional determinants.
# = Reference Level not established

1= Unless otherwise noted Screening Level Values are from *Portland Harbor Joint Source Control Strategy*, Final, December 2005 (7/16/07 revision)
2 = EPA, under CERCLA authority, has identified the Safe Drinking Water Acts MCLs and AWQCs (federal and state once approved) as potential ARARs under CERCLA. The final determination will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to The EPA Portland Harbor ROD, due to an exceedance of an SLV in upland stormwater will be evaluated and prioritized on a case by case basis.
3 = Tier II SCV values were taken from Suter II, G.W. and Tasco, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2
4 = MCL is based on benzo(a)pyrene
5 = These values were taken form OAR 340-41 Table 20 because they will remain the enforceable values for these particular analytes.
6 = Freshwater aquatic life values for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Chronic = exp(1.005(ph)-5.134). The value displayed in the table corresponds to a pH of 7.8.
7 = Freshwater aquatic life values for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Chronic = exp(1.005(ph)-5.29). The value displayed in the table corresponds to a pH of 7.8.

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-8-33	HAI	5237-080521-WS8-33-105	21-May-08	388	388	1 U	-	-	7.3	0.008 U	0.012 U	-	0.58	-85.6	6.33	888	21.4	17.05
		5237-080929-WS-8-33-145	29-Sep-08	392	392	1 U	-	-	9	0.008 U	0.012 U	-	0	-146	6.39	849	503	18
		5237-090408-WS8-33-119	8-Apr-09	373	373	2 U	-	-	7.9	1.5	1.72 J	-	4.29	-168	6.1	791	323	17.4
		5327-090819-WS-8-33-159	19-Aug-09	-	-	-	-	-	-	-	-	-	0.73	-200.8	6.36	733	45	20.75
WS-8-59	HAI	5237-070716-WS-8-59-108	16-Jul-07	394	394	25 U	25 U	-	14.5	0.1 U	1.0 U	-	-	-124.8	6.98	1,589	210	21.09
		5237-080521-WS8-56-106	21-May-08	480	419	60	-	-	11.4	0.008 U	0.4	-	0.66	-68.9	6.51	947	487	17.25
		5237-080929-WS-8-56-146	29-Sep-08	377	377	1 U	-	-	12.4	0.008 U	0.012 U	-	1.79	-108	6.53	696	>1,000	19.3
		5237-090408-WS8-59-115	8-Apr-09	492	492	2 U	-	-	7.7	0.3	0.4	-	4.26	-132	6.14	98	830	17.7
		5327-090819-WS-8-59-157	19-Aug-09	-	-	-	-	-	-	-	-	-	0.72	-170.8	6.49	658	-170.8	19.51
WS-9-34	HAI	5237-090410-WS9-34-122	10-Apr-09	318	318	2 U	-	-	4.4	0.3	0.6	-	4.17	-157	6.07	661	984	12.8
		5327-090819-WS-9-34-156	19-Aug-09	366.	366.	20. U	20. U	-	1.64	0.25 U	1. U	-	-	-82	6.78	739	149	16.7
WS-10-27	MFA	WS-10-27	27-Oct-03	493	-	-	-	-	10.3	0.03 U	28.6	-	-	-	-	-	-	-
			29-Jan-04	314	-	-	-	-	5.26	0.03 U	3.16	-	-	-	-	-	-	-
			29-Apr-04	509	-	-	-	-	7.74	0.03 U	0.76	-	-	-	-	-	-	-
			16-Nov-04	609	-	-	-	-	8.82	0.03 U	0.5 U	-	-	-	-	-	-	-
			17-Feb-05	313	-	-	-	-	2.62	0.03 U	4.97	-	-	-	-	-	-	-
			23-May-05	606	-	-	-	-	4.06	0.03 U	1.85	-	-	-	-	-	-	-
			9-Aug-05	574	-	-	-	-	4.03	0.03 U	0.5 U	-	-	-	-	-	-	-
			15-Nov-05	605	-	-	-	-	6.33	0.03 U	0.73	-	-	-	-	-	-	-
			16-Feb-06	290	-	-	-	-	5.43	0.03 U	13	-	-	-	-	-	-	-
			10-May-06	290	-	-	-	-	3.68	0.03 U	5.9	-	-	-	-	-	-	-
			22-Aug-06	448	-	-	-	-	6.25	0.03 U	0.5 U	-	-	-	-	-	-	-
			15-Nov-06	198	-	-	-	-	3.57	0.0986	13.9	-	-	-	-	-	-	-
			20-Feb-07	255	-	-	-	-	3.75	0.03 U	0.5 U	-	-	-	-	-	-	-
			24-May-07	308	308	10 U	10 U	-	3.9	0.228	0.5 U	-	-	-	-	-	-	-
			16-Aug-07	470	-	-	-	-	6.14	0.03 U	0.5 U	-	-	-	-	-	-	-
			20-Nov-07	576	-	-	-	-	8.87	0.03 U	0.5 U	-	-	-	-	-	-	-
			8-Feb-08	178	-	-	-	-	2.61	0.03 U	4.31	-	-	-	-	-	-	-
			13-May-08	271	-	-	-	-	4.23	0.0366	0.5 U	-	-	-	-	-	-	-
			18-Aug-08	418	-	-	-	-	6.37	0.03 U	0.5 U	-	-	-	-	-	-	-
WS-11-125	MFA	WS-11-125	28-Oct-03	302	-	-	-	-	36.2	0.03 U	40.9	-	-	-	-	-	-	-
			30-Jan-04	324	-	-	-	-	46.5	0.03 U	49.8	-	-	-	-	-	-	-

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0				Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate		Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-11-125	MFA	WS-11-125	29-Apr-04	297	-	-	-	-	40.3	0.03 U	40.8		-	-	-	-	-	-	-
			16-Nov-04	341	-	-	-	-	56.9	0.03 U	53.8		-	-	-	-	-	-	-
			16-Feb-05	326	-	-	-	-	50.2	0.03 U	49.2		-	-	-	-	-	-	-
			18-May-05	340	-	-	-	-	46.2	0.03 U	36.9		-	-	-	-	-	-	-
			10-Aug-05	335	-	-	-	-	52.6	0.03 U	46.8		-	-	-	-	-	-	-
			15-Nov-05	382	-	-	-	-	47.8	0.03 U	35.4		-	-	-	-	-	-	-
			15-Feb-06	387	-	-	-	-	49	0.03 U	41.7		-	-	-	-	-	-	-
			11-May-06	344	-	-	-	-	51.2	0.03 U	40.6		-	-	-	-	-	-	-
			28-Jun-06	403	-	-	-	-	50.9	-	7.17		-	-	-	-	-	-	-
			27-Jul-06	311	-	-	-	-	46.6	-	10.8		-	-	-	-	-	-	-
			23-Aug-06	378	-	-	-	-	50.1	0.03 U	4.95		-	-	-	-	-	-	-
			26-Sep-06	701	701	10 U	10 U	-	54.6	0.0466	0.78		-	-	-	-	-	-	-
			23-Oct-06	695	695	10 U	10 U	-	61.7	0.0434	0.72		-	-	-	-	-	-	-
			18-Dec-06	999	999	10 U	10 U	-	70.4	0.03 U	2.15		-	-	-	-	-	-	-
			25-Jan-07	976	976	10 U	10 U	-	72.4	0.0426	2.28		-	-	-	-	-	-	-
			21-Feb-07	1,160	1,160	10 U	10 U	-	52.8	0.0404	2.57		-	-	-	-	-	-	-
			21-Mar-07	1,300	1,300	10 U	10 U	-	56	0.0887	2.83		-	-	-	-	-	-	-
			23-Apr-07	1,420	1,420	10 U	10 U	-	73.6	0.03 U	2.45		-	-	-	-	-	-	-
			22-May-07	1,560	1,560	10 U	10 U	-	68	0.18	1.8		-	-	-	-	-	-	-
			15-Nov-07	1,070	-	-	-	-	60.6	0.0359	0.77		-	-	-	-	-	-	-
			14-Feb-08	894	-	-	-	-	66.6	0.03 U	0.55		-	-	-	-	-	-	-
			15-May-08	758	-	-	-	3.86	57.4	0.03 U	0.5	U	-	-	-	-	-	-	-
			6-Aug-08	672	-	-	-	-	59	0.03 U	0.5	U	-	-	-	-	-	-	-
	HAI	5237-080515-WS11-125-102	15-May-08	762	762	1 U	-	-	57.4	0.008 U	0.117	J	-	0.12	-157.5	7.07	824	9.84	18
		5237-080929-WS-11-125-144	29-Sep-08	622	622	1 U	-	-	48	0.008 U	0.012	U	-	0.47	-244.7	6.92	764	3.1	18.74
		5237-090407-WS11-125-102	7-Apr-09	596	596	2 U	-	-	48.4	0.1 U	0.4		-	0.4	-151	7.41	982	9.8	17.11
		5237-090818-WS-11-125-149	18-Aug-09	-	-	-	-	-	-	-	-		-	0.37	-237.4	6.73	908	9.5	19.11
WS-11-161	MFA	WS-11-161	27-Oct-03	217	-	-	-	-	32.7	0.03 U	17.5		-	-	-	-	-	-	-
			29-Jan-04	243	-	-	-	-	43.2	0.03 U	7.24		-	-	-	-	-	-	-
			27-Apr-04	239	-	-	-	-	27.6	0.03 U	3.05		-	-	-	-	-	-	-
			16-Nov-04	266	-	-	-	-	38.5	0.03 U	0.5	U	-	-	-	-	-	-	-
			16-Feb-05	260	-	-	-	-	39.6	0.03 U	0.5	U	-	-	-	-	-	-	-

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0				Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate		Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-11-161	MFA	WS-11-161	18-May-05	252	-	-	-	-	41	0.03 U	0.5 U		-	-	-	-	-	-	-
			10-Aug-05	255	-	-	-	-	39.8	0.03 U	0.5 U		-	-	-	-	-	-	-
			15-Nov-05	265	-	-	-	-	42	0.03 U	0.5 U		-	-	-	-	-	-	-
			14-Feb-06	264	-	-	-	-	37.2	0.03 U	0.5 U		-	-	-	-	-	-	-
			11-May-06	257	-	-	-	-	40.3	0.03 U	0.5 U		-	-	-	-	-	-	-
			21-Aug-06	264	-	-	-	-	33.9	0.03 U	0.5 U		-	-	-	-	-	-	-
			13-Nov-06	241	-	-	-	-	32.8	0.0808	0.5 U		-	-	-	-	-	-	-
			21-Feb-07	241	-	-	-	-	38	0.03 U	0.5 U		-	-	-	-	-	-	-
			29-May-07	240	240	10 U	10 U	-	39.6	0.282	0.5 U		-	-	-	-	-	-	-
			15-Aug-07	249	-	-	-	-	39.4	0.03 U	0.5 U		-	-	-	-	-	-	-
			15-Nov-07	292	-	-	-	-	36.2	0.0303	0.5 U		-	-	-	-	-	-	-
			11-Feb-08	310	-	-	-	-	37.5	0.03 U	0.5 U		-	-	-	-	-	-	-
			15-May-08	323	-	-	-	-	32.8	0.0686	0.5 U		-	-	-	-	-	-	-
			6-Aug-08	319	-	-	-	-	35.1	0.03 U	0.5 U		-	-	-	-	-	-	-
	HAI	5237-070712-WS11-161	12-Jul-07	242	242	25 U	25 U	-	32.1	0.1 U	1.0 U		-	-	-	-	-	-	-
		5237-080515-WS11-161-103	15-May-08	332	332	1 U	-	-	33.5	0.008 U	0.072 J		-	0.09	-126.3	6.8	450	0.46	17.81
		5237-080929-WS-11-161-142	29-Sep-08	301	301	1 U	-	-	32.8	0.008 U	0.012 U		-	0.6	-263.2	6.77	427	0.0	17.33
		5237-080929-WS-11-161-143	29-Sep-08	283	283	1 U	-	-	33	0.008 U	0.012 U		-	-	-	-	-	-	-
		5237-090407-WS11-161-100	7-Apr-09	336	336	2 U	-	-	34	0.1 U	0.4		-	0.57	-132.4	7.04	599	5.2	16.66
		5237-090818-WS-11-161-147	18-Aug-09	-	-	-	-	-	-	-	-		-	0.48	-229.7	6.8	574	10.2	18.51
WS-12-125	MFA	WS-12-125	28-Oct-03	366	-	-	-	-	16	0.03 U	17.2		-	-	-	-	-	-	-
			30-Jan-04	362	-	-	-	-	14.3	0.03 U	24.2		-	-	-	-	-	-	-
			26-Apr-04	396	-	-	-	-	14.4	-	19.8		-	-	-	-	-	-	-
			17-Nov-04	399	-	-	-	-	15.5	0.03 U	15.4		-	-	-	-	-	-	-
			16-Feb-05	367	-	-	-	-	15.9	0.03 U	26.1		-	-	-	-	-	-	-
			18-May-05	371	-	-	-	-	16.5	0.03 U	29.3		-	-	-	-	-	-	-
			16-Aug-05	374	-	-	-	-	16.5	0.03 U	19		-	-	-	-	-	-	-
			15-Nov-05	431	-	-	-	-	16.6	0.03 U	18.6		-	-	-	-	-	-	-
			14-Feb-06	430	-	-	-	-	15.9	0.03 U	20.4		-	-	-	-	-	-	-
			9-May-06	380	-	-	-	-	16.6	0.03 U	22.4		-	-	-	-	-	-	-
			21-Aug-06	414	-	-	-	-	15.2	0.03 U	16.2		-	-	-	-	-	-	-
			13-Nov-06	386	-	-	-	-	14.8	0.0682	19.8		-	-	-	-	-	-	-

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-12-125	MFA	WS-12-125	21-Feb-07	376	-	-	-	-	16.4	0.03 U	24.1	-	-	-	-	-	-	-
			29-May-07	359	359	10 U	10 U	-	15.8	0.522	18.2	-	-	-	-	-	-	-
			15-Aug-07	368	-	-	-	-	16.7	0.03 U	17.6	-	-	-	-	-	-	-
			13-Nov-07	413	-	-	-	-	14.2	0.03 U	18.9	-	-	-	-	-	-	-
			11-Feb-08	375	-	-	-	-	14	0.03 U	22.2	-	-	-	-	-	-	-
			21-May-08	377	-	-	-	-	15.3	0.061	20.9	-	-	-	-	-	-	-
			6-Aug-08	374	-	-	-	-	15.9	0.03 U	19.2	-	-	-	-	-	-	-
	HAI	5237-070712-WS12-125	12-Jul-07	410	410	25 U	25 U	-	16.1	0.1 U	18.5	-	-	-	-	-	-	-
		5237-080521-WS12-126-104	21-May-08	362	362	1 U	-	-	13.2	0.008 U	19.7	-	0.51	-49.9	6.24	647	1.05	17.04
		5237-080925-WS-12-125-140	25-Sep-08	352	352	1 U	-	-	16.2	0.008 U	19.4	-	0	-149	6.46	724	2.05	18.6
		5237-090407-WS12-125-106	7-Apr-09	412	412	2 U	-	-	14.1	0.1 U	18.9	-	0.65	-132.5	7.31	679	6.6	18.42
		5237-090818-WS-12-125-145	18-Aug-09	-	-	-	-	-	-	-	-	-	0.54	-211.3	6.53	676	2.9	19.01
WS-12-161	MFA	WS-12-161	27-Oct-03	209	-	-	-	-	76.2	0.03 U	16	-	-	-	-	-	-	-
			29-Jan-04	242	-	-	-	-	68.3	0.03 U	3.03	-	-	-	-	-	-	-
			26-Apr-04	226	-	-	-	-	60.8	-	2.02	-	-	-	-	-	-	-
			17-Nov-04	310	-	-	-	-	63.5	0.03 U	0.5 U	-	-	-	-	-	-	-
			18-Feb-05	280	-	-	-	-	57.4	0.03 U	0.5 U	-	-	-	-	-	-	-
			20-May-05	273	-	-	-	-	57.2	0.03 U	0.68	-	-	-	-	-	-	-
			16-Aug-05	279	-	-	-	-	59.3	0.03 U	0.5 U	-	-	-	-	-	-	-
			15-Nov-05	300	-	-	-	-	54.2	0.03 U	0.5 U	-	-	-	-	-	-	-
			14-Feb-06	283	-	-	-	-	55	0.03 U	0.5 U	-	-	-	-	-	-	-
			9-May-06	272	-	-	-	-	57.8	0.03 U	0.5 U	-	-	-	-	-	-	-
			21-Aug-06	275	-	-	-	-	55.8	0.03 U	0.5 U	-	-	-	-	-	-	-
			13-Nov-06	251	-	-	-	-	48.4	0.0702	0.5 U	-	-	-	-	-	-	-
			21-Feb-07	251	-	-	-	-	51.9	0.03 U	0.5 U	-	-	-	-	-	-	-
			29-May-07	256	256	10 U	10 U	-	55.5	0.199	0.5 U	-	-	-	-	-	-	-
			15-Aug-07	250	-	-	-	-	48.2	0.03 U	0.5 U	-	-	-	-	-	-	-
			13-Nov-07	264	-	-	-	-	47.7	0.03 U	0.54	-	-	-	-	-	-	-
			11-Feb-08	256	-	-	-	-	44.8	0.03 U	0.73	-	-	-	-	-	-	-
			21-May-08	254	-	-	-	-	46.8	0.03 U	0.58	-	-	-	-	-	-	-
			5-Aug-08	246	-	-	-	-	48.5	0.03 U	0.51	-	-	-	-	-	-	-
	HAI	5237-070712-WS12-161	12-Jul-07	223	223	25 U	25 U	-	47.9	0.1 U	1.0 U	-	-	-	-	-	-	-

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-12-161		5237-080521-WS12-161-107	21-May-08	248	248	1 U	-	-	48.2	0.008 U	0.6	-	0.15	-63.1	6.6	507	0.71	17.5
		5237-080925-WS-12-161-141	25-Sep-08	240	240	1 U	-	-	39.8	0.008 U	0.5	-	0	-164	6.71	560	0.21	18.3
		5237-090407-WS12-161-104	7-Apr-09	262	262	2 U	-	-	42.1	0.1 U	1.1	-	1.32	-129.5	7.38	523	6.1	17.99
		5237-090818-WS-12-161-143	18-Aug-09	-	-	-	-	-	-	-	-	-	0.45	-153.3	6.85	526	3.7	19.21
WS-13-69	MFA	WS-13-69	29-Oct-03	379	-	-	-	-	17.9	0.03 U	64	-	-	-	-	-	-	-
			30-Jan-04	354	-	-	-	-	23.2	0.03 U	71.6	-	-	-	-	-	-	-
			28-Apr-04	436	-	-	-	-	28.9	0.03 U	95.6	-	-	-	-	-	-	-
			18-Nov-04	424	-	-	-	-	30.5	0.03 U	118	-	-	-	-	-	-	-
			17-Feb-05	372	-	-	-	-	30.2	0.03 U	122	-	-	-	-	-	-	-
			20-May-05	411	-	-	-	-	30.5	0.03 U	126	-	-	-	-	-	-	-
			10-Aug-05	384	-	-	-	-	35.7	0.03 U	139	-	-	-	-	-	-	-
			16-Nov-05	461	-	-	-	-	34.4	0.03 U	149	-	-	-	-	-	-	-
			16-Feb-06	474	-	-	-	-	45.6	0.03 U	175	-	-	-	-	-	-	-
			10-May-06	465	-	-	-	-	35.9	0.03 U	131	-	-	-	-	-	-	-
			19-Jul-06	504	-	-	-	-	33	-	105	-	-	-	-	-	-	-
			24-Aug-06	398	-	-	-	-	39.5	-	115	-	-	-	-	-	-	-
			27-Sep-06	404	404	10 U	10 U	-	41.2	0.106	126	-	-	-	-	-	-	-
			25-Oct-06	458	458	10 U	10 U	-	37.9	0.0912	119	-	-	-	-	-	-	-
			15-Nov-06	452	452	10 U	10 U	-	39.9	0.13	123	-	-	-	-	-	-	-
			25-Jan-07	448	448	10 U	10 U	-	40.6	0.03 U	123	-	-	-	-	-	-	-
			21-Feb-07	485	485	10 U	10 U	-	44.8	0.03 U	118	-	-	-	-	-	-	-
			22-Mar-07	431	431	10 U	10 U	-	44.9	0.124	122	-	-	-	-	-	-	-
			24-Apr-07	477	477	10 U	10 U	-	45.4	0.509	112	-	-	-	-	-	-	-
			23-May-07	498	498	10 U	10 U	-	9.18	1.01	23.1	-	-	-	-	-	-	-
			17-Aug-07	521	-	-	-	-	36.4	0.03 U	114	-	-	-	-	-	-	-
			15-Nov-07	526	-	-	-	-	40.5	0.03 U	114	-	-	-	-	-	-	-
			12-Feb-08	502	-	-	-	-	40.7	0.03 U	146	-	-	-	-	-	-	-
			14-May-08	514	-	-	-	-	41	0.03 U	121	-	-	-	-	-	-	-
			8-Aug-08	485	-	-	-	-	39.3	0.0347	114	-	-	-	-	-	-	-
WS-14-125	MFA	WS-14-125	16-Nov-04	258	-	-	-	-	23.2	0.03 U	20.2	-	-	-	-	-	-	-
			21-Feb-05	242	-	-	-	-	43.5	0.03 U	0.5 U	-	-	-	-	-	-	-
			23-May-05	276	-	-	-	-	13.4	0.03 U	0.65	-	-	-	-	-	-	-

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0				Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate		Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-14-125	MFA	WS-14-125	9-Aug-05	282	-	-	-	-	13.1	0.03 U	0.5 U		-	-	-	-	-	-	-
			16-Nov-05	294	-	-	-	-	11.8	0.03 U	0.5 U		-	-	-	-	-	-	-
			15-Feb-06	291	-	-	-	-	12	0.03 U	0.5 U		-	-	-	-	-	-	-
			9-May-06	287	-	-	-	-	11.7	0.03 U	0.5 U		-	-	-	-	-	-	-
			22-Aug-06	297	-	-	-	-	11.5	0.03 U	0.5 U		-	-	-	-	-	-	-
			14-Nov-06	277	-	-	-	-	11	0.0701	0.5 U		-	-	-	-	-	-	-
			21-Feb-07	275	-	-	-	-	11.5	0.03 U	0.5 U		-	-	-	-	-	-	-
			24-May-07	291	291	10 U	10 U	-	11.4	0.0391	0.5 U		-	-	-	-	-	-	-
			16-Aug-07	278	-	-	-	-	11.4	0.03 U	0.5 U		-	-	-	-	-	-	-
			14-Nov-07	289	-	-	-	-	11.8	0.03 U	0.5 U		-	-	-	-	-	-	-
			11-Feb-08	285	-	-	-	-	10.4	0.03 U	0.5 U		-	-	-	-	-	-	-
			15-May-08	289	-	-	-	-	11.1	0.0507	0.5 U		-	-	-	-	-	-	-
			4-Aug-08	283	-	-	-	-	12	0.03 U	0.5 U		-	-	-	-	-	-	-
	HAI	5237-070712-WS14-125	12-Jul-07	266	266	25 U	25 U	-	11.7	0.1 U	1.0 U		-	-	-	-	-	-	-
		5237-080515-WS14-125-100	15-May-08	294	294	1 U	-	-	10.7	0.008 U	0.073 J		-	0.2	-65	6.73	382	0.3	16.2
		5237-080925-WS-14-125-138	25-Sep-08	276	276	1 U	-	-	11.8	0.008 U	0.012 U		-	0	-170	6.72	510	1.12	17.4
		5237-090408-WS14-125-110	8-Apr-09	307	307	2 U	-	-	10.6	1.5	1.65 J		-	1	-101.7	7.51	463	7.5	14.74
		5327-090819-WS-14-125-155	19-Aug-09	-	-	-	-	-	-	-	-		-	0.29	-144.2	6.73	486	0	17.49
WS-14-161	MFA	WS-14-161	16-Nov-04	241	-	-	-	-	49.8	0.03 U	0.5 U		-	-	-	-	-	-	-
			21-Feb-04	274	-	-	-	-	14.8	0.03 U	1.54		-	-	-	-	-	-	-
			23-May-05	237	-	-	-	-	44.5	0.03 U	0.5 U		-	-	-	-	-	-	-
			9-Aug-05	240	-	-	-	-	56.4	0.03 U	0.5 U		-	-	-	-	-	-	-
			16-Nov-05	254	-	-	-	-	47.6	0.03 U	0.5 U		-	-	-	-	-	-	-
			15-Feb-06	261	-	-	-	-	50.4	0.03 U	0.5 U		-	-	-	-	-	-	-
			9-May-06	242	-	-	-	-	52.7	0.03 U	0.5 U		-	-	-	-	-	-	-
			22-Aug-06	255	-	-	-	-	52.5	0.03 U	0.5 U		-	-	-	-	-	-	-
			14-Nov-06	235	-	-	-	-	47.6	0.089	0.5 U		-	-	-	-	-	-	-
			21-Feb-07	232	-	-	-	-	49	0.03 U	0.5 U		-	-	-	-	-	-	-
			24-May-07	250	250	10 U	10 U	-	48.4	0.194	0.5 U		-	-	-	-	-	-	-
			16-Aug-07	234	-	-	-	-	51.5	0.03 U	0.5 U		-	-	-	-	-	-	-
			14-Nov-07	258	-	-	-	-	49.6	0.03 U	0.5 U		-	-	-	-	-	-	-
			11-Feb-08	242	-	-	-	-	52.8	0.03 U	0.5 U		-	-	-	-	-	-	-

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-14-161	MFA	WS-14-161	15-May-08	248	-	-	-	-	51.4	0.0369	0.5 U	-	-	-	-	-	-	-
			4-Aug-08	239	-	-	-	-	53.6	0.0366	0.5 U	-	-	-	-	-	-	-
	HAI	5237-070712-WS14-161	12-Jul-07	241	241	25 U	25 U	-	48.1	0.1 U	1.0 U	-	-	-	-	-	-	-
		5237-080515-WS14-161-101	15-May-08	251	251	1 U	-	-	50.5	0.008 U	0.06 J	-	0.24	-82.8	6.72	404	0.23	17.1
		5237-080925-WS-14-161-139	25-Sep-08	230	230	1 U	-	-	46.1	0.004 U	0.006 U	-	0	-159	6.71	575	0.77	16.3
		5237-090408-WS14-161-108	8-Apr-09	261	261	2 U	-	-	46.4	1.5	1.73 J	-	0.91	-94.2	7.44	519	9.1	14.63
		5237-090818-WS-14-161-151	18-Aug-09	-	-	-	-	-	-	-	-	-	0.72	-233.9	6.75	538	6.9	18.13
WS-15-85	MFA	WS-15-85	18-Nov-04	355	-	-	-	-	10	0.03 U	4.1	-	-	-	-	-	-	-
			17-Feb-05	398	-	-	-	-	11.6	0.03 U	7.76	-	-	-	-	-	-	-
			19-May-05	396	-	-	-	-	10.4	0.03 U	3.26	-	-	-	-	-	-	-
			10-Aug-05	397	-	-	-	-	257	0.03 U	249	-	-	-	-	-	-	-
			14-Nov-05	443	-	-	-	-	85.5	0.03 U	60.3	-	-	-	-	-	-	-
			16-Feb-06	416	-	-	-	-	42.4	0.03 U	18.4	-	-	-	-	-	-	-
			10-May-06	470	-	-	-	-	30.6	0.03 U	9.19	-	-	-	-	-	-	-
			25-Aug-06	440	-	-	-	-	26.8	-	4.27	-	-	-	-	-	-	-
			14-Nov-06	453	-	-	-	-	2.94	0.051	14	-	-	-	-	-	-	-
			21-Feb-07	429	-	-	-	-	13	0.03 U	3.35	-	-	-	-	-	-	-
			24-May-07	444	444	10 U	10 U	-	10.4	0.227	1.22	-	-	-	-	-	-	-
			17-Aug-07	446	-	-	-	-	10.5	0.03 U	1.09	-	-	-	-	-	-	-
			15-Nov-07	432	-	-	-	-	9.74	0.03 U	0.5 U	-	-	-	-	-	-	-
			12-Feb-08	399	-	-	-	-	6.07	0.0403	0.5 U	-	-	-	-	-	-	-
			14-May-08	451	-	-	-	-	8.42	0.03 U	0.5 U	-	-	-	-	-	-	-
			8-Aug-08	415	-	-	-	-	7.79	0.0304	0.5 U	-	-	-	-	-	-	-
WS-15-140	MFA	WS-15-140	18-Nov-04	287	-	-	-	-	39.6	0.03 U	36.8	-	-	-	-	-	-	-
			17-Feb-05	280	-	-	-	-	40.8	0.03 U	44.2	-	-	-	-	-	-	-
			19-May-05	280	-	-	-	-	36.4	0.03 U	43.9	-	-	-	-	-	-	-
			10-Aug-05	275	-	-	-	-	44.2	0.03 U	50.8	-	-	-	-	-	-	-
			14-Nov-05	282	-	-	-	-	42	0.03 U	47.4	-	-	-	-	-	-	-
			15-Feb-06	275	-	-	-	-	44.6	0.03 U	50.6	-	-	-	-	-	-	-
			10-May-06	276	-	-	-	-	43.8	0.03 U	41.1	-	-	-	-	-	-	-
			25-Aug-06	270	-	-	-	-	21.2	-	12.6	-	-	-	-	-	-	-
			14-Nov-06	255	-	-	-	-	57.1	0.0569	35.2	-	-	-	-	-	-	-

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-15-140	MFA	WS-15-140	21-Feb-07	250	-	-	-	-	47.2	0.03 U	33.2	-	-	-	-	-	-	-
			24-May-07	275	275	10 U	10 U	-	47.2	0.15	26.6	-	-	-	-	-	-	-
			17-Aug-07	260	-	-	-	-	48.7	0.03 U	39.1	-	-	-	-	-	-	-
			15-Nov-07	265	-	-	-	-	47.5	0.03 U	32.1	-	-	-	-	-	-	-
			12-Feb-08	300	-	-	-	-	48.7	0.03 U	27.3	-	-	-	-	-	-	-
			14-May-08	255	-	-	-	-	45.6	0.03 U	24.2	-	-	-	-	-	-	-
			8-Aug-08	250	-	-	-	-	44.7	0.03 U	26.5	-	-	-	-	-	-	-
WS-16-125	MFA	WS-16-125	17-Nov-04	342	-	-	-	-	5.85	0.03 U	0.53	-	-	-	-	-	-	-
			21-Feb-05	335	-	-	-	-	4.43	0.03 U	0.5 U	-	-	-	-	-	-	-
			23-May-05	330	-	-	-	-	4.4	0.03 U	0.5 U	-	-	-	-	-	-	-
			9-Aug-05	326	-	-	-	-	4.25	0.03 U	0.5 U	-	-	-	-	-	-	-
			16-Nov-05	370	-	-	-	-	4.08	0.03 U	0.5 U	-	-	-	-	-	-	-
			15-Feb-06	372	-	-	-	-	3.54	0.03 U	0.5 U	-	-	-	-	-	-	-
			11-May-06	332	-	-	-	-	3.77	0.03 U	0.5 U	-	-	-	-	-	-	-
			22-Aug-06	360	-	-	-	-	4.25	0.03 U	0.5 U	-	-	-	-	-	-	-
			15-Nov-06	326	-	-	-	-	3.16	0.119	0.5 U	-	-	-	-	-	-	-
			21-Feb-07	333	-	-	-	-	3.52	0.03 U	0.5 U	-	-	-	-	-	-	-
			24-May-07	355	355	10 U	10 U	-	4.36	0.272	0.5 U	-	-	-	-	-	-	-
			16-Aug-07	340	-	-	-	-	4.5	0.03 U	0.5 U	-	-	-	-	-	-	-
			19-Nov-07	338	-	-	-	-	4.34	0.0312	0.5 U	-	-	-	-	-	-	-
			12-Feb-08	342	-	-	-	-	3.79	0.0334	0.5 U	-	-	-	-	-	-	-
			14-May-08	354	-	-	-	-	4.6	0.0308	0.5 U	-	-	-	-	-	-	-
			5-Aug-08	268	-	-	-	-	4.63	0.0337	0.5 U	-	-	-	-	-	-	-
WS-16-161	MFA	WS-16-161	17-Nov-04	293	-	-	-	-	7.14	0.03 U	0.64	-	-	-	-	-	-	-
			18-Feb-05	287	-	-	-	-	6.63	0.03 U	0.5 U	-	-	-	-	-	-	-
			20-May-05	278	-	-	-	-	6.63	0.03 U	0.5 U	-	-	-	-	-	-	-
			9-Aug-05	294	-	-	-	-	5.41	0.03 U	0.5 U	-	-	-	-	-	-	-
			16-Nov-05	296	-	-	-	-	0.5 U	0.03 U	0.5 U	-	-	-	-	-	-	-
			15-Feb-06	300	-	-	-	-	6.06	0.03 U	0.5 U	-	-	-	-	-	-	-
			10-May-06	281	-	-	-	-	7.74	0.03 U	0.5 U	-	-	-	-	-	-	-
			22-Aug-06	287	-	-	-	-	7.79	0.03 U	0.5 U	-	-	-	-	-	-	-
			15-Nov-06	262	-	-	-	-	7.01	0.0991	0.5 U	-	-	-	-	-	-	-

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-16-161	MFA	WS-16-161	21-Feb-07	257	-	-	-	-	8.22	0.03 U	0.5 U	-	-	-	-	-	-	-
			24-May-07	304	304	10 U	10 U	-	5.8	0.203	0.5 U	-	-	-	-	-	-	-
			16-Aug-07	278	-	-	-	-	7.2	0.03 U	0.5 U	-	-	-	-	-	-	-
			15-Nov-07	276	-	-	-	-	8.33	0.03 U	0.5 U	-	-	-	-	-	-	-
			8-Feb-08	267	-	-	-	-	8.38	0.03 U	0.5 U	-	-	-	-	-	-	-
			16-May-08	264	-	-	-	-	9.06	0.0526	0.5 U	-	-	-	-	-	-	-
			5-Aug-08	338	-	-	-	-	8.26	0.0363	0.5 U	-	-	-	-	-	-	-
WS-17-52	MFA	WS-17-52	16-Nov-04	324	-	-	-	-	22.1	0.03 U	74.8	-	-	-	-	-	-	-
			17-Feb-05	305	-	-	-	-	29.6	0.03 U	109	-	-	-	-	-	-	-
			20-May-05	333	-	-	-	-	32.3	0.03 U	128	-	-	-	-	-	-	-
			9-Aug-05	287	-	-	-	-	36.9	0.03 U	170	-	-	-	-	-	-	-
			15-Nov-05	442	-	-	-	-	35.4	0.03 U	161	-	-	-	-	-	-	-
			16-Feb-06	190	-	-	-	-	28.2	0.03 U	103	-	-	-	-	-	-	-
			10-May-06	172	-	-	-	-	27.9	0.03 U	94.8	-	-	-	-	-	-	-
			22-Aug-06	358	-	-	-	-	39	0.03 U	144	-	-	-	-	-	-	-
			15-Nov-06	175	-	-	-	-	27.4	0.0728	93.4	-	-	-	-	-	-	-
			20-Feb-07	329	-	-	-	-	39.7	0.03 U	154	-	-	-	-	-	-	-
			24-May-07	167	167	10 U	10 U	-	29.8	0.0592	86.1	-	-	-	-	-	-	-
			17-Aug-07	212	-	-	-	-	33.9	0.03 U	108	-	-	-	-	-	-	-
			14-Nov-07	239	-	-	-	-	34.9	0.03 U	104	-	-	-	-	-	-	-
			8-Feb-08	166	-	-	-	-	31.7	0.03 U	83.2	-	-	-	-	-	-	-
			13-May-08	183	-	-	-	-	31	0.03 U	84.3	-	-	-	-	-	-	-
			18-Aug-08	206	-	-	-	-	32.9	0.03 U	78.3	-	-	-	-	-	-	-
WS-17-94	MFA	WS-17-94	17-Nov-04	271	-	-	-	-	15.1	0.03 U	0.5 U	-	-	-	-	-	-	-
			18-Feb-04	292	-	-	-	-	10.2	0.03 U	0.5 U	-	-	-	-	-	-	-
			18-May-04	296	-	-	-	-	9.27	0.03 U	0.5 U	-	-	-	-	-	-	-
			8-Aug-05	308	-	-	-	-	8.73	0.03 U	0.5 U	-	-	-	-	-	-	-
			15-Nov-05	339	-	-	-	-	9.85	0.03 U	0.5 U	-	-	-	-	-	-	-
			16-Feb-06	321	-	-	-	-	10.1	0.03 U	0.5 U	-	-	-	-	-	-	-
			9-May-06	309	-	-	-	-	10.6	0.0338	0.5 U	-	-	-	-	-	-	-
			21-Aug-06	305	-	-	-	-	11.6	0.03 U	0.5 U	-	-	-	-	-	-	-
			14-Nov-06	290	-	-	-	-	9.56	0.0611	0.5 U	-	-	-	-	-	-	-

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-17-94	MFA	WS-17-94	20-Feb-07	308	-	-	-	-	10.3	0.0809	0.5 U	-	-	-	-	-	-	-
			24-May-07	305	305	10 U	10 U	-	10.9	0.279	0.5 U	-	-	-	-	-	-	-
			17-Aug-07	316	-	-	-	-	10.2	0.03 U	0.97	-	-	-	-	-	-	-
			14-Nov-07	308	-	-	-	-	11.2	0.03 U	0.5 U	-	-	-	-	-	-	-
			8-Feb-08	289	-	-	-	-	11.8	0.03 U	0.5 U	-	-	-	-	-	-	-
			13-May-08	287	-	-	-	-	13.9	0.03 U	0.5 U	-	-	-	-	-	-	-
			18-Aug-08	297	-	-	-	-	11.8	0.03 U	0.5 U	-	-	-	-	-	-	-
WS-18-71	MFA	WS-18-71	27-Jun-06	603	-	-	-	-	89.8	-	652	-	-	-	-	-	-	-
			19-Jul-06	597	-	-	-	-	78.2	-	389	-	-	-	-	-	-	-
			29-Aug-06	584	-	-	-	-	322	-	104	-	-	-	-	-	-	-
			26-Sep-06	523	553	10 U	10 U	-	82.4	0.0644	387	-	-	-	-	-	-	-
			24-Oct-06	539	539	10 U	10 U	-	80.7	0.0538	503	-	-	-	-	-	-	-
			16-Nov-06	542	542	10 U	10 U	-	77.7	0.117	416	-	-	-	-	-	-	-
			26-Jan-07	613	613	10 U	10 U	-	79.4	0.03 U	407	-	-	-	-	-	-	-
			22-Feb-07	705	705	10 U	10 U	-	75.5	0.03 U	171	-	-	-	-	-	-	-
			22-Mar-07	771	771	10 U	10 U	-	101	0.122	117	-	-	-	-	-	-	-
			24-Apr-07	868	868	10 U	10 U	-	109	0.241	19.8	-	-	-	-	-	-	-
			22-May-07	891	891	10 U	10 U	-	101	0.436	8.86	-	-	-	-	-	-	-
			16-Nov-07	906	-	-	-	-	116	0.0345	11.6	-	-	-	-	-	-	-
			13-Feb-08	770	-	-	-	-	110	0.03 U	1.23	-	-	-	-	-	-	-
			20-May-08	1,040	-	-	-	-	154	0.0559	0.76	-	-	-	-	-	-	-
			12-Aug-08	918	-	-	-	-	151	0.03 U	0.5	-	-	-	-	-	-	-
WS-18-101	MFA	WS-18-101	28-Jun-06	339	-	-	-	-	26.9	-	8.17	-	-	-	-	-	-	-
			19-Jul-06	326	-	-	-	-	36.4	-	9.33	-	-	-	-	-	-	-
			28-Aug-06	330	-	-	-	-	45	-	6.89	-	-	-	-	-	-	-
			26-Sep-06	309	309	10 U	10 U	-	41.9	0.0516	3.14	-	-	-	-	-	-	-
			24-Oct-06	316	316	10 U	10 U	-	44.4	0.0464	3.17	-	-	-	-	-	-	-
			16-Nov-06	311	311	10 U	10 U	-	42.4	0.107	0.96	-	-	-	-	-	-	-
			26-Jan-07	284	284	10 U	10 U	-	92.8	0.03 U	0.5 U	-	-	-	-	-	-	-
			22-Feb-07	291	291	10 U	10 U	-	88.4	0.03 U	0.5 U	-	-	-	-	-	-	-
			22-Mar-07	294	294	10 U	10 U	-	96.2	0.114	0.5 U	-	-	-	-	-	-	-
			24-Apr-07	334	334	10 U	10 U	-	87.5	0.451	0.5 U	-	-	-	-	-	-	-

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Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-18-101	MFA	WS-18-101	22-May-07	358	358	10 U	10 U	-	99	1.45	0.5 U	-	-	-	-	-	-	-
			16-Nov-07	380	-	-	-	-	98.3	0.03 U	0.5 U	-	-	-	-	-	-	-
			12-Feb-08	342	-	-	-	-	118	0.03 U	0.5 U	-	-	-	-	-	-	-
			22-May-08	335	-	-	-	-	157	0.03 U	0.5 U	-	-	-	-	-	-	-
			12-Aug-08	365	-	-	-	-	146	0.03 U	0.5 U	-	-	-	-	-	-	-
WS-19-71	MFA	WS-19-71	27-Jun-06	561	-	-	-	-	56.5	-	149	-	-	-	-	-	-	-
			20-Jul-06	608	-	-	-	-	48.2	-	65.5	-	-	-	-	-	-	-
			29-Aug-06	554	-	-	-	-	60.1	-	81.7	-	-	-	-	-	-	-
			27-Sep-06	599	599	10 U	10 U	-	62.7	0.083	42.7	-	-	-	-	-	-	-
			24-Oct-06	661	661	10 U	10 U	-	59.1	0.0508	0.5 U	-	-	-	-	-	-	-
			16-Nov-06	681	681	10 U	10 U	-	59.4	0.117	1.32	-	-	-	-	-	-	-
			26-Jan-07	768	768	10 U	10 U	-	85.2	0.03 U	0.5 U	-	-	-	-	-	-	-
			23-Feb-07	685	685	10 U	10 U	-	71	0.03 U	18.4	-	-	-	-	-	-	-
			22-Mar-07	755	755	10 U	10 U	-	82.5	0.03 U	0.5 U	-	-	-	-	-	-	-
			24-Apr-07	888	888	10 U	10 U	-	83.9	0.401	0.79	-	-	-	-	-	-	-
			23-May-07	890	890	10 U	10 U	-	105	0.184	0.57	-	-	-	-	-	-	-
			19-Nov-07	924	-	-	-	-	100	0.032	0.9	-	-	-	-	-	-	-
			13-Feb-08	918	-	-	-	-	138	0.03 U	1.01	-	-	-	-	-	-	-
			22-May-08	902	-	-	-	-	134	0.0327	0.96	-	-	-	-	-	-	-
			12-Aug-08	934	-	-	-	-	128	0.0349	0.79	-	-	-	-	-	-	-
WS-19-101	MFA	WS-19-101	27-Jun-06	372	-	-	-	-	33.8	-	173	-	-	-	-	-	-	-
			20-Jul-06	438	-	-	-	-	76.4	-	34.4	-	-	-	-	-	-	-
			29-Aug-06	589	-	-	-	-	80	-	0.5 U	-	-	-	-	-	-	-
			27-Sep-06	857	857	10 U	10 U	-	47.6	0.078	0.5 U	-	-	-	-	-	-	-
			25-Oct-06	1,090	1,090	10 U	10 U	-	68.6	0.0605	1.32	-	-	-	-	-	-	-
			15-Nov-06	1,300	1,300	10 U	10 U	-	83.5	0.03 U	1.83	-	-	-	-	-	-	-
			25-Jan-07	1,100	1,100	10 U	10 U	-	100	0.0428	1.21	-	-	-	-	-	-	-
			23-Feb-07	909	909	10 U	10 U	-	65.3	0.0416	0.83	-	-	-	-	-	-	-
			22-Mar-07	984	984	10 U	10 U	-	79.2	0.03 U	0.67	-	-	-	-	-	-	-
			24-Apr-07	975	975	10 U	10 U	-	84.1	0.338	0.93	-	-	-	-	-	-	-
			23-May-07	1,050	1,050	10 U	10 U	-	114	0.0493	0.67	-	-	-	-	-	-	-
			19-Nov-07	895	-	-	-	-	106	0.03 U	1.61	-	-	-	-	-	-	-

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-19-101	MFA	WS-19-101	13-Feb-08	1,010	-	-	-	-	148	0.037	0.89	-	-	-	-	-	-	-
			22-May-08	863	-	-	-	-	152	0.0392	0.5 U	-	-	-	-	-	-	-
			12-Aug-08	747	-	-	-	-	157	0.0338	0.5 U	-	-	-	-	-	-	-
WS-20-112	MFA	WS-20-112	28-Jun-06	771	-	-	-	-	41.3	-	27.2	-	-	-	-	-	-	-
			27-Jul-06	2,160	-	-	-	-	37.2	-	16.3	-	-	-	-	-	-	-
			28-Aug-06	558	-	-	-	-	41.6	-	5.5	-	-	-	-	-	-	-
			25-Sep-06	447	447	10 U	10 U	-	45.3	0.0626	0.5 U	-	-	-	-	-	-	-
			23-Oct-06	498	498	10 U	10 U	-	49.8	0.054	0.95	-	-	-	-	-	-	-
			18-Dec-06	488	488	10 U	10 U	-	59	0.109	0.5 U	-	-	-	-	-	-	-
			25-Jan-07	311	311	10 U	10 U	-	50.8	0.03 U	0.5 U	-	-	-	-	-	-	-
			21-Feb-07	343	343	10 U	10 U	-	51.3	0.03 U	0.5 U	-	-	-	-	-	-	-
			21-Mar-07	401	401	10 U	10 U	-	59.7	0.03 U	0.5 U	-	-	-	-	-	-	-
			23-Apr-07	289	289	10 U	10 U	-	50	0.03 U	0.5 U	-	-	-	-	-	-	-
			21-May-07	289	289	10 U	10 U	-	48.2	0.03 U	0.5 U	-	-	-	-	-	-	-
			15-Nov-07	241	-	-	-	-	49.8	0.03 U	0.5 U	-	-	-	-	-	-	-
			14-Feb-08	234	-	-	-	-	51.3	0.03 U	0.5 U	-	-	-	-	-	-	-
			16-May-08	358	-	-	-	7.19	49.5	0.03 U	0.5 U	-	-	-	-	-	-	-
			6-Aug-08	218	-	-	-	-	56.9	0.03 U	0.5 U	-	-	-	-	-	-	-
WS-21-112	MFA	WS-21-112	28-Jun-06	417	-	-	-	-	43.4	-	81.8	-	-	-	-	-	-	-
			28-Jul-06	426	-	-	-	-	45.2	-	34.3	-	-	-	-	-	-	-
			28-Aug-06	401	-	-	-	-	41.7	0.0446	21.6	-	-	-	-	-	-	-
			25-Sep-06	368	368	10 U	10 U	-	40.6	0.056	17.1	-	-	-	-	-	-	-
			24-Oct-06	384	384	10 U	10 U	-	39	0.0532	28.8	-	-	-	-	-	-	-
			14-Nov-06	384	-	-	-	-	40	0.0739	18	-	-	-	-	-	-	-
			19-Dec-06	371	371	10 U	10 U	-	45	0.129	13.1	-	-	-	-	-	-	-
			24-Jan-07	362	362	10 U	10 U	-	43.5	0.0317	8.49	-	-	-	-	-	-	-
			22-Feb-07	379	-	-	-	-	42.4	0.03 U	3.32	-	-	-	-	-	-	-
			21-Mar-07	376	376	10 U	10 U	-	45	0.0645	2.71	-	-	-	-	-	-	-
			23-Apr-07	391	391	10 U	10 U	-	41	0.23	0.65	-	-	-	-	-	-	-
			22-May-07	439	439	10 U	10 U	-	38.4	0.932	3.47	-	-	-	-	-	-	-
			16-Aug-07	376	-	-	-	-	41.2	0.03 U	0.5 U	-	-	-	-	-	-	-
			14-Nov-07	405	-	-	-	-	37.4	0.03 U	0.5 U	-	-	-	-	-	-	-

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
WS-21-112	MFA	WS-21-112	11-Feb-08	391	-	-	-	-	32.7	0.03 U	0.5 U	-	-	-	-	-	-	-
			21-May-08	378	-	-	-	1.14	32.7	0.0397	3.48	-	-	-	-	-	-	-
			13-Aug-08	375	-	-	-	-	32.8	0.03 U	0.5 U	-	-	-	-	-	-	-
	HAI	5237-070712-WS21-112	12-Jul-07	392	392	25 U	25 U	-	37.1	0.1 U	1.0 U	-	-	-	-	-	-	-
		5237-080521-WS21-112-108	21-May-08	384	384	1 U	-	-	31.7	0.008 U	5.3	-	0.17	-40.9	6.3	646	2.6	17.44
		5237-080925-WS-21-112-137	25-Sep-08	376	376	1 U	-	-	27.7	0.008 U	0.012 U	-	0	-172	6.51	721	0.46	18.2
		5237-090407-WS21-112-108	7-Apr-09	396	2 U	2 U	-	-	26.4	0.3	29.7	-	0.98	-132.4	7.3	685	6.6	18.08
		5237-090820-WS-21-112-165	20-Aug-09										-	-	6.89	483	40	24.2
WS-22-112	MFA	WS-22-112	28-Jun-06	10 U	-	-	-	-	96.6	-	31.5	-	-	-	-	-	-	-
			27-Jul-06	681	-	-	-	-	36	-	16.8	-	-	-	-	-	-	-
			25-Aug-06	1,980	-	-	-	-	19.6	-	6.26	-	-	-	-	-	-	-
			25-Sep-06	2,670	2,670	10 U	10 U	-	111	0.03 U	3.21	-	-	-	-	-	-	-
			24-Oct-06	1,770	1,770	10 U	10 U	-	68	0.03 U	6.07	-	-	-	-	-	-	-
			19-Dec-06	870	870	10 U	10 U	-	61.4	0.122	0.54	-	-	-	-	-	-	-
			24-Jan-07	883	883	10 U	10 U	-	64.2	0.0598	0.5 U	-	-	-	-	-	-	-
			22-Feb-07	839	839	10 U	10 U	-	63.8	0.0368	0.5 U	-	-	-	-	-	-	-
			21-Mar-07	743	743	10 U	10 U	-	64.2	0.0808	0.5 U	-	-	-	-	-	-	-
			23-Apr-07	604	604	10 U	10 U	-	72.8	0.26	0.5 U	-	-	-	-	-	-	-
			22-May-07	619	619	10 U	10 U	-	62.6	0.0991	0.5 U	-	-	-	-	-	-	-
			16-Nov-07	344	-	-	-	-	57.8	0.03 U	0.5 U	-	-	-	-	-	-	-
			14-Feb-08	327	-	-	-	-	52	0.03 U	0.5 U	-	-	-	-	-	-	-
			16-May-08	334	-	-	-	42.5	52.2	0.03 U	0.5 U	-	-	-	-	-	-	-
			13-Aug-08	269	-	-	-	-	51.3	0.03 U	0.5 U	-	-	-	-	-	-	-
RP-7-30	HAI	5237-070828-RP-7-30-106	28-Aug-07	311	311	25 U	25 U	-	7.81	0.1 U	1.0 U	2.8	0.44	-95.1	6.39	725	11.3	15.19
RP-7-55	HAI	5237-070827-RP-7-55-104	27-Aug-07	515	515	5 U	5 U	-	9.45	0.1 U	16.1	2.5	0.41	-55.5	6.61	922	33.8	16.37
RP-7-84	HAI	5237-070828-RP-7-84-107	28-Aug-07	263	263	5 U	5 U	-	984	0.1 U	84.2	1.2	0.19	18.4	6.44	3,113	1.21	13.96
	HAI	5237-070828-RP-7-84-108	28-Aug-07	262	262	5 U	5 U	-	991	0.1 U	84.3	-	-	-	-	-	-	-
RP-11-30	HAI	5237-070827-RP-11-30-101	27-Aug-07	166	166	25 U	25 U	-	2.63	0.1 U	1.0 U	4.5	0.36	-102	6.31	404	9.21	15.02
RP-11-160	HAI	5237-070827-RP-11-160-102	27-Aug-07	252	252	25 U	25 U	-	10.6	0.1 U	1.0 U	3.1	0.17	-126.6	6.69	495	4.41	14.94
RP-11-216	HAI	5237-070827-RP-11-216-103	27-Aug-07	222	222	5 U	5 U	-	404	0.1 U	26.7	3.8	0.14	-93	6.69	1,629	1.63	14.59
	HAI	5237-070829-RP-24-30-109	1-Aug-07	-	-	-	-	-	-	-	-	-	0.47	-133.6	6.55	1,375	-	18.48
RP-24-60	HAI	5237-070828-RP-24-60-110	28-Aug-07	506	506	25 U	25 U	-	11.6	0.1 U	8.1	3.7	0.31	-75.9	6.60	872	5.23	16.25

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples
Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	°C
RP-24-73	HAI	5237-070829-RP-24-73-113	29-Aug-07	433	433	5 U	5 U	-	34.8 U*	0.1 U	34.2	3.5	0.43	-25.5	6.34	1,004	2.14	13.84
RP-24-85	HAI	5237-070828-RP-24-85-111	28-Aug-07	296	296	5 U	5 U	-	1,560	0.1 U	71.1	1.6	0.16	-5.8	6.5	3,139	1.42	14.2
NWN-1-20	HAI	5237-080807-NWN-1-20-107	07-Aug-08	497	497	1 U	-	-	6.1	0.008 U	1.7	-	-	-	6.34	791	>1,000	14.2
		5237-081211-NWN-1-20-019	11-Dec-08	467	467	1 U	-	-	5.7	0.011	10.3	-	-	-	6.33	448	110	15.1
		5237-090407-NWN1-20-105	07-Apr-09	323	323	2 U	-	-	5.2	0.1 U	9.5	-	6.08	-314	5.61	732	439	14.6
		5237-090604-NWN-1-20-103	04-Jun-09	274	274	1 U	-	-	6.9	0.008 U	13.6	-	11.26	-329	5.67	739	397	16.3
		5237-090818-NWN-1-20-148	18-Aug-09	-	-	-	-	-	-	-	-	-	-	-	5.95	440	-	17.00
NWN-2-20	HAI	5237-080730-NWN2-20-101	30-Jul-08	470	470	1 U	-	-	9	0.008 U	20.4	-	-	-	6.39	555	-	14.9
		5237-081211-NWN-2-20-017	11-Dec-08	378	378	1 U	-	-	7.2	0.008 U	8.6	-	-	-	6.19	305	170	15.3
		5237-090407-NWN2-20-107	07-Apr-09	202	202	2 U	-	-	14.4	0.1 U	49.7	-	-	-	6.27	223	-	16.2
		5237-090604-NWN-2-20-101	04-Jun-09	223	223	1 U	-	-	18.3	0.3	37.2	-	7.61	-34	6.09	565	239	14.3
		5237-090818-NWN-2-20-142	18-Aug-09	-	-	-	-	-	-	-	-	-	0.0	-87.	6.88	1,060	23.4	15.52
NWN-3-17	HAI	5237-080730-NWN3-17-100	30-Jul-08	691	691	1 U	-	-	3.2	0.008 U	0.141 J	-	-	-	6.14	503	>1,000	16.9
		NS (Dry)	11-Dec-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		5237-090407-NWN3-17-101	07-Apr-09	596	596	2 U	-	-	2.8	0.1 U	0.4	-	4.3	-157	6.16	118	20	13.9
		5237-090604-NWN-3-17-102	04-Jun-09	546	546	1 U	-	-	3.1	0.3	0.5	-	-	-	6.16	464	-	16.2
		NS (Dry)	18-Aug-09	-	-	-	-	-	-	-	-	-	-	-	5.75**	566**	-	19.03**
NWN-4-15	HAI	NS (Dry)	30-Jul-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		5237-081212-NWN-4-15-021	12-Dec-08	100	100	1 U	-	-	1.6	1.4	6.6	-	1.45**	31.2**	6.18**	178**	750**	12.75**
		5237-090407-NWN4-15-103	07-Apr-09	64	64	2 U	-	-	1.9	1.5	3.2	-	4.13	148	5.26	135	336	12.9
		5237-090604-NWN-4-15-100	04-Jun-09	86	86	1 U	-	-	2.2	0.9	5.8	-	-	-	5.32**	99.2**	-	17.2**
		5327-090818-NWN-4-15-152	18-Aug-09	-	-	-	-	-	-	-	-	-	-	-	6.15**	131.9**	-	19.8**
NWN-5-20	HAI	5237-080730-NWN5-20-103	30-Jul-08	462	462	1 U	-	-	3.1	0.02 J	19.7	-	1.02	-145.8	6.25	358	750	21.1
		5237-081211-NWN-5-20-018	11-Dec-08	400	400	1 U	-	-	2.6	0.008 U	8.2	-	0.8	-62	5.63	78.4	180	12.22
		5237-090408-NWN5-20-111	08-Apr-09	272	272	2 U	-	-	2.8	0.3	3.9	-	3.9	-125	6.08	509	382	12.3
		5237-090604-NWN-5-20-104	04-Jun-09	349	349	1 U	-	-	2.6	0.3 J	8	-	0.78	-31.1	6.2	600	25	12.6
		5237-090818-NWN-5-20-150	18-Aug-09	-	-	-	-	-	-	-	-	-	0.24	-41	6.76	708	17.5	15.19
NWN-6-31	HAI	5237-080730-NWN6-31-104	30-Jul-08	667	667	1 U	-	-	79	0.015 J	0.6	-	0.32	-303.1	6.57	494	120	18.3
		5237-081211-NWN-6-31-020	11-Dec-08	603	603	1 U	-	-	99.3	0.008 U	0.075	-	0.4	-90	6.10	154	40	11.49
		5237-090408-NWN6-31-109	08-Apr-09	628	628	2 U	-	-	90.8	1.5	1.72 J	-	4.4	-172	6.34	148	746	12.6
		5237-090604-NWN-6-31-106	04-Jun-09	628	628	1 U	-	-	85.7	0.008 U	0.4	-	0.45	-30.2	6.54	1,172	150	15.13
		5327-090819-NWN-6-31-154	19-Aug-09	-	-	-	-	-	-	-	-	-	0.54	-109	7.10	1,230	54.1	13.73

Table 4f - Indicator and Natural Attenuation Parameters Results for Groundwater Samples

Siltronic Corporation Property Monitoring Wells

Well Number	Collected by	HAI Sample Number	Sample Date	EPA Method 310.1/SM 2320 B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method SM 2320B	EPA Method 350.1	EPA Method 300.0			Field Measurement						
				Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Ammonia as Nitrogen	Chloride	Nitrate-Nitrogen	Sulfate	Ferrous Iron	Dissolved Oxygen	Oxygen Reduction Potential	pH	Specific Conductivity	Turbidity	Temperature
			Units ==>	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	pH Units	uS/cm	NTU's	^{0}C
NWN-7-30	HAI	5237-080807-NWN-7-30-106	07-Aug-08	667	667	1 U	-	-	13.8	0.008 U	33.5	-	0.72	-134.1	6.34	1,034	60	16.6
		5237-081211-NWN-7-30-016	11-Dec-08	670	670	1 U	-	-	13.4	0.008 U	19.5	-	0.2	-73	5.80	145	38	15.51
		5237-090408-NWN7-30-112	08-Apr-09	686	686	2 U	-	-	15.1	1.5	32.7	-	0.79	-117.9	7.48	1,036	24	15.3
		5237-090604-NWN-7-30-108	04-Jun-09	682	682	1 U	-	-	22.9	0.008 U	20.1	-	0.53	14.9	6.36	1,189	45	17.27
		5237-090818-NWN-7-30-144	18-Aug-09	-	-	-	-	-	-	-	-	-	0.54	-130	6.99	1,330	1.5	17.78
NWN-8-30	HAI	5237-080730-NWN8-30-105	30-Jul-08	354	354	1 U	-	-	171	0.008 U	4.3	-	0.14	-298.5	6.56	462	140	16.4
		5237-081211-NWN-8-30-022	11-Dec-08	410	410	1 U	-	-	183	0.008 U	1.3	-	1.1	-33	6.00	142	-	13.37
		5237-090408-NWN8-30-113	08-Apr-09	363	363	2 U	-	-	142	0.3	3.3	-	4.12	-192	6.40	129	355	13.5
		5237-090604-NWN-8-30-105	04-Jun-09	388	388	1 U	-	-	166	0.008 U	3.9	-	4.76	-161	6.19	146	277	15
		5237-090818-NWN-8-30-146	18-Aug-09	-	-	-	-	-	-	-	-	-	0.42	-110	7.00	1,170	91.3	14.83
NWN-9-31	HAI	5237-080807-NWN-9-31-108	07-Aug-08	334	334	1 U	-	-	6.9	0.008 U	1.3	-	1.4	-125.3	6.38	588	189	17.2
		5237-081211-NWN-9-31-023	11-Dec-08	389	389	1 U	-	-	6.1	0.008 U	0.2	-	0.6	-101.3	6.44	723	31	14.96
		5237-090409-NWN9-31-121	09-Apr-09	325	325	2 U	-	-	6.4	0.3	0.5	-	4.1	-194	4.1	714	190	15
		5237-090604-NWN-9-31-107	04-Jun-09	365	365	1 U	-	-	5.4	0.008 U	0.4	-	3.92	-202	6.14	97	7.5	16.6
		5237-090604-NWN-9-31-109	04-Jun-09	363	363	1 U	-	-	5.3	0.008 U	0.4	-	-	-	-	-	-	-
		5327-090819-NWN-9-31-158	19-Aug-09	-	-	-	-	-	-	-	-	-	0.48	-134	6.98	867	27.5	19.11
NWN-10-26	HAI	5237-080807-NWN-10-26-109	07-Aug-08	267	267	1 U	-	-	1.6	0.008 U	0.006 U	-	1.09	-136.6	6.45	480	80	17
		5237-080807-NWN-10-26-110	07-Aug-08	270	270	1 U	-	-	1.9	0.008 U	0.012 U	-	-	-	-	-	-	-
		NS (Dry)	11-Dec-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		5237-090410-NWN10-26-123	10-Apr-09	274	274	2 U	-	-	4.3	0.3	1.3	-	4.92**	-141**	5.96**	575**	>1,000**	13.4**
		5237-090604-NWN-10-26-111	04-Jun-09	238	238	1 U	-	-	2	0.3	0.6	-	4.6	-140	5.93	573	<0.1	15.3
		NS (Dry)	19-Aug-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

"-" = Measurement not taken, not analyzed, or data unavailable (sampler other than HAI).
* = Partial sample obtained, but sample volume completely used during other analysis (i.e 8260B), insufficient volume to analyze for natural attenuation parameters.

** = Insufficient recharge volume to ensure parameter stabilzation criteria meet (well purged dry).

Note:

^{0}C = Degrees Celcius
EPA = Environmental Protection Agency
J - Estimated Concentration
uS/cm = microsiemens per centimeter
mg/l = milligrans per liter

mV = millivolts
NS = No Sample
NTU = nephelometric units
ORP = Oxidation Reduciton Potential
ppm = parts per million

ug/l = micrograms per liter
U = Non-detect above method reporting limits
U* = Compound considered non-detect because it was also detected in associated blank at similar concentration levels.

Table 5
Summary of DNAPL Recovery Volume: Well MW-6-32 and MW-13-30

Date	MW-6-32		MW-13-30		Measured Volume of Liquid within AST (gallons)	Measured Volume of Liquid Recovered (gallons)	Estimated Volume of DNAPL Recovered[1] (gallons)
	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)			
08-Aug-00	6	10	-	-	6	6	5
15-Aug-00	3	5	-	-	20	20	16
22-Aug-00	3	5	-	-	30	30	24
19-Sep-00	3	5	-	-	50	50	40
22-Sep-00	3	5	-	-	55	55	44
03-Oct-00	3	5	-	-	55	55	44
19-Oct-00	3	5	-	-	70	70	56
16-Nov-00	3	5	-	-	100	100	80
28-Nov-00	3	5	-	-	110	110	88
20-Dec-00	3	5	-	-	130	130	104
18-Jan-01	3	5	-	-	160	160	128
09-Feb-01	3	5	-	-	165	165	132
20-Feb-01	3	5	-	-	165	165	132
30-Mar-01	3	5	-	-	165	165	132
12-Jun-01	3	5	-	-	175	175	140
28-Jun-01	6	10	-	-	180	180	162
12-Jul-01	6	10	-	-	187	187	168
22-Aug-01	6	10	-	-	193	193	174
28-Sep-01	6	10	-	-	220	220	198
14-Nov-01	6	10	-	-	230	230	207
17-Jan-02	6	10	-	-	275	275	248
25-Feb-02	6	10	-	-	348	348	313
15-Mar-02	6	10	-	-	370	370	333
12-Apr-02	6	10	-	-	372	372	333
20-May-02	6	10	-	-	375	375	333
12-Jul-02	6	10	-	-	411	411	370
23-Aug-02	6	10	-	-	425	425	383
13-Sep-02	6	10	-	-	425	425	383
01-Nov-02	6	10	-	-	438	438	394
16-Dec-02	6	10	-	-	445	445	401
28-Jan-03	6	10	-	-	467 [2]	467	420
05-Feb-03	6	10	-	-	6	473	426
11-Mar-03	6	10	-	-	8	475	428
04-Apr-03	6	10	-	-	11	478	430

Table 5
Summary of DNAPL Recovery Volume: Well MW-6-32 and MW-13-30

Date	MW-6-32		MW-13-30		Measured Volume of Liquid within AST (gallons)	Measured Volume of Liquid Recovered (gallons)	Estimated Volume of DNAPL Recovered[1] (gallons)
	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)			
12-May-03	6	10	-	-	19	486	437
09-Jul-03	6	10	-	-	28	495	446
06-Oct-03	12	10	-	-	37	504	454
23-Oct-03	12	10	-	-	44	511	460
24-Nov-03	12	10	-	-	49	516	464
29-Dec-03	12	10	-	-	57	524	472
12-Jan-04	12	10	-	-	60	527	474
25-Feb-04	12	10	-	-	75	542	488
30-Apr-04	12	10	-	-	87	554	499
03-Aug-04	12	10	-	-	95	562	505
20-Aug-04	12	10	-	-	95	562	506
29-Sep-04	12	10	-	-	95	562	506
03-Nov-04	12	10	-	-	95	562	506
01-Dec-04	12	10	-	-	101	568	511
30-Dec-04	12	10	-	-	101	568	511
02-Feb-05	12	10	-	-	101	568	511
09-Feb-05	12	10	-	-	107	574	517
10-May-05	12	10	-	-	107	574	517
16-Jun-05	6	10	-	-	113	580	522
16-Aug-05	6	10	-	-	115	582	524
29-Aug-05	6	3	-	-	120	587	528
07-Oct-05	6	3	-	-	120	587	528
18-Oct-05	6	3	-	-	120	587	528
01-Nov-05	6	10	-	-	120	587	528
07-Nov-05	6	10	-	-	120	587	528
08-Nov-05	6	10	-	-	120	587	528
15-Nov-05	6	10	-	-	131	598	538
16-Nov-05	6	10	-	-	130	598	538
09-Dec-05	6	10	-	-	130	598	538
09-Jan-06	6	10	-	-	140	608	547
13-Jan-06	6	10	-	-	140	608	547
16-Jan-06	6	10	-	-	140	608	547
06-Feb-06	6	10	-	-	160	628	565
10-Feb-06	6	10	-	-	170	638	574

Table 5
Summary of DNAPL Recovery Volume: Well MW-6-32 and MW-13-30

Date	MW-6-32		MW-13-30		Measured Volume of Liquid within AST (gallons)	Measured Volume of Liquid Recovered (gallons)	Estimated Volume of DNAPL Recovered[1] (gallons)
	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)			
22-Feb-06	6	10	-	-	180	648	583
28-Feb-06	6	10	-	-	198	666	599
08-Mar-06	6	10	-	-	200	668	601
17-Mar-06	6	10	-	-	240	708	637
23-Mar-06	6	10	-	-	250	718	646
28-Mar-06	6	10	-	-	252	720	648
04-Apr-06	6	10	-	-	270	738	664
12-Apr-06	6	10	-	-	290	758	682
19-Apr-06	6	10	-	-	315	783	705
26-Apr-06	6	10	-	-	341	809	728
01-May-06	6	10	-	-	341	809	728
03-May-06	6	10	-	-	345	813	732
19-May-06	6	10	-	-	358	826	743
26-May-06	6	10	-	-	360	828	745
02-Jun-06	6	10	-	-	370	838	754
09-Jun-06	6	10	-	-	372	840	756
19-Jun-06	6	10	-	-	384	852	767
23-Jun-06	6	10	-	-	388	856	770
28-Jun-06	6	10	-	-	398	866	779
18-Jul-06	6	10	-	-	398	866	779
09-Aug-06	6	10	-	-	404	872	785
21-Aug-06	6	10	-	-	415 [3]	883	795
31-Aug-06	6	10	-	-	20	903	807
08-Sep-06	6	10	-	-	29	912	812
18-Sep-06	6	10	-	-	34	917	815
22-Sep-06	6	10	-	-	42	925	820
27-Sep-06	6	10	-	-	51	934	825
10-Oct-06	6	10	-	-	60	943	831
20-Oct-06	6	10	-	-	62	945	832
30-Oct-06	6	10	-	-	70	953	837
01-Dec-06	6	10	-	-	73	956	839
05-Jan-07	6	10	-	-	80	963	843
24-Jan-07	6	10	-	-	80	963	843
07-Feb-07	6	10	-	-	85	968	846

Table 5
Summary of DNAPL Recovery Volume: Well MW-6-32 and MW-13-30

Date	MW-6-32		MW-13-30		Measured Volume of Liquid within AST (gallons)	Measured Volume of Liquid Recovered (gallons)	Estimated Volume of DNAPL Recovered[1] (gallons)
	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)			
21-Feb-07	6	10	-	-	90	973	849
27-Feb-07	6	10	-	-	94	977	851
06-Mar-07	6	10	-	-	100	983	855
15-Mar-07	6	10	-	-	106	989	858
30-Mar-07	6	10	-	-	115	998	864
09-Apr-07	6	10	-	-	120	1,003	867
19-Apr-07	6	10	-	-	125	1,008	870
02-May-07	6	10	-	-	137	1,020	877
10-May-07	6	10	-	-	145	1,028	882
22-May-07	6	10	-	-	153	1,036	887
08-Jun-07	6	10	-	-	165	1,048	894
21-Jun-07	6	10	-	-	174	1,057	899
22-Aug-07	6	10	-	-	190	1,073	909
04-Oct-07	6	10	-	-	229	1,112	932
26-Oct-07	6	10	-	-	252	1,135	946
30-Nov-07	6	10	-	-	296	1,179	972
25-Jan-08	6	10	-	-	360	1,243	1,011
08-Feb-08	6	10	-	-	369	1,252	1,016
05-Mar-08	6	10	-	-	374	1,257	1,019
15-Mar-08	6	10	-	-	383	1,266	1,025
27-Mar-08	6	10	-	-	384	1,267	1,025
01-May-08	6	10	-	-	440	1,323	1,059
26-Jun-08	6	10	-	-	450 [3]	1,333	1,065
07-Jul-08	6	10	-	-	20	1,353	1,077
21-Jul-08	6	10	-	-	45	1,378	1,092
28-Jul-08	6	10	-	-	58	1,391	1,100
13-Aug-08	6	10	-	-	60	1,393	1,101
22-Aug-08	6	10	-	-	65	1,398	1,104
19-Sep-08	6	10	-	-	115	1,448	1,134
15-Oct-08	6	10	-	-	145	1,478	1,152
24-Oct-08	6	10	-	-	145	1,478	1,152
28-Oct-08	6	10	-	-	155	1,488	1,158
04-Nov-08	6	10	-	-	165	1,498	1,164

Table 5
Summary of DNAPL Recovery Volume: Well MW-6-32 and MW-13-30

Date	MW-6-32		MW-13-30		Measured Volume of Liquid within AST (gallons)	Measured Volume of Liquid Recovered (gallons)	Estimated Volume of DNAPL Recovered[1] (gallons)
	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)			
10-Nov-08	6	10	-	-	170	1,503	1,167
11-Nov-08	6	10	-	-	170	1,503	1,167
26-Nov-08	6	10	-	-	193	1,526	1,181
12-Dec-08	6	10	-	-	208	1,541	1,190
05-Jan-09	6	10	-	-	210	1,543	1,191
14-Jan-09	6	10	-	-	220	1,553	1,197
23-Jan-09	6	10	-	-	227	1,560	1,201
30-Jan-09	6	10	-	-	237	1,570	1,207
06-Feb-09	6	10	-	-	240	1,573	1,209
25-Feb-09	6	10	-	-	270	1,603	1,227
24-Mar-09	6	10	-	-	285	1,618	1,236
03-Apr-09	6	10	-	-	300	1,633	1,245
17-Apr-09	6	10	-	-	311	1,644	1,252
30-Apr-09	6	10	-	-	315	1,648	1,254
08-May-09	6	10	-	-	320	1,653	1,257
13-May-09	6	10	-	-	326	1,659	1,261
21-May-09	6	10	-	-	335	1,668	1,266
29-May-09	6	10	-	-	330	1,663	1,263
05-Jun-09	6	10	-	-	345	1,678	1,272
11-Jun-09	6	10	-	-	348	1,681	1,274
19-Jun-09	6	10	-	-	350	1,683	1,275
26-Jun-09	6	10	-	-	360	1,693	1,281
10-Jul-09	6	10	-	-	370	1,703	1,287
15-Jul-09	6	10	-	-	374	1,707	1,289
20-Jul-09	6	10	-	-	380	1,713	1,293
30-Jul-09	6	10	-	-	390	1,723	1,299
07-Aug-09	6	10	-	-	398	1,731	1,304
14-Aug-09	6	10	-	-	411	1,744	1,312
20-Aug-09	6	10	-	-	420	1,753	1,317
27-Aug-09	6	10	-	-	438	1,771	1,328
02-Sep-09	6	10	-	-	445	1,778	1,332
29-Sep-09	6	10	-	-	463	1,796	1,343
08-Oct-09	6	10	-	-	475	1,808	1,350
16-Oct-09	6	10	-	-	495	1,828	1,362
22-Oct-09	3	10	-	-	498 [3]	1,831	1,364

Table 5
Summary of DNAPL Recovery Volume: Well MW-6-32 and MW-13-30

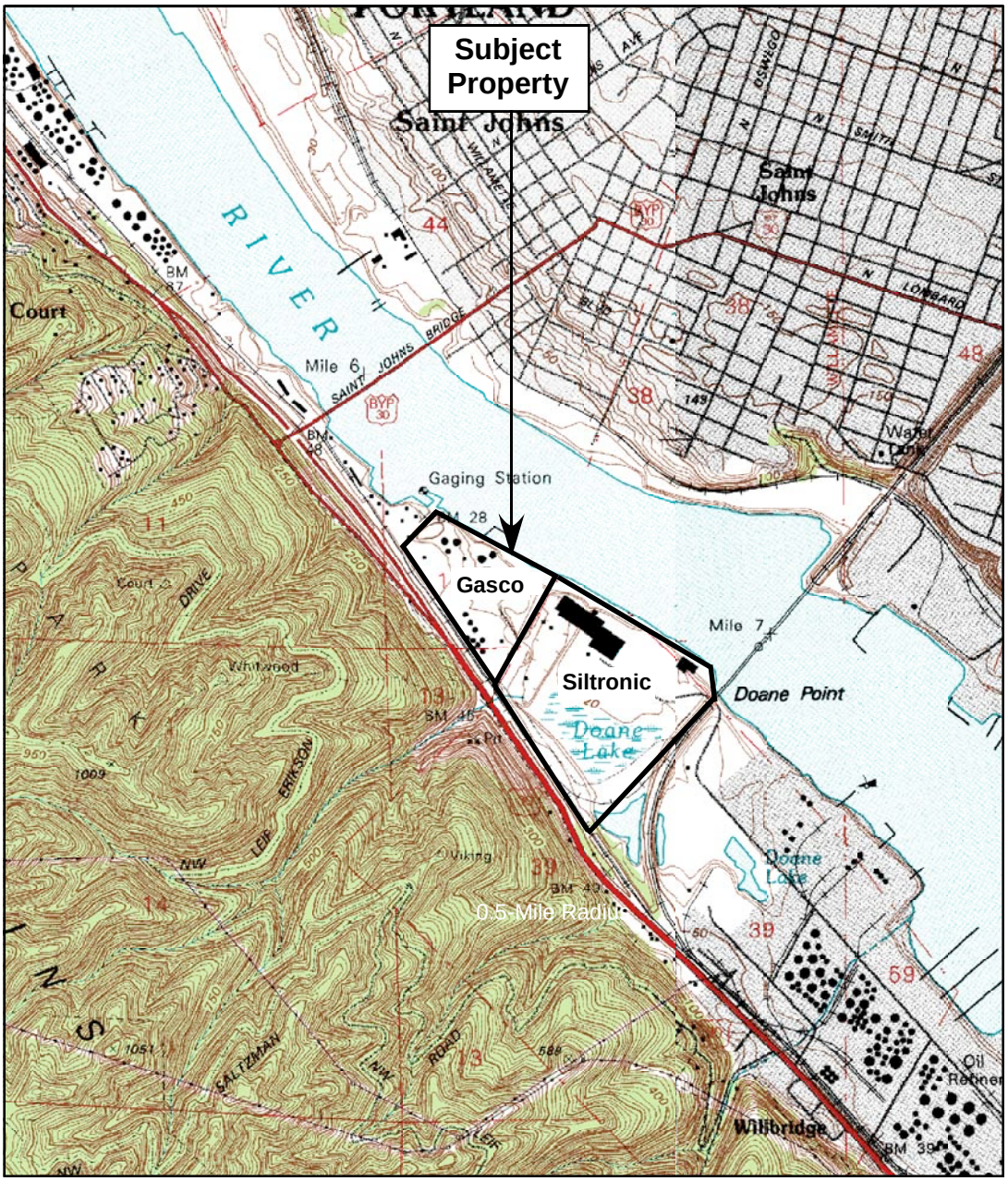
Date	MW-6-32		MW-13-30		Measured Volume of Liquid within AST (gallons)	Measured Volume of Liquid Recovered (gallons)	Estimated Volume of DNAPL Recovered[1] (gallons)
	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)	Pumping Cycles Per Day	Pumping Duration per Cycle (minutes)			
06-Nov-09	3	10	-	-	20	1,851	1,376
13-Nov-09	NA	NA	NA	NA	22	1,853	1,377
01-Dec-09 [4]	3	10	2	30	35	1,866	1,385
03-Dec-09	-	-	3	10	35	1,866	1,385
04-Dec-09	4	8	2	10	38	1,869	1,387
09-Dec-09 [5]	-	-	-	-	38	1,869	1,387
29-Dec-09	3	8	3	20	74	1,905	1,408

Notes:

AST = above-ground storage tank
DNAPL = dense non-aqueous phase liquid
NA = System off do to solar panels gaining charge

1 = DNAPL content is estimated to be 80% of the total liquid volume through June 12, 2001; and 90% subsequent to June 12, 2001; and 60% DNAPL content post August 21, 2006 based on direct observations of recovered liquids during pumping.
2 = Contents of tank removed and transported off-site for re-refining by Spencer Environmental, Inc., Portland, Oregon
3 = Contents of tank removed and transported off-site for re-refining by Thermo Fluids, Inc., Portland, Oregon
4 = DNAPL recovery pump installed at MW-13-30 and switch power source from nitrogen gas to air compessor. Begin pumping at both MW-6-32 and MW-13-30, various cycles and durations
5 = System off do to frozen discharge tubing

FIGURES



Note: Base Map from the Portland (1990), Oregon, and Linnton (1990) USGS 7.5-Minute Quadrangles
Contour Interval: 10 Feet

NORTH

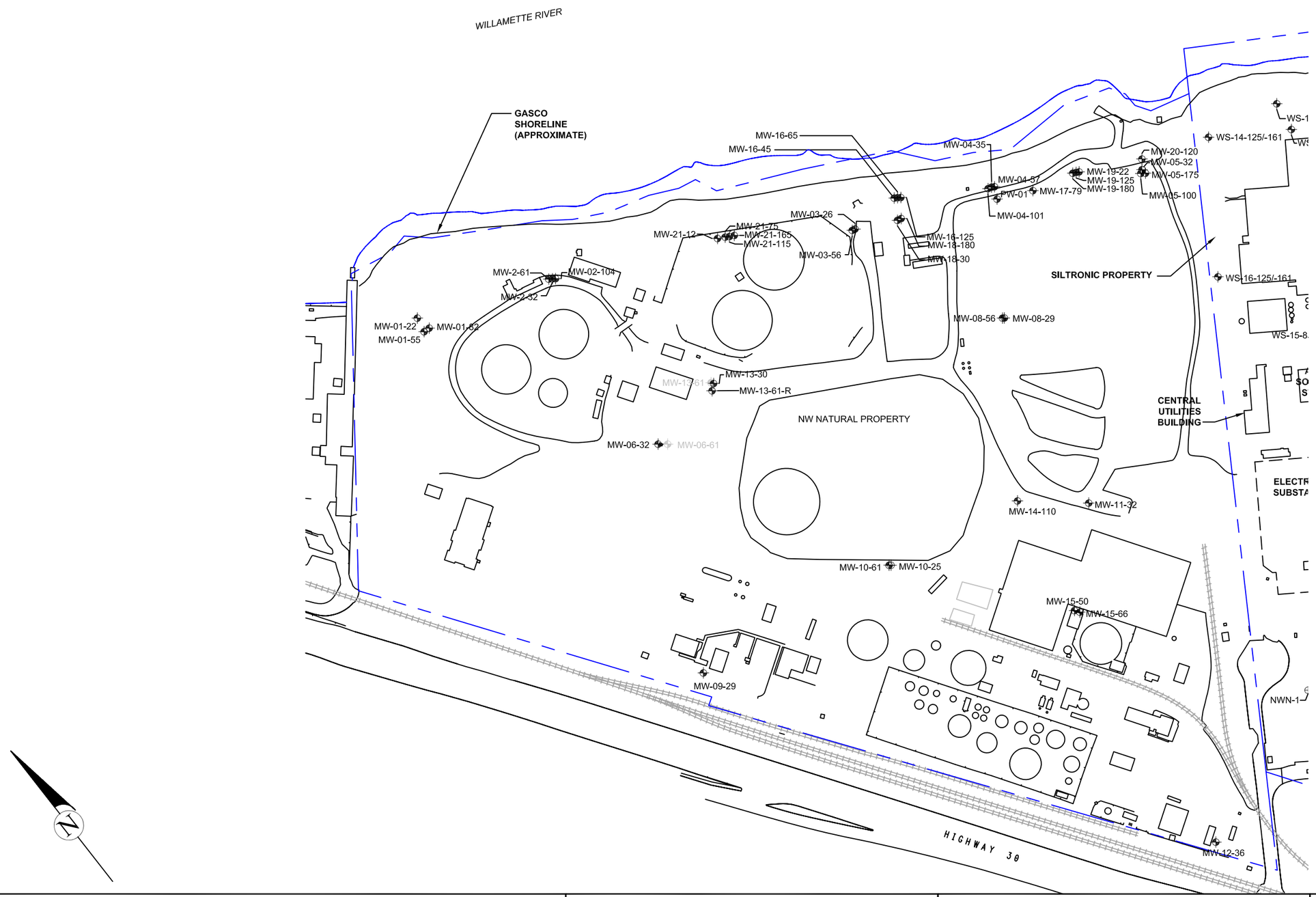
0 1000 2000 4000
1"=2000' Scale in Feet

FIGURE 1
Location Map

NW Natural Gasco Facility
7900 NW St. Helens Rd.
Portland, Oregon

HAHN AND ASSOCIATES, INC.
Project No. 2708

February 2010



LEGEND

Monitoring Well

Property Line (Approximate)

HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 200 feet

200 0 200 400 feet

Project No. 2708-5237 REV. NOVEMBER 2008

FIGURE 2
Site Map - Monitoring Well Locations
NW Natural Gasco Facility
7900 NW St. Helens Road
Portland, Oregon

X:\Hahn\Gasco Site 2008\Monitoring Well Maps\MW - Figure 2-2b.dwg 12/10/08

LEGEND

- Monitoring Well
- Property Line (Approximate)

HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 250 feet

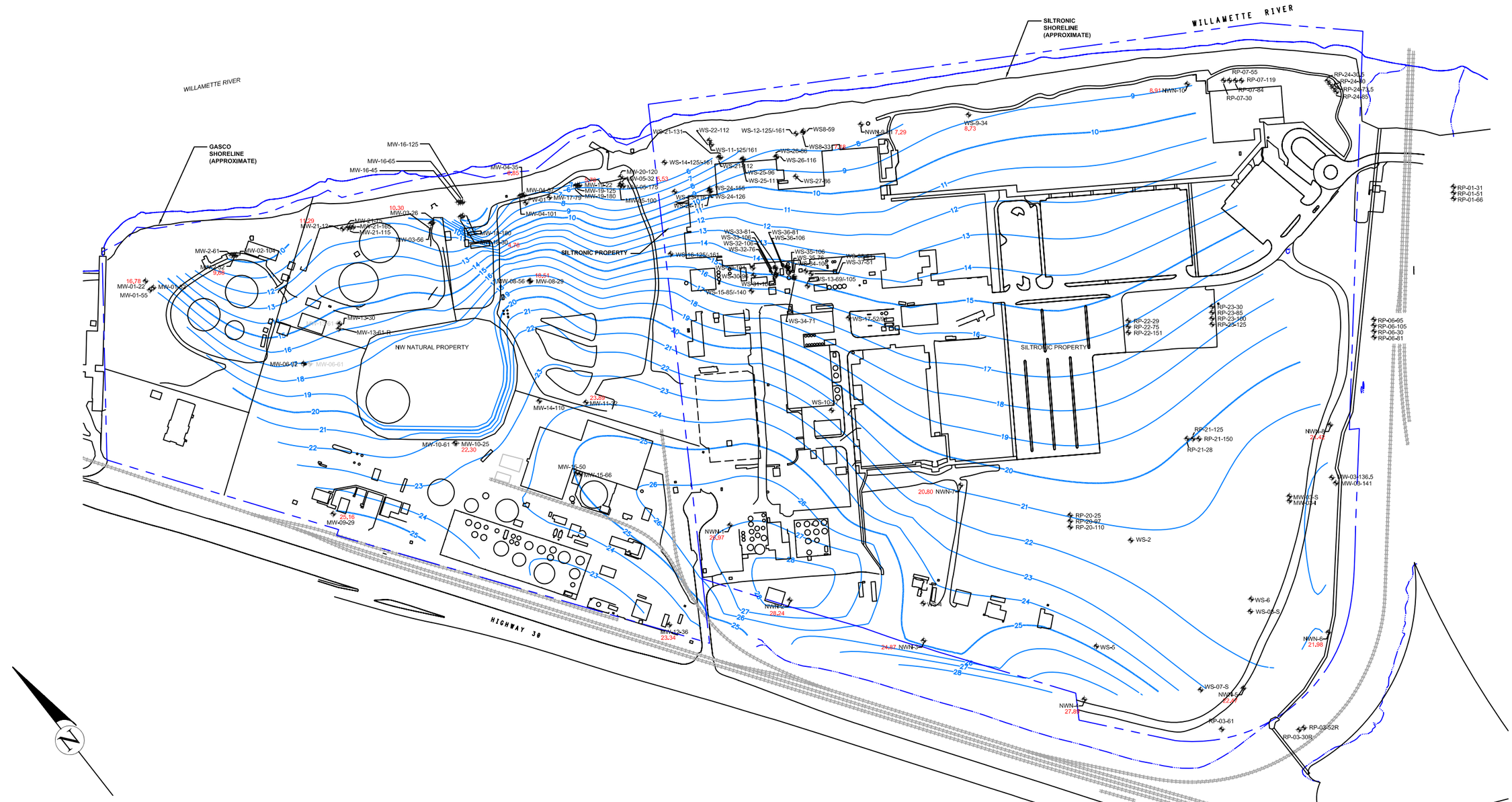
250 0 250 500 feet

Project No. 2708-5237 REV. NOVEMBER 2008

FIGURE 2a
Site Map - Monitoring Well Locations

Siltronic Corporation Property
7200 NW Front Avenue
Portland, Oregon

X:\Hahn\Gasco Site 2008\Monitoring Well Maps\MW – Figure 2-2a.dwg 1/21/10



LEGEND

- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- Isocontour Line - Groundwater Elevation
- 28.24 Groundwater Elevation (City of Portland Datum)

HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 300 feet

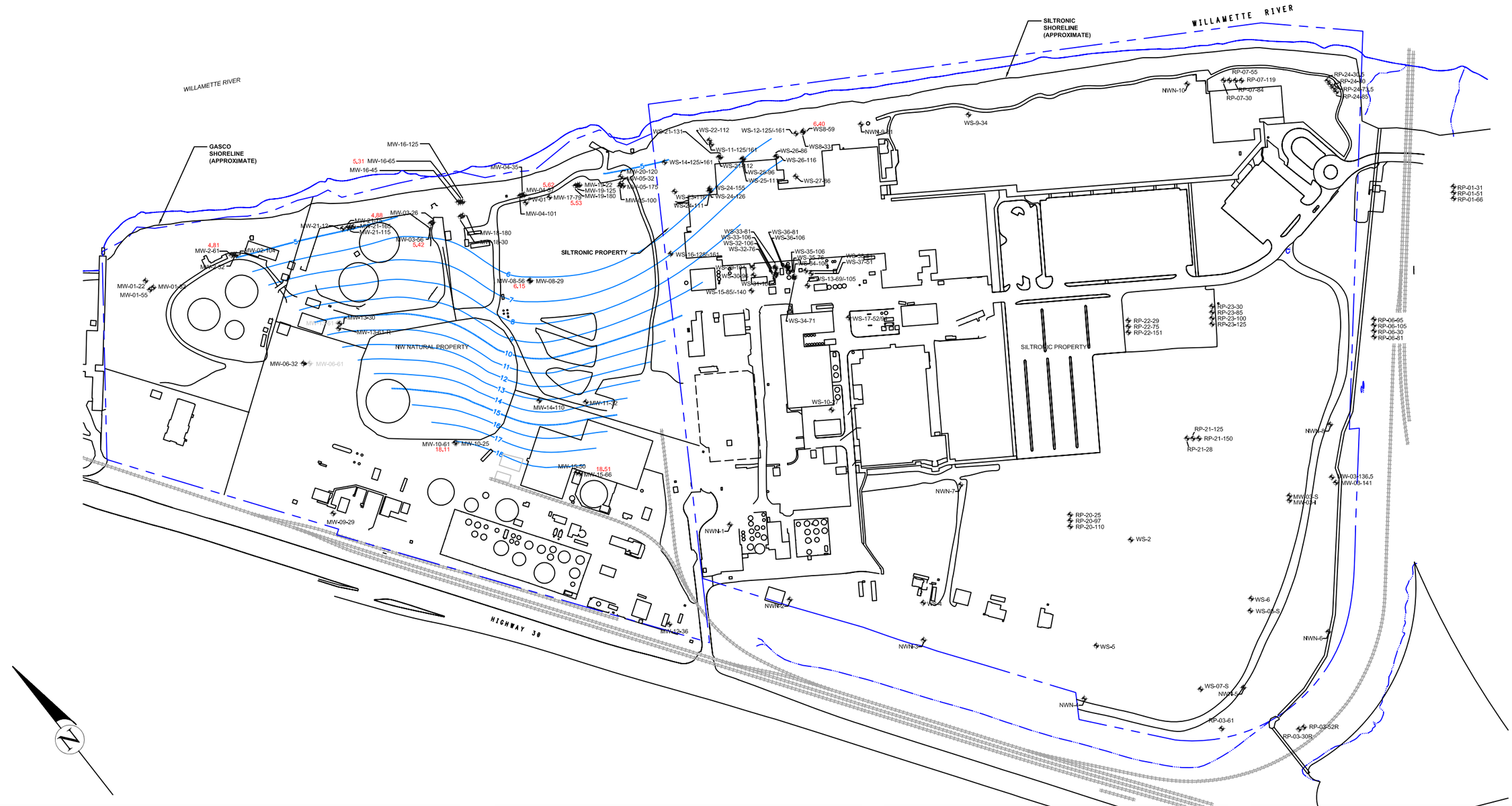
300 0 300 600 feet

Project No. 2708-5237 REV. FEB 2010

FIGURE 3
GROUNDWATER ELEVATION MAP
Surficial Fill WBZ Wells
August 5, 2009

NW Natural & Siltronic Properties
Portland, Oregon

X:\Hahn\Gasco Site 2009\09-August 5 Groundwater\GWElev-Surficial Fill.dwg 5/26/10



LEGEND

- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- Isocontour Line - Groundwater Elevation — 18.51 Groundwater Elevation (City of Portland Datum)

HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 300 feet

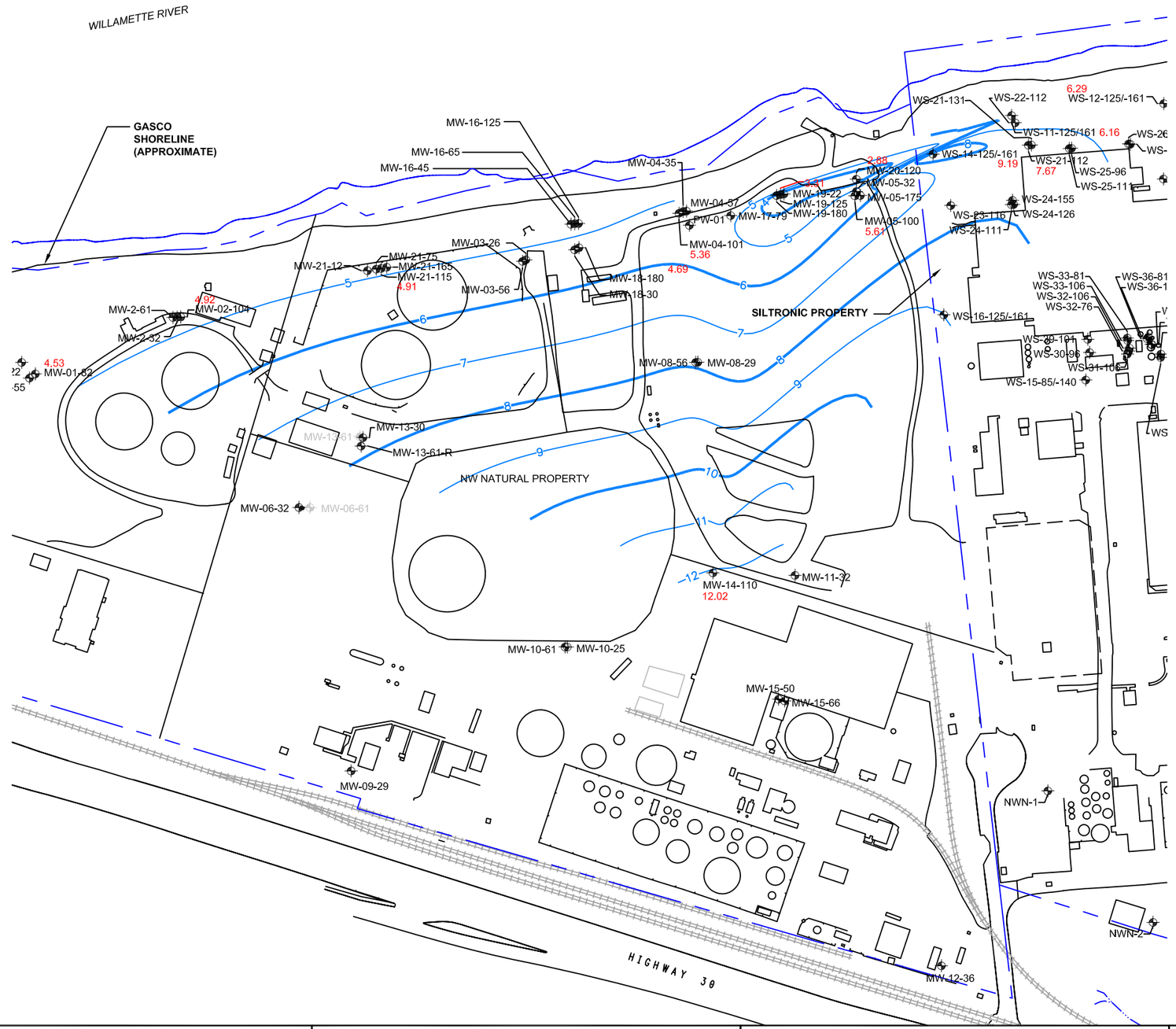
300 0 300 600 feet

Project No. 2708-5237 REV. FEB 2010

FIGURE 4
GROUNDWATER ELEVATION MAP
Alluvial WBZ Wells - to 80' BGS (Upper) - August 5, 2009

NW Natural & Siltronic Properties
Portland, Oregon

X:\Hahn\Gasco Site 2009\09-August 5 Groundwater\GWElev-Alluvial Upper.dwg 5/26/10



LEGEND

- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- Isocontour Line - Groundwater Elevation
- 12.02 Groundwater Elevation (City of Portland Datum)

HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 200 feet

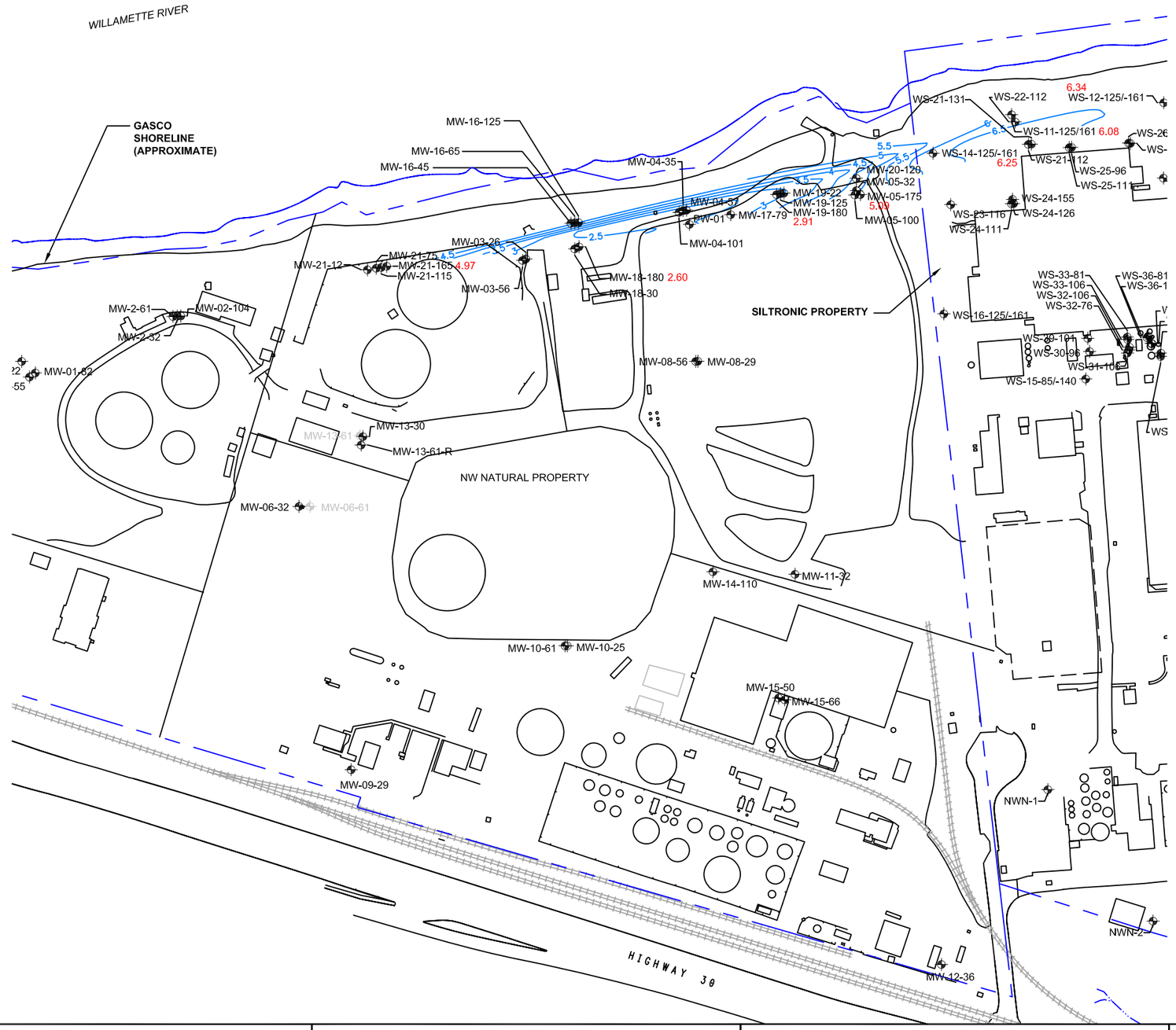
200 0 200 400 feet

Project No. 2708-5237 REV. FEB 2010

FIGURE 5
GROUNDWATER ELEVATION MAP
Alluvial WBZ Wells - 80 to 125' BGS (Intermediate) August 5, 2009

NW Natural & Siltronic Properties
Portland, Oregon

X:\Hahn\Gasco Site 2009\09-August 5 Groundwater\GWElev-Alluvial Intermediate.dwg 5/26/10



LEGEND

- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- Isocontour Line - Groundwater Elevation
- 6.34 Groundwater Elevation (City of Portland Datum)

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PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 200 feet

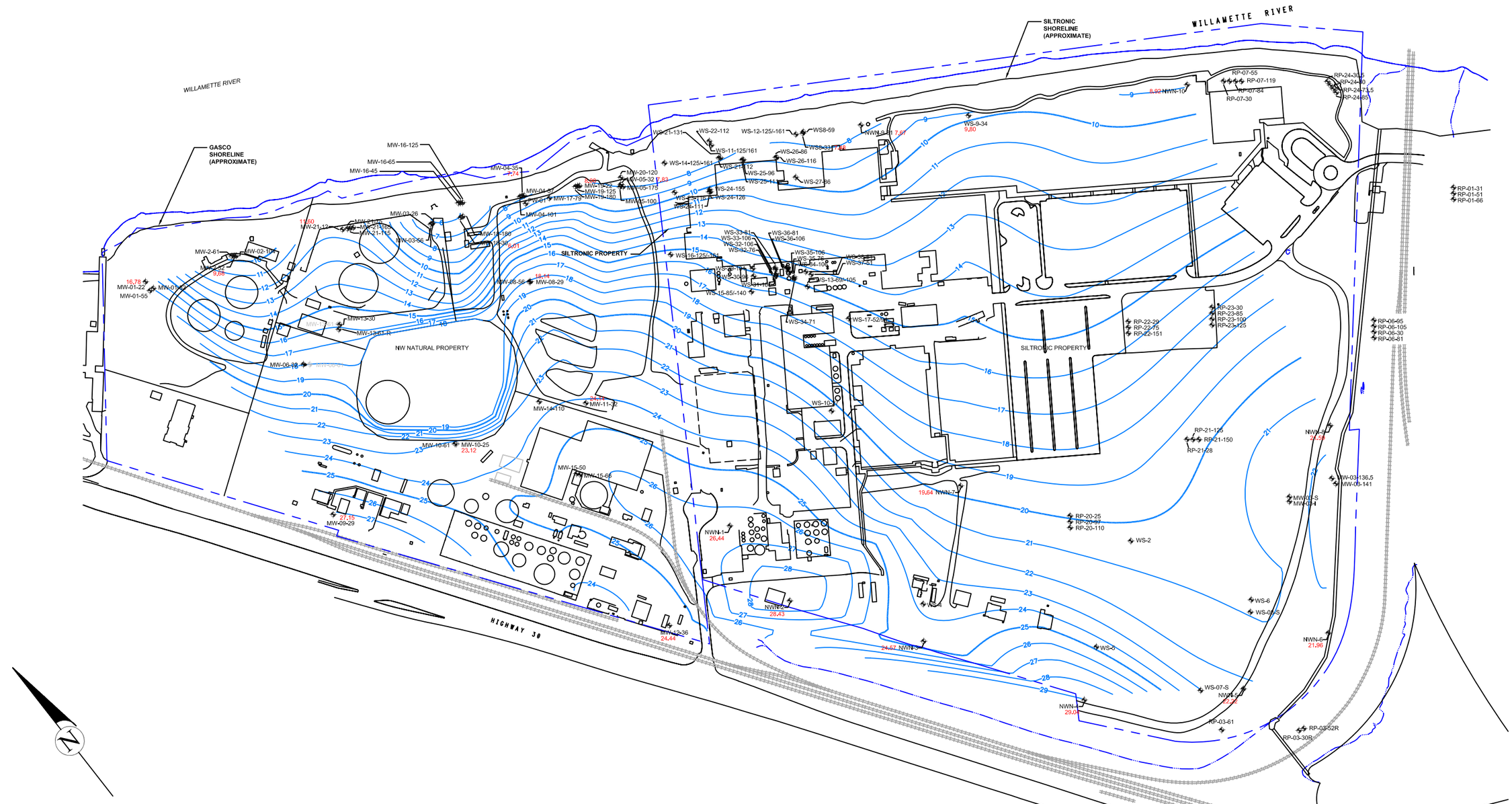
200 0 200 400 feet

Project No. 2708-5237 REV. FEB 2010

FIGURE 6
GROUNDWATER ELEVATION MAP
Alluvial WBZ Wells Below 125' BGS (Lower) August 5, 2009

NW Natural & Siltronic Properties
Portland, Oregon

X:\Hahn\Gasco Site 2009\09-August 5 Groundwater\GWElev-Alluvial Lower.dwg 5/26/10



LEGEND

- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- Isocontour Line - Groundwater Elevation
- 29.04 Groundwater Elevation (City of Portland Datum)

HAHN AND ASSOCIATES, INC.

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434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 300 feet

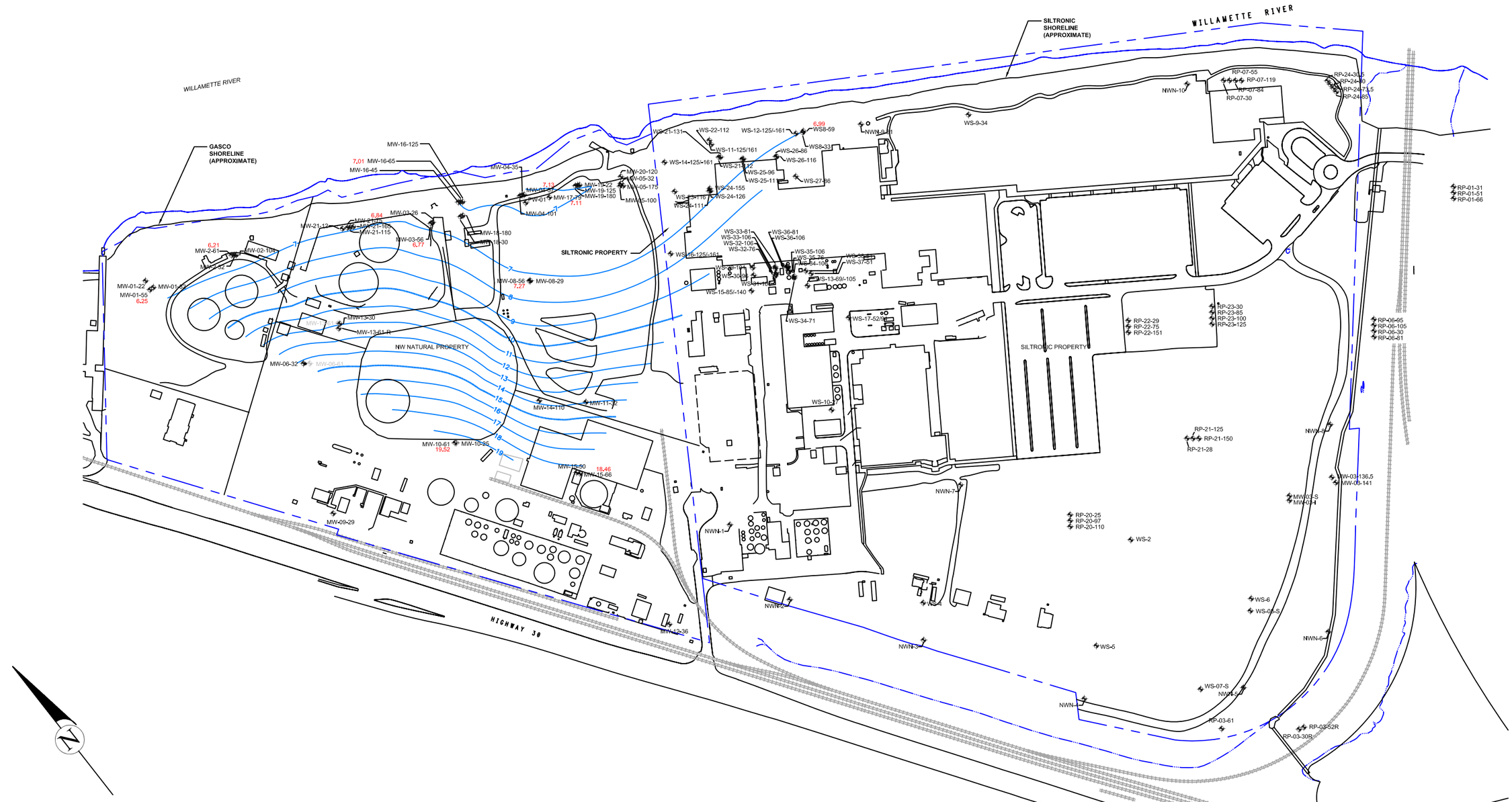
300 0 300 600 feet

Project No. 2708-5237 REV. FEB 2010

FIGURE 7
GROUNDWATER ELEVATION MAP
Surficial Fill WBZ Wells
December 4, 2009

NW Natural & Siltronic Properties
Portland, Oregon

X:\Hahn\Gasco Site 2009\09-December 4 Groundwater\GWElev-Surficial Fill.dwg 5/26/10



LEGEND

- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- Isocontour Line - Groundwater Elevation — 19.52 Groundwater Elevation (City of Portland Datum)

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434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 300 feet

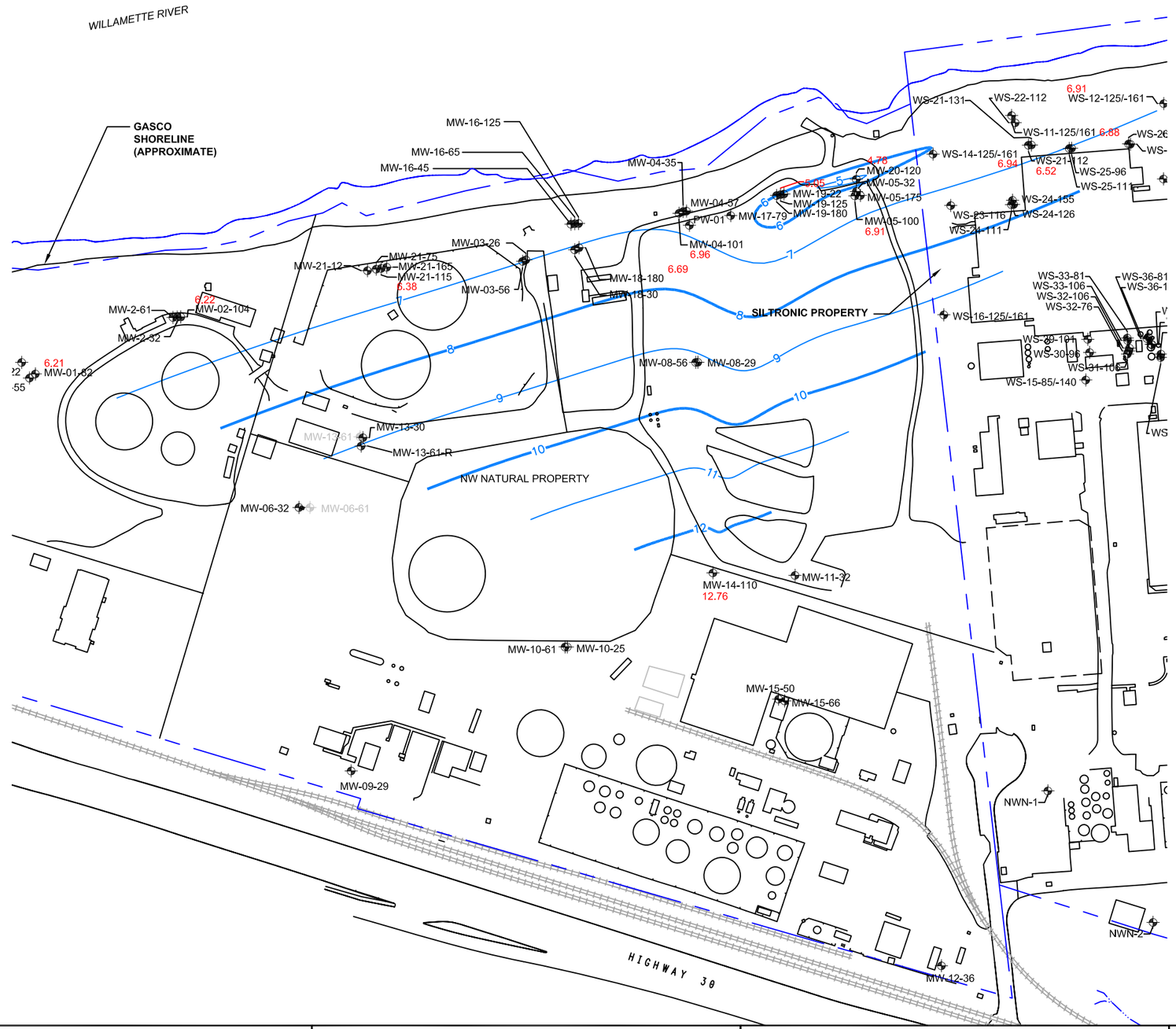
300 0 300 600 feet

Project No. 2708-5237 REV. FEB 2010

FIGURE 8
GROUNDWATER ELEVATION MAP
Alluvial WBZ Wells - to 80' BGS (Upper) - December 4, 2009

NW Natural & Siltronic Properties
Portland, Oregon

X:\Hahn\Gasco Site 2009\09-December 4 Groundwater\GWElev-Alluvial Upper.dwg 5/26/10



LEGEND

- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- Isocontour Line - Groundwater Elevation
- 12.76 Groundwater Elevation (City of Portland Datum)

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434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 200 feet

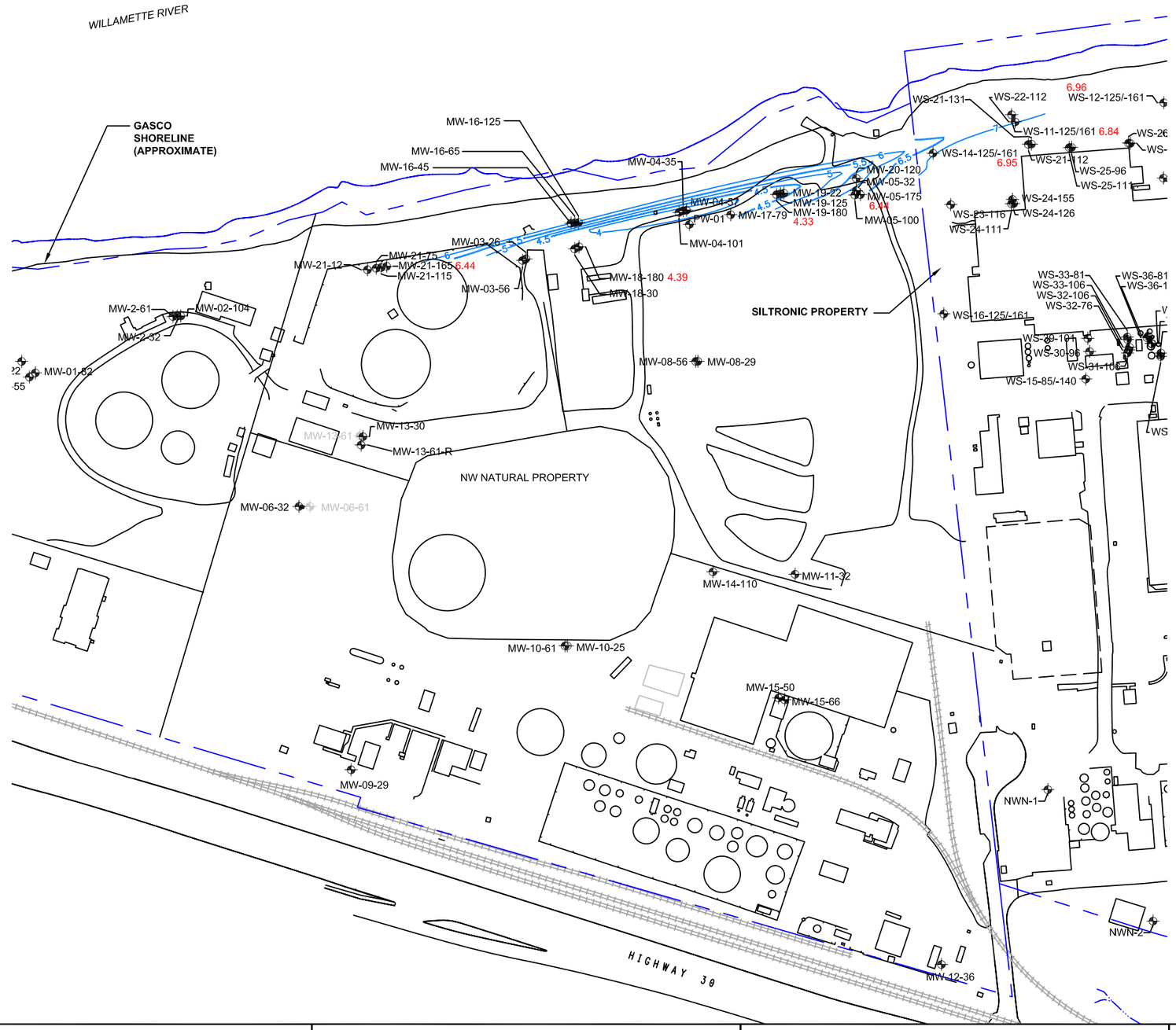
200 0 200 400 feet

Project No. 2708-5237 REV. FEB 2010

FIGURE 9
GROUNDWATER ELEVATION MAP
Alluvial WBZ Wells - 80 to 125' BGS (Intermediate) December 4, 2009

NW Natural & Siltronic Properties
Portland, Oregon

X:\Hahn\Gasco Site 2009\09-December 4 Groundwater\GWElev-Alluvial Intermediate.dwg 5/26/10



LEGEND

- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- Isocontour Line - Groundwater Elevation
- 6.96 Groundwater Elevation (City of Portland Datum)

HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
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PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 200 feet

200 0 200 400 feet

Project No. 2708-5237 REV. FEB 2010

FIGURE 10
GROUNDWATER ELEVATION MAP
Alluvial WBZ Wells Below 125' BGS (Lower) December 4, 2009

NW Natural & Siltronic Properties
Portland, Oregon

X:\Hahn\Gasco Site 2009\09-December 4 Groundwater\GWElev-Alluvial Lower.dwg 5/26/10

FIGURE 11
Thickness of Dense Non-Aqueous Phase Liquid (DNAPL) in Groundwater Monitoring Wells

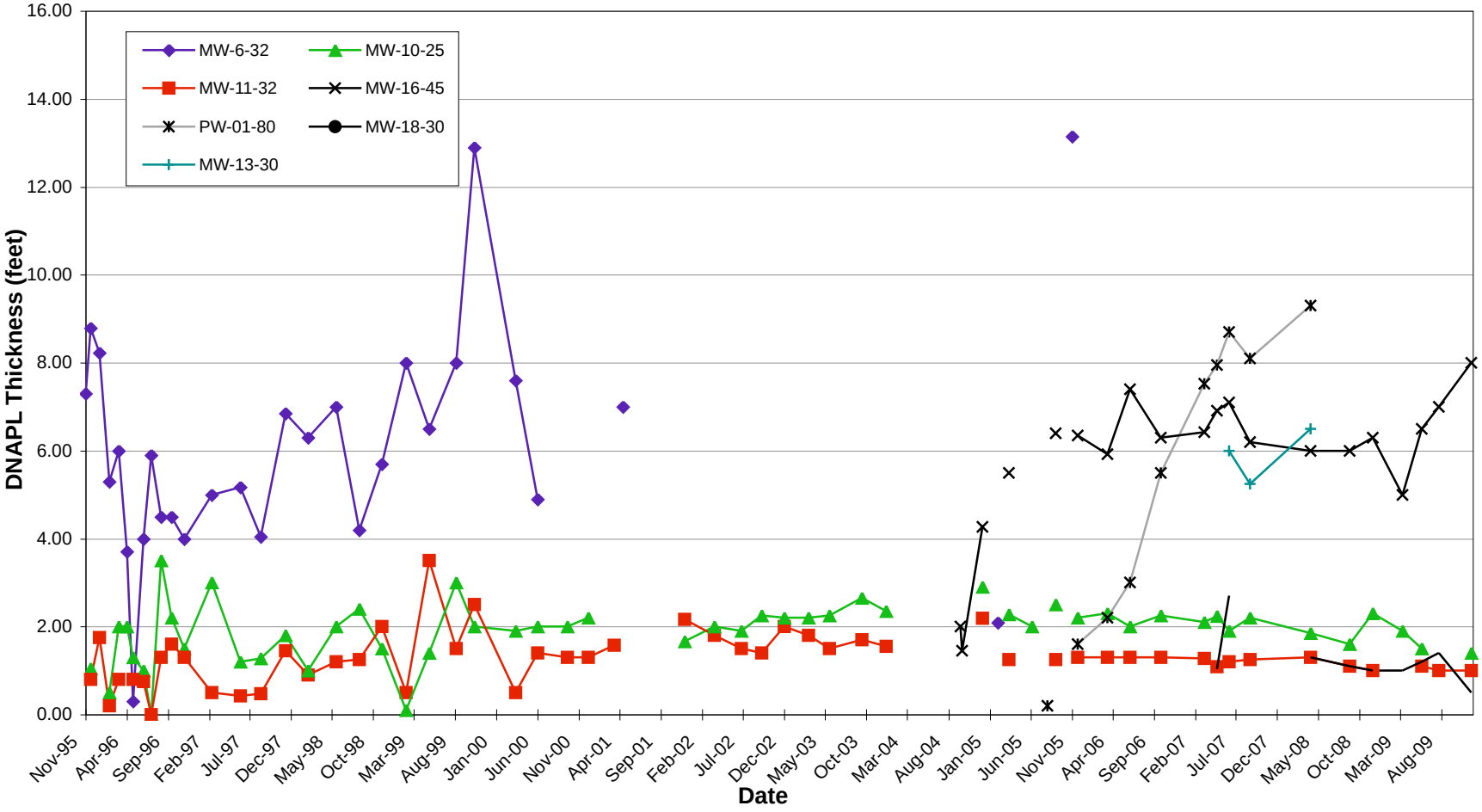
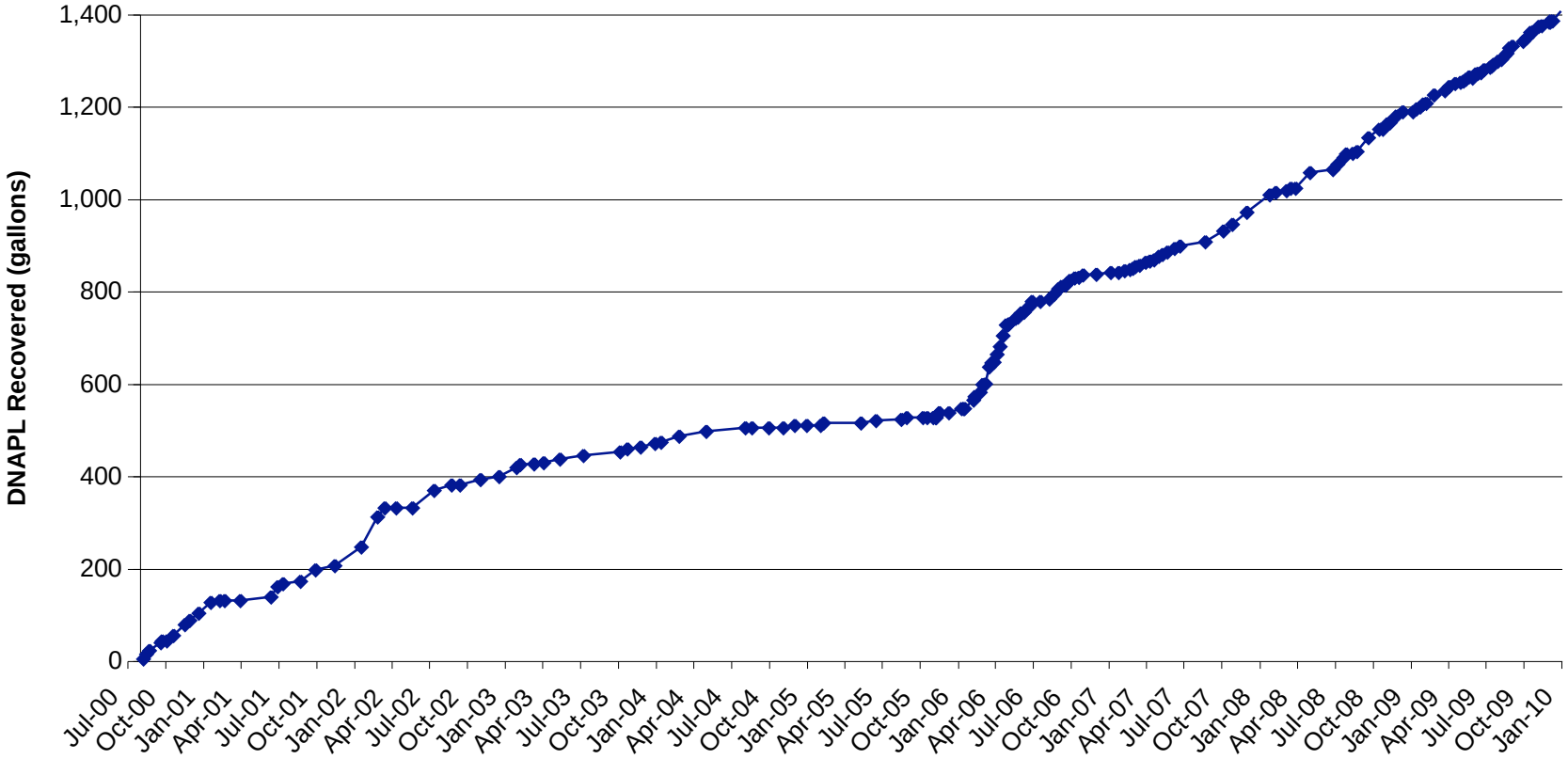


Figure 12
Estimated Cumulative DNAPL Recovery Volume Through Time:
Well MW-6-32 and MW-13-30
NW Natural - Gasco Facility

Note: DNAPL recovery from MW-6-32 between August 8, 2000 and December 1, 2009. DNAPL recovery from both MW-6-32 and MW-13-30 between December 1, 2009 and present.



Updated: 5/12/10 APR
File: Table 5 MW-6-DNAPL Recovery Chart_thru June 09.xls/ Discharge Chart

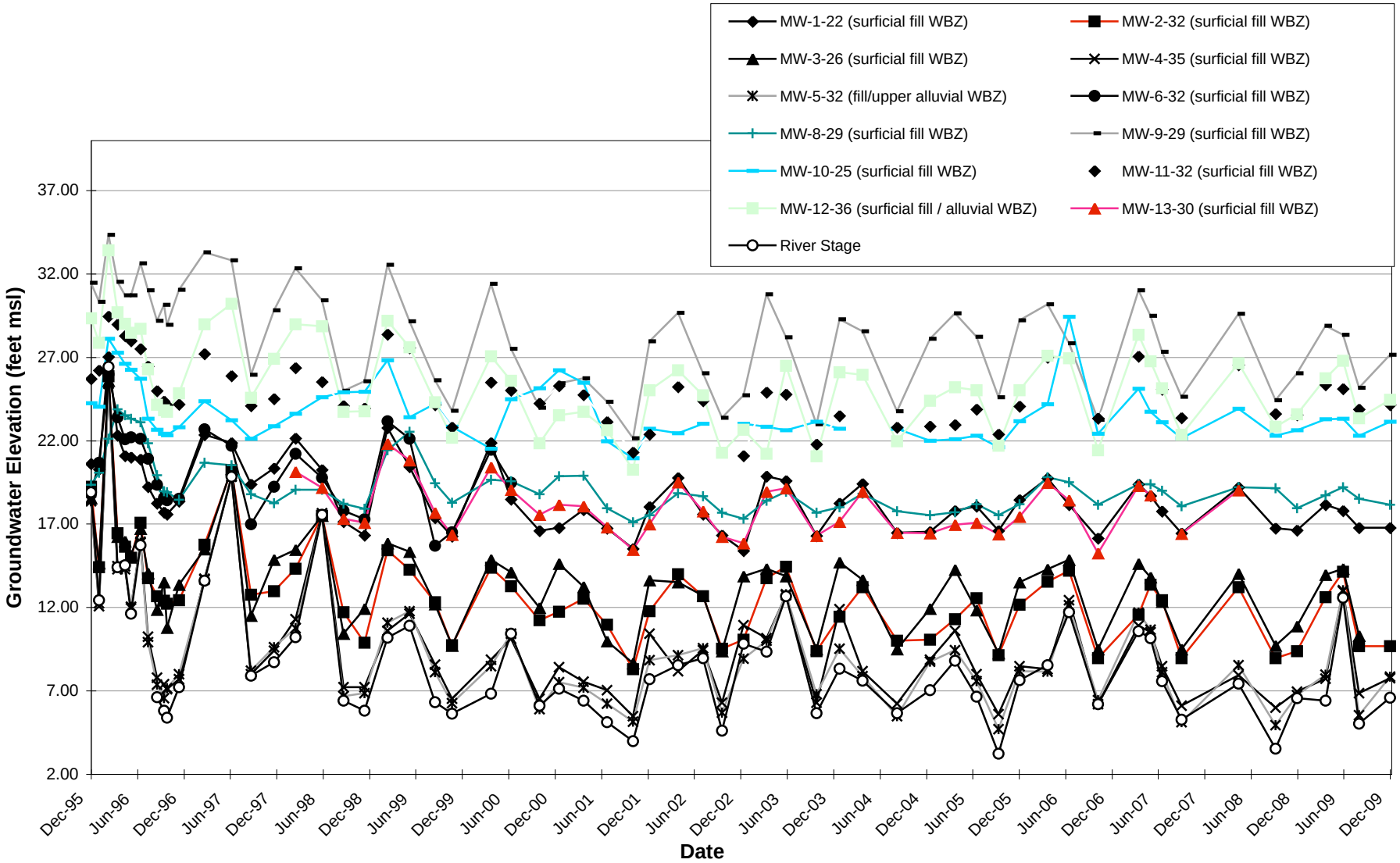
HAHN AND ASSOCIATES, INC.
Project # 2708

APPENDICIES

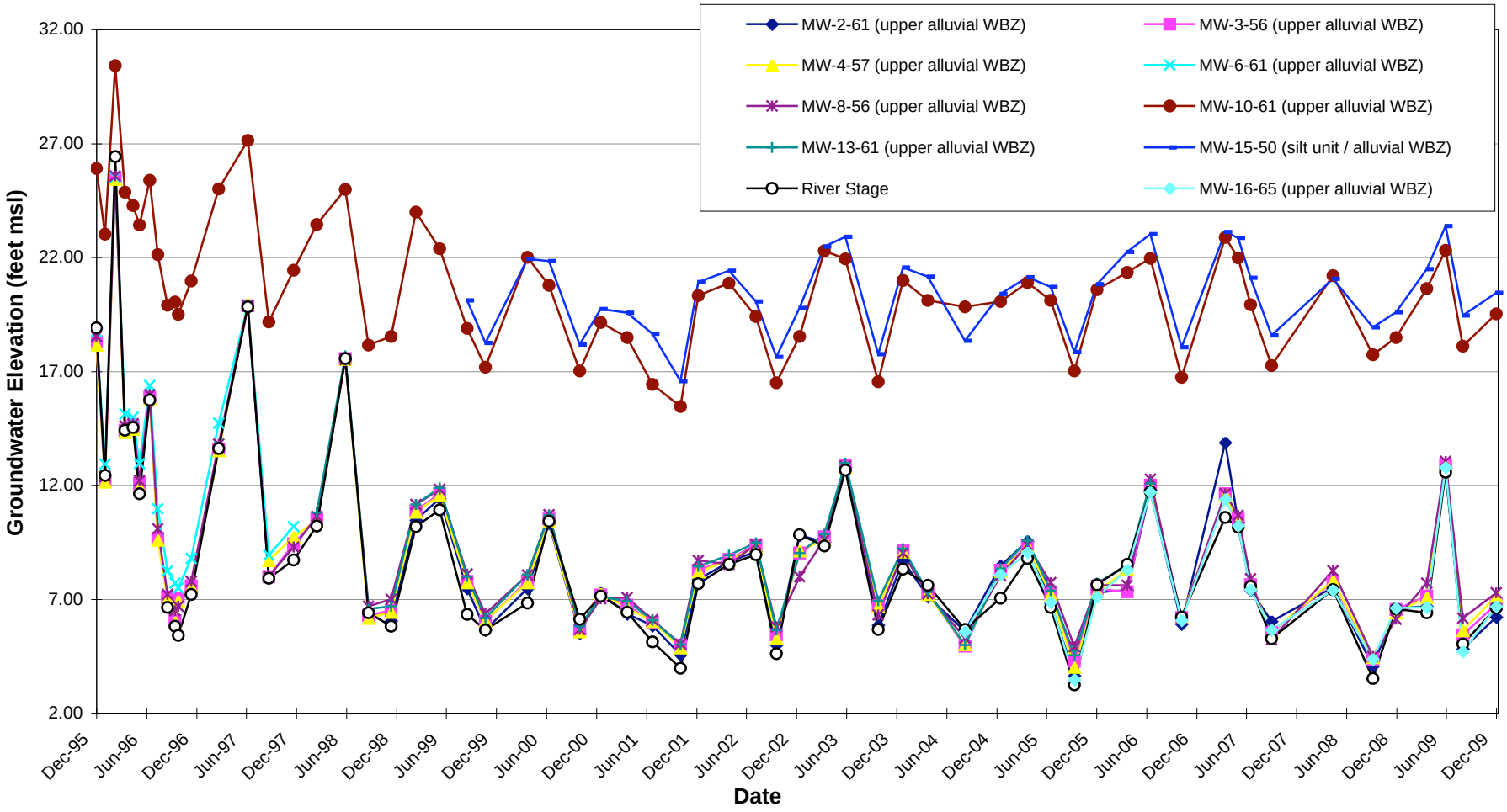
APPENDIX A

Groundwater Elevation Hydrographs

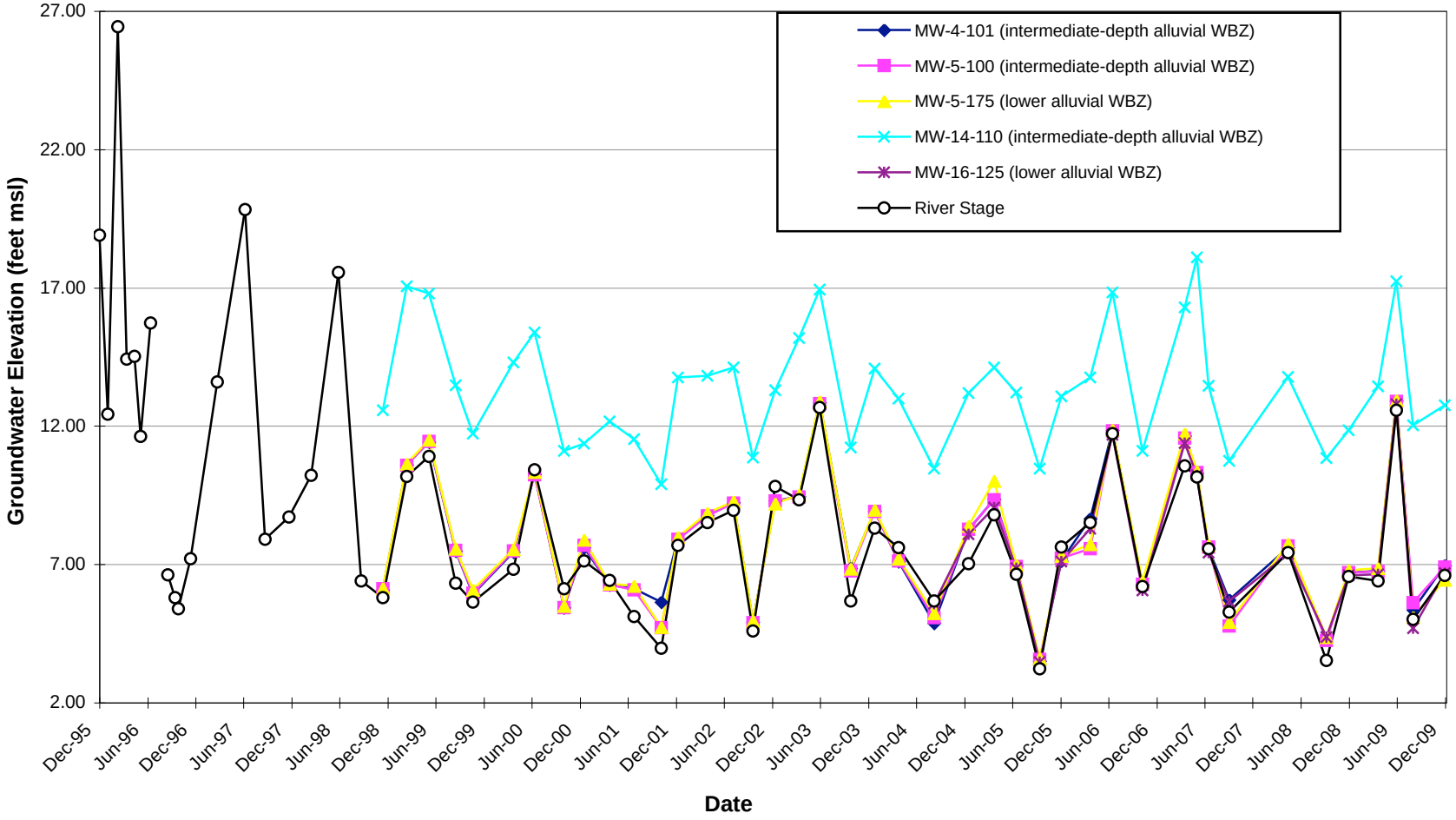
Groundwater Hydrograph
Surficial Fill Water-Bearing Zone Monitoring Wells - NW Natural Property



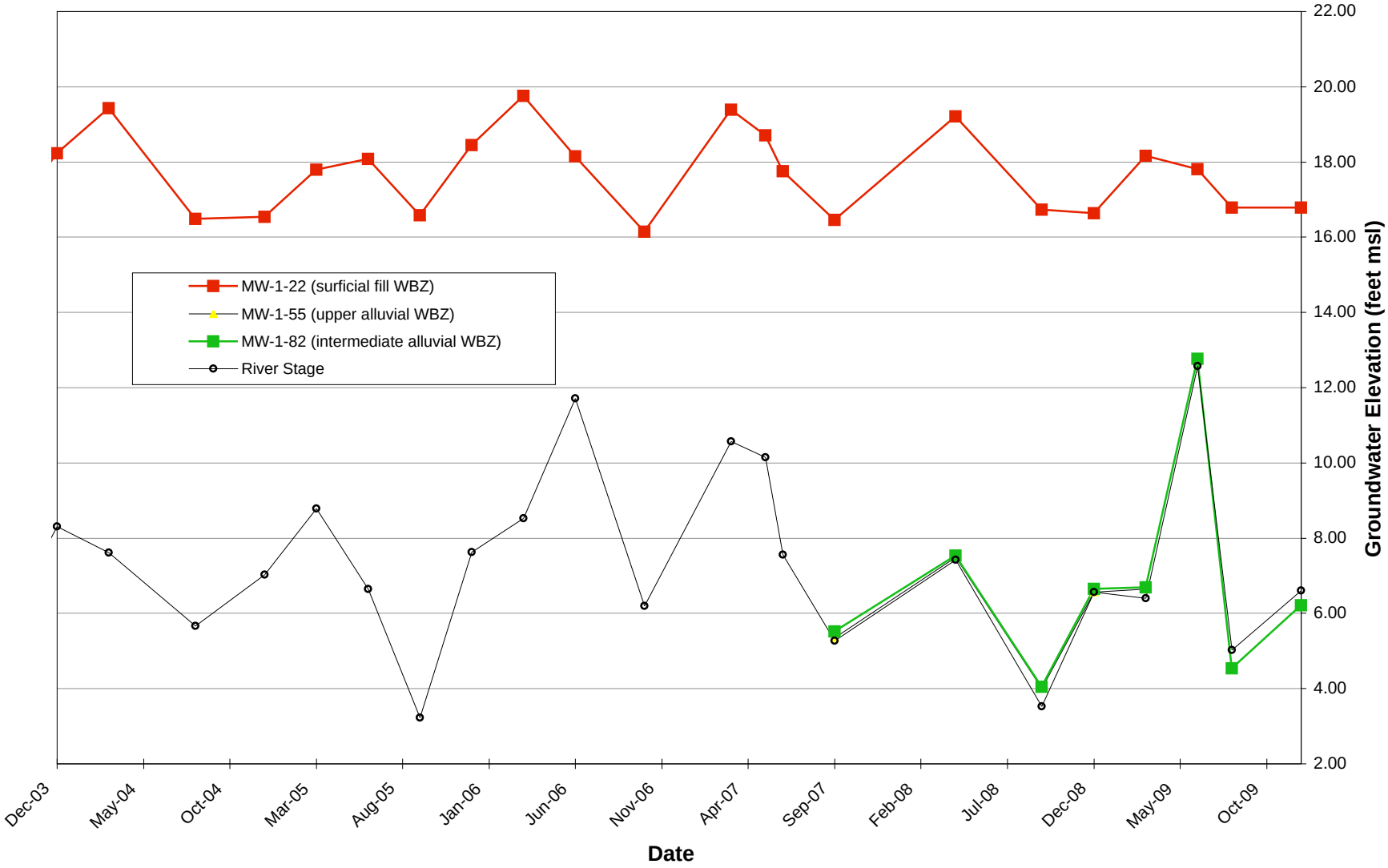
Groundwater Hydrograph
Upper Alluvial Water-Bearing Zone Monitoring Wells - NW Natural Property



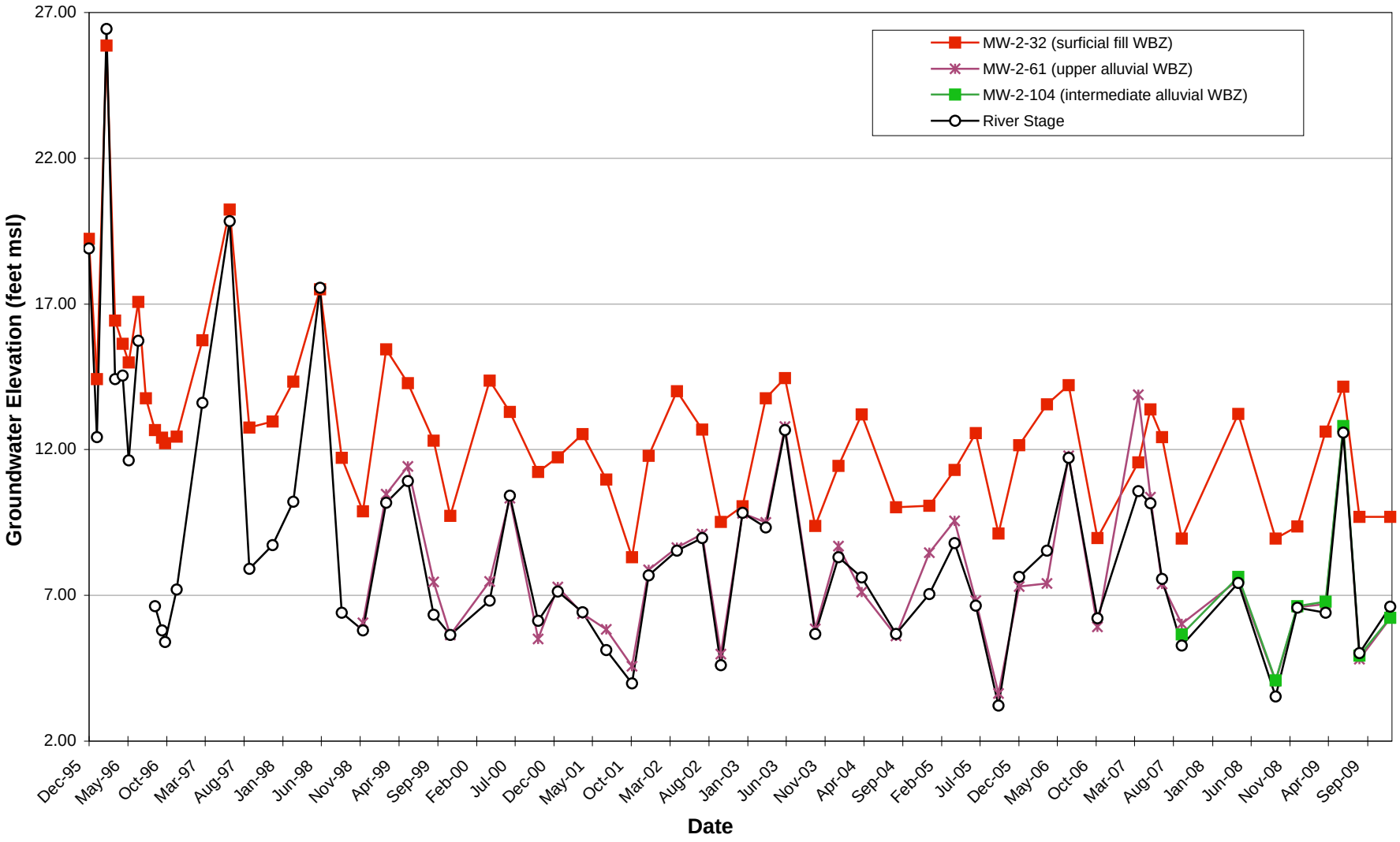
Groundwater Hydrograph
Intermediate and Lower Alluvial Water-Bearing Zone Monitoring Wells - NW Natural Property



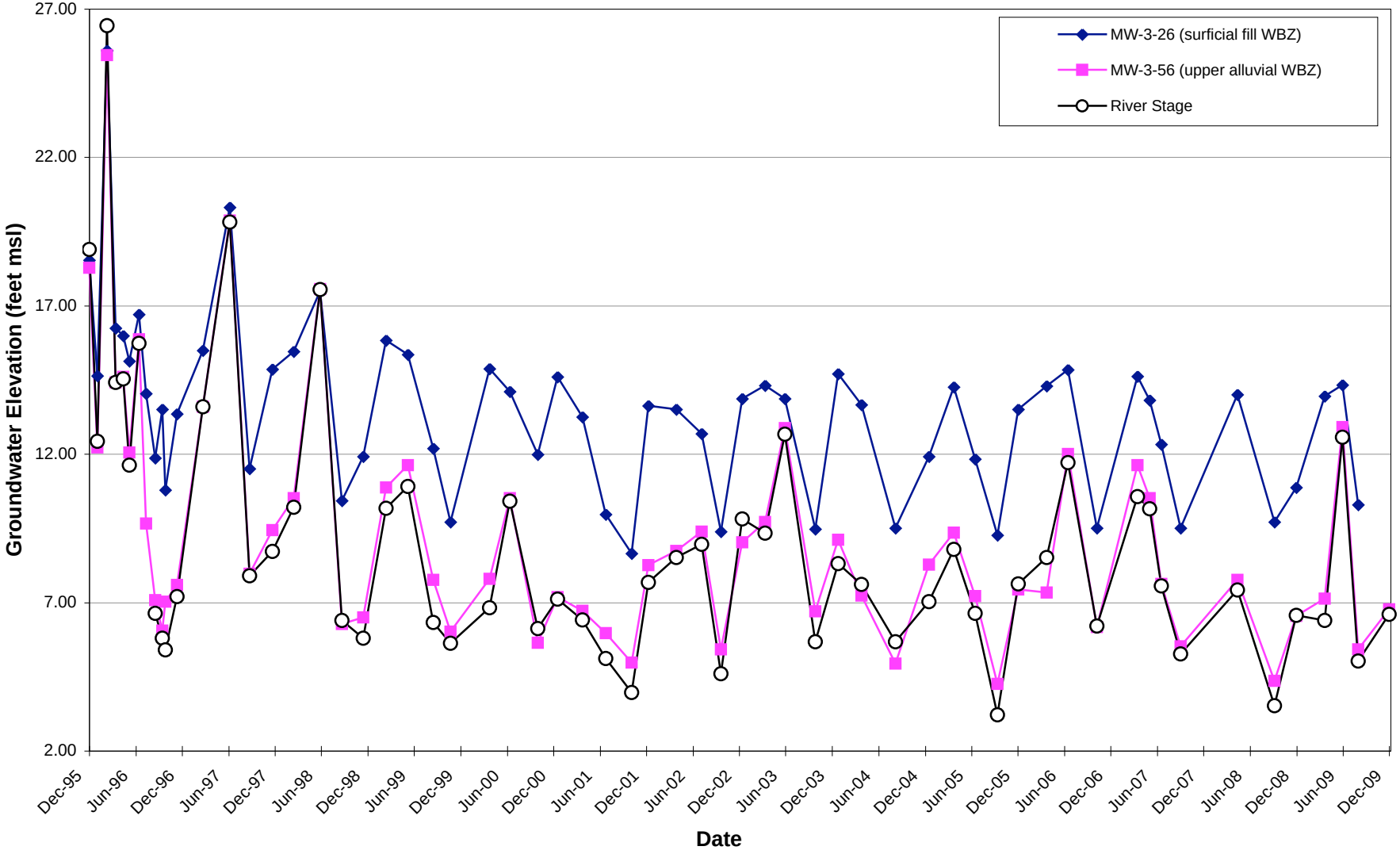
Groundwater Hydrograph
Well MW-1 Well Cluster



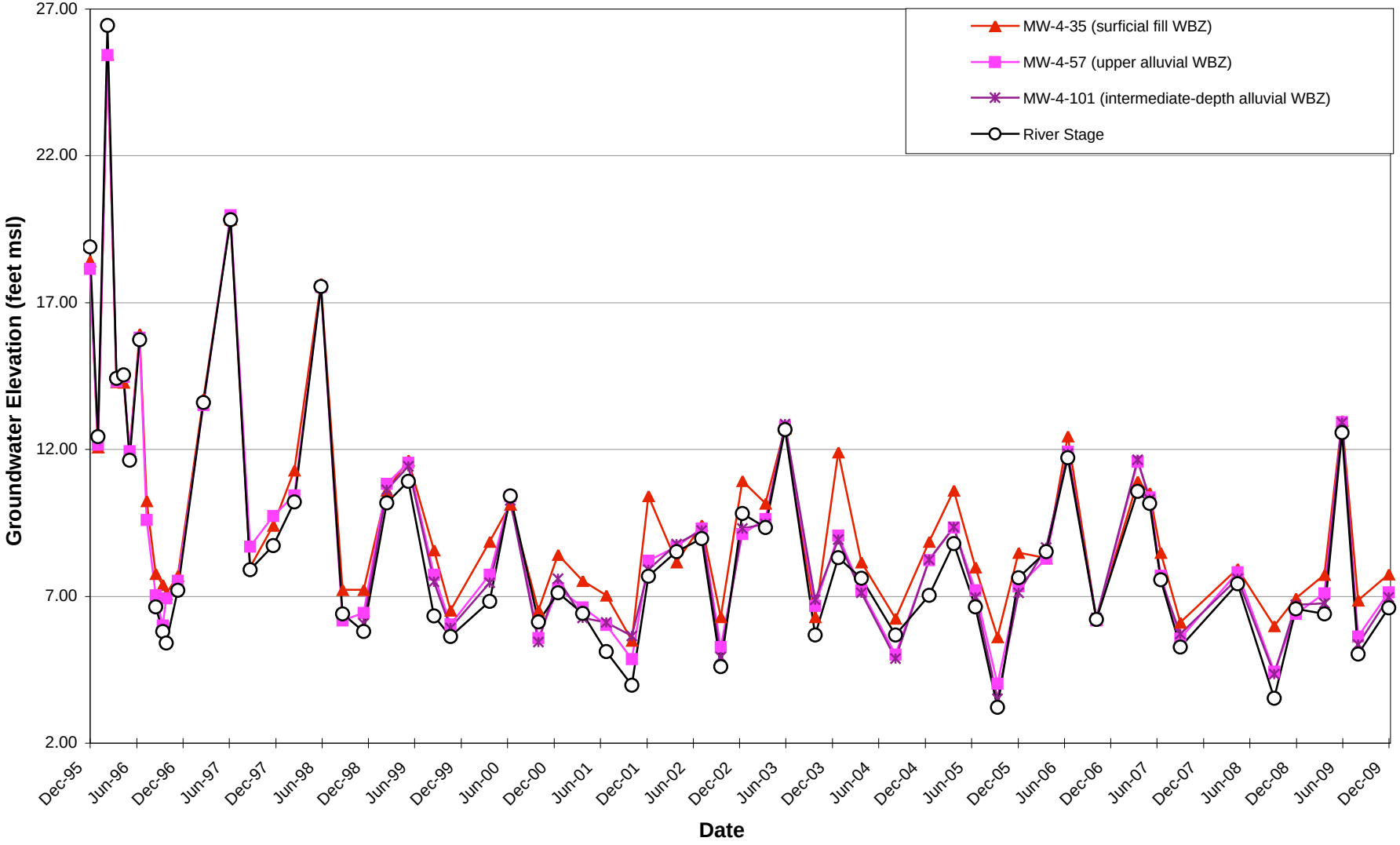
Groundwater Hydrograph
MW-2 Well Cluster



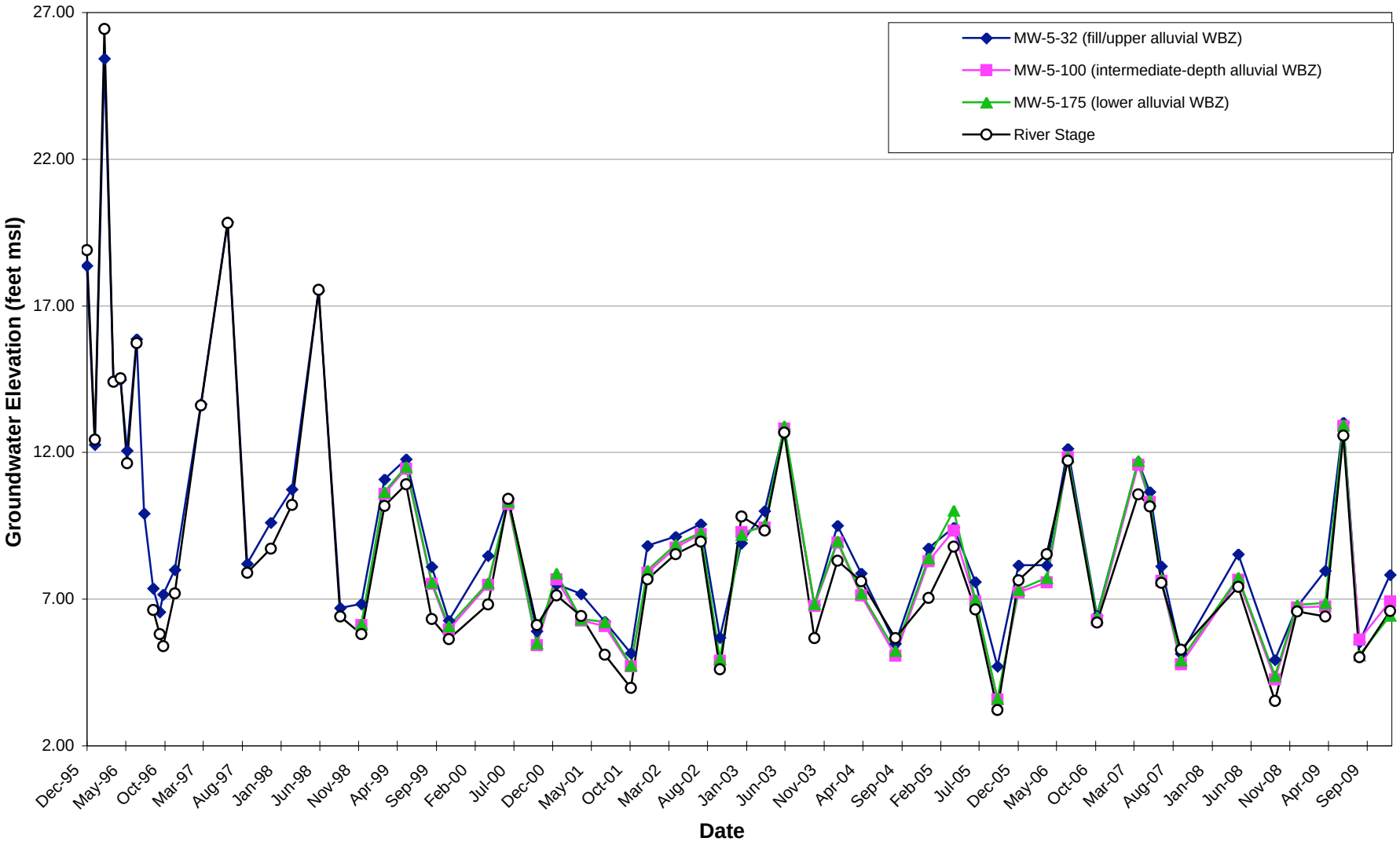
Groundwater Hydrograph
MW-3 Well Cluster



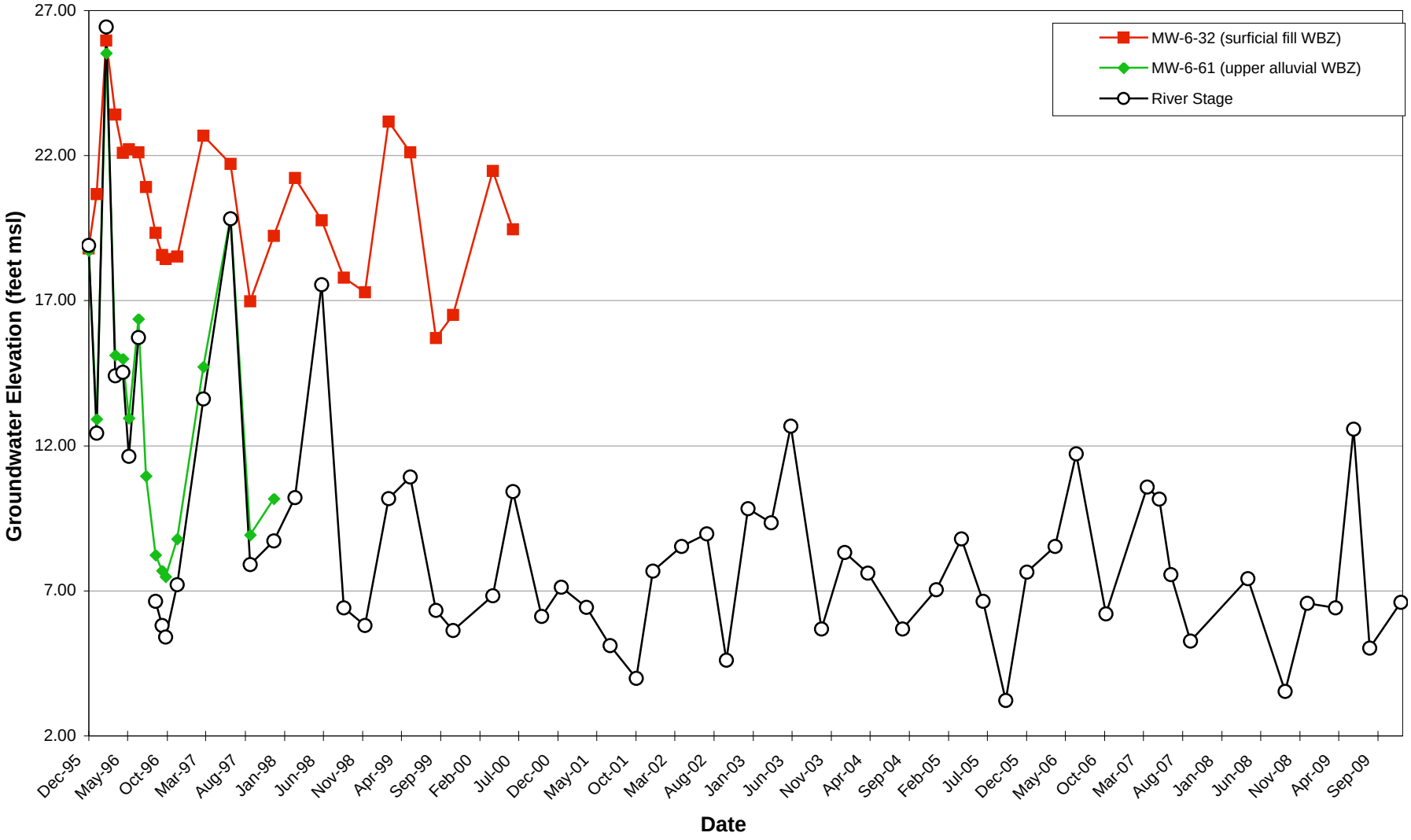
Groundwater Hydrograph
MW-4 Well Cluster



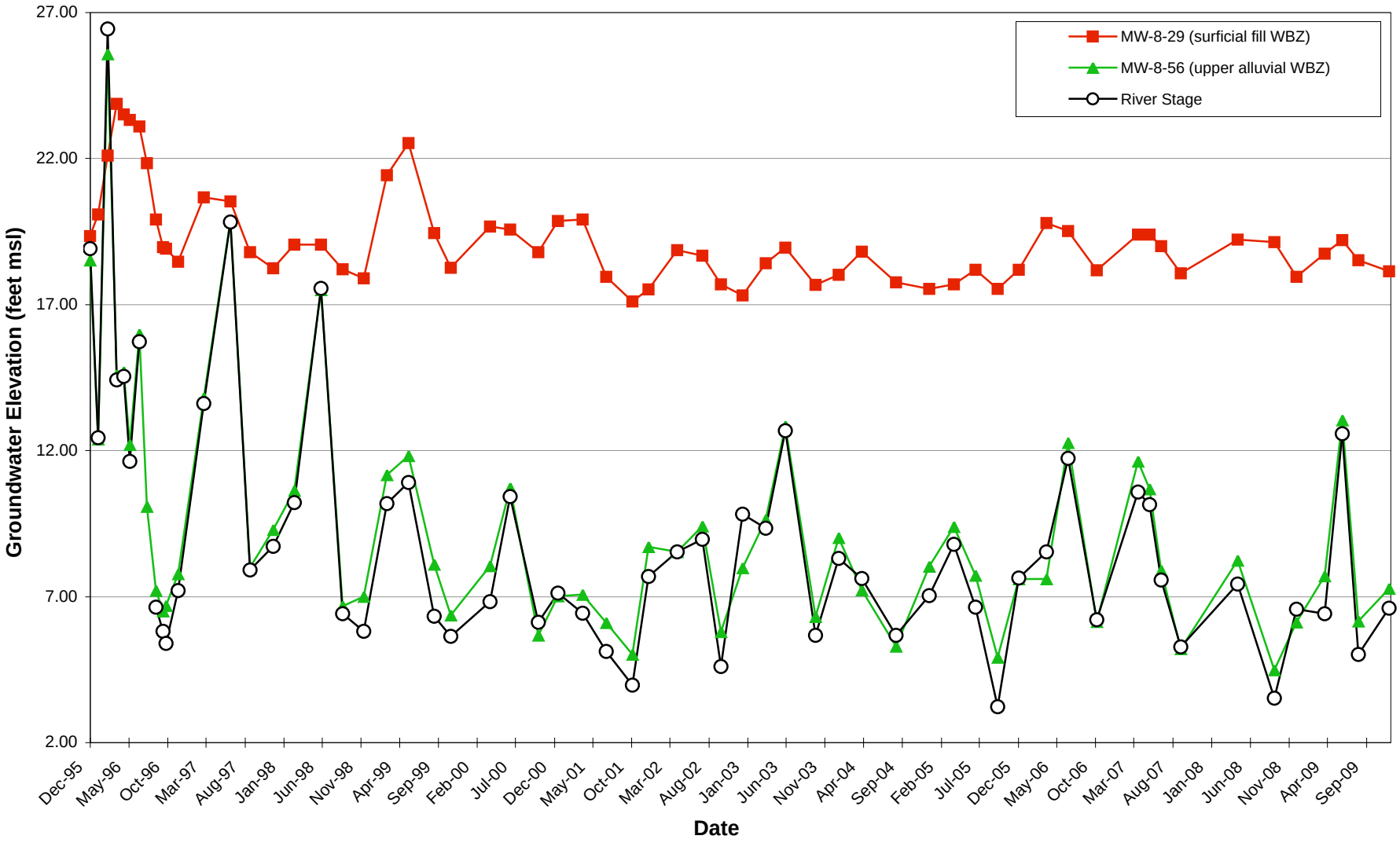
Groundwater Hydrograph
MW-5 Well Cluster



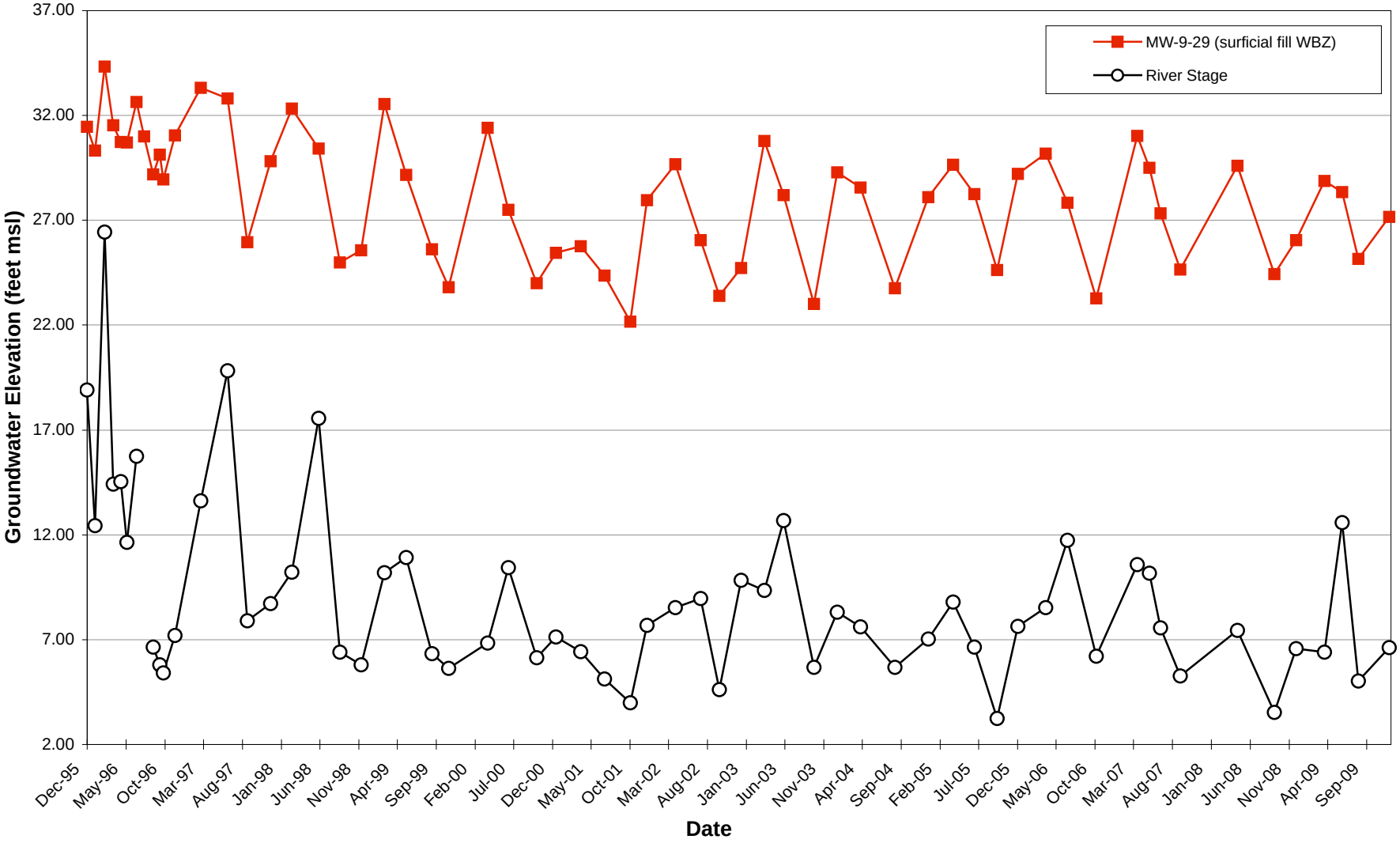
Groundwater Hydrograph
MW-6 Well Cluster



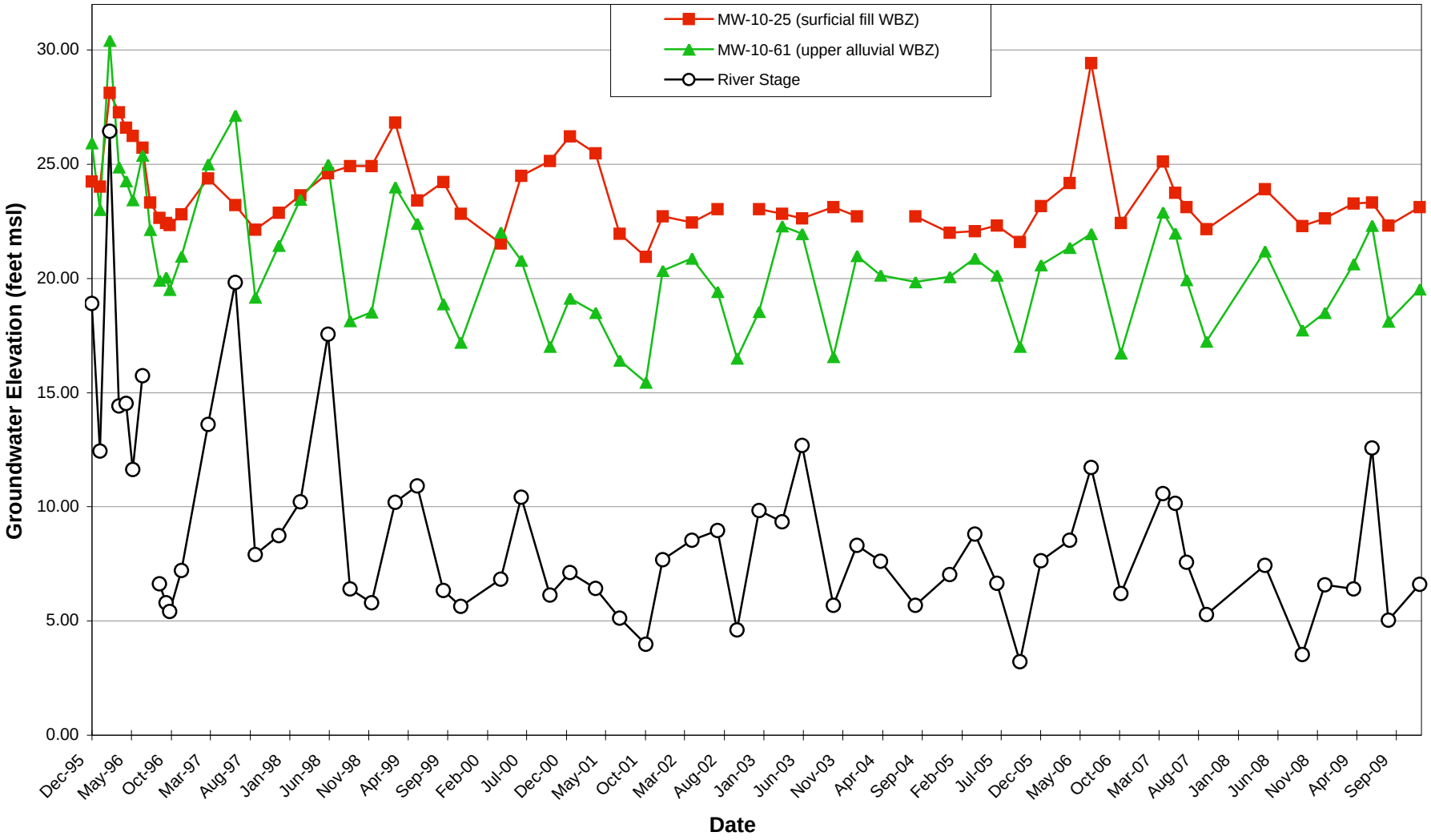
Groundwater Hydrograph
MW-8 Well Cluster



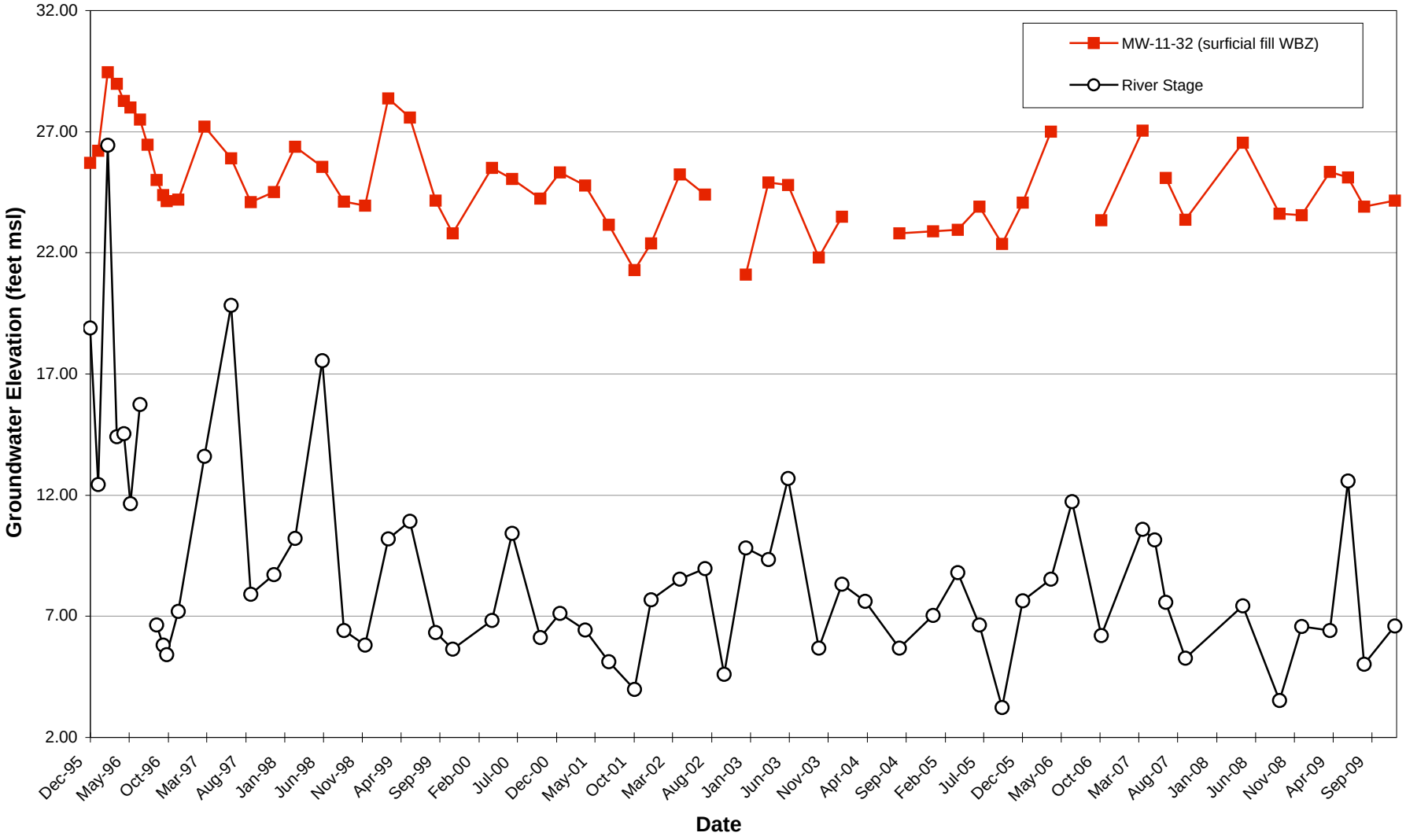
Groundwater Hydrograph
Well MW-9-29



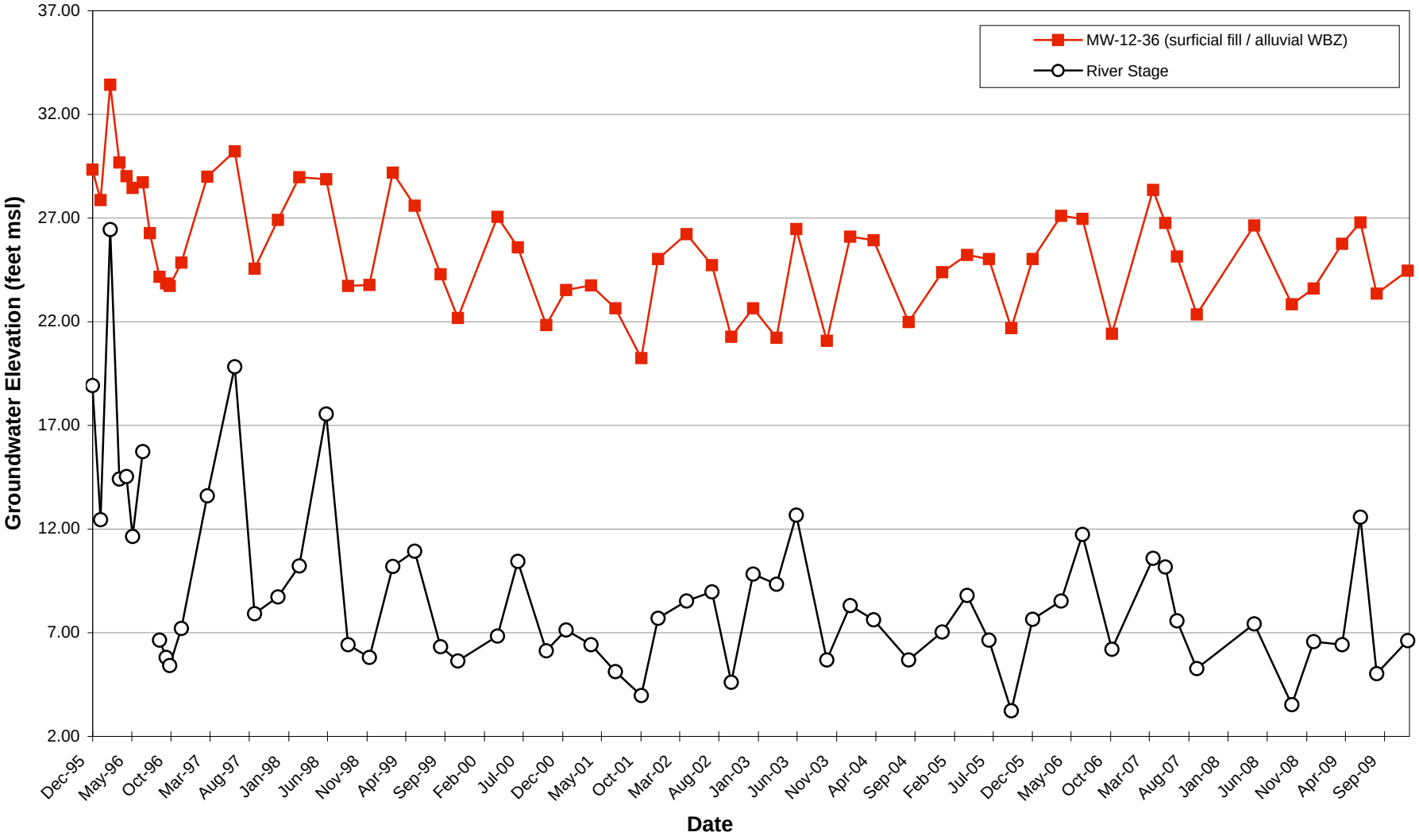
Groundwater Hydrograph
MW-10 Well Cluster



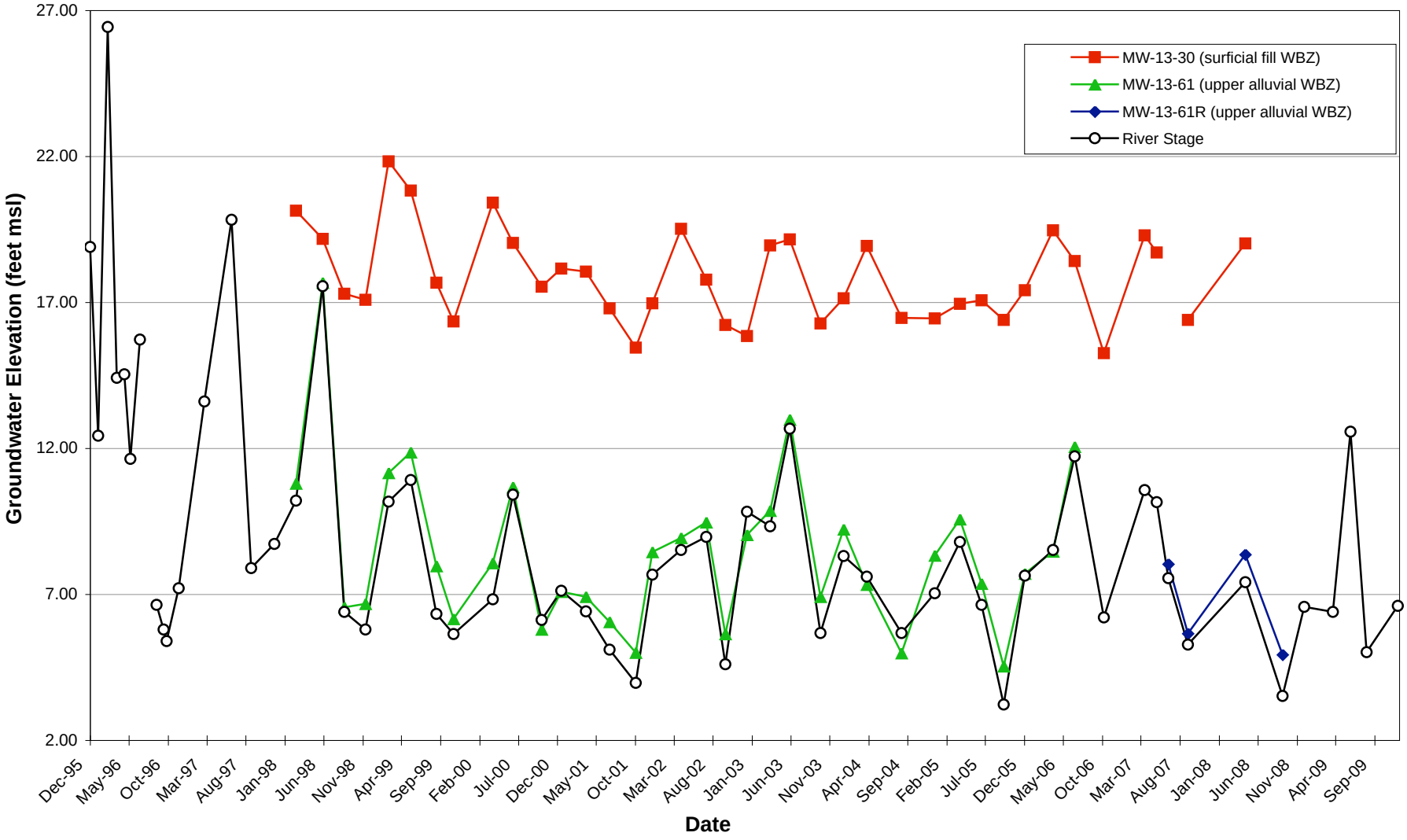
Groundwater Hydrograph
Well MW-11-32



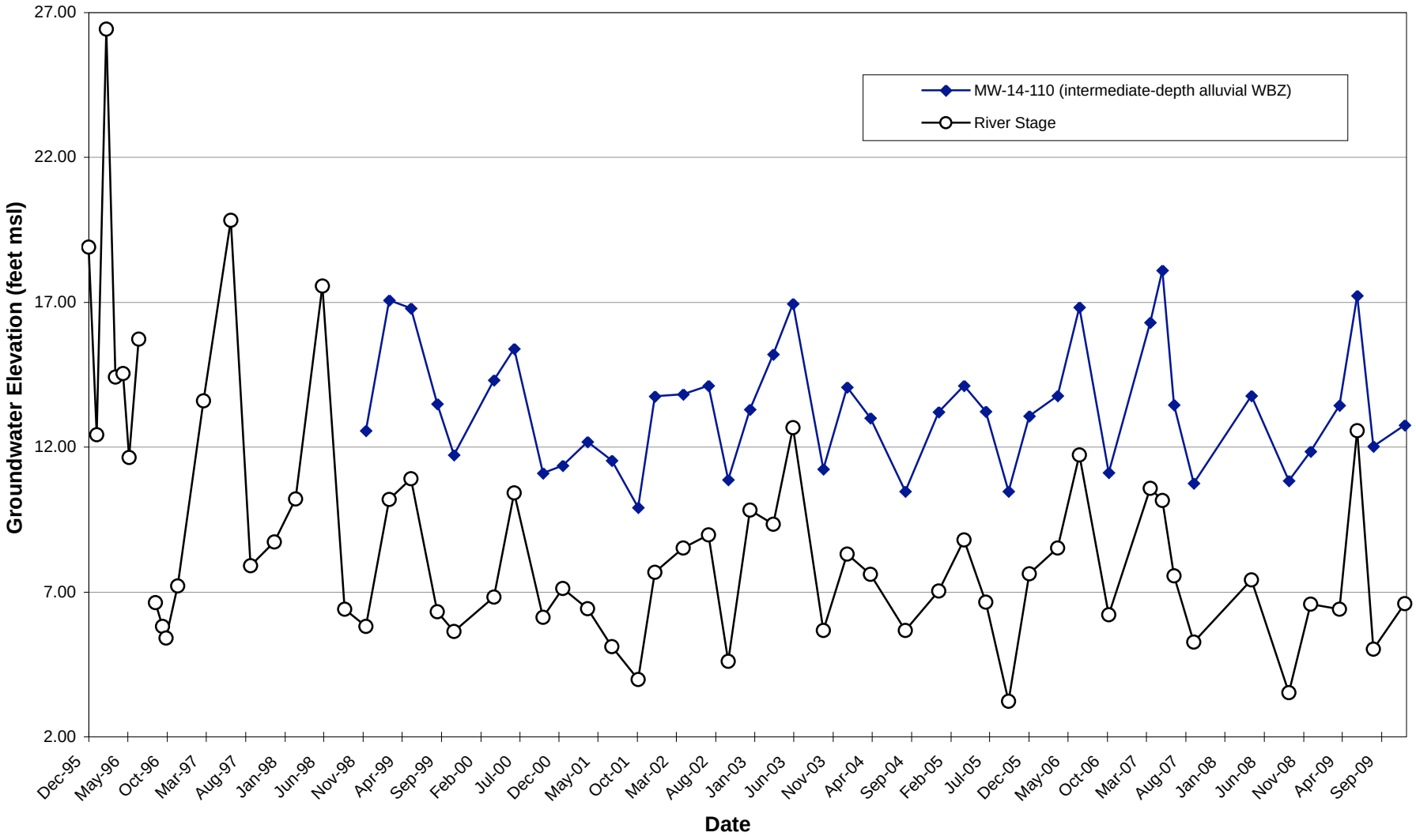
Groundwater Hydrograph
Well MW-12-36



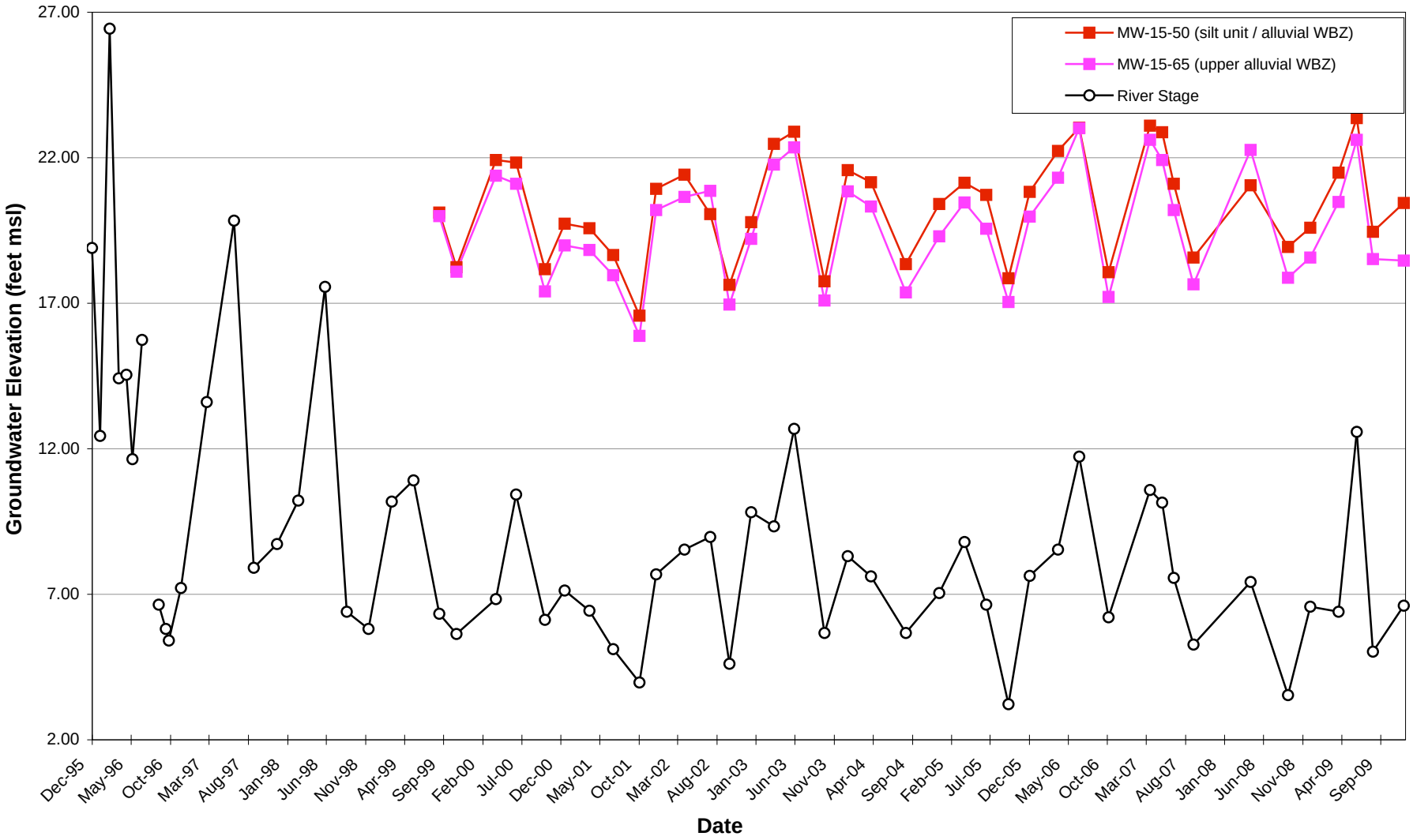
Groundwater Hydrograph
MW-13 Well Cluster



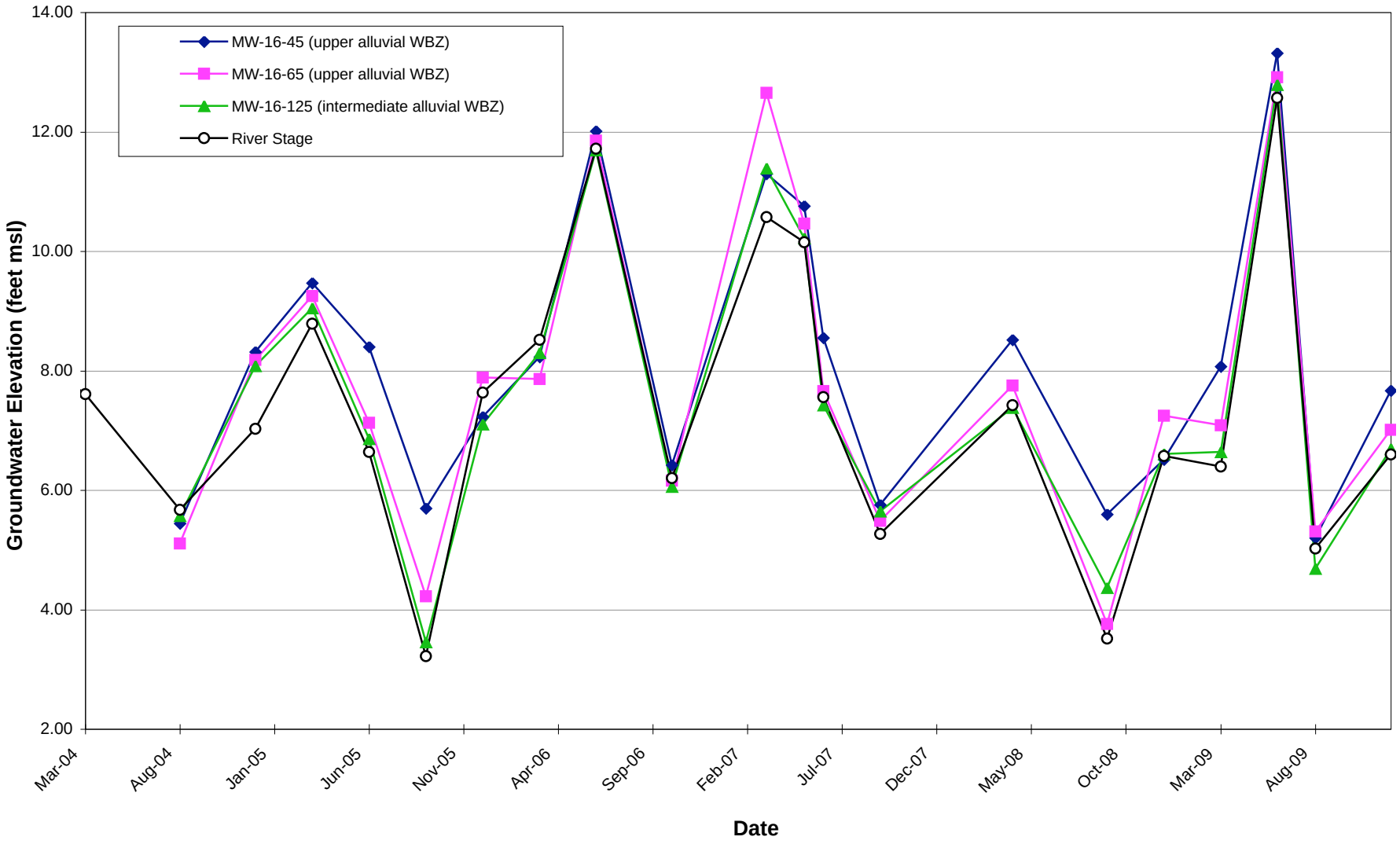
Groundwater Hydrograph
Well MW-14-110



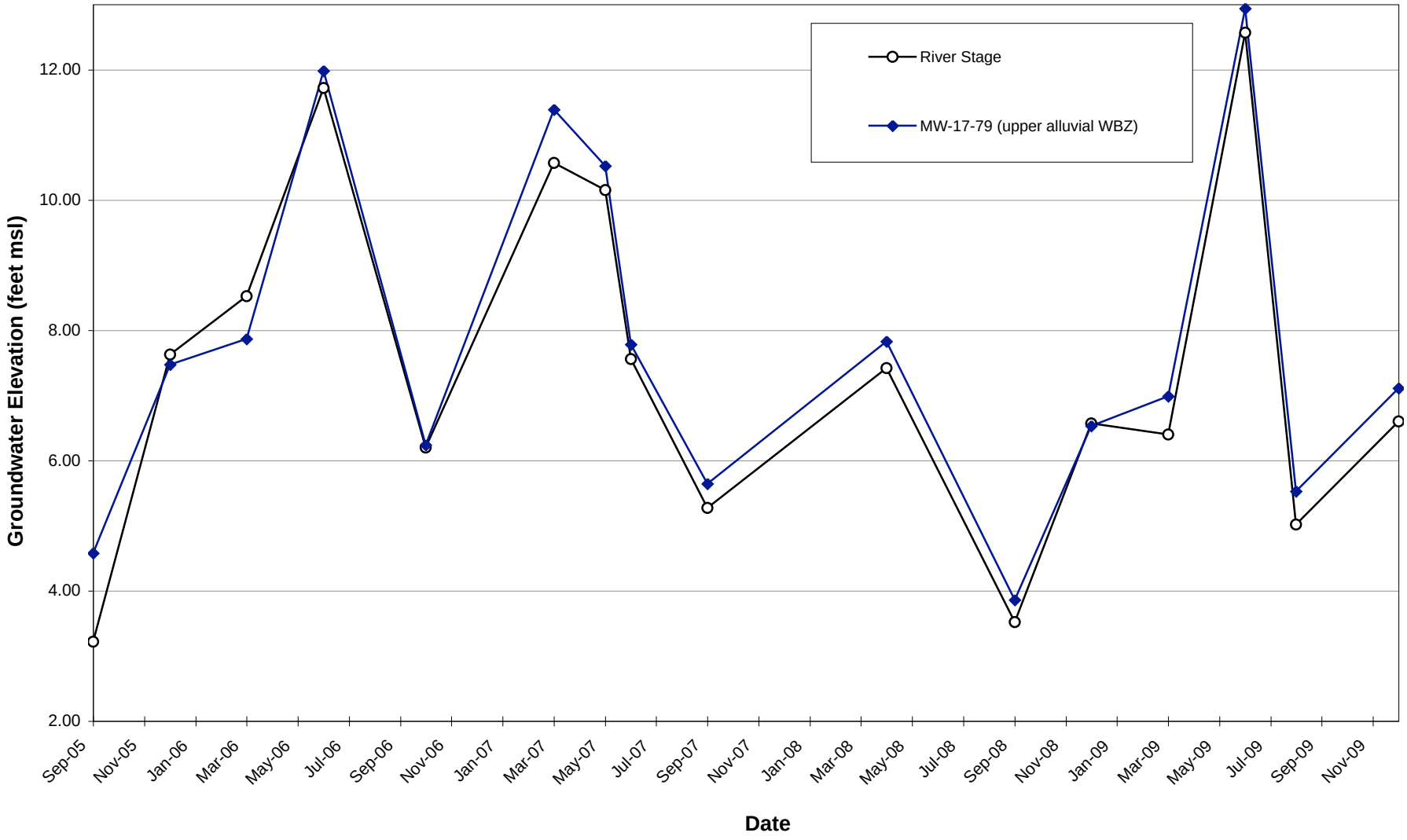
Groundwater Hydrograph
MW-15 Well Cluster



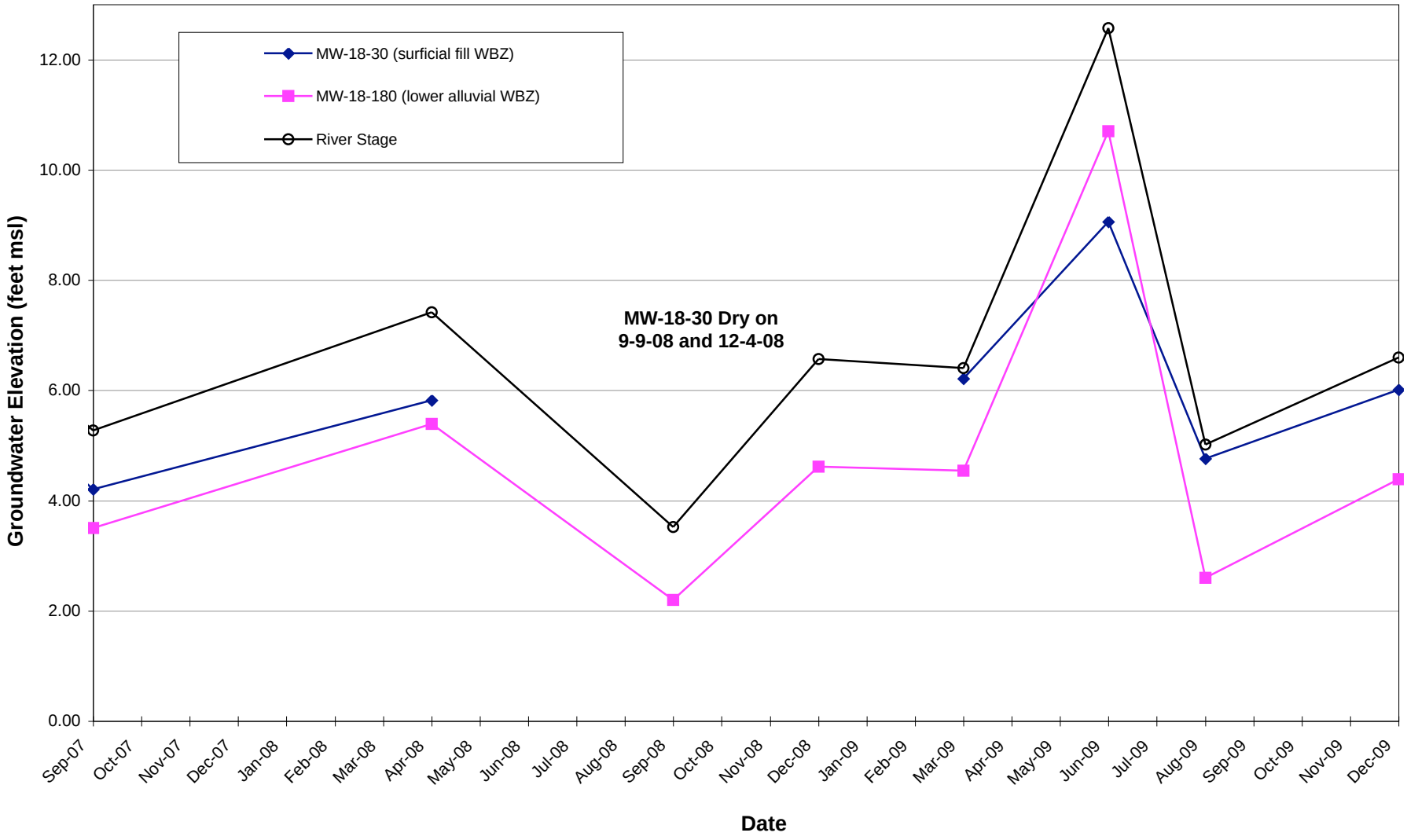
Groundwater Hydrograph
MW-16 Well Cluster



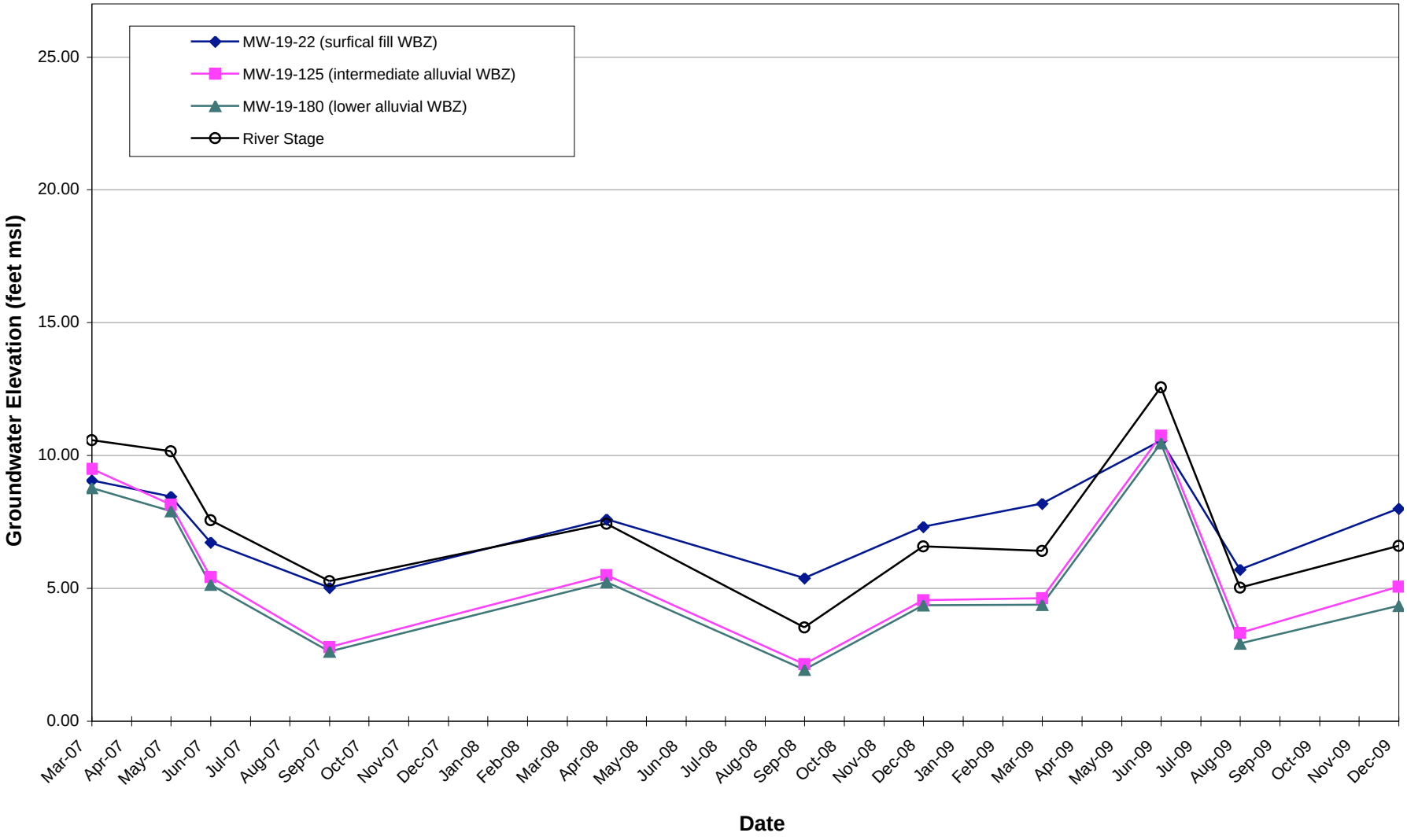
Groundwater Hydrograph
MW-17-79 Well



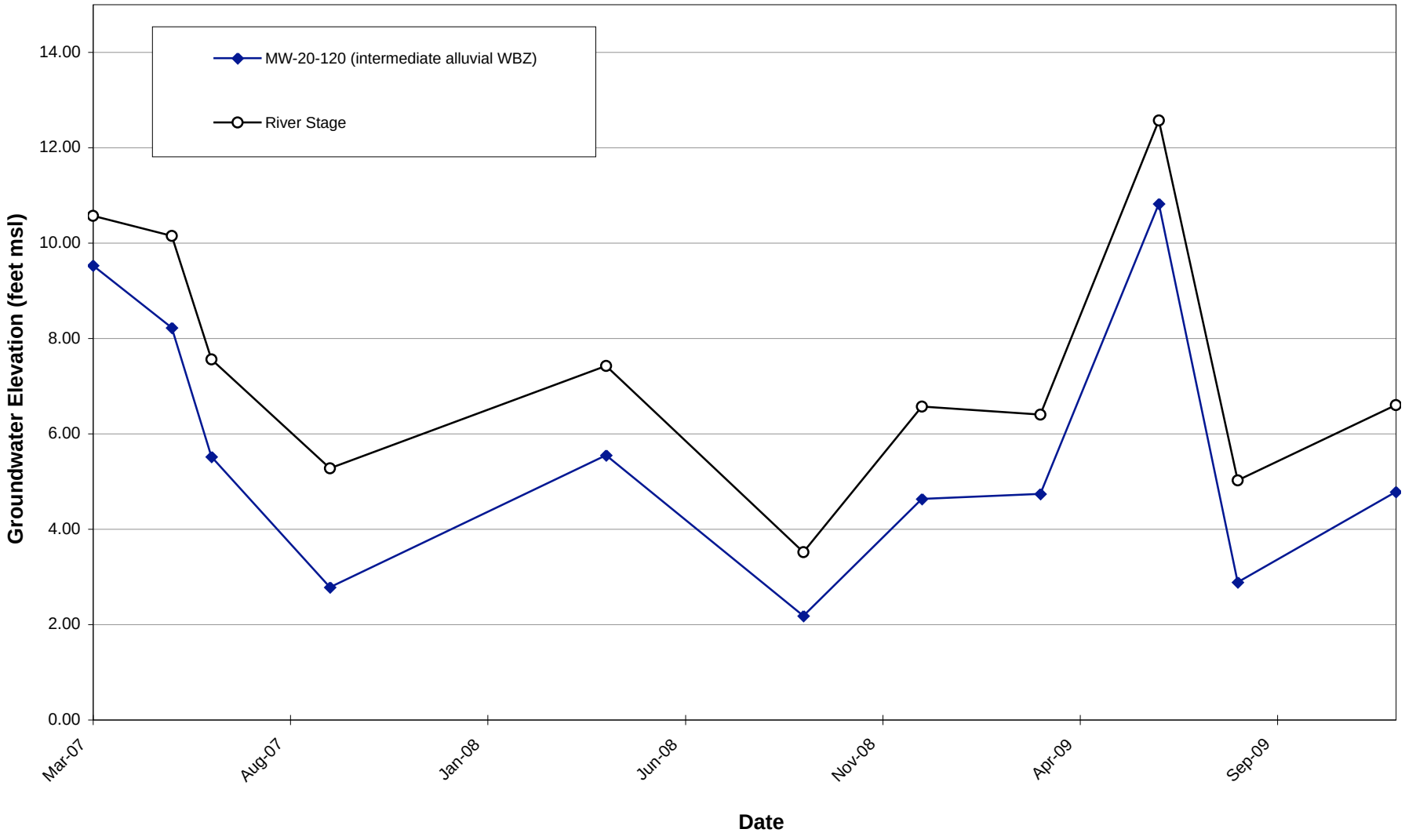
Groundwater Hydrograph
MW-18 Well Cluster



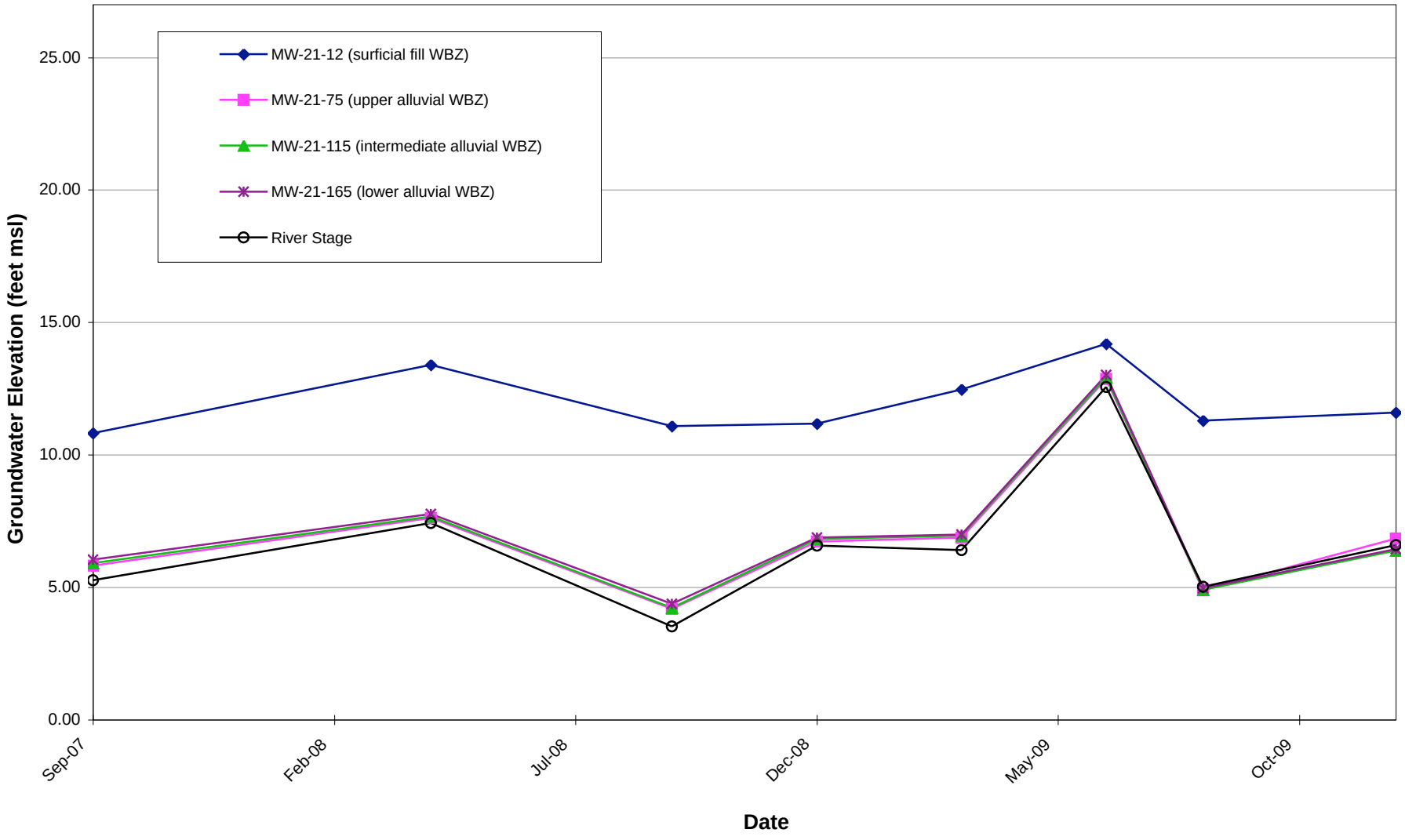
Groundwater Hydrograph
MW-19 Well Cluster



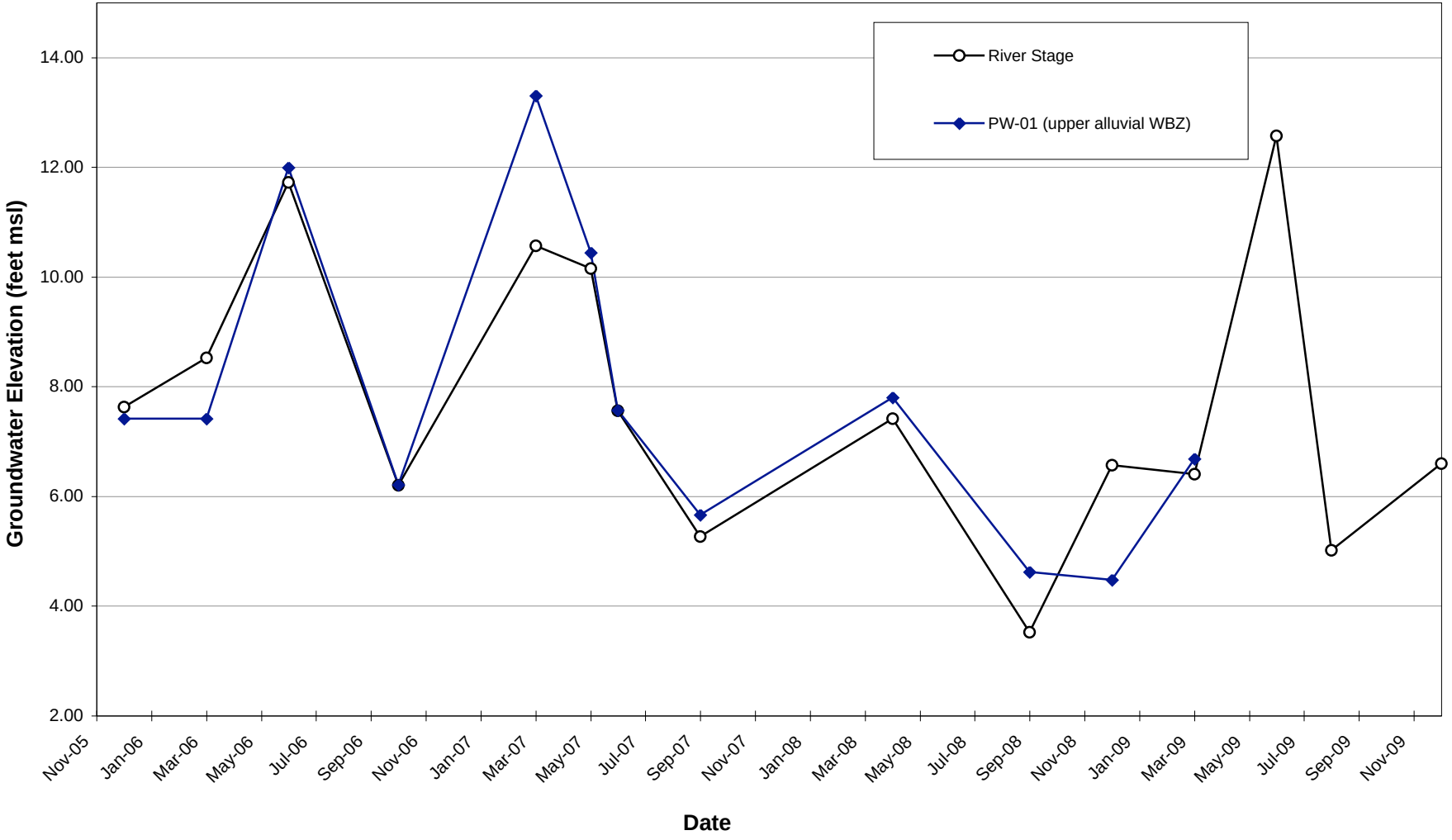
Groundwater Hydrograph
MW-20-120



Groundwater Hydrograph
MW-21 Well Cluster

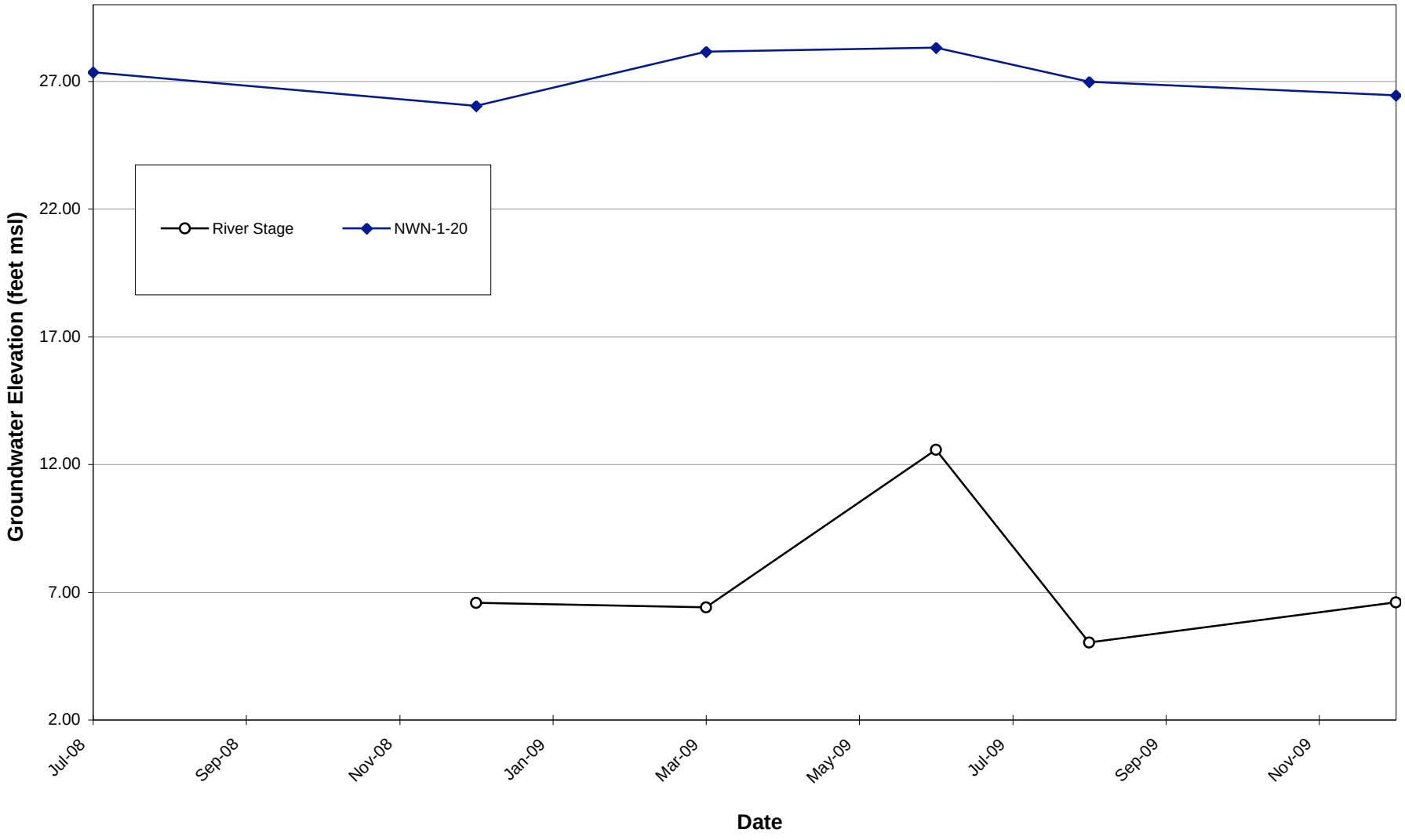


Groundwater Hydrograph
PW-01 Well

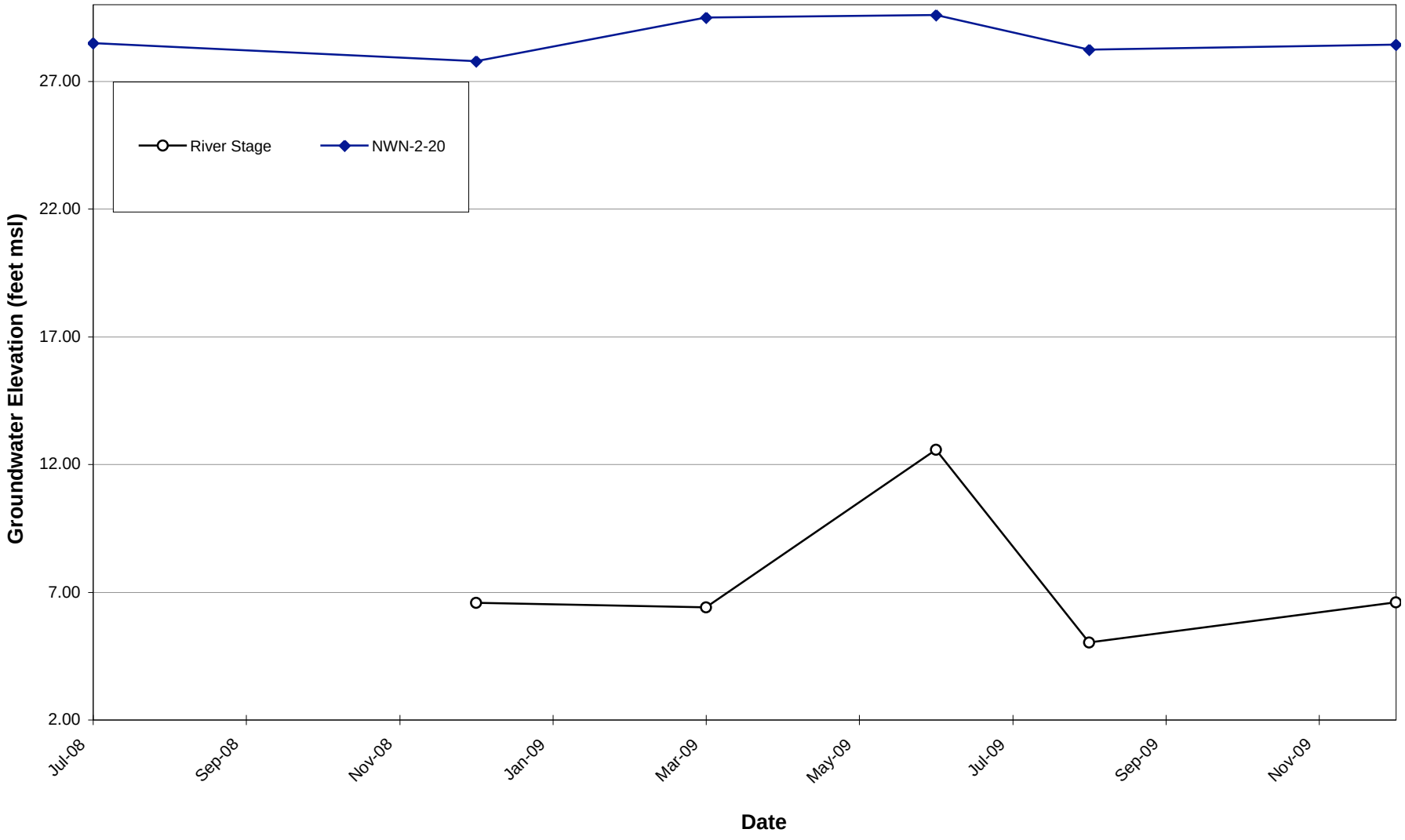


Note: Pump in well - Water level not measured post March 2009

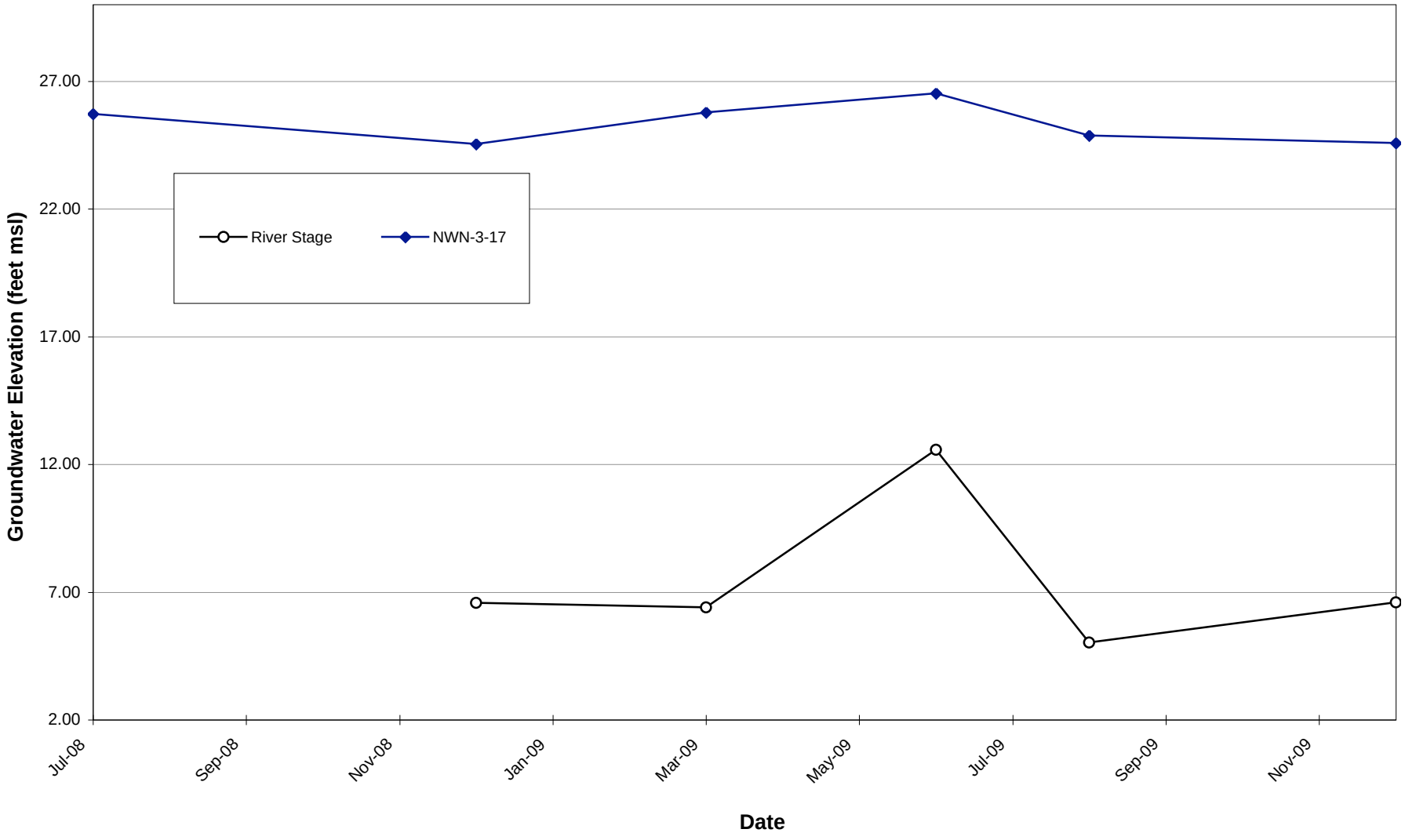
Groundwater Hydrograph
NWN-1-20 Well



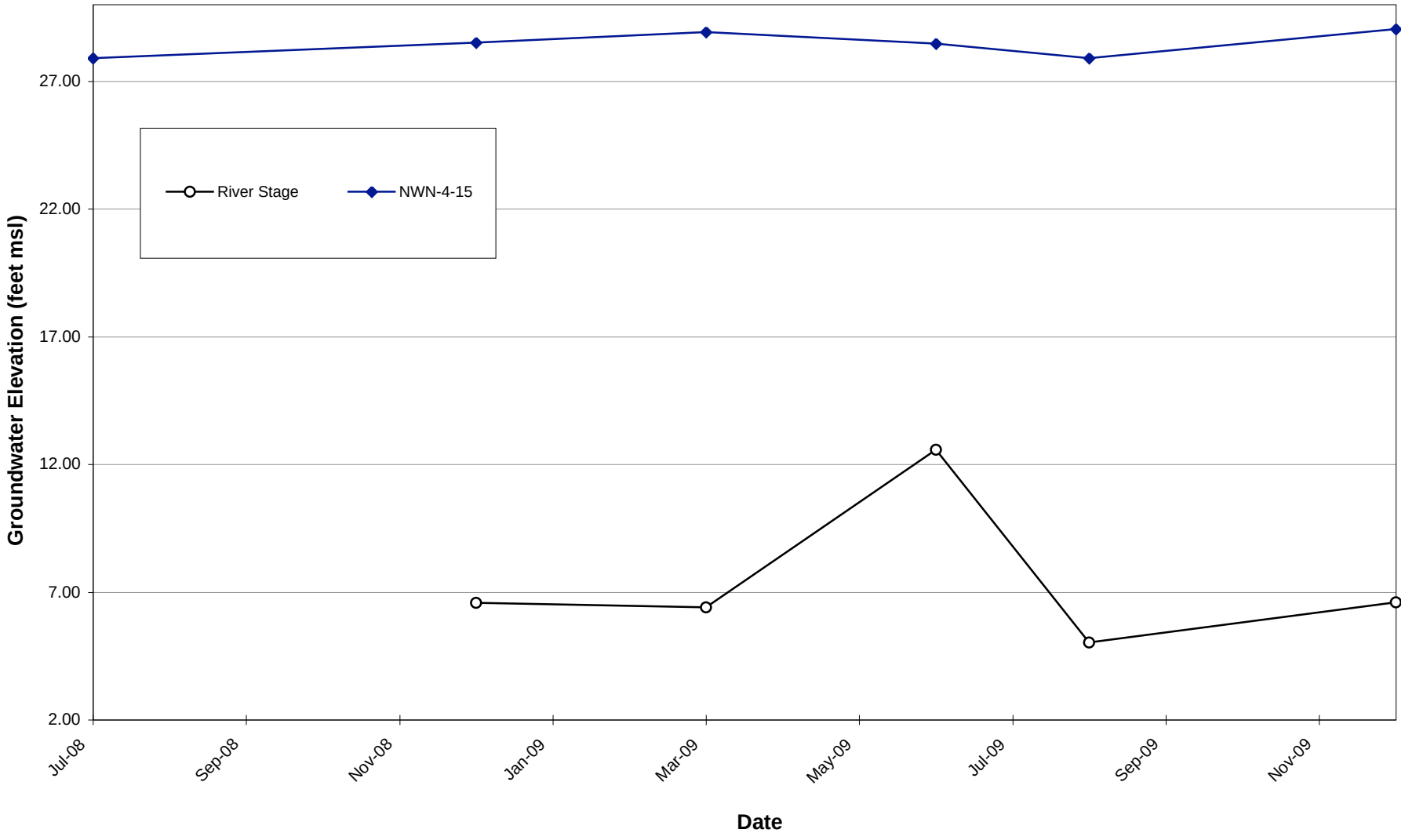
Groundwater Hydrograph
NWN-2-20 Well



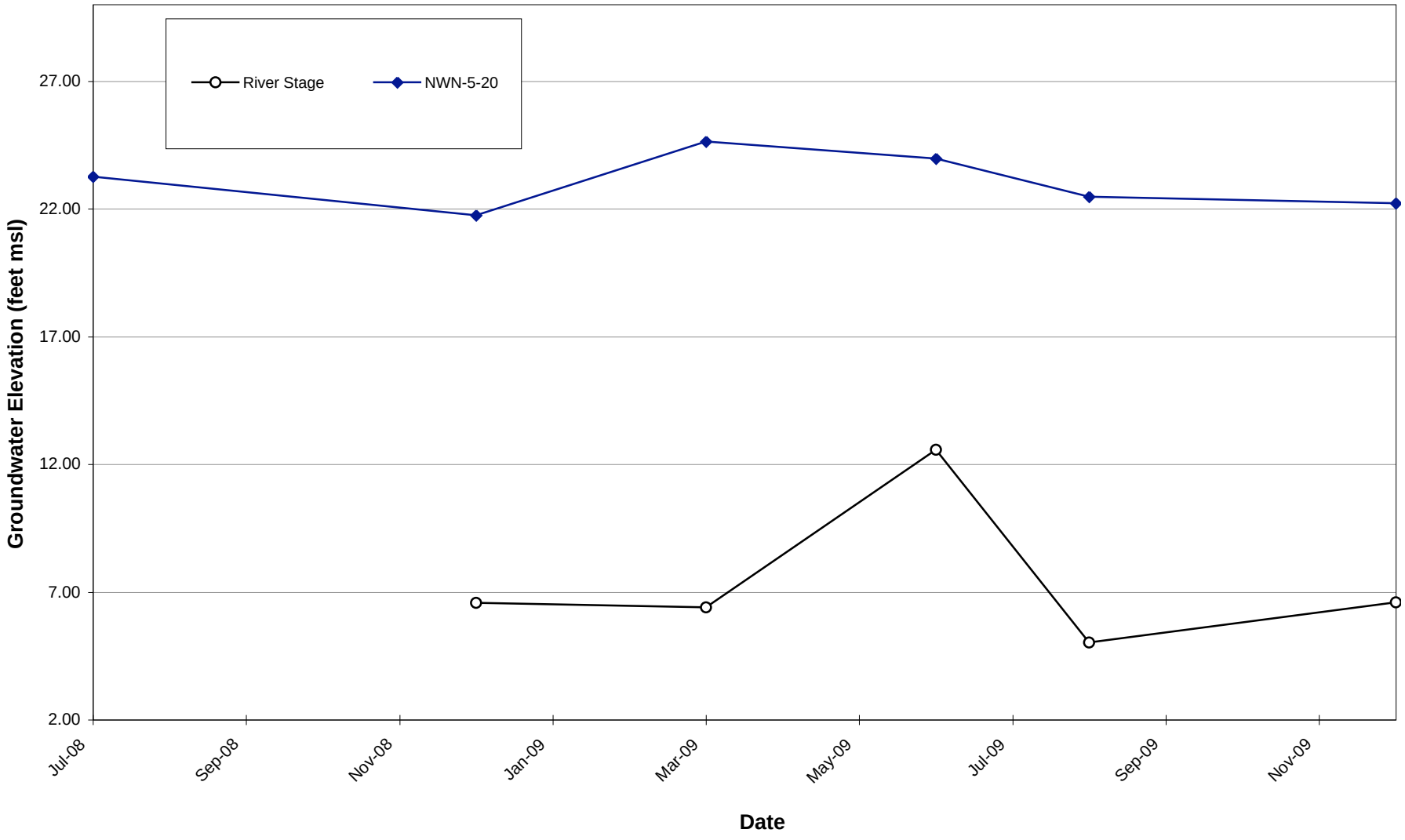
Groundwater Hydrograph
NWN-3-17 Well



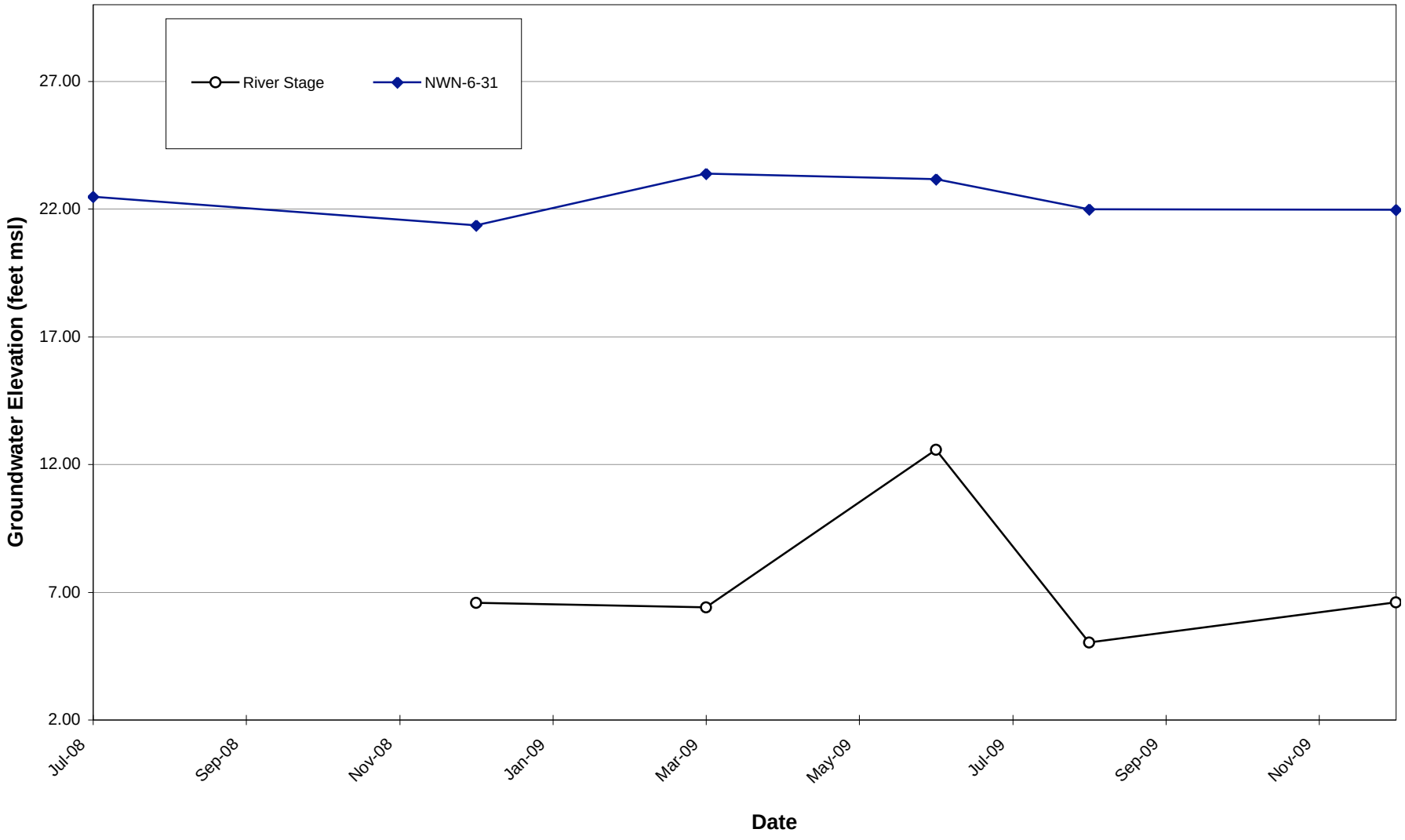
Groundwater Hydrograph
NWN-4-15 Well



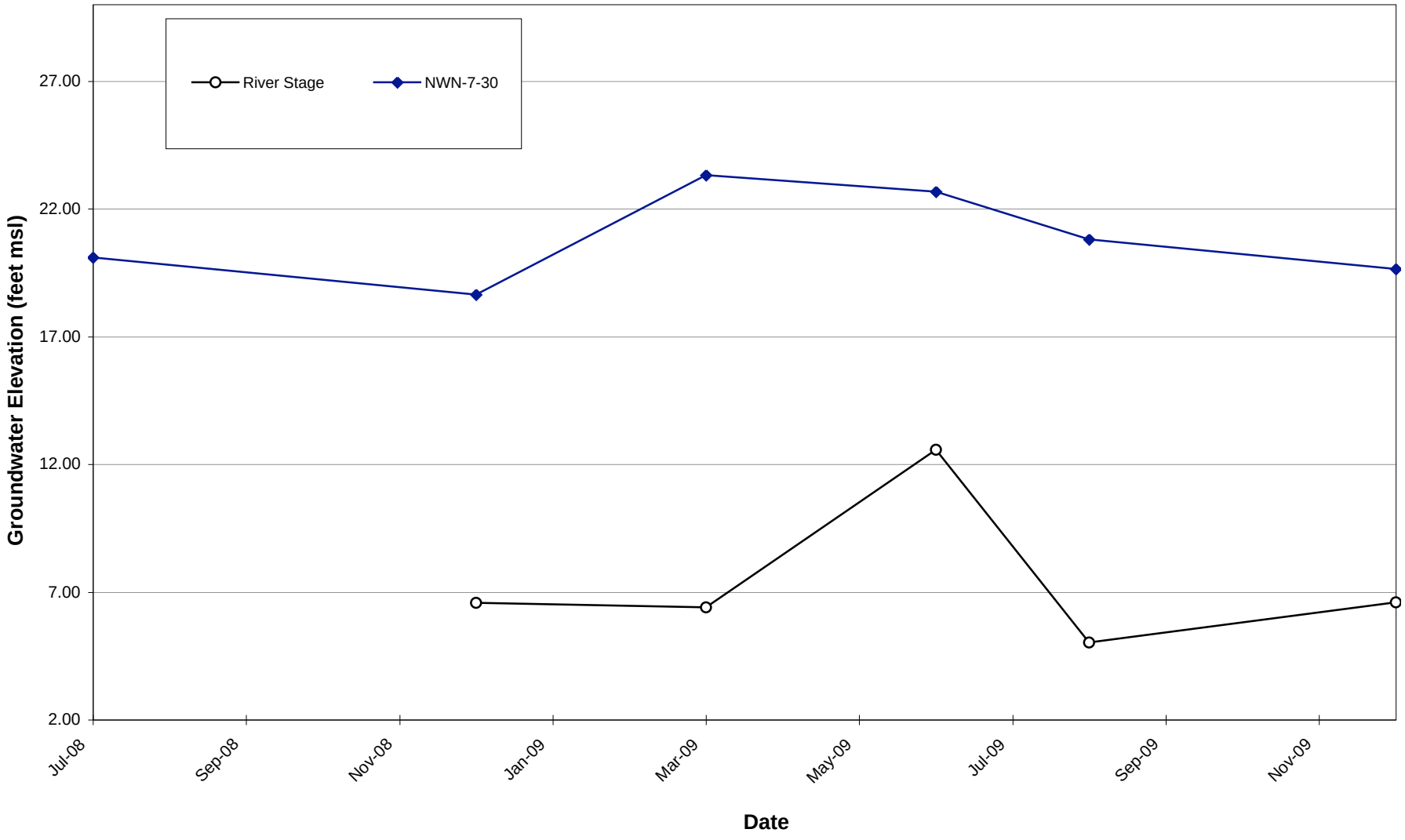
Groundwater Hydrograph
NWN-5-20 Well



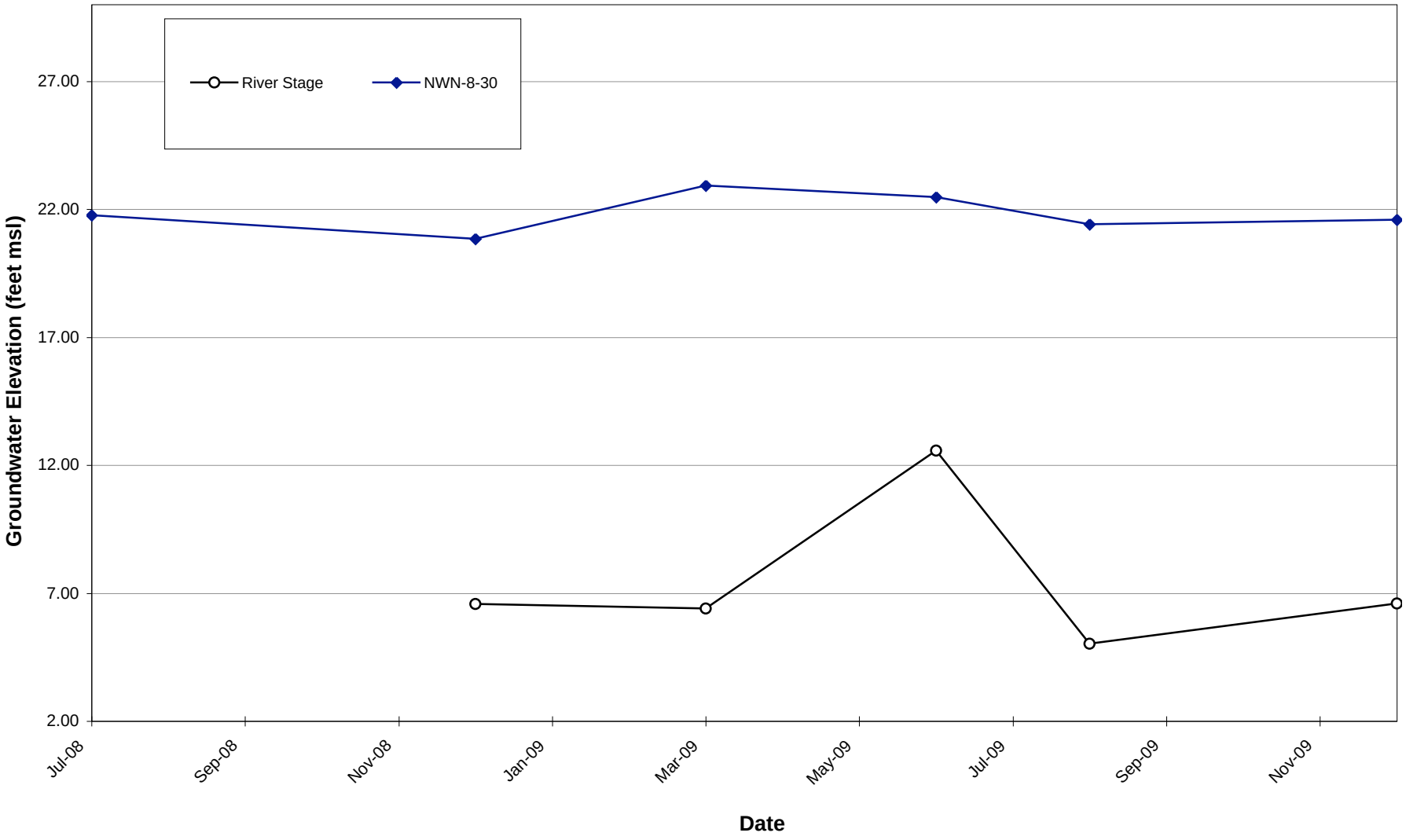
Groundwater Hydrograph
NWN-6-31 Well



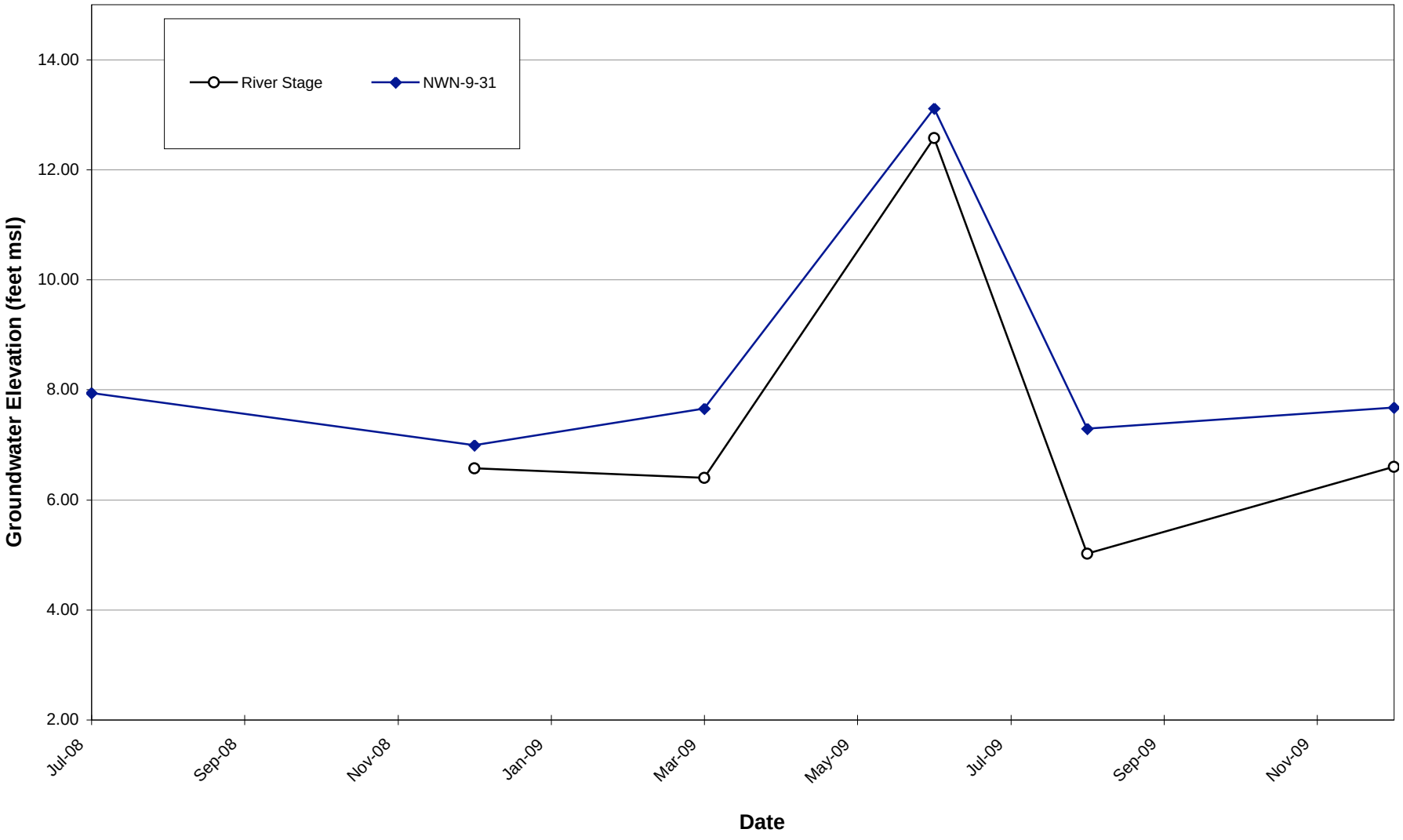
Groundwater Hydrograph
NWN-7-30 Well



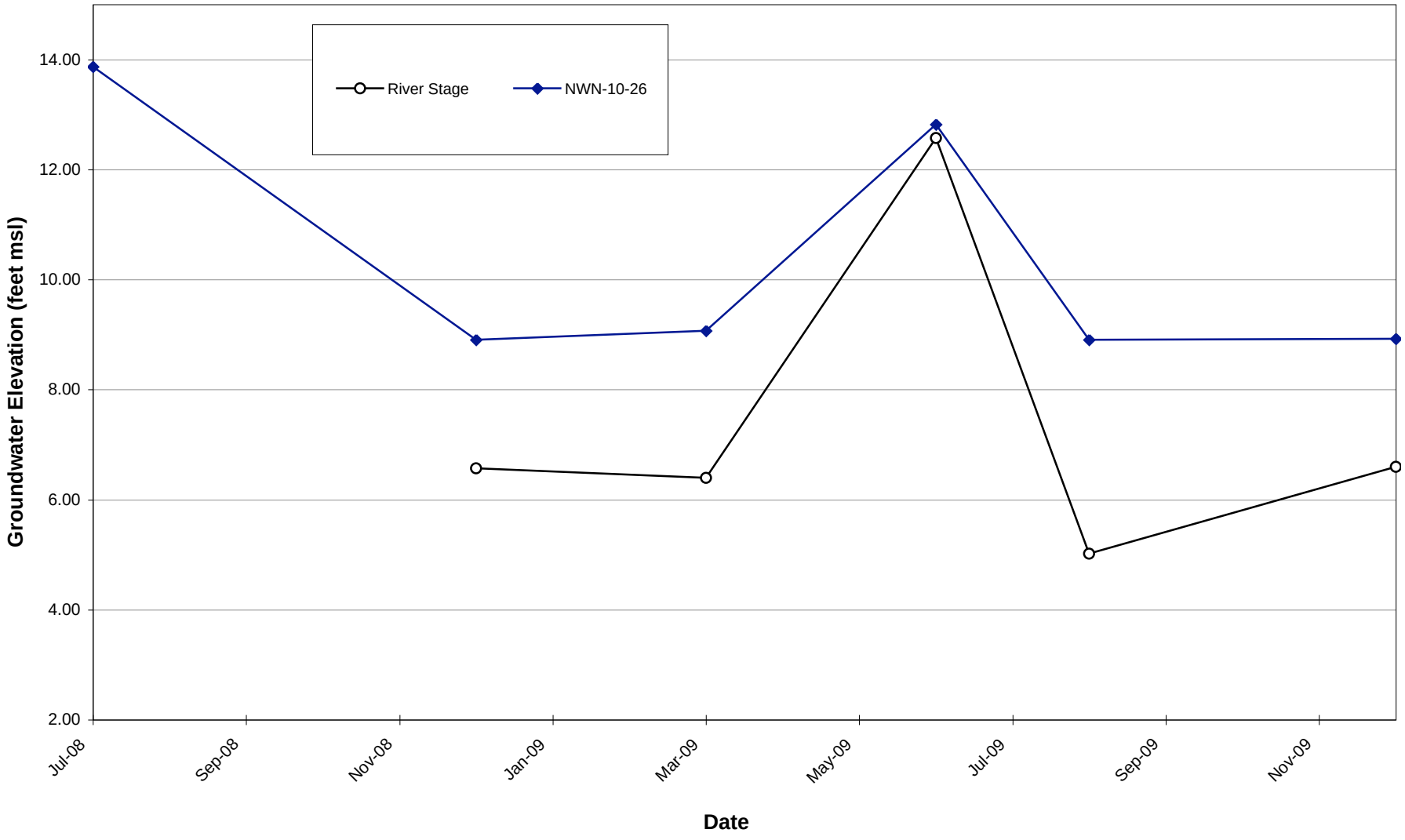
Groundwater Hydrograph
NWN-8-30 Well



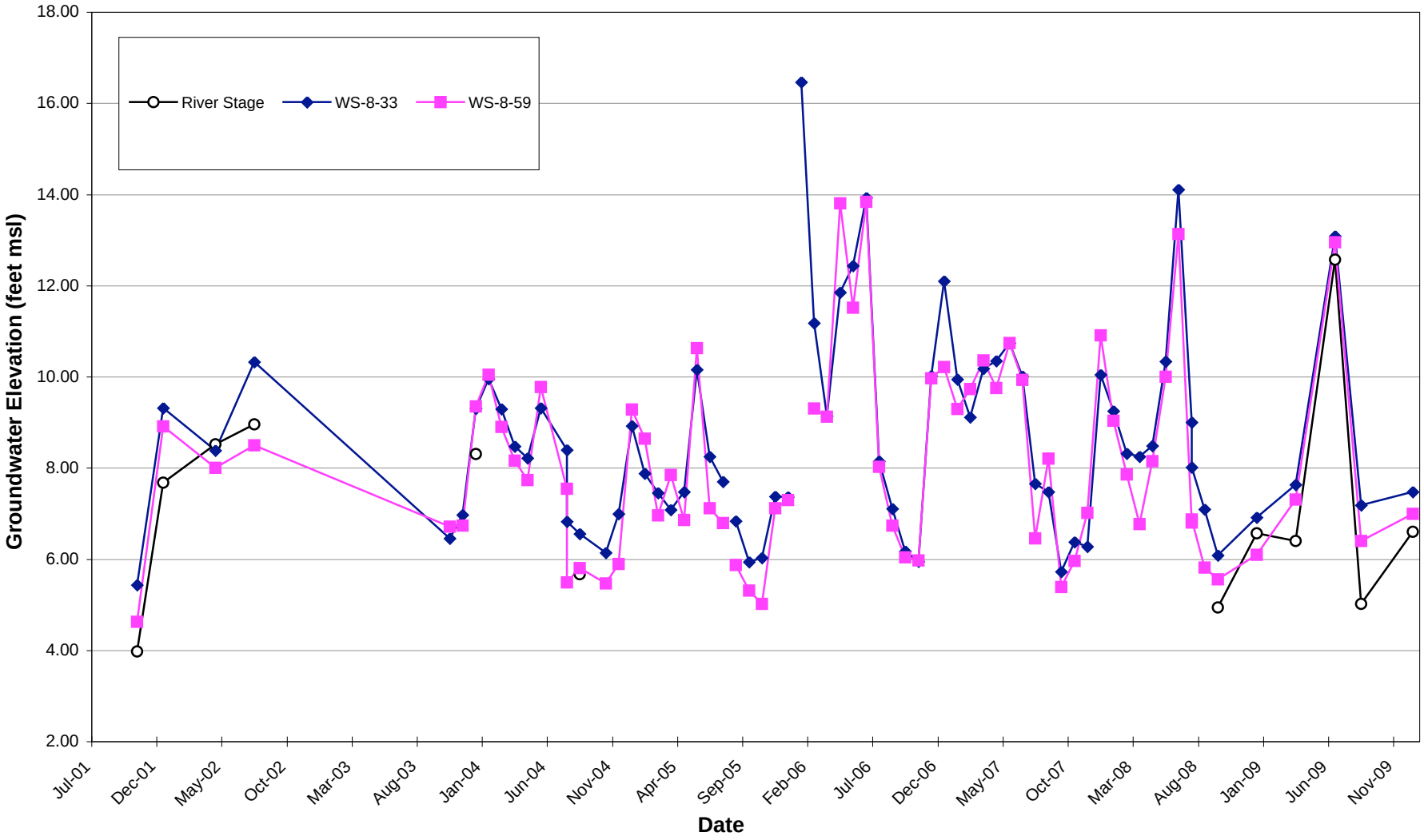
Groundwater Hydrograph
NWN-9-31 Well



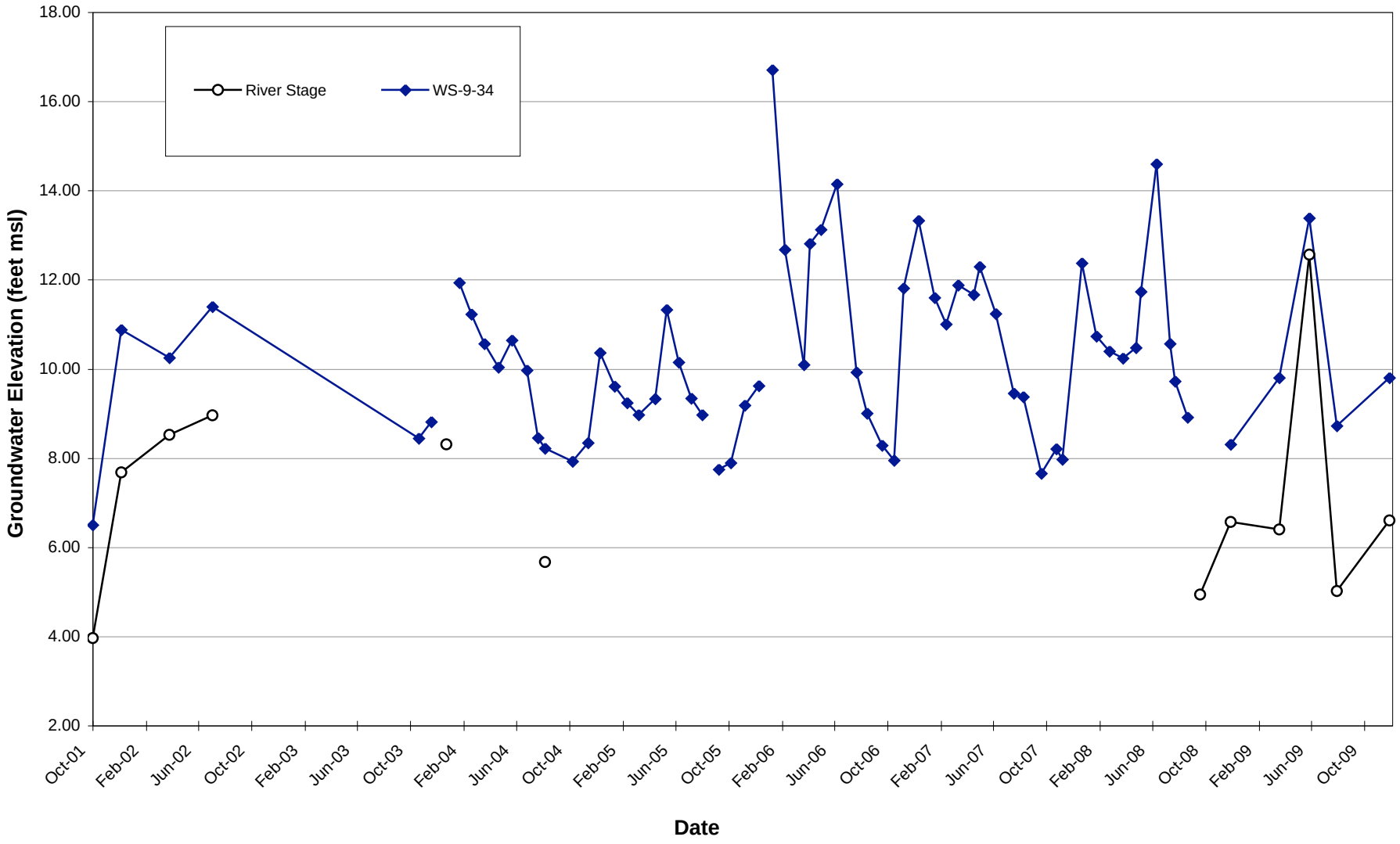
Groundwater Hydrograph
NWN-10-26 Well



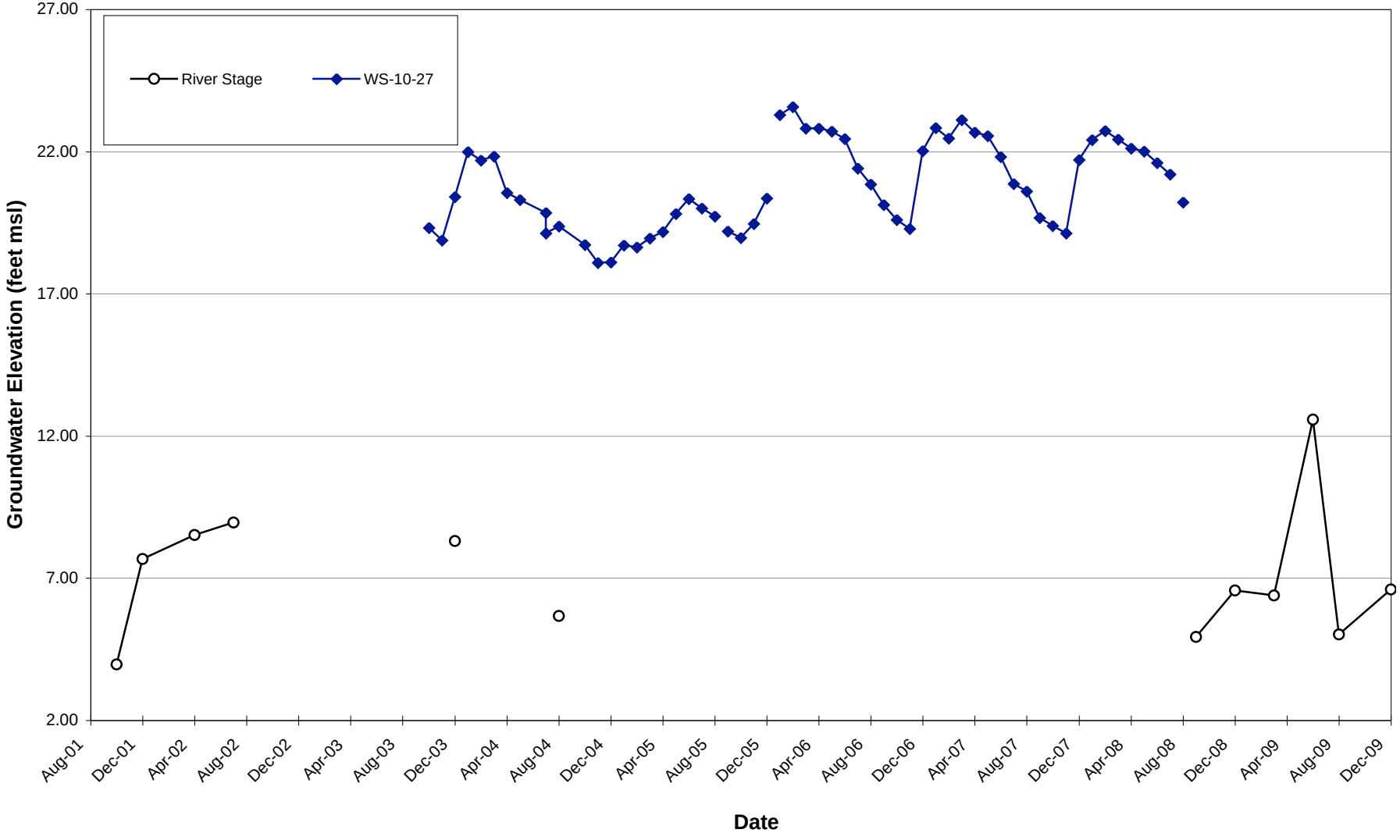
Groundwater Hydrograph
WS-8 Well Cluster



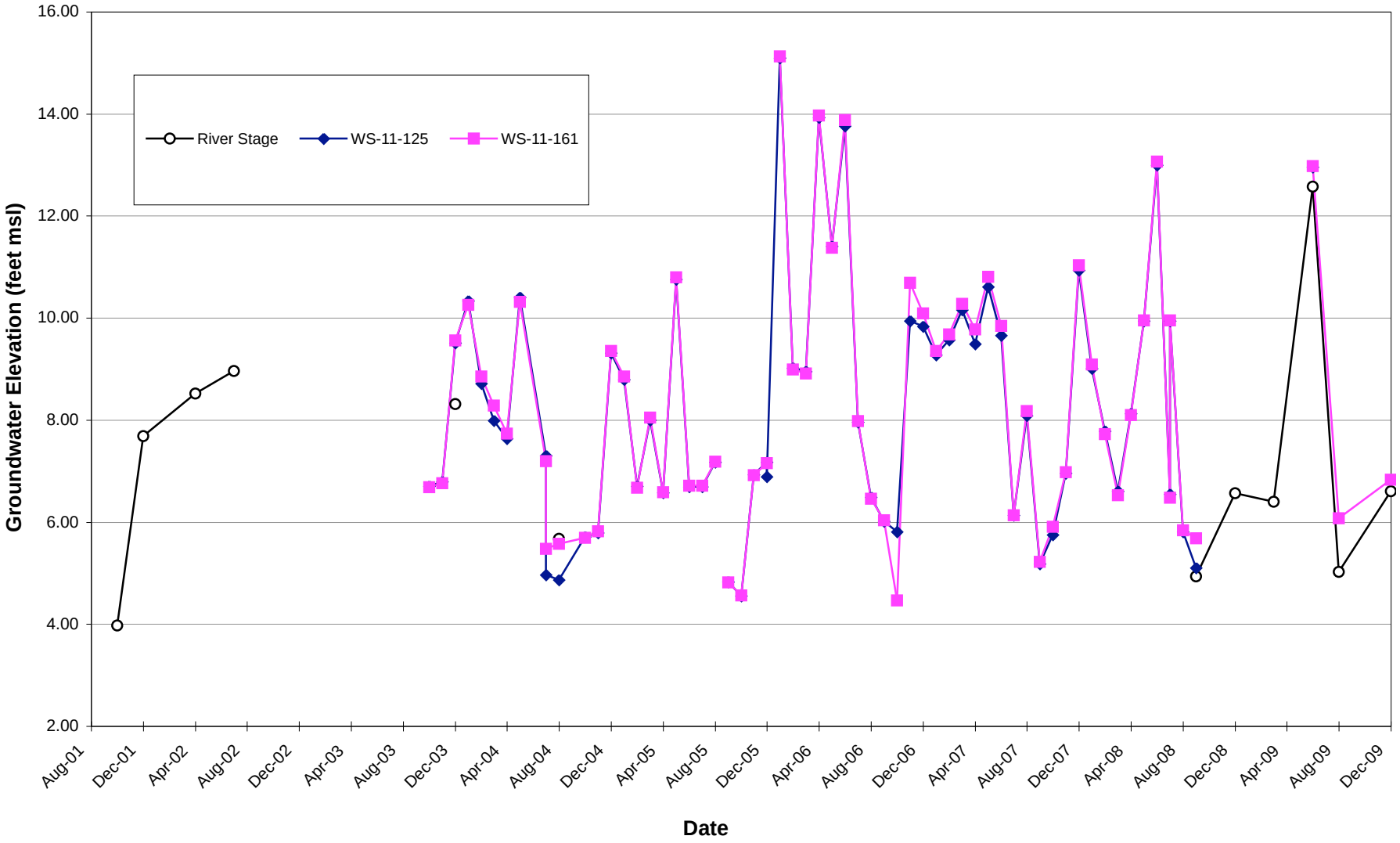
Groundwater Hydrograph
WS-9-34 Well



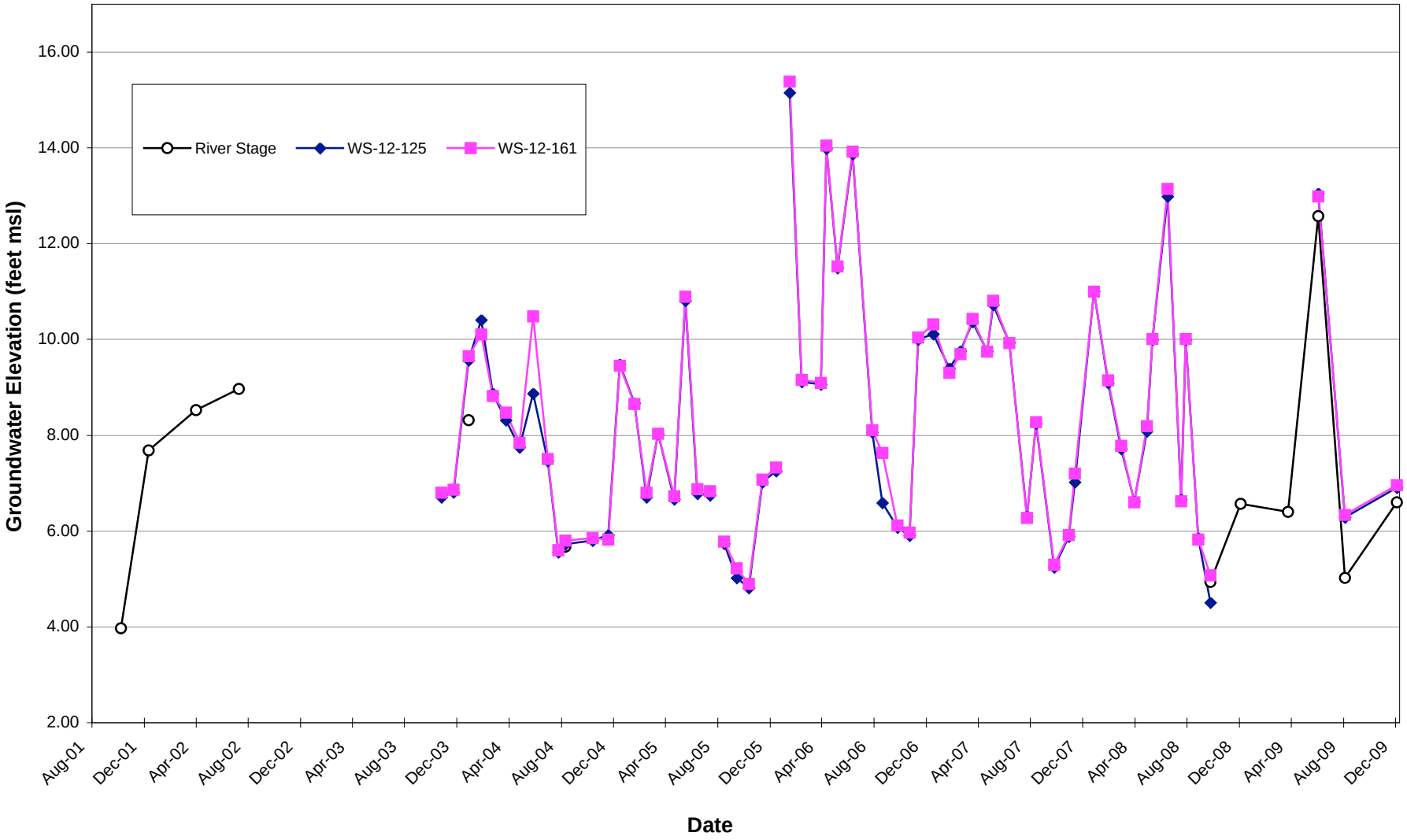
Groundwater Hydrograph
WS-10-27 Well



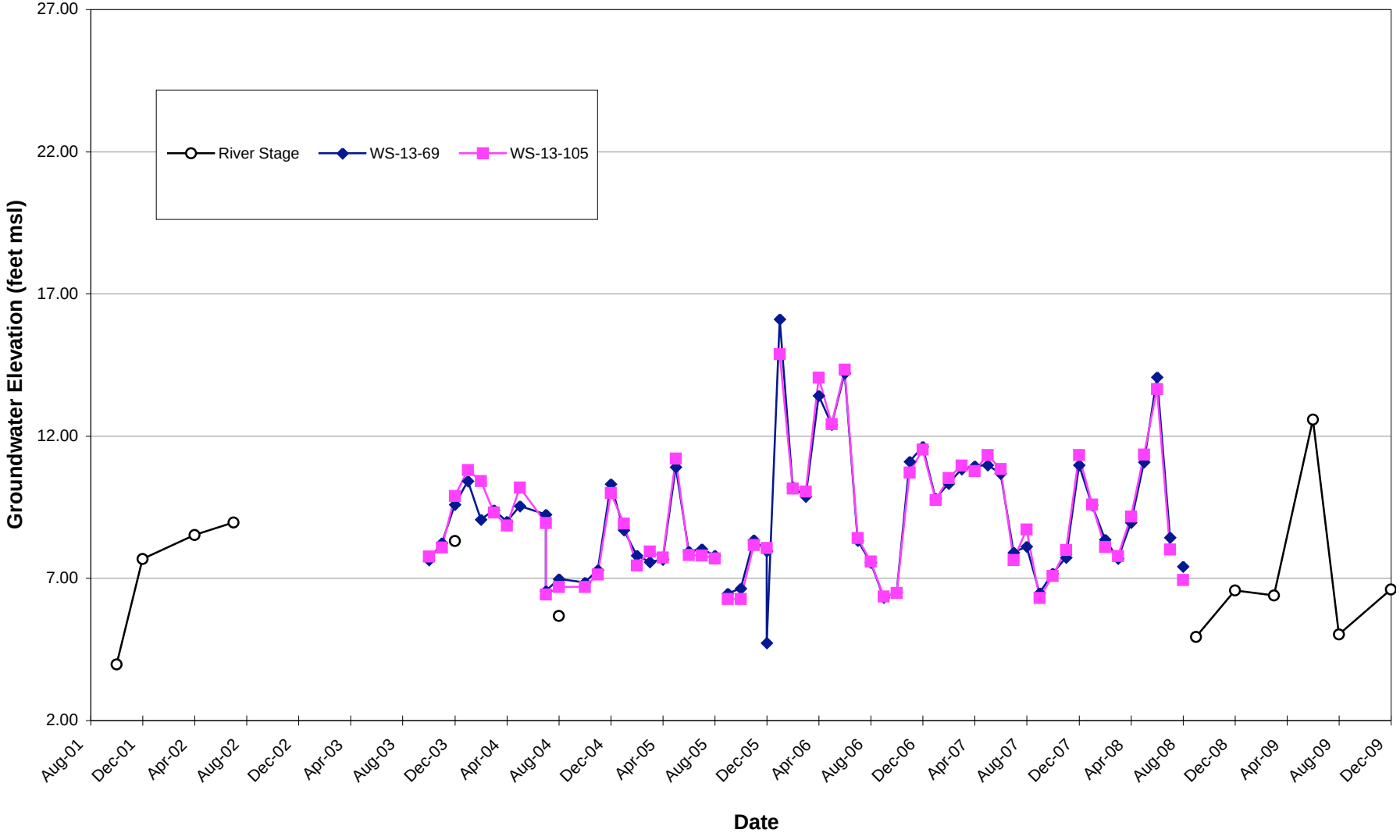
Groundwater Hydrograph
WS-11 Well Cluster



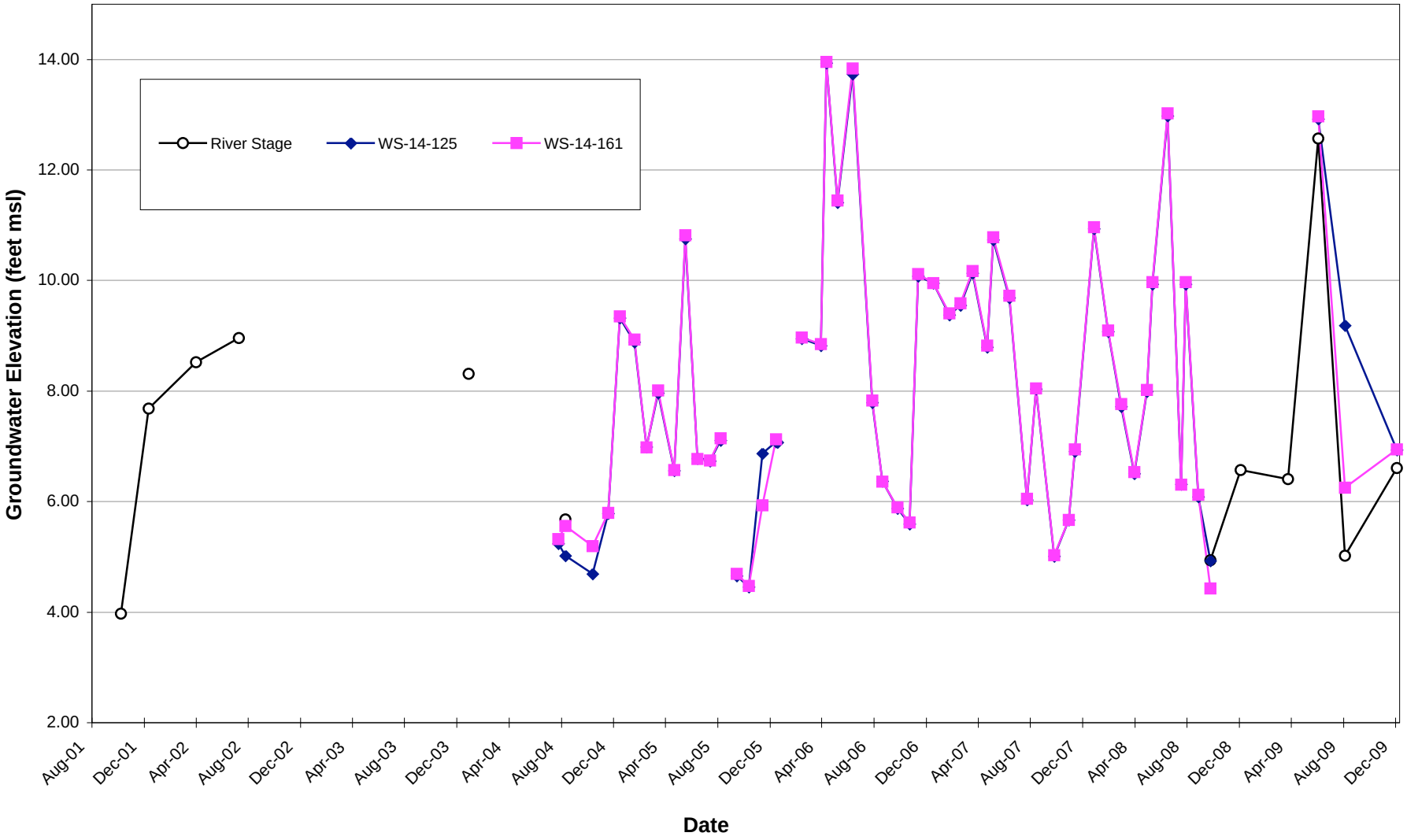
Groundwater Hydrograph
WS-12 Well Cluster



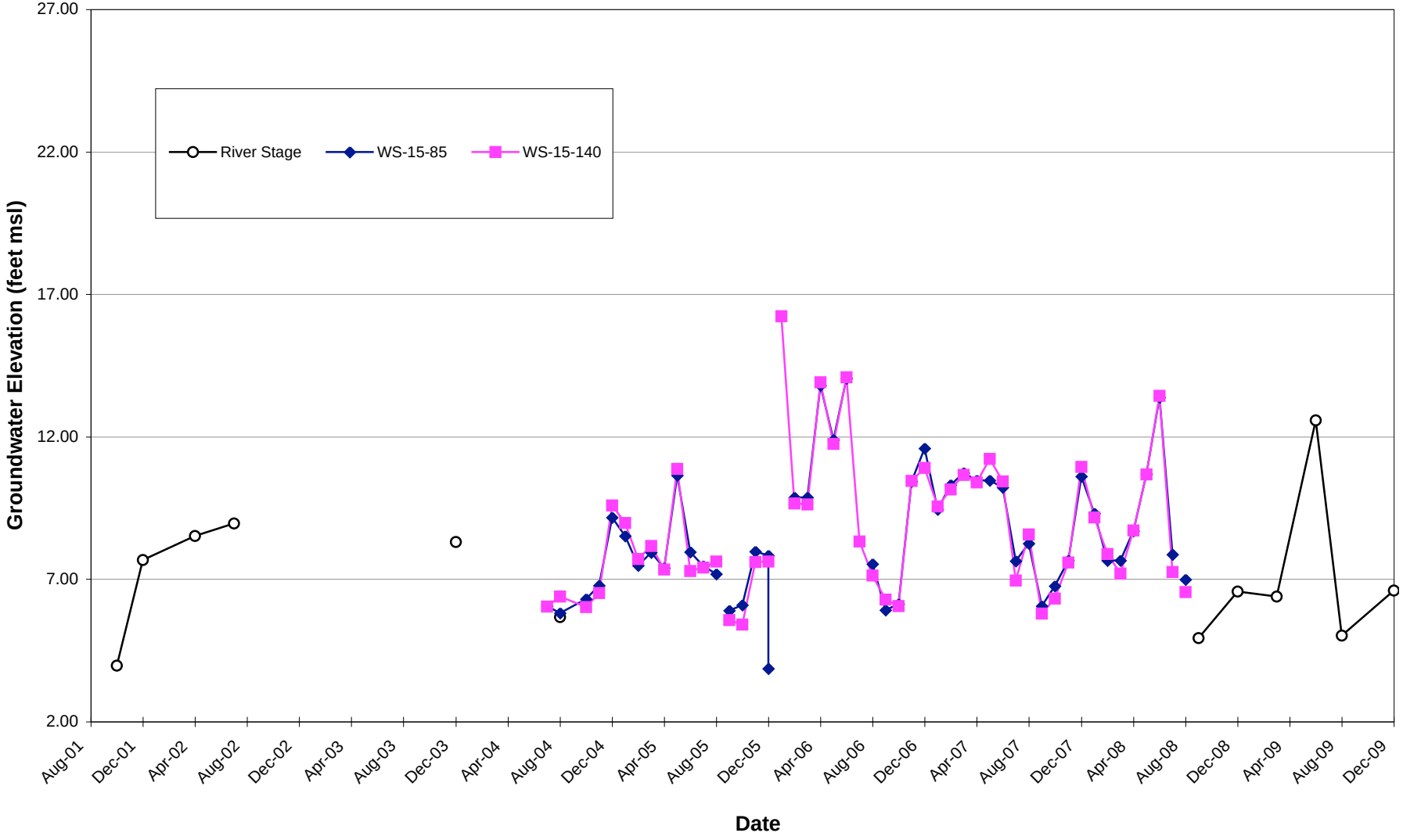
Groundwater Hydrograph
WS-13 Well Cluster



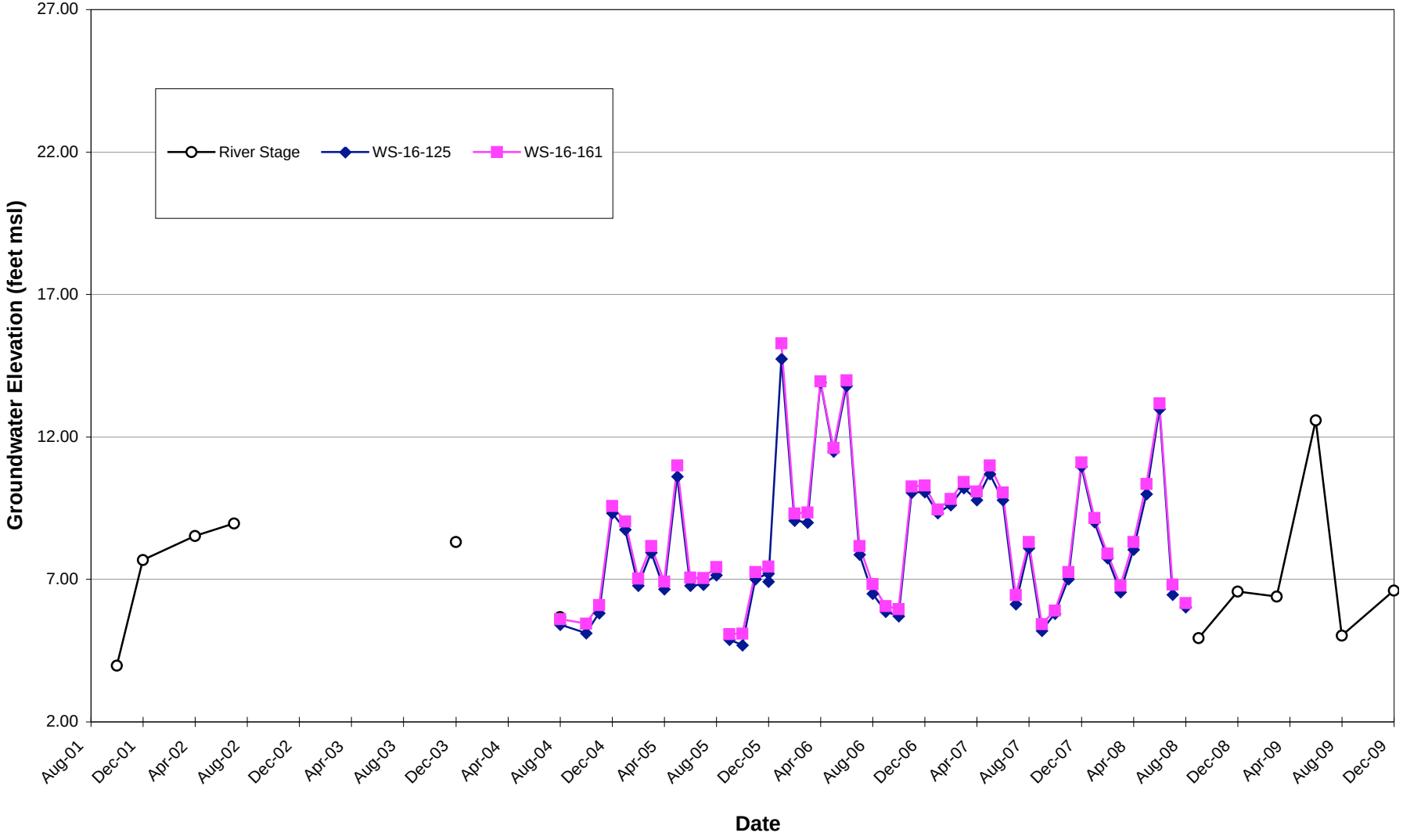
Groundwater Hydrograph
WS-14 Well Cluster



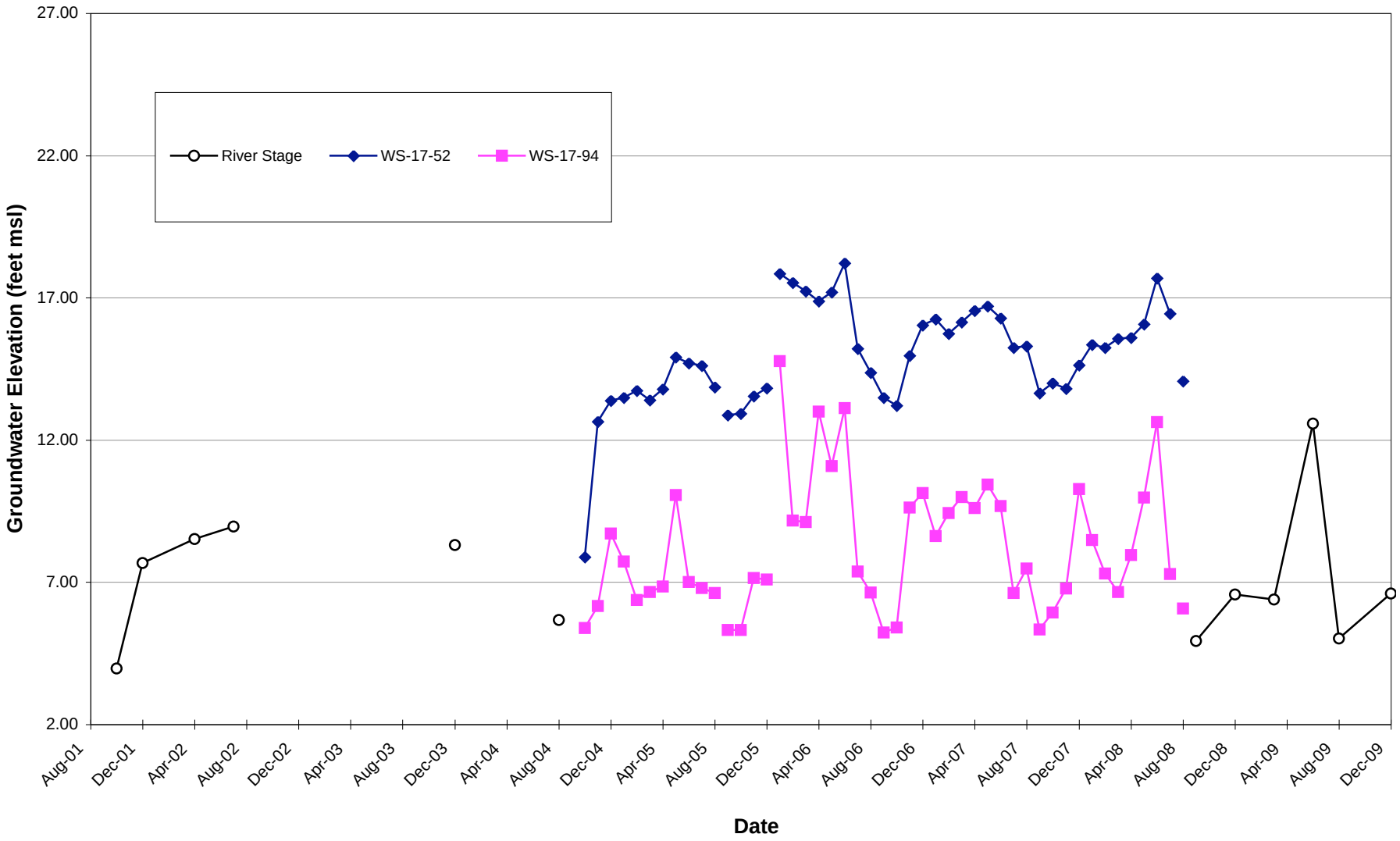
Groundwater Hydrograph
WS-15 Well Cluster



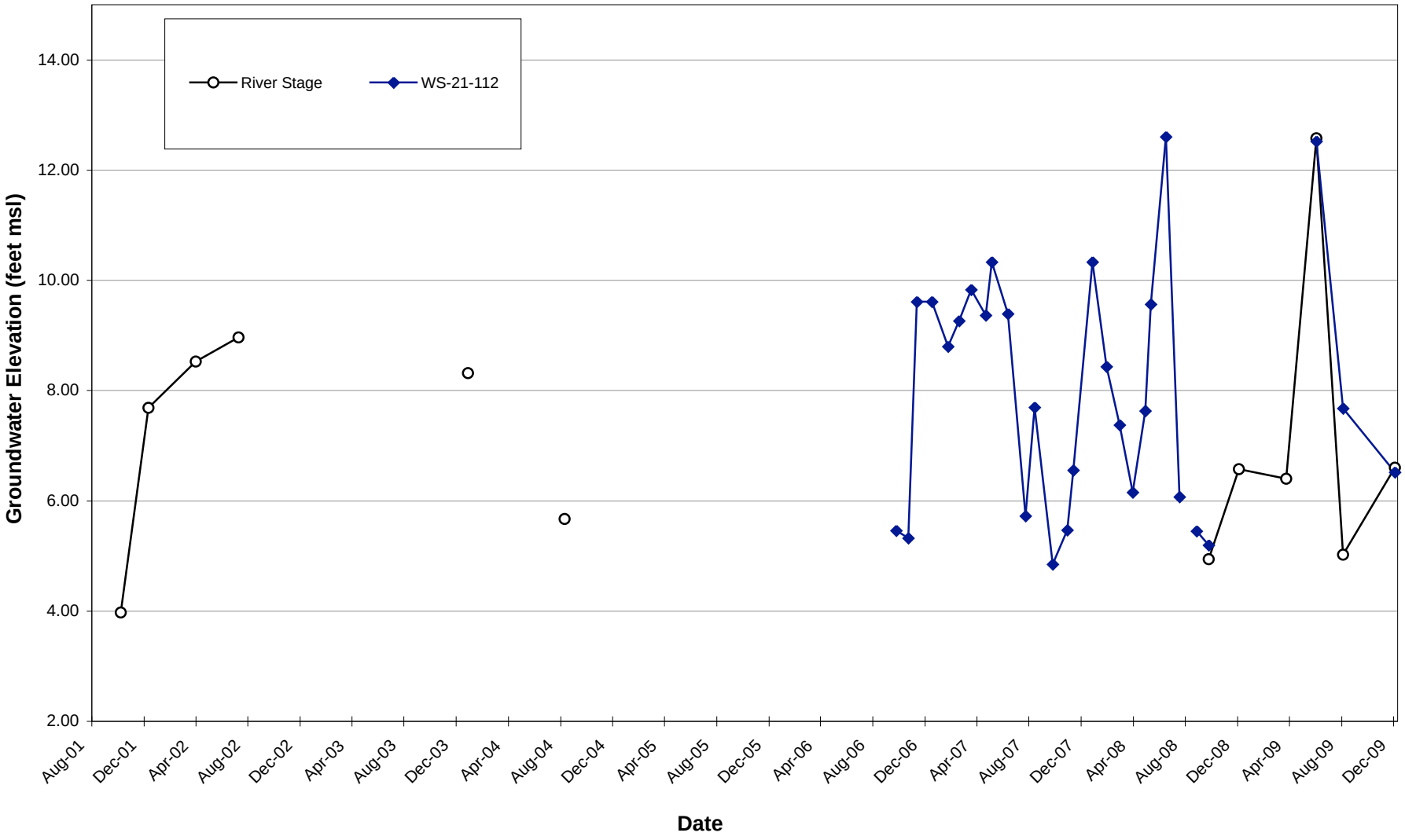
Groundwater Hydrograph
WS-16 Well Cluster



Groundwater Hydrograph
WS-17 Well Cluster



Groundwater Hydrograph
WS-21-112 Well



APPENDIX B

Monitoring Well Field Sampling Summary Sheets and Water Level / DNAPL Field Logs – August 2009 Groundwater Monitoring Event and December 2009 Groundwater Monitoring Event

Water Level Measurement Field Log

Site: Gasco
Project No.: 2708
Date: 8/5/09
Measured by: RCR
Device / Method: Solinst Water Level Meter; Waterra Interface Probe

Well	Time Opened	Time	Water Level (ft btc)	Time	Water Level (ft btc)	Time	NAPL (Thickness)
MW-1-22	8:34	8:35	17.98	14:12	17.97	8:36	—*
MW-1-55	8:19	8:27	28.73	~~14:18~~ 14:23	~~30.50~~ 31.34	8:30	—
MW-1-82	8:18	8:21	29.07	14:25	31.55	8:22	—
MW-2-32	8:39	8:45	24.74	14:19	24.78	8:46	—
MW-2-61	8:39	8:43	27.51	14:20	29.60	8:44	—
MW-2-104	8:39	8:41	27.98	14:16	30.00	8:42	—
MW-3-26	9:40	9:44	23.92	14:36	23.81	9:45	—
MW-3-56	9:40	9:42	27.32	14:37	28.65	9:43	—
MW-4-35	10:40	10:45	27.55	12:57	27.69	10:45	—
MW-4-57	10:40	10:46	28.91	12:50	28.91	10:46	—
MW-4-101	10:40	10:43	28.17	12:52	29.00	10:44	—
MW-5-32	12:05	12:17	21.30	13:59	22.30	12:18	—
MW-5-100	12:05	12:19	21.65	13:57	21.70	12:20	—
MW-5-175	12:05	12:15	21.49	13:55	22.10	12:16	—
MW-8-29	10:11	10:13	20.53	14:30	20.58	10:14	—
MW-8-56	10:11	10:15	32.34	14:28	32.98	10:16	—
MW-9-29	9:49	9:50	12.49	11:25	12.49	9:51	—
MW-10-25	9:53	9:56	16.92	11:31	16.92	10:00	—
MW-10-61	9:53	9:54	21.22	11:35	21.22	9:55	—
MW-11-32	11:46	11:48	14.50	12:53	14.50	12:00	1.0
MW-12-36	12:43	12:44	15.39	14:20	15.35	12:45	—
MW-13-31	—						—
MW-14-110	11:40	11:41	25.35	12:49	25.39	11:42	—
MW-15-50	12:34	12:37	16.48	14:18	16.52	12:38	—
MW-15-66	12:34	12:39	16.56	14:17	17.55	12:40	—
MW-16-45	10:57	11:08	26.34	14:41	27.92	11.10	7.0
MW-16-65	10:57	10:58	26.84	14:33	27.80	10:59	—
MW-16-125	10:57	11:00	26.95	14:39	28.20	11:02	3.0
MW-17-79	10:35	10:36	28.64	14:01	29.30	10:37	—
MW-18-30	10:20	10:26	26.90	14:30	26.90	10:30	1.4
MW-18-180	10:20	10:22	27.58	14:31	29.10	10:23	—
MW-19-22	10:48	10:50	21.70	12:32	21.70	10:51	—
MW-19-125	10:48	10:53	23.20	12:34	23.89	10:54	—
MW-19-180	10:48	10:55	23.65	12:36	24.37	10:56	—
MW-20-120	12:06	12:22	22.10	14:08	22.75	12:22	—
MW-21-12	8:50	8:52	11.98	14:28	12.00	8:53	—
MW-21-75	8:50	8:55	16.20	14:29	18.25	8:56	—
MW-21-115	8:51	8:58	16.52	14:30	18.56	8:59	—
MW-21-165	8:51	9:01	16.21	14:31	18.22	9:02	—
PW-01-80	10:38	10:39	31.19	—	—	10:39	—
PW-3-85 ~~PW-04~~ (Shallow)	12:06	12:28	21.28	14:06	21.95	12:29	—
PW-3-118 ~~PW-04~~ (Deep)	12:06	12:24	21.55	14:10	22.20	12:26	—
MW-River - FAMM	8:13	8:13	26.5*	12:58	26.30	14:44	~~27.10~~ 27.10 (FROM DOCK) READING, 2&3
MW-River - MW-4 Dolphin	8:18	8:20	TOO LOW	12:45	TOO LOW	14:50	TOO LOW

RECOVERY PUMP IN NOT PUMPING 8/5/09

DNAPL presence not measured → no access.

error in field measurement. DNAPL thickness not measured

PUMP INSTALL / CASING SEALED

ANCHOR CONDUCTING MAINTENANCE & PULLED CASING NO 2ND BOUND

ft btc = feet below top of casing

* THROUGH GRATING

File: 2708_Water Level Form.xls (07/03) HAIN AND ASSOCIATES, INC

*(–) = NO DNAPL OR LNAPL identified in well.

Water Level Measurement Field Log

Site: Siltronic Corporation Property

Project No.: 5237-45

Date: AUGUST 5, 2009

Measured by: BEN UHL

Device / Method: Solinst Water Level Meter; Waterra Interface Probe; Innova Land Surveyor

Well	Time Opened	Water Level (ft btc)	Time	Water Level (ft btc)	Time	Water Level (ft btc)	Time	NAPL (Thickness)	CH_4 (LEL %)	O_2 (%)	H_2S (ppm)	CO_2 (ppm)
NWN-1-20	942	10.30	1137	10.30			943	Ø-Tarlike aroma	70.	18.8	Ø	Ø
NWN-2-20	951	13.10	1144	13.15			952	blebbs-NOT MEASUREABLE	12.	19.2	Ø	Ø
NWN-3-17	956	10.8	1150	16.60			958	Ø	100.	Ø	Ø	Ø
NWN-4-15	1013	14.8	1201	14.80			1014	Ø	19.6	18.9	Ø	Ø
NWN-5-20	1018	14.2	1204	14.40			1019	Ø	14.1	1.	Ø	Ø
NWN-6-31	1024	11.20	1206	11.20			1025	Ø	100	16	Ø	Ø
NWN-7-30	1004	15.3	1153	15.30			1005	Ø	100	18	Ø	Ø
NWN-8-30	1030	12.7	1216	12.45			1031	Ø	100	7.8	Ø	Ø
NWN-9-31	924	26.30	1116	26.50			925	Ø	0	20.9	Ø	Ø
NWN-10-26	1039	25.46	1224	25.46			1040	Ø	100	12.6	Ø	Ø
WS-8-33	916	27.16	1114	27.15			917	Ø	2	20.2	Ø	Ø
WS-8-59	919	27.50	1115	27.81			920	Ø	Ø	21.0	Ø	Ø
WS-9-34	1046	24.82	1230	24.92			1047	Ø	100	18.5	Ø	Ø
WS-11-125	929		1124	27.20			929	NM	100	18.2	Ø	Ø
WS-11-161	930	26.63	1123	27.30			930	Ø	11	18.7	Ø	Ø
WS-12-125	910	27.35	1112	28.00			911	Ø	Ø	21.2	Ø	Ø
WS-12-161	910	27.30	1114	27.96			911	Ø	Ø	21.0	Ø	Ø
WS-14-125	845	26.60	1101	24.40			846	NM	Ø	21.	Ø	Ø
WS-14-161	845	26.62	1100	27.40			846	NM	Ø	21.	Ø	Ø
WS-21-112	859	27.91	1107	26.80			900	Ø	Ø	21.	Ø	Ø

ft btc = feet below top of casing

Low-Flow Well Sampling Field Log

Well Number: MW-1-22

Date: 8/20/09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	RCR
Purge Method:	STANDARD (3-5x VOL)
Pump Intake Depth (ft btc):	21' btc
Flow-Through Cell:	YES - HORIBA U52
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	WARM, CLEAR
Comments:	

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	22.00	24.80	11.00	13.80	11 - 21

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3 ✓	VOA	HCL	BTEX	N
2 ✓	1L AMB	4C	LL PAHs-extended	N
2 ✓	250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1 ✓	250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~
1 ✓	250ml AMB	NaOH	OIA-1677	N
1 ✓	250ml AMB	PbCO3/NaOH	OIA-1677	Y
1	250mL HDPE	HNO3	DISS. METALS	Y
11				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 9:55		Initial 18.3	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
10:01	INI		18.5	19.13	1,670	5.91	3.28	196	158	Cl
10:04			18.7	16.88	2,210	2.75	3.0	199	84.3	Cl
10:07			18.90	15.84	2,290	~~5.4~~ 1.2	2.97	195	72.8	AC
10:10			19.10	15.32	2,290	0.5	2.98	210	64.5	AC
10:13			19.35	15.02	2,280	0.1	2.98	210	62.3	AC
10:16			19.4	15.03	2,270	0.05	2.99	210	65.1	AC
10:19			19.4	14.93	2,270	0.05	2.99	209	66.5	AC
	Start Sampling 10:25									
	End Sampling			Sample Number: 2708- 090820-MW-1-22-163 @ 10:25						
			Final 19.4							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

22 - 18.3 = 3.7' H_2O COLUMN X 0.166 = 0.6 gal = 1x VOL
1.8 gal = 3x VOL
4.5 gal = 5x VOL

Low-Flow Well Sampling Field Log

Well Number: MW-1-55

Page 1 of 1

Date: 8/20/09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: RCR

Purge Method: STANDARD

Pump Intake Depth (ft btc): 44-45' btc

Flow-Through Cell: YES - HORIBA U52

Sampling Method: Stainless Steel Check Valve

Decontamination Method: Dedicated Tubing

Purge Water Disposition: AST

Field Conditions:

Comments: PERMANENT PUMP INSTALLED @ AROUND 44 TO 45 FEET btc, CANNOT VERIFY IF IN SCREEN INTERVAL = STANDARD PURGE. TURBIDITY READS HIGH, BUT PURGE H2O CRYSTAL CLEAR (FLOW RATE TOO HIGH FOR TURBIDITY SENSOR IN FLOW CELL)

Well Information Stick-up ~~or Flush~~ (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	57.00	-	55.00	-	45 - 55

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3 ✓	VOA	HCL	BTEX	N
2 ✓	1L AMB	4C	LL PAHs-extended	N
2 ✓	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1 ✓	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~3~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	N
1	250ml AMB	NaOH	OIA-1677	N
1	250ml AMB	PbCO3/NaOH	OIA-1677	Y
1 ✓	250mL HDPE	HNO3	DISS METALS	Y

(11)

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	11:12	Initial 28.89	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
11:13	1.0			24.56	3,760	1.87	6.45	57	455	CC
11:14	2.0			21.06	3,960	0.90	6.57	51	462	CC
11:15	3.0			19.87	4,080	0.50	6.54	46	481	CC
11:16	4.0			19.42	4,110	0.25	6.55	43	520	CC
11:17	5.0			19.07	4,150	0.0	6.56	40	546	CC
11:18	6.0			18.80	4,170	0.0	6.58	35	558	CC
11:19	7.0		30.04	18.57	4,190	0.0	6.59	30	575	CC
11:20	8.0			18.37	4,200	0.0	6.60	24	592	CC
11:21	10.0			18.24	4,210	0.0	6.60	19	592	CC
11:22	12.0			18.05	4,200	0.0	6.61	17	586	CC
11:23	13.0		30.90	18.01	4,200	0.0	6.62	15	583	CC
	Start Sampling									
	End Sampling			Sample Number:	2708- 090820-MW-1-55-164 @ 11:25					
			Final							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

55-28.89 = 26.11 x 0.166 = 4.3 gal = 1x

3x = 13 gal

5x = 21.5

206-

ANCHOR DOWN

1:45

12:00 → SAMP.

Low-Flow Well Sampling Field Log

Well Number: MW-1-82

Page 1 of ____

Date: 8/20/09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	RLR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	74' btc
Flow-Through Cell:	Yes - Horiba U52
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	Warm, Clear
Comments:	

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	85.40	-	72.00	-	72 - 82

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500mL~~ 250 HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500mL~~ 250 HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~
~~1~~	~~1L AMB~~	~~NaOH~~		N
~~1~~	~~250mL AMBER~~	~~NaOH~~	7x2	Y
~~x2~~	~~1L~~	~~4C~~	=14	

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 8:35		Initial 28.4	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
8:39	INI		28.4	16.75	205	16.34	7.74	78	12.5	CC
8:42	0.5		28.45	15.01	234	7.84	7.30	87	95.9	Cl-AC
8:45	1.0		28.45	14.82	237	5.57	7.25	104	116	AC
8:48	1.5		28.45	14.67	238	3.58	7.21	86	69.5	AC
8:51	2.0		28.45	14.65	239	2.70	7.19	34	41.3	C
8:54	2.5		28.50	14.66	239	1.75	7.17	-8	46.6	C
8:57	3.0		28.55	14.61	240	0.95	7.16	-29	38.2	C
9:00	3.5		28.55	14.61	239	0.75	7.15	-35	31.3	C
9:03	4.0		28.55	14.63	239	0.40	7.15	-42	25.9	C
9:06	4.5		28.55	14.64	239	0.38	7.14	-52	20.9	CC
9:09	5.0		28.55	14.64	239	0.37	7.14	-54	18.7	CC
9:12	5.5		28.55	14.63	239	0.36	7.14	-56	15.5	CC
	Start Sampling									
	End Sampling			Sample Number:	2708- 090820-MW-1-82-161 @ 9:15					
			Final						162	

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-2-32

Page 1 of 1

Date: 8-12-2009

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: BEN UHL

Purge Method: LOW FLOW

Pump Intake Depth (~~ft btc~~): 30' bgs

Flow-Through Cell: YES

Sampling Method: Stainless Steel Check Valve

Decontamination Method: Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: OVERCAST, 70°S F

Comments:

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	32.50	-	21.50	-	21.5 - 32.5

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl⁻~~	~~N~~
7	TOTAL			

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	932	Initial 25.25	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
936	INT		25.50	19.50	275	4.60	7.31	-92	65	AC
940	0.25		25.85	20.36	240	1.36	6.72	-7	29	C
944	0.5		26.20	20.57	236	0.61	6.65	17	19.6	CC
948	1.0		26.50	20.81	236	0.16	6.65	33	12.7	CC
952	1.3		26.50	20.69	236	0.00	6.67	40	9.9	CC
956	2.0		26.50	20.75	237	0.00	6.75	43	11.7	CC
1000	2.4		26.50	20.77	237	0.00	6.76	42	12.5	CC
	Start Sampling 1023									
	End Sampling 1020			Sample Number: 2708-090812-MW-2-32-113						
			Final 26.50							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-2-61

Page 1 of 1

Date: 8-12-2009

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	BEN UHL
Purge Method:	LOW FLOW
Pump Intake Depth (ft btc):	
Flow-Through Cell:	YES
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	OVERCAST, 70°'s F

Comments:

Well Information			Stick-up or Flush (circle one)		
Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	61.50	-	50.00	-	50 - 60

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
2	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~ (BN)
1	250ml AMB	NaOH	OIA-1677	N
1 (F)	250ml AMB	PbCO3/NaOH	OIA-1677	Y
(10)				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 1052		Initial 28.59	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1057	INT		28.60	22.68	436	11.92	7.52	-10	15.9	CC
1101	0.3		28.60	22.64	597	3.90	7.21	-78	13.5	CC
1105	0.6		28.60	22.62	663	2.76	7.12	-80	12.9	CC
1109	0.9		28.60	22.63	673	2.26	7.13	-83	11.8	CC
1112	1.2		28.60	22.69	678	1.82	7.21	-89	9.3	CC
1117	1.5		28.60	22.58	687	0.78	7.16	-91	9.4	CC
1121	1.8		28.60	22.97	687	0.77	7.19	-97	8.7	CC
1125	2.1		28.60	22.06	687	0.75	7.18	-97	8.4	CC
	Start Sampling 1130									
	End Sampling 1150			Sample Number:	2708-090812-MW-2-61-115					
			Final 28.60							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-2-104

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Date: 8-12-09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	BEN LUHL
Purge Method:	LOW FLOW
Pump Intake Depth (ft ~~btc~~):	100' bgs
Flow-Through Cell:	YES
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	RAINY, 70°S F
Comments:	

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	116.50	-	94.00	-	94 - 104

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1LAMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl-~~	~~N~~
7	TOTAL			

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	850	Initial 29.78	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
851	INT		29.78	21.14	352	14.75	7.88	120	58	AC
856	0.1		29.70	19.13	612	1.68	7.17	-81	800	VC Black particles
900	0.7		29.70	18.52	636	1.07	7.27	-112	133	SC
904	2.0		29.70	18.21	629	0.55	7.29	-118	74	AC
909	2.9		29.70	18.09	634	0.52	7.32	-118	50	AC
912	3.7		29.70	18.08	629	0.52	7.30	-115	40	AC
916	4.2		29.70	18.16	628	0.51	7.31	-115	38	C
	Start Sampling	918								
	End Sampling	928		Sample Number:	2708-090812-MW-2-104-111					
			Final 29.70							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-3-26

Page 1 of 1

Date: 8-17-2009

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	BEN UHL
Purge Method:	STANDARD
Pump Intake Depth (~~ft btc~~):	24' bgs
Flow-Through Cell:	YES
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	
Purge Water Disposition:	AST
Field Conditions:	Sunny, 90's F
Comments:	1440 - purgewater encountered clear conditions.

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	26.00	-	15.00	-	15 - 25

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
2	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	ALK, Bicarb, Carb, NO3, SO4, Cl	N (BN)
1	250ml AMB	NaOH	OIA-1677	N
1	250ml AMB	PbCO3/NaOH	OIA-1677	Y
10	~~1L HDPE~~	~~HNO3~~	~~DISSOLVED METALS~~	(F) (PB)

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	1416	Initial 24.38	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1421	INT		25.60	19.36	361	0.00	6.92	32	439	VC
1426	1.1		25.90	21.77	376	0.00	6.89	5	155	SC
1430	1.3		25.20	20.97	379	0.00	6.91	-12	100	SC
1436	2.4		26.84	22.95	401	0.00	6.79	-15	262	(B) SCl
1440	2.6		26.95	22.95	400	0.00	6.80	-17	34	C
	Start Sampling	1442								
	End Sampling	1531		Sample Number:	2708-090817-MW-3-26-239					
			Final 26.80							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

27 - 24.38 = 2.62 x 0.163 = 0.4 gal = 1 vol
1.2 gal = 3 vol
2.0 gal = 5 vol

Low-Flow Well Sampling Field Log

Well Number: MW-3-56

Page 1 of 1

Date: 8-11-09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: BEN UHL

Purge Method: LOW FLOW

Pump Intake Depth (ft ~~btc~~): 51' bgs

Flow-Through Cell: YES

Sampling Method: Stainless Steel Check Valve

Decontamination Method:

Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: DRIZZLE, 70°'s F

Comments:

Well Information (Stick-up or Flush (circle one))

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	56.00	-	45.00	-	45 - 55

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl-~~	N BW
8	1 500mL HDPE	HNO3	DISSOLVED METALS	Y

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On		initial 29.50	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1605	INT		30.0	19.53	484	2.52	7.37	-70	132	SC
1611	1.5		30.0	15.86	488	0.00	7.44	-100	410	CI
1617	3.0		30.0	15.67	497	0.00	7.52	-116	365	CI
1620	4.0		30.0	15.61	498	0.00	7.51	-118	341	CI
1623	5.0		30.0	15.66	501	0.00	7.49	-118	340	CI
1626	6.0		30.0	15.68	501	0.00	7.51	-119	351	CI
	Start Sampling	1630								
	End Sampling	1643		Sample Number:	2708-090811-MW-3-56-107					
			final 30.0							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy CI=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-4-35

Page 1 of 1

Date: 8-13-2009

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	BEN WHL
Purge Method:	LOW FLOW
Pump Intake Depth (ft btc):	33' bgs
Flow-Through Cell:	YES
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	Sunny, 70°SF

Comments: 1045 - tubing problems
1055 - fixed tubing, pumping resumes

Well Information (Stick-up or Flush (circle one))

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	35.00	-	24.00	-	24 - 34

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
2	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl-~~	N
1	250ml AMB	NaOH	OIA-1677	N
1	250ml AMB	PbCO3/NaOH	OIA-1677	Y
10	TOTAL			

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 1034		Initial 28.10	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1035	1NT		28.10	14.74	1,170	1.32	7.24	-88	16.2	CC
1039	0.8		28.10	14.71	1,190	0.00	7.23	-112	109	SC
1043	1.0		28.10	16.75	1,150	0.31	7.30	-121	215	CL
1055	2.0		28.10	21.63	1,200	0.00	7.37	-141	>800	VC, black particles
1059	2.5		28.10	15.05	1,180	0.00	7.40	-136	>800	VC
1104	3.0		30.10	14.72	1,200	0.00	7.33	-136	72	AC
1108	3.5		30.10	14.77	1,190	0.00	7.32	-137	35	C
1112	4.0		30.10	14.37	1,180	0.00	7.34	-138	11	CC
1116	4.5		30.10	14.36	1,180	0.00	7.34	-139	8.7	CC
1120	5.0		30.10	14.4	1,180	0.00	7.35	-139	8.1	CC
	Start Sampling 1121									121
	End Sampling 1140			Sample Number:	2708- 090813-MW-4-35					~~119~~
			Final 30.10							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-4-57

Date: 8/17/09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: RCR

Purge Method: Low Flow

Pump Intake Depth (ft btc): 49' btc

Flow-Through Cell: Yes - YSI

Sampling Method: Inertial Pump Stainless Steel Check Valve

Decontamination Method: Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: Warm, Clear, ≈80°F

Comments:

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	57.00	-	46.00	-	46 - 56

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
2	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable CN	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
	~~HDPE~~		~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	
1	250ml AMB	NaOH	OIA-1677	N
1	250ml AMB	PbCO3/NaOH	OIA-1677	Y
1	250 mL HDPE	HNO3	Diss. Metals	Y

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 12:53		Initial 30.5	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
12:54	1N1		30.55	18.31	1,012	8.81	6.95	-35.8	80	Cl - C
12:57	0.5		30.65	16.69	1,041	3.95	6.81	-123.5	60	C
13:00	0.75		30.65	16.44	997	2.70	6.74	-159.4	290	Cl
13:03	1.0		30.68	16.51	960	2.10	6.65	-180.6	150	Cl
13:06	1.3		30.70	16.61	963	1.90	6.65	-187.5	140	Cl
13:09	1.6		30.70	16.65	967	1.50	6.65	-199.7	130	Cl
13:12	1.9		30.70	16.61	971	1.35	6.68	-205.3	140	Cl
13:15	2.2		30.70	16.62	977	1.10	6.69	-210.4	150	Cl
13:18	2.5		30.7	16.63	978	1.05	6.68	-212.3	150	Cl
13:21	2.75		30.7	16.65	980	1.0	6.68	-215.2	170	Cl
13:24	3.0		30.72	16.65	985	0.9	6.68	-216.4	180	Cl
13:27	3.3		30.73	16.71	989	0.87	6.68	-219.3	150	Cl
	Start Sampling		13:45							
	End Sampling		14:15	Sample Number:	2708- 090817-MW-4-57-138 @ 13:45					
			Final 30.75							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-4-57

Date: 8/17/09

HAI Project Number: 2708-30

Well Purge Data (continued from Page 1)

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
		Stabilization Criteria =>		-	±3%	±10%	±0.1	±10mv	±10%	Cl
13:30	3.5		30.75	16.75	990	0.83	6.67	-227.1	170	Cl
13:33	3.75		30.75	16.83	990	0.72	6.67	-227.3	190	Cl
13:36	4.0		30.75	16.80	991	0.70	6.67	-228.4	250	Cl
	Start Sampling	13:45								
	End Sampling	14:15		Sample Number:	2708- 090817-MW-4-57-138 @ 13:45					
			Final 30.75							

Comments

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-4-101

Page 1 of 1

Date: 8-13-2009

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: BEN UHL

Purge Method: LOW FLOW

Pump Intake Depth (ft ~~btc~~): 95' bgs

Flow-Through Cell: YES

Sampling Method: Stainless Steel Check Valve

Decontamination Method: Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: Sunny, 70's F

Comments: - MILD "GYM-BAG" AROMA TO PURGE WATER

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	120.00	-	89.50	-	89.5-99.5

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	ALK, Bicarb, Carb, NO3, SO4, Cl	N (R)
7	TOTAL			

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 936		Initial 29.25	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
937	INT		29.25	15.08	740	7.21	7.24	-86	60	AC
941	1.0		29.30	14.54	764	0.00	7.37	-123	164	SC
945	2.0		29.30	14.54	765	0.00	7.40	-131	49	AC
950	3.2		29.30	14.68	755	0.00	7.36	-133	33	C
954	4.0		29.30	14.47	747	0.00	7.31	-131	33	C
958	5.0		29.30	14.49	746	0.00	7.36	-135	31	C
	Start Sampling 1000									
	End Sampling 1020			Sample Number: 2708-090813-MW-4-101-119						
			Final 29.30							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-5-32

Date: 8/12/09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: RLR

Purge Method:

Pump Intake Depth (ft btc): 26' btc

Flow-Through Cell: Yes - YSI

Sampling Method: Stainless Steel Check Valve

Decontamination Method:

Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: Cool, Partly Cloudy

Comments:

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	32.00	-	21.00	-	21 - 31

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs-extended	N
2 1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	N
1	250ml AMB	NaOH	OIA-1677	N
1	250ml AMB	PbCO3/NaOH	OIA-1677	Y
10				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	11:05	Initial 21.90	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
11:09	1N1		22.80	15.38	359	11.27	6.68	-70.4	71000	VC
11:12	0.4		23.10	14.70	361	5.80	6.76	-139.2	60	C
11:15	0.75		22.90	16.04	361	3.30	6.72	-137.7	31	C - CC
11:18	1.1		22.50	16.07	363	3.10	6.70	-125.6	31	CC
11:21	1.5		22.40	16.13	365	2.70	6.69	-119.7	29	CC
11:24	1.9		22.30	15.81	365	2.20	6.72	-114.3	23	CC
11:27	2.3		22.50	15.35	366	1.70	6.70	-131.3	25	CC
11:30	2.7		22.60	15.48	365	1.50	6.67	-136.8	22	CC
11:33	3.0		22.80	15.32	367	1.40	6.65	-140.7	22	CC
11:36	3.3		22.80	15.31	367	1.20	6.68	-143.2	22	CC
11:39	3.5		22.80	15.03	367	1.10	6.65	-138.0	26	CC
11:42	3.75		22.70	15.36	365	0.90	6.62	-135.2	26	CC
	Start Sampling	11:50								
	End Sampling	12:10		Sample Number:	2708- 090812-MW-5-32-114 @					
			Final 22.80							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-5-32

Date: 8/12/09

HAI Project Number: 2708-30

Well Purge Data (continued from Page 1)

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
		Stabilization Criteria =>		-	±3%	±10%	±0.1	±10mv	±10%	
11:45	4.2		22.80	15.43	366	0.89	6.64	-133.5	26	cc
11:48	4.6		22.80	15.41	366	0.88	6.65	-133.2	25	cc
	Start Sampling	11:50								
	End Sampling	12:10		**Sample Number:**	2708- 090812-MW-5-32-114 @					11:50
			Final 22.80							

Comments

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-5-100

Page 1 of ____

Date: 8/12/09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	92' btc
Flow-Through Cell:	YES - YSI
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	Cool, Cloudy

Comments:

Well Information					Stick-up or Flush (circle one)
Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	100.00	-	88.00	-	88 - 98

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs-extended	N
2	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~
1	250ml AMB	NaOH	OIA-1677	N
1	250ml AMB	PbCO3/NaOH	OIA-1677	Y
10				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 9:48		Initial 21.90	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
9:49	IN1		21.90	15.72	715	1.78	6.80	-158.2	26	C SMALL AMT OF SEDIMENT
9:52	0.75		21.90	15.14	712	0.88	6.61	-179.3	27	C- "
9:58	1.5		21.90	15.29	702	0.70	6.53	-192.6	17	CC
~~9:50~~	~~E~~									
~~9~~10:4	1.8		21.90	~~15~~ 15.43	702	0.65	6.52	-196.4	13	CC
10:04	2.1		21.90	15.44	702	0.55	6.52	-197.1	14	CC
10:07	2.3		21.90	15.34	702	0.54	6.52	-198.3	19	CC
10:10	2.6		21.90	15.30	701	0.53	6.52	-198.5	15	CC
	Start Sampling 10:15									
	End Sampling 10:30			Sample Number: 2708- 090812-MW-5-100-112 @ 10:15						
			Final 21.90							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-5-175

Page 1 of ____

Date: 8/12/09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	168' btc
Flow-Through Cell:	YES → YSI
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	~~ASF~~ SEGREGATED 55 gal Drum
Field Conditions:	Cool, Cloudy, Rain

Comments:

Well Information (Stick-up or Flush (circle one))

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	175.00	-	163.00	-	163 - 173

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~5~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 8:44		Initial 22.15	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
8:48			22.60	14.33	451	12.51	6.56	-99.5	22	CC
8:51			22.50	14.34	459	4.73	6.84	-177.8	350	~~C~~ CI
8:54			22.45	14.42	457	2.90	6.86	-207.4	50	C
8:57			22.40	14.36	456	1.90	6.87	-215.3	23	CC
9:00			22.40	14.45	455	1.50	6.87	-221.3	23	CC
9:03			22.35	14.47	455	1.30	6.88	-222.6	28	CC
9:06			22.35	14.51	455	1.01	6.88	-224.5	30	CC
9:09			22.30	14.67	455	1.00	6.88	-225.0	37	C
9:12			22.30	14.63	455	0.90	6.89	-226.9	35	C
9:15			22.25	14.68	455	0.75	6.89	-228.4	35	C
9:18			22.25	14.73	455	0.74	6.89	-229.1	33	C
9:21			22.25	14.76	455	0.73	6.89	-229.5	31	C
	Start Sampling 9:25									
	End Sampling 9:40			Sample Number: 2708-090812-MW-5-175-110 @ 9:25						
			Final 22.25							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-8-29

Date: 8/11/09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30
Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	25.0' btc
Flow-Through Cell:	Yes — YSI
Sampling Method:	Inertial - Grab
Decontamination Method:	Dedicated Tubing, new disposable extension tubing
Purge Water Disposition:	AST
Field Conditions:	Cool, Cloudy

Comments: Initial H_2O had "flake" like particles, like very fine blebs

Well Information (Stick-up or Flush (circle one))

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	29.00	31.60	18.00	20.60	18 - 28

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pumo Intake (ft)	Convert Factor (L/ft)	Minimum Purge Volume (Liters)

3/4"=0.087 L/ft 2"=0.64 L/ft 4"=2.5 L/ft 6"=5.68 L/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
2	1 L Amber	None	PAHs	N
3	VOAs	HCl	BTEX	N
1	~~500~~ 250 mL	NaOH	Total and Amenable CN	N
1	250 mL	HNO_3	Total Metals	N
~~1~~ 7	~~1 L HDPE~~	~~Non~~	~~Alk, Bicarb, Carb, NO3, SO4, Cl-~~	N

Well Purge Data

Time	Volume Purged (Liters)	Purge Rate (Lpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	15:39	Initial 20.90	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
15:42	1N1		21.50	14.83	1,031	8.23	6.82	-58.3	60	AC - some oily blebs w/ HC odor
15:47	0.5		21.90	15.76	922	3.68	6.67	-137.6	90	AC - "
15:50	0.75		22.20	15.41	916	3.04	6.59	-147.4	95	SC. (4 blebs)
15:54	1.0		22.55	14.99	912	2.70	6.60	-158.9	85	SC-AC
15:57	1.25		22.85	15.15	906	2.40	6.62	-169.6	60	AC (3 blebs) odor
16:00	1.5		22.95	15.57	909	2.09	6.65	-172.8	50	AC
16:03	1.8		23.0	16.20	914	1.85	6.65	-173.8	50	AC
16:06	2.2		23.0	16.45	929	1.55	6.67	-176.8	45	AC
16:09	2.5		23.0	16.55	937	1.30	6.68	-181.7	37	C
16:12	2.8		23.0	16.58	960	1.25	6.67	-182.9	31	C
16:15	3.1		23.0	16.71	970	1.20	6.68	-184.2	29	C
16:18	3.4		23.0	16.90	975	1.15	6.68	-184.7	29	C
	Start Sampling		16:35							
	End Sampling		16:50	Sample Number:	2708- 090811-MW-8-29-106					
			Final 23.0							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Lpm=Liters per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-8-29

Date: 8/11/09

HAI Project Number: 2708-30

Well Purge Data (continued from Page 1)

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
		Stabilization Criteria =>		-	±3%	±10%	±0.1	±10mv	±10%	
16:21	3.75		23.0	17.02	977	1.10	6.67	-185.4	28	C
16:24	4.0		23.0	17.40	992	1.05	6.69	-188.8	26	C
16:27	4.4		23.0	17.85	1,040	0.90	6.71	-200.8	23	C
16:30	4.8		23.0	17.76	1,041	0.85	6.69	-204.5	22	C
16:33	5.2		23.0	17.42	1,041	0.86	6.70	-204.7	23	C
	Start Sampling	16:35								
	End Sampling			**Sample Number:**	2708- 090811-MW-8-29-106 @ 16:35					
			Final							

Comments

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-8-56

Date: 8/11/09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: RCR

Purge Method: Low Flow

Pump Intake Depth (ft btc): 48' bTC

Flow-Through Cell: Yes

Sampling Method: Inertial - Grab

Decontamination Method:

Dedicated well tubing, new disposable extension tubig

Purge Water Disposition: AST

Field Conditions:

Comments:

PURGE H_2O w/ OILY SHEEN & HYDROCARBON LIKE ODOR

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	56.00	58.60	45.00	47.60	45 - 55

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pumo Intake (ft)	Convert Factor (L/ft)	Minimum Purge Volume (Liters)

3/4"=0.087 L/ft 2"=0.64 L/ft 4"=2.5 L/ft 6"=5.68 L/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
2	1 L Amber	None	PAHs	N
3	VOAs	HCl	BTEX	N
1	500 mL	NaOH	Total and Amenable CN	N
1	250 mL	HNO_3	Total Metals	N
~~1~~	~~1L HDPE~~	~~Non~~	~~Alk, Bicarb, Carb, NO3, SO4, Cl-~~	~~N~~
7				

Well Purge Data

Time	Volume Purged (Liters)	Purge Rate (Lpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	14:45	Initial 34.60	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
14:48	1N1		36.50	16.31	987	1.53	6.80	-131.3	60	AC (SEE COMMENTS)
14:50	0.5		36.65	16.21	989	1.03	6.80	-190.9	40	C "
14:52	1.0		36.90	16.16	989	0.98	6.83	-30.1	40	C "
14:54	1.5		37.15	16.02	987	0.85	6.85	-125.7	45	C "
14:56	2.0		37.70	15.89	987	0.77	6.85	-174.2	40	C "
14:58	2.5		38.10	16.13	980	0.69	6.83	-202.2	33	C "
15:00	3.0		38.50	17.17	970	0.65	6.85	-230.6	37	C "
15:03	3.5		38.55	17.01	969	0.59	6.85	-247.2	40	C "
15:06	4.0		38.55	16.95	964	0.56	6.84	-256.3	40	C "
15:09	4.6		38.55	16.83	964	0.54	6.85	-262.7	38	C "
	Start Sampling	15:20								
	End Sampling	15:35		Sample Number:	2708-090811-MW-8-56-104					
			Final 38.55							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Lpm=Liters per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-8-56

Date: 8/11/09

HAI Project Number: 2708-30

Well Purge Data (continued from Page 1)

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
		Stabilization Criteria =>		-	±3%	±10%	±0.1	±10mv	±10%	
15:12	5.0		38.55	16.88	964	0.52	6.84	-265.9	39	C
15:15	5.3		38.55	16.75	964	0.51	6.85	-266.1	37	C
	Start Sampling	15:20								
	End Sampling	15:		**Sample Number:**	2708-090811-MW-8-56-104					
			Final 38.55							

Comments

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-9-29

Page 1 of ____

Date: 8/13/09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30
Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow (YES)
Pump Intake Depth (ft btc):	~~25~~ 19' btc
Flow-Through Cell:	Yes - YSI
Sampling Method:	INERTIAL
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	

Comments: INITIAL H_2O VERY TURBID W/ SAND, THEN SOME CLEARING, THEN TURBID AGAIN W/ 0.5 gal. LOCATION DIFFICULT TO LOW FLOW DUE TO SHORT H_2O COLUMN & GENERALLY HIGHLY TURBID ~~[illegible]~~ TO START

Well Information — Stick-up or (Flush) (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	29.00	28.70	18.00	17.70	18 - ~~28~~ 23

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~Alk, Bicarb, Carb, NO3, SO4 Cl~~	N

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 8:48		Initial 12.70	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
8:55	1.0		14.50	14.29	152	2.59	8.27	-47.3	150	Cl
8:59	1.75		16.60	13.75	170	1.60	8.38	-83.7	>1000	VC
9:02	2.1		17.0	13.63	175	1.50	8.04	-76.4	>1000	VC
9:05	2.5		17.0	13.73	177	1.20	7.56	-65.5	>1000	VC
9:08	3.0		17.4	13.69	177	1.10	7.42	-28.8	>1000	VC
9:11	3.5		17.45	13.72	176	1.00	7.41	2.3	>1000	VC
9:14	4.0		17.45	13.79	176	0.90	7.~~35~~ 29	6.5	>1000	VC
9:17	4.5		17.45	13.78	175	0.85	7.17	6.7	>1000	VC
9:20	5.0		17.45	13.86	174	0.80	7.07	4.0	>1000	VC - SOME IMPROVEMENT
9:23	5.5		17.45	13.89	173	0.77	7.01	2.1	800	VC - "
9:26	6.0		17.45	13.97	173	0.75	7.00	1.6	550	VC - "
9:29	6.5		17.45	14.01	173	0.74	6.95	0.8	400	VC - Cl
	Start Sampling 9:50									
	End Sampling 10:00			Sample Number:	2708-090813-MW-9-29-120 @ 9:50					
			Final 17.45							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

23.0 − 12.7 = 10.3' × 0.166 = 1.7 gal = 1x
5.1 gal = 3x
8.5 gal = 5x

Low-Flow Well Sampling Field Log

Well Number: _____

Date: MW-9-29 8/13/09

HAI Project Number: 2708-30

Well Purge Data (continued from Page 1)

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
		Stabilization Criteria =>		-	±3%	±10%	±0.1	±10mv	±10%	
9:32	7.0		17.45	13.99	173	0.73	6.93	1.3	270	Cl
9:35	7.5		17.45	14.10	172	0.73	6.92	-0.7	220	Cl-SC
9:38	8.0		17.45	14.28	171	0.72	6.92	-0.5	170	SC
9:41	8.5		17.45	14.16	171	0.72	6.92	-1.1	140	SC
9:44	9.0		17.45	14.15	171	0.71	6.92	-1.5	150	SC
9:47	9.5		17:45	14.10	171	0.70	6.91	-1.8	145	SC
	Start Sampling		9:50							
	End Sampling		10:00	Sample Number:		2708- 090813-MW-9-29-120				@9:50
			Final 17.45							

Comments

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-10-25

Page 1 of ____

Date: 8/13/09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: RCR

Purge Method: STANDARD

Pump Intake Depth (ft btc): NA

Flow-Through Cell: No

Sampling Method: Waterra Inertia Pump and Stainless Ste

Decontamination Method: NEW DISPOSABLE BAILER ~~Dedicated Tubing~~

Purge Water Disposition: ~~AST~~ OWS ⇒ AST

Field Conditions:

Comments: NAPL WELL (= NO FLOW THROUGH & STANDARD PURGE).

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2					

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500mL~~ 250 HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500mL~~ 250 HDPE	HNO3	Total Metals	N
~~1~~ 7	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
11:05	Pump On		Initial 17.25	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
	1.0			17.6	543	/	7.26	/	/	
	2.0			15.5	552	/	5.73	/	/	
	3.0			14.7	561	/	5.71	/	/	
	4.0			14.5	564	/	5.70	/	/	
	Start Sampling		11:40							
	End Sampling		11:55	Sample Number:		2708- 090813-MW-10-25-124 @				11:40
			Final —							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

25 - 17.25 = 7.75' × 0.166 = 1.29 gal = 1x

3.85 gal = 3x

6.4 gal = 5x

Low-Flow Well Sampling Field Log

Well Number: MW-10-61

Page 1 of 1

Date: 8/13/09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: RCR

Purge Method: Low Flow

Pump Intake Depth (ft btc): 53' btc

Flow-Through Cell: Yes - YSI

Sampling Method: Waterra Inertia Pump and Stainless Steel Check Valve

Decontamination Method:

Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: Warm, Clear ~65°F

Comments:

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	61.00	63.80	50.00	52.80	50 - 60

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
1	1L AMB	4C	LL SVOC	N
1	1L AMB	4C	LL PAHs	N
1	~~1~~ HDPE 250 mL	NaOH	Free + Amenable CN	N
1	~~1~~ HDPE 250 mL	HNO3	Total Metals	N
~~2~~	~~250mL HDPE~~	~~4C~~	~~Alk, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~
1	250 mL HDPE	HNO3	Diss METALS	Y

8

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	10:12	Initial 27.80	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
10:14	1N1		23.30	16.01	537	3.02	8.69	27.7	75	AC - C
10:17			23.60	15.73	502	1.50	8.13	23.2	45	C
10:20			23.75	15.70	511	1.35	8.01	17.9	50	C
10:23			23.80	15.67	526	1.10	7.87	11.9	55	C
10:26			23.90	15.73	530	0.95	7.86	8.3	55	C
10:29			23.95	15.69	537	0.80	7.45	5.1	55	C
10:32			24.03	15.80	537	0.77	7.26	-5.5	50	C
10:35			24.05	15.81	538	0.71	7.22	-12.6	45	C
10:38			24.05	15.83	538	0.60	7.29	-23.0	55	C
10:41			24.05	15.74	541	0.60	7.27	-27.6	80	AC
10:44			24.05	15.76	540	0.59	7.26	-28.1	55	C
	Start Sampling		10:48							
	End Sampling		11:00 Final	Sample Number:	2708-090813-MW-10-61-122					@ 10:48

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Page 1 of ___

Well Number: MW-11-32

Date: 8/11/09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: RCR

Purge Method: STANDARD

Pump Intake Depth (ft btc): 24' BTC

Flow-Through Cell: ~~YES~~ NO

Sampling Method: INERTIAL - GRAB

Decontamination Method: Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: COOL, CLOUDY

Comments: NO FLOW THROUGH CELL DUE TO KNOWN DNAPL WELL. STANDARD PURGE 3x VOLUME.

Well Information (Stick-up or Flush (circle one))

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2					

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
1	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, CL~~	~~N~~
1		HNO3	DISS. METALS	Y
8				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 10:36		Initial 14.62	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
10:39	0.5			14.6	86	/	7.55	/	/	SHEEN PRESENT / BROWNISH H.C. ODOR SOME NAPL
10:42	1.0			14.8	93	/	7.33	/	/	" "
10:45	2.5			14.6	99	/	7.04	/	/	" "
10:49	4.0			14.9	96	/	6.92	/	/	" "
10:53	5.0			14.8	96	/	6.84	/	/	" "
10:57	6.5			14.8	96	/	6.82	/	/	" "
11:01	7.5			14.8	96	/	6.82	/	/	" "
11:05	8.5			14.9	97	/	6.83	/	/	" "
	Start Sampling		11:10							
	End Sampling		11:20 Final	Sample Number:	2708-090811-MW-11-32-100 @ 11:10					

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

32 - 14.62 = 17.38 = 2.9 gal = 1x
8.7 gal = 3x

Low-Flow Well Sampling Field Log

Well Number: MW-12-36

Date: 8-17-2009

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: BEN UHL

Purge Method: Low Flow

Pump Intake Depth (~~ft btc~~): 30' bgs

Flow-Through Cell: Yes

Sampling Method: Waterra Inertia Pump and Stainless Steel Check Valve

Decontamination Method:

Dedicated Well Tubing & New Extension Tubing

Purge Water Disposition: AST

Field Conditions: Sunny, 80°'s F

Comments:

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	36.00	38.80	25.00	27.80	25 - 35

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (L/ft)	Minimum Purge Volume (Liters)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
2	1 L Amber	None	PAHs	N
3	VOAs	HCl	BTEX	N
1	500 mL	NaOH	Total and Amenable CN	N
1	250 mL	HNO_3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, CL⁻~~	~~N~~
7	TOTAL			

Well Purge Data

Time	Volume Purged (Liters)	Purge Rate (Lpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	1240	Initial 13.90	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1241	INT		16.50	28.53	178	6.58	8.10	5	185	SC
1245	0.1		16.40	27.72	354	2.30	7.42	42	83	AC
1249	0.2		16.40	26.81	410	1.80	7.40	-14	82	AC
1254	0.4		16.40	26.00	495	1.16	7.44	-80	70	AC
1258	0.5		16.40	25.69	506	1.03	7.43	-87	60	AC
1302	0.6		16.40	25.45	510	0.65	7.43	-93	58	AC
1306	0.7		16.40	24.75	510	0.31	7.40	-92	50	AC
1310	0.8		16.40	23.96	500	0.30	7.36	-88	48	AC
1314	1.0		16.40	24.66	499	0.29	7.73	-88	47	AC
	Start Sampling	1315								
	End Sampling	1340		Sample Number:	2708-090817-MW-12-36-137					
			Final 16.40							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Lpm=Liters per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-14-110

Page 1 of 1

Date: 8-12-2009

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	BEN UHL
Purge Method:	LOW FLOW
Pump Intake Depth (~~ft btc~~):	106 bgs
Flow-Through Cell:	Yes
Sampling Method:	Waterra Inertia Pump and Stainless Steel Check Valve
Decontamination Method:	Dedicated Well Tubing & New Extension Tubing
Purge Water Disposition:	AST
Field Conditions:	Sunny, 70°s F

Comments: 1225 - Pumping discharge stopped Troubleshoot equipment.
1311 - Pump working. Kinked tubing in Pro casing/well casing.

Well Information (Stick-up or Flush (circle one))

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	110.00	112.10	98.00	100.10	98 - 108

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1LAMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable CN	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1LHDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~
8	DW			
1	500mL HDPE	HNO_3	DISS. METALS	Y

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 1220		Initial 26.86	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1221	INT		26.86	20.12	1,290	9.73	7.90	-24	43.7	AC
1225	1.0		26.10	19.31	1,290	7.05	7.47	-71	112	SC
1312	2.0		26.24	22.51	1,190	10.39	7.65	-21	52	SC
1316	2.5		27.00	18.49	1,020	5.93	7.66	-33	24.5	C
1320	3.0		27.00	17.82	1,210	4.36	7.45	-29	77.5	SC
1325	4.0		27.0	17.43	1,210	3.87	7.47	-36	50	SC
1330	5.0		27.0	17.49	1,210	3.71	7.47	-38	50	SC
1334	6.0		27.0	17.53	1,210	3.68	7.46	-39	51	SC
	Start Sampling 1340									
	End Sampling 1358			Sample Number: 2708-090812-MW-14-110-117						
			Final 27.0							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-15-50

Date: 8-17-2009

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	BEN UHL
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	
Flow-Through Cell:	Yes
Sampling Method:	Waterra Inertia Pump and Stainless Steel Check Valve
Decontamination Method:	Dedicated Well Tubing & New Extension Tubing
Purge Water Disposition:	AST
Field Conditions:	SUNNY, 80'S F

Comments: *Black particles in purgewater. Pitch? Also, this well has higher temps maybe due to adjacent steam-line in area.

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	50.00	49.70	40.00	39.70	40 - 50

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (L/ft)	Minimum Purge Volume (Liters)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
2	1 L Amber	None	PAHs	N
12	VOAs	HCl	BTEX	N
1	500 mL	NaOH	Total and Amenable CN	N
1	250 mL	HNO_3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl-~~	~~N~~ -BW
1	250mL HDPE	HNO_3	DISS METALS	Y
7 (8)	TOTAL			

Well Purge Data

Time	Volume Purged (Liters)	Purge Rate (Lpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	913	Initial 17.15	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
914	INT		18.00	20.53	1,550	4.86	7.72	-18	77	SC
922	0.25		18.60	28.29	1,520	0.63	7.12	-99	>800	VC*
926	0.40		18.81	27.86	1,450	0.42	7.10	-98	791	VC
* 930	0.60		19.0	27.41	1,460	0.09	7.12	-98	>800	VC
944	5.1		23.97	23.72	1,500	0.00	7.20	-100	>800	VC
1006	11.0		26.60	22.84	1,560	0.00	7.30	-108	>800	VC
1021	15.0		26.89	22.68	1,580	0.00	7.32	-109	>800	VC
1024	16.0		27.04	22.72	1,590	0.00	7.36	-111	>800	VC
1027	17.0		27.16	22.14	1,590	0.00	7.36	-112	>800	VC
1031	18.0		27.21	22.64	1,590	0.00	7.37	-112	>800	VC.
	Start Sampling	1032								
	End Sampling	1050		Sample Number:	2708- 090817-MW-15-50-133					
			Final 28.01							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Lpm=Liters per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

*-930=switch to standard purge.
-Rainbow sheen on purge water.

50-17.15 = 32.85 × 0.163 = 5.3 gal = 1 vol
15.9 gal = 3 vol
26.5 gal = 5 vol.

Low-Flow Well Sampling Field Log

Well Number: MW-15-66

Page 1 of 1

Date: 8-17-2009

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow
Pump Intake Depth (~~ft btc~~):	62' bgs
Flow-Through Cell:	Yes
Sampling Method: Waterra Inertia Pump and Stainless Steel Check Valve	
Decontamination Method: Dedicated Well Tubing & New Extension Tubing	
Purge Water Disposition:	AST
Field Conditions:	Sunny, 80°'s F
Comments:	High temps possibly due to steam-line in area

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	66.00	65.80	60.50	60.30	60.5 - 65.5

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pumo Intake (ft)	Convert Factor (L/ft)	Minimum Purge Volume (Liters)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
2	1 L Amber	None	PAHs	N
3	VOAs	HCl	BTEX	N
1	500 mL	NaOH	Total and Amenable CN	N
1	250 mL	HNO_3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl-~~	~~N~~
1	250 mL HDPE	HNO_3	DISS METALS	Y
8	TOTAL			

Well Purge Data

Time	Volume Purged (Liters)	Purge Rate (Lpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	1104	Initial 18.41	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1105	1NT		20.00	27.06	390	7.60	7.89	-59	>800	VC
1113	0.8		19.68	27.58	161	0.34	7.34	-29	>800	VC
1116	1.1		19.40	28.19	182	0.00	7.30	-19	>800	VC
1120	1.3		19.40	28.36	183	0.00	7.28	-17	>800	VC
1125	1.6		19.40	28.45	184	0.00	7.24	1	>800	VC
1129	2.0		19.40	28.46	185	0.00	7.25	4	>800	VC
1134	2.3		19.40	28.48	185	0.00	7.25	6	>800	VC
	Start Sampling	1135								
	End Sampling	1150		Sample Number:	2708-090817-MW-15-66-135					
			Final 19.40							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Lpm=Liters per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

65-18.41= 46.59×0.163=7.5 gal=1 vol
22.5 gal=3 vol
38.5 gal=5 vol

Low-Flow Well Sampling Field Log

Well Number: MW-16-45

Page 1 of ____

Date: 8/13/09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	RER / BAL
Purge Method:	Standard
Pump Intake Depth (ft btc):	33' btc
Flow-Through Cell:	No (NAPL issues)
Sampling Method:	Waterra Inertia Pump and Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	OWS then AST
Field Conditions:	Cool, Cloudy

Comments: Initial Purge H_2O Has Some (≈5%) Blebs, But By 3.0 gallons ≈ 50% NAPL. Discontinue on 8/13 & will Sample in A.M. on 8/14 (Allow Settling/Recharge Time)

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	49.00	-	30.00	-	30 - 45

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	250mL HDPE	HNO3	Total Metals	N
7				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	15:25	Initial 27.25	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
15:28	1.0			17.6	617	/	7.93	/	/	
15:31	2.0			16.2	501	/	7.18	/	/	
	Pump off @ 2.0 gal.									
15:50	Restart									
15:54	3.0			15.5	476	/	7.18	/	/	
	*Pumping Mostly NAPL @ 3.0 gal (Allow Stand Time)									
16:05	4.0			15.1	459	/	7.20	/	/	
16:08	4.75			15.6	432	/	7.19	/	/	
	*Mostly NAPL => Allow Stand Time									
16:30	Unable to Raise Sufficient H_2O									
	Start Sampling 530 8/14/09									
	End Sampling			Sample Number:	2708- 090814-MW-16-45-130					
			Final							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-16-65

Page 1 of ____

Date: 8/13/09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	57' btc
Flow-Through Cell:	Yes - YSI
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	Cloudy, warm, ≈70°F

Comments:

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	68.00	-	55.00	-	55 - 65

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
2 ±	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
~~4~~ 1	500mL HDPE	HNO3	Total Metals	N
~~7~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	N
1	250ml AMB	NaOH	OIA-1677	N
1	250ml AMB	PbCO3/NaOH	OIA-1677	Y

X2 =

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 13:43		Initial 28.1	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
13:46			29.6	15.51	496	3.90	8.13	-19.7	500	VC - SANDY
13:49			30.5	15.72	487	1.50	7.55	-32.3	390	VC-CI (SANDY GRAYISH)
13:52			31.1	16.08	486	1.30	7.39	-45.5	120	CI-AC (SOME SANDS)
13:55			31.1	15.92	486	1.01	7.15	-60.0	45	C - STILL SMALL % SANDS
13:58			31.35	15.81	488	0.90	7.14	-68.7	39	C - DECREASING %
14:01			31.40	15.76	489	0.85	7.14	-69.6	35	C - "
14:04			31.45	15.88	490	0.80	7.12	-75.4	30	C-CC
14:07			31.40	16.37	492	0.77	7.06	-72.8	37	C-CC
14:10			31.45	16.41	495	0.75	6.98	-69.1	35	C-CC
14:13			31.45	15.05	489	0.70	6.97	-65.8	120	SC-AC (SOME INCREASED SANDS)
14:16			31.45	15.35	493	0.71	6.97	-62.7	65	AC-C
14:19			31.55	15.49	493	0.69	6.91	-61.3	1.4	CC
	Start Sampling 14:35									
	End Sampling ~~14:35~~ 15:00			Sample Number: 2708- ~~090~~ 090813-MW-16-65-126						
			Final						128	

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy CI=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-16-65

Date: 8/13/09

HAI Project Number: 2708-30

Well Purge Data (continued from Page 1)

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
		Stabilization Criteria =>		-	±3%	±10%	±0.1	±10mv	±10%	
14:22			31.60	15.52	494	0.65	6.86	-79.7	26	C (NOT CC)
14:25			31.65	15.49	495	0.60	6.82	-91.0	32	C
14:28			31.70	15.28	497	0.60	6.81	-97.7	29	C-CC
14:31	5.5		31.70	15.05	497	0.60	6.81	-88.2	30	C-CC
	Start Sampling	14:35								
	End Sampling	~~15:00~~	Final	Sample Number:	2708- 090813-MW-16-65-126 @ 14:35					
									128	

Comments

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-17-79

Page 1 of ____

Date: 8/17/09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	RCR
Purge Method:	~~BE~~ Low Flow
Pump Intake Depth (ft btc):	71' btc
Flow-Through Cell:	YES - YSI
Sampling Method:	INERTIAL PUMP Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	COOL, CLEAR, ≈ 65°F
Comments:	

Well Information (Stick-up or Flush (circle one))

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	82.00	-	38.50	-	38.5 - 78.5

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~ 7	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	10:10	initial 29.8	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
10:13	IN1								15	CC
10:16	0.5		29.9	16.52	843	1.20	6.53	-91.3	3.5	CC
10:19	0.75		30.0	16.52	877	0.90	6.61	-134.5	290	CI
10:22	1.0		30.0	16.45	876	0.80	6.65	-163.0	40	C
10:26	1.3		30.0	16.35	872	0.70	6.65	-182.2	4.6	CC
10:29	1.75		30.0	16.40	870	0.60	6.64	-193.5	0.2	CC
10:32	1.9		30.0	16.40	868	0.50	6.64	-208.2	0.1	CC
10:35	2.0		30.0	16.34	867	0.50	6.63	-215.5	0.1	CC
10:38	2.3		30.0	16.44	867	0.50	6.63	-223.3	1.0	CC
10:41	2.75		30.0	16.43	867	0.50	6.63	-228.7	0.1	CC
10:44	3.0		30.0	16.45	867	0.50	6.63	-227.5	0.1	CC
	Start Sampling	10:45								
	End Sampling	10:55		Sample Number:	2708- 090817-MW-17-79-134 @ 10:45					
			Final 30.0							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy CI=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-18-30

Page 1 of ____

Date: 8-11-09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: RCR

Purge Method: STANDARD

Pump Intake Depth (ft btc): NA (BAILER)

Flow-Through Cell: NO

Sampling Method: Stainless Steel Check Valve

Decontamination Method: DISPOSABLE BAILER ~~Dedicated Tubing~~ (EW)

Purge Water Disposition: AST

Field Conditions: OIL/WATER SEPARATOR

Comments: 1157 - well contains only oil. Returned @ 13:00 & remove ≈1200mL, then just DNAPL/oil. Allow stand time. Concluded sampling on 8/12/09

Well Information (Stick-up or Flush (circle one))

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	30.00	-	19.00	-	19 - 29

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~ 7	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4 Cl~~	N

*VOAs w/ HEADSPACE AS MINISCUS IS CONCAVE DUE TO HIGHER % OF OIL/NAPL PRESENT IN SAMPLE

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
11:30	Pump On	11:40	Initial 26.1	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
11:45	0.5			19.7	946	/	9.09	/	/	STRONG N.C. ODOR HEAVY SHEEN. NAPL PRESENT.
1148	1.0			17.0	867	/	8.63	/	/	"
1157	2.3			16.5	760	/	7.92	/	/	"
	≈ 5x VOLUME									
	Start Sampling	13:00								
	End Sampling	-		Sample Number:	2708-0908~~11~~12-MW-18-30-102 @ 13:00					
			Final - only oil in sump							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

29 - 26.1 = 2.9' = .48 gal = 1x

1.45 gallons = 3x

Low-Flow Well Sampling Field Log

Well Number: MW-18-180

Page 1 of 1

Date: 8/17/09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	172' btc
Flow-Through Cell:	YES
Sampling Method:	Stainless Steel Check Valve (Inertial Pump)
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	Cool, Clear

Comments:

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	230.00	-	170.00	-	170 - 180

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~4~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~
7				
x 3				
(21)				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 8:55		Initial 29.10	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
8:57	INI		29.10	16.95	371	6.49	6.75	-143.7	35	C - CC
9:00	0.25		29.15	16.02	389	2.64	6.82	-155.7	33	CC
9:03	0.75		29.25	15.85	391	2.50	6.91	-161.5	25	CC
9:06	1.25		29.30	15.76	394	2.01	7.52	-185.6	16	CC
9:09	1.75		29.35	15.49	391	1.50	7.41	-208.2	13	CC
9:12	2.5		29.35	15.35	347	1.30	7.21	-221.7	23	CC
9:15	3.0		29.35	15.23	341	1.05	7.16	-226.7	12	CC
9:18	3.5		29.35	15.20	343	0.95	7.13	-230.8	11	CC
9:21	4.0		29.35	15.14	346	0.80	7.12	-233.8	5.7	CC
9:24	4.5		29.35	15.15	351	0.70	7.12	-235.4	9.3	CC
9:27	5.0			15.16	356	0.75	7.12	-236.8	7.1	CC
	Start Sampling 9:30									
	End Sampling 9:55			Sample Number: 2708- 090817-MW-18-180-132 @ 9:30						
			Final 29.35						MS/MSD	

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-19-22

Page 1 of ____

Date: 8/17/09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: RCR

Purge Method: STANDARD (SEE COMMENTS)

Pump Intake Depth (ft btc): 22' btc

Flow-Through Cell: NO

Sampling Method: INERTIAL Stainless Steel Check Valve

Decontamination Method: Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: WARM, CLEAR

Comments: H_2O LEVEL BARELY ABOVE SUMP. WILL TAKE LOCATION DRY & SAMPLE RECHARGE. H_2O RECHARGES QUICKLY WILL PUMP UNTIL TURBIDITY CLEARS, OR COMPLETELY DRY.

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	23.00	-	12.00	-	12 - 22

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~
1	250ML HDPE	HNO_3	DISS METALS	Y
8				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 14:40		Initial 21.80	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
14:45	0.2		22.90	14.9		/	6.75	/	>1000	VC - BLACKISH SAND
14:48	0.75			13.8		/	6.67	/	>1000	"
14:51	1.25			14.1		/	6.61	/	>1000	"
14:53	2.0			13.9		/	6.59	/	>1000	"
14:55	2.5		23.0	14.9		/	6.59	/	>1000	"
	→ DRY @ 2.5 GALLONS									
		*RECHARGES		QUICKLY TO	21.80' btc.					
	Start Sampling	15:00								
	End Sampling	15:10		Sample Number:	2708- 090817-MW-19-22-140 @ 15:00					
			Final 21.80	POST SAMPLING.						

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

22 - 21.80 = 0.2' H_2O COLUMN · X 0.166 = 0.03 gal = 1x
0.09 = 3x
0.166 = 5x

Low-Flow Well Sampling Field Log

Well Number: MW-19-125

Page 1 of 1

Date: 8-13-2009

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: BEN UHL

Purge Method: LOW FLOW

Pump Intake Depth (~~ft btc~~): 121' bgs

Flow-Through Cell: YES

Sampling Method: Stainless Steel Check Valve

Decontamination Method: Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: OVERCAST, 70°'s F

Comments: –

Well Information (Stick-up or Flush (circle one))

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	126.00	-	115.00	-	115 - 125

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~ BW
7 TOTAL				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 1329		Initial 23.91	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1330	INT		23.91	19.45	442	7.69	7.73	45	84	AC
1334	0.5		24.00	15.52	581	1.98	7.38	-118	99	AC
1338	1.3		24.00	15.42	587	0.00	7.28	-117	105	SC
1342	2.0		24.00	15.27	576	0.00	7.25	-117	54	AC
1346	2.8		24.00	15.24	579	0.00	7.23	-116	35	C
1350	3.6		24.00	15.03	572	0.00	7.23	-116	29	C
1355	4.3		24.00	14.86	576	0.00	7.22	-115	26.7	C
	Start Sampling 1400									
	End Sampling 1457			Sample Number: 2708-090813-MW-19-125-123						
			Final 24.00							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-19-180

Date: 8-13-2009

Page 1 of 1

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	BON UHL
Purge Method:	LOW FLOW
Pump Intake Depth (ft ~~btc~~):	175 bgs
Flow-Through Cell:	YES
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	OVERCAST, 70°'s F

Comments:

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	227.00	-	170.00	-	170 - 180

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
1	1L HDPE	4C	ALK, Bicarb, Carb, NO3, SO4, Cl	N
7	TOTAL			

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	1425	Initial 24.45	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1426	INT		24.55	22.74	149	6.10	6.70	-98	112	SC
1431	0.1		24.55	23.29	487	8.03	5.83	-100	18.6	CC
1436	0.2		24.55	23.38	481	5.90	8.00	-77	20	CC
1440	0.3		24.55	22.96	469	4.35	7.84	-88	20	CC
1446	1.0		24.55	22.09	479	2.87	7.64	-118	23.4	CC
1451	1.3		24.55	21.92	484	2.40	7.60	-115	21	CC
1455	1.9	24.70	~~24.55~~	21.86	489	2.18	7.47	-104	21.6	CC
1500	2.2		24.70	21.85	490	2.17	7.46	-101	23.6	CC
1504	2.6		24.70	21.78	489	2.16	7.45	-100	23.7	CC
1508	2.9		24.70	21.18	490	2.14	7.42	-99	23	CC
	Start Sampling	1510								
	End Sampling	1525		Sample Number:	2708-090813-MW-19-180-125					
			Final 24.70							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-20-120

Page 1 of ____

Date: 8/12/09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	112' btc
Flow-Through Cell:	Yes – YSI
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	Warm, Partly Cloudy
Comments:	

Well Information (Stick-up or Flush (circle one))

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	213.00	-	110.00	-	110 - 120

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~
7				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 12:19		Initial 22.30	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
12:21	1N1		22.55	16.57	465	12.04	6.94	-43.6	80	C-AC
12:24	0.3		22.65	16.31	466	4.30	7.26	-83.9	110	AC
12:27	6.5		22.55	17.50	465	3.15	7.25	-90.1	90	AC
12:30	0.75		22.55	17.98	462	2.50	7.23	-105.8	75	AC
12:33	1.0		22.55	18.13	470	1.95	7.23	-106.3	63	AC
12:36	1.25		22.55	19.16	475	1.50	7.23	-105.7	50	AC-C
12:39	1.50		22.55	19.10	480	1.40	7.25	-104.3	45	AC-C
12:42	1.75		22.55	19.27	482	1.25	7.27	-102.0	40	C
12:45	2.0		22.55	19.32	485	1.15	7.28	-105.3	40	C
12:48	2.25		22.55	19.55	490	1.00	7.28	-107.0	40	C
12:51	2.5		22.55	19.70	490	0.85	7.28	-110.5	40	C
12:54	2.7		22.55	19.80	492	0.75	7.28	-114.8	45	C
	Start Sampling		13:05							
	End Sampling		13:15	Sample Number:	2708- 090812-MW-20-120-1/6					@ 13:
			Final							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-20-120

Date: 8/12/09

HAI Project Number: 2708-30

Well Purge Data (continued from Page 1)

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
		Stabilization Criteria =>		-	±3%	±10%	±0.1	±10mv	±10%	
12:57	2.9		22.55	19.85	493	0.74	7.28	-116.6	40	
13:00	3.0		22.55	19.91	493	0.73	7.28	-115.3	40	
	Start Sampling	13:05								
	End Sampling	13:15		Sample Number:	2708- 090812-MW-20-120-116 @13:05					
			Final							

Comments

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-21-12

Page 1 of 1

Date: 8-11-09

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	2708-30

Sampling Information	
Field Team:	BEN UHL
Purge Method:	LOW FLOW
Pump Intake Depth (~~ft btc~~):	11.5' bgs
Flow-Through Cell:	YES
Sampling Method:	Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	AST
Field Conditions:	DRIZZLE, 70°S F
Comments:	SHEEN ON PURGE WATER IN BUCKET.

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	14.00	-	7.00	-	7 - 12

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl⁻~~	~~N~~ BW
7 Total				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 1433		Initial 12.13	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1430	INT		12.13	23.35	503	7.06	7.20	-93	45	AC
1442	0.3		12.25	23.68	502	5.33	7.16	-88	40	AC
1448	0.6		12.25	23.67	492	4.49	7.09	-80	26	C
1453	1.2		12.25	23.55	487	4.06	7.10	-83	19	C
1458	1.8		12.25	23.58	485	3.69	7.10	-85	13.1	CC
1503	2.0		12.25	23.53	484	3.33	7.10	-87	10.4	CC
1508	2.4		12.25	23.50	482	3.28	7.8	-90	8.0	CC
1513	2.8		12.25	23.41	482	3.25	7.10	-92	6.8	CC
1518	3.2		12.25	23.35	482	3.21	7.11	-94	6.4	CC
	Start Sampling 1520									
	End Sampling 1536			Sample Number: 2708-090811-MW-21-12-105						
			Final 12.25							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Stick up
15 - 12.13 = 2.87 × 0.163 = 0.46 = 1 vol
1.4 gal = 3 vol
2.3 gal = 5 vol

Low-Flow Well Sampling Field Log

Well Number: MW-21-75

Page 1 of ____

Date: 8/17/09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: RCR

Purge Method: Low Flow

Pump Intake Depth (ft btc): ~~3~~ 67' btc

Flow-Through Cell: Yes - Yes

Sampling Method: Inertial Pump Stainless Steel Check Valve

Decontamination Method: Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: Warm, Clear, ≈75°F

Comments:

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	77.00	-	65.00	-	65 - 75

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
2 ~~1~~	~~500~~ 250m L HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~
1	250ml AMB	NaOH	OIA-1677	N
1	250ml AMB	PbCO3/NaOH	OIA-1677	Y
~~1~~	10			

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	11:12	Initial 19.15	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
11:13	1N1		19.15	22.40	497	1.93	7.07	-107.0	40	C-CC
11:16	0.5		19.15	21.40	586	1.25	6.74	-127.0	20	CC
11:19	0.8		19.15	21.15	593	1.10	6.63	-148.0	19	CC
11:22	1.1		19.15	20.93	591	0.90	6.63	-182.8	12	CC
11:25	1.5		19.15	20.84	593	0.85	6.63	-194.3	15	CC
11:28	1.9		19.20	20.93	594	0.70	6.63	-203.1	0.7	CC
11:31	2.3		19.20	21.06	596	0.65	6.63	-219.5	0.25	CC
11:34	2.7		19.20	20.94	598	0.60	6.62	-230.4	0.7	CC
11:37	3.1		19.20	20.82	598	0.59	6.63	-238.2	0.5	CC
11:40	3.4		19.20	20.64	598	0.50	6.63	-247.0	0.7	CC
11:43	3.7		19.20	20.62	599	0.49	6.62	-250.0	0.5	CC
11:46	4.0		19.20	20.65	599	0.48	6.63	-251.5	0.7	CC
	Start Sampling	11:50								
	End Sampling			Sample Number:	2708- 090817-MW-21-75-136 @ 11:50					
			Final							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-21-115

Page 1 of 1

Date: 8-11-09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: BEN UHL

Purge Method: LOW FLOW

Pump Intake Depth (ft ~~btc~~): 110' bgs

Flow-Through Cell: Yes

Sampling Method: Stainless Steel Check Valve

Decontamination Method: Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: OVERCAST, 70'S F

Comments: "GYM-BAG" aroma to purgewater. No sheen observed. - minor really fine grain black particles in purgewater

Well Information (Stick-up or Flush (circle one))

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	118.00	-	105.00	-	105 - 115

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft (2")=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250 mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250 mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	ALK, Bicarb, Carb, NO3, SO4, CL-	~~N~~ (BW)
~~8~~ (BW)	TOTAL			
(7)				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	1047	Initial 17.06	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1048	INT		17.10	22.79	351	11.79	8.39	-20	13.8	CC
1053	1.2		17.10	22.26	397	3.18	7.19	-108	2.2	CC
1057	3.0		17.10	20.07	387	3.19	7.20	-108	10.	CC, slow rate
1103	4.0		17.10	19.41	387	2.75	7.21	-107	16.	CC
1111	8.0		17.10	19.13	384	2.76	7.18	-108	30	CC
1114	10.0		17.10	19.09	386	2.72	7.15	-108	30	CC
	Start Sampling	1115								
	End Sampling	1129		Sample Number:	2708-090811-MW-21-115-101					
			Final 17.10							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: MW-21-166

Page 1 of ____

Date: 8-11-09

Project Information

Project Name: NW Natural - Gasco Facility

HAI Project Number: 2708-30

Sampling Information

Field Team: Ben Uhl

Purge Method: Low Flow

Pump Intake Depth (~~ft btc~~): 160' bgs

Flow-Through Cell: YES

Sampling Method: Stainless Steel Check Valve

Decontamination Method:

Dedicated Tubing

Purge Water Disposition: AST

Field Conditions: OVERCAST 70°'s F

Comments:

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	193.00	-	156.00	-	156 - 166

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4 Cl~~	~~N~~
~~1~~ (DC)	TOTAL			
1	250mL HDPE	HNO_3	DISSOLVED METALS	Y
(8)				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	1318	Initial 17.75	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
1320	INT		17.75	20.49	362	1.70	9.06	-185	15.4	CC
1329	3.5		19.90	20.34	347	0.00	8.98	-106	67.2	QC, slowed rate
1334	4.6		19.46	20.41	344	0.00	9.09	-389	80.7	AC
1340	5.6		19.46	20.22	344	0.00	9.23	-391	117	SC
1345	7.0		19.46	20.06	349	0.00	9.27	-395	121	SC
1350	8.0		19.46	19.91	345	0.00	9.27	-395	125	SC
	Start Sampling	1352								
	End Sampling	1407		Sample Number:	2708-090811-MW-21-166-103					
			Final 19.46							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: NWN -1-20

Page 1 of 1

Date: 8/18/09

Project Information	
Project Name:	Siltronic Corporation Property
HAI Project Number:	5237

Sampling Information	
Field Team:	RCR
Purge Method:	STANDARD
Pump Intake Depth (ft btc):	14' btc
Flow-Through Cell:	NO (SHEEN & BLACKISH H_2O)
Sampling Method:	Waterra Inertia Pump - Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing, Alconox and Distilled Water on Water Level Indicator Probe
Purge Water Disposition:	AST @ NWN property
Field Conditions:	WARM, CLEAR, ≈ 80°F

Comments: INITIAL H_2O BLACKISH (NO MULTIMETER), W/ SOME SHEEN H_2O CLEARS @ AROUND 3-4x WELL VOLUME

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	22.00		10.00		10' - 20'

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs - Extended	N
1	~~1~~ 250 mL HDPE	NaOH	Total, Free, Amenable CN	N
1	~~500m~~ 250 mL HDPE	HNO3	Total Metals	N
~~5~~	~~1L HDPE~~	~~4C~~	~~Carb, BiCarb, ALK, NO3, SO4, CL~~	~~N~~
1	250 mL HDPE	HNO_3	DISS METALS	Y

8

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	12:10	Initial 10.70	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
	IN1		10.70			/	7.19	/	/	CLOUDY w/ FOUL ODOR & BLACKISH
12:20	1.0		10.70	23.9	381	/	6.95	/	/	Cl - BLACKISH W/SHEEN
12:25	1.5		10.70	20.3	384	/	6.70	/	/	Cl - BLACKISH (NO ~~SHEE~~ SHEEN)
12:28	2.0		10.75	18.7	390	/	6.51	/	/	Cl - BLACKISH
12:31	2.5		10.80	18.1	402	/	6.32	/	/	Cl - "
12:33	3.0		10.80	17.7	411	/	6.15	/	/	Cl - "
12:36	~~3~~ 4.0		10.80	17.4	418	/	6.03	/	/	Cl - "
12:39	~~4~~ 5.0		10.80	17.5	421	/	5.98	/	/	Cl - GRAYISH (SOME CLEARING)
12:42	~~5~~ 6.0		10.80	17.3	432	/	5.97	/	/	Cl - CONTINUING TO CLEAR
12:45	7.0		10.80	17.2	437	/	5.95	/	/	Cl - "
12:48	8.0		10.80	17.0	440	/	5.95	/	/	AC
	LD	REACH	5x	VOLUME						
	Start Sampling									
	End Sampling			**Sample Number:**	5237- 090818-NWN-1-20-148 @ 12:50					
			Final							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

20 - 10.70 = 9.3' COLUMN X 0.166 = 1.54 GAL = 1x
4.6 GAL = 3x
7.7 GAL = 5x

Low-Flow Well Sampling Field Log

Well Number: NWN-2-20

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Date: 8/18/09

Project Information	
Project Name:	Siltronic Corporation Property
HAI Project Number:	5237
Sampling Information	
Field Team:	RLR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	15' btc
Flow-Through Cell:	YES - HORIBA U52
Sampling Method:	Waterra Inertia Pump - Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing, Alconox and Distilled Water on Water Level Indicator Probe
Purge Water Disposition:	AST @ NWN property
Field Conditions:	Clear, warm, ≈70°F
Comments:	Purge H_2O has oil-like odor.

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	22.00		10.00		10' - 20'

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs - Extended	N
1	1L HDPE	NaOH	Total, Free, Amenable CN	N
1	500 mL HDPE	HNO3	Total Metals	N
~~2~~ 7	~~1L HDPE~~	~~4C~~	~~Carb, BiCarb, Alk, NO3, SO4, CL~~	~~N~~

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	7:43	Initial 13.40	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
7:47	IN1		13.40	17.89	807	0.66	6.67	81	118	Cl - ODOR
7:51	0.5		13.40	16.52	740	0.0	6.68	21	112	Cl - "
7:54	0.8		13.40	16.03	994	0.0	6.83	-40	57.2	C "
7:57	1.25		13.40	15.94	1,020	0.0	6.85	-57	35.1	C "
8:00	1.75		13.40	15.69	1,040	0.0	6.86	-71	40.3	C "
8:04	2.3		13.40	15.55	1,060	0.0	6.86	-79	32.8	C "
8:07	2.7		13.40	15.60	1,060	0.0	6.87	-82	37.2	C "
8:10	3.0		13.40	15.56	1,060	0.0	6.87	-86	28.9	C "
8:13	3.5		13.40	15.52	1,060	0.0	6.88	-87	23.4	C-CC "
	Start Sampling	8:15								
	End Sampling	8:35		Sample Number:	5237- 090818-NWN-2-20-142					@ 8:15
			Final 13.40							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons par minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: NWN-3-17

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Date: 8/18/09

Project Information

Project Name: Siltronic Corporation Property

HAI Project Number: 5237

Sampling Information

Field Team: RCR

Purge Method: STANDARD

Pump Intake Depth (ft btc): 17' btc

Flow-Through Cell: NO - INSUFFICIENT H_2O COLUMN FOR LOW FLOW

Sampling Method: Waterra Inertia Pump - Stainless Steel Check Valve

Decontamination Method: Dedicated Tubing, Alconox and Distilled Water on Water Level Indicator Probe

Purge Water Disposition: AST @ NWN property

Field Conditions: WARM, CLEAR

Comments: MINIMAL H_2O COLUMN WILL ATTEMPT TO PURGE DRY. INSUFFICIENT VOLUME TO COLLECT ANY PORTION OF SAMPLE SUITE

Well Information — Stick-up or (Flush) (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	19.00		7.00		7' - 17'

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs - Extended	N
1	~~1~~ 250 mL HDPE	NaOH	Total, Free, Amenable CN	N
1	~~500~~ 250 mL HDPE	HNO3	Total Metals	N
~~4~~	~~1L HDPE~~	~~4C~~	~~Carb, BiCarb, Alk, NO3, SO4, Cl~~	N

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	8:55	Initial 16.90	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
8/18 8:57	0.2		18.75	19.03	566	/	5.75	/	/	AC-C
	↳ WELL DRY w/ ≈ 0.2 GALLONS REMOVED									
	ALLOWING STAND TIME FOR RECHARGE									
11:55			17.5							
14:50			18.2							
	↳ RETURN IN A.M. OF 8/19/09									
8/19 7:25			18.5	⇒ NO SAMPLE. NO RECHARGE AFTER 18 HRS. w/ APPROX. 100 ML VOLUME REMOVED ON 8/18/09						
	Start Sampling									
	End Sampling			Sample Number:	5237- X					
			Final							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: NWN-4-15

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Date: 8/18/09

Project Information	
Project Name:	Siltronic Corporation Property
HAI Project Number:	5237
Sampling Information	
Field Team:	RCR
Purge Method:	STANDARD
Pump Intake Depth (ft btc):	15' BTC
Flow-Through Cell:	NO - INSUFFICIENT H_2O COLUMN
Sampling Method: Waterra Inertia Pump - Stainless Steel Check Valve	
Decontamination Method: Dedicated Tubing, Alconox and Distilled Water on Water Level Indicator Probe	
Purge Water Disposition:	AST @ NWN property
Field Conditions:	COOL, CLEAR
Comments:	PARTIAL SAMPLE. ONLY ENOUGH VOLUME FOR 3 VOAs

Well Information (~~Stick up~~ or ~~Flush~~) (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	17.00		5.00		5' - 15'

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
~~2~~	~~1L AMB~~	~~4C~~	~~LL PAHs - Extended~~	~~N~~
~~1~~	~~1L HDPE~~	~~NaOH~~	~~Total Free, Amenable CN~~	~~N~~
~~1~~	~~500 ml HDPE~~	~~HNO3~~	~~Total Metals~~	~~N~~
~~2~~	~~1L HDPE~~	~~4C~~	~~Carb, BiCarb, ALK, NO3, SO4, CL~~	~~N~~

Well Purge Data

	Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
		Pump On	7:20	Initial 14.8	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
T	7:24	IN1			19.8	131.9	/	6.15	/	/	C
8/18		↳ WELL		DRY	W/ <0.5 GALLONS	REMOVED					
			ALLOW	4-6	HRS.	RECHARGE					
)	11:40			15.7							
	14:25			15.9							
		↳ RETURN IN A.M. OF 8/19/09									
8/19	7:35			16.8	NO RECHARGE W/ 18 HRS. STAND TIME						
					(H_2O LEVELS ALSO FELL AS WELL NOW COMPLETELY DRY)						
					PARTIAL SAMPLE						
		Start Sampling	14:25								
		End Sampling	—		**Sample Number:**	5237- 090818-NWN-4-15-152 @ 14:25					
				Final —							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: NWN-5-20

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Date: 8/18/09

Project Information	
Project Name:	Siltronic Corporation Property
HAI Project Number:	5237

Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	16' btc
Flow-Through Cell:	YES - HORIBA U52
Sampling Method: Waterra Inertia Pump - Stainless Steel Check Valve	
Decontamination Method: Dedicated Tubing, Alconox and Distilled Water on Water Level Indicator Probe	
Purge Water Disposition:	AST @ NWN property
Field Conditions:	WARM, CLEAR, ≈ 85°
Comments:	

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	22.00		10.00		10' - 20'

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs - Extended	N
1	~~1L~~ 250 mL HDPE	NaOH	Total, Free, Amenable CN	N
1	~~500 mL~~ 250 mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~Carb, BiCarb, ALK, NO3, SO4, CL~~	~~N~~
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Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 13:42		Initial 14.50	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
13:45	1N1		14.55	18.51	644	11.40	7.26	82	570	Cl
13:48	0.5		14.60	16.14	636	3.31	6.87	84	459	Cl
13:51	1.0		14.60	15.86	673	1.94	6.80	77	207	Cl
13:54	1.5		14.60	15.62	693	0.95	6.77	63	108	Cl - AC
13:57	2.0		14.60	15.43	700	0.35	6.76	34	75.9	AC
14:00	2.5		14.60	15.25	703	0.30	6.76	10	47.6	C
14:03	3.0		14.60	15.11	706	0.28	6.75	-9	32.7	C
14:06	3.5		14.60	15.24	707	0.26	6.76	-21	27.1	CC
14:09	4.0		14.60	15.14	707	0.25	6.75	-33	23.5	CC
14:12	4.5		14.60	15.18	708	0.25	6.76	-38	20.6	CC
14:15	5.0		14.60	15.21	708	0.25	6.76	-40	19.6	CC
14:18	5.5		14.60	15.19	708	0.24	6.76	-41	17.5	CC
	Start Sampling		14:20							
	End Sampling		14:30	Sample Number:	5237- 090818-NWN-5-20-150 @ 14:20					
			Final 14.60							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

20 - 14.50 = 5.5' H_2O COLUMN × 0.166 = 0.9 gal = 1x
2.7 gal = 3x
4.5 gal = 5x

Low-Flow Well Sampling Field Log

Well Number: NWN-6-31

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Date: 8/19/09

Project Information	
Project Name:	Siltronic Corporation Property
HAI Project Number:	5237
Sampling Information	
Field Team:	RCR
Purge Method:	LOW FLOW
Pump Intake Depth (ft btc):	24' btc
Flow-Through Cell:	YES - HORIBA U52
Sampling Method: Waterra Inertia Pump - Stainless Steel Check Valve	
Decontamination Method: Dedicated Tubing, Alconox and Distilled Water on Water Level Indicator Probe	
Purge Water Disposition:	AST @ NWN property
Field Conditions:	COOL, CLEAR, ~70°F
Comments:	

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	33.00		31.00		21' - 31'

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs - Extended	N
1	~~1L~~ 250mL HDPE	NaOH	Total, Free, Amenable CN	N
1	~~500mL~~ 250mL HDPE	HNO3	Total Metals	N
~~4~~	~~1L HDPE~~	~~4C~~	~~Carb, BiCarb, ALK, NO3, SO4, CL~~	~~N~~
1	250mL HDPE	HNO_3	DISS. METALS	Y

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Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 8:05		Initial 11.76	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
8:08	1N1		13.10	14.75	1,320	5.90	7.88	32	>1000	VC
8:11	0.75		13.25	13.72	1,260	3.10	7.41	45	58.5	CI-AC
8:14	1.25		13.15	13.96	1,240	1.75	7.29	-4	76.1	AC
8:17	1.75		13.15	13.98	1,230	0.95	7.22	-50	84.1	AC
8:20	2.1		13.10	13.74	1,230	0.80	7.18	-64	76.8	AC
8:23	2.5		13.10	13.75	1,230	0.75	7.16	-79	77.6	AC
8:26	2.75		13.05	14.06	1,230	0.70	7.14	-89	79.3	AC
8:29	3.0		13.05	13.87	1,230	0.65	7.12	-94	83	AC
8:32	3.3		13.05	13.81	1,230	0.60	7.12	-99	75.3	AC
8:35	3.7		13.05	13.72	1,230	0.55	7.10	-105	54.7	AC
8:38	4.0		13.05	13.74	1,230	0.55	7.10	-107	54.6	AC
8:41	4.3		13.05	13.73	1,230	0.54	7.10	-109	54.1	AC
	Start Sampling 8:45									
	End Sampling 8:55			Sample Number:		5237-090819-NWN-6-31-15-154 @ 8:45				
			Final 13.05							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy CI=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: NWN-7-30

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Date: 8/18/09

Project Information

Project Name: Siltronic Corporation Property

HAI Project Number: 5237

Sampling Information

Field Team: RLR

Purge Method: LOW FLOW

Pump Intake Depth (ft btc): 22' btc

Flow-Through Cell: YES - HORIBA U52

Sampling Method: Waterra Inertia Pump - Stainless Steel Check Valve

Decontamination Method: Dedicated Tubing, Alconox and Distilled Water on Water Level Indicator Probe

Purge Water Disposition: AST @ NWN property

Field Conditions: WARM, CLEAR, ≈70°F

Comments:

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	32.00		20.00		20' - 30'

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs - Extended	N
1	~~1L~~ 250 mL HDPE	NaOH	Total, Free, Amenable CN	N
1	~~500~~ 250 mL HDPE	HNO3	Total Metals	N
~~4~~	~~1L HDPE~~	~~4C~~	~~Carb, BiCarb, ALK, NO3, SO4,~~ CL	~~N~~
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Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 9:10		Initial 15.58	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
9:13	1N1		15.55	18.35	1,330	10.05	7.03	-83	18.7	CC
9:17	0.5		15.60	18.00	1,360	4.35	6.98	-117	15.5	CC
9:20	1.0		15.60	17.89	1,360	1.35	6.97	-122	11.6	CC
9:23	1.3		15.60	17.86	1,350	0.90	6.97	-124	6.7	CC
9:26	1.7		15.60	17.81	1,340	0.75	6.98	-126	3.7	CC
9:29	2.0		15.60	17.78	1,320	0.65	6.98	-127	2.2	CC
9:32	2.3		15.60	17.80	1,310	0.59	6.98	-128	1.4	CC
9:35	2.7		15.60	17.77	1,330	0.55	6.98	-129	1.4	CC
9:38	3.0		15.60	17.78	1,330	0.54	6.99	-130	1.5	CC
	Start Sampling 9:40									
	End Sampling 9:55		Final	Sample Number: 5237- 090818-NWN-7-30-~~B~~144 @ 9:40						

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: NWN-8-30

Date: 8/18/09

Project Information

Project Name: Siltronic Corporation Property

HAI Project Number: 5237

Sampling Information

Field Team: RCR

Purge Method: LOW FLOW

Pump Intake Depth (ft btc): 22' BTC

Flow-Through Cell: YES - HORIBA U52

Sampling Method: Waterra Inertia Pump - Stainless Steel Check Valve

Decontamination Method: Dedicated Tubing, Alconox and Distilled Water on Water Level Indicator Probe

Purge Water Disposition: AST @ NWN property

Field Conditions: WARM, CLEAR, ≈75°F

Comments:

Well Information Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	32.00		15.00		15' - 30'

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs - Extended	N
1	~~250 mL~~ # HDPE	NaOH	Total, Free, Amenable CN	N
1	~~500~~ 250 mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~Carb, BiCarb, Alk, NO3, SO4, Cl~~	~~N~~
1	250-mL HDPE	HNO_3	DISS METALS	Y

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Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 10:30		Initial 12.90	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
10:33	1N1		13.0	17.24	1,360	4.32	6.99	65	433	Cl
10:36	0.75		13.0	16.64	1,350	1.56	7.18	7	360	Cl
10:39	1.3		13.05	16.69	1,330	1.10	7.16	-35	350	Cl
10:42	1.8		13.10	15.15	1,290	0.90	7.18	-69	280	Cl
10:45	2.4		13.20	15.03	1,210	0.80	7.05	-84	250	Cl
10:48	2.9		13.30	14.95	1,190	0.75	7.02	-89	238	Cl
10:51	3.5		13.40	14.82	1,170	0.70	7.02	-95	215	Cl
10:54	4.0		13.45	14.80	1,170	0.65	7.02	-100	183	Cl - AC
10:57	4.5		13.45	14.84	1,170	0.60	7.03	-103	165	Cl - AC
11:00	5.0		13.50	14.83	1,170	0.55	7.03	-105	145	AC
11:03	5.5		13.50	14.77	1,170	0.50	7.03	-107	135	AC
11:06	6.0		13.50	14.83	1,170	0.50	7.04	-108	120	AC
11:09	6.5		13.50	14.89	1,170	0.48	7.04	-109	110	AC
11:12	7.0		13.50	14.94	1,180	0.45	7.05	-110	100	AC
	Start Sampling 11:25									
	End Sampling 11:40			Sample Number:	5237- 090818-NWN-8-30-146					@ 11:25
			Final 13.50							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: NWN-8-30

Date: 8/18/09

HAI Project Number: 5237

Well Purge Data (continued from Page 1)

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
		Stabilization Criteria =>		-	±3%	±10%	±0.1	±10mv	±10%	
11:15	7.5		13.50	14.89	1,180	0.44	7.05	-110	90.9	AC
11:18	8.0		13.50	14.84	1,170	0.43	7.05	-111	90.1	AC
11:21	8.5		13.50	14.83	1,170	0.42	7.0	-110	91.3	AC
~~11:24~~										
	Start Sampling	11:25								
	End Sampling	11:40		Sample Number:	5237- 090818-NWN-8-30-146					@ 11:25
			Final 13.50							

Comments

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: NWN-9-31

Page 1 of 1

Date: 8/19/09

Project Information	
Project Name:	Siltronic Corporation Property
HAI Project Number:	5237
Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	≈ 30.5' btc
Flow-Through Cell:	Yes - Horiba U52
Sampling Method: Waterra Inertia Pump - Stainless Steel Check Valve	
Decontamination Method: Dedicated Tubing, Alconox and Distilled Water on Water Level Indicator Probe	
Purge Water Disposition:	AST @ NWN property
Field Conditions:	Warm, Clear, ≈ 80°F
Comments:	

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	33.00		16.00		16' - 31'

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs - Extended	N
1	~~1L~~ 250mL HDPE	NaOH	Total, Free, Amenable CN	N
1	~~500 mL~~ 250 HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~Carb, BiCarb, ALK, NO3, SO4, CL~~	~~N~~

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	11:53	Initial 27.20	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
11:57	IN1		27.3	19.44	918	1.05	6.89	-28	145	Cl-AC
12:00			27.3	18.11	928	1.0	6.92	-62	82.6	AC
12:03			27.3	18.15	914	0.9	6.94	-94	60.9	AC
12:06			27.3	18.22	900	0.8	6.94	-106	68.8	AC
12:09			27.3	17.68	903	0.7	6.94	-113	54.2	AC
12:12			27.3	17.94	903	0.65	6.95	-119	41.4	C
12:15			27.3	18.31	890	0.60	6.95	-124	38.2	C
12:18			27.3	18.11	882	0.55	6.97	-127	39.6	C
12:21			27.3	18.66	877	0.50	6.97	-129	42.6	C
12:24			27.3	18.77	865	0.50	6.97	-131	24.3	C
12:27			27.3	19.09	867	0.49	6.98	-133	28.8	C
12:30			27.3	19.11	867	0.48	6.98	-134	27.5	C
	Start Sampling	12:35								
	End Sampling	12:50		Sample Number:		5237- 090819-NWN-9-31-158				@ 12:35
			Final 27.3							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: NWN-10-26

Page 1 of ____

Date: 8/19/09

Project Information	
Project Name:	Siltronic Corporation Property
HAI Project Number:	5237
Sampling Information	
Field Team:	RCR
Purge Method:	INERTIAL THEN BAILER
Pump Intake Depth (ft btc):	
Flow-Through Cell:	
Sampling Method:	Waterra Inertia Pump - Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing, Alconox and Distilled Water on Water Level Indicator Probe
Purge Water Disposition:	AST @ NWN property
Field Conditions:	
Comments:	MINIMAL H_2O ABOVE BOTTOM OF SCREEN, WILL ATTEMPT TO PUMP DRY THEN SAMPLE IF RECHARGES

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	28.00		11.00		11' - 26'

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	VOCs	N
2	1L AMB	4C	LL PAHs - Extended	N
1	1L HDPE	NaOH	Total, Free, Amenable CN	N
1	500 mL HDPE	HNO3	Total Metals	N
1	1L HDPE	4C	Carb, BiCarb, ALK, NO3, SO4, CL	N

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	9:23	Initial 25.55	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
	—		27.25							
	↳ INSUFFICIENT H_2O COLUMN TO RAISE H_2O W/ INERTIAL PUMP									
	H_2O LOADS INTO TUBING, BUT CANNOT REACH THE SURFACE.									
	WILL ATTEMPT TO PURGE W/ BAILER									
	0.1 - 0.2 gal. ⇒ WELL DRY. INSUFFICIENT H_2O TO COLLECT PARAMETERS									
9:40			27.85	ALLOW STAND TIME UNTIL END OF DAY						
14:00			26.5 ⇒ IN SUMP = INSUFFICIENT RECHARGE TO SAMPLE							
				NO SAMPLE						
				INSUFFICIENT RECHARGE						
	Start Sampling									
	End Sampling		Final	Sample Number:	5237- XX					

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: WS-8-33

Page 1 of ____

Date: 8-19-9

Project Information	
Project Name:	NW Natural - Gasco Facility
HAI Project Number:	5237-45
Sampling Information	
Field Team:	JCK & RCR
Purge Method:	
Pump Intake Depth (ft btc):	
Flow-Through Cell:	
Sampling Method:	Waterra/Stainless Steel Check Valve
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	On-site Drum (Siltronic/MFA)
Field Conditions:	
Comments:	DTW 27.84' btc 12:45

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"					23 - 33

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.166 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250 mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250 mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	N

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
12:47	Pump On		Initial 27.84	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
12:52	1 L		27.85	22.71	0.715	14.62	6.37	24.7	170	C
12:55	1.5 L		27.95	21.03	0.802	3.97	6.40	-32.6	310	Cl
12:58	2.8 L		27.93	20.36	0.811	2.40	6.36	-62.5	310	Cl
13:01	4.0 L		27.90	19.93	0.794	1.65	6.38	-104.9	270	Cl
13:04	4.9 L		27.90	20.75	0.788	1.11	6.42	-131.4	220	Cl
13:07	5.4 L		27.90	21.51	0.786	0.91	6.39	-145.6	360	
13:10	6.0 L		27.90	21.72	0.782	0.78	6.38	-158.8	150	
13:13	6.8 L		27.92	21.51	0.773	0.62	6.37	-170.6	120	
13:16	8.0 L		27.90	20.21	0.756	0.81	6.39	-184.5	100	
13:19	9.0 L		27.90	21.25	0.754	0.63	6.37	-189.3	85	
13:22	10.0 L		27.92	20.22	0.744	0.71	6.35	-195.1	65	
13:25	11.1 L		27.90	20.08	0.735	0.75	6.36	-200.7	55	
13:28	12.0 L		27.92	20.75	0.733	0.73	6.36	-200.8	45	
	Start Sampling 13:30									
	End Sampling 13:40			Sample Number: 5237-090819-WS8-33-159						
			Final 27.95							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: WS-8-5~~0~~9

Page 1 of ____

Date: 8-19-9

Project Information	
Project Name:	WSRIFS
HAI Project Number:	5237-45
Sampling Information	
Field Team:	JCK
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	
Flow-Through Cell:	Yes
Sampling Method:	Waterra Inertia Pump
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	On-site Drum (Siltronic/MFA)
Field Conditions:	Sunny, breezy, warm
Comments:	DTW 28.53' btc 11:31

Well Information — Stick-up or (Flush) (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"	56.00	58.60	45.00	47.60	46 - 56

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	~~N~~ Y
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4-Cl~~	N

Well Purge Data

Time	Volume Purged (~~Gallons~~ Liters)	Purge Rate (~~Gpm~~ L)	DTW (ft btc)	Temp. (°C)	Conductivity (µS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
11:37	Pump On		Initial 28.54	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
11:39				19.83	0.664	10.33	6.67	-10.9	270	
11:42	3.5L		29.20	19.00	0.657	2.66	6.50	-61.2	310	
11:45	4.8L		29.35	18.76	0.656	2.29	6.47	-69.4	400	
11:48	6.5L		29.40	18.72	0.657	1.84	6.49	-91.3	800	
11:51	10 L		29.50	18.70	0.656	1.45	6.47	-112.9	Er 2	
11:54	11.3L		29.30	18.80	0.655	1.21	6.48	-129.6	"	
11:57	13.5L		29.30	19.06	0.656	1.11	6.48	-141.3	"	
12:00	15.5L		29.35	18.98	0.655	0.92	6.47	-150.1	"	
12:03	17.0L		29.10	19.33	0.656	0.83	6.50	-157.6	"	
12:06	18.0L		29.10	19.68	0.657	0.77	6.50	-162.1	"	
12:09	19.0L		29.15	19.56	0.658	0.74	6.50	-167.1	"	
12:12	20.0		29.15	19.51	0.658	0.72	6.49	-170.8	"	
	Start Sampling	12:14								
	End Sampling	~~28~~ 12:25		Sample Number:	5237-090819-WS8-59-157					
			Final 28.85							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: WS-9-34

Page 1 of 1

Date: 8/19/09

Project Information	
Project Name:	WSRIFS
HAI Project Number:	5237-45
Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	30' bTC (FINAL)
Flow-Through Cell:	Yes – HORIBA U52
Sampling Method:	Waterra Inertia Pump
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	On-site Drum (Siltronic/MFA)
Field Conditions:	WARM, CLEAR, ≈75° F
Comments:	

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"					

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft **2"=0.163 G/ft** 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250 mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250 mL HDPE	HNO3	Total Metals	N
1	1L HDPE	4C	ALK, Bicarb, Carb, NO3, SO4, Cl	N
~~3~~ 1	250 mL HDPE	HNO3	DISS. METALS	Y
~~7~~ 9				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On	10:10	Initial 25.20	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
10:13	1N1		26.15	16.06	539		7.46	4	>1000	VC
10:16	0.5		26.30	15.36	703		6.95	10	548	VC
10:19	1.0		26.70	15.15	735		6.86	-10	81.8	AC
10:22	1.1		26.85	15.31	743		6.82	-25	63.3	AC
10:25	1.2		26.85	16.13	746		6.80	-37	53.0	AC
10:28	1.3		26.95	16.65	753		6.75	-51	268	CI
10:31	1.4		27.0	17.10	753		6.75	-55	190	
10:34	1.5		27.0	17.88	749		6.75	-60	133	AC
10:37	LOCATION STOPPED PRODUCING H_2O ⇒ RE-SET TUBING @ 30' bTC (INITIAL @ 28' bTC									
10:40	1.75		27.20	18.12	755		6.81	-76	49.2	C
10:43	1.9		27.40	16.62	739		6.78	-77	62.1	AC
10:46	2.0		27.60	16.29	734		6.79	-79	127	AC
10:49	2.3		27.60	16.47	737		6.79	-81	149	AC
10:52	2.6		27.60	16.70	739		6.78	-82	149	AC
	Start Sampling		11:00							
	End Sampling		11:15	**Sample Number:**	5237- 090819-WS-9-34-156 @ 11:00					
			Final 27.60							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy CI=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

34 - 25.20 = 8.8' H_2O COLUMN × 0.166 = 1.46 GAL = 1×
4.38 GAL = 3×
7.3 GAL = 5×

Low-Flow Well Sampling Field Log

Well Number: WS-11-125

Page 1 of 1

Date: 8-18-9

Project Information	
Project Name:	WSRIFS
HAI Project Number:	5237-45
Sampling Information	
Field Team:	JCK
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	
Flow-Through Cell:	Yes
Sampling Method:	Waterra Inertia Pump
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	On-site Drum (Siltronic/MFA)
Field Conditions:	Sunny Breezy
Comments:	DTW 29.35 @ 12:38
	Sample effervesced

Well Information — Stick-up or (Flush) (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"					

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4 Cl~~	N

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On		Initial	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
12:47	0.5 L	200 mL/min	29.47	19.75	0.908	2.63	6.74	-151.0	14	C
12:50	1.0 L	"	29.49	19.36	0.929	1.46	6.71	-183.6	10	C
12:53	2.0 L	"	29.50	19.16	0.940	1.06	6.70	-205.9	14	C
12:56	2.5 L	"	29.50	19.15	0.940	0.93	6.68	-212.6	9.1	CC
12:59	3.0	"	29.53	19.12	0.939	0.83	6.68	-218.3	9.5	CC
13:02	3.5	"	29.53	19.13	0.936	0.67	6.68	-223.2	9.8	CC
13:05	4.0	"	29.53	19.13	0.932	0.58	6.67	-224.7	9.7	CC
13:08	4.5	"	29.55	19.08	0.928	0.52	6.69	-228.1	9.7	CC
13:11	5.0	"	29.60	19.07	0.924	0.47	6.68	-230.3	10	C
13:14	5.5	"	29.62	19.05	0.916	0.42	6.77	-233.5	12	C
13:17	6.0	"	29.61	19.11	0.911	0.39	6.78	-235.9	12	C
13:20	7.5	"	29.63	19.11	0.908	0.37	6.73	-237.4	9.5	CC
	Start Sampling	13:24								
	End Sampling	13:41		Sample Number:	5237-090818-WS11-125-149					
			Final 29.68							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

~~Sample~~

Low-Flow Well Sampling Field Log

Well Number: WS-11-161

Page 1 of 1

Date: 8-18-9

Project Information	
Project Name:	WSRIFS
HAI Project Number:	5237-45
Sampling Information	
Field Team:	JCK
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	
Flow-Through Cell:	Yes
Sampling Method:	Waterra Inertia Pump
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	On-site Drum (Siltronic/MFA)
Field Conditions:	Sunny, Breezy
Comments:	DTW 28.77 @ 11:30
	Sample effervesced

Well Information — Stick-up or (Flush) (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"					

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	N

Well Purge Data

Time	Volume Purged (~~Gallons~~ Liters)	Purge Rate (~~Gpm~~ mL)	DTW (ft btc)	Temp. (°C)	Conductivity (mS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
11:37	Pump On		Initial	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
11:40	1.0 L	200mL/min	—	19.59	0.571	40.57	7.34	95.2	25	CC
11:43	2.0 L	200mL/min	29.0	18.91	0.585	3.42	6.82	-78.4	1.4	CC
11:46	2.3 L	"	NA	18.70	0.588	1.46	6.88	-143.6	8.3	CC
11:49	3.0 L	"	NA	18.63	0.589	1.22	6.83	-163.3	7.0	CC
11:52	3.5 L	"	NA	18.56	0.591	1.03	6.80	-179.7	8.9	CC
11:55	4.1 L	"	NA	18.50	0.591	0.88	6.86	-191.2	7.4	CC
11:58	4.9 L	"	NA	18.56	0.588	0.71	6.79	-204.2	9.1	CC
12:01	5.5 L	"	NA	18.60	0.586	0.60	6.82	-211.2	9.3	CC
12:04	6.0 L	"	NA	18.57	0.583	0.55	6.79	-218.1	8.7	CC
12:07	6.5 L	"	NA	18.59	0.579	0.50	6.82	-224.2	11	CC
12:10	7.3 L	"	NA	18.59	0.578	0.47	6.82	-226.3	10.8	CC
12:13	7.7 L	"	NA	18.51	0.574	0.48	6.80	-229.7	10.2	CC
	Start Sampling 12:17									
	End Sampling 12:32			**Sample Number:**	5237-090818-WS11-161-147					
			NA Final							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

NA- Heron wtr. lvl. meter was not operating @ this well - perhaps due to tubing interference or NAPL along well's shaft.

Low-Flow Well Sampling Field Log

Well Number: WS-12-125

Page 1 of 1

Date: ~~WS-12~~ 8-18-9

Project Information	
Project Name:	WSRIFS
HAI Project Number:	5237-45

Sampling Information	
Field Team:	JCK
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	
Flow-Through Cell:	Yes
Sampling Method:	Waterra Inertia Pump
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	On-site Drum (Siltronic/MFA)
Field Conditions:	Sunny, breezy
Comments:	DTW 29.08 10:13

Well Information — Stick-up or (Flush) (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"					

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable C	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	N

Well Purge Data

Time	Volume Purged (~~Gallons~~ Liters)	Purge Rate (~~Gpm~~ mL)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
10:15	Pump On		Initial	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
10:24	0.5 L	200 mL/min	29.42	19.50	0.676	30.13	6.77	12.5	1.4	CC
10:27	1.5 L	"	29.48	19.23	0.681	4.41	6.59	-25.9	1.5	CC
10:30	2.2 L	"	29.52	19.12	0.680	1.93	6.64	-79.4	2.1	CC
10:33	2.5 L	"	29.53	19.01	0.678	1.27	6.59	-128.4	5.2	CC
10:36	3.4 L	"	29.54	19.01	0.677	1.03	6.61	-159.6	5.2	CC
10:39	3.8 L	"	29.57	19.02	0.677	0.93	6.54	-171.2	4.1	CC
10:42	4.5 L	"	29.57	19.02	0.676	0.75	6.55	-191.5	2.7	CC
10:45	5 L	"	29.60	19.04	0.676	0.66	6.58	-202.0	4.6	CC
10:48	5.3 L	"	29.63	19.01	0.676	0.56	6.56	-210.1	3.9	CC
10:51	6.1 L	"	29.64	19.01	0.676	0.54	6.53	-211.3	2.9	CC
	Start Sampling	10:55								
	End Sampling	11:11		Sample Number:	5237-090818-WS12-125-145					
			Final 29.74							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: WS-12-161

Page 1 of 1

Date: 8-18-9

Project Information	
Project Name:	WSRIFS
HAI Project Number:	5237-45
Sampling Information	
Field Team:	JCK
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	
Flow-Through Cell:	Yes
Sampling Method:	~~Waterra Inertia Pump~~ Ni System (MFA)
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	On-site Drum (Siltronic/MFA)
Field Conditions:	sunny, breezy
Comments:	DTW 28.59

Well Information — Stick-up or (Flush) (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"					

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4 Cl~~	N

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
9:05	Pump On		Initial	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
	0.5 L	0.2 L/m								
9:17		0.2 L/m	29.38	19.59	0.536	~~71.1~~ 1.00	6.59	18.0	1.1	CC
9:20	2.5 L	"	29.49	19.31	0.530	2.07	6.83	12.2	10	CC
9:23	3.2 L	"	29.51	19.31	0.525	1.11	6.87	-47.7	12	CC
9:26	4.0 L	"	29.56	19.22	0.525	0.88	6.86	-73.9	9.8	CC
9:29	4.3 L	"	29.56	19.17	0.524	0.70	6.85	-106.6	7.3	CC
9:31	4.8 L	"	29.58	19.17	0.525	0.63	6.85	-117.7	5.9	CC
9:34	5.2 L	"	29.58	19.20	0.525	0.56	6.84	-131.9	2.7	CC
9:37	5.8 L	"	29.60	19.19	0.526	0.51	6.84	-140.2	3.9	CC
9:40	6.2 L	"	29.60	19.20	0.526	0.48	6.84	-148.7	2.2	CC
9:43	6.8 L	"	29.62	19.21	0.526	0.45	6.85	-153.5	3.7	CC
	8 L	"								
	Start Sampling 9:48									
	End Sampling 10:05			**Sample Number:**	5237-090808-WS12-161-143					
			Final 29.65							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: WS-14-125

Page 1 of ____

Date: 8-19-9

Project Information	
Project Name:	WSRIFS
HAI Project Number:	5237-45
Sampling Information	
Field Team:	JCK
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	
Flow-Through Cell:	Yes
Sampling Method:	Waterra Inertia Pump
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	On-site Drum (Siltronic/MFA)
Field Conditions:	Sunny & Warm
Comments:	DTW 27.65 @ 10:08
	Slight effervescence in VOAs

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"					

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	500mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	500mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4 Cl~~	N

Well Purge Data

Time	Volume Purged (~~Gallons~~ Liters)	Purge Rate (~~Gpm~~ mL)	DTW (ft btc)	Temp. (°C)	Conductivity (µS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
10:14	Pump On		Initial 27.74	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
10:18	0.8 L	200 mL/min	27.79	18.63	0.474	0.90	6.54	4.1	0.35	CC (odor)
10:21	1.7 L	"	27.81	18.10	0.475	0.65	6.74	-24.7	0.00	CC
10:24	2.3 L	150 mL/min	27.83	17.88	0.477	0.53	6.68	-46.5	0.00	CC
10:27	2.6 L	"	27.83	17.74	0.480	0.44	6.67	-65.9	0.00	CC
10:30	2.9 L	"	27.85	17.67	0.482	0.42	6.70	-77.1	0.00	CC
10:33	3.2 L	"	27.89	17.60	0.482	0.39	6.69	-89.2	~~0.00~~ 0.2 µL	CC
10:36	4 L	215 mL/min	27.89	17.55	0.482	0.36	6.71	-99.4	0.00	CC
10:39	4.5 L	"	27.90	17.51	0.483	0.35	6.71	-109.2	0.00	CC
10:42	5.5 L	"	27.93	17.50	0.484	0.33	6.72	-120.0	0.00	CC
10:45	6.0 L	"	27.95	17.48	0.485	0.31	6.71	-127.9	0.00	CC
10:48	6.4 L	"	27.96	17.47	0.485	0.30	6.72	-136.1	0.00	CC
10:51	7.0 L	"	27.99	17.50	0.485	0.29	6.72	-141.1	0.00	CC
10:54	7.5 L	"	27.99	17.49	0.486	0.29	6.73	-144.2	0.00	CC
	Start Sampling 10:57									
	End Sampling 11:11			Sample Number:	5237-090819-WS14-125-155					
			Final 28.08							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: WS-14-161

Page 1 of 1

Date: 8-18-9

Project Information	
Project Name:	WSRIFS
HAI Project Number:	5237-45
Sampling Information	
Field Team:	JCK
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	
Flow-Through Cell:	Yes
Sampling Method:	Waterra Inertia Pump
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	On-site Drum (Siltronic/MFA)
Field Conditions:	Sunny, warm
Comments:	DTW 29.68 14:01

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"					

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	N

Well Purge Data

Time	Volume Purged (~~Gallons~~ Liters)	Purge Rate (~~Gpm~~ mL)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
14:09	Pump On		Initial 29.70	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
14:12	1.0 L	200 mL/min	29.68	19.76	0.535	3.18	7.38	105.4	20	C
14:15	1.8 L	200 mL/min	29.65	19.05	0.536	2.28	7.08	-172.5	11	C
14:18	2.2 L	"	29.64	18.47	0.536	1.70	6.85	-210.2	7.9	CC
14:21	2.6 L	"	29.64	18.25	0.537	1.47	6.86	-219.5	11	C
14:24	3.0 L	"	29.64	18.21	0.536	1.32	6.78	-223.9	9.0	CC
14:27	3.6 L	"	29.60	18.22	0.538	1.14	6.85	-227.8	1.8	CC
14:30	4.2 L	"	29.59	18.23	0.538	1.00	6.78	-230.5	3.2	CC
14:33	4.8 L	"	29.59	18.19	0.538	0.92	6.80	-231.8	7.4	CC
14:36	5.2 L	"	29.55	18.17	0.538	0.79	6.81	-232.6	5.8	CC
14:39	5.9 L	"	29.53	18.15	0.537	0.72	6.76	-233.7	7.6	CC
14:42	6.2 L	"	29.52	18.13	0.538	0.72	6.75	-233.9	6.9	CC
	Start Sampling 14:45									
	End Sampling 15:02			Sample Number: 5237-090818-WS14-161-151						
			Final 29.73							

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

Low-Flow Well Sampling Field Log

Well Number: WS-21-112

Date: 8/20/09

Project Information	
Project Name:	WSRIFS
HAI Project Number:	5237-45
Sampling Information	
Field Team:	RCR
Purge Method:	Low Flow
Pump Intake Depth (ft btc):	50'
Flow-Through Cell:	~~Yes~~ NO
Sampling Method:	PERMANANT PUMP SYSTEM ~~Waterra Inertia Pump~~
Decontamination Method:	Dedicated Tubing
Purge Water Disposition:	On-site Drum (Siltronic/MFA)
Field Conditions:	WARM, CLEAR

Comments: PERMANANT PUMP INSTALLED PUMP TURNED ON @ 12:00 & PUMPS 1.45gpm. 5x WELL VOLUME = 71 gallons. 87 gallons PUMPED @ 13:00

Well Information — Stick-up or Flush (circle one)

Well Diameter (in)	Drilled Well Depth (ft bgs)	Drilled Well Depth (ft btc)	Top of Screen (ft bgs)	Top of Screen (ft btc)	Screen Interval (ft bgs)
2"					

Purge Volume (Only applicable if pump intake is above top of screen)

Top Screen (ft btc)	Pump Intake (ft btc)	Top Screen - Pump Intake (ft)	Convert Factor (G/ft)	Minimum Purge Volume (Gallons)

3/4"=0.022 G/ft 2"=0.163 G/ft 4"=0.66 G/ft 6"=1.5 G/ft

Sample Containers

Number	Type	Preservative	Analytical Parameters	Filtered?
3	VOA	HCL	BTEX	N
2	1L AMB	4C	LL PAHs-extended	N
1	~~500~~ 250mL HDPE	NaOH	Total+ Free + Amenable Cl	N
1	~~500~~ 250mL HDPE	HNO3	Total Metals	N
~~1~~	~~1L HDPE~~	~~4C~~	~~ALK, Bicarb, Carb, NO3, SO4, Cl~~	~~N~~
7 x 2 = 14				

Well Purge Data

Time	Volume Purged (Gallons)	Purge Rate (Gpm)	DTW (ft btc)	Temp. (°C)	Conductivity (uS/cm)	D.O. (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Clarity/Color/ Remarks
	Pump On 12:00		Initial 25.00	-	±3%	±10%	±0.1	±10mv	±10%	<= Stabilization Criteria
13:00				24.2	483	/	6.89	/	40	
87gal.										
	Start Sampling	13:00								
	End Sampling	13:05		Sample Number:	5237-090820-~~WS-1~~ WS-21-112-165					
			Final 42.22						166	

Note: bgs= below ground surface btc=below top of casing DTW=depth to water Gpm=Gallons per minute
Clarity: VC=very cloudy Cl=cloudy SC=slightly cloudy AC=almost clear C=clear CC=crystal clear

1x = 14.3 gal
5x = 71 gal

December 2009 Groundwater Monitoring Event

Water Level Measurement Field Log

Site: Gasco

Project No.: 2708

Date: 12/4/2009

Measured by: Ben [illegible]

Device / Method: Solinst Water Level Meter; Waterra Interface Probe

Well	Time Opened	Time	Water Level (ft btc)	Time	NAPL (Thickness)
MW-1-22	900	~~1308~~	~~29.87~~	~~1309~~	~~Ø~~
MW-1-55	904	1310	29.50	1311	Ø
MW-1-82	905	1308	[illegible]	1309	Ø
MW-2-32	855	1316	24.78	1317	Ø
MW-2-61	856	1314	28.20	1315	Ø
MW-2-104	857	1328	28.70	1329	Ø
MW-3-26	851	1302	13.35	1303	Ø
MW-3-56	853	1304	27.30	1305	Ø
MW-4-35	817	1052	26.80	1053	Ø
MW-4-57	810	1049	27.40	1049	Ø
MW-4-101	811	1050	27.40	1051	Ø
MW-5-32	820	1100	20.00	1101	Ø
MW-5-100	823	1102	20.40	1103	Ø
MW-5-175	825	1104	20.75	1105	Ø
MW-8-29	842	1233	20.95	1234	Ø
MW-8-56	843	1235	31.86	1236	Ø
MW-9-29	911	1329	10.50	1324	Ø
MW-10-25	916	1315	16.10	1316	1.4'
MW-10-61	917	1317	19.81	1318	Ø
MW-11-32	847	1251	14.25	1252	1.0'
MW-12-36	950	1353	14.25	1354	0
MW-13-31	–	–	–	–	–
MW-14-110	845	1247	24.65	1248	Ø
MW-15-50	941	1346	15.54	1347	Ø
MW-15-66	942	1348	17.60	1349	Ø
MW-16-45	830	1132	25.45	1142	8.0'
MW-16-65	831	1130	26.10		Ø
MW-16-125	832	1133	26.20	1145	3.0'
MW-17-79	836	1146	27.72	1147	Ø
MW-18-30	838	1228	25.65	1229	0.5'
MW-18-180	839	1222	27.31	1223	Ø
MW-19-22	814	1120	19.40	1121	Ø
MW-19-125	815	1123	22.15	1124	Ø
MW-19-180	816	1125	22.95	1126	Ø
MW-20-120	818	1112	20.85	1113	Ø
MW-21-12	925	1254	11.69	1255	Ø
MW-21-75	926	1256	16.29	1257	Ø
MW-21-115	927	1258	17.09	1259	Ø
MW-21-165	928	1300	16.75	1301	Ø
PW-01-80	807	1155	25.20	1156	pump(AA) above oil
MW-River - FAMM	–	–	–	–	–
MW-River - MW-4 Dolphin	–		1127	DRY	–

(R) 1325, 17.97 DTW / 1326 DTD Ø

orange tint to water on probe.

*27.00 DTW from recovery pump TOC - 1.8' = original 4" casing

24.70 to beach, water immediately adjacent ~0.5' east.

ft btc = feet below top of casing

25.52

File: 2708_Water Level Form.xls

(07/03)

HAHN AND ASSOCIATES, INC.

PW-04 (north) DTW = 20.01 TOC (steel)
(South) DTW = 20.08

DTP DTB
Ø 119.60 (TOP pump)?
Ø 97.50 (TOP of Pump?)

Water Level Measurement Field Log

Site: Siltronic Corporation Property

Project No.: 5237-45

Date: 12/4/09

Measured by: Corey Raspone

Device / Method: Waterra Interface Probe

Well	Time Opened	Time	Water Level (ft btc)	Time	Water Level (ft btc)	Time	NAPL (Thickness)	CH_4 (LEL %)	O_2 (%)	H_2S (ppm)	CO_2 (ppm)	
NWN-1-20	8:48	10:00	10.87	11:29	10.83	10:00	—					H.C. ODOR
NWN-2-20	8:46	9:55	12.98	11:23	12.96	9:55	—					"
NWN-3-17	8:44	9:50	16.89	11:09	16.90	9:50	—					
NWN-4-15	8:40	9:48	13.66	11:05	13.65	9:48	—					
NWN-5-20	8:37	9:46	14.64	11:02	14.65	9:46	—					
NWN-6-31	8:34	9:44	11.21	10:57	11.22	9:44	—					
NWN-7-30	8:42	9:52	16.47	11:12	16.46	9:52	—					CH_4 ODOR UPON OPENING
NWN-8-30	8:30	9:41	12.29	10:53	12.28	9:41	—					
NWN-9-31	9:08	10:16	26.13	11:50	26.12	10:16	—					
NWN-10-26	8:24	9:29	25.45	10:40	25.45	9:29	—					
WS-8-33	9:10	10:18	26.85	11:56	26.85	10:18	—					
WS-8-59	9:11	10:17	26.92	11:53	27.22	10:17	—					
WS-9-34	8:19	9:25	23.70	10:35	23.85	9:25	—					
WS-11-125	9:15	10:25	26.10	12:05	26.48	10:25	— *					
WS-11-161	9:15	10:23	26.15	12:03	26.54	10:23	—					
WS-12-125	9:12	10:21	27.02	11:59	27.38	10:21	—					
WS-12-161	9:12	10:19	26.98	11:57	27.34	10:19	—					
WS-14-125	9:04	10:07	26.32	11:37	26.65	10:07	— *					
WS-14-161	9:04	10:09	26.35	11:35	26.70	10:09	—					
WS-21-112	9:06	10:11	27.16	11:42	27.95	10:11	—					

ft btc = feet below top of casing

LAND GAS NOT MEASURED THIS VISIT.

* PVC CASING SHOWS "SIGNS" OF DNAPL (i.e. SMEARING), BUT NOT DNAPL READING OR DNAPL ON TIP OF METER.

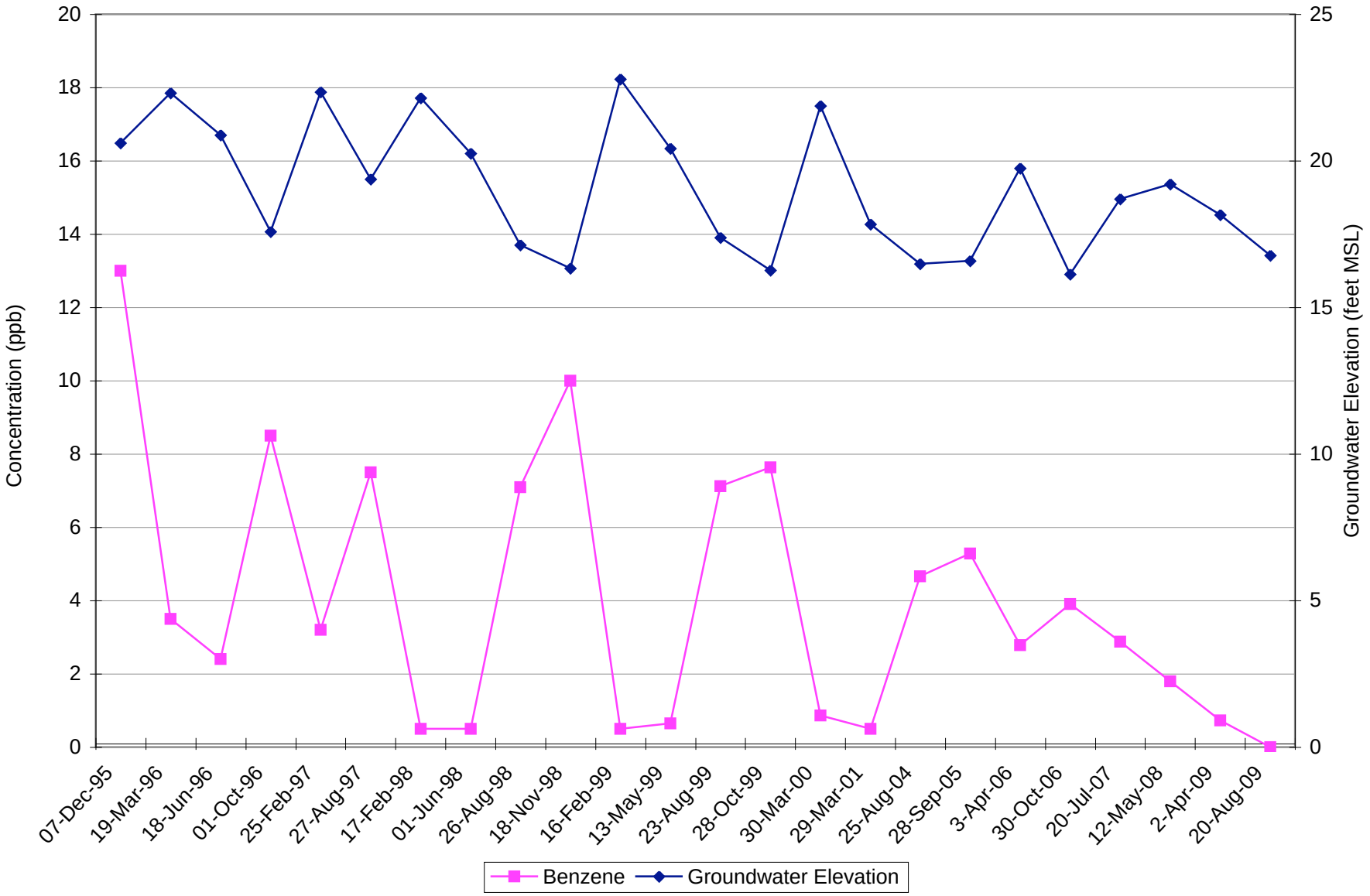
APPENDIX C

Analytical Results and Chain-of-Custody Documentation: August 2009 Groundwater Monitoring Event; Data Validation Reporting (**On CD**)

APPENDIX D

Time-Concentration Graphs: Benzene Concentrations and Groundwater Elevations Through Time

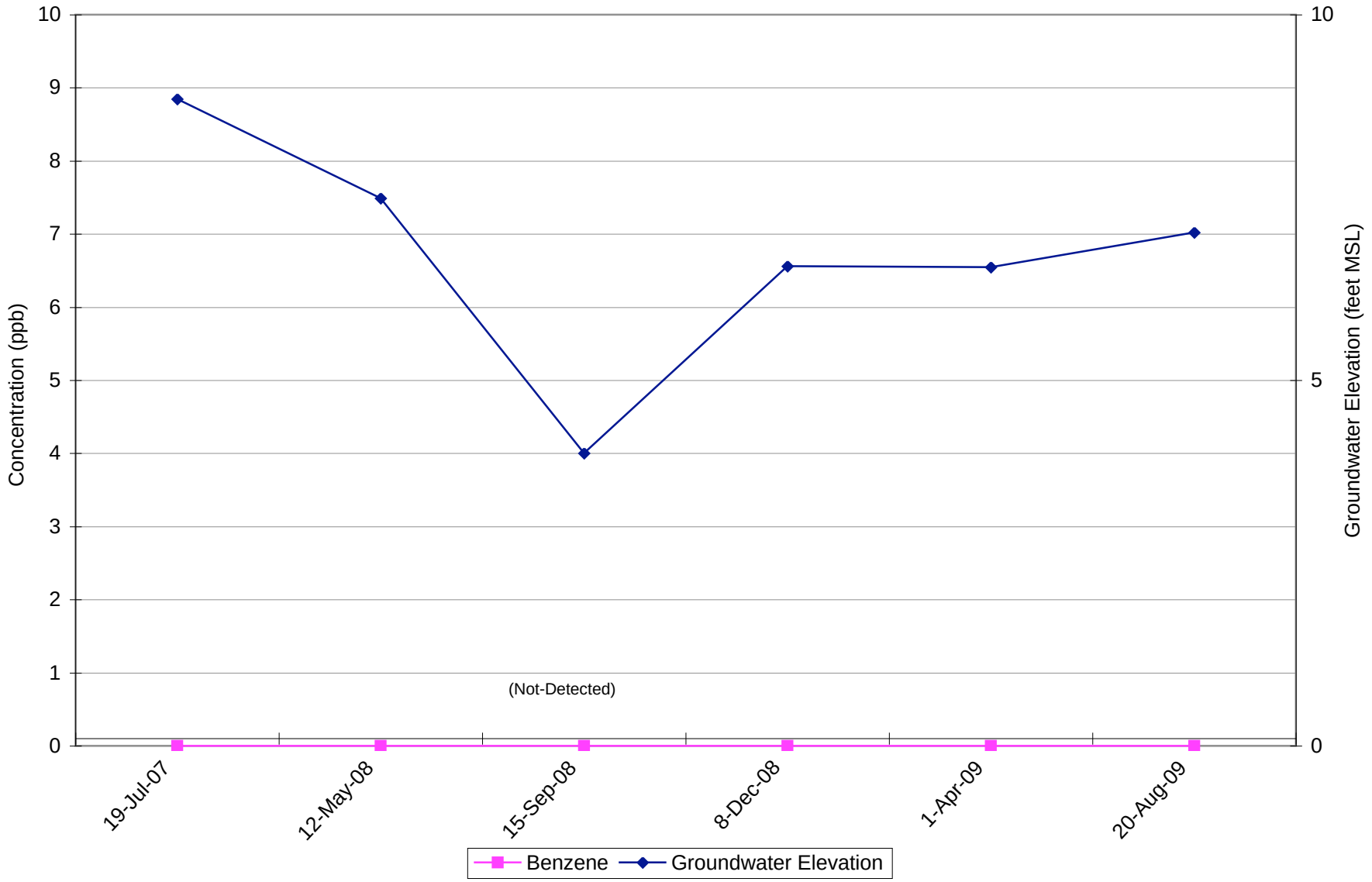
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-1-22 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

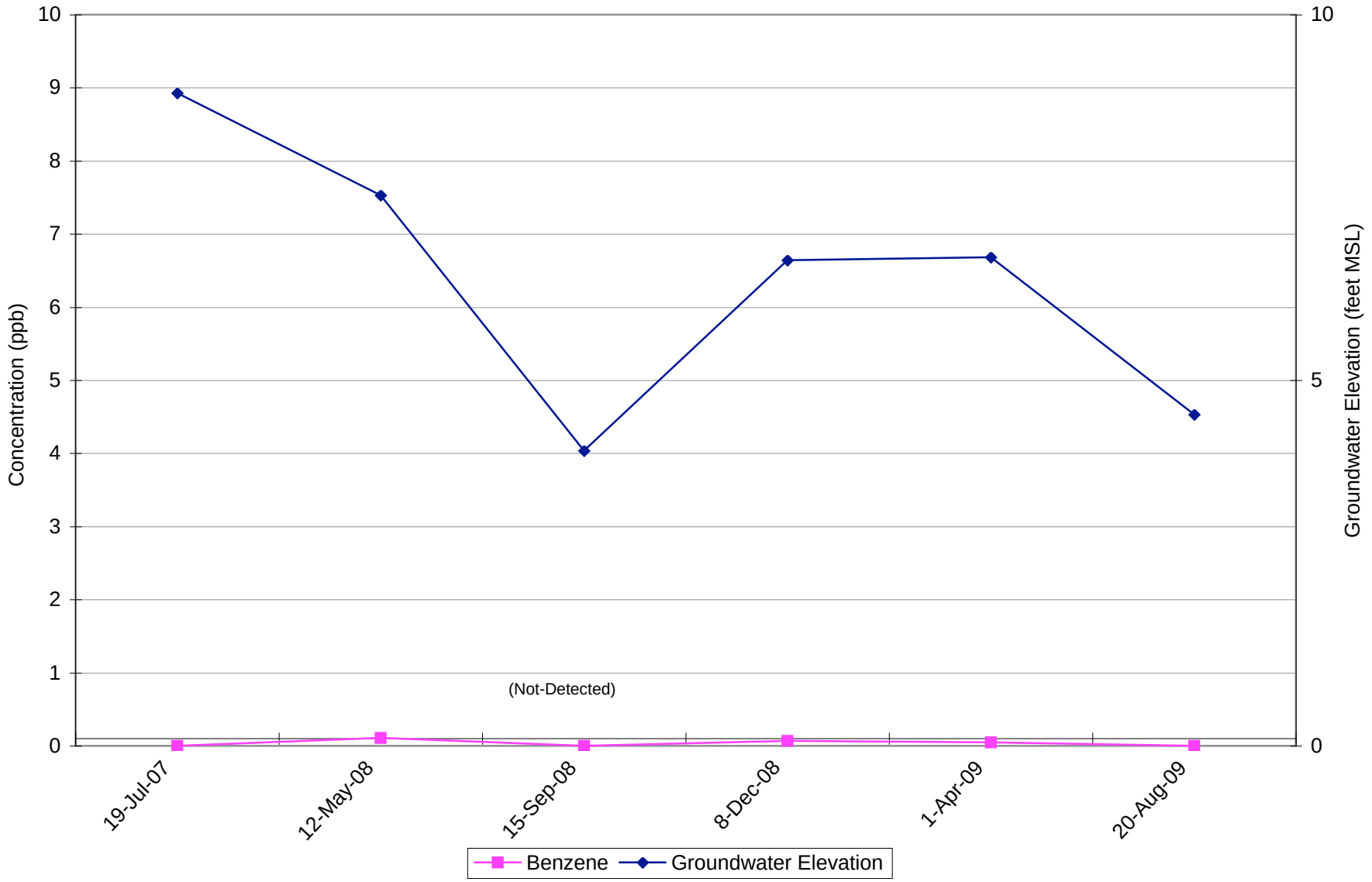
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-1-55 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-1-82 (intermediate alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
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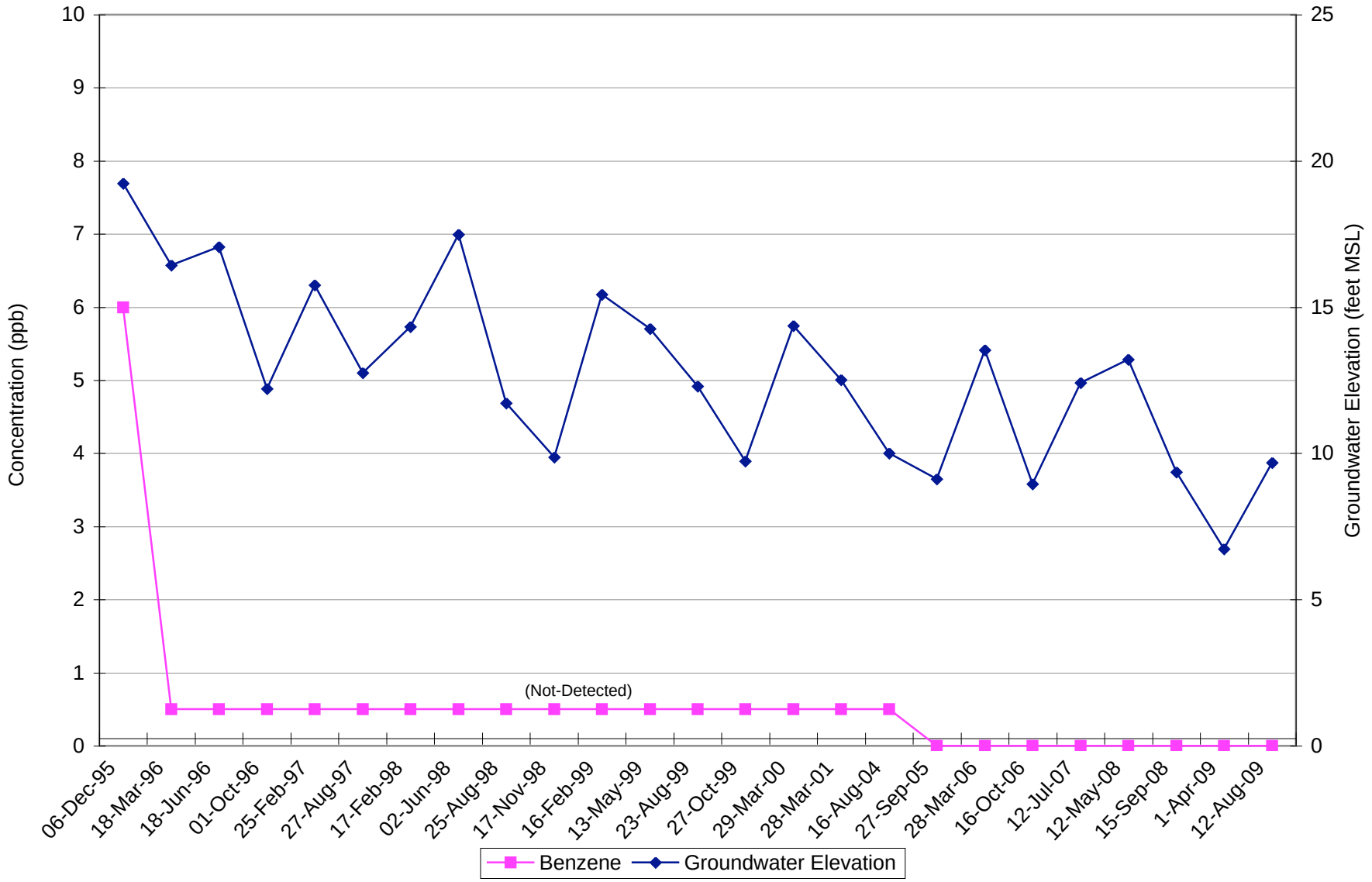
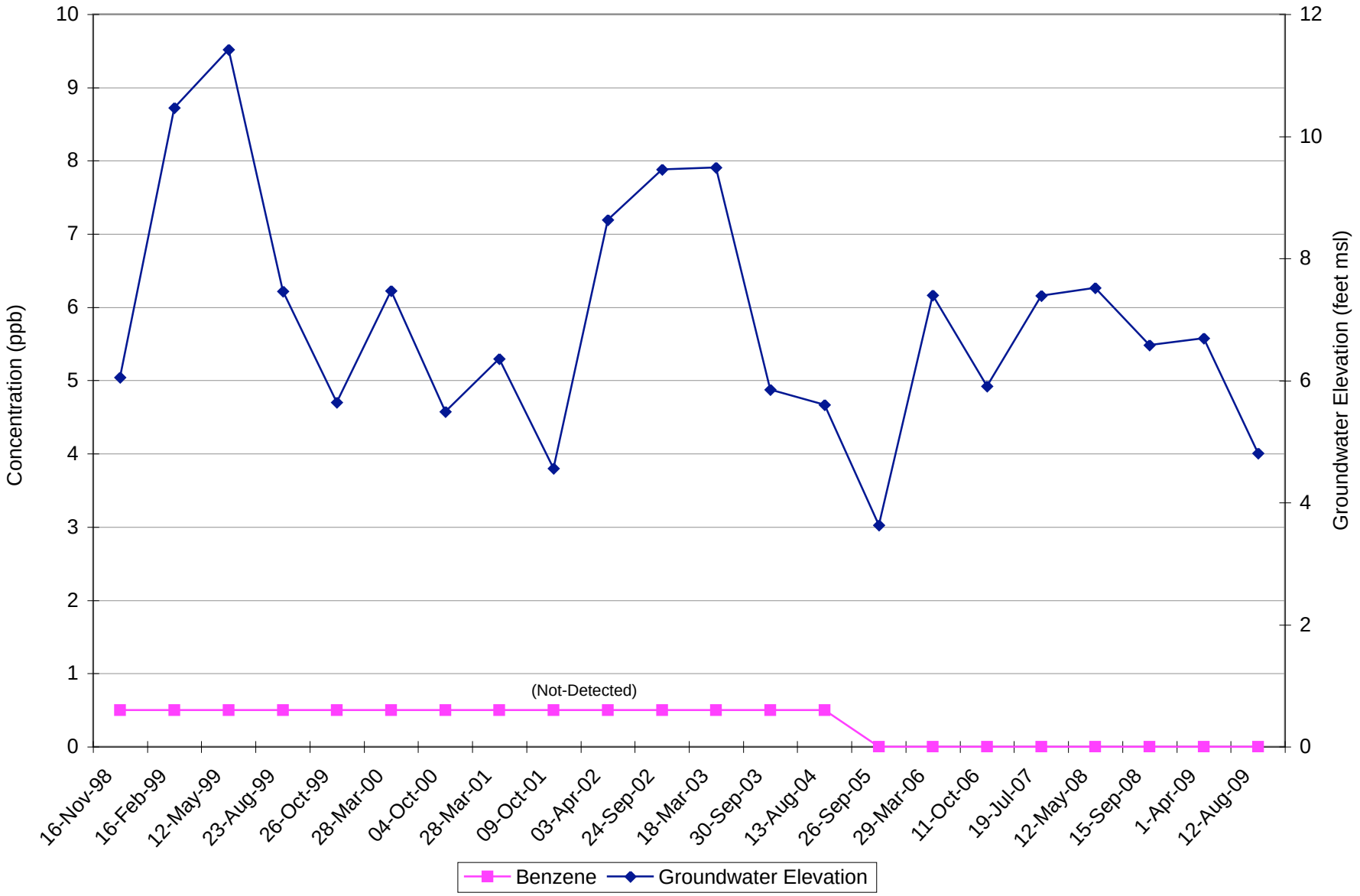
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-2-32 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

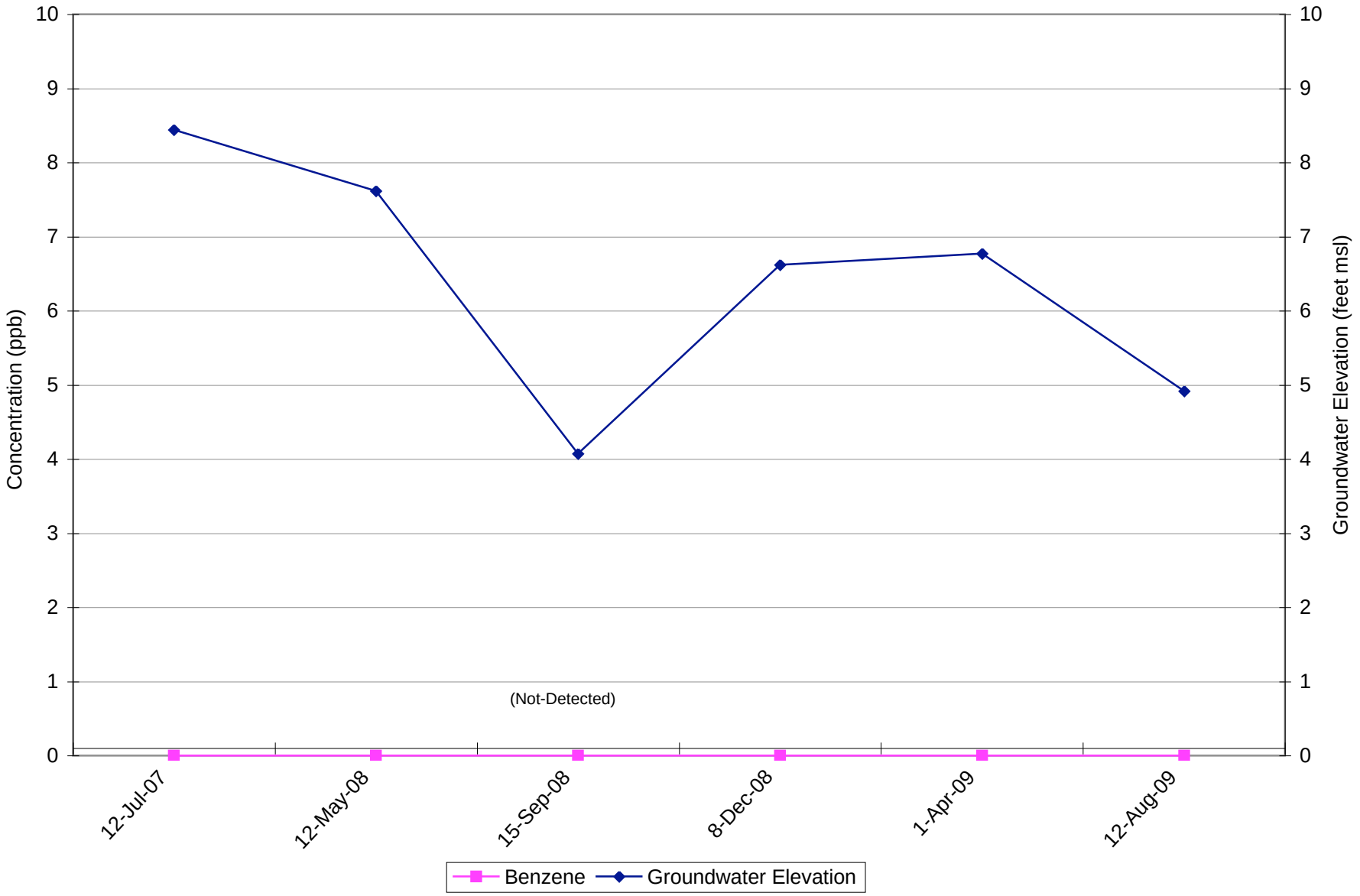
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-2-61 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

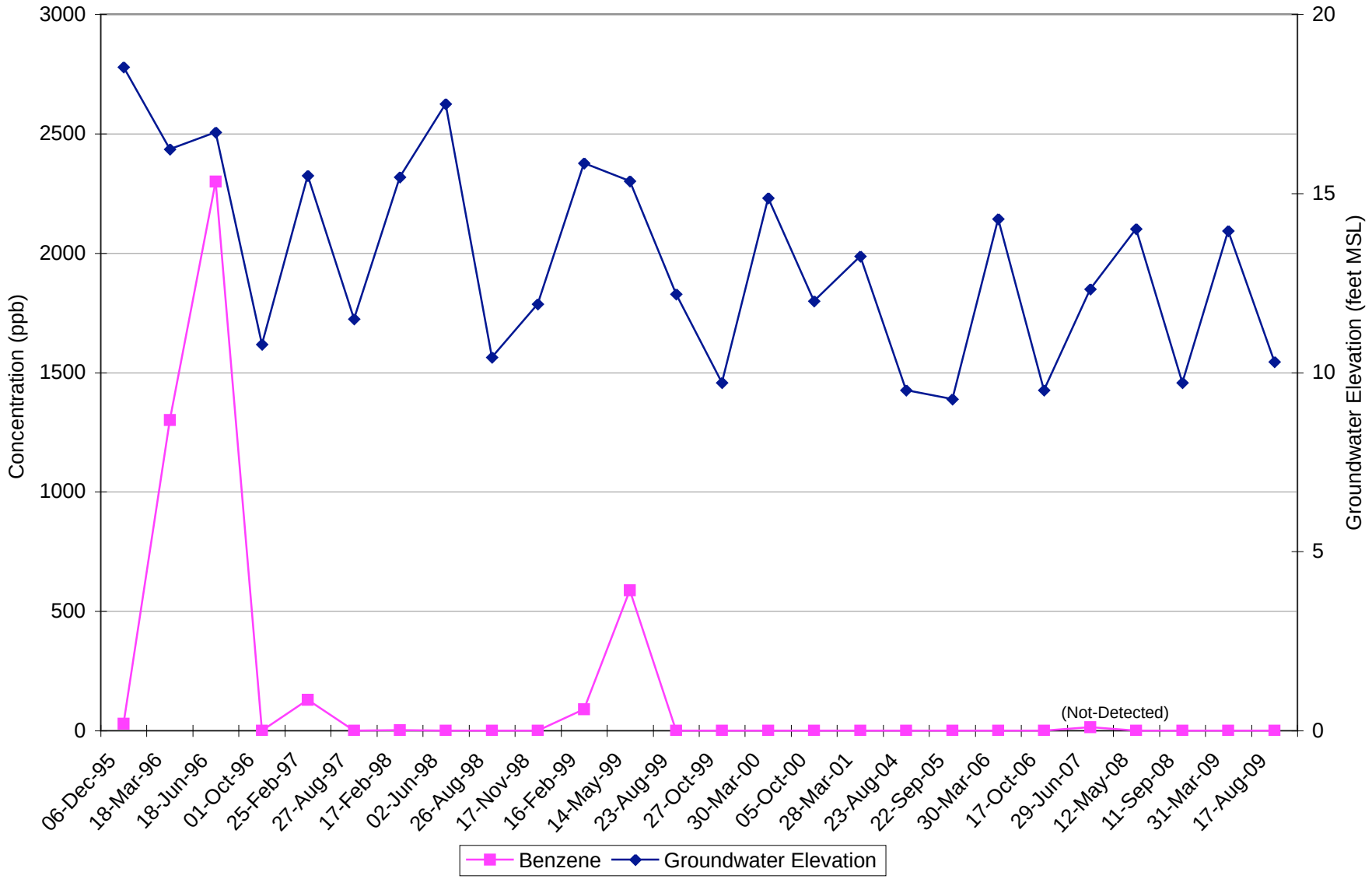
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-2-104 (intermediate depth alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

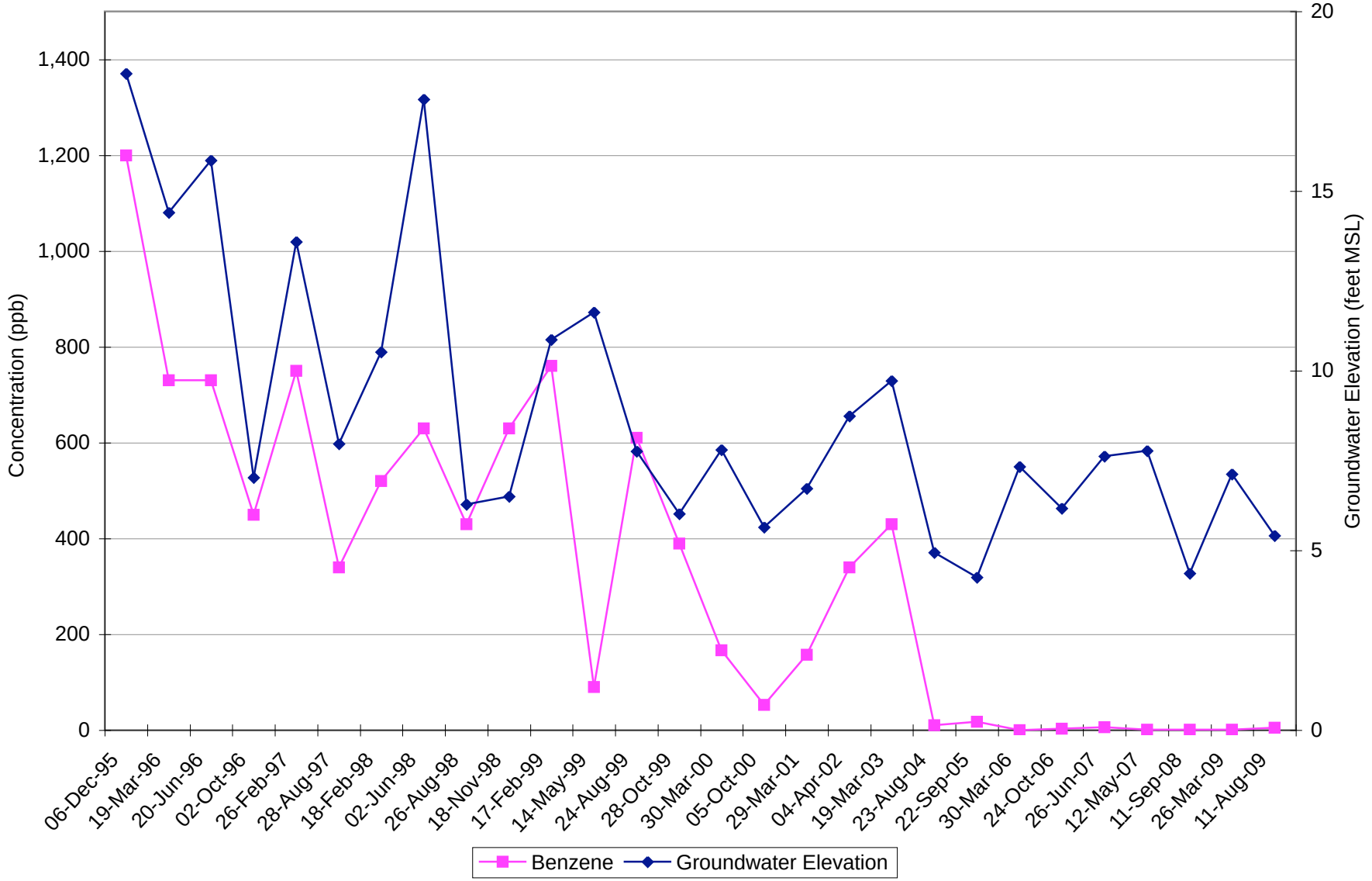
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-3-26 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-3-56 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
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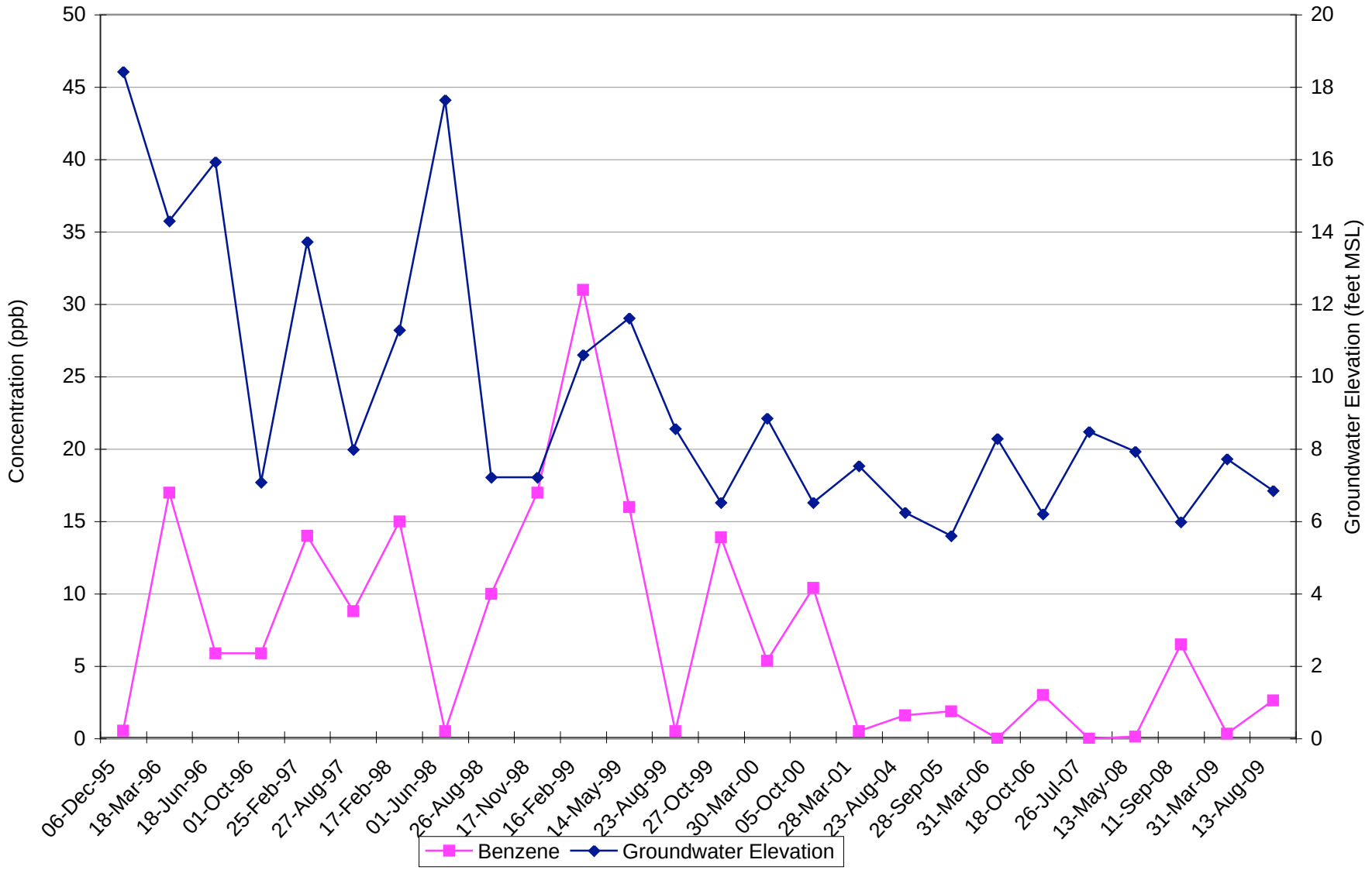
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-4-35 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
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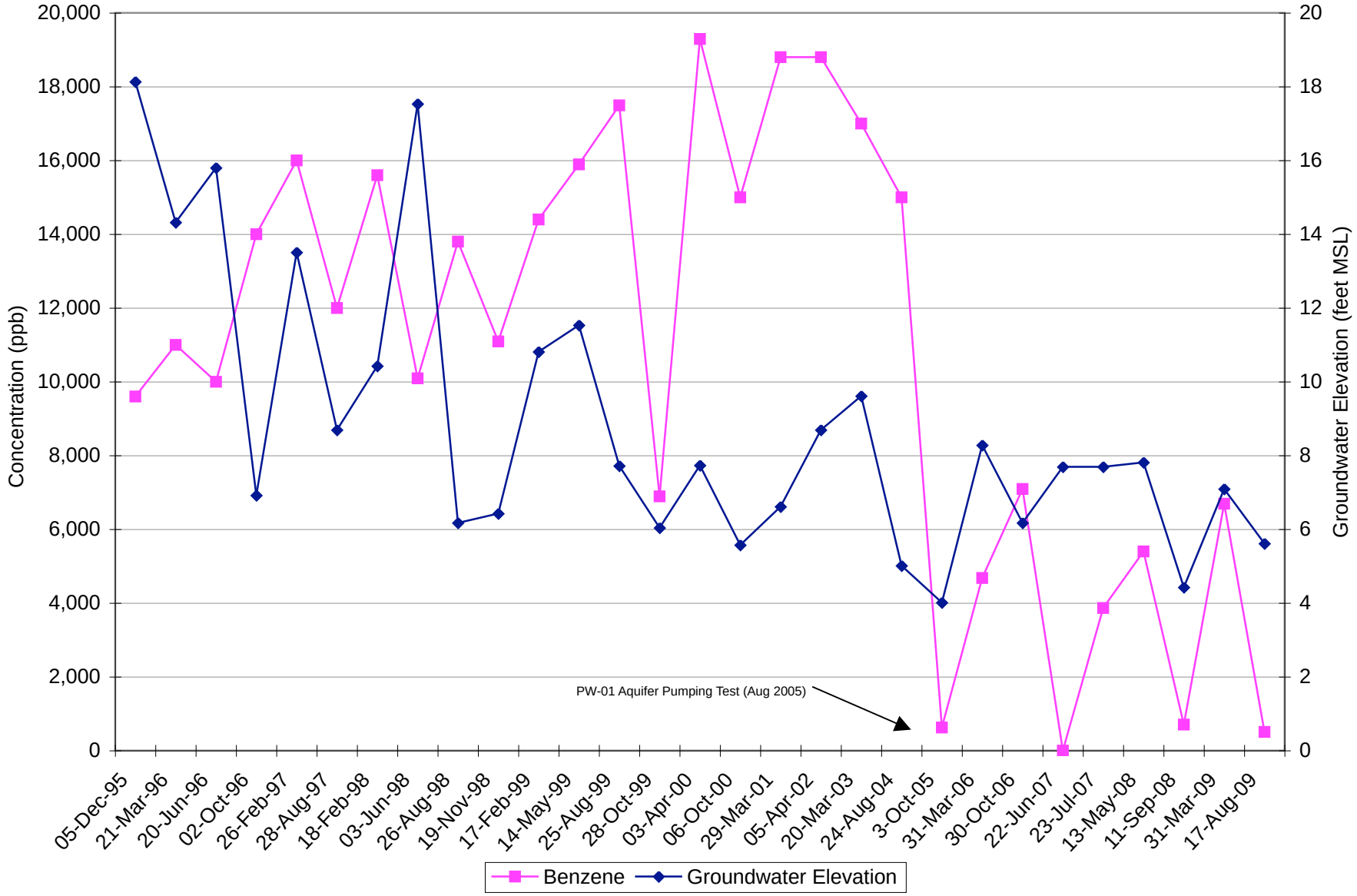
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-4-57 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
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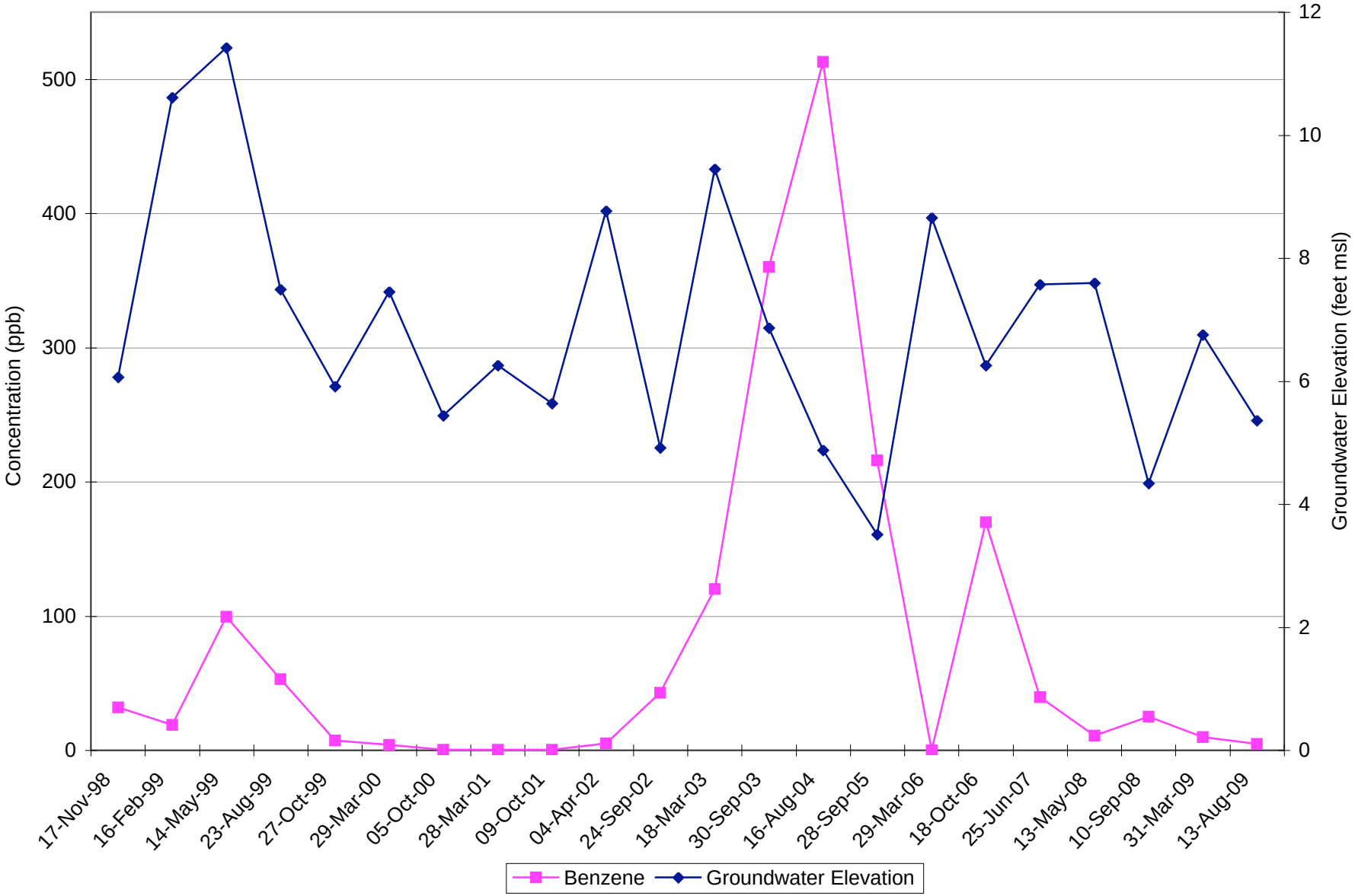
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-4-101 (intermediate-depth alluvial WBZ)
NW Natural - Gasco Facility



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File: Concentration Plots_BAU_3Q 2009.xls

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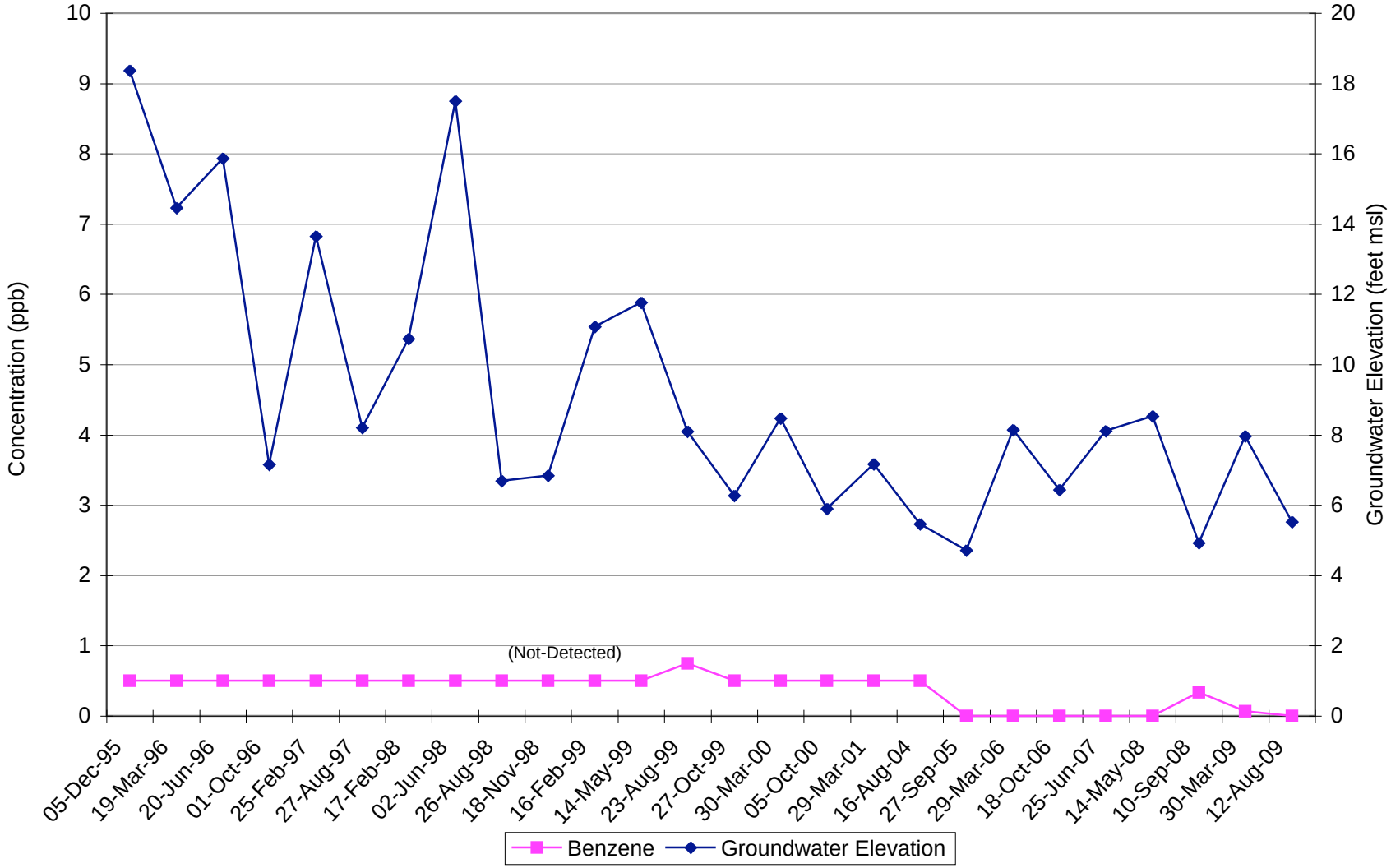
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-5-32 (surficial fill WBZ / upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10: BAU
File: Concentration Plots_BAU_3Q 2009.xls

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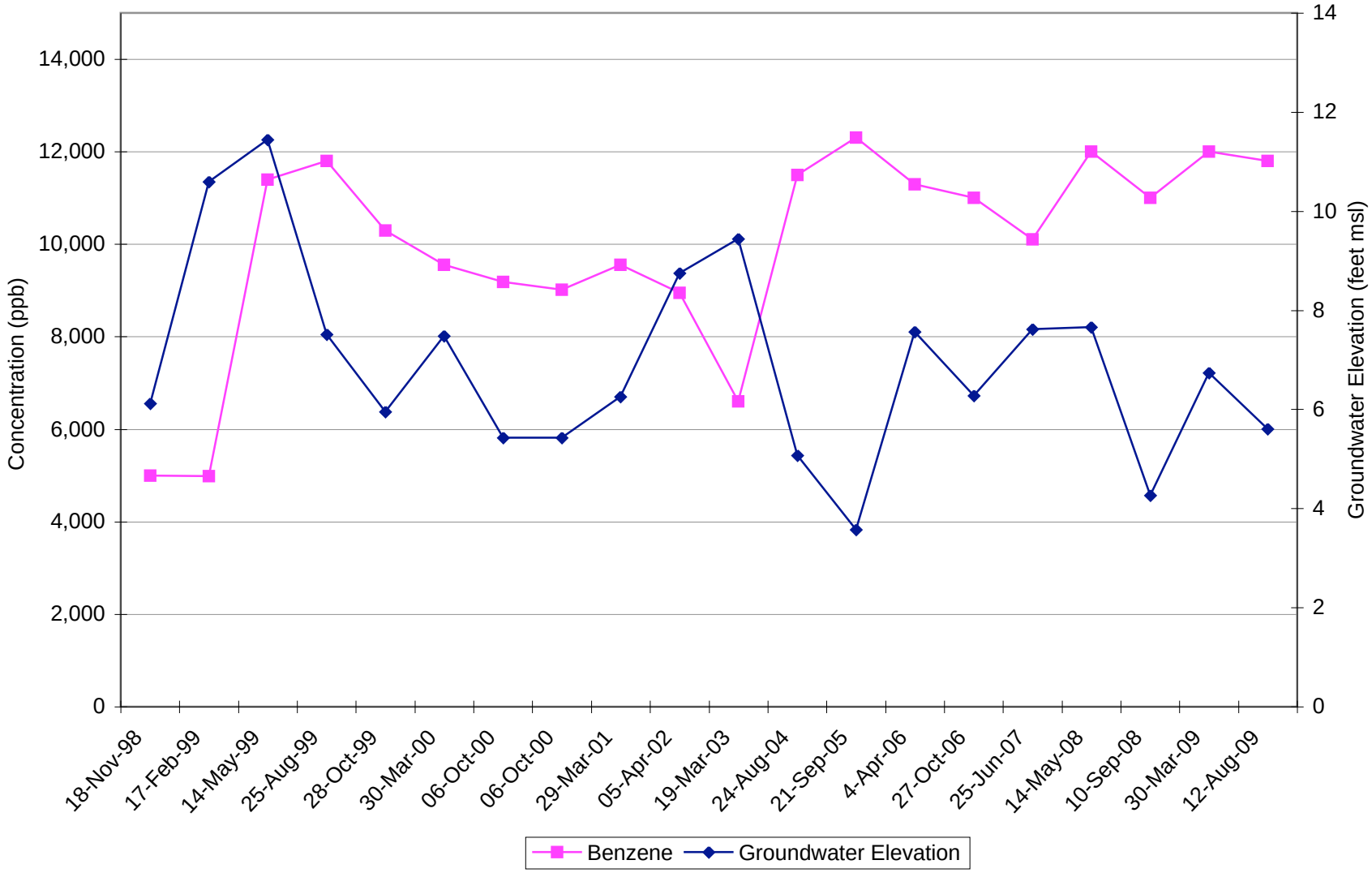
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-5-100 (intermediate-depth alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10: BAU
File: Concentration Plots_BAU_3Q 2009.xls

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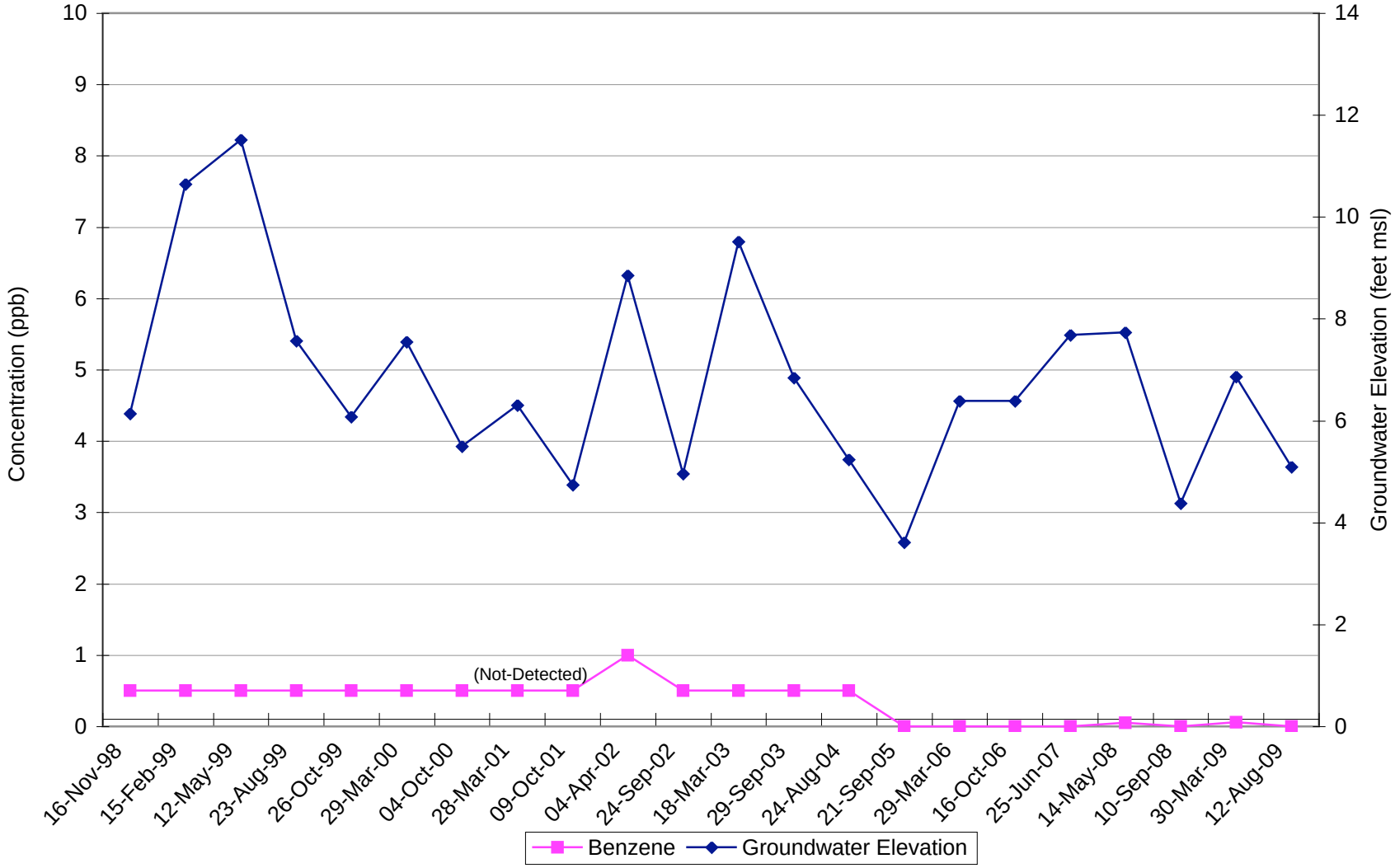
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-5-175 (lower alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10: BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
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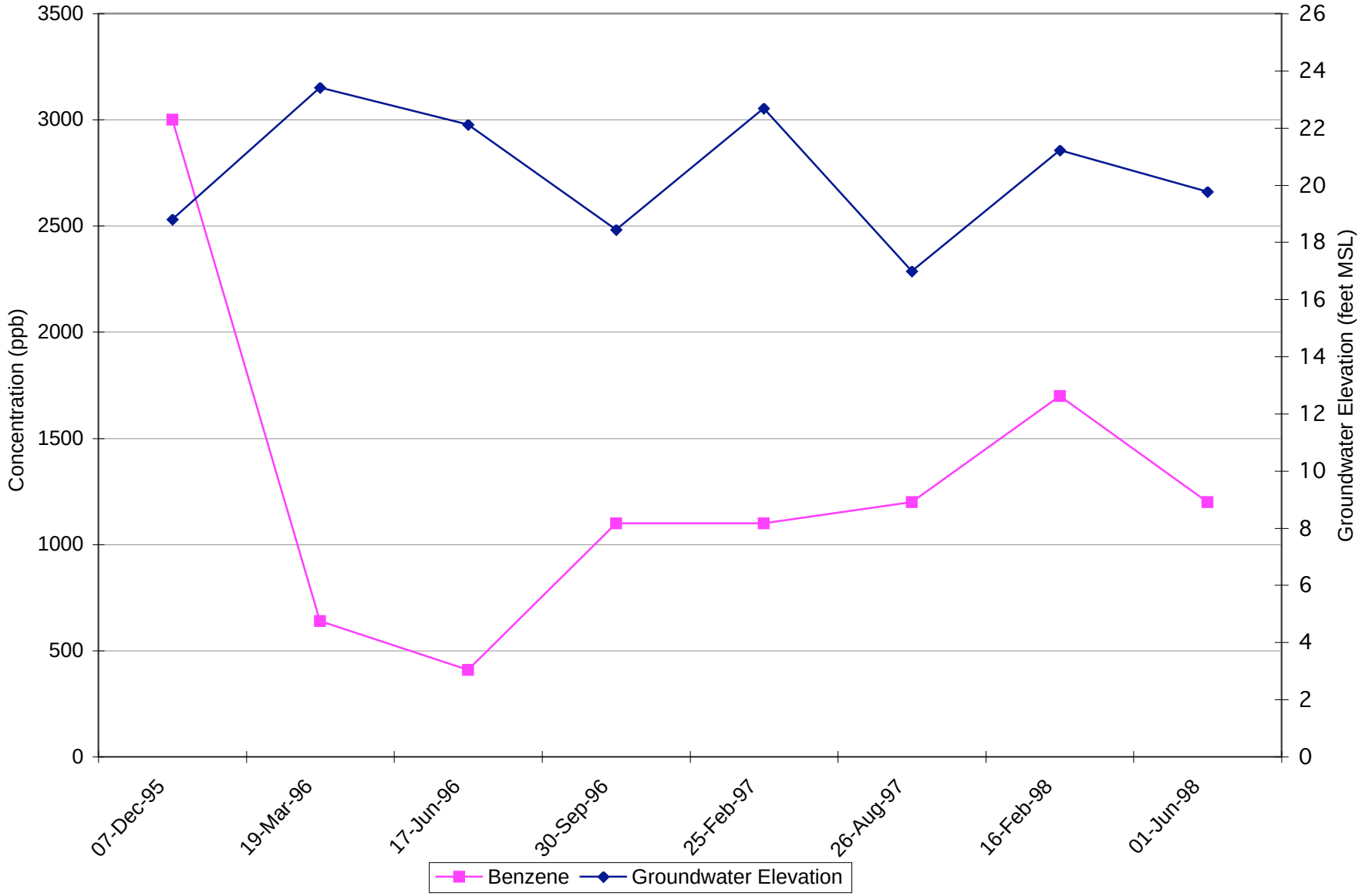
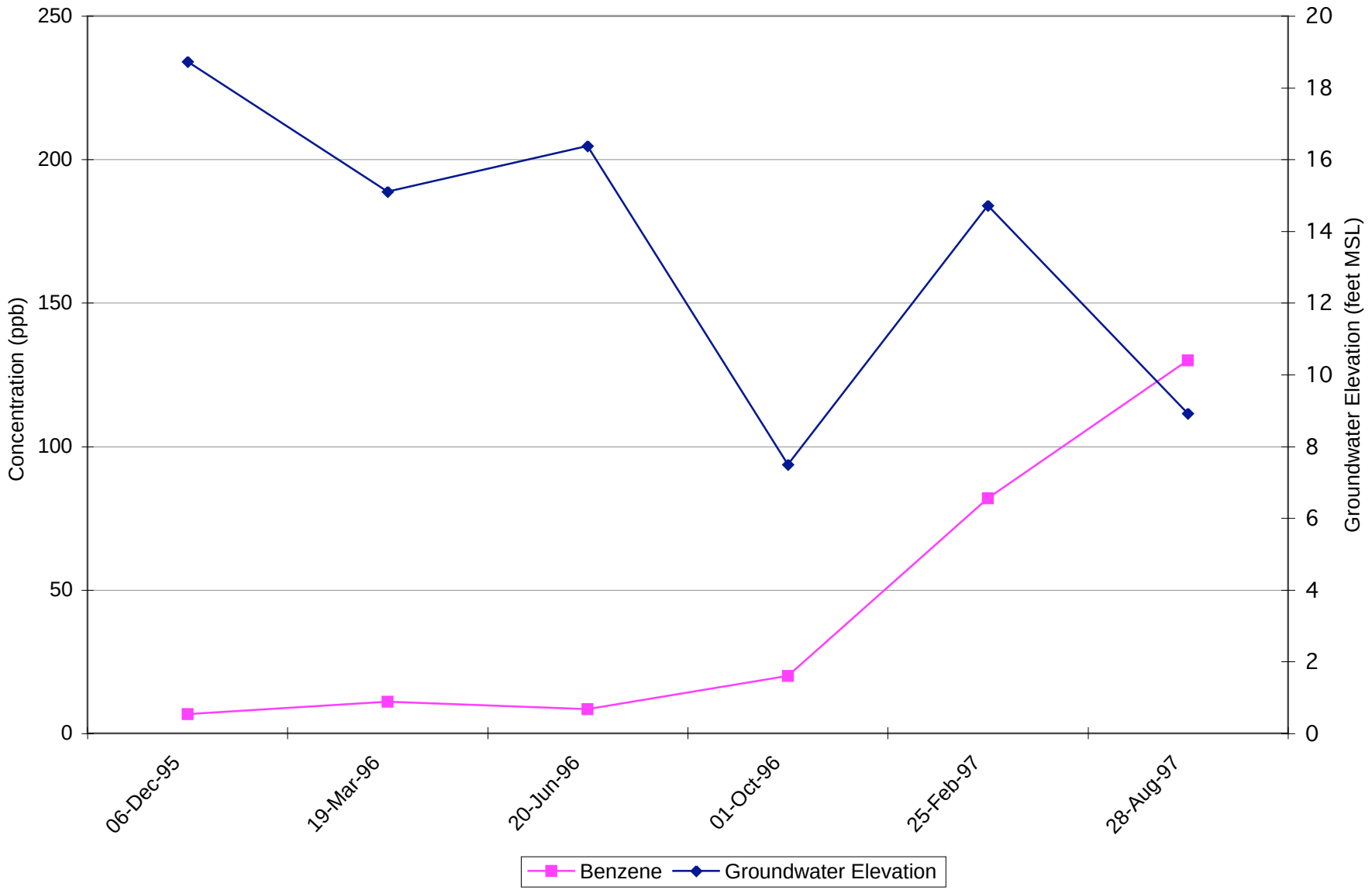
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-6-32 (surficial fill WBZ) - Current DNAPL Recovery Location
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

HAHN AND ASSOCIATES, INC.
Project No. 2708

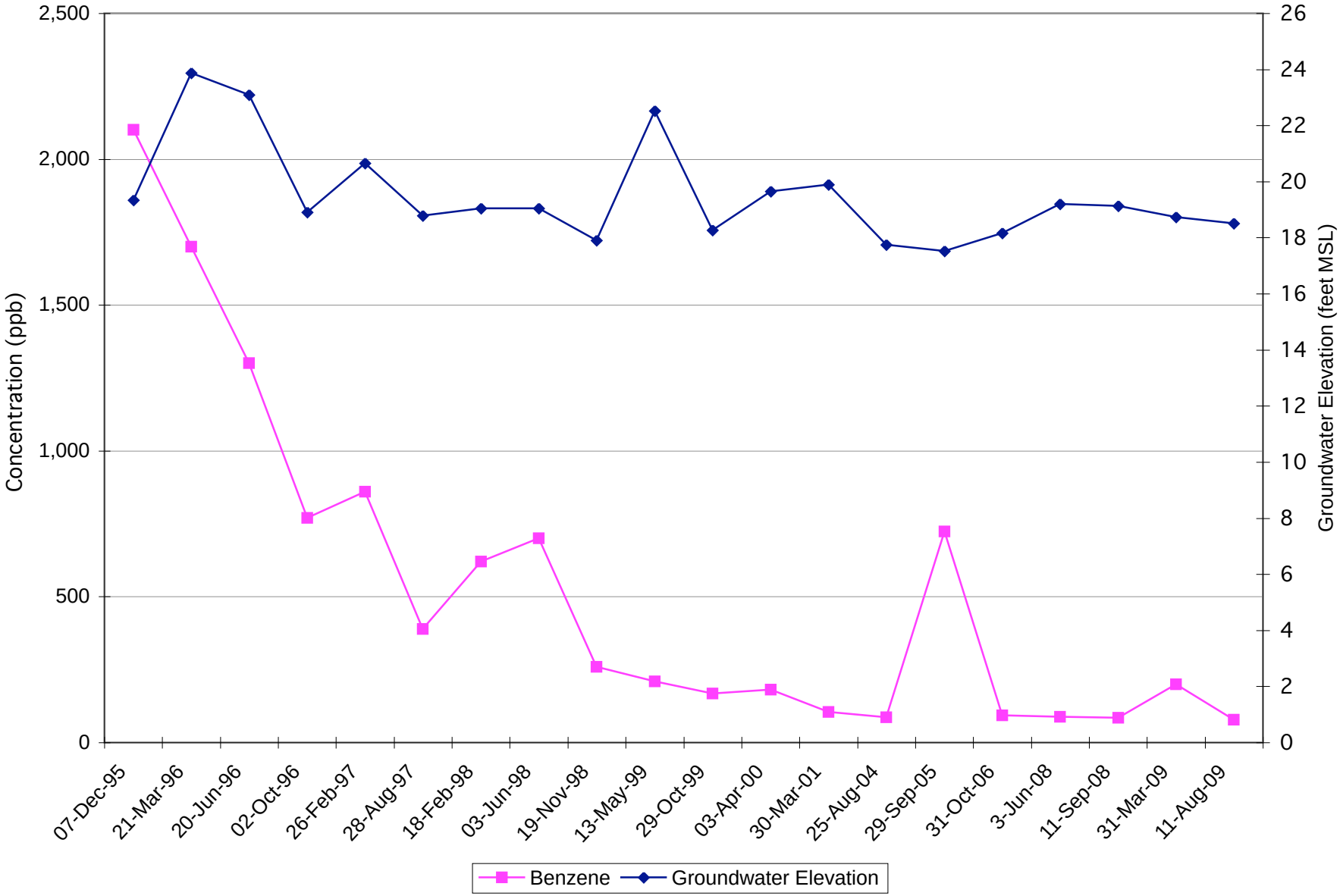
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-6-61 (upper alluvial WBZ) - abandoned
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

HAHN AND ASSOCIATES, INC.
Project No. 2708

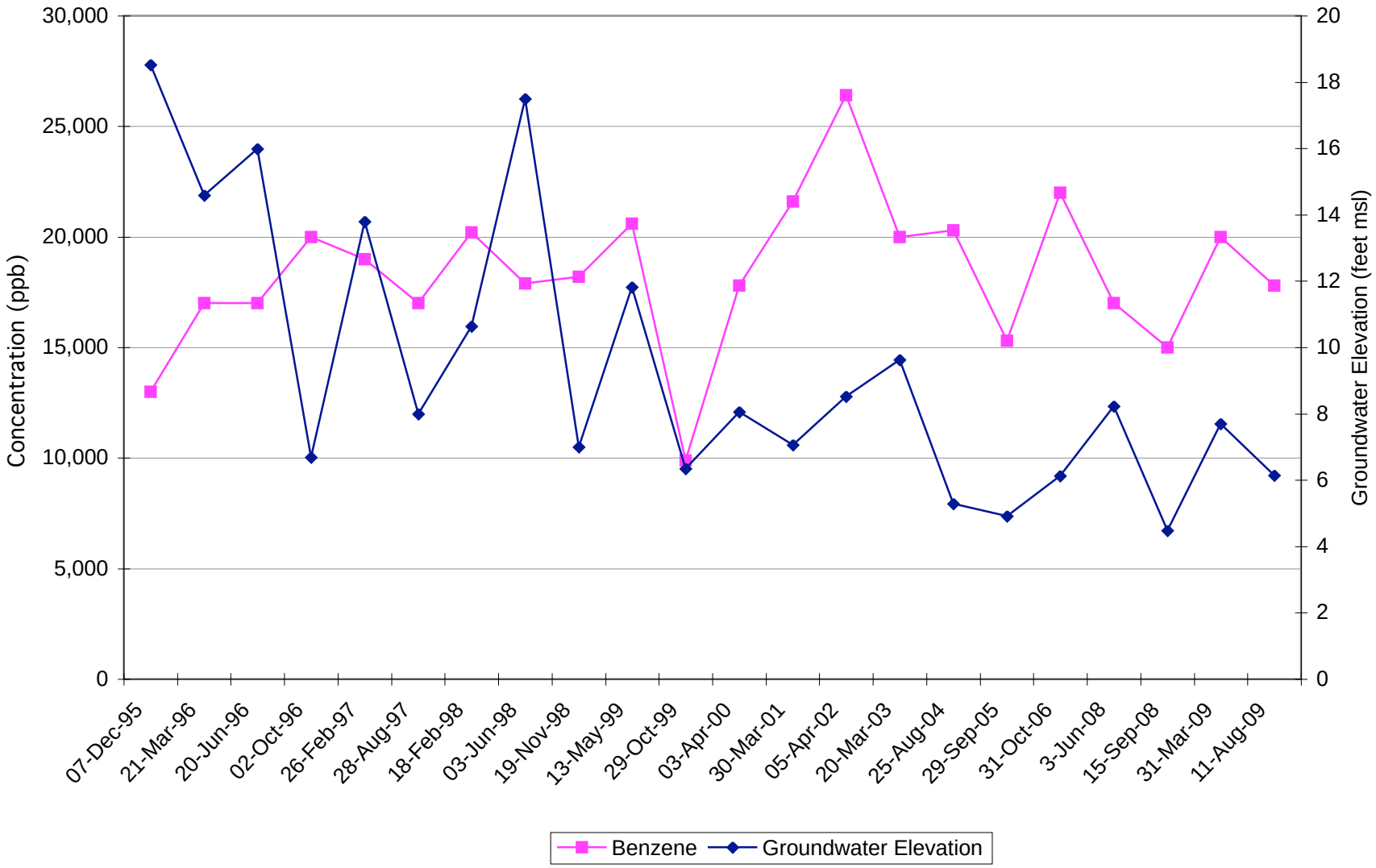
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-8-29 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

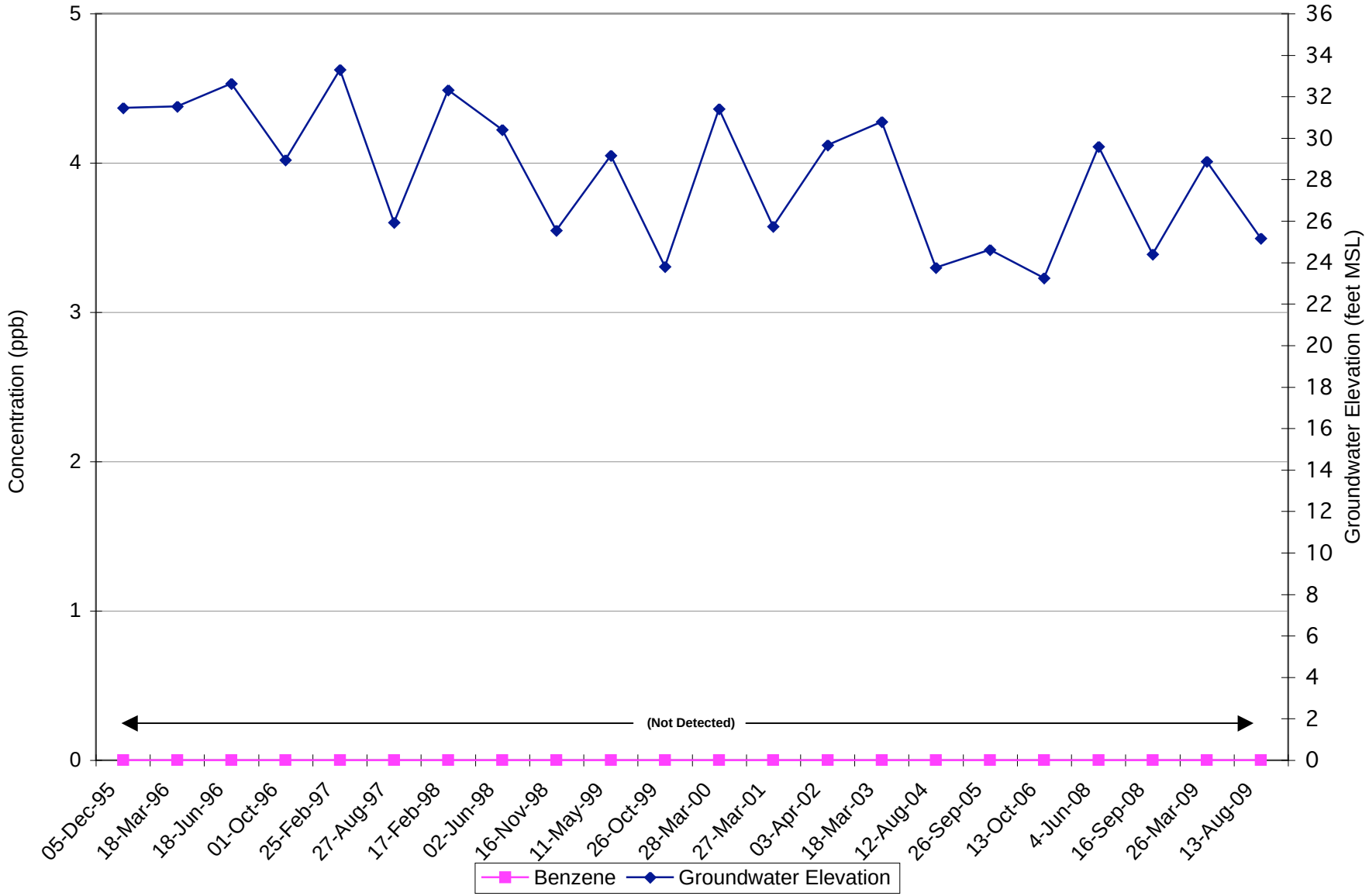
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-8-56 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10: BAU
File:Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-9-29 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

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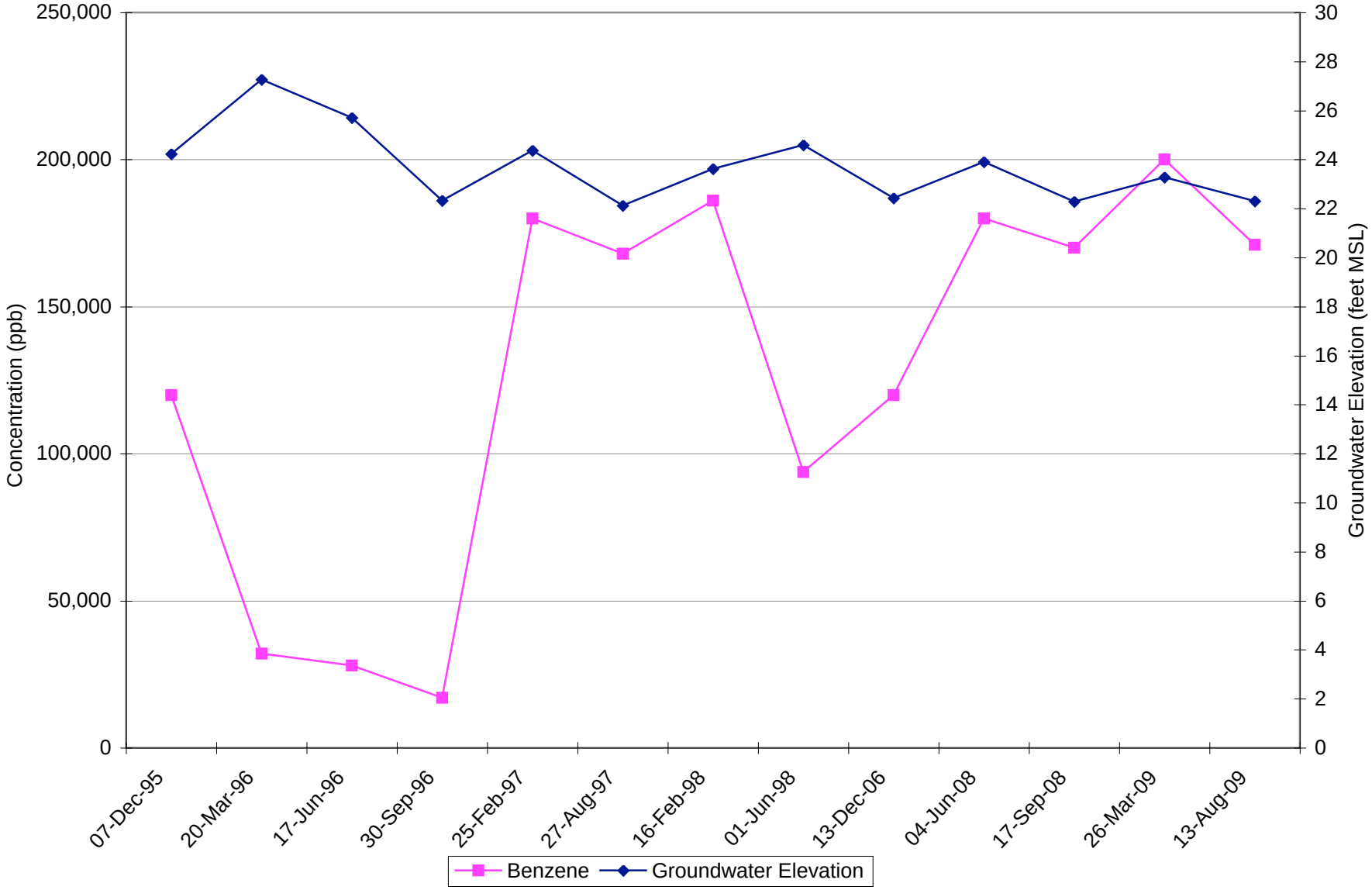
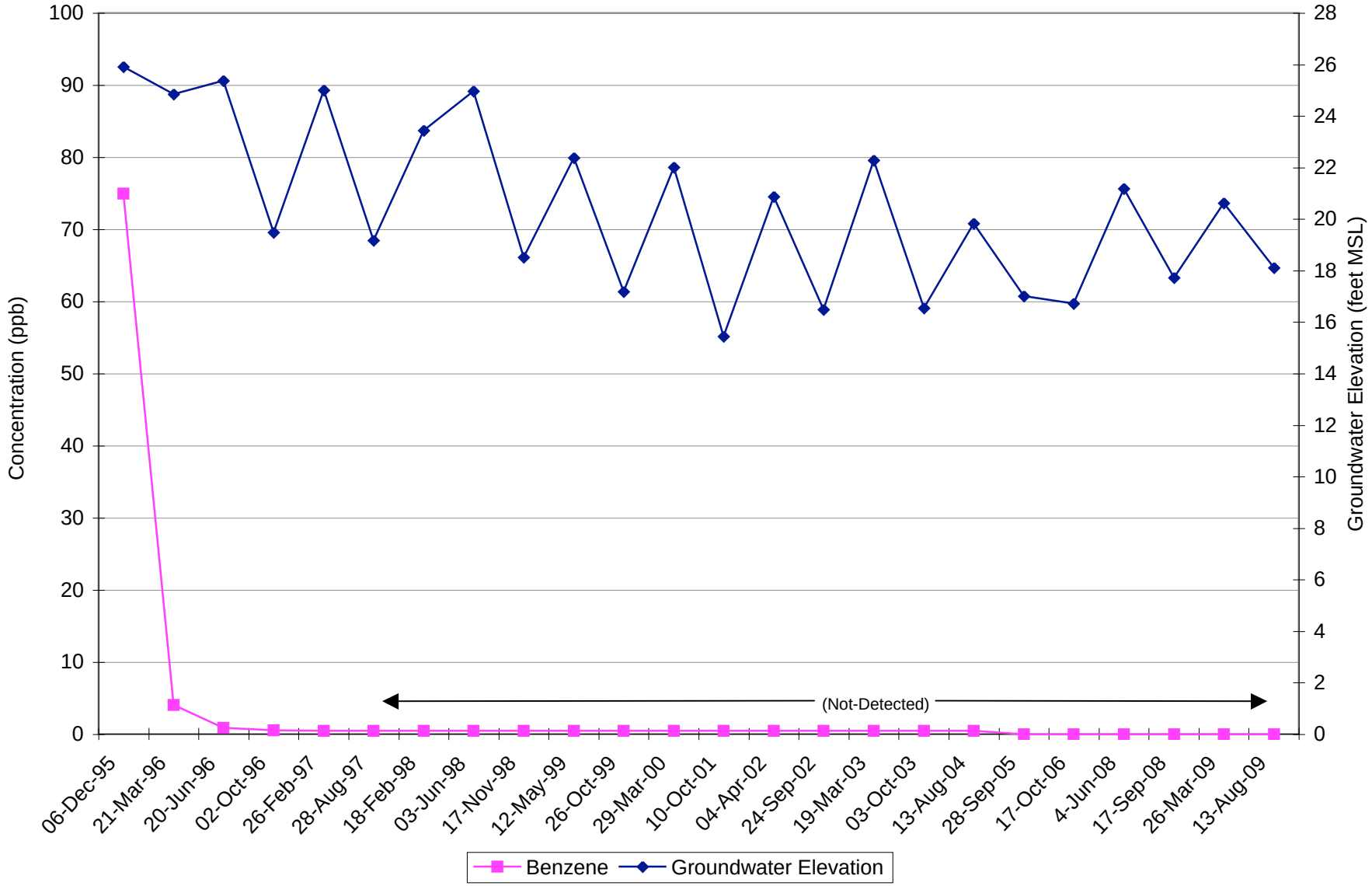
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-10-25 (surficial fill WBZ) - Well Contains DNAPL
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-10-61 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
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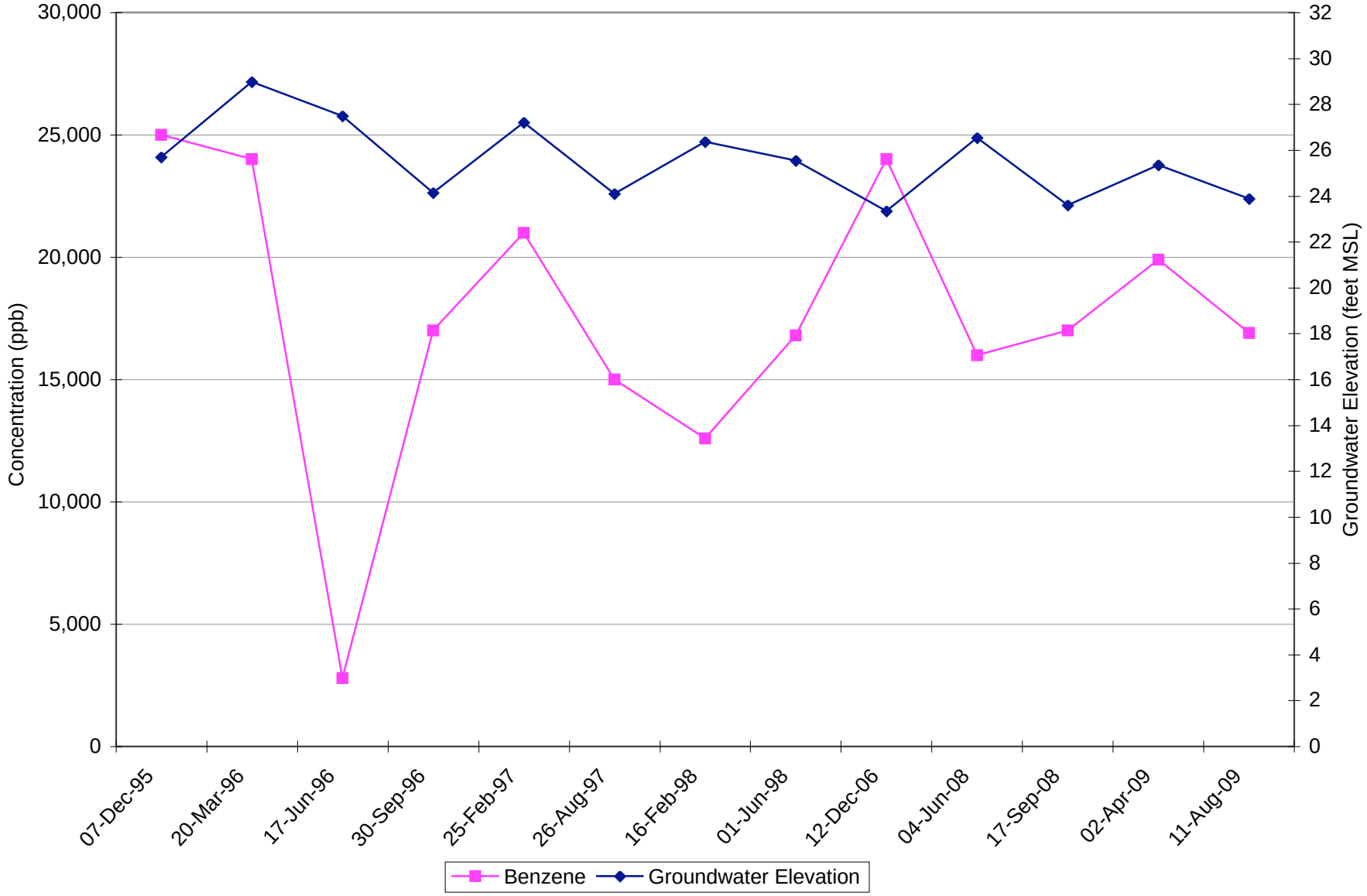
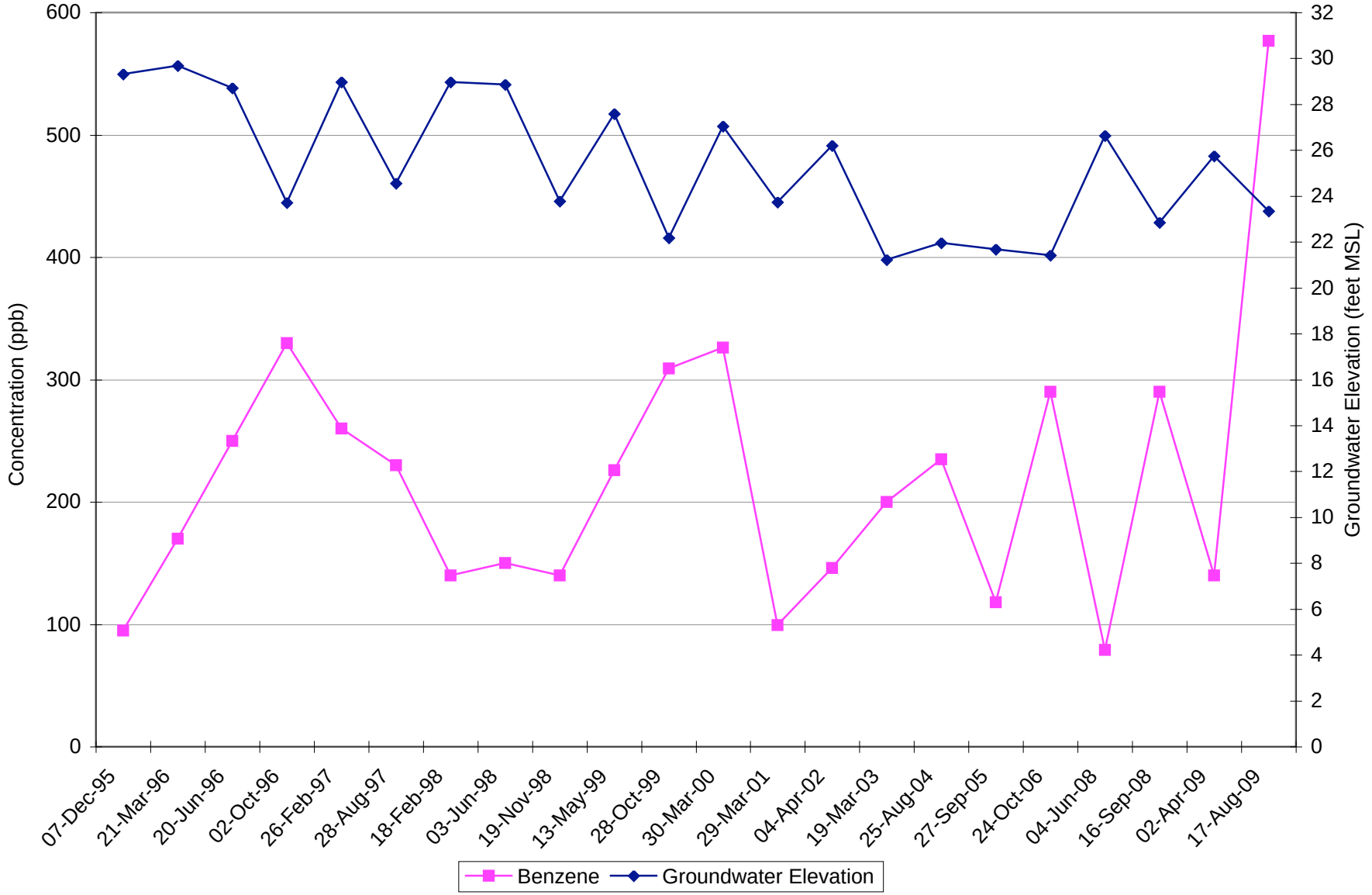
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-11-32 (surficial fill WBZ) - Well Contains DNAPL
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

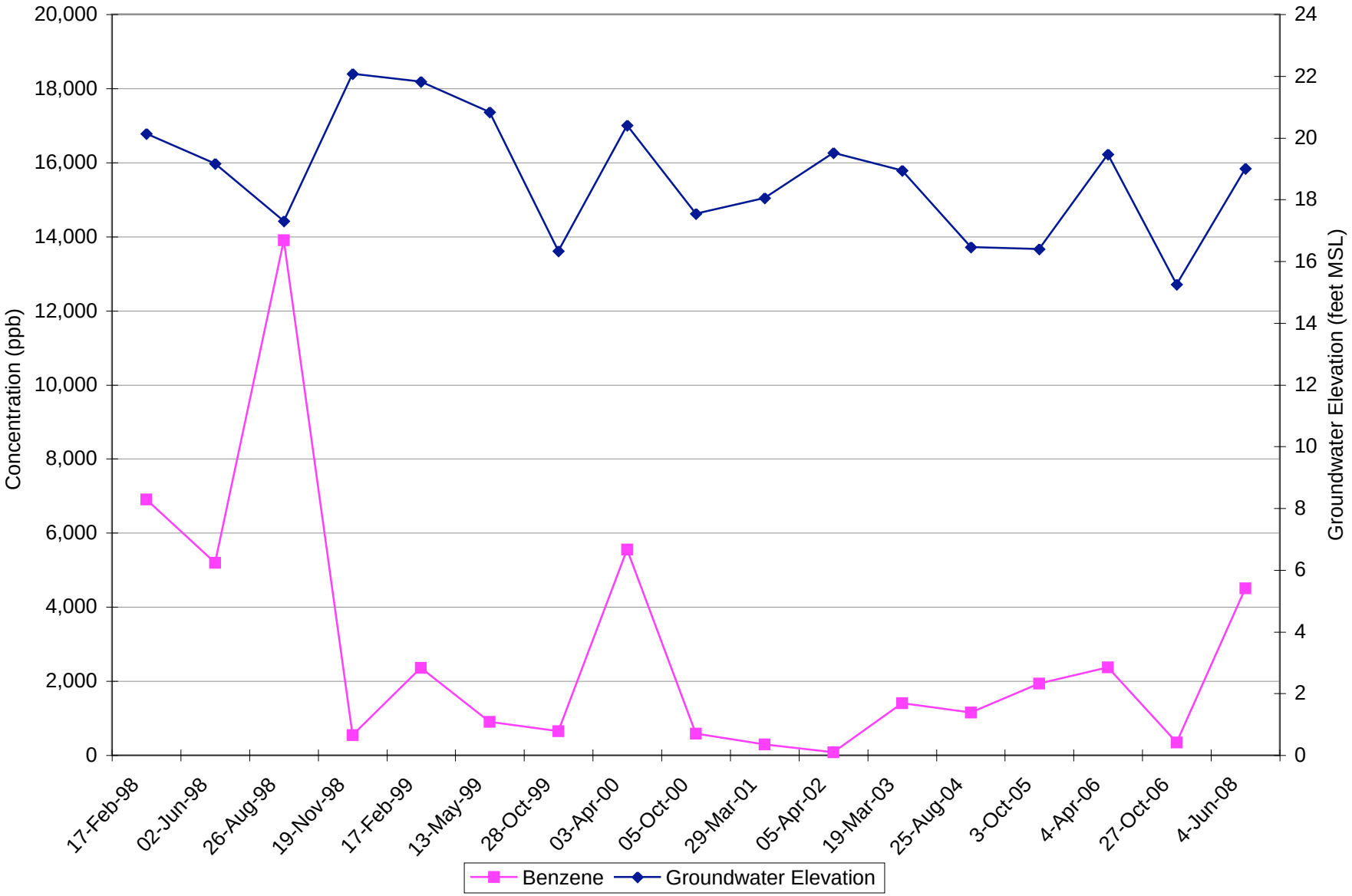
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-12-36 (surficial fill WBZ / upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

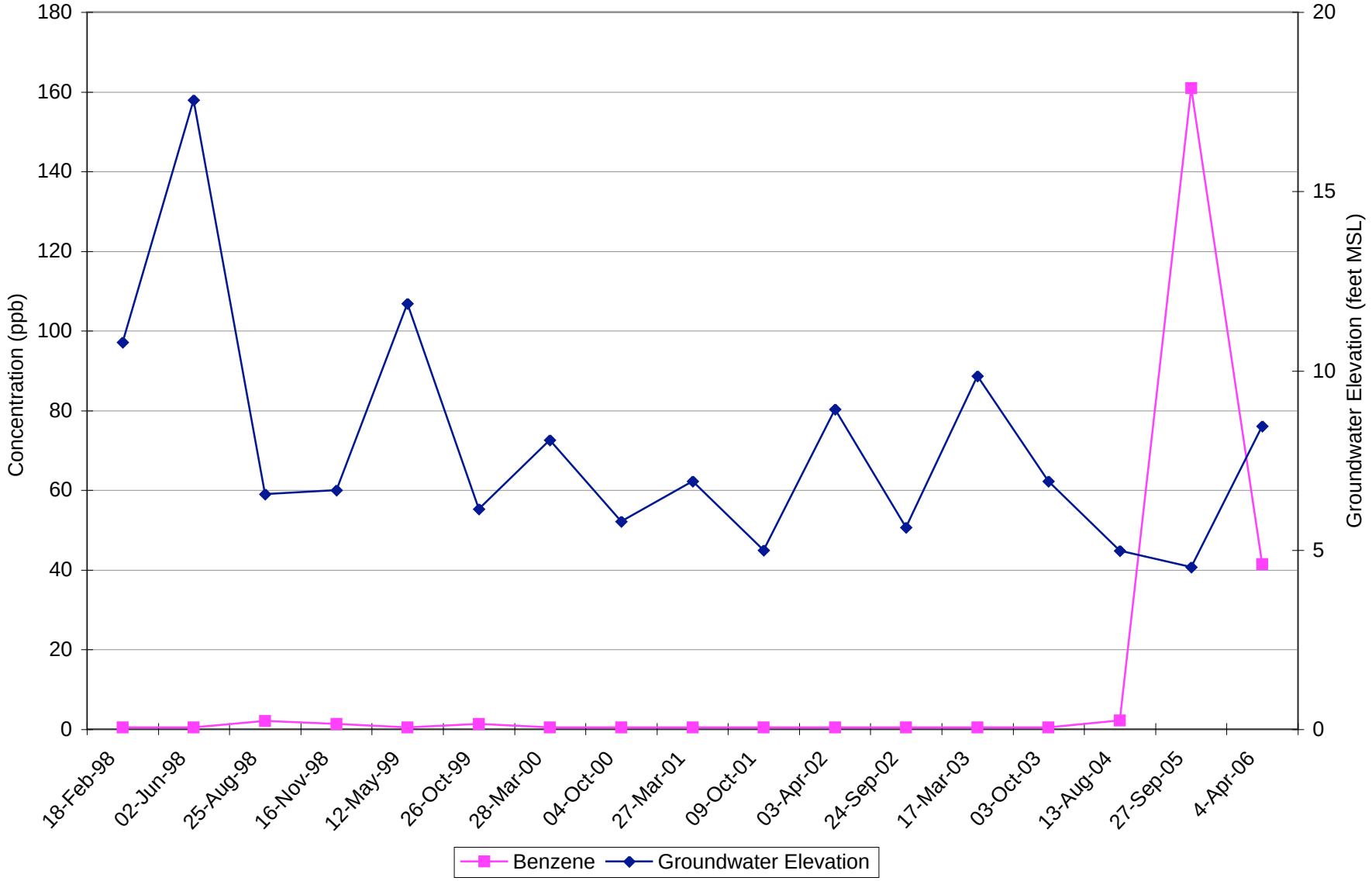
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-13-30 (surficial fill WBZ) Current DNAPL Recovery Location
NW Natural - Gasco Facility



Updated: 5/24/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

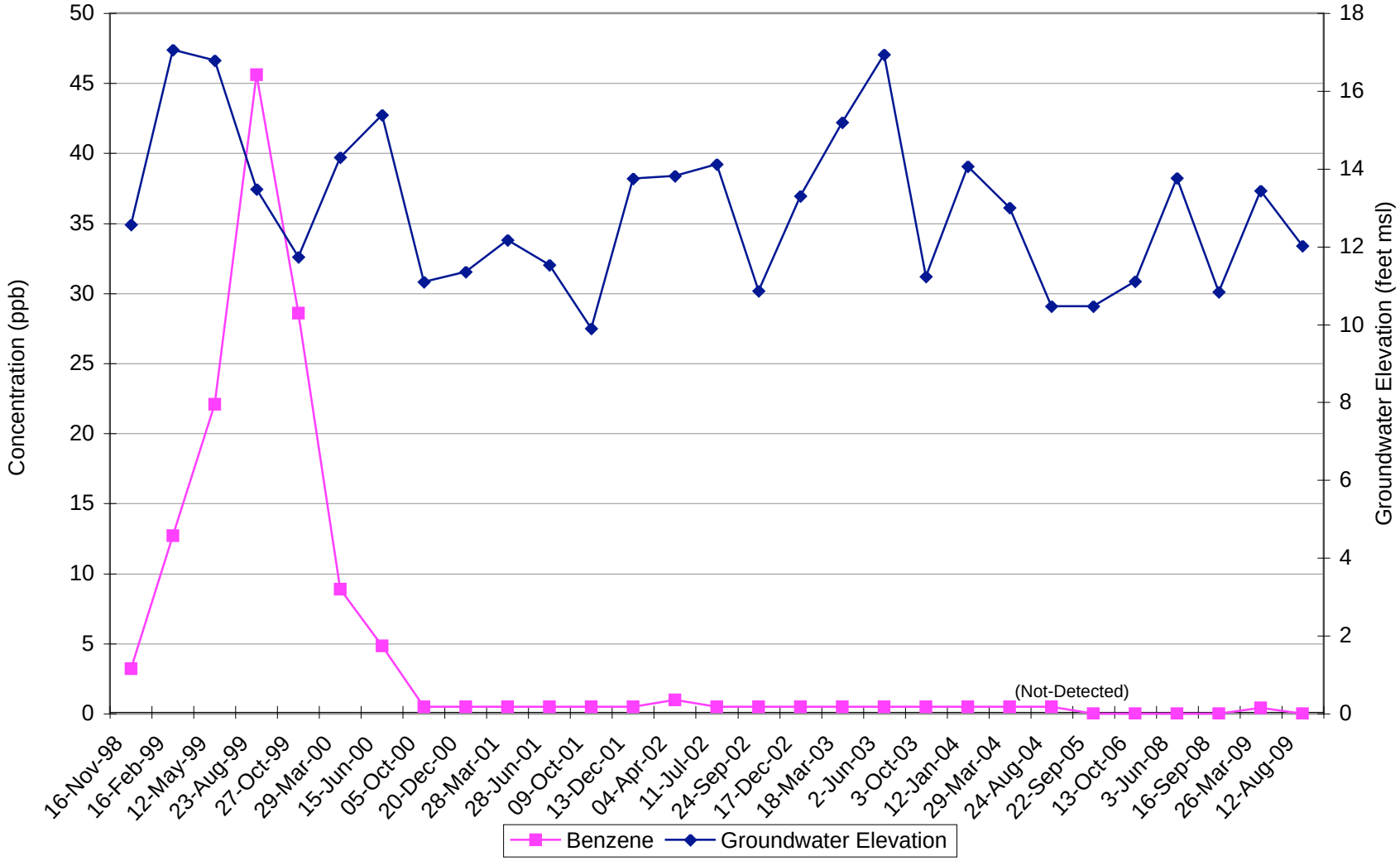
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well MW-13-61 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-14-110 (intermediate-depth alluvial WBZ)
NW Natural - Gasco Facility



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File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
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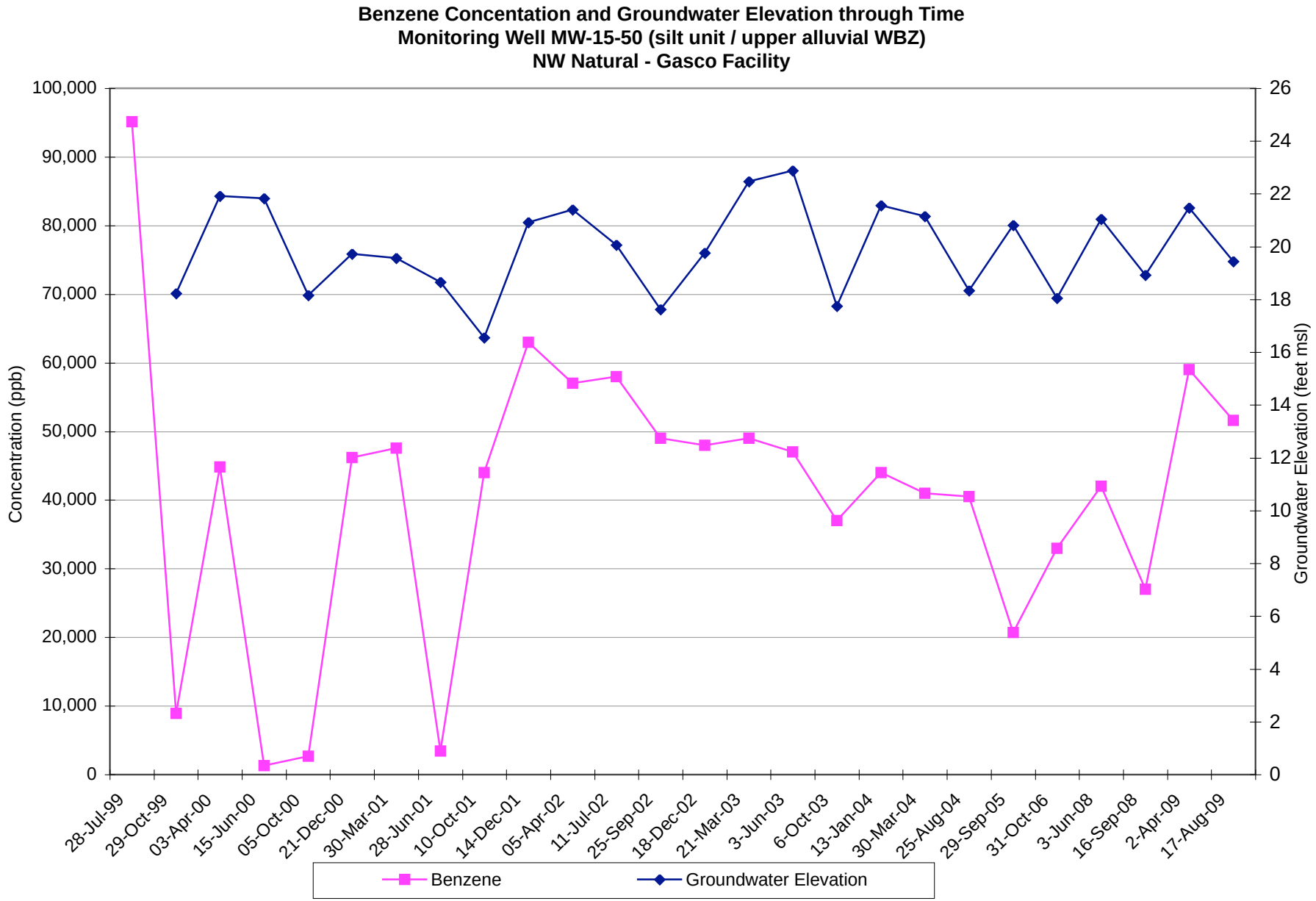
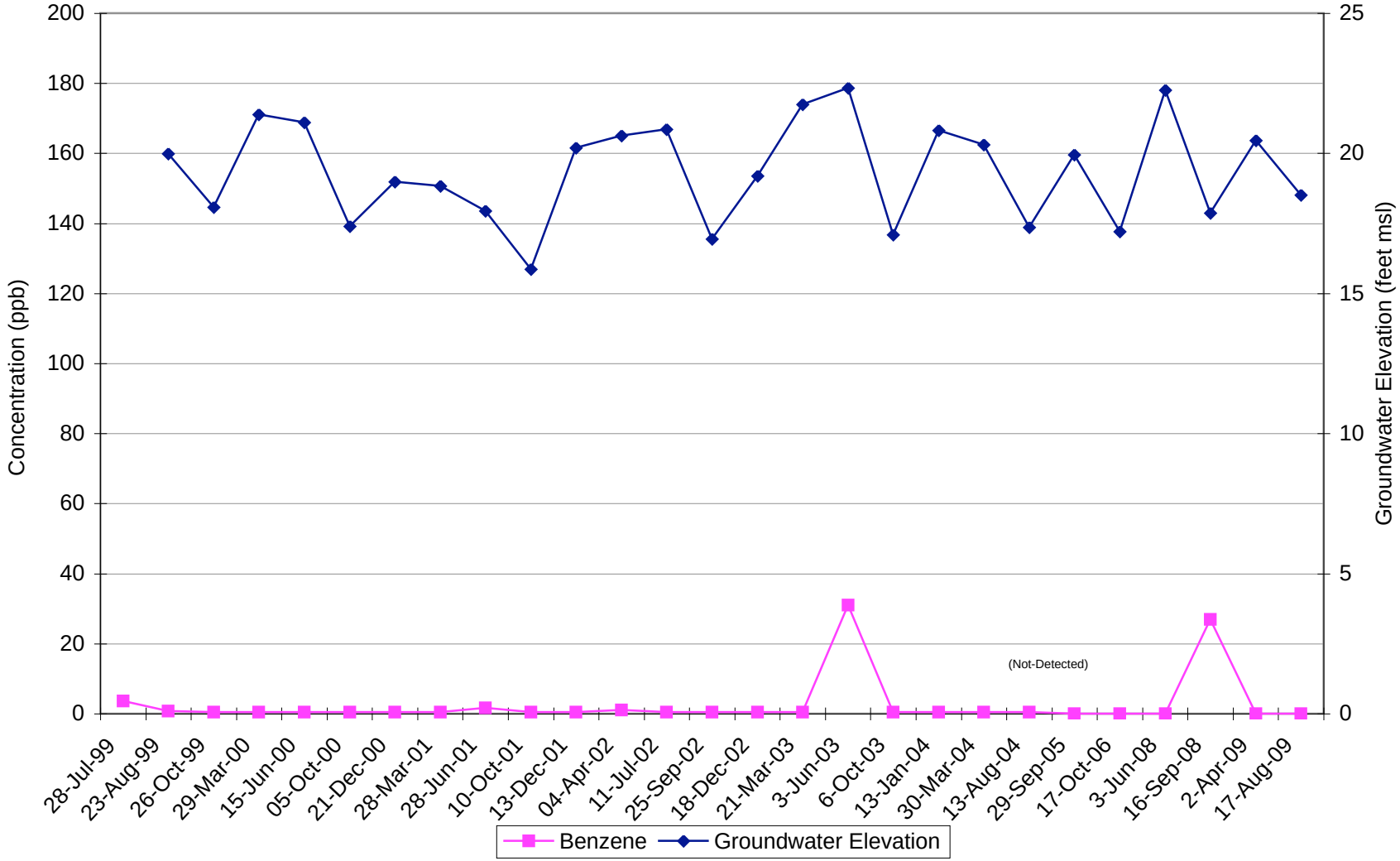


Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW-15-50 bnz

Project No. 2708
HAHN AND ASSOCIATES, INC.

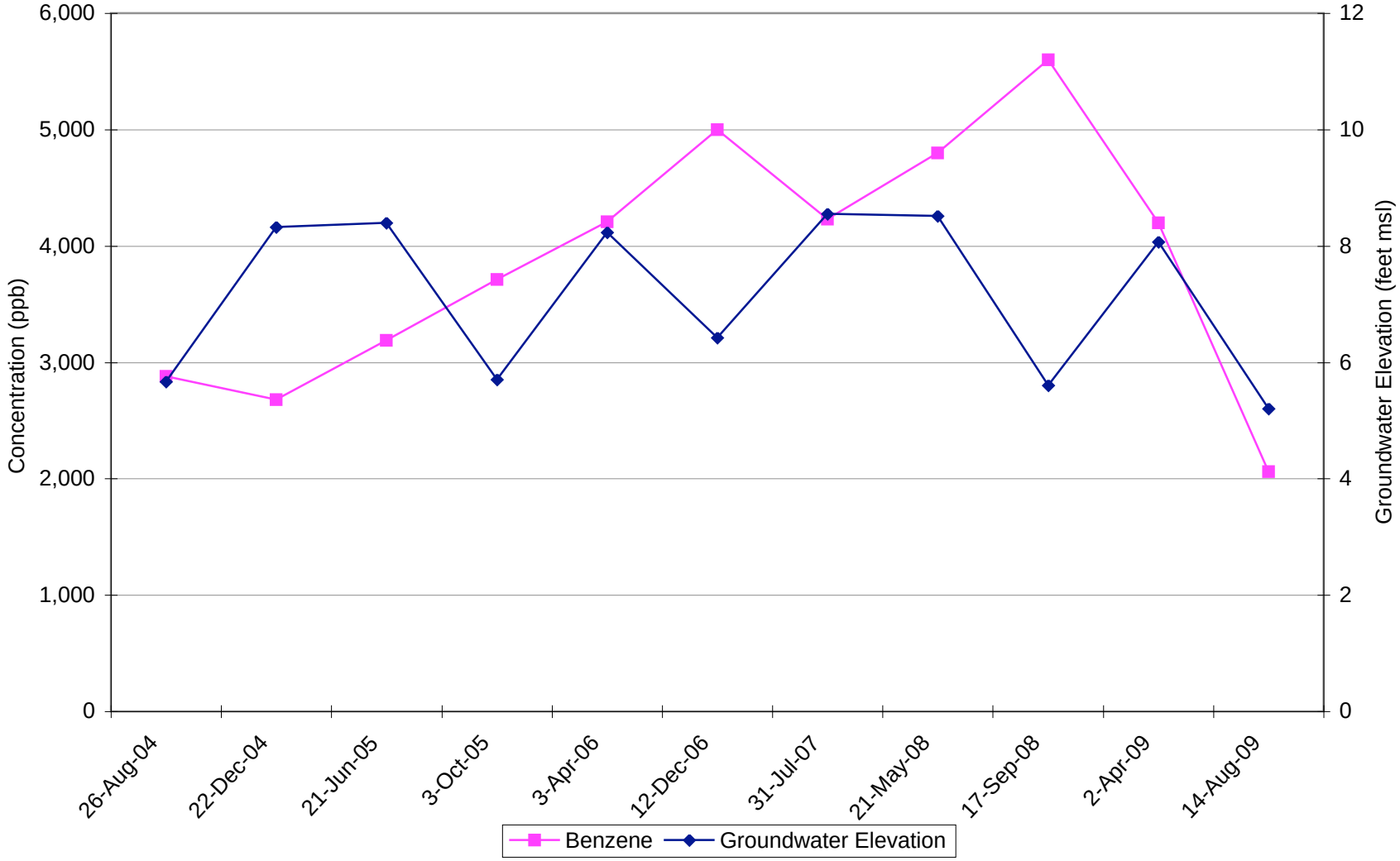
Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-15-66 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10: BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

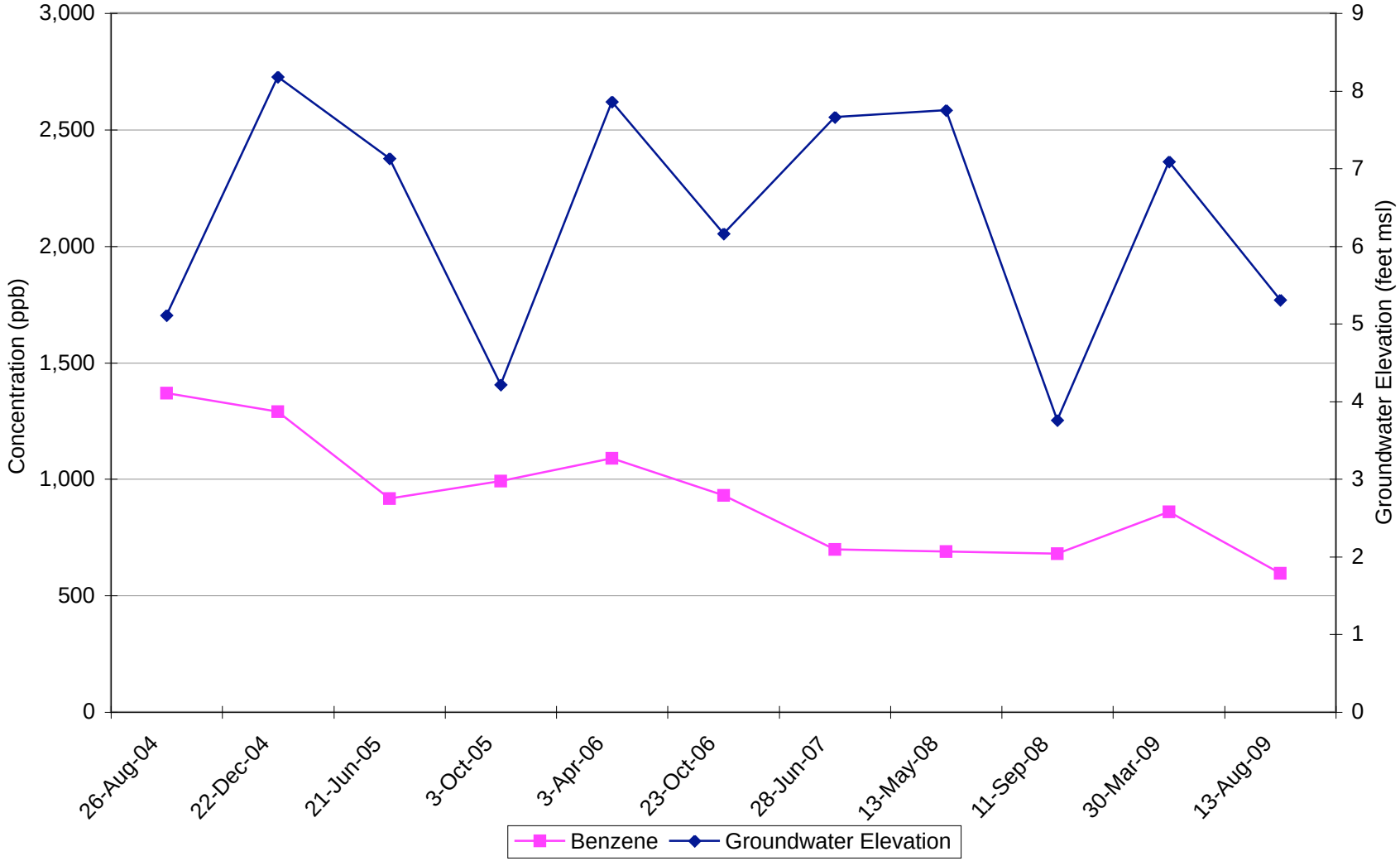
Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-16-45 (upper alluvial WBZ) - Well Contains DNAPL
NW Natural - Gasco Facility



Updated: 5/12/10: BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

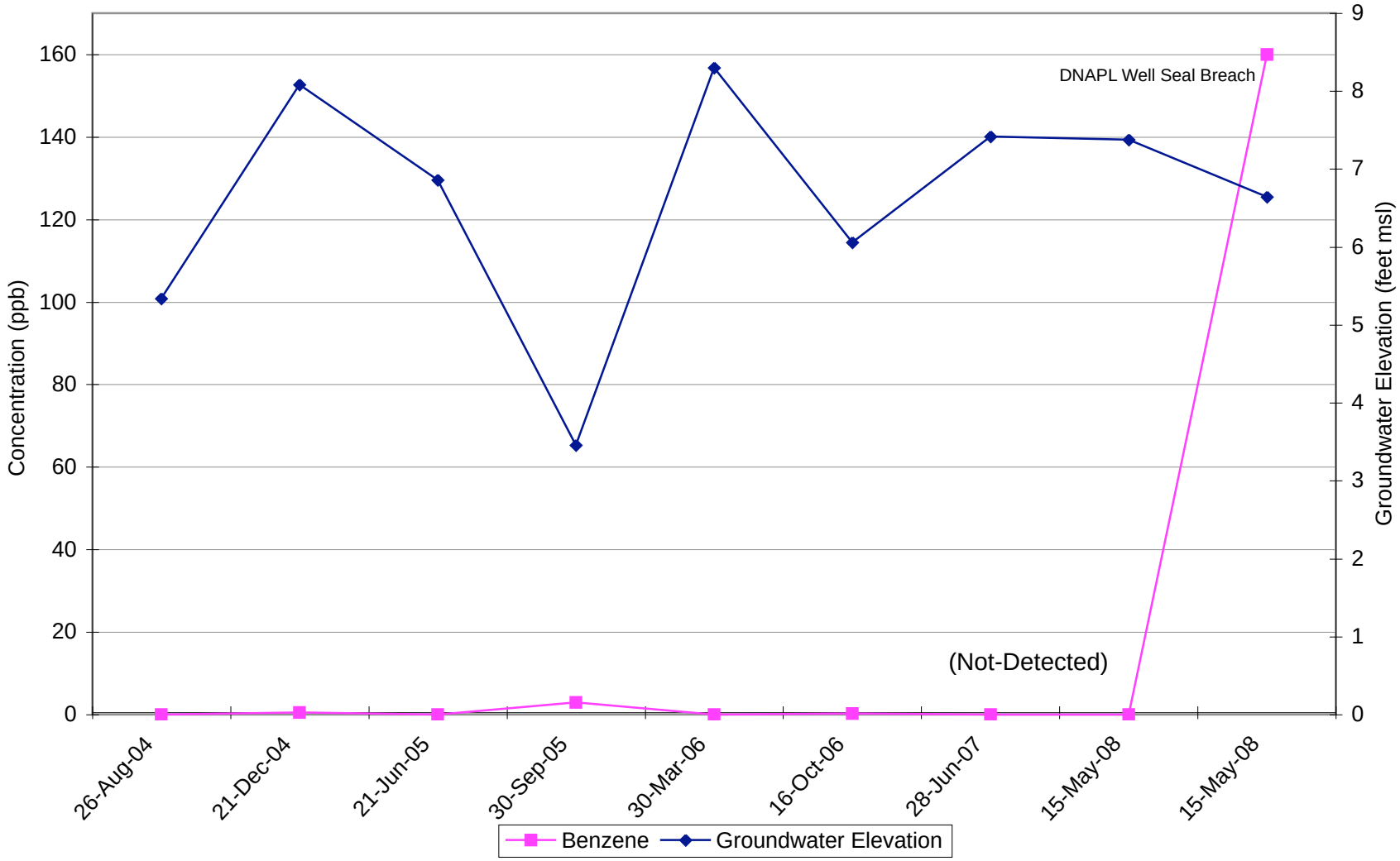
Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-16-65 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10: BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

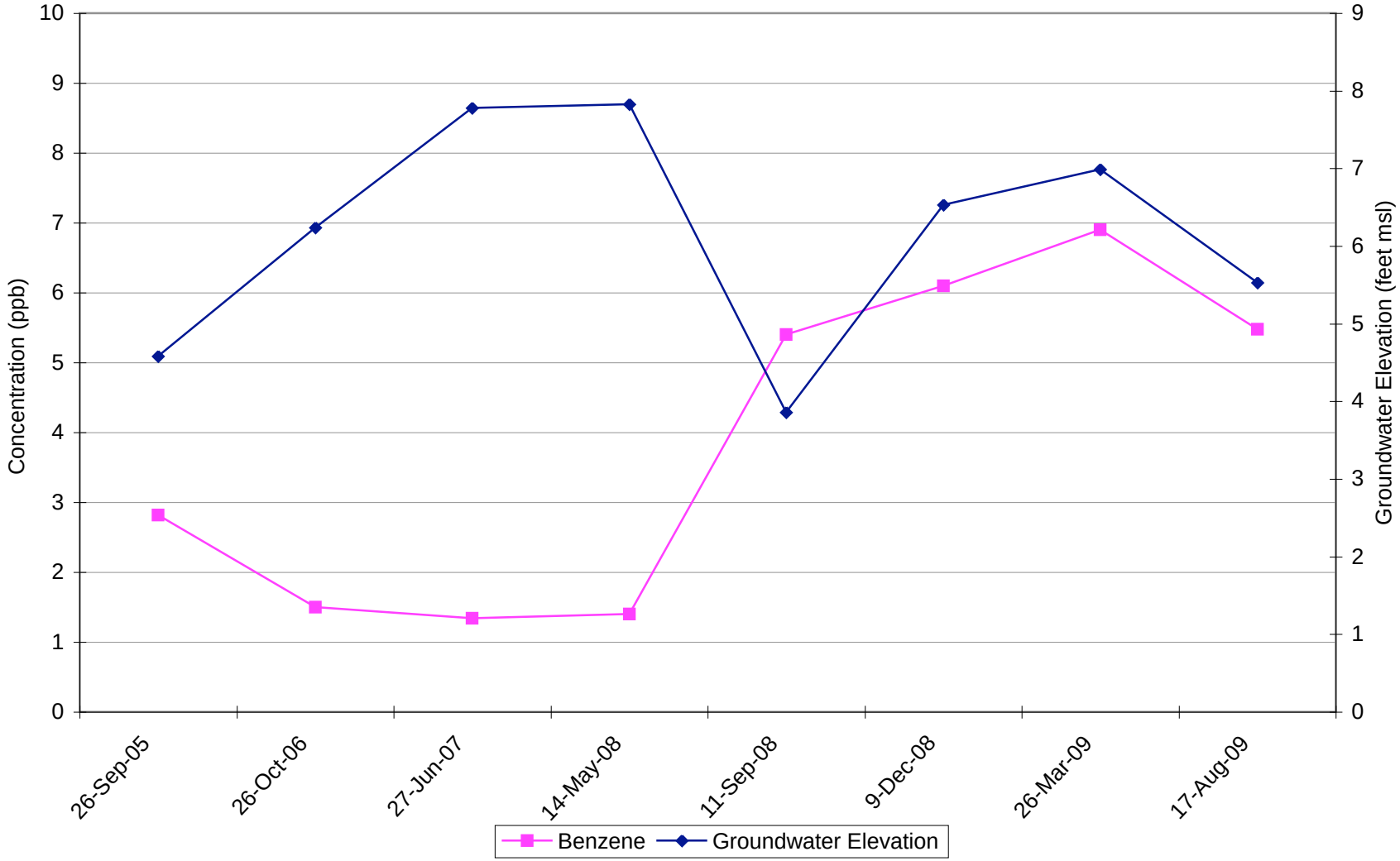
Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-16-125 (intermediate-depth alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10: BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

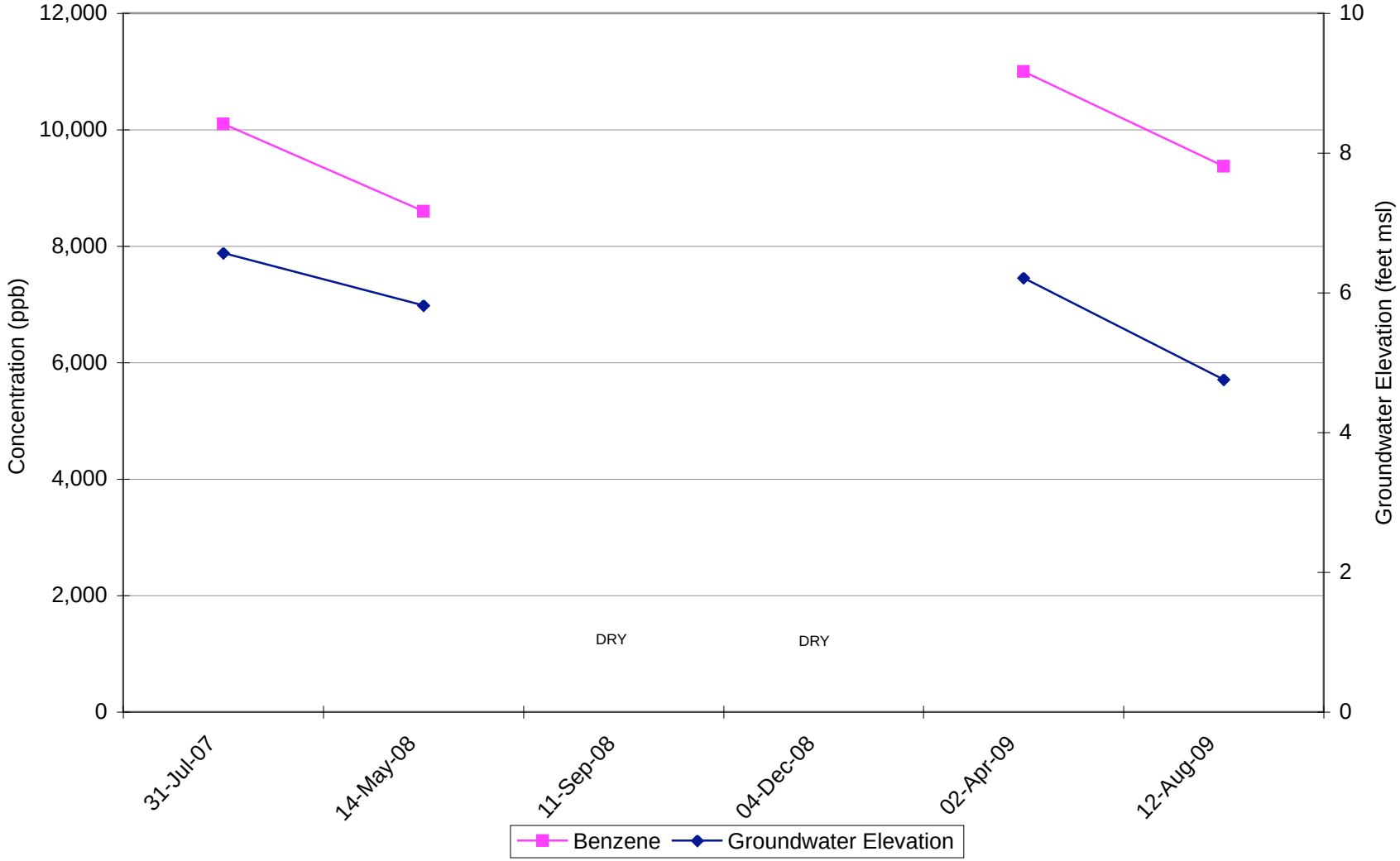
Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-17-79 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10: BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

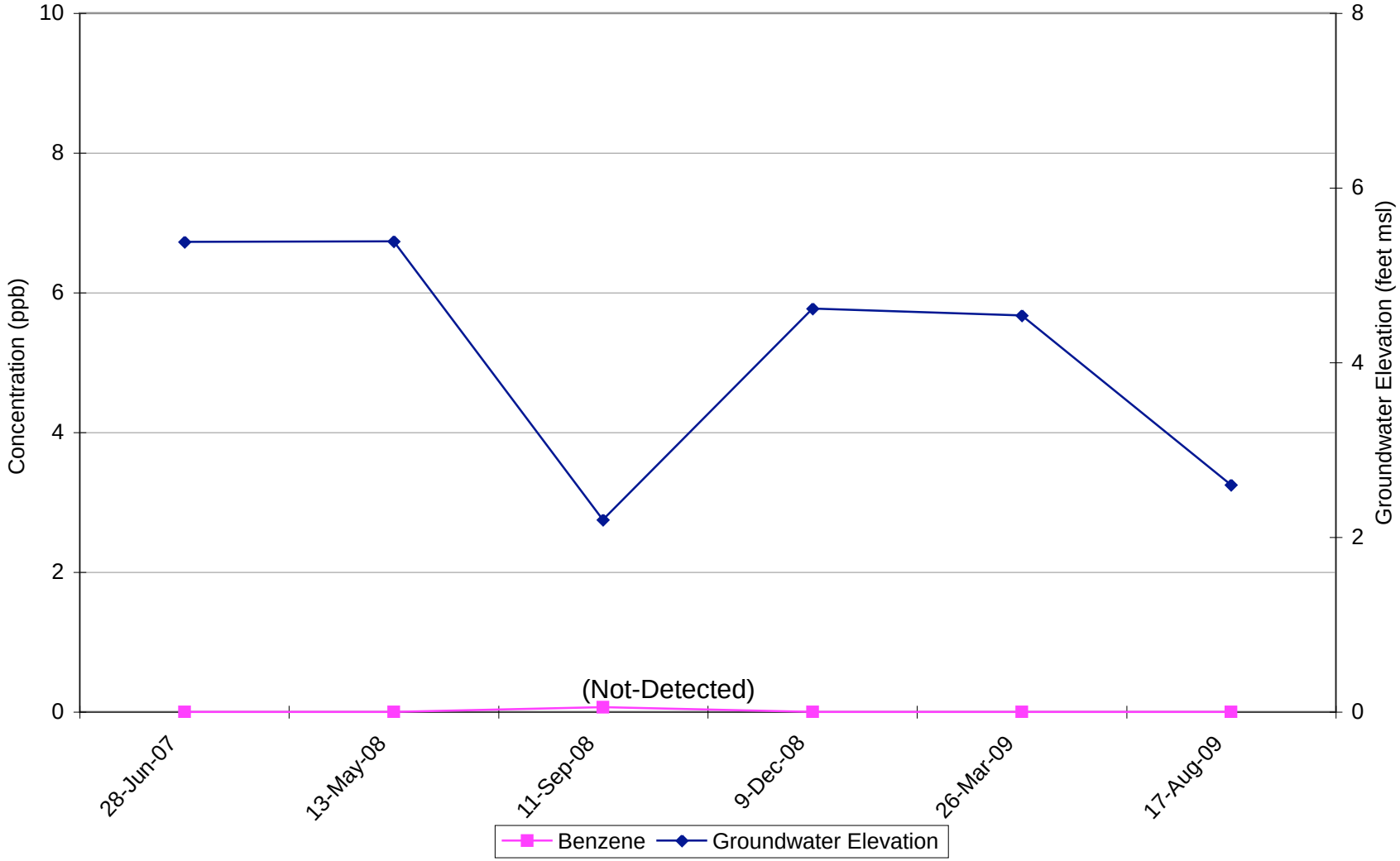
Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-18-30 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10: BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

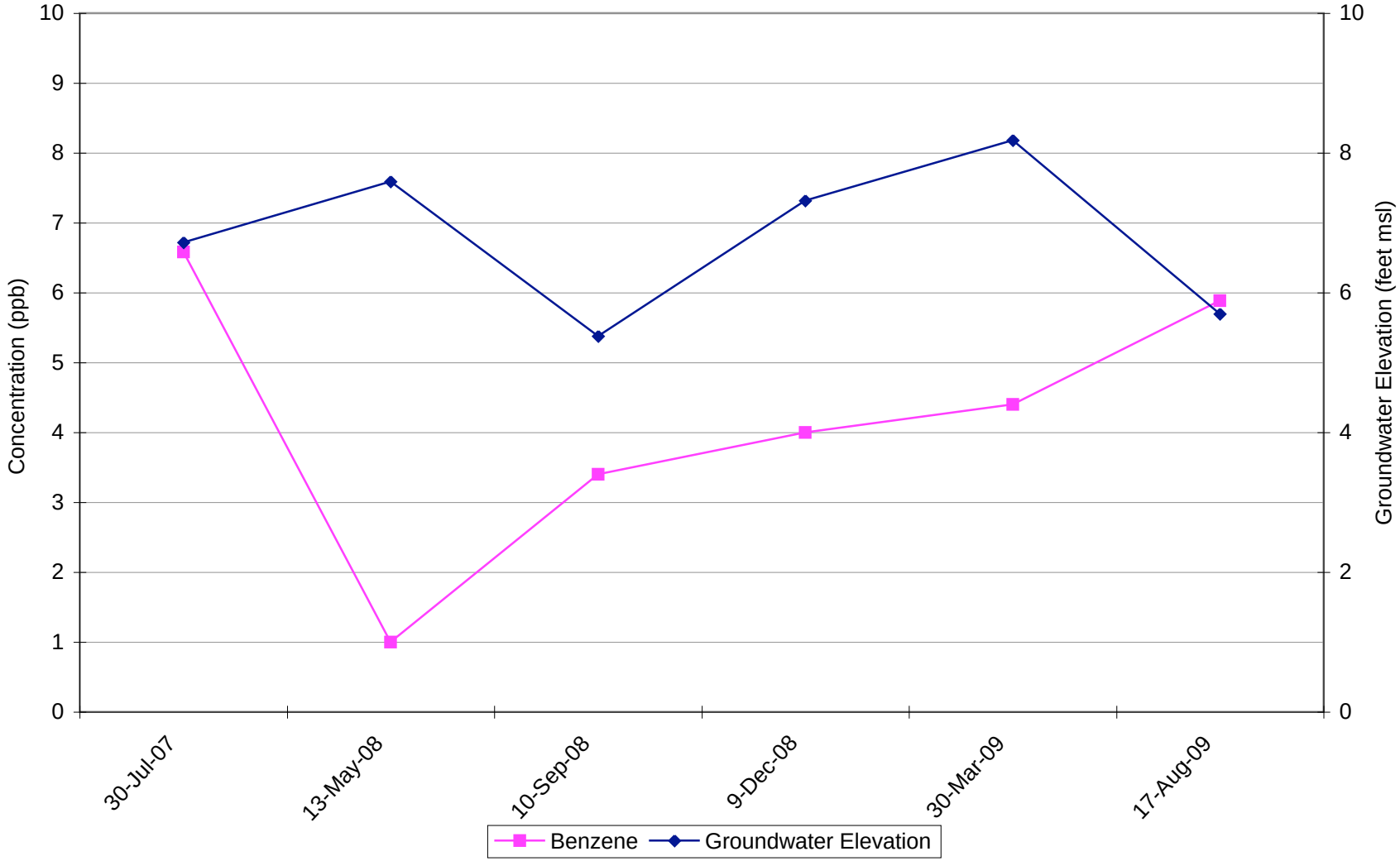
Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-18-180 (lower alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10: BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-19-22 (surficial fill WBZ)
NW Natural - Gasco Facility



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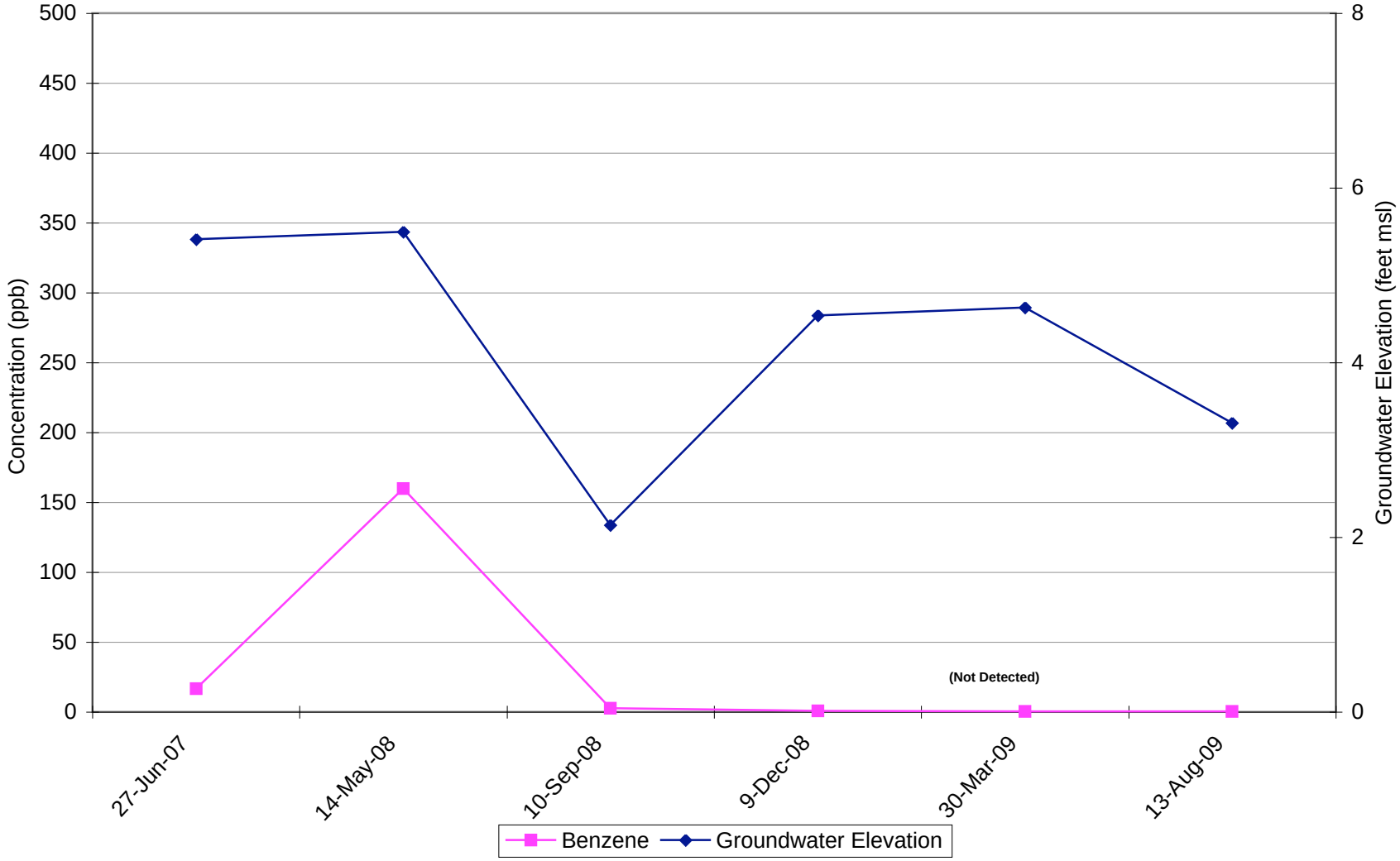
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-19-125 (intermediate alluvial WBZ)
NW Natural - Gasco Facility



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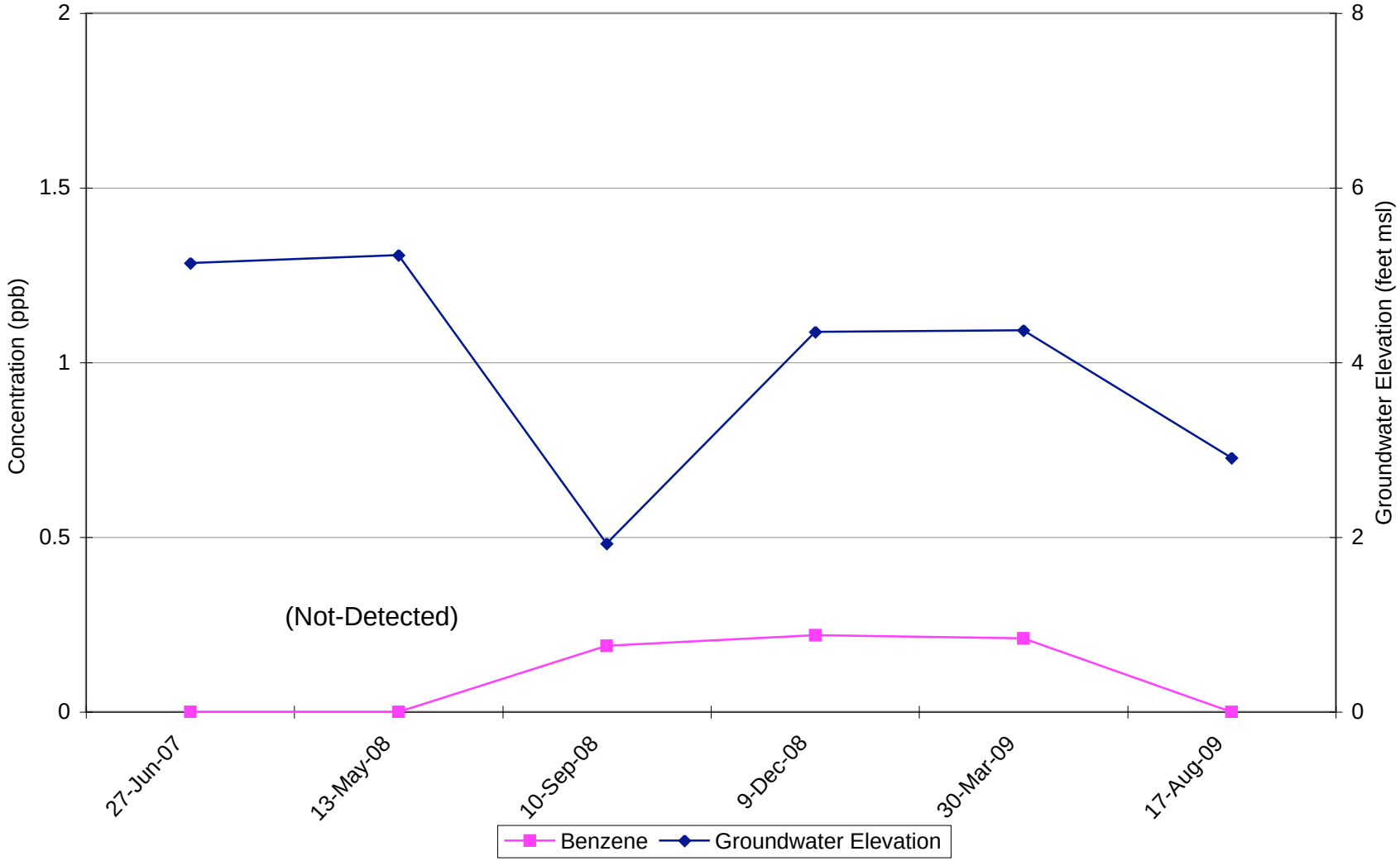
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-19-180 (lower alluvial WBZ)
NW Natural - Gasco Facility



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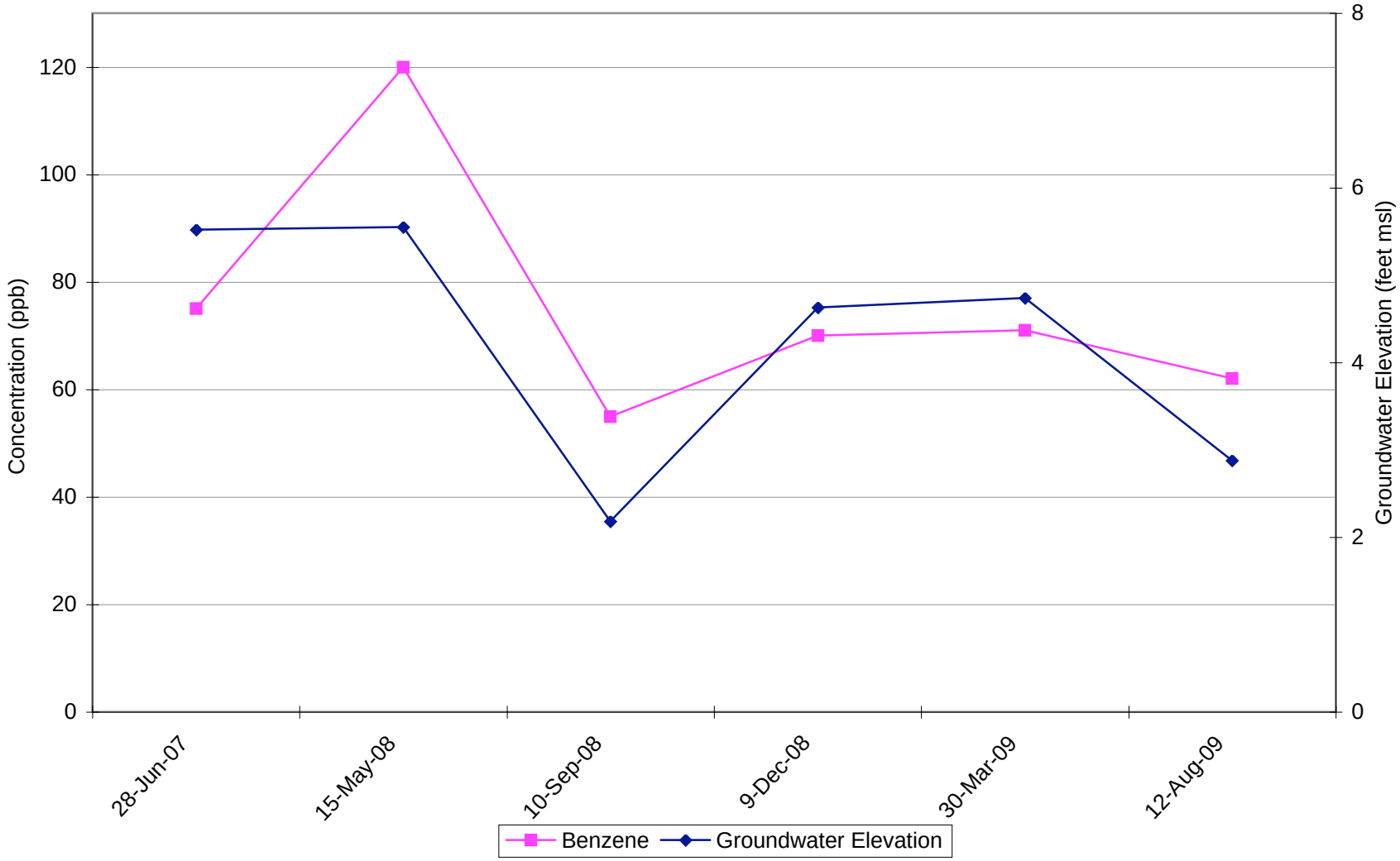
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-20-120 (intermediate alluvial WBZ)
NW Natural - Gasco Facility



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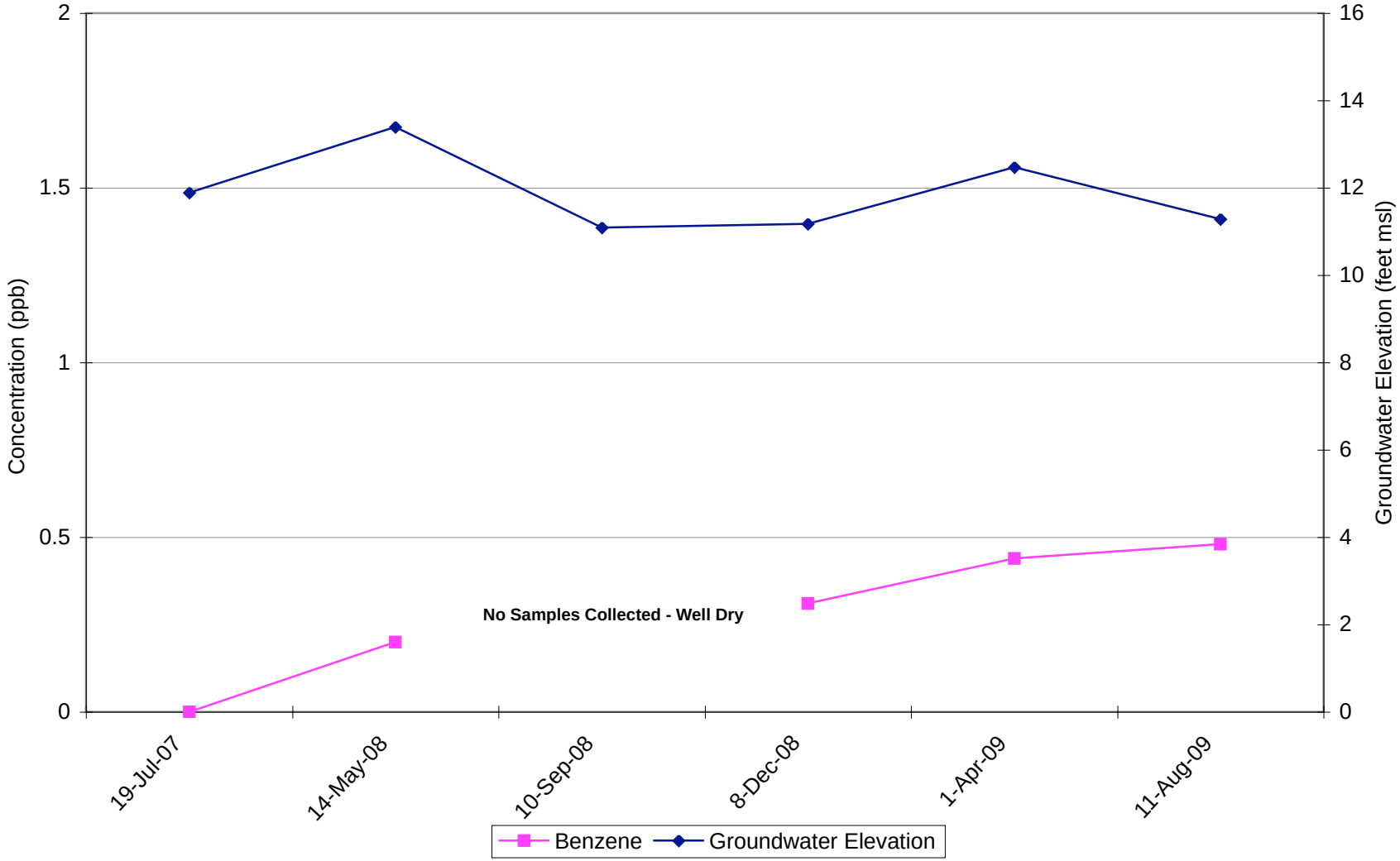
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-21-12 (surficial fill WBZ)
NW Natural - Gasco Facility



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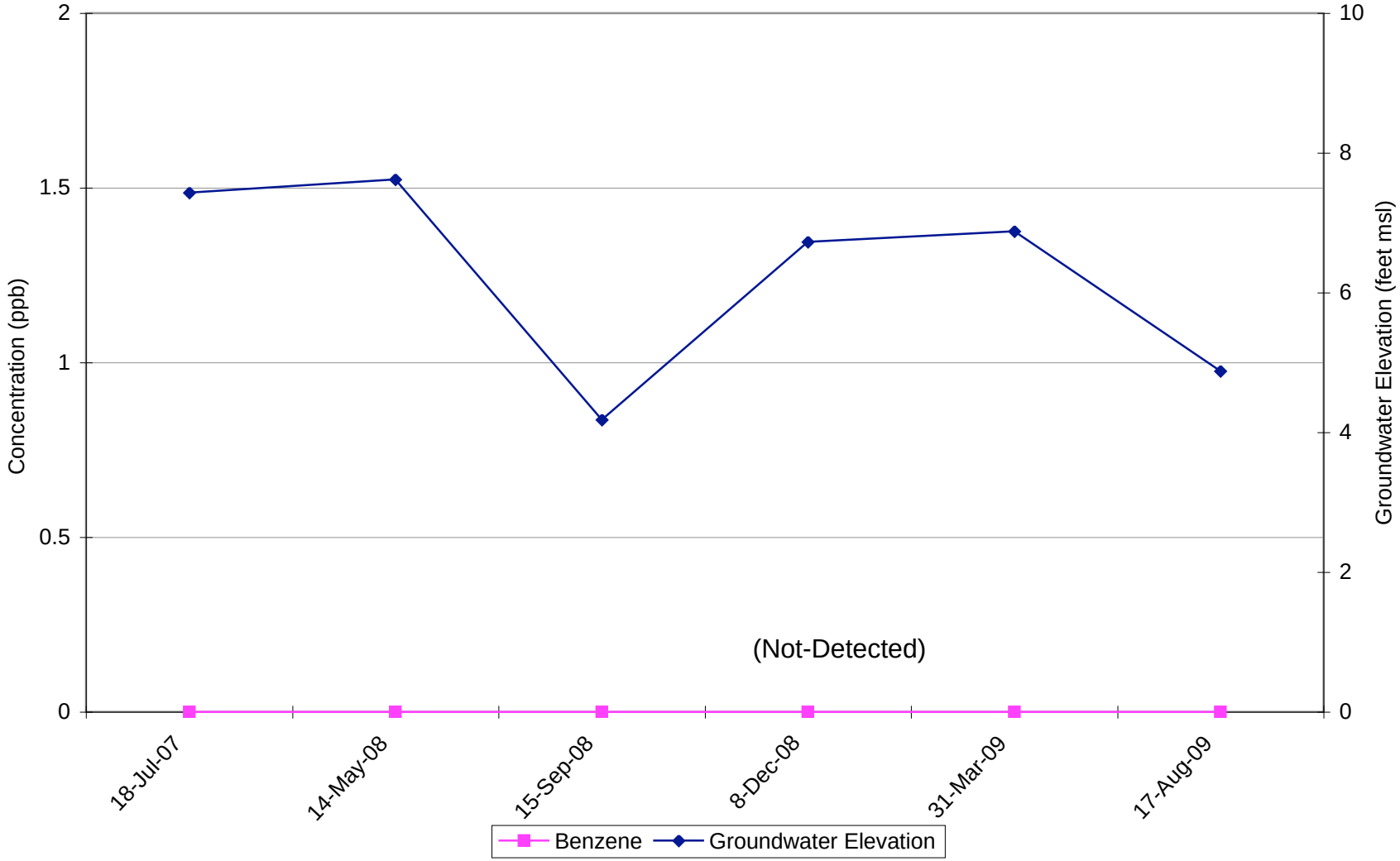
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-21-75 (upper alluvial WBZ)
NW Natural - Gasco Facility



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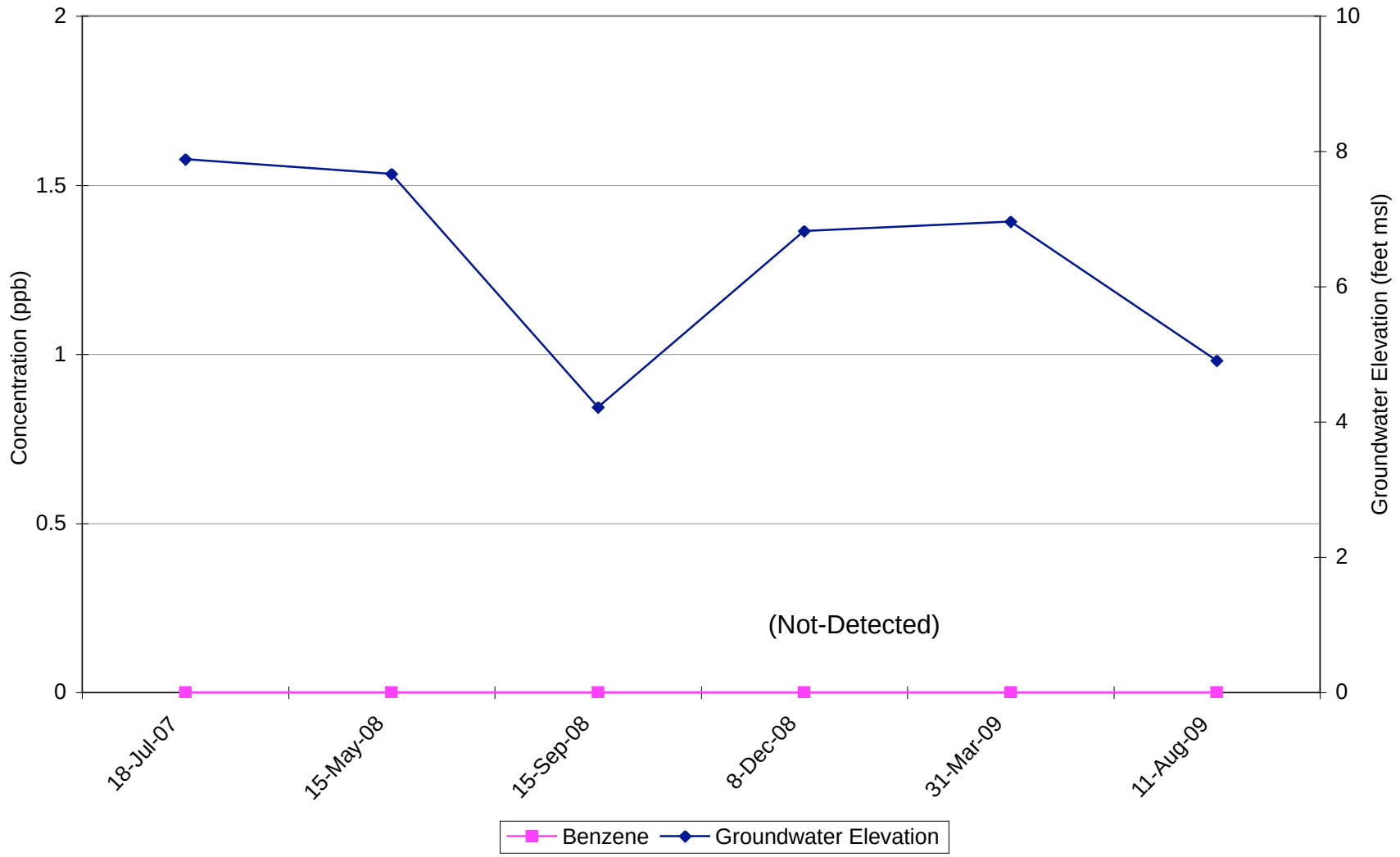
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-21-115 (intermediate alluvial WBZ)
NW Natural - Gasco Facility



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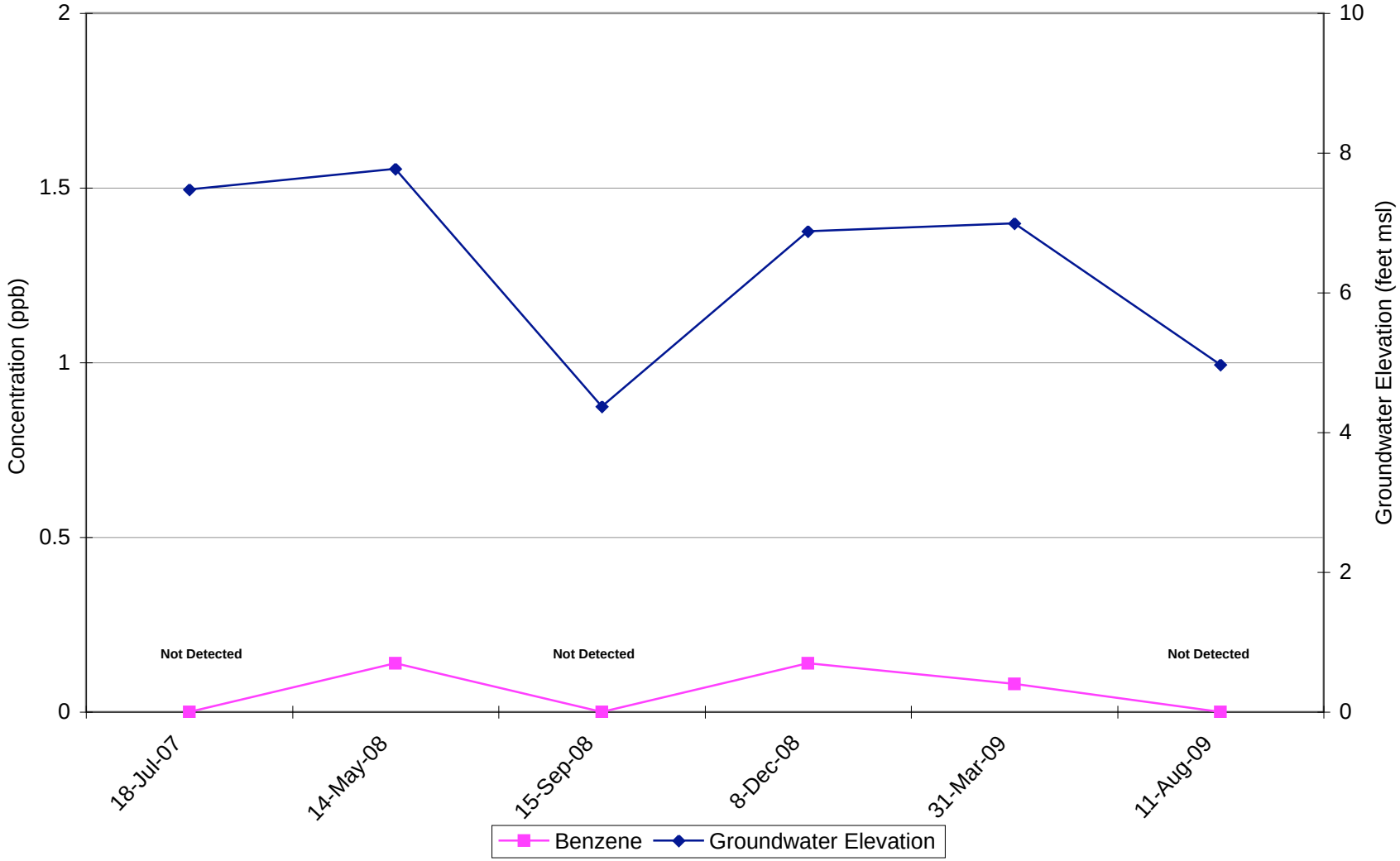
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentation and Groundwater Elevation through Time
Monitoring Well MW-21-165 (lower alluvial WBZ)
NW Natural - Gasco Facility



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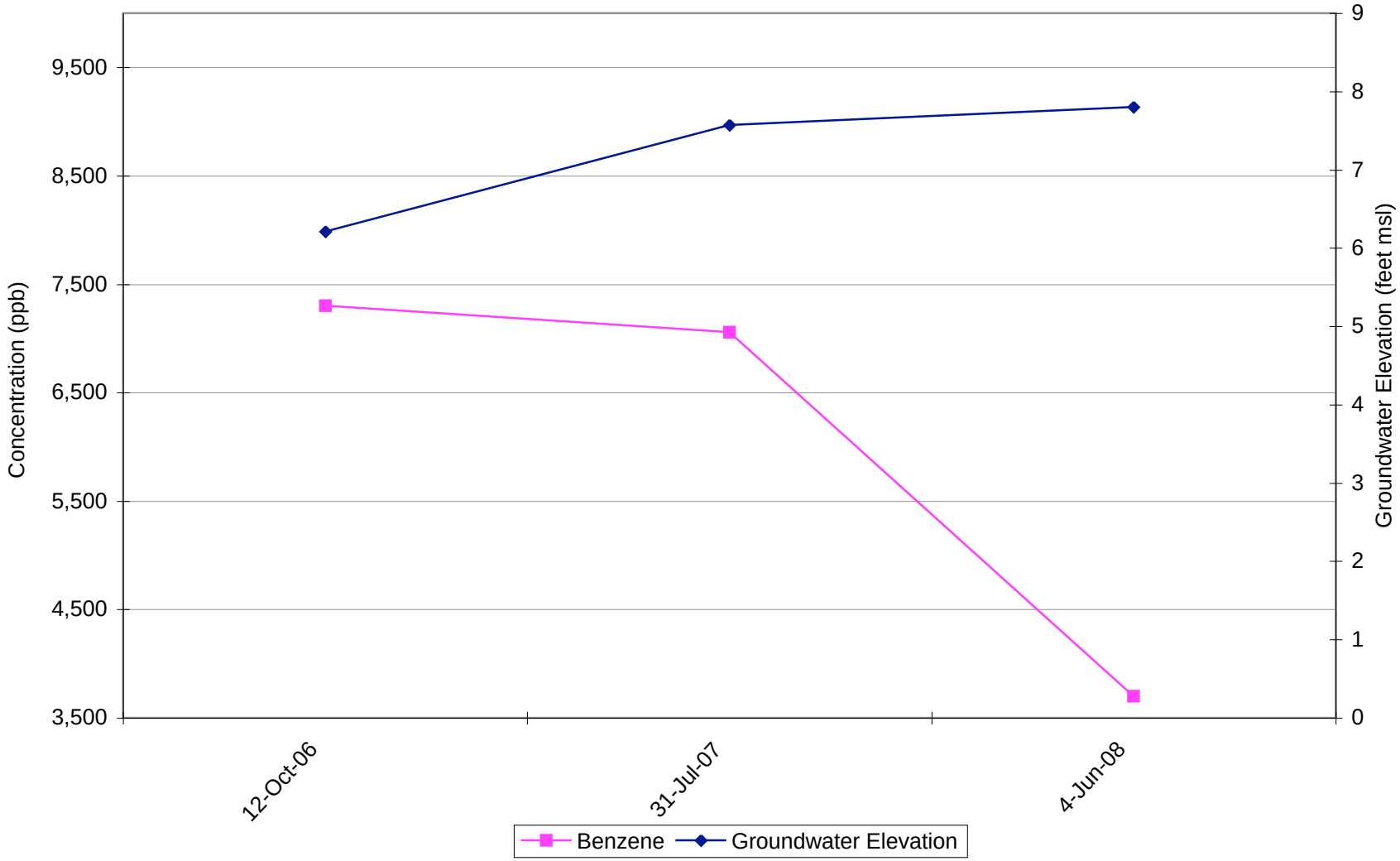
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentation and Groundwater Elevation through Time
Monitoring Well PW-01 (intermediate alluvial WBZ)
NW Natural - Gasco Facility



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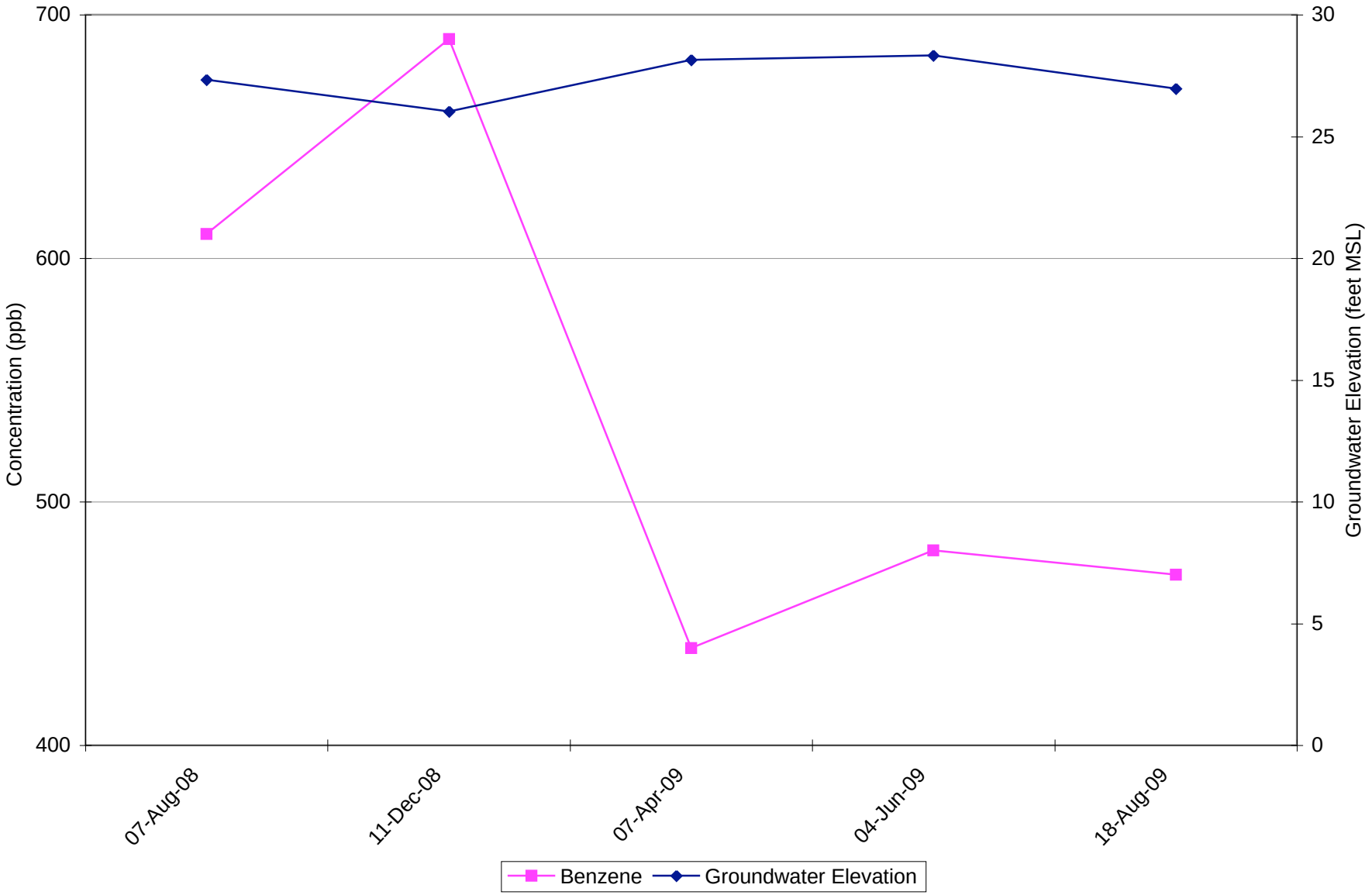
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well NWN-1-20 (surficial fill WBZ)
Siltronic Corporation Property



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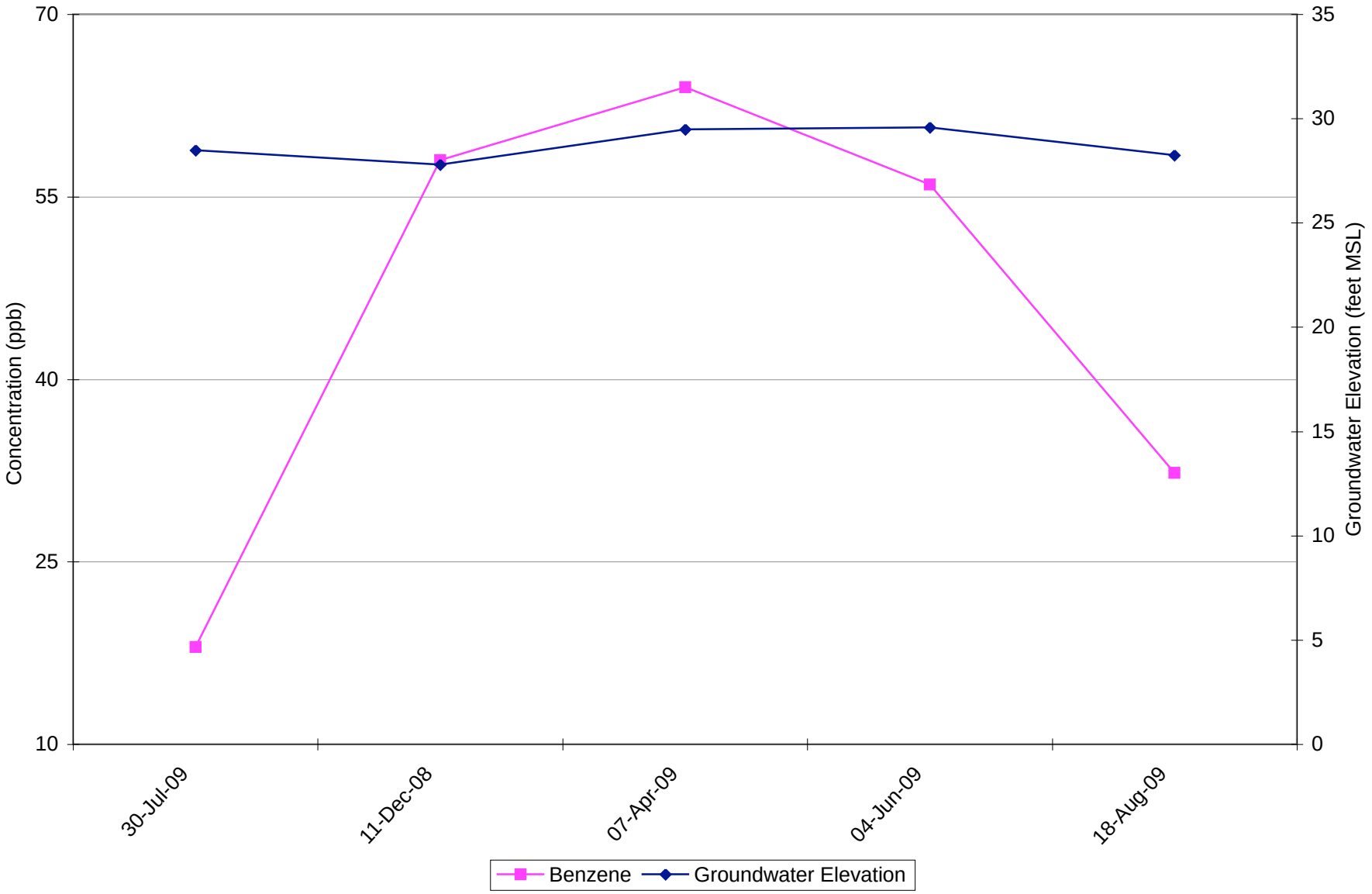
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well NWN-2-20 (surficial fill WBZ)
Siltronic Corporation Property



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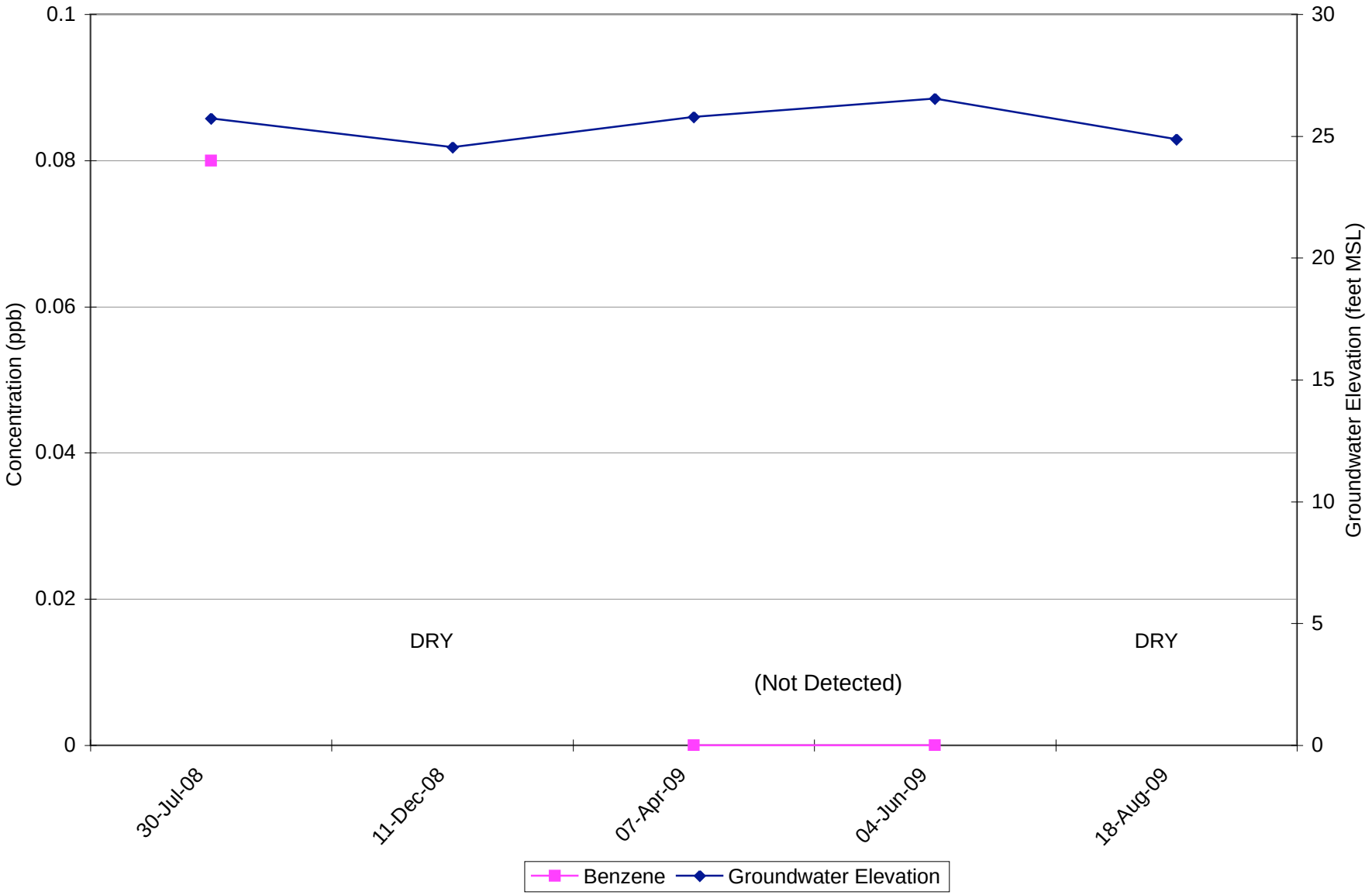
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well NWN-3-17 (surficial fill WBZ)
Siltronic Corporation Property



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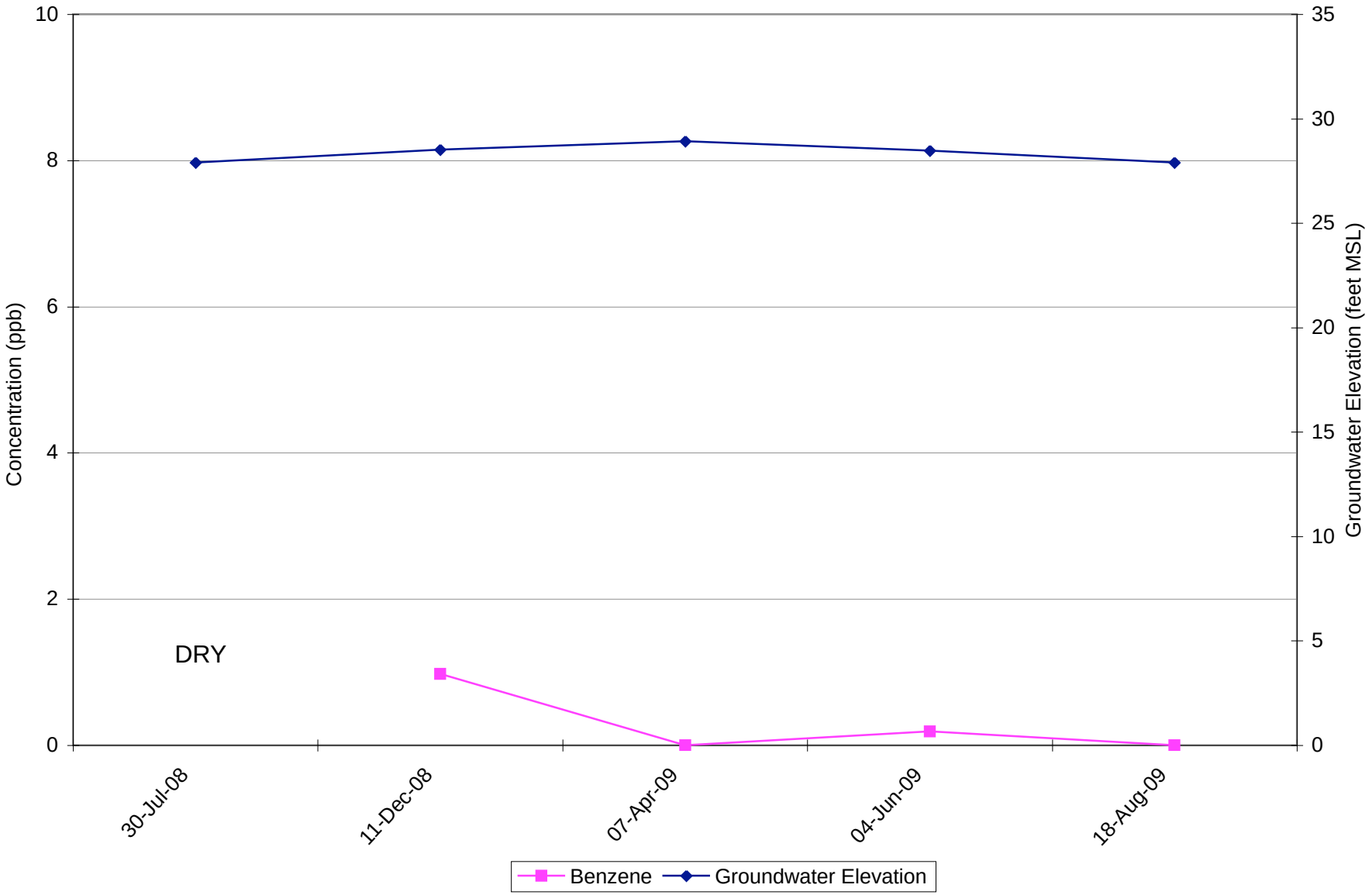
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

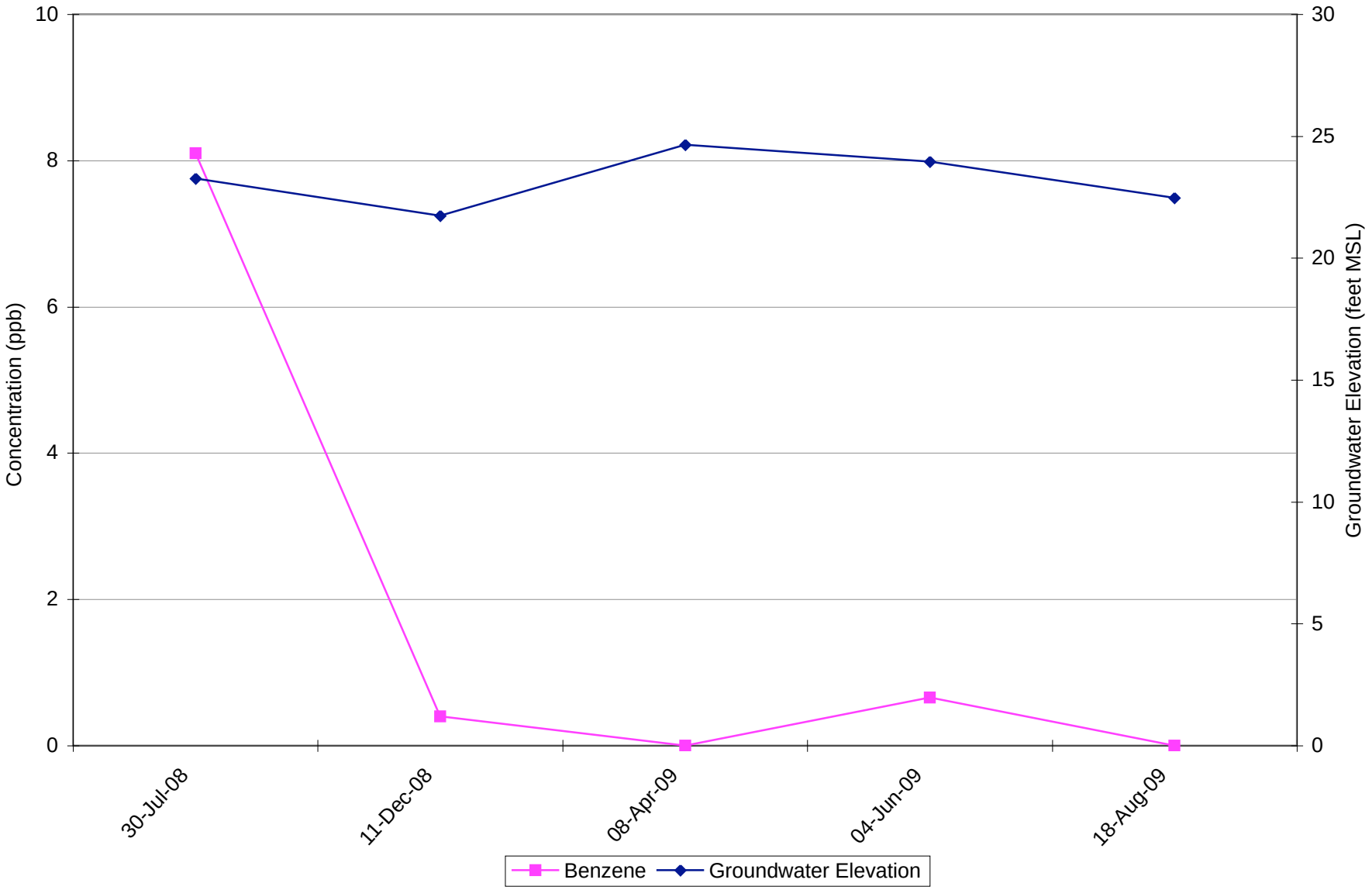
Benzene Concentration and Groundwater Elevation through Time
Monitoring Well NWN-4-15 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well NWN-5-20 (surficial fill WBZ)
Siltronic Corporation Property



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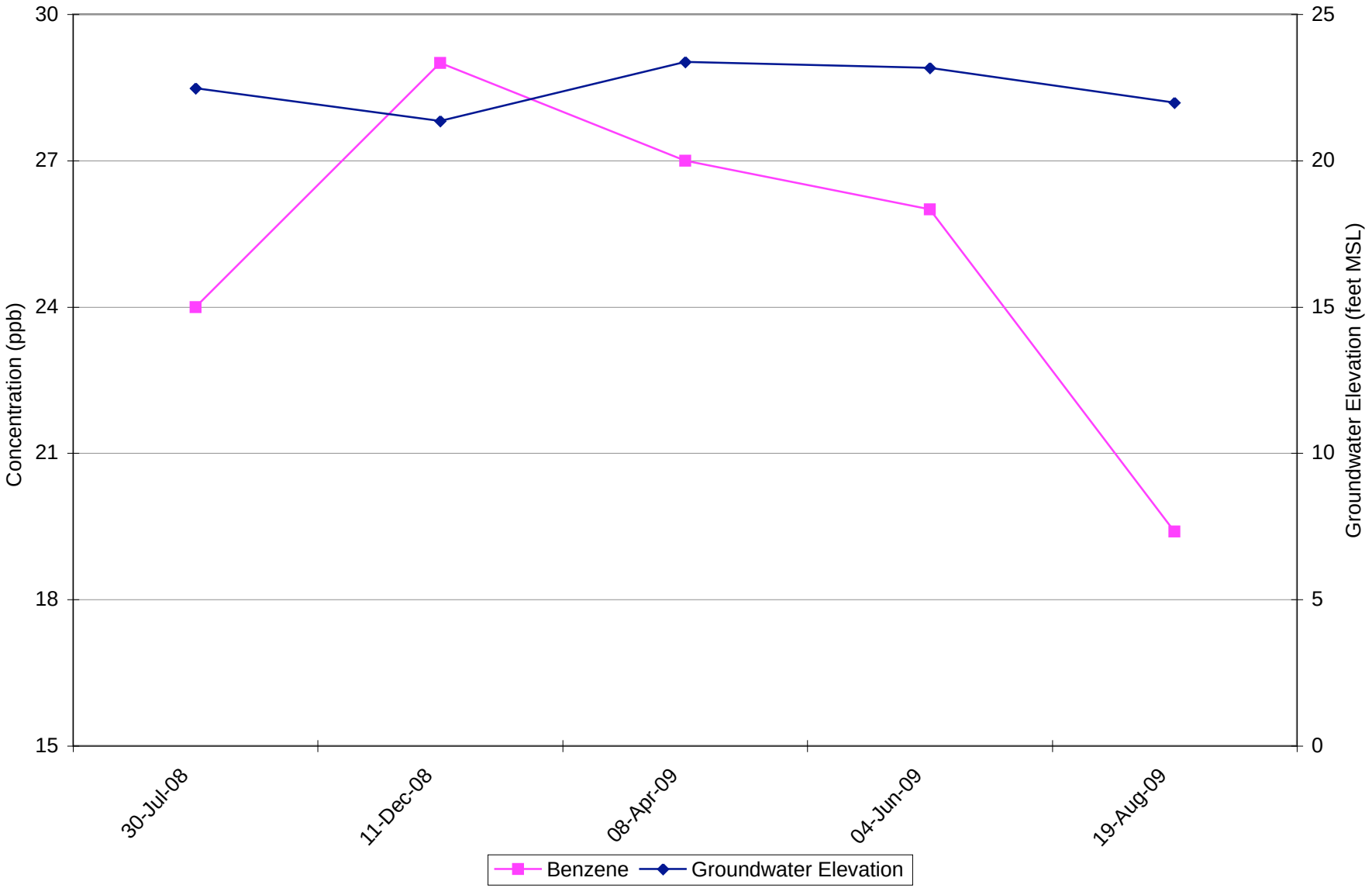
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well NWN-6-31 (surficial fill WBZ)
Siltronic Corporation Property



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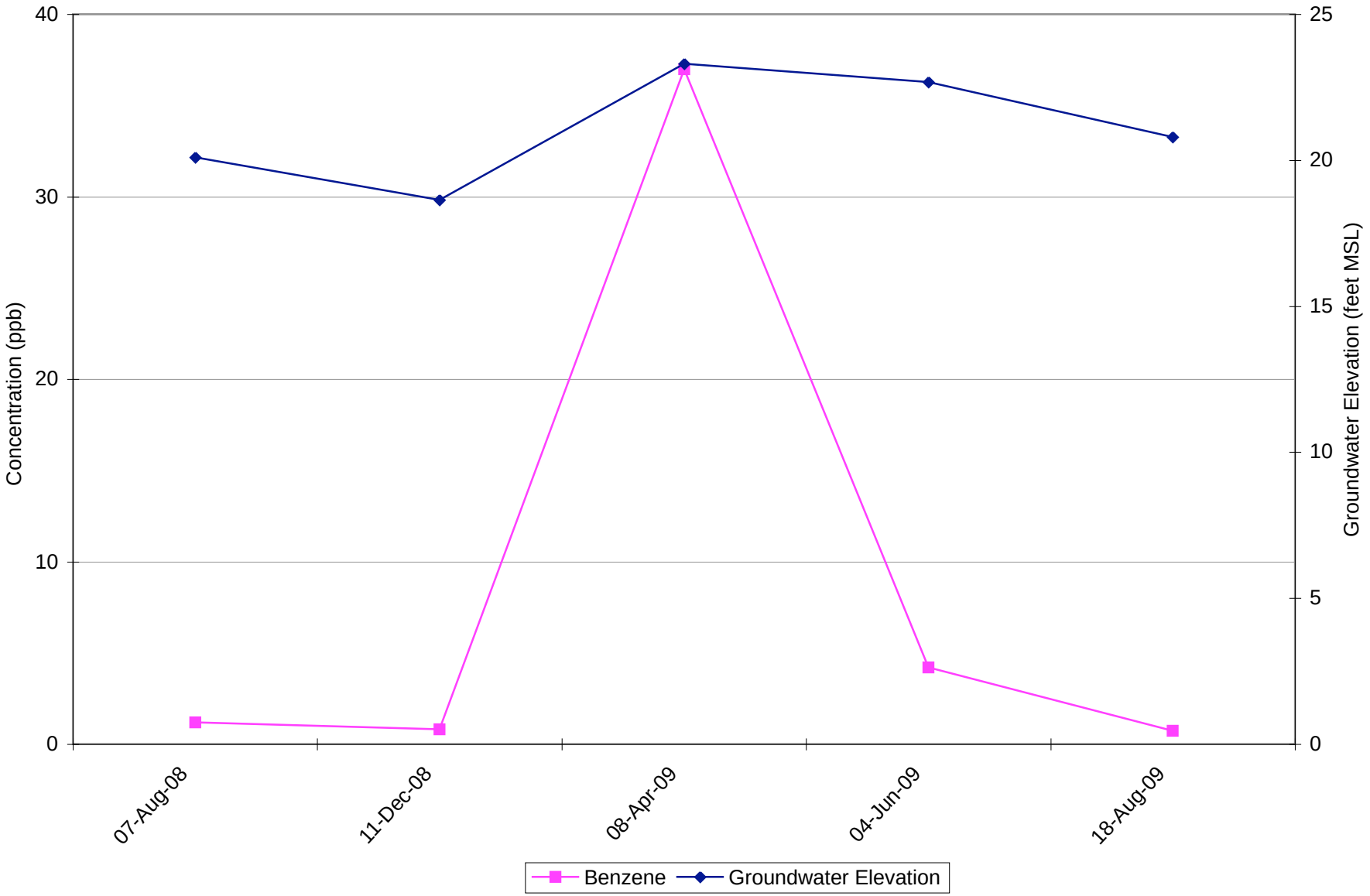
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well NWN-7-30 (surficial fill WBZ)
Siltronic Corporation Property



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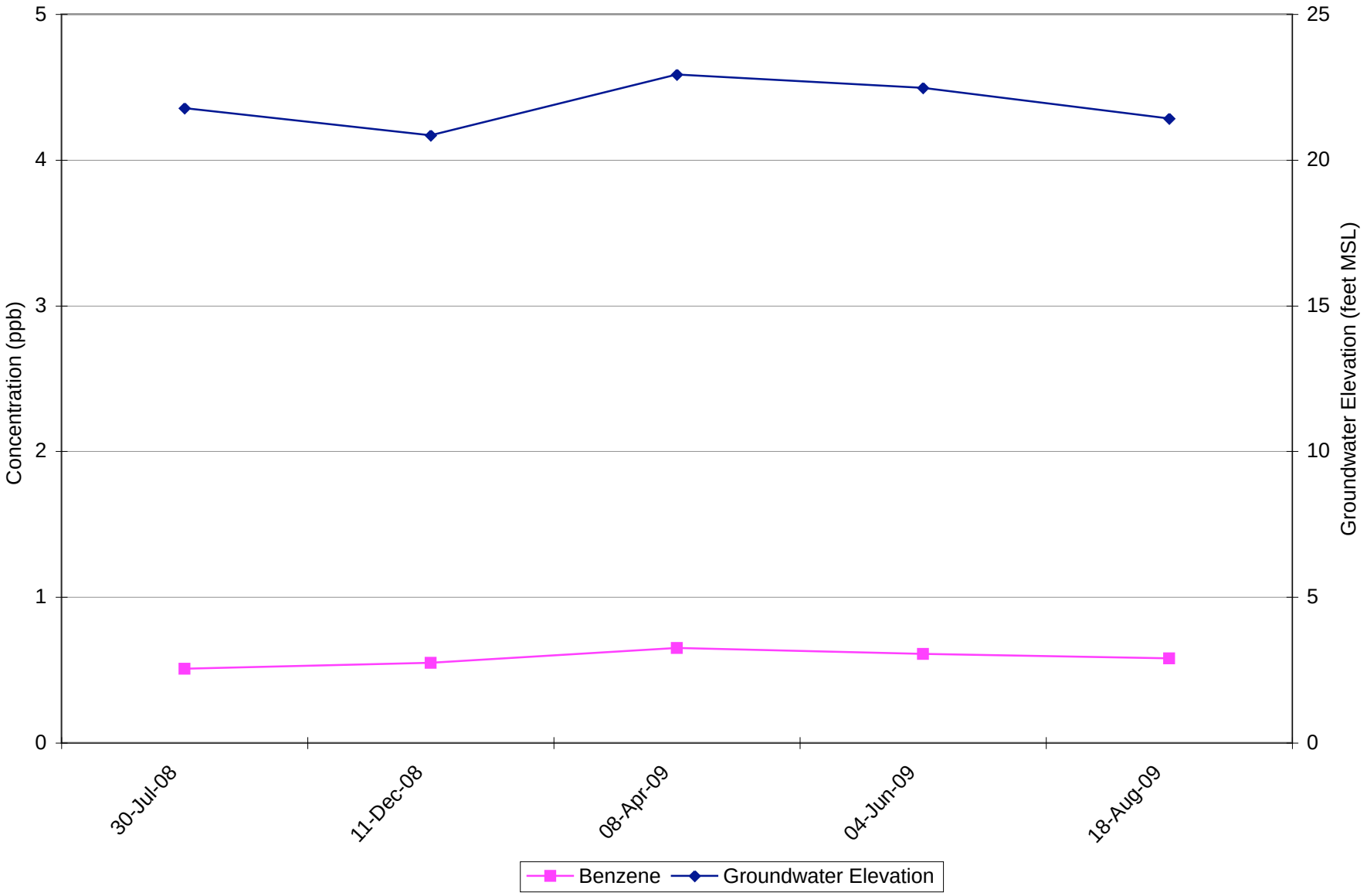
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well NWN-8-30 (surficial fill WBZ)
Siltronic Corporation Property



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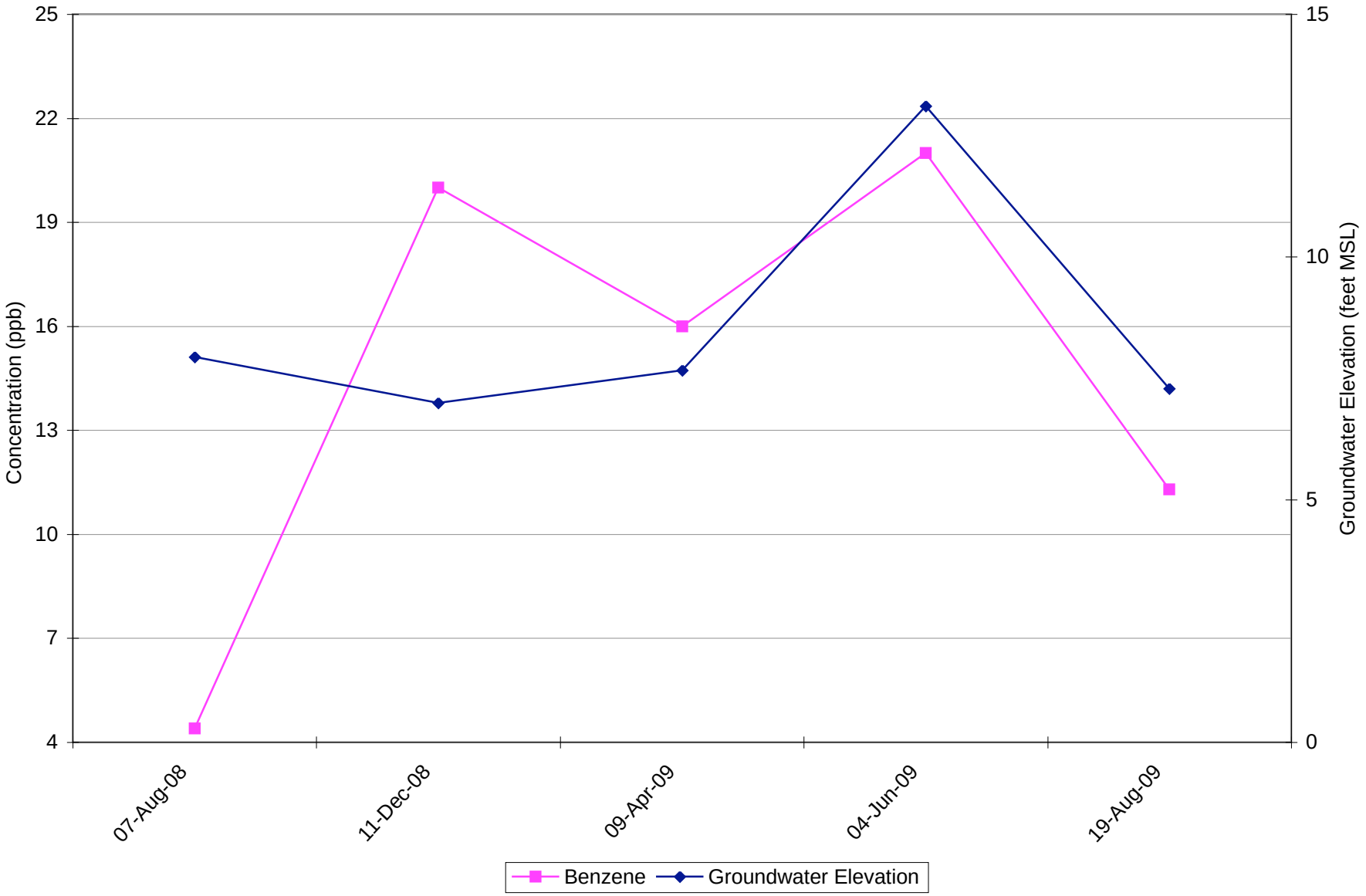
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well NWN-9-31 (surficial fill WBZ)
Siltronic Corporation Property



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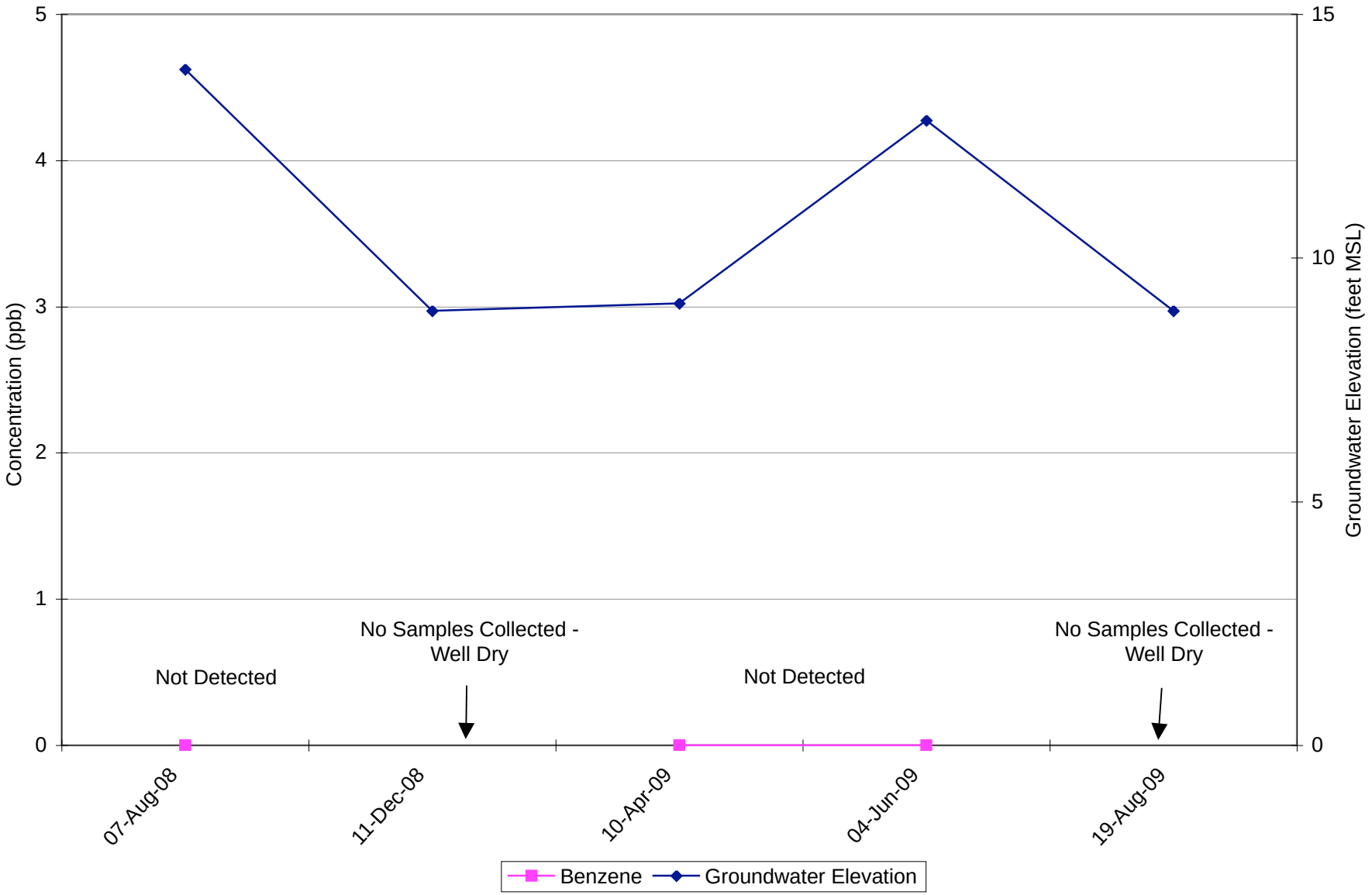
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well NWN-10-26 (surficial fill WBZ)
Siltronic Corporation Property



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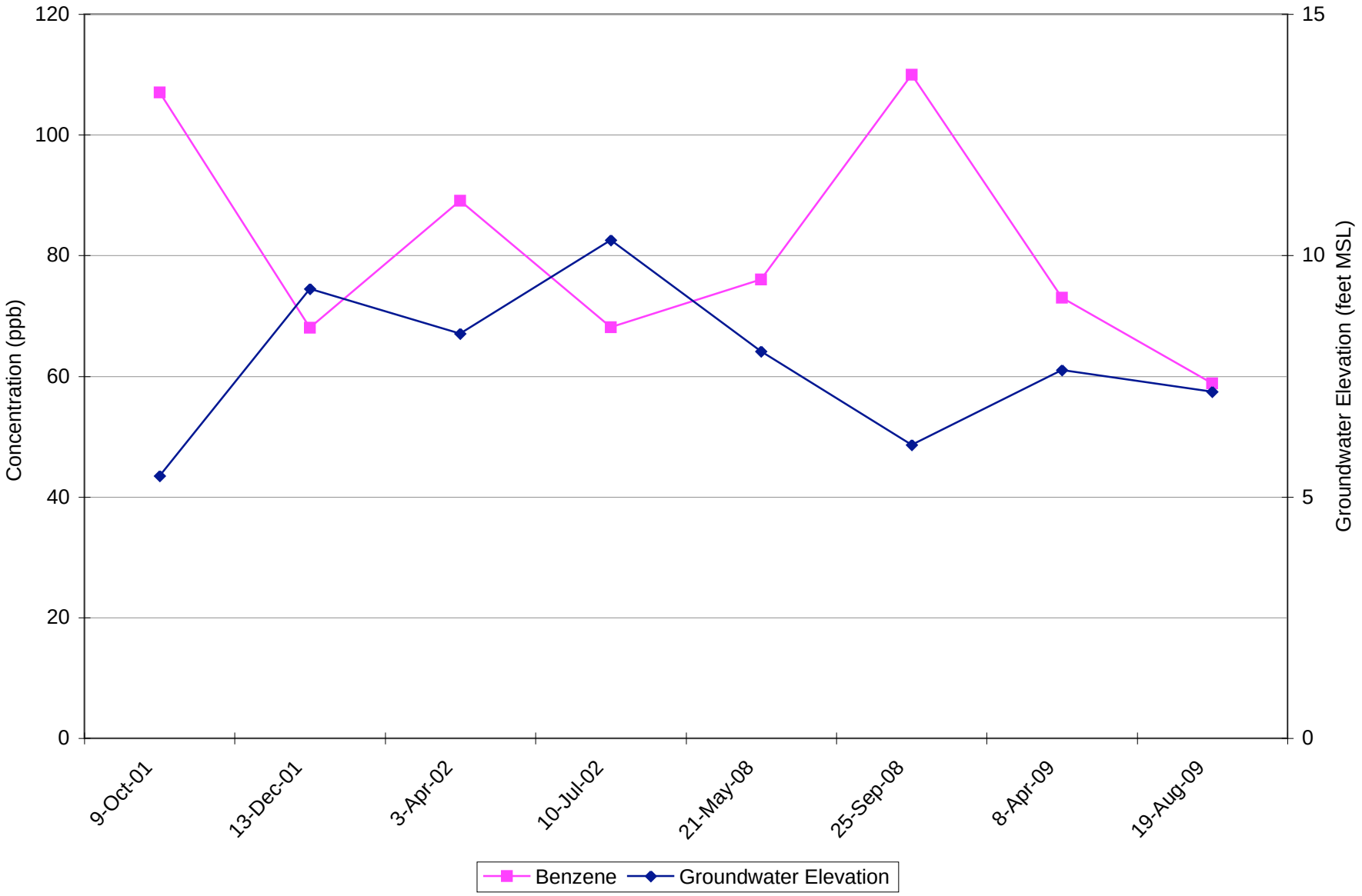
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well WS-8-33 (surficial fill WBZ)
Siltronic Corporation Property



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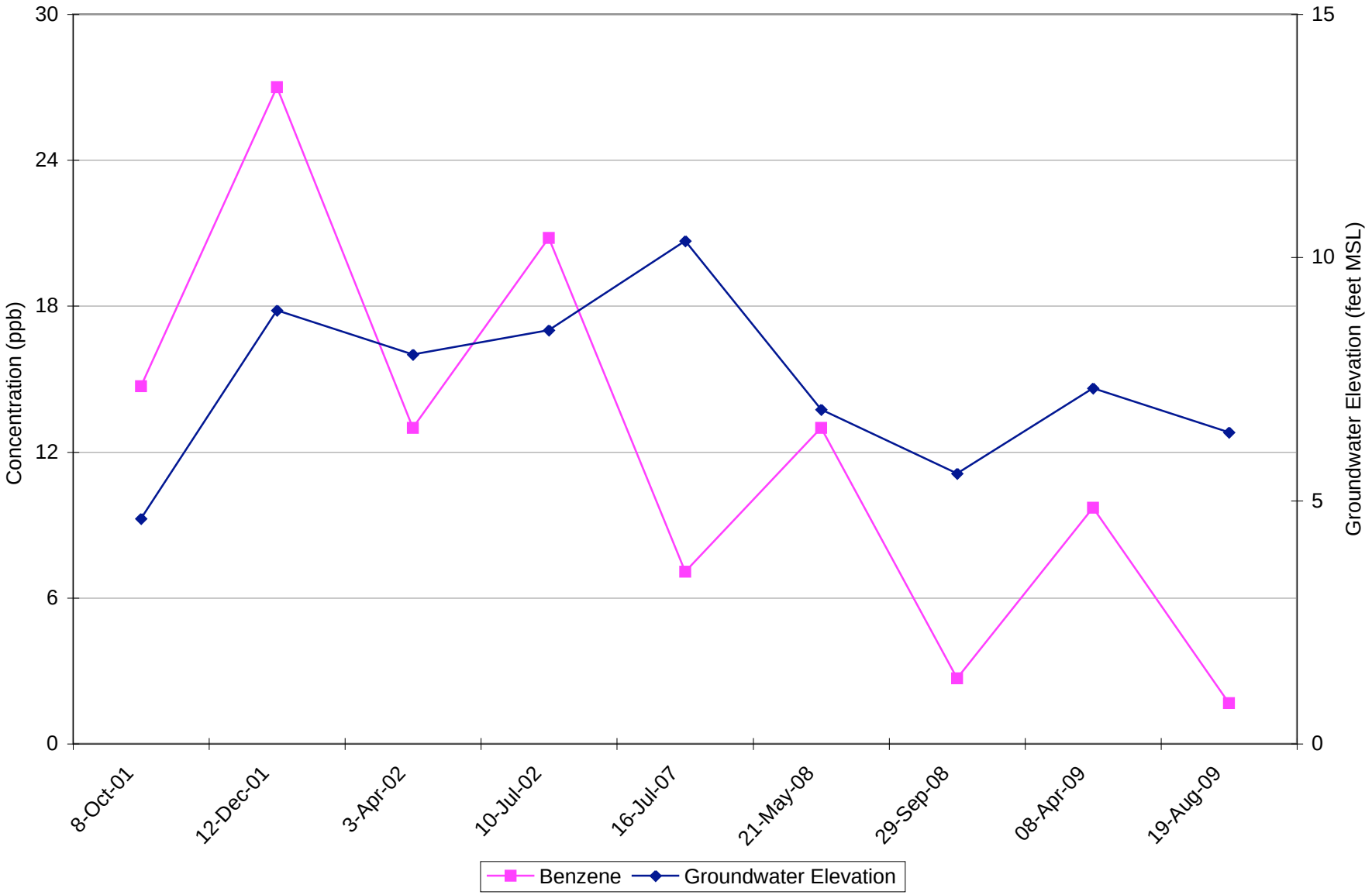
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well WS-8-59 (upper alluvial WBZ)
Siltronic Corporation Property



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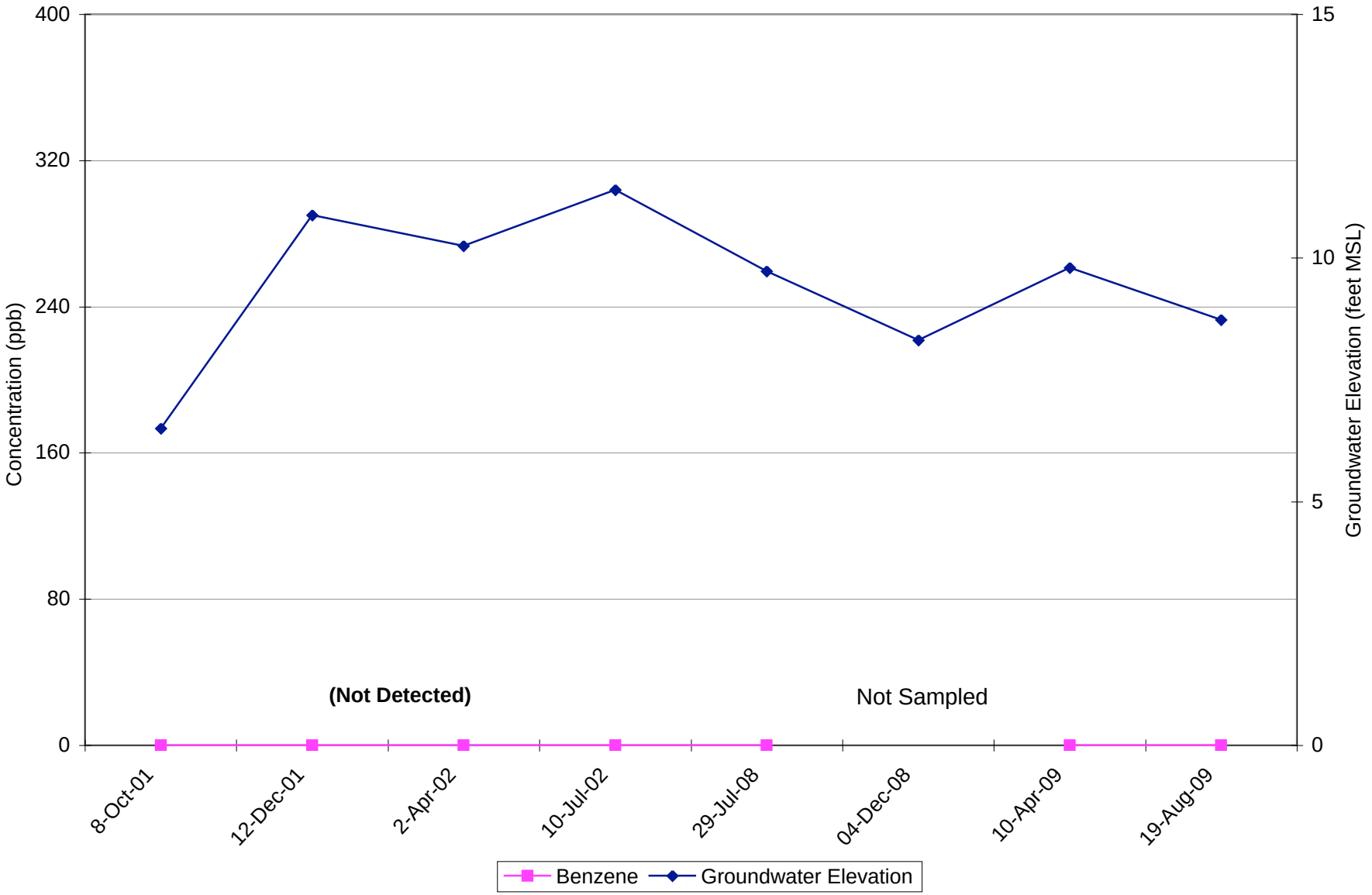
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well WS-9-34 (surficial fill WBZ)
Siltronic Corporation Property



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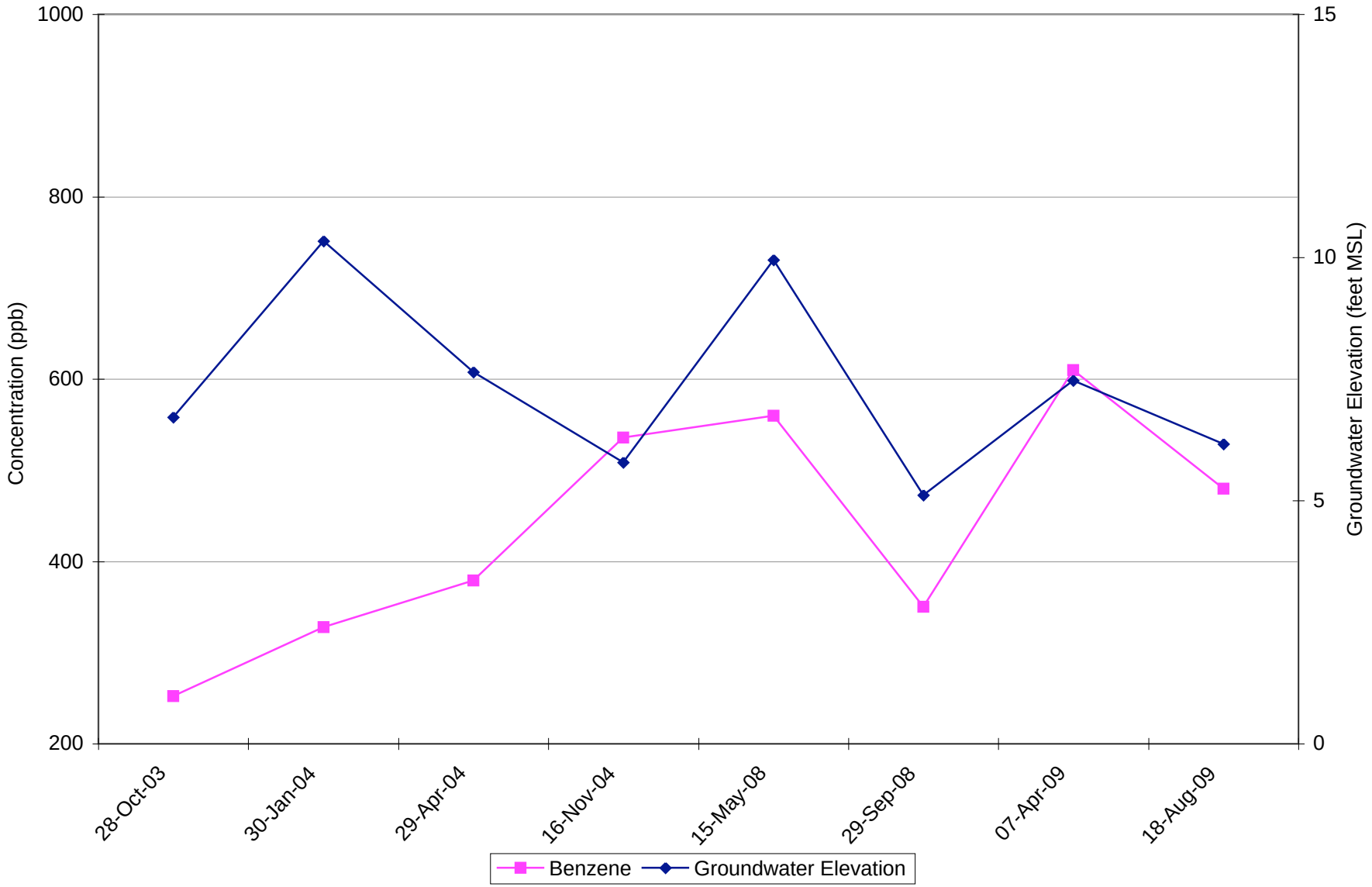
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well WS-11-125 (intermediate depth alluvial WBZ)
Siltronic Corporation Property



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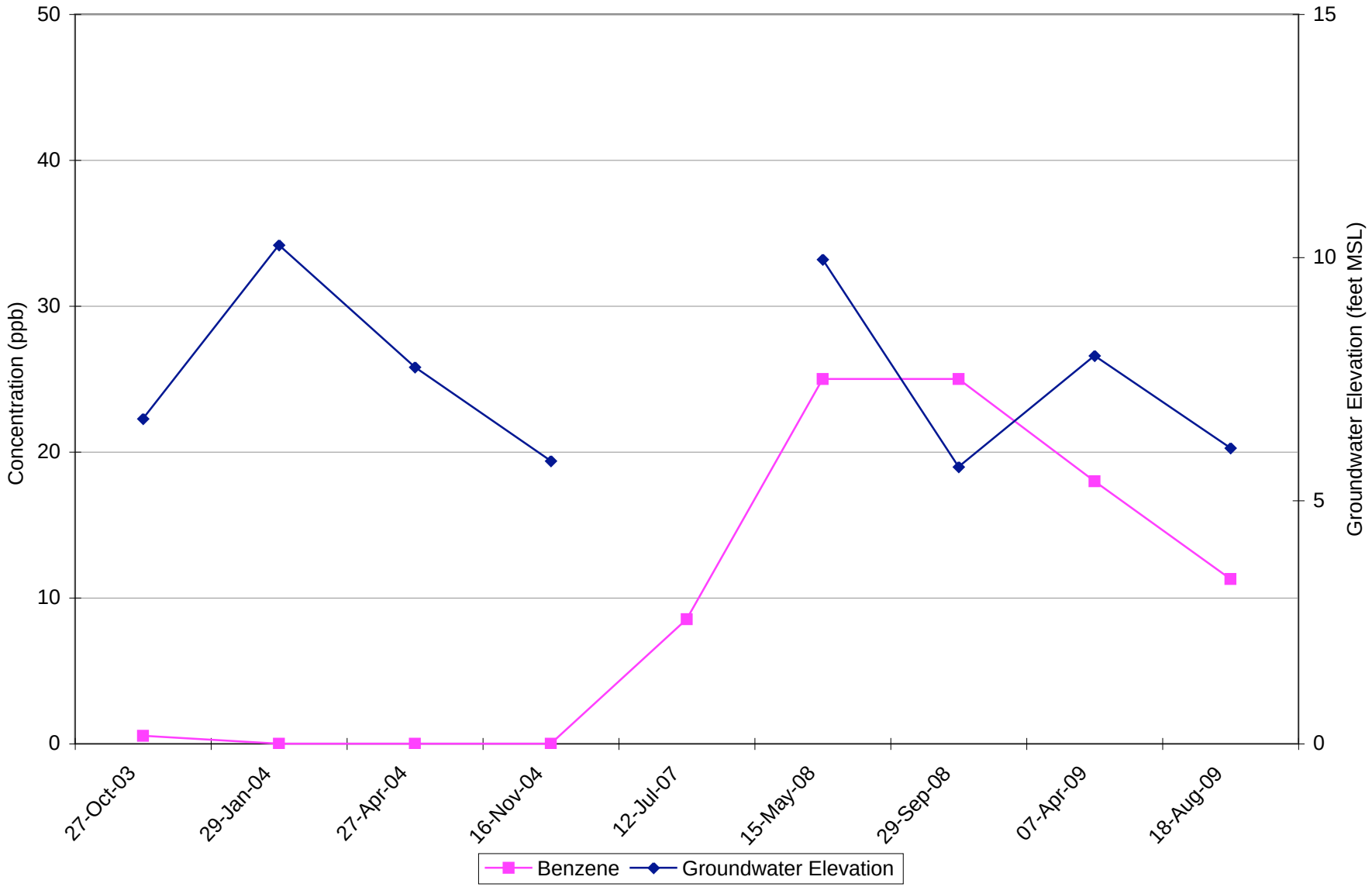
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well WS-11-161 (lower alluvial WBZ)
Siltronic Corporation Property



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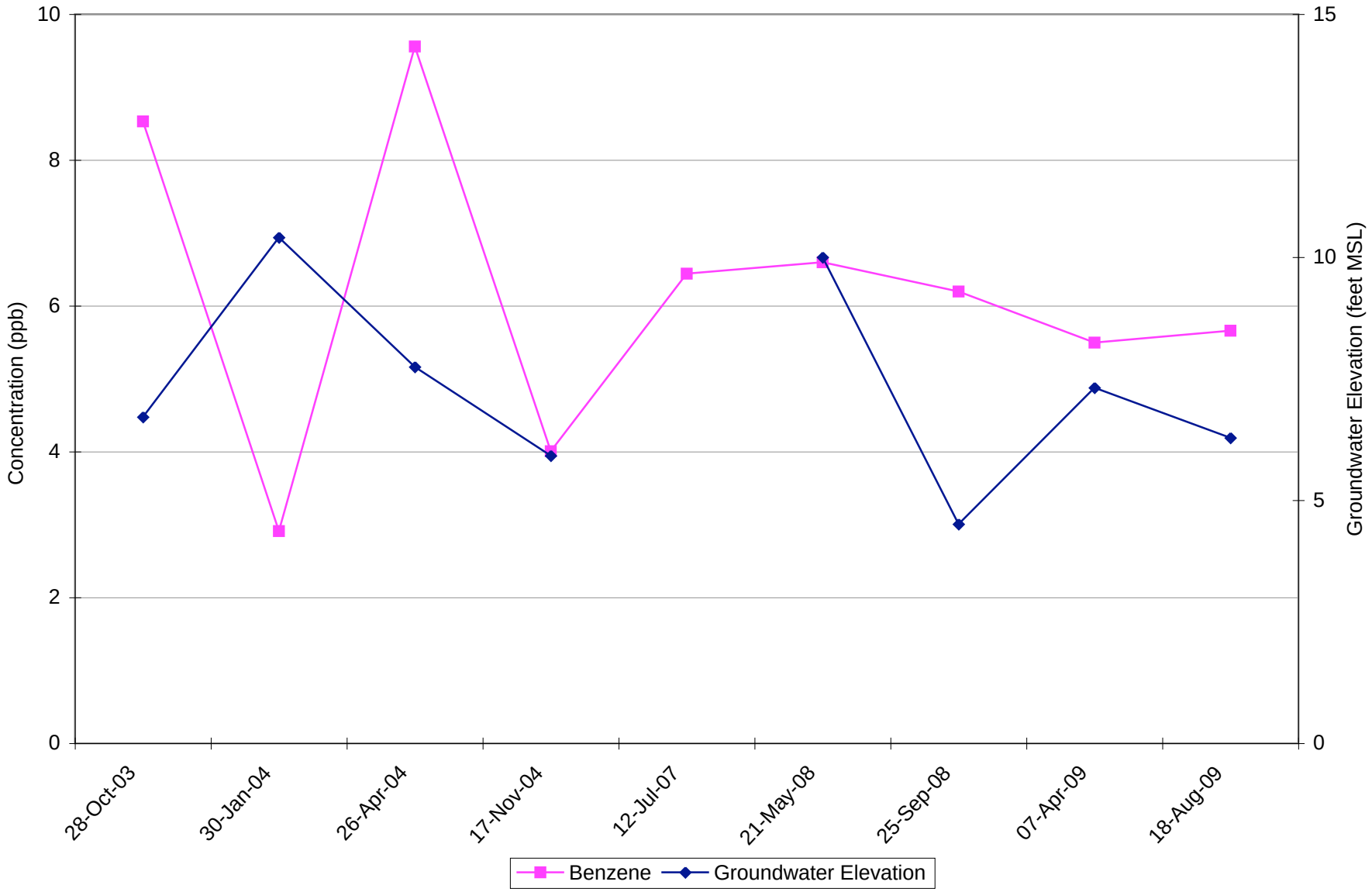
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well WS-12-125 (intermediate depth alluvial WBZ)
Siltronic Corporation Property



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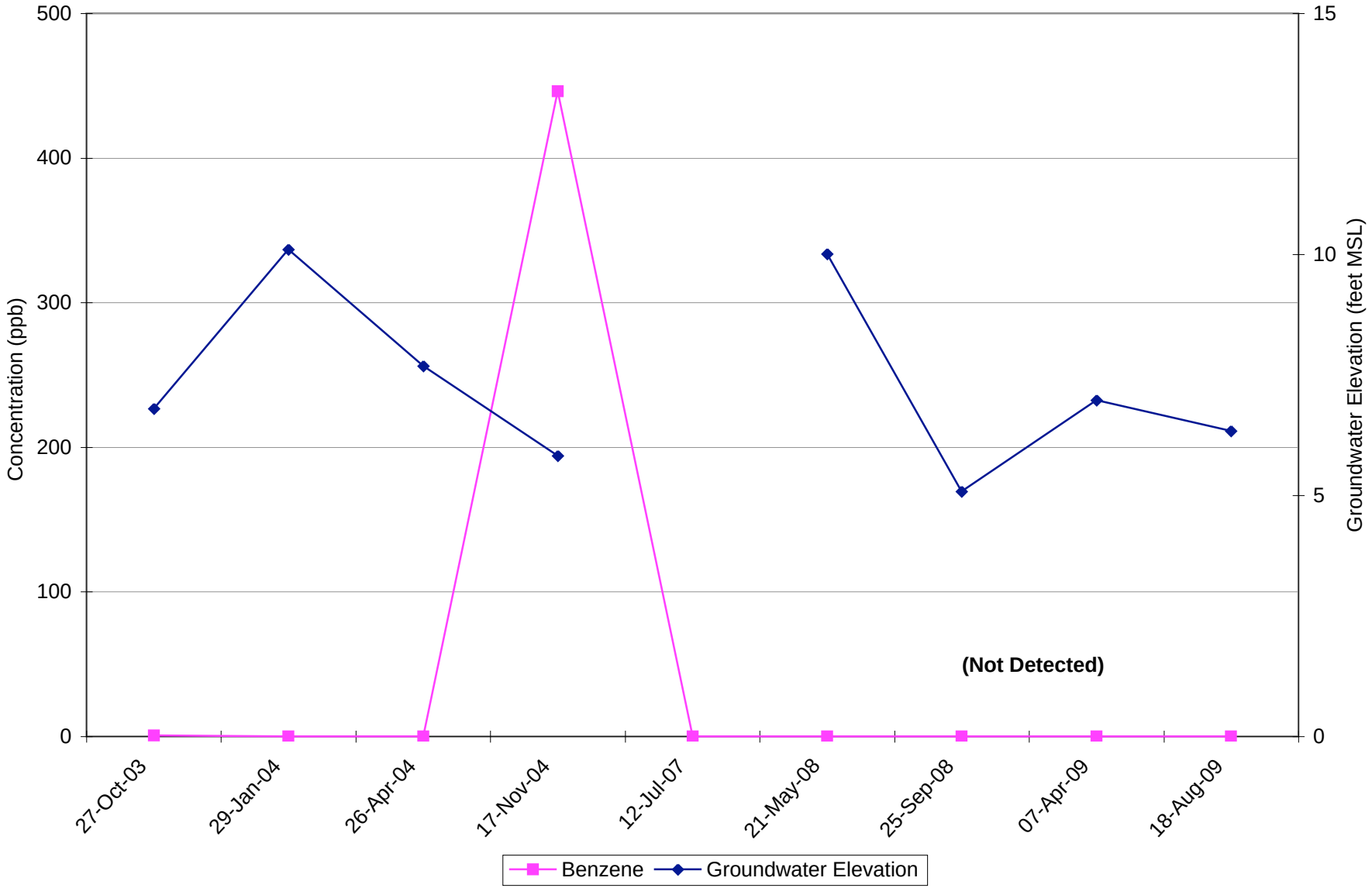
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well WS-12-161 (lower alluvial WBZ)
Siltronic Corporation Property



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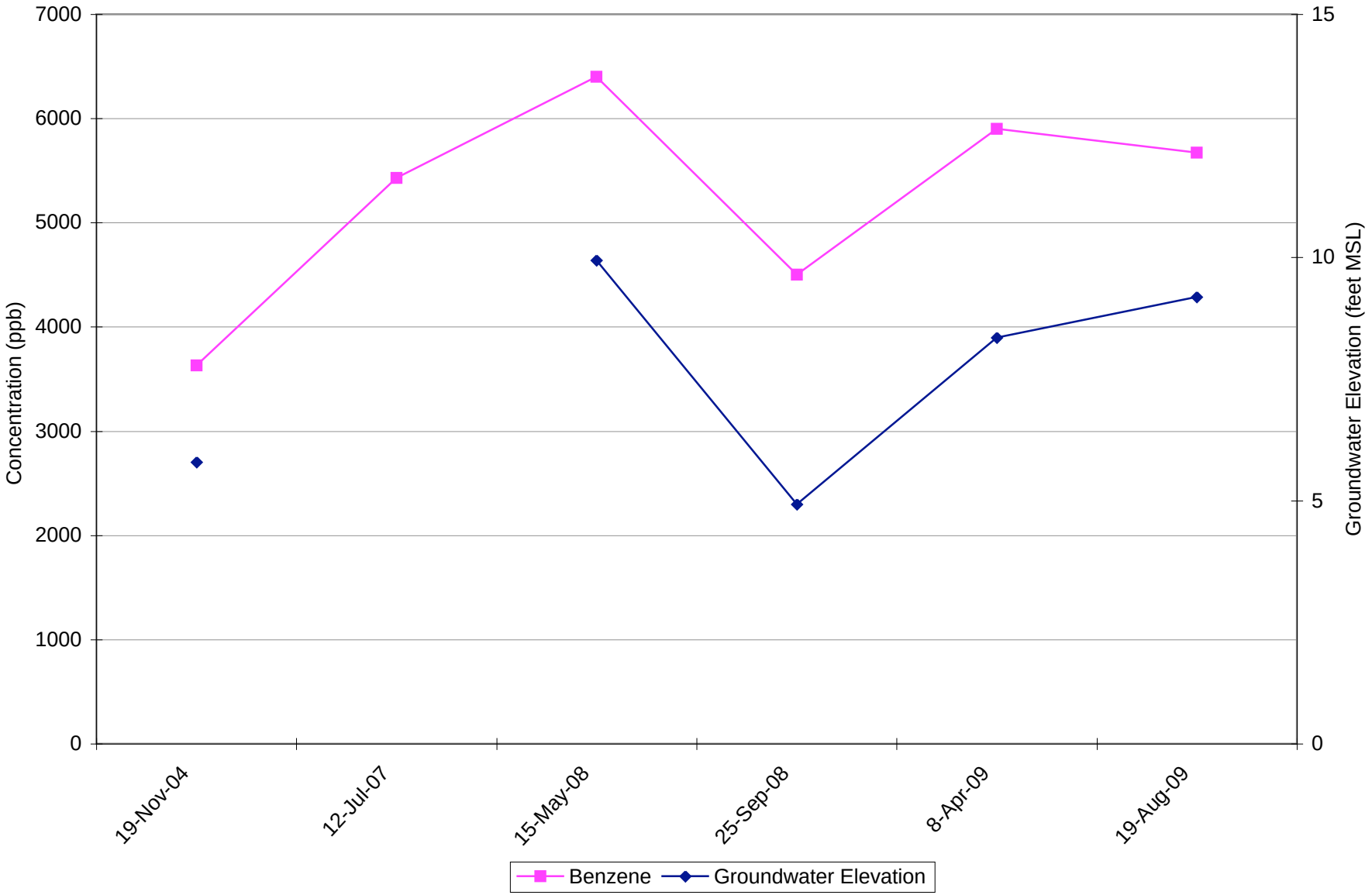
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well WS-14-125 (intermediate depth alluvial WBZ)
Siltronic Corporation Property



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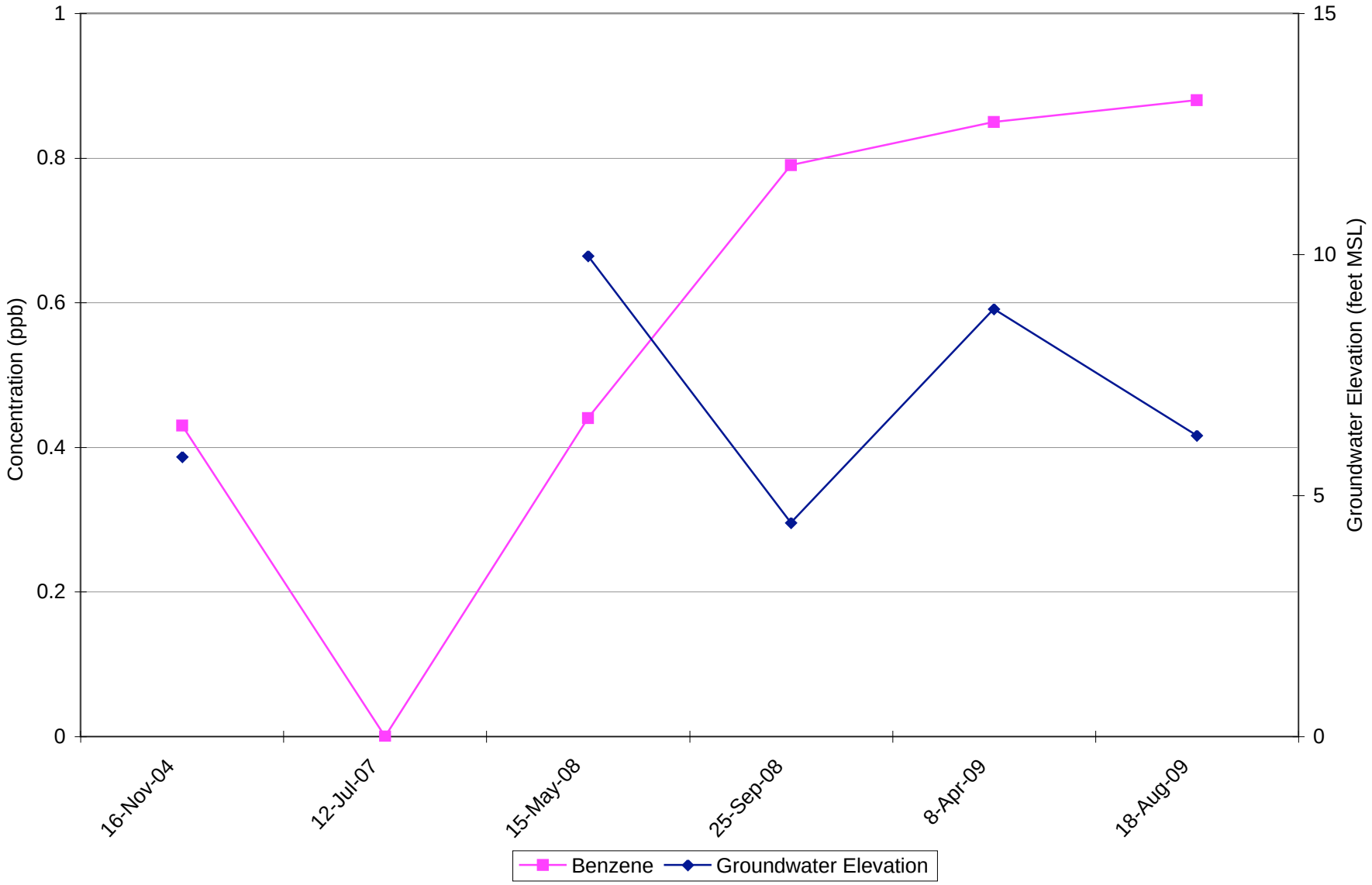
Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well WS-14-161 (lower alluvial WBZ)
Siltronic Corporation Property



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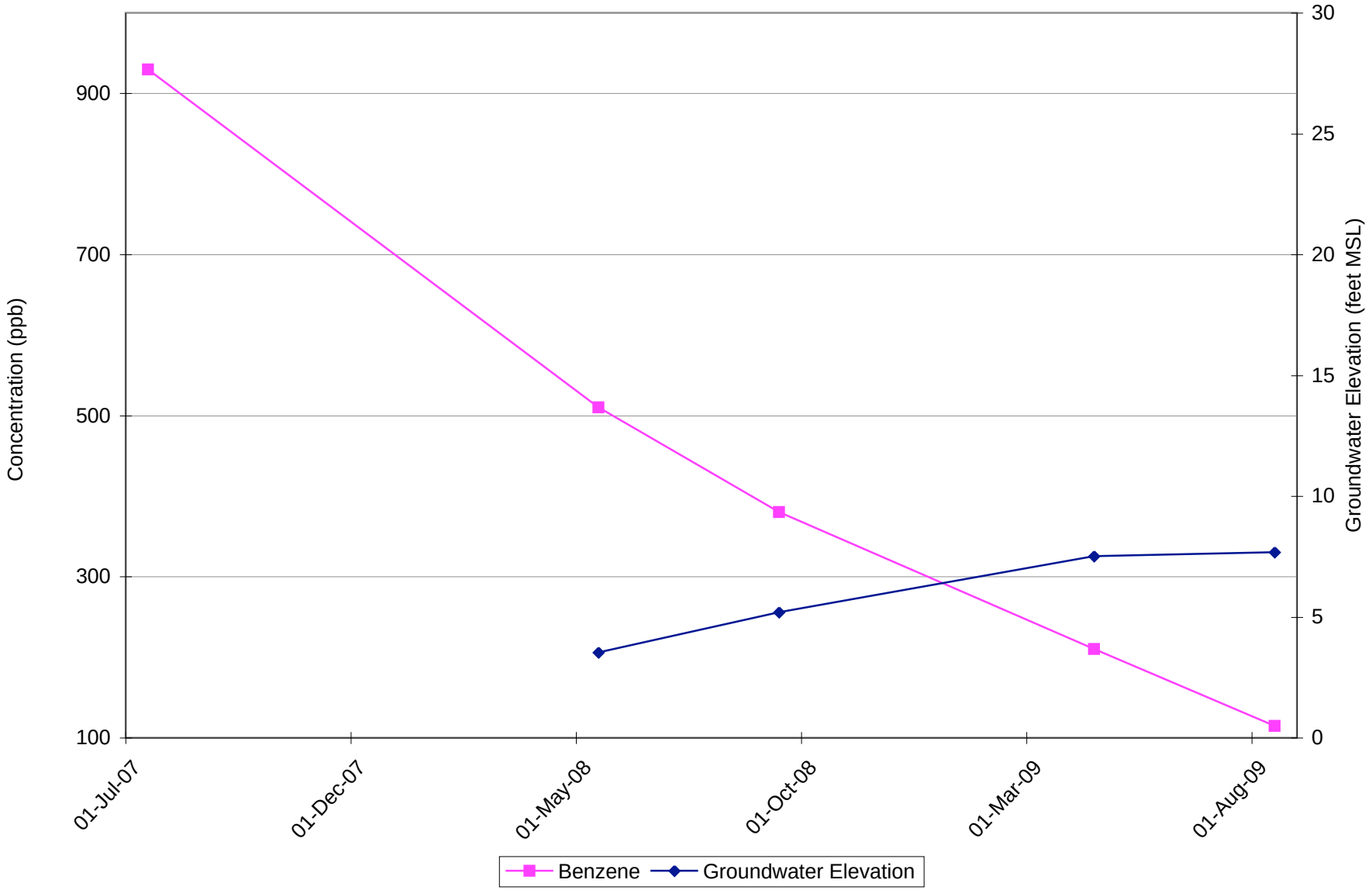
File: Concentration Plots_BAU_3Q 2009.xls

Project No. 2708
HAHN AND ASSOCIATES, INC.

Benzene Concentration and Groundwater Elevation through Time
Monitoring Well WS-21-112 (intermediate depth alluvial WBZ)
Siltronic Corporation Property



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File: Concentration Plots_BAU_3Q 2009.xls

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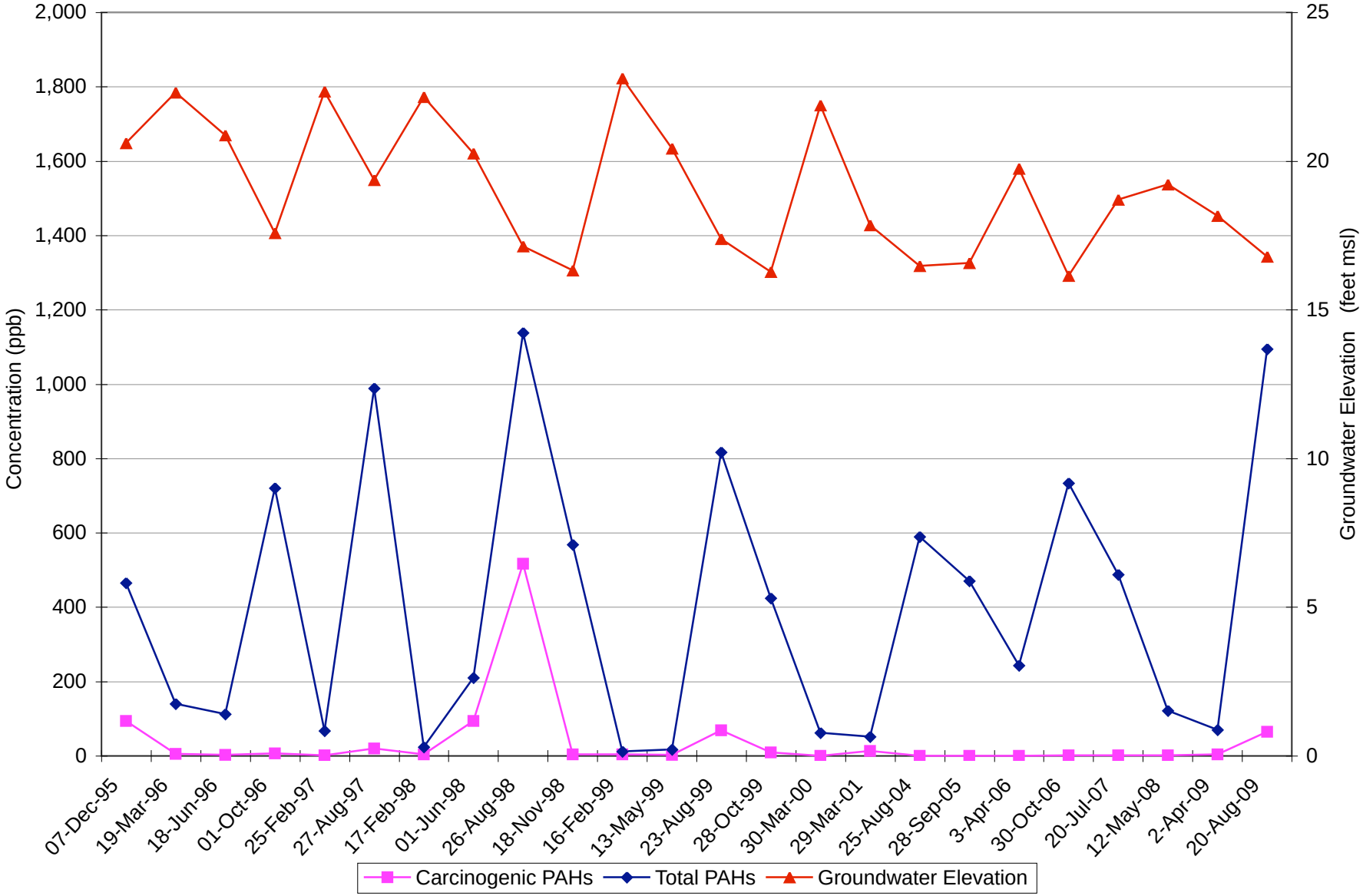
HAHN AND ASSOCIATES, INC.

APPENDIX E

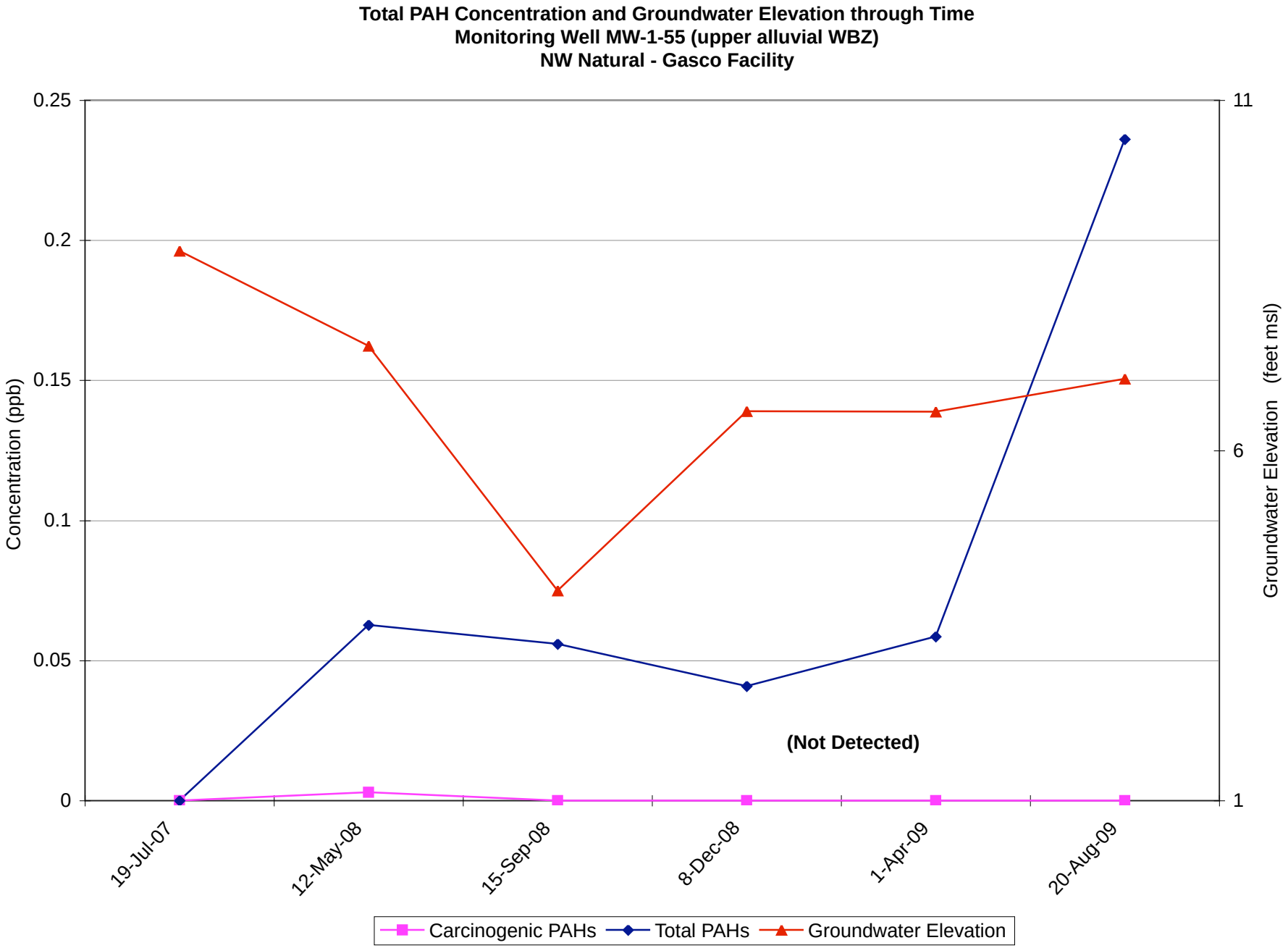
Time-Concentration Graphs: Total PAH and Carcinogenic PAH Concentrations and Groundwater Elevations Through Time

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-1-22 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW-1-22 (PAH)

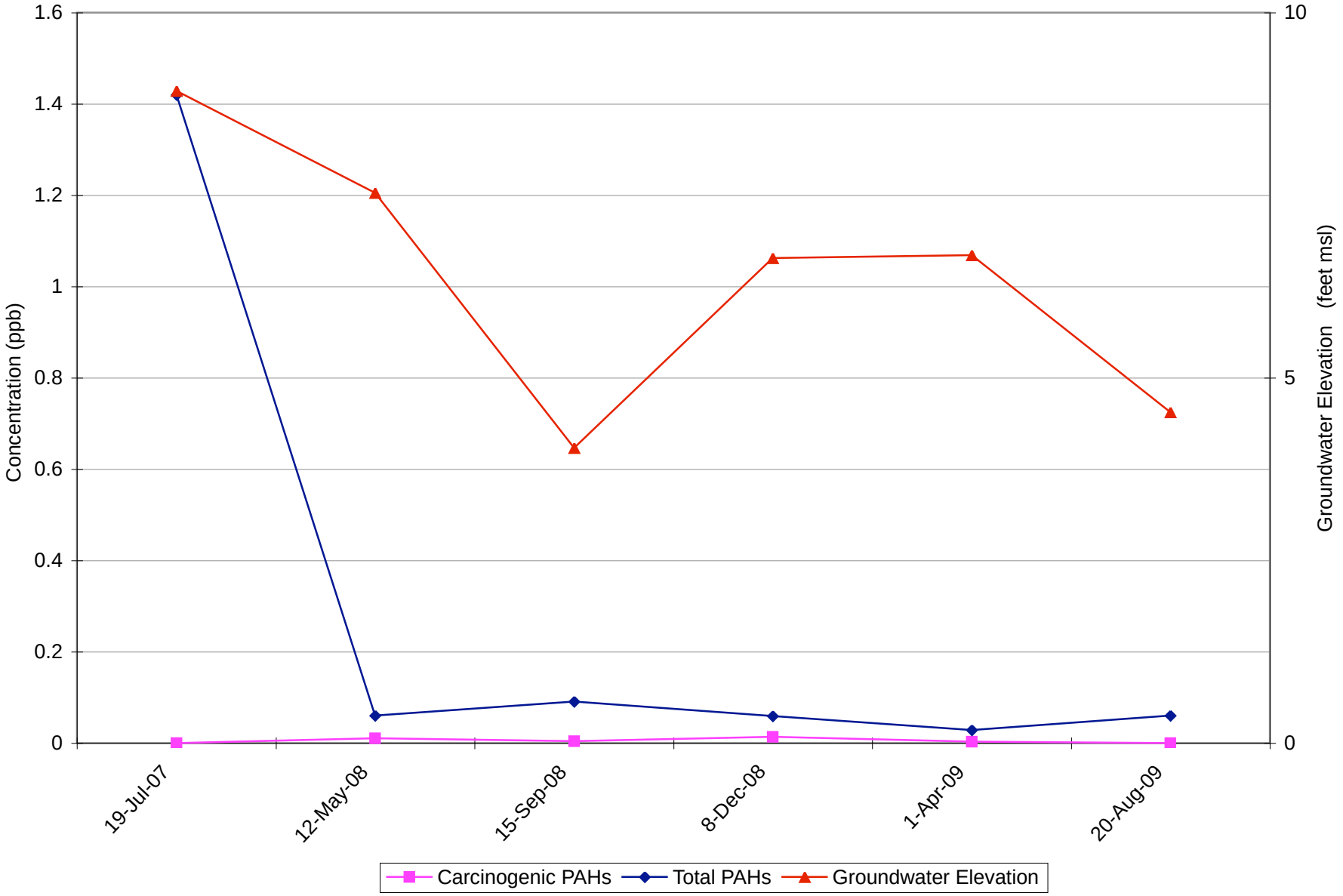
Project No. 2708
HAHN AND ASSOCIATES, INC.



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW-1-55 (PAH)

Project No. 2708
HAHN AND ASSOCIATES, INC.

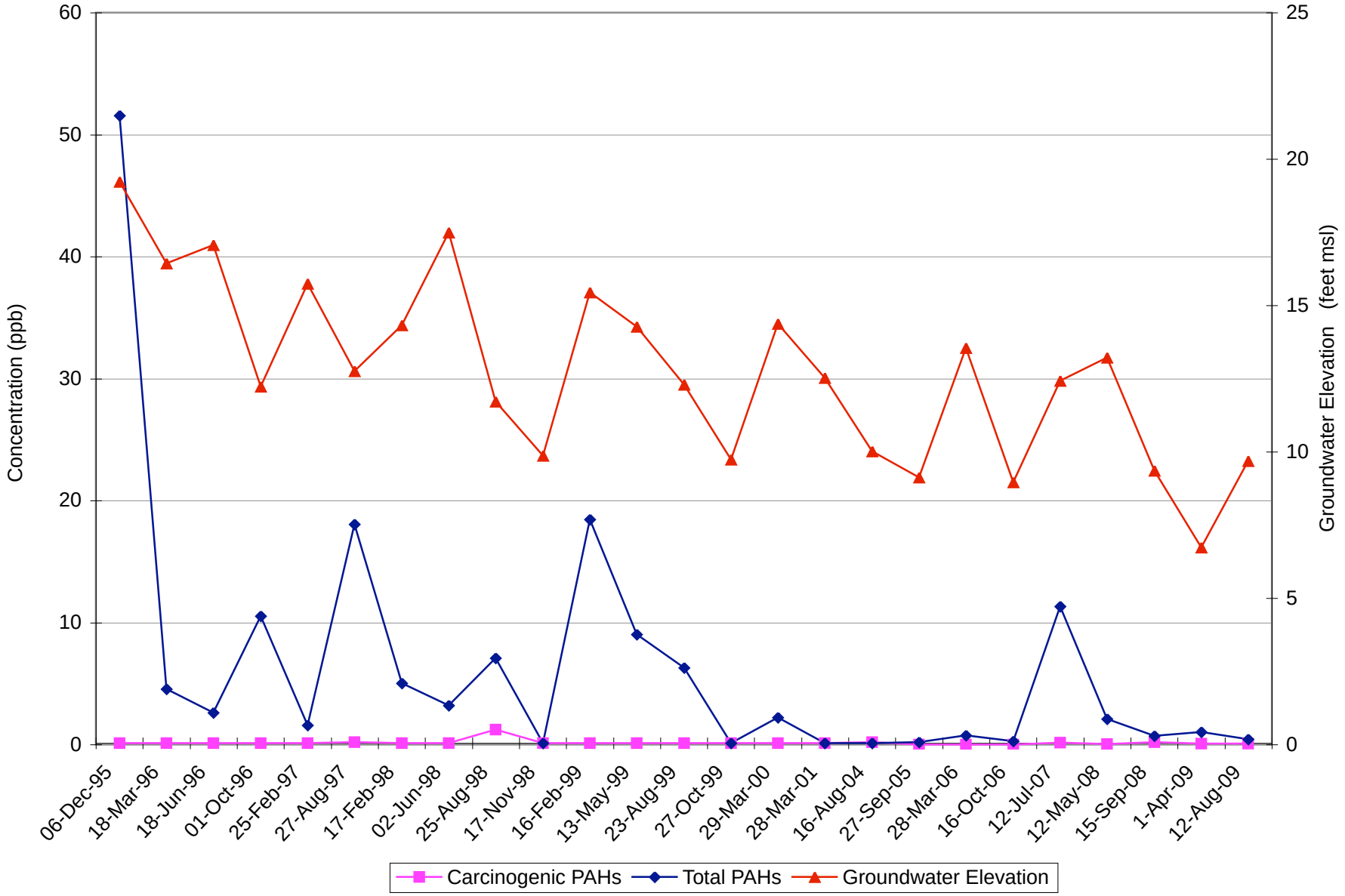
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-1-82 (intermediate alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW-1-82 PAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

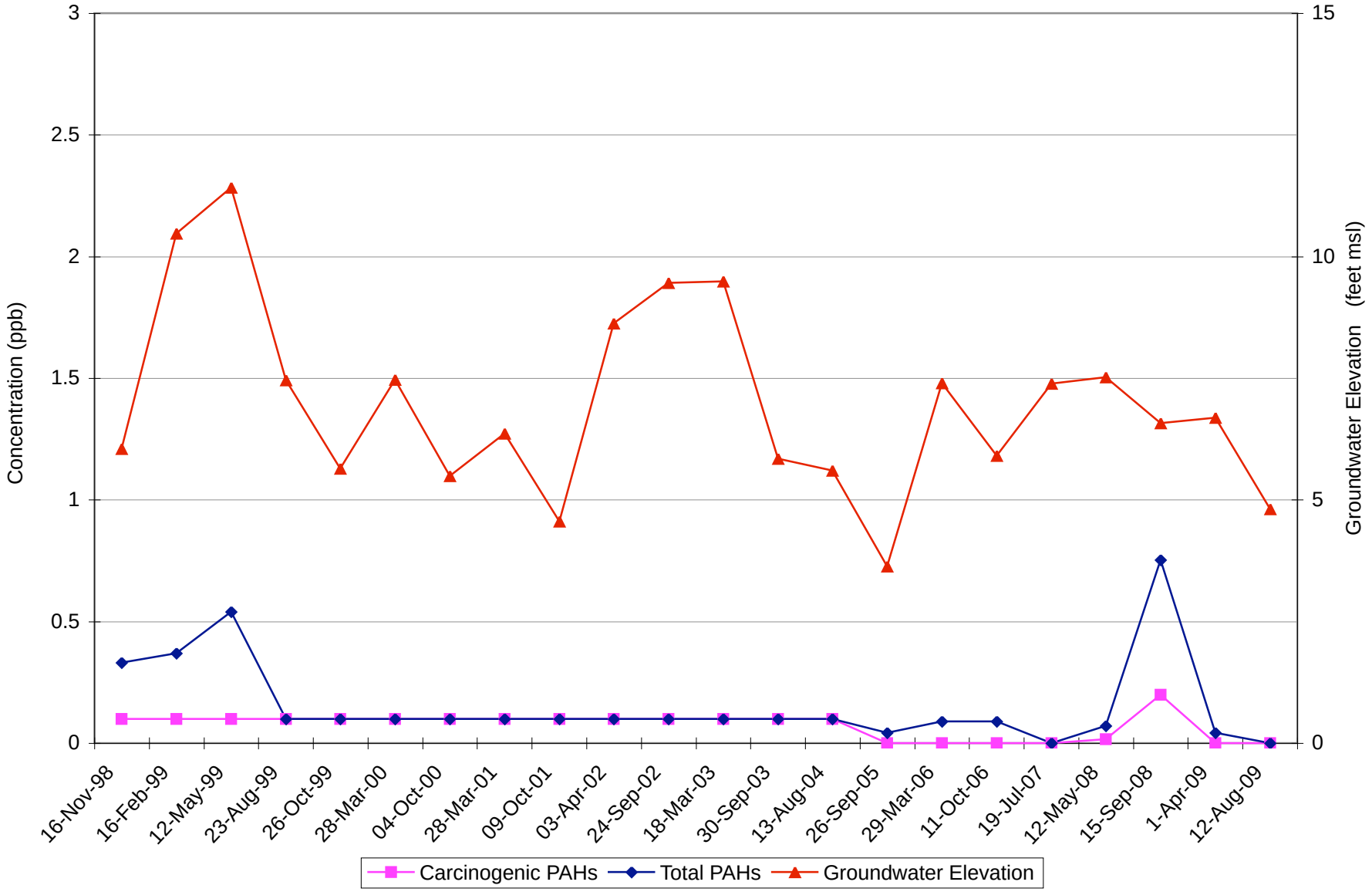
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-2-32 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW2-32 (PAHs)

Project No. 2708
HAHN AND ASSOCIATES, INC.

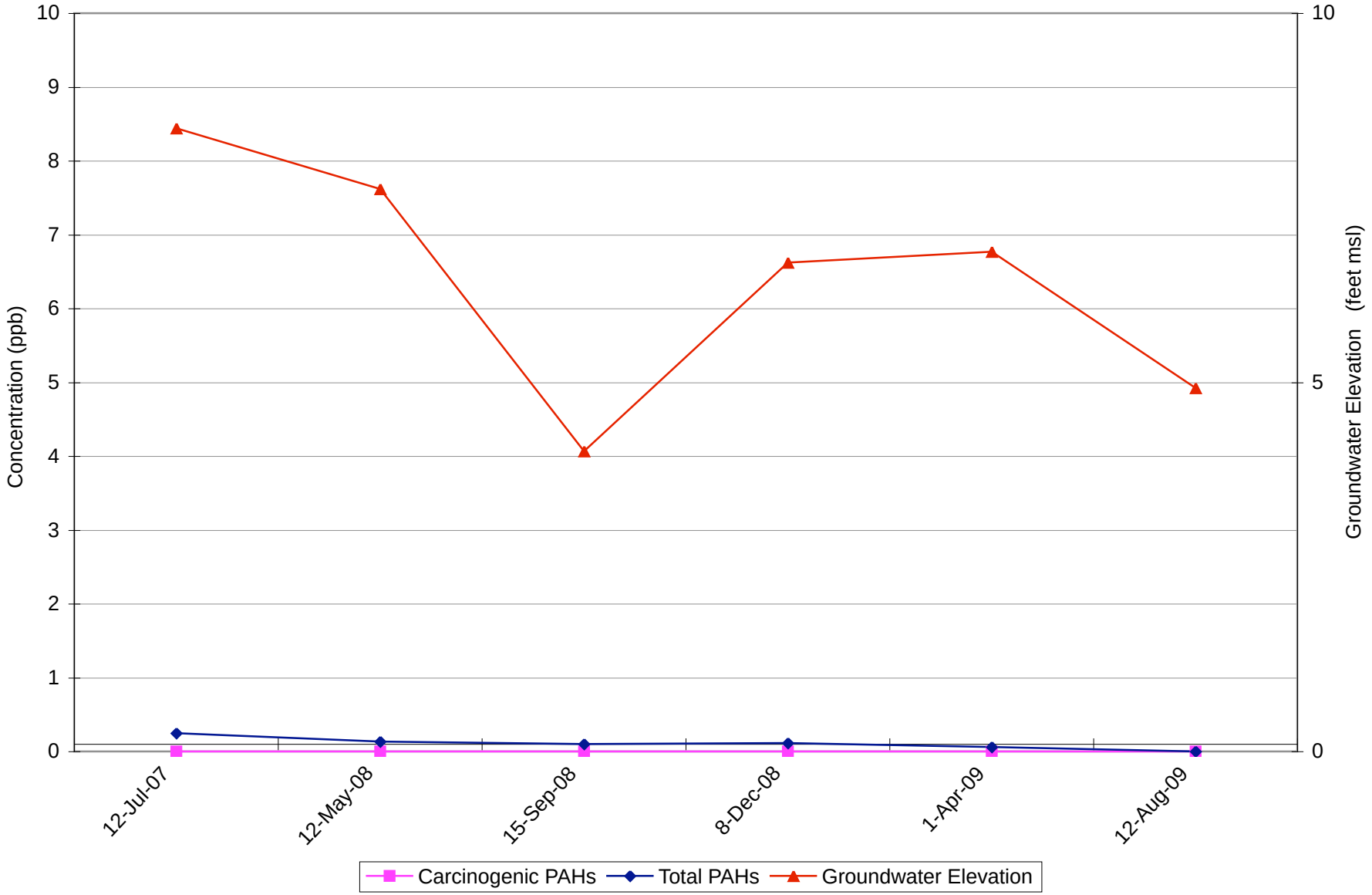
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-2-61 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW-02-61 PAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

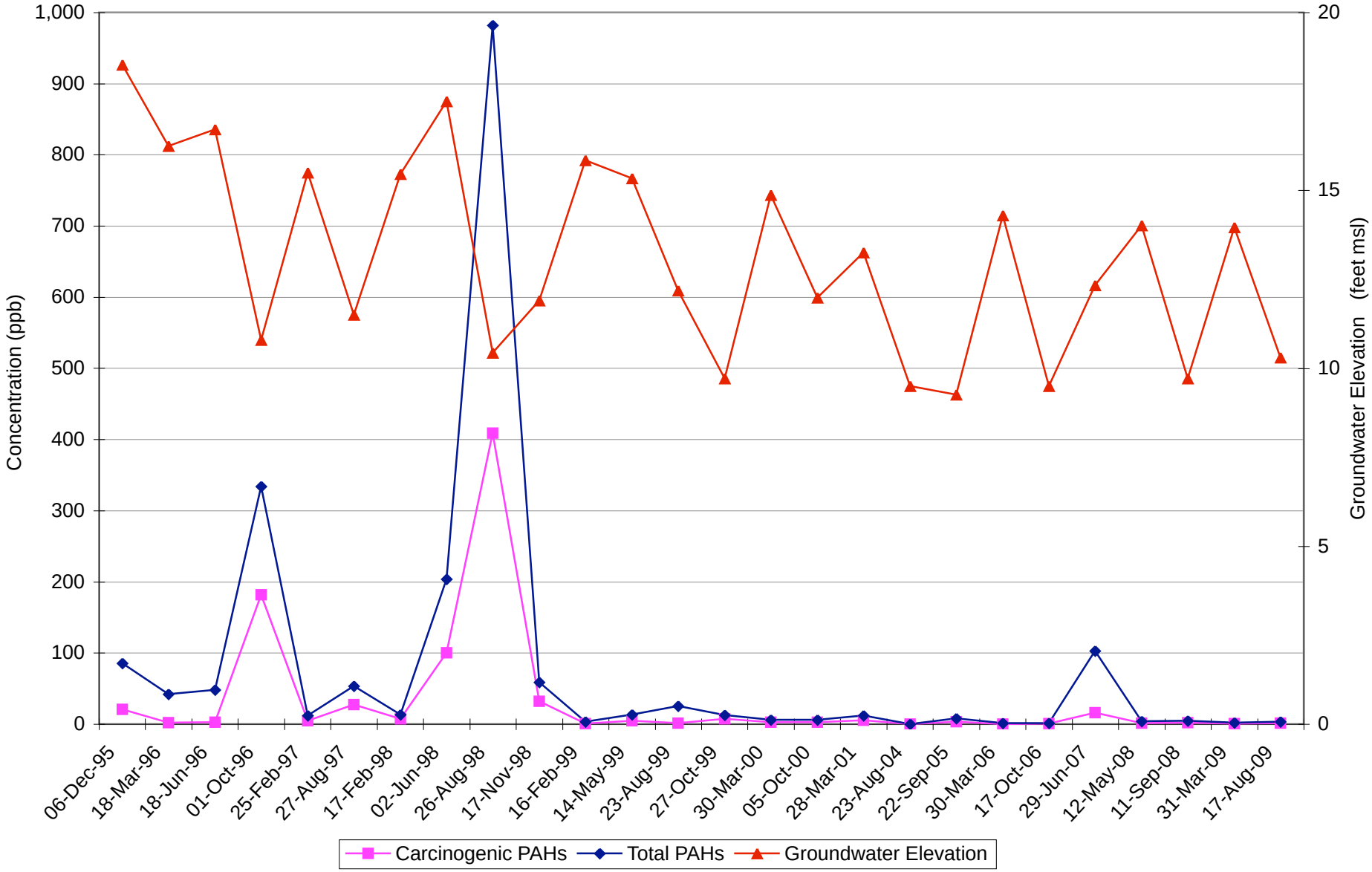
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-2-104 (intermediate alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW-02-104 (PAHs)

Project No. 2708
HAHN AND ASSOCIATES, INC.

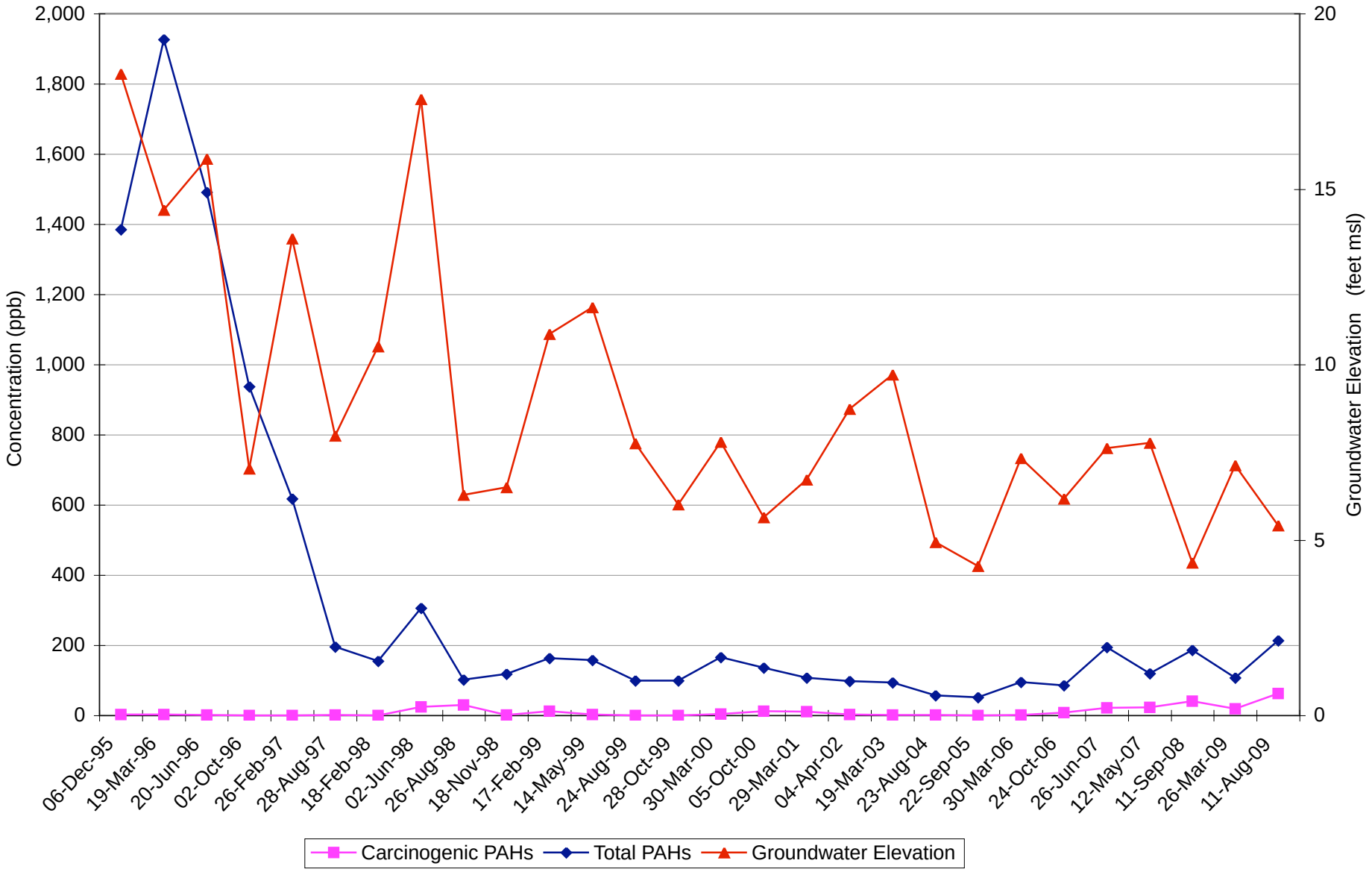
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-3-26 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW3-26 (PAHs)

Project No. 2708
HAHN AND ASSOCIATES, INC.

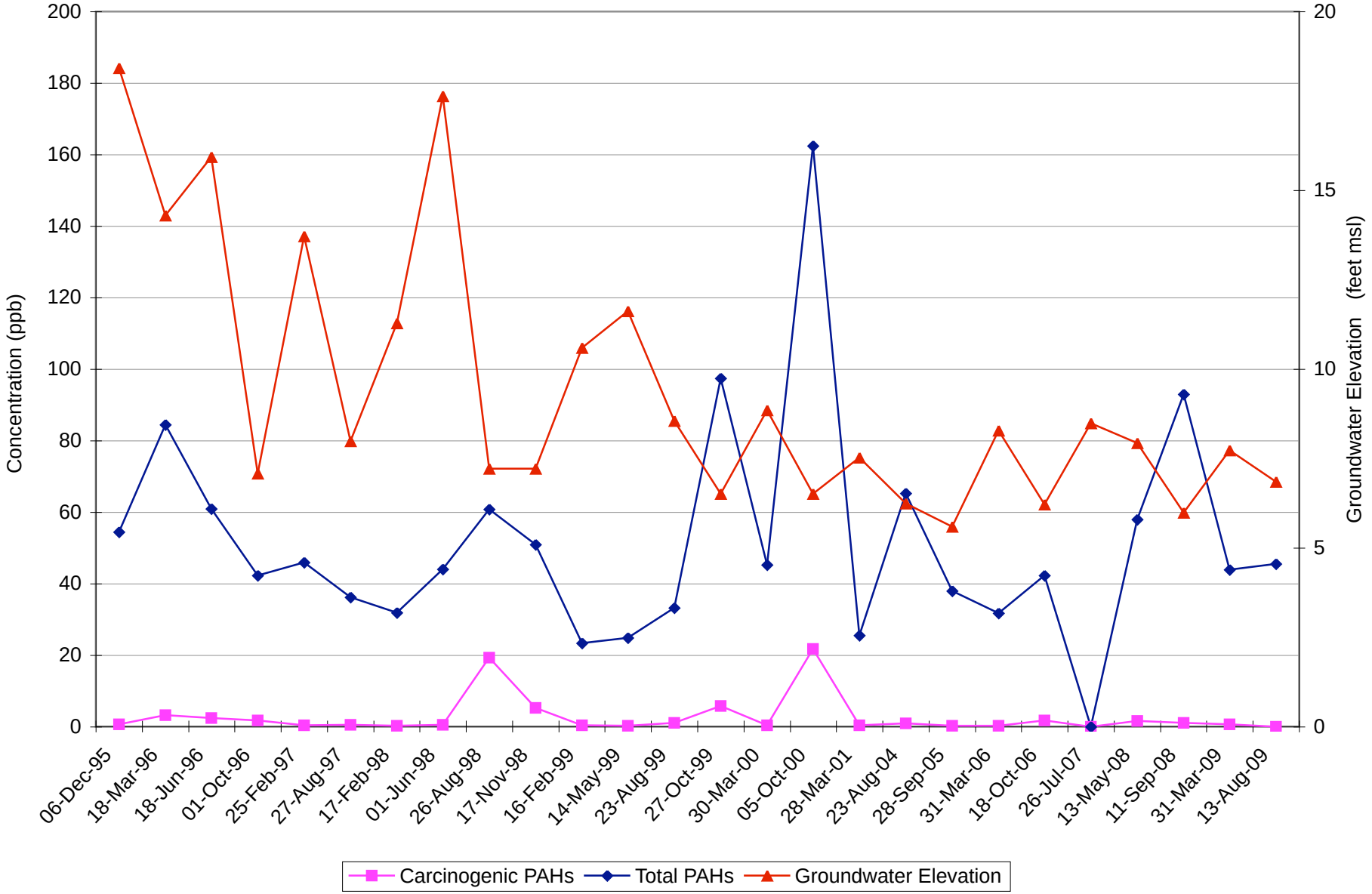
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-3-56 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAu
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW3-56 (PAHs)

Project No. 2708
HAHN AND ASSOCIATES, INC.

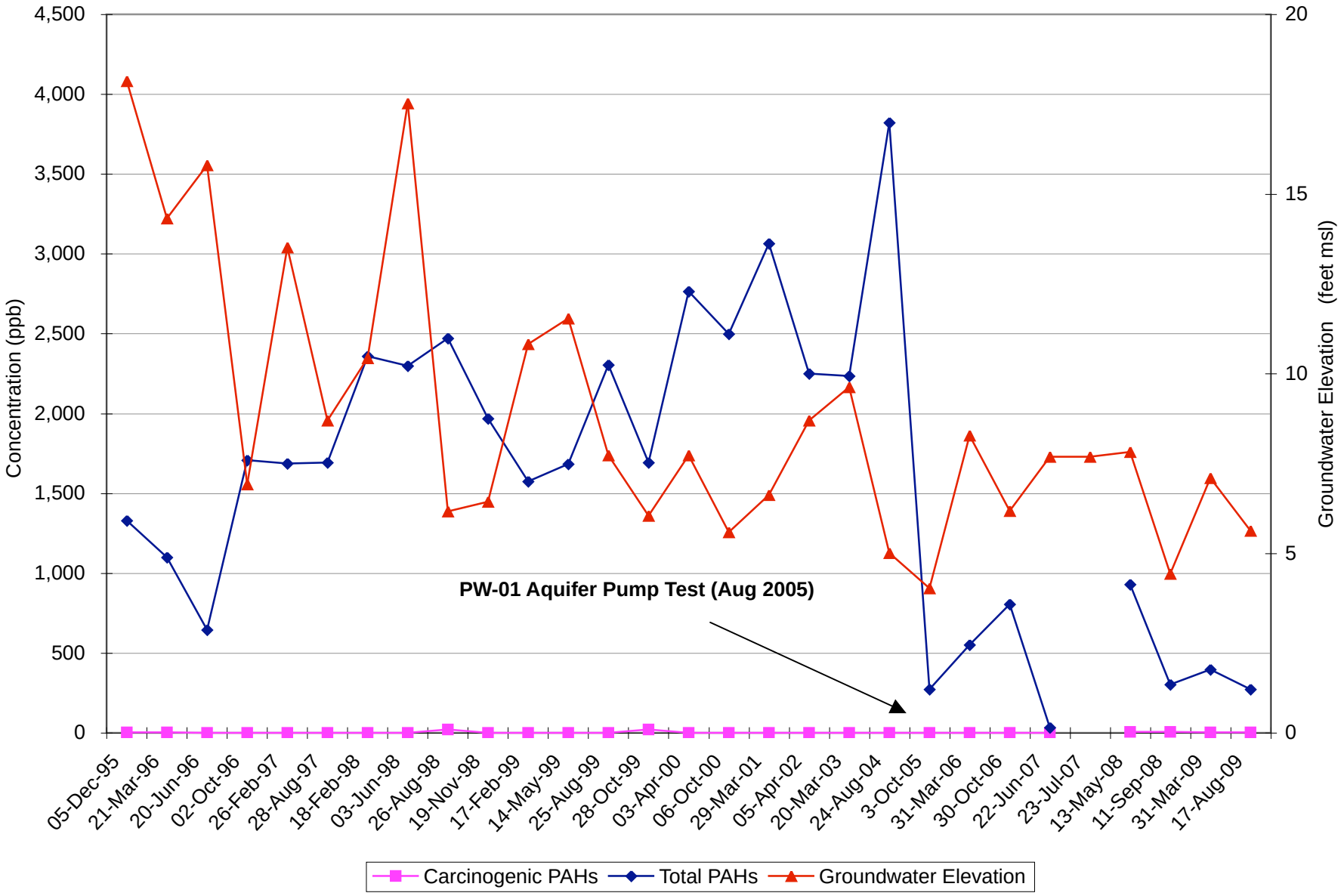
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-4-35 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW4-35 (PAHs)

Priject No. 2708
HAHN AND ASSOCIATES, INC.

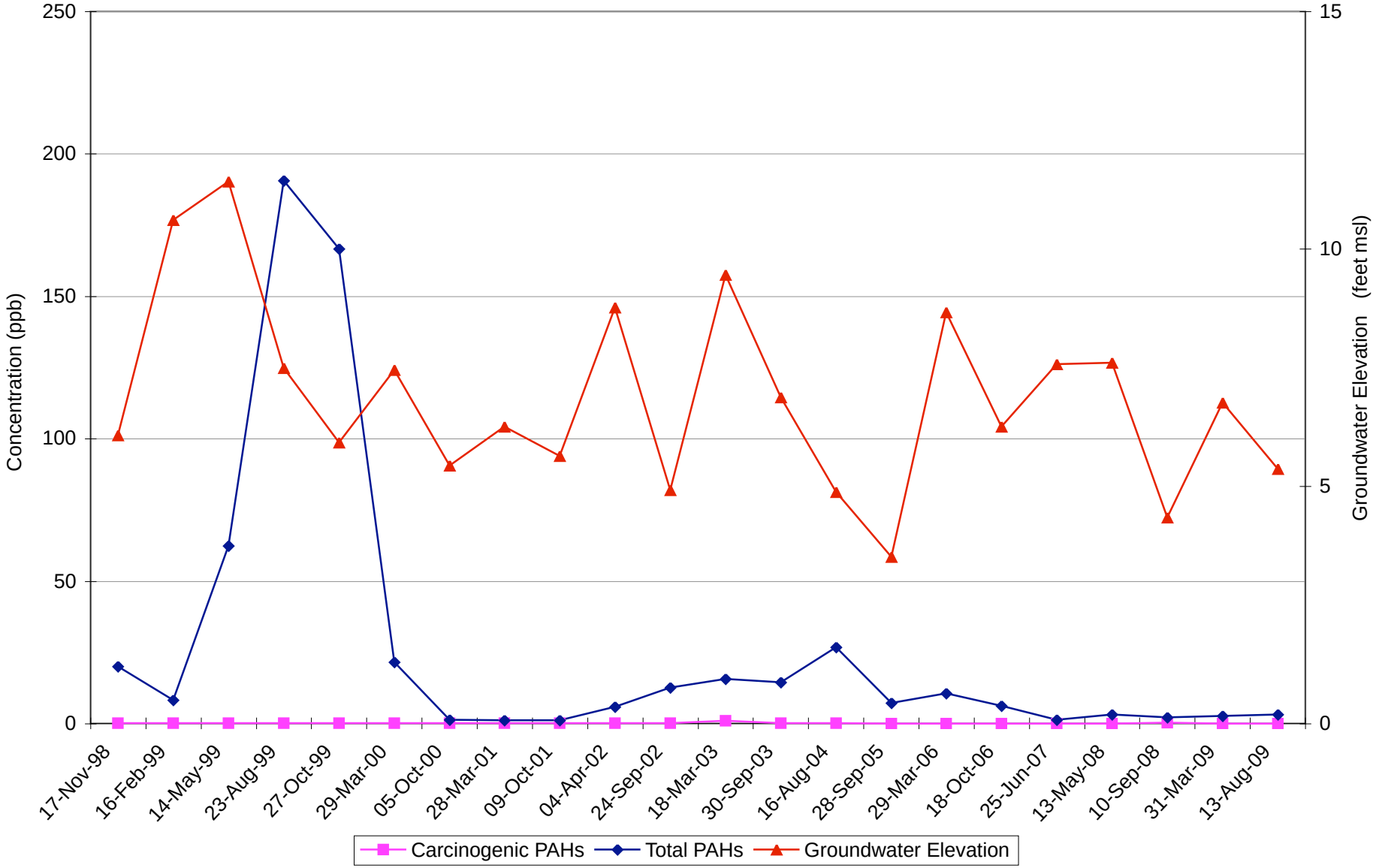
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-4-57 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW4-57 (PAH)

Project No. 2708
HAHN AND ASSOCIATES, INC.

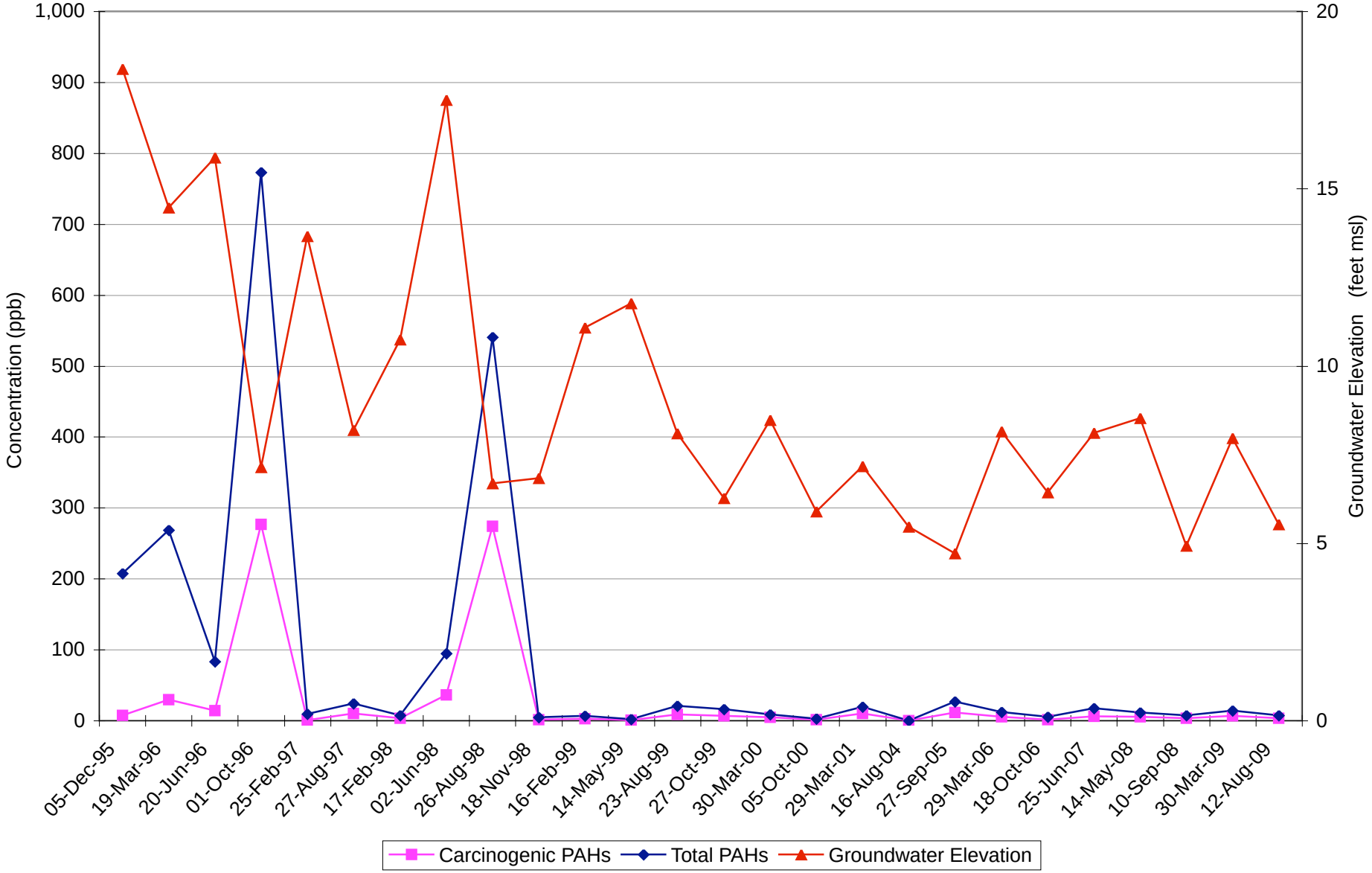
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-4-101 (intermediate-depth alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW4-101 (PAH)

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-5-32 (surficial fill WBZ / upper alluvial WBZ)
NW Natural - Gasco Facility



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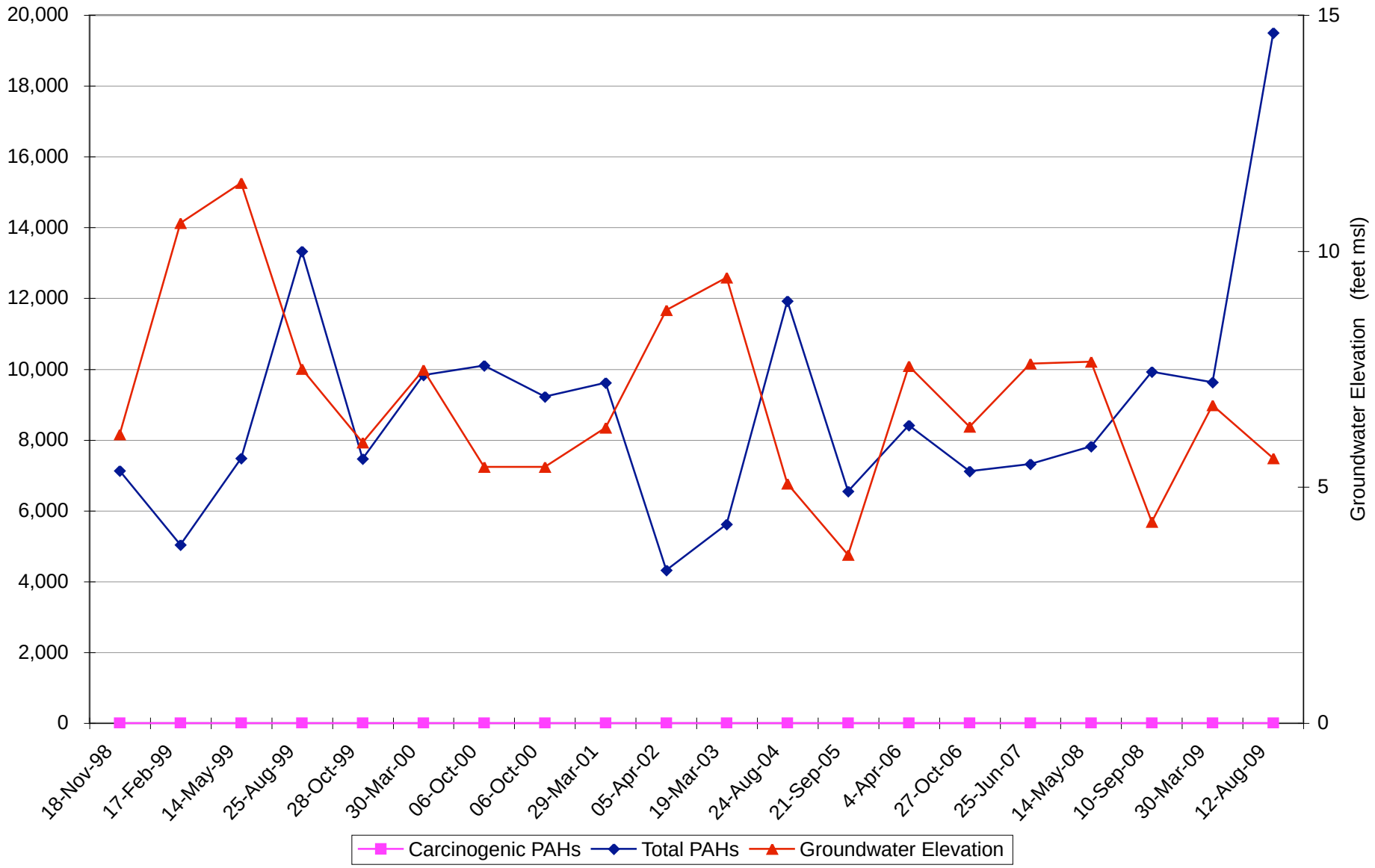
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW5-32 (PAHs)

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-5-100 (intermediate-depth alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
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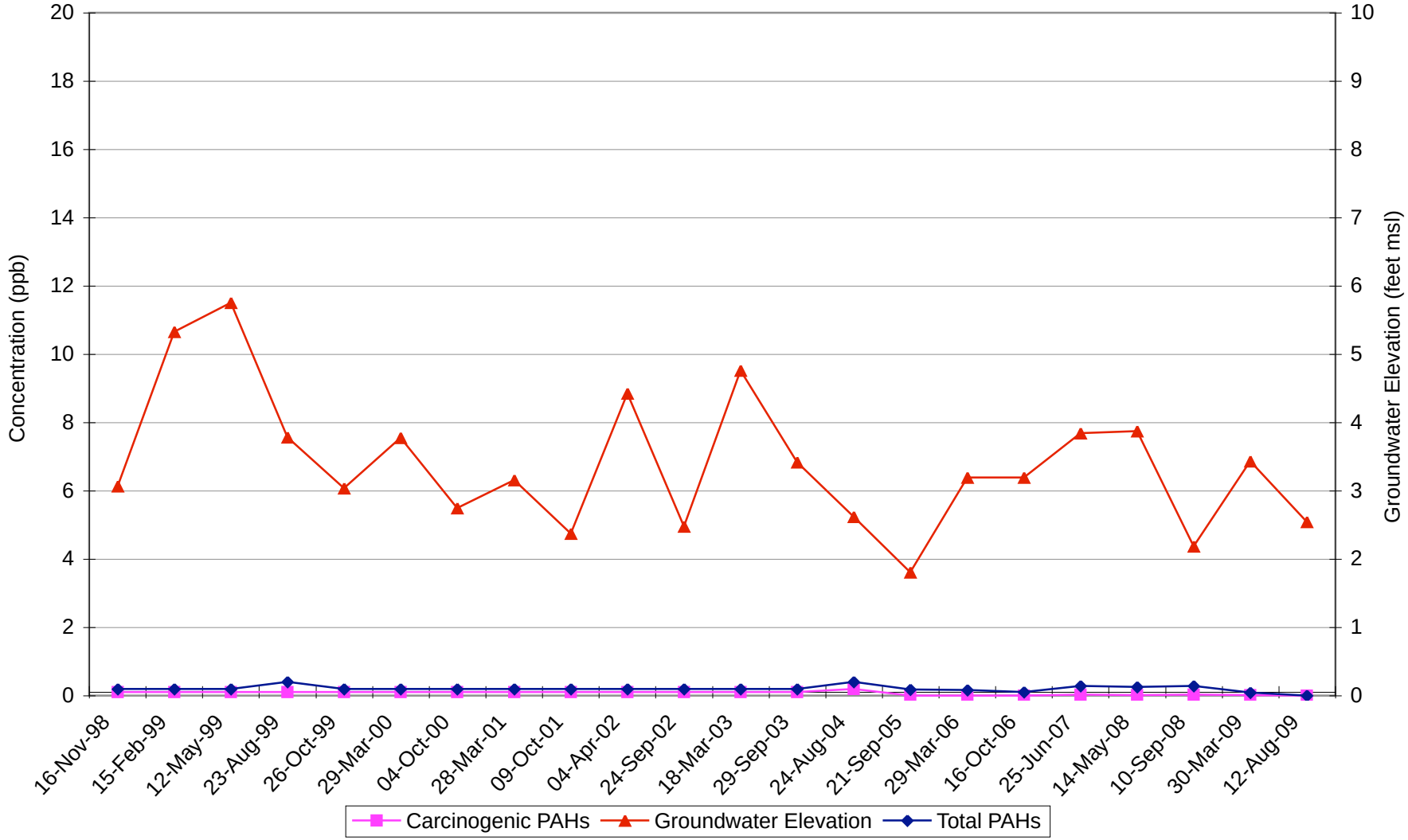
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-5-175 (lower alluvial WBZ)
NW Natural - Gasco Facility



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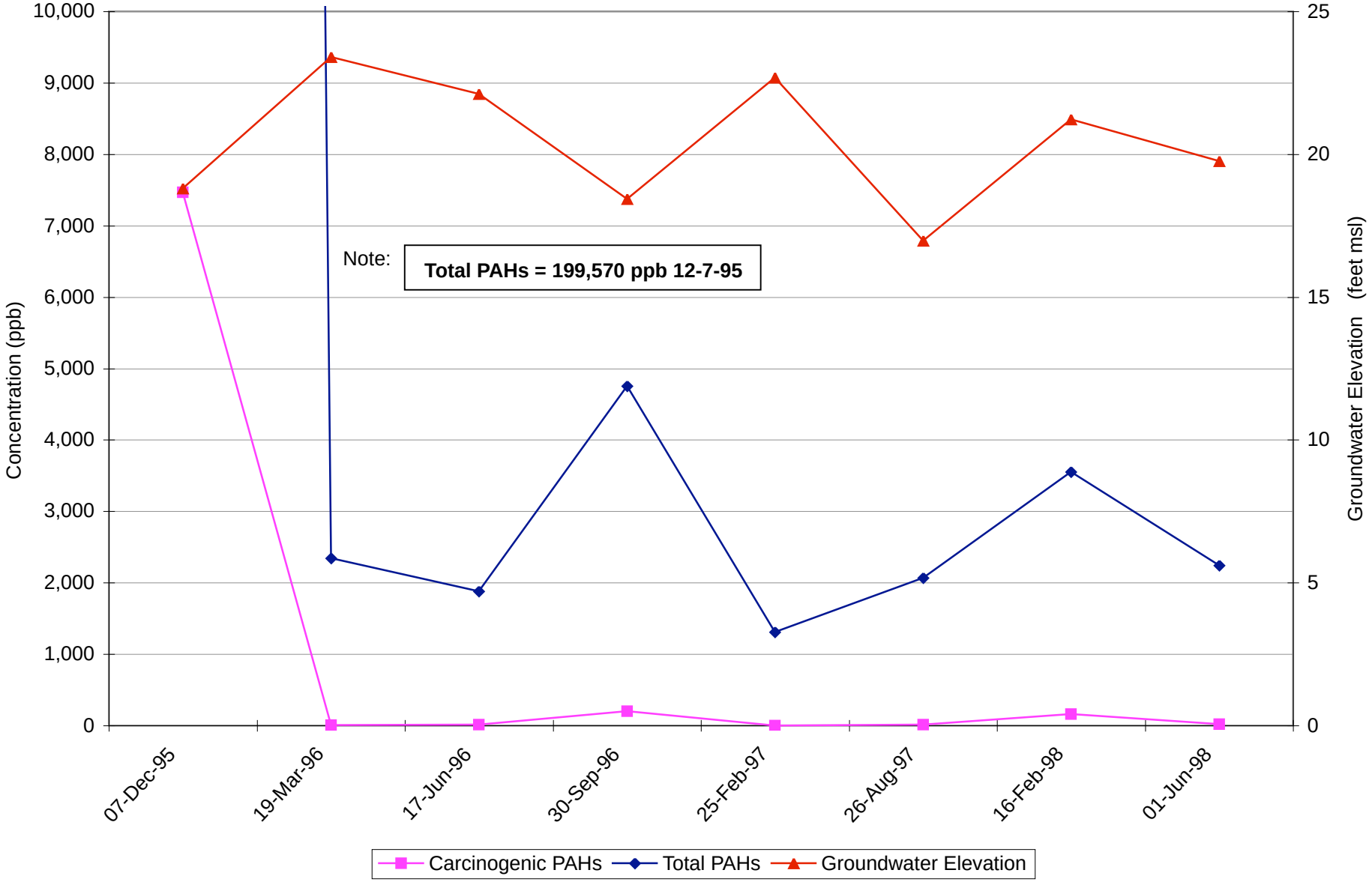
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW5-175 (PAHs)

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-6-32 (surficial fill WBZ) Current DNAPL Recovery Well
Northwest Natural - Gasco Facility



Updated: 5/12/10 BAU
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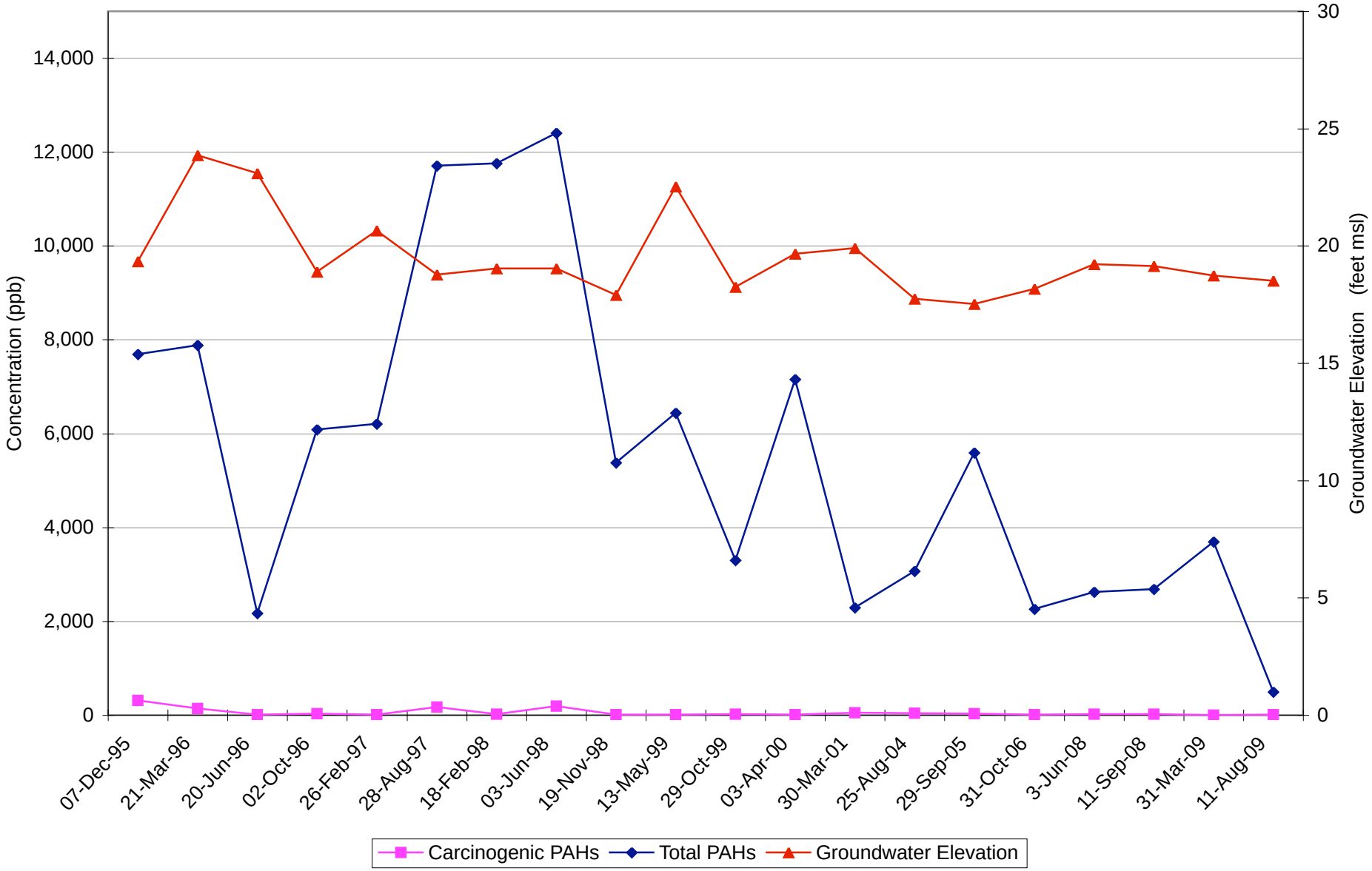
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-8-29 (surficial fill WBZ)
NW Natural - Gasco Facility



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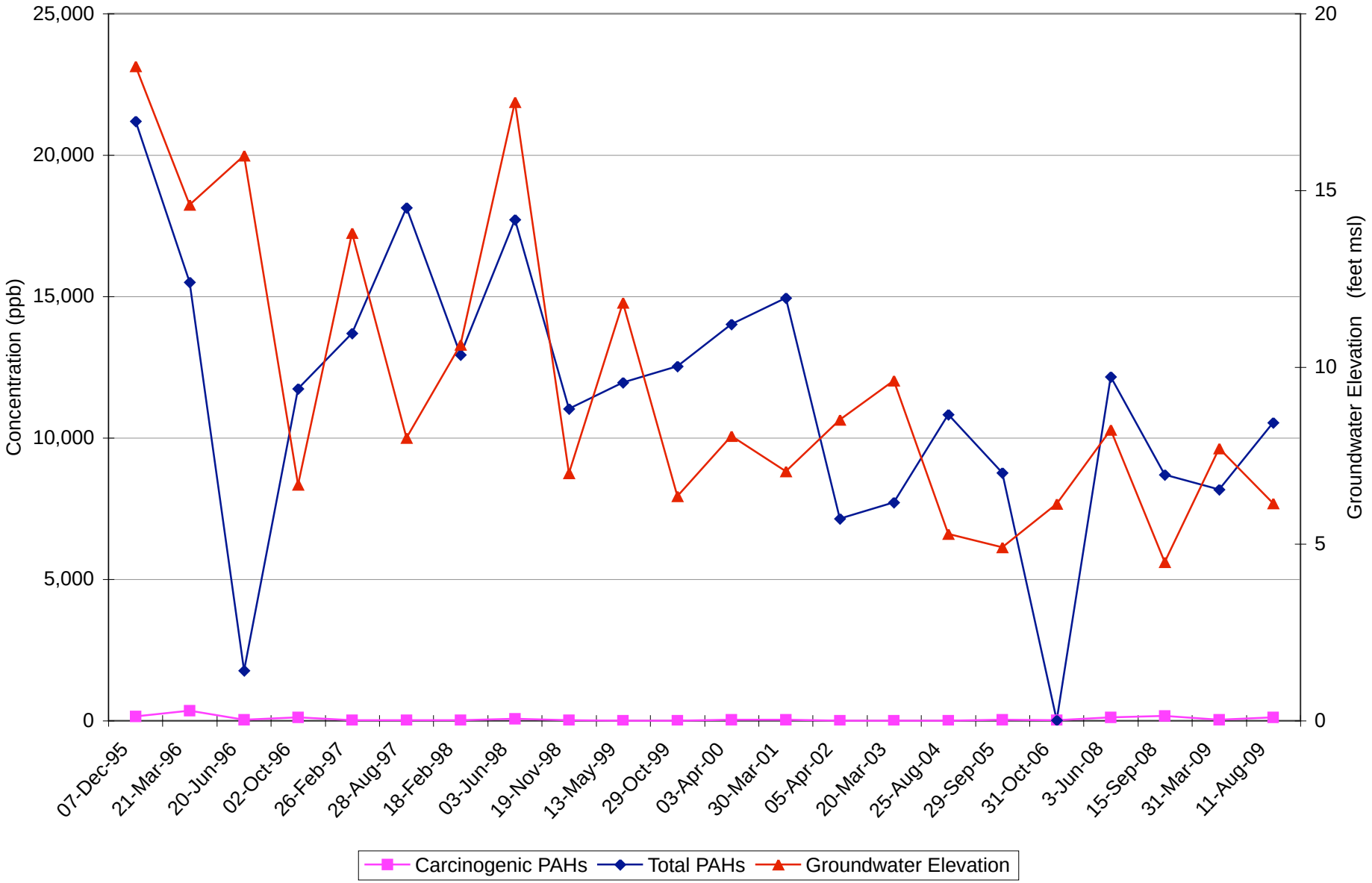
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-8-56 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
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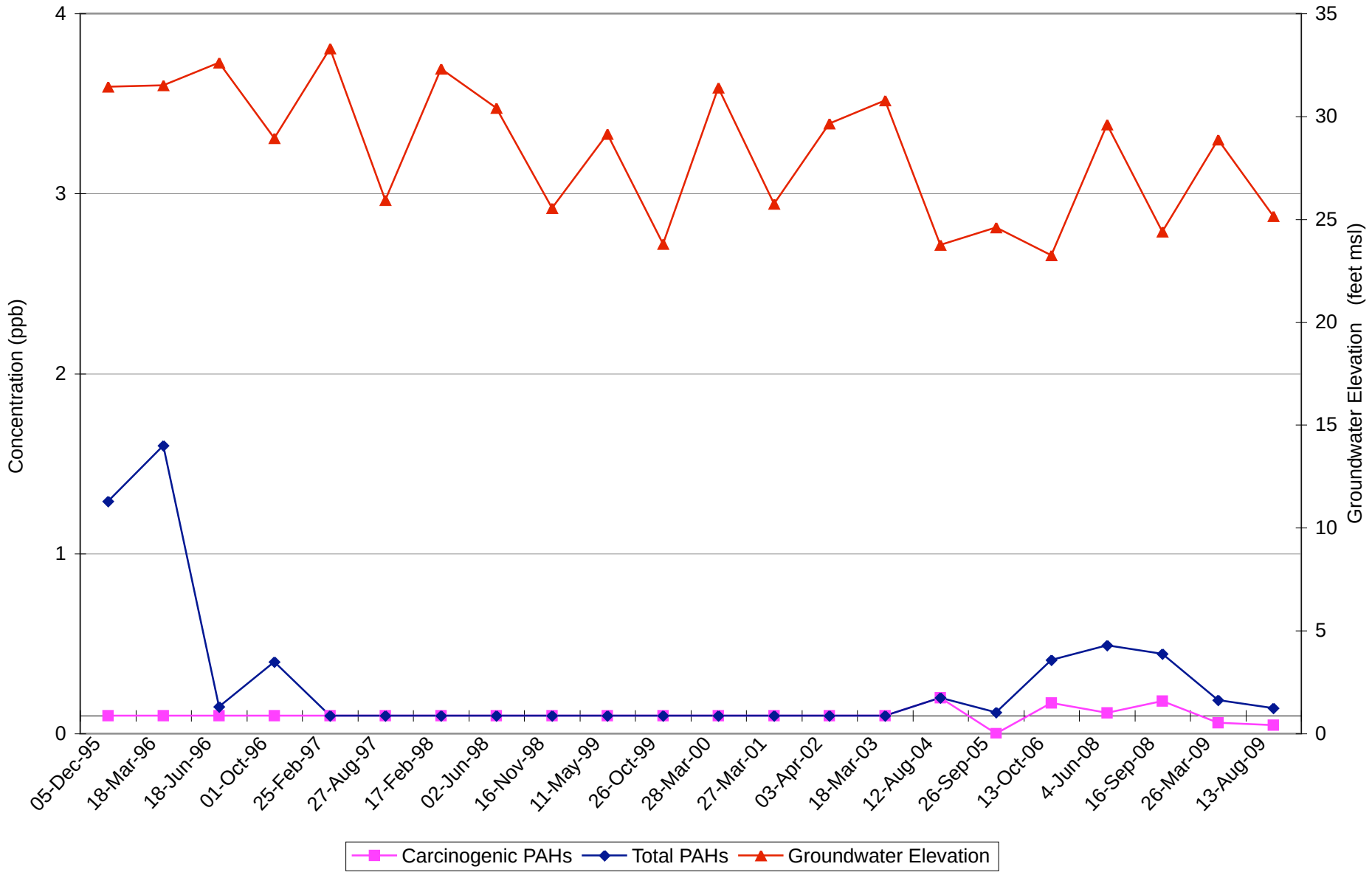
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-9-29 (Surficial Fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
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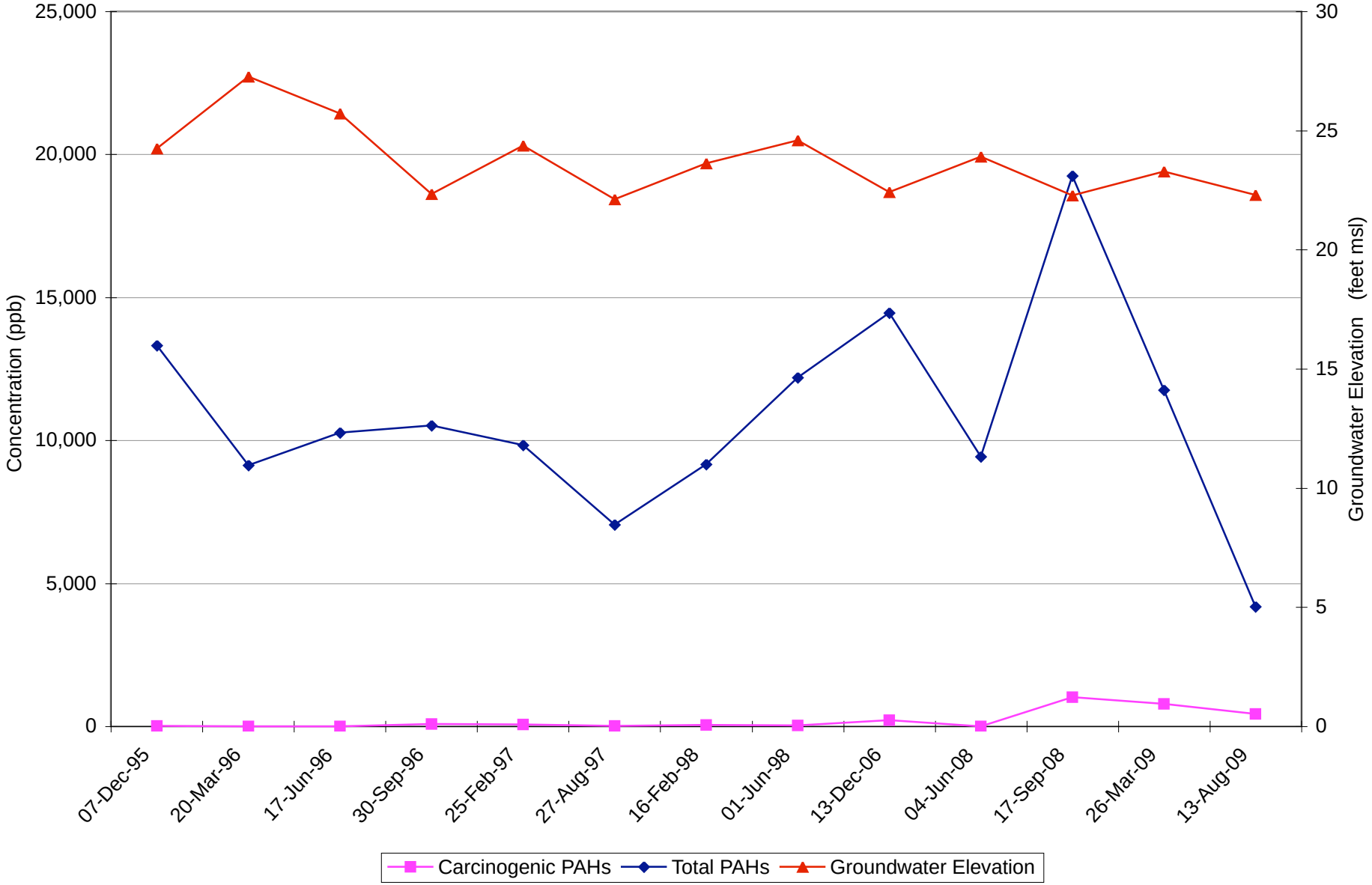
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-10-25 (surficial fill WBZ) - Well Contains DNAPL
Northwest Natural - Gasco Facility



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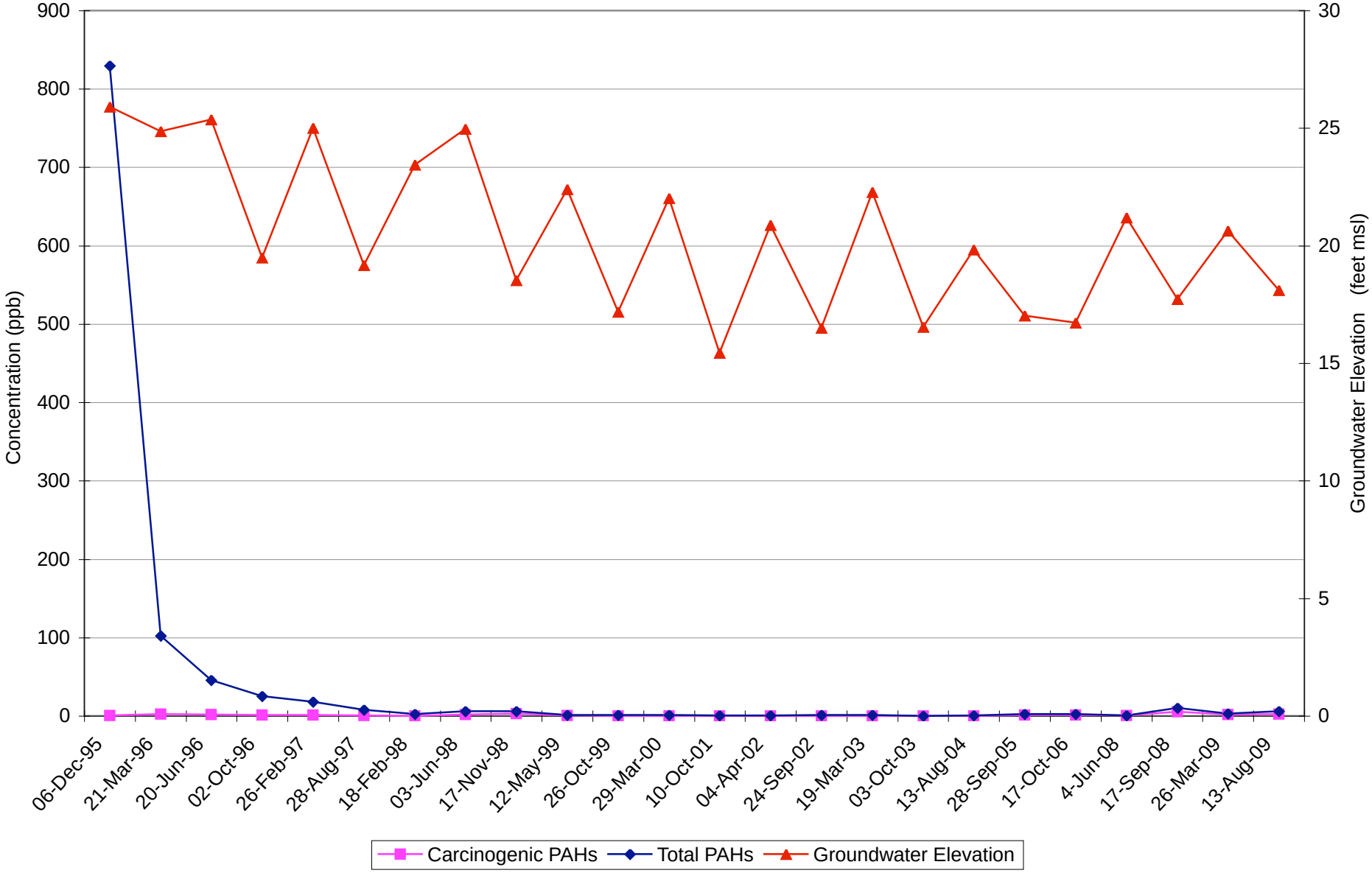
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-10-61 (upper alluvial WBZ)
NW Natural - Gasco Facility



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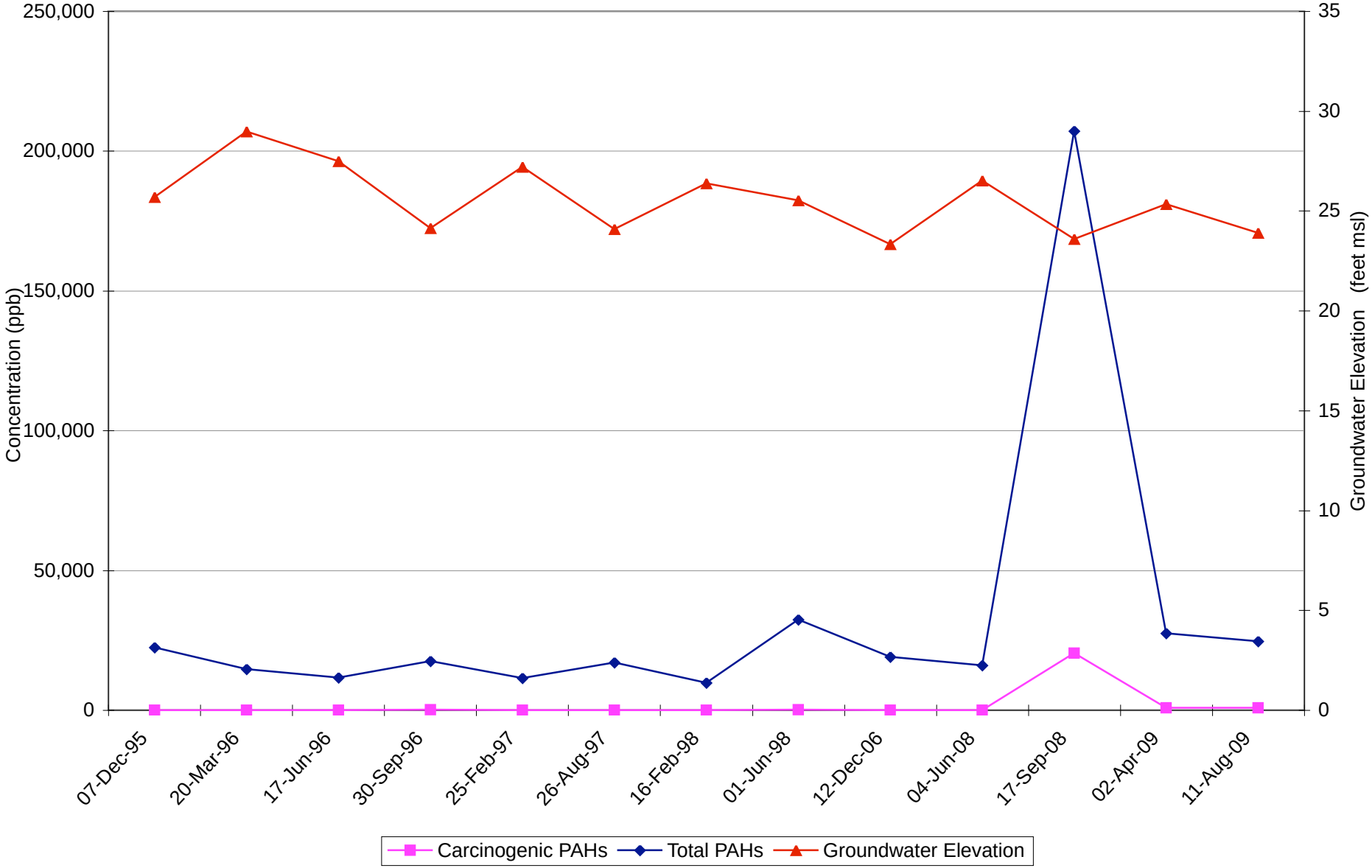
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-11-32 (surficial fill WBZ) - Well Contains DNAPL
NW Natural - Gasco Facility



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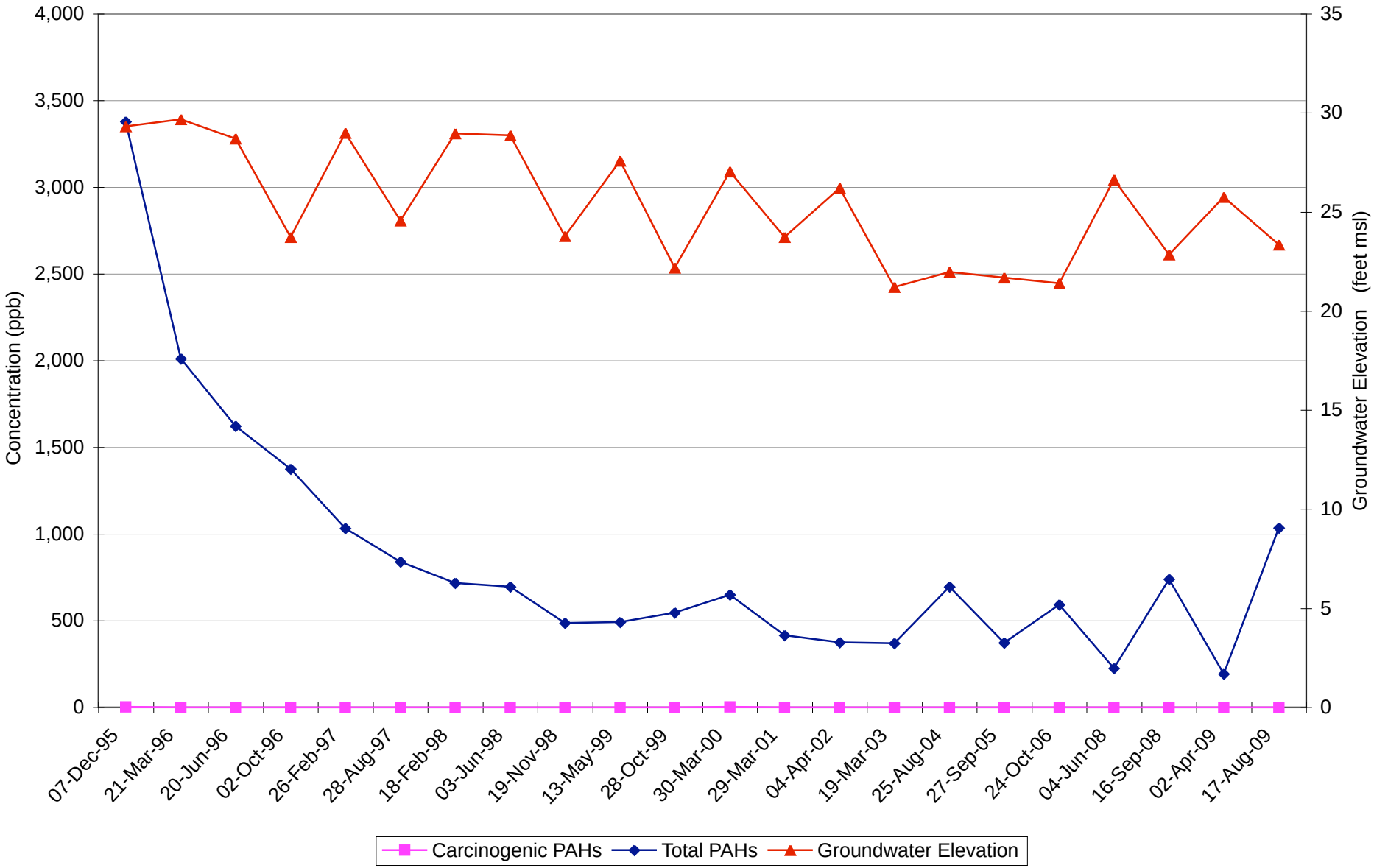
Project No. 2708
HAHN AND ASSOCIATES, INC.

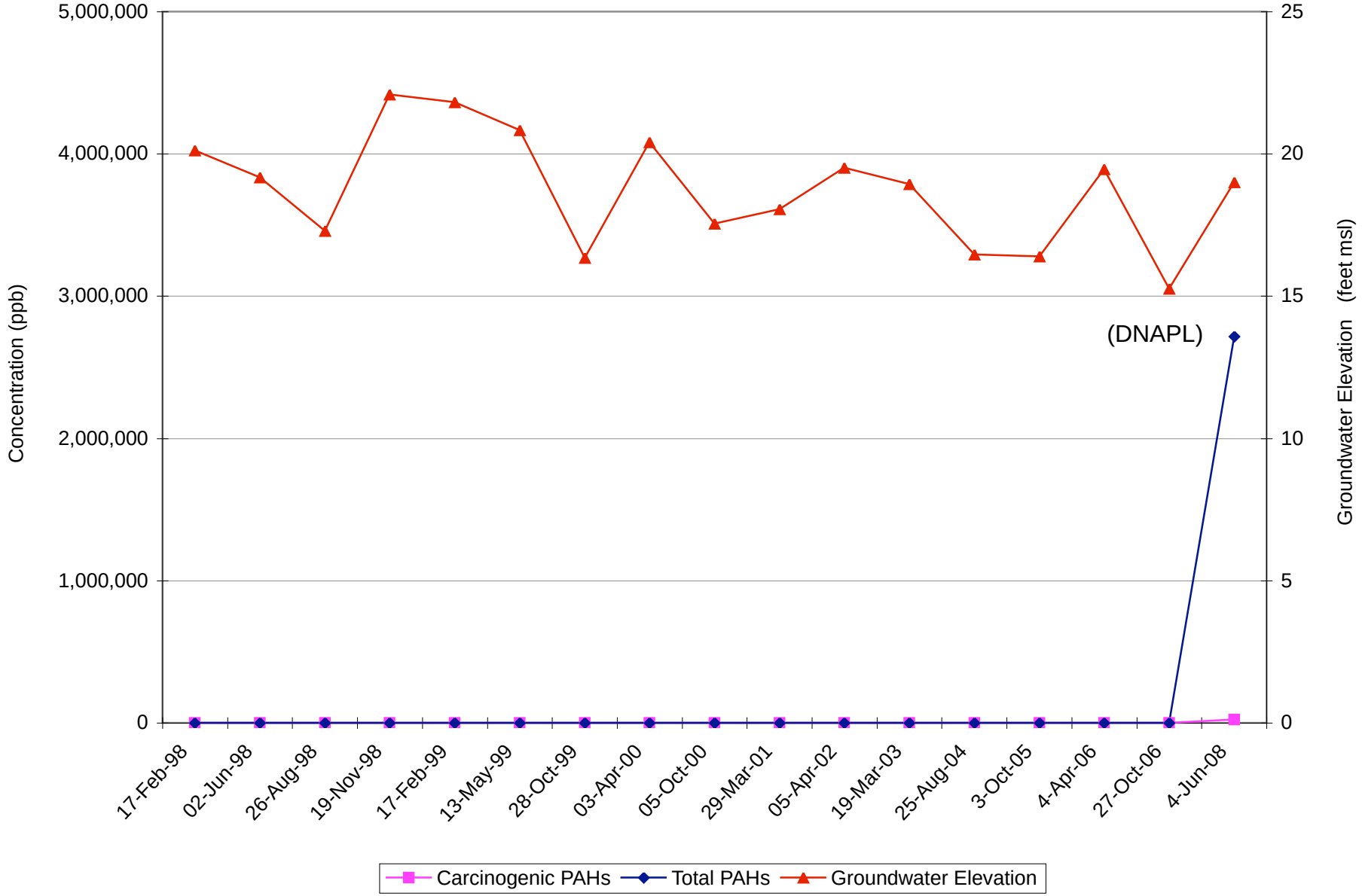
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-12-36 (surficial fill WBZ / upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/24/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW12-36 (PAHs)

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-13-30 (surficial fill WBZ)
Current DNAPL Recovery Location - NW Natural - Gasco Facility



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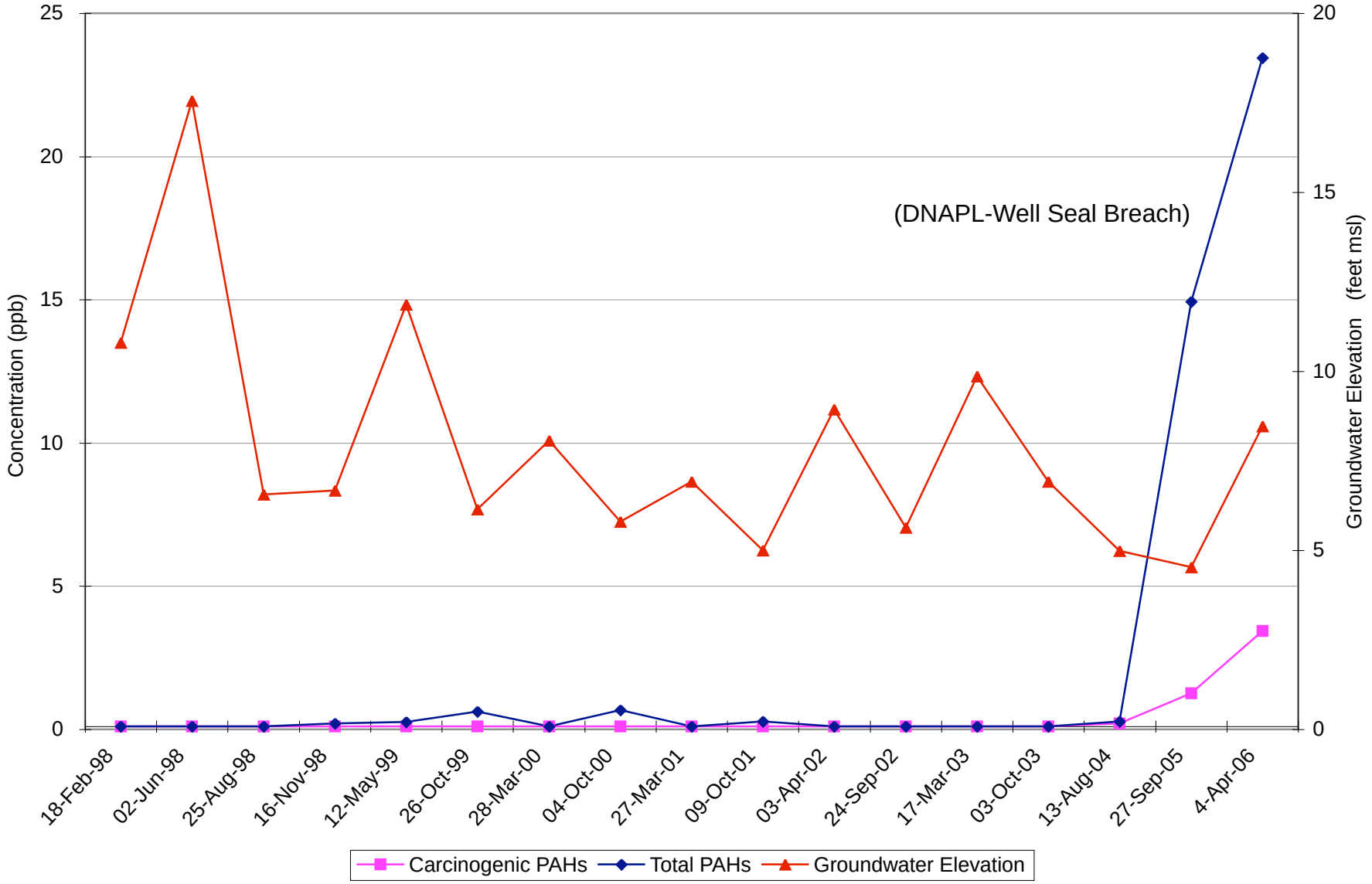
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-13-61 (alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
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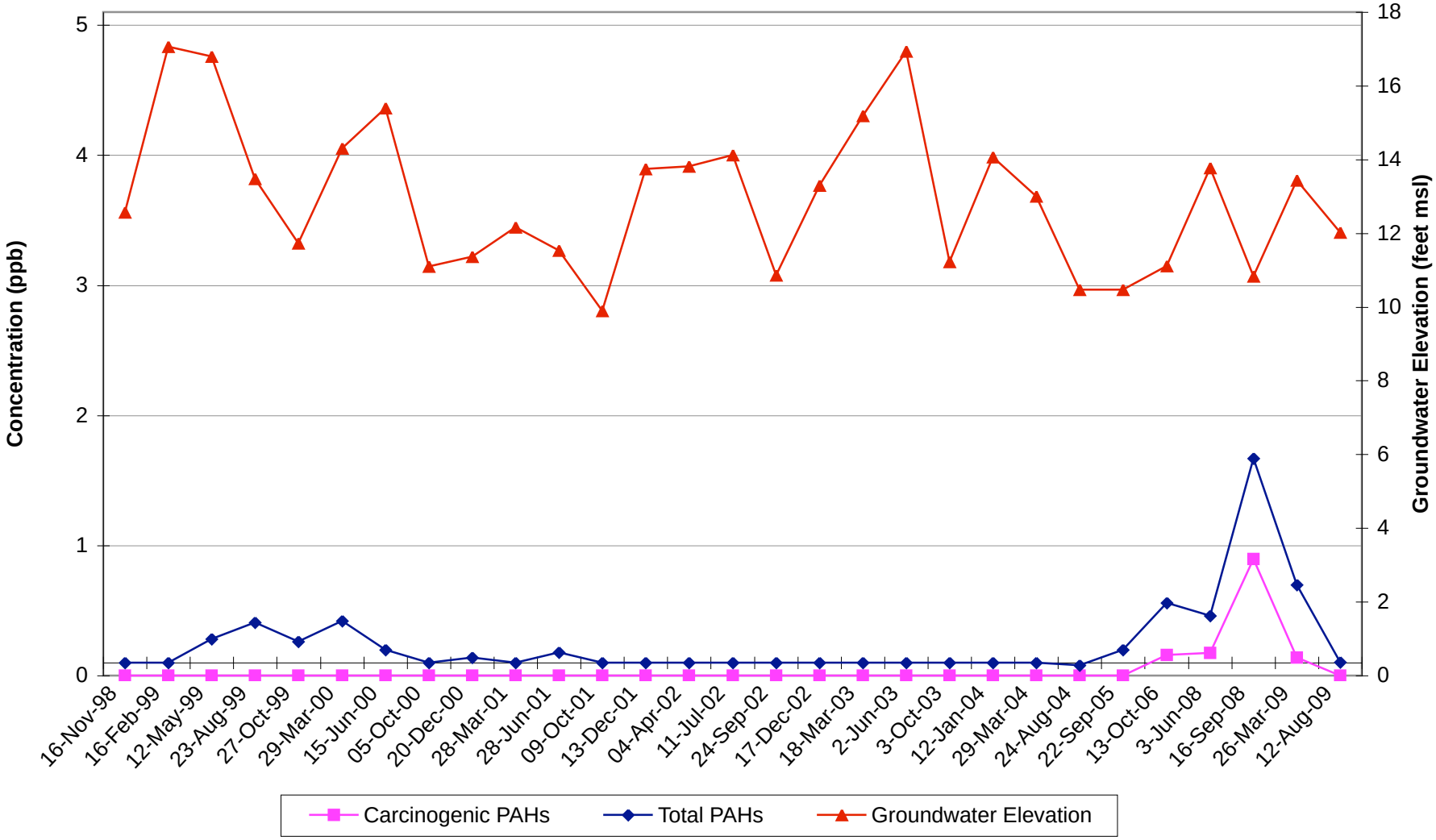
Project No. 2708
HAHN AND ASSOCIATES, INC.

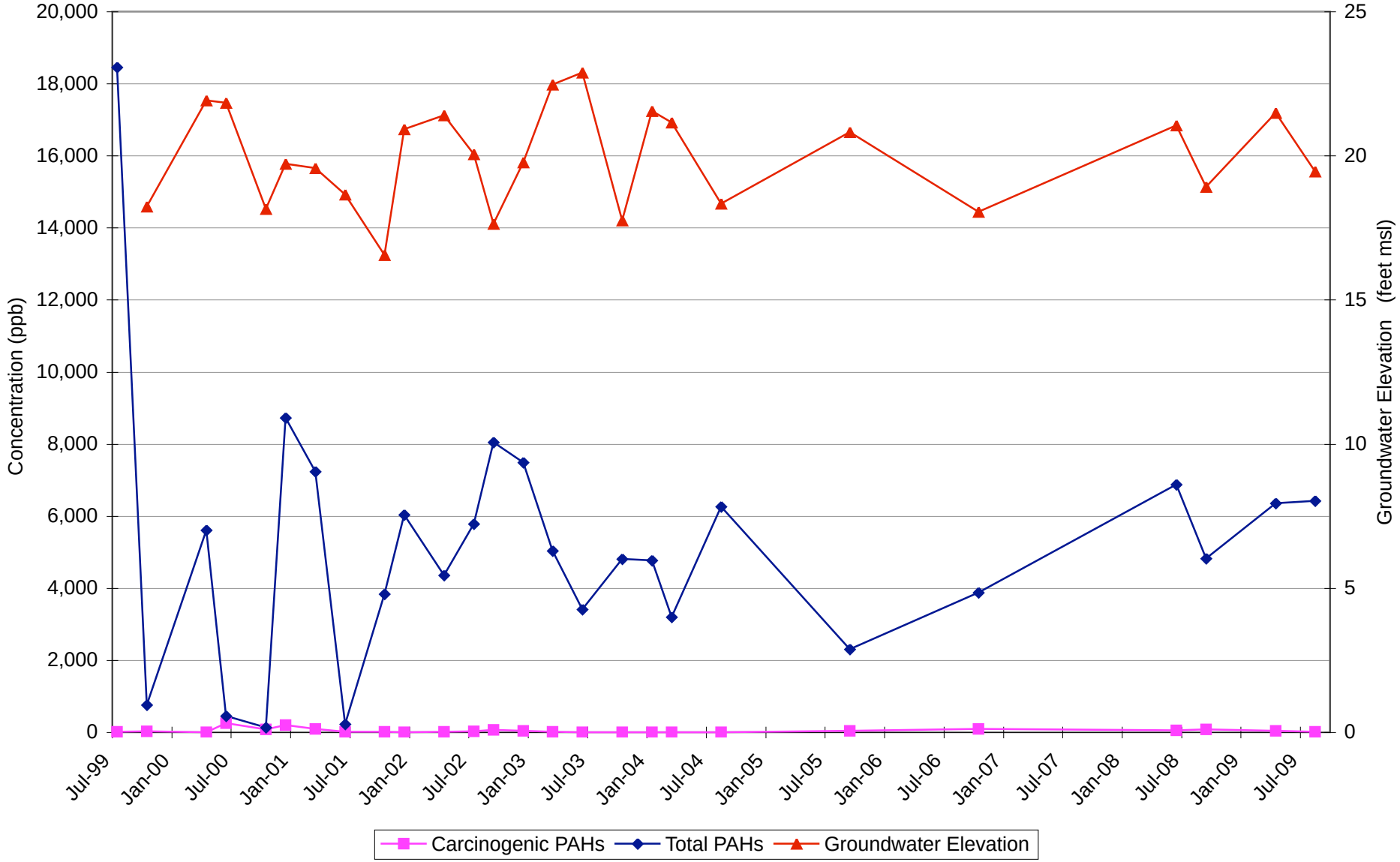
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-14-110 (intermediate-depth alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW14-110 (PAHs)

Project No. 2708
HAHN AND ASSOCIATES, INC.

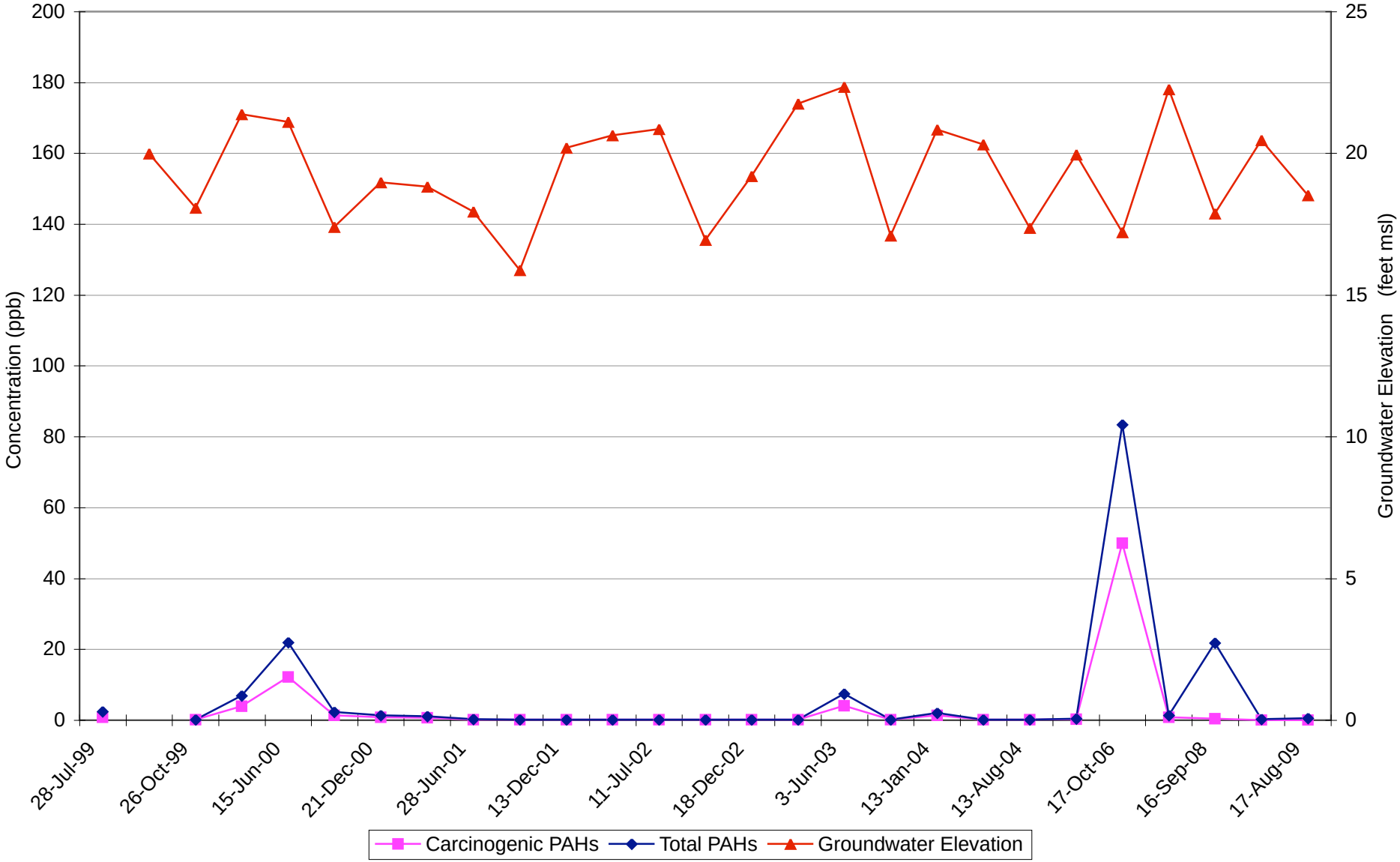
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well MW-15-50 (silt unit / upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW-15-50 PAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-15-66 (upper alluvial WBZ)
NW Natural - Gasco Facility



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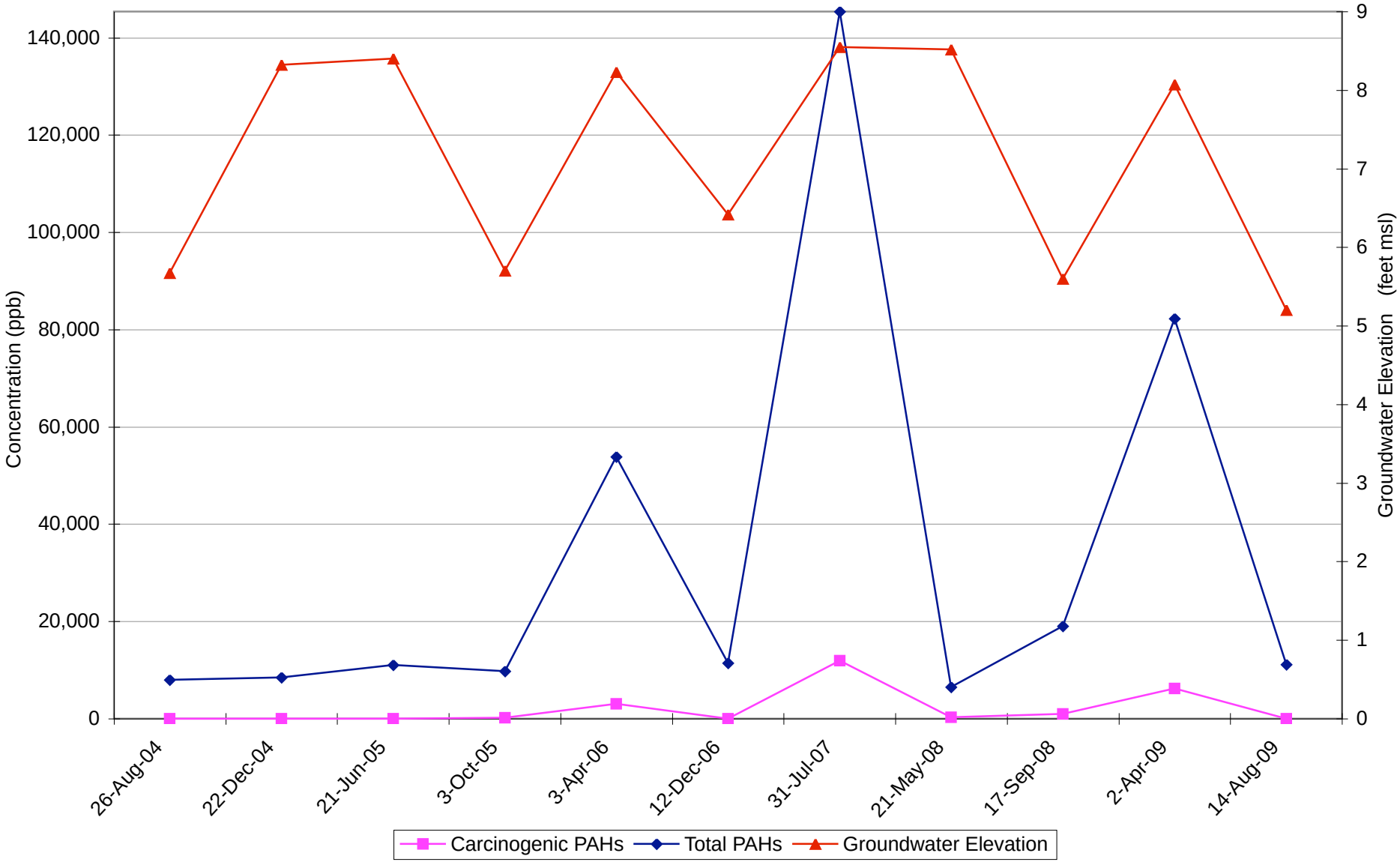
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW-15-66 PAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-16-45 (upper alluvial WBZ) - Well Contains DNAPL
NW Natural - Gasco Facility



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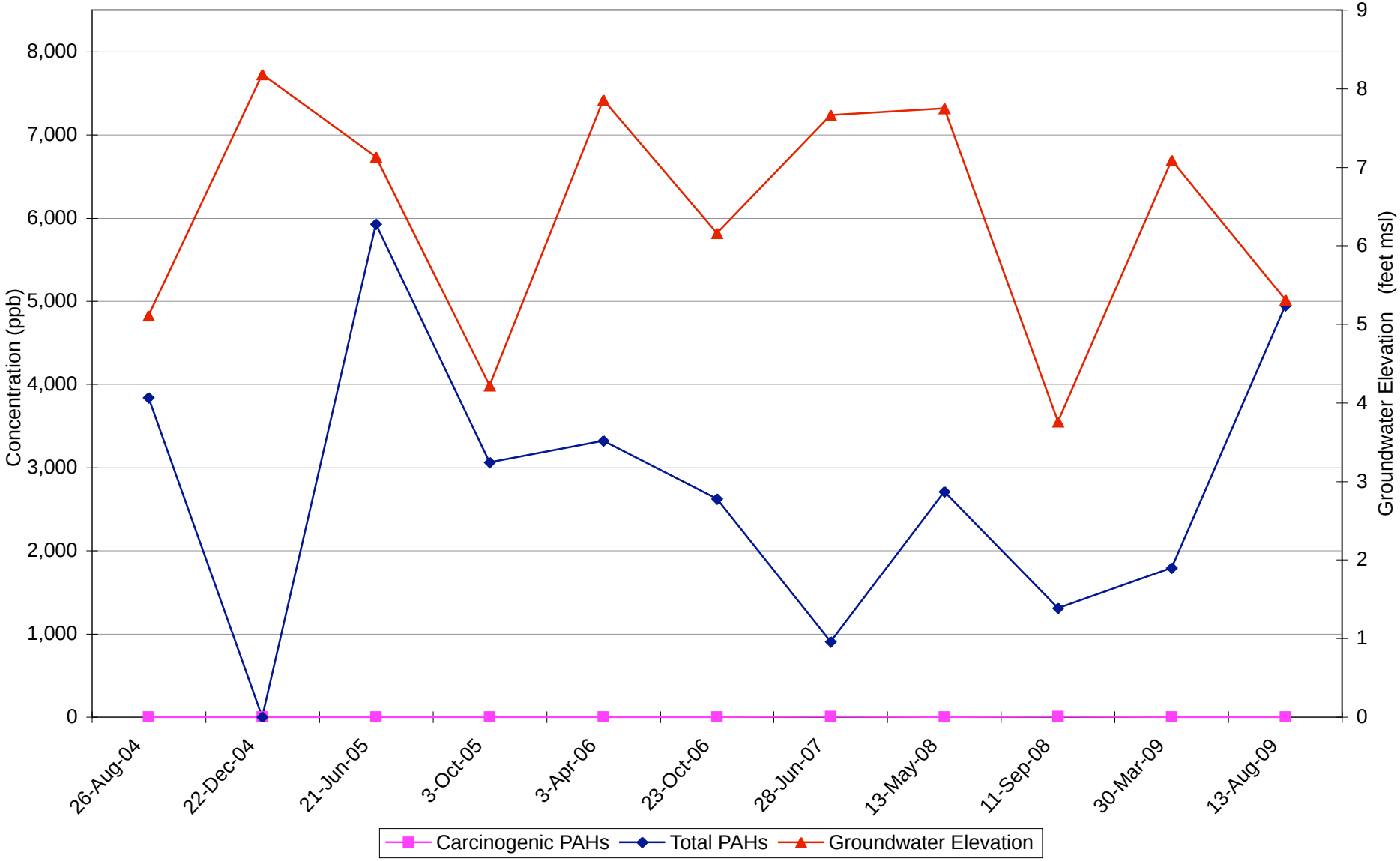
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-16-65 (upper alluvial WBZ)
NW Natural - Gasco Facility



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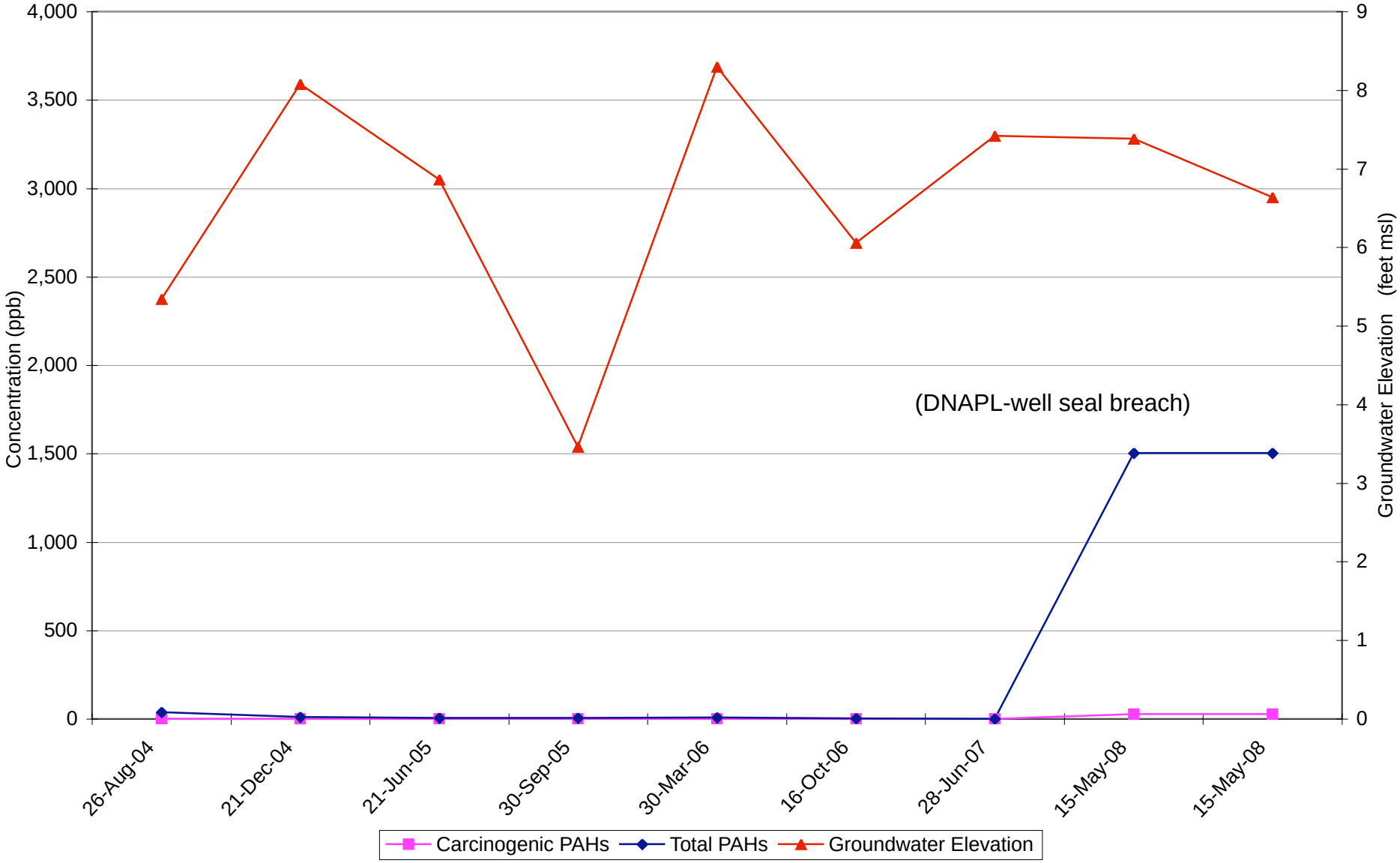
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-16-125 (intermediate-depth alluvial WBZ)
NW Natural - Gasco Facility



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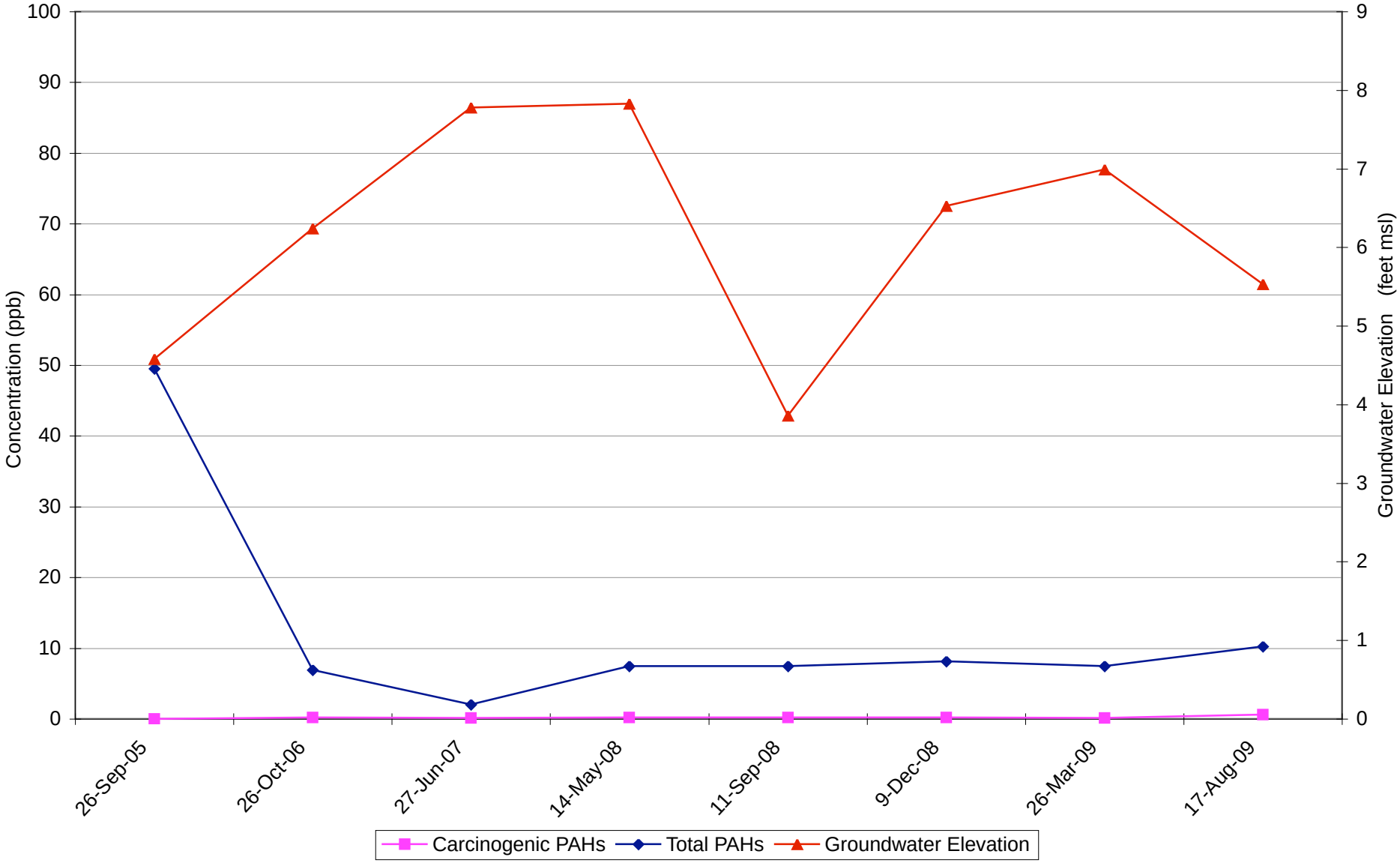
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-17-79 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
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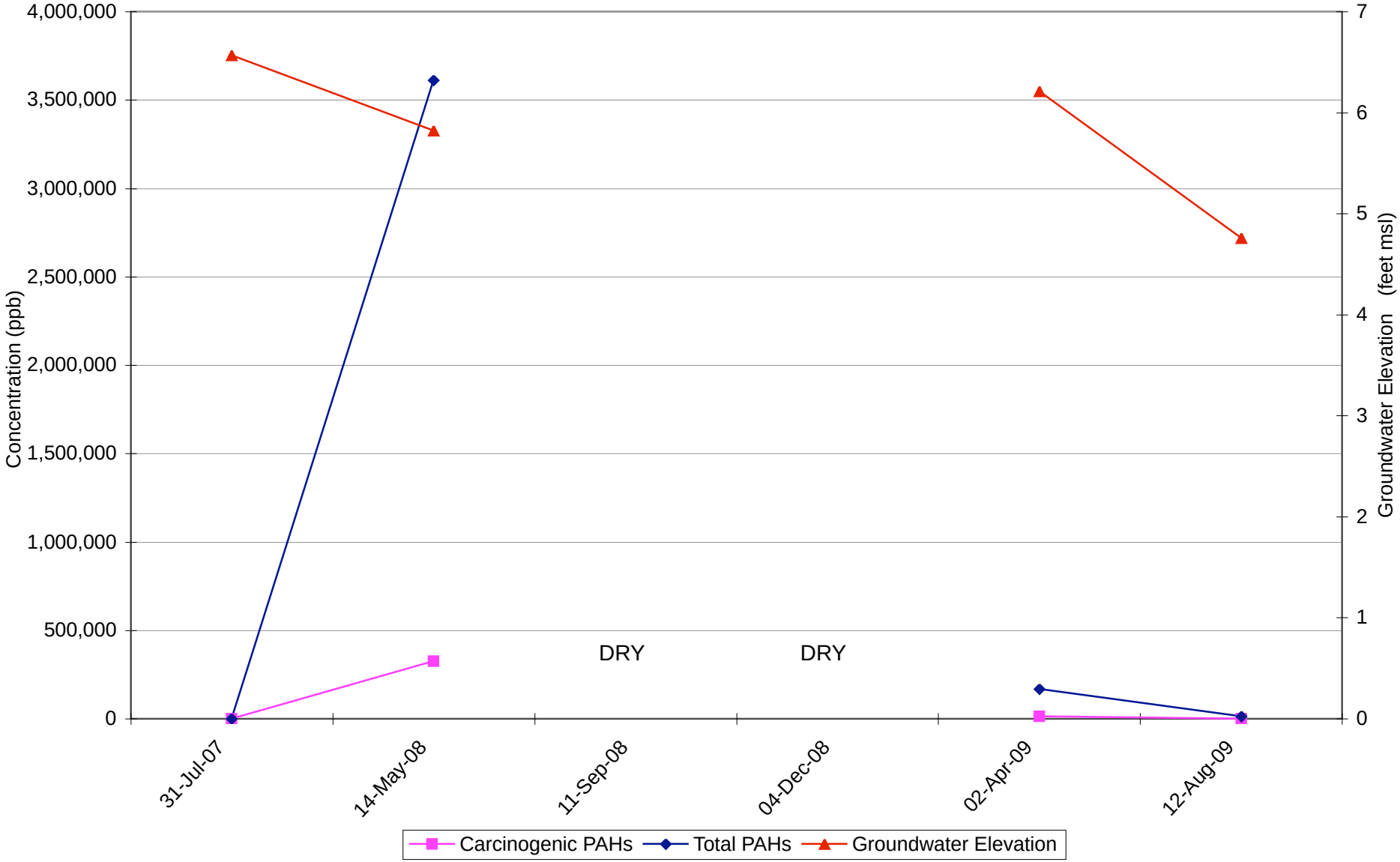
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-18-30 (surficial fill WBZ)
NW Natural - Gasco Facility



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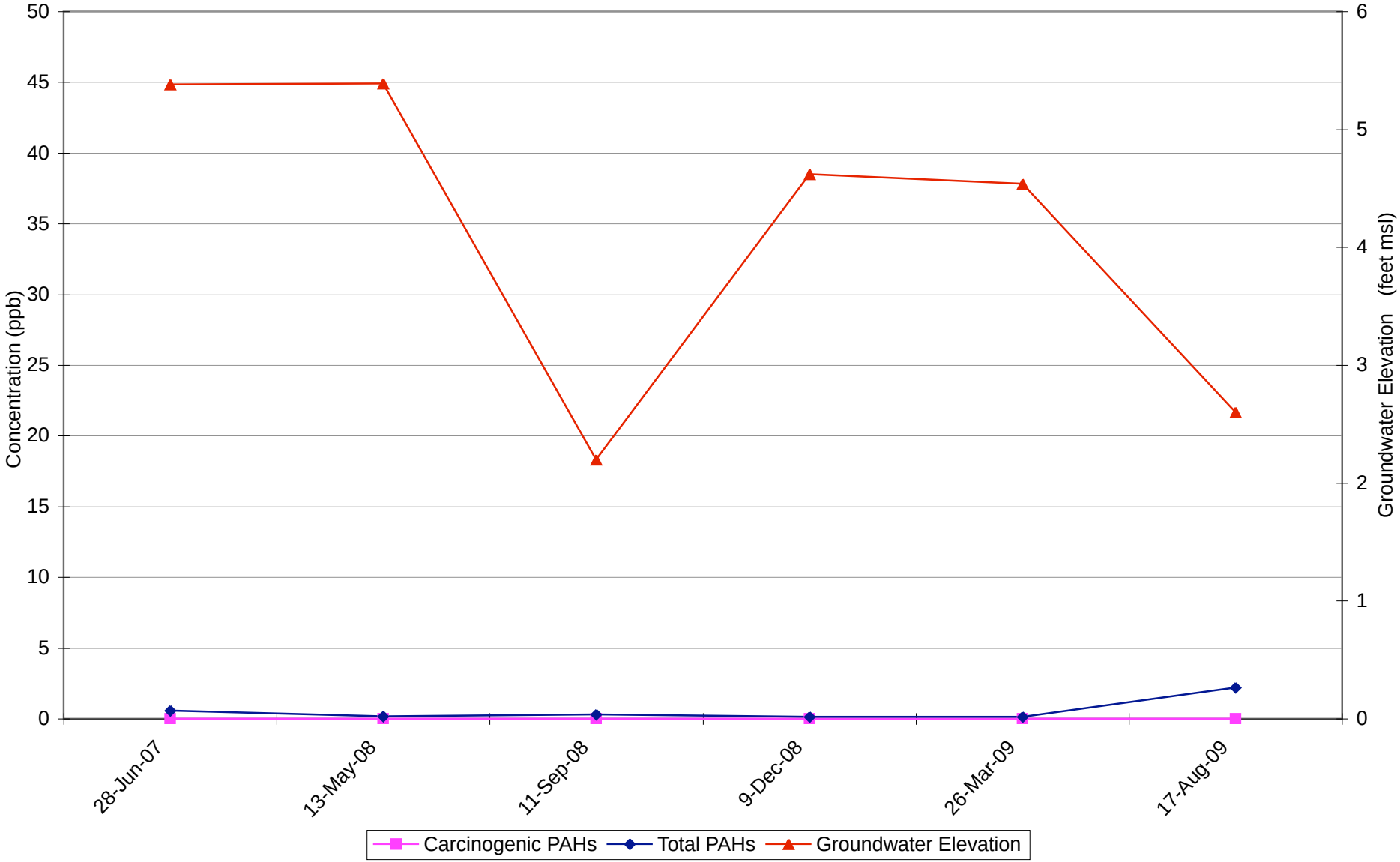
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-18-180 (lower alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
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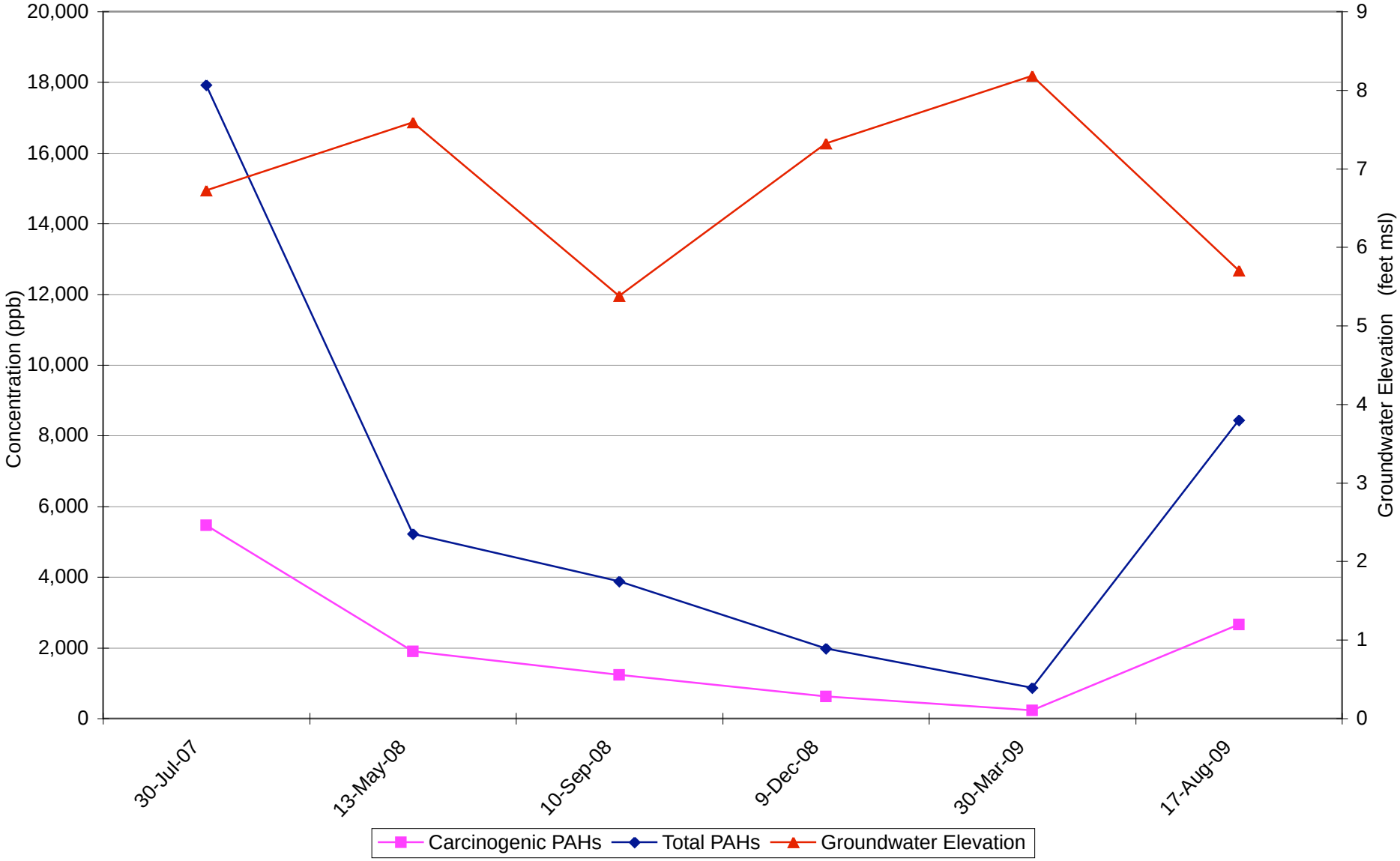
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-19-22 (surficial fill WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
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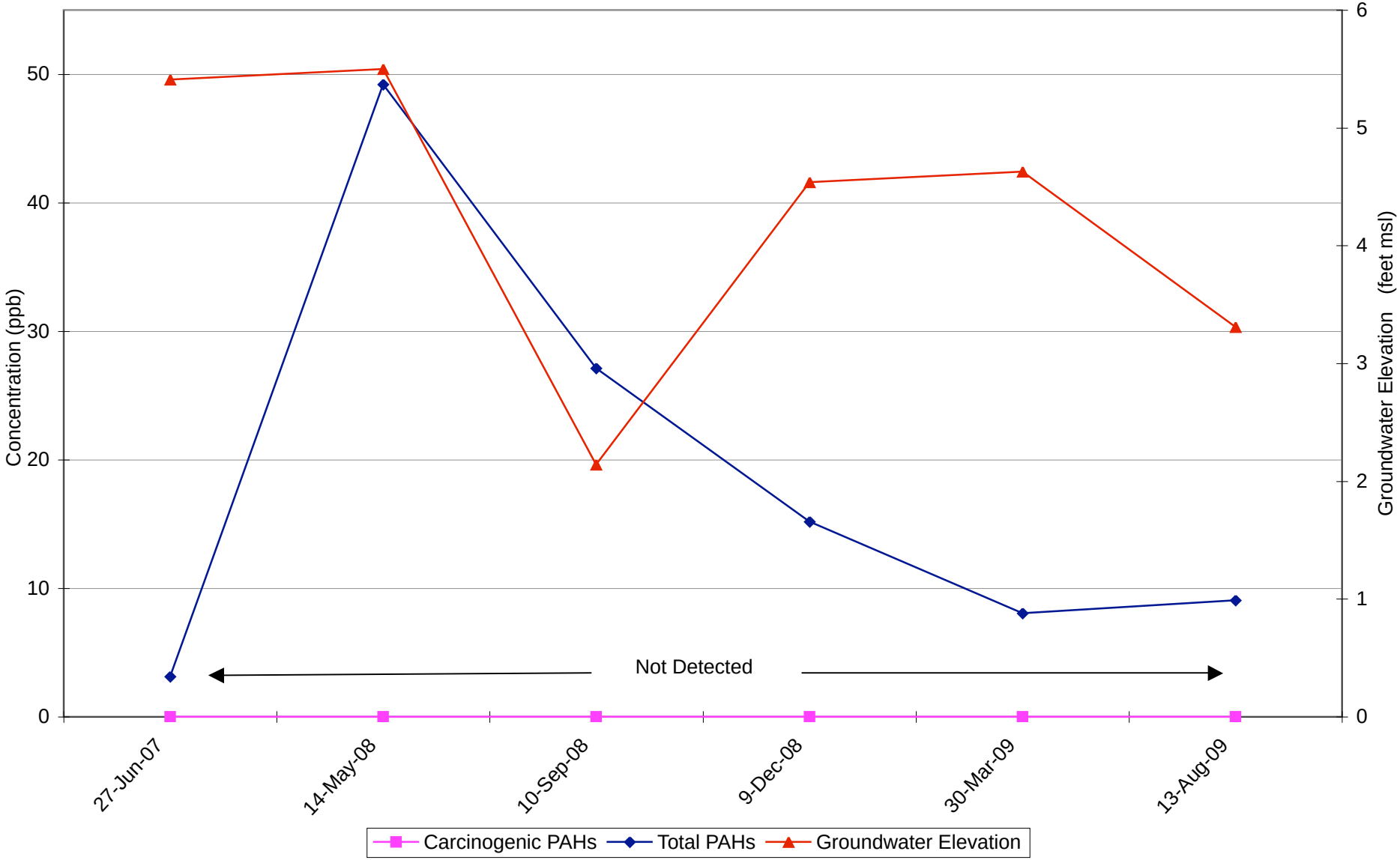
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-19-125 (intermediate alluvial WBZ)
NW Natural - Gasco Facility



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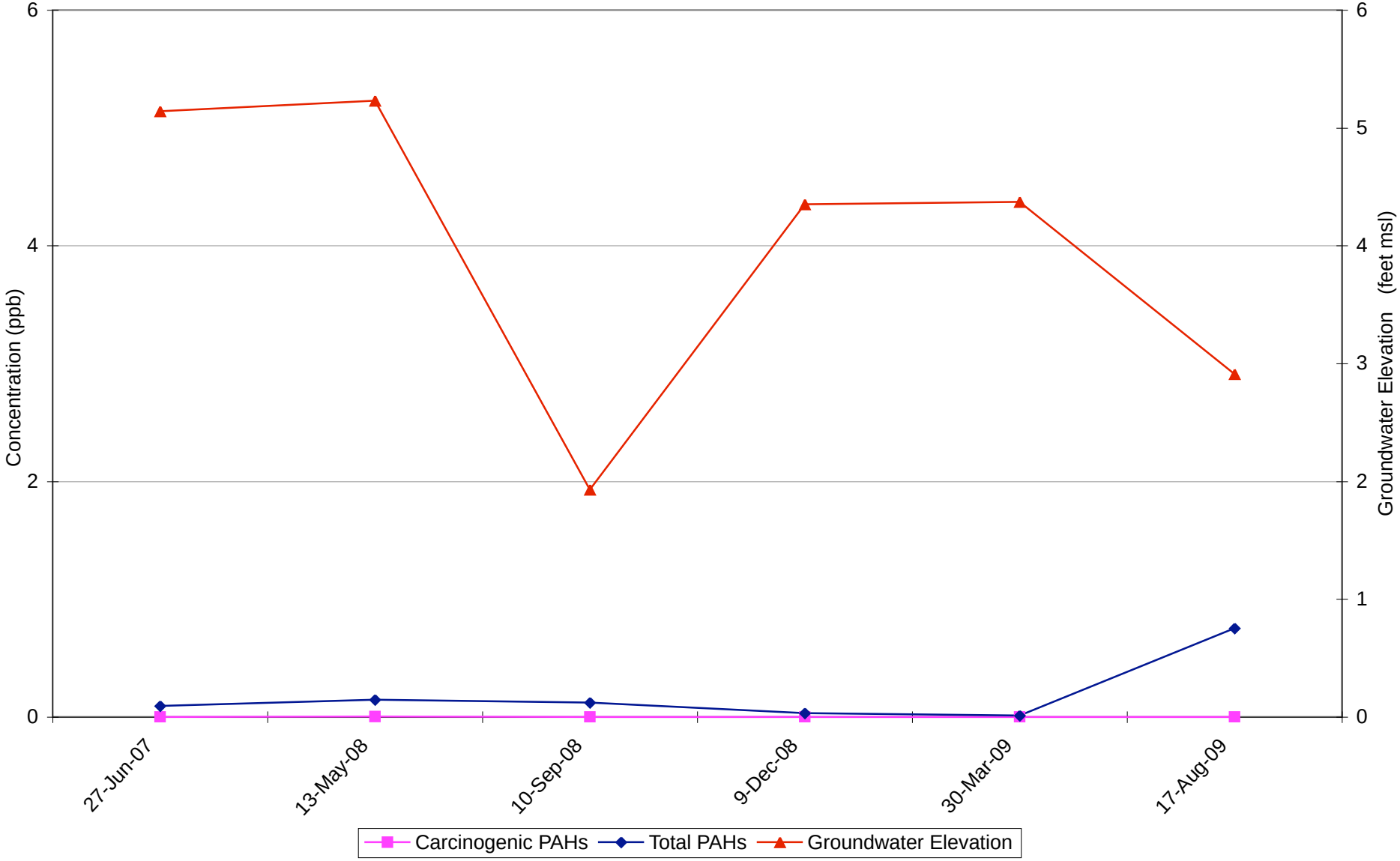
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW-19-125 PAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-19-180 (lower alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
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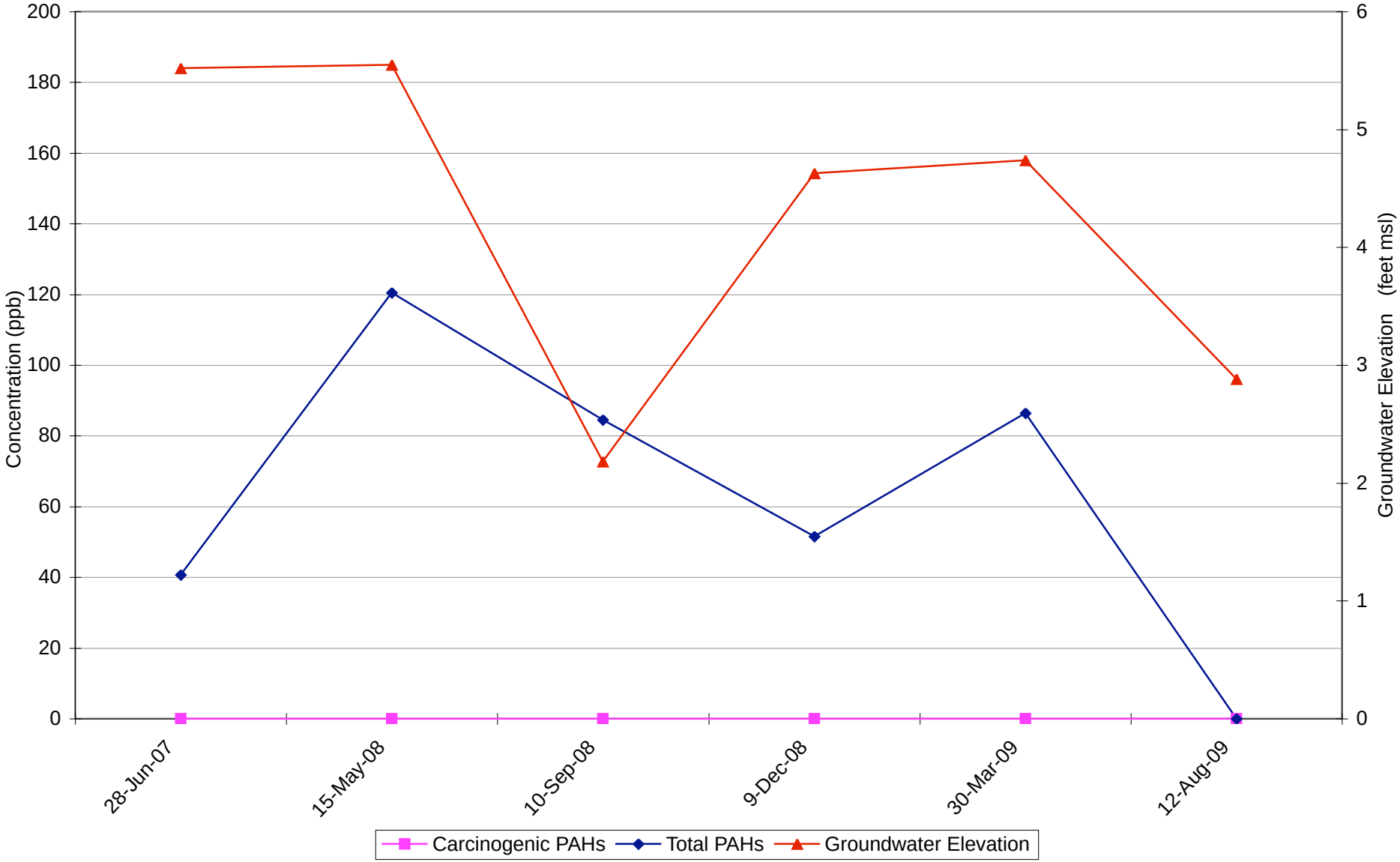
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-20-120 (intermediate alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
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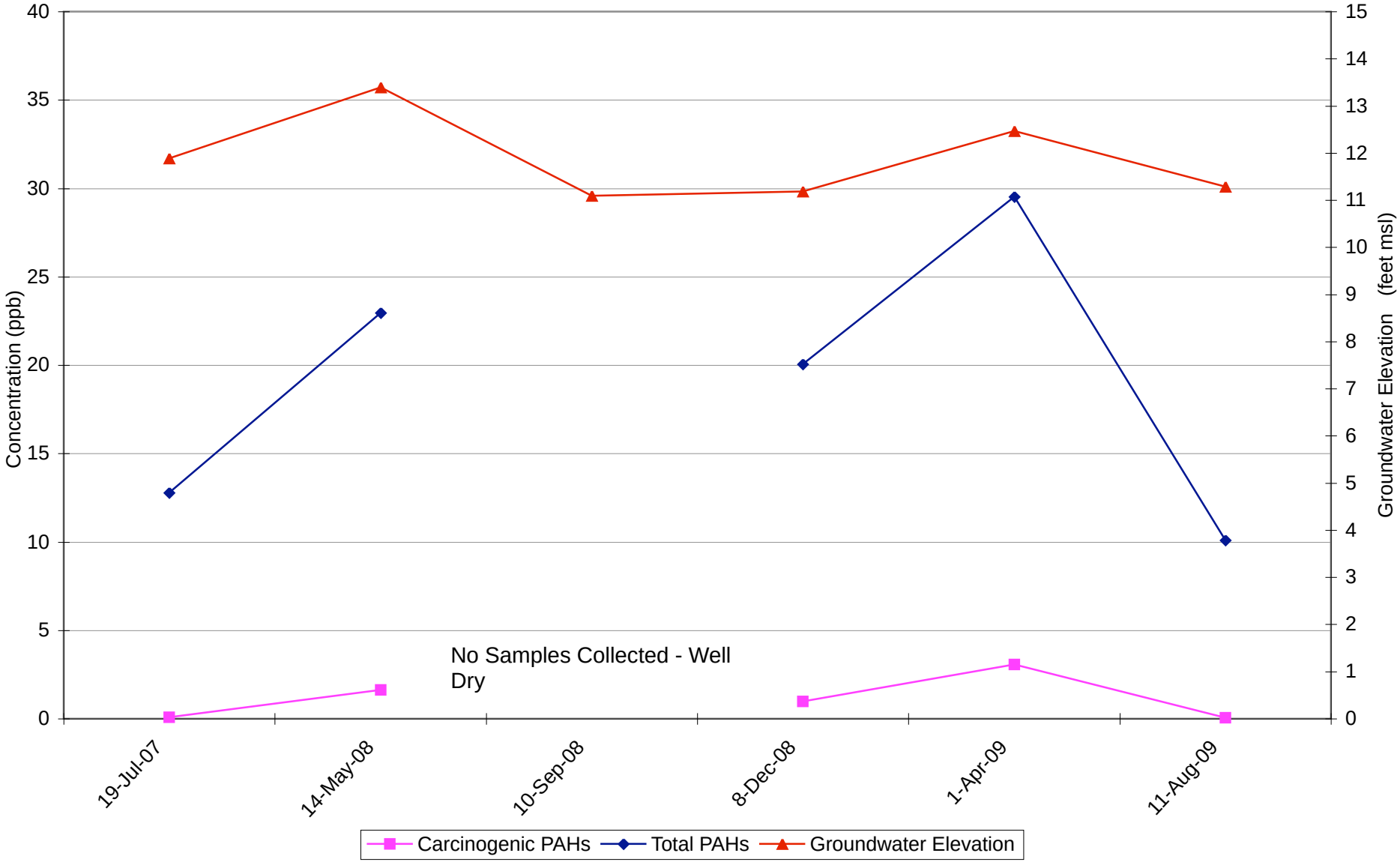
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-21-12 (surficial fill WBZ)
NW Natural - Gasco Facility



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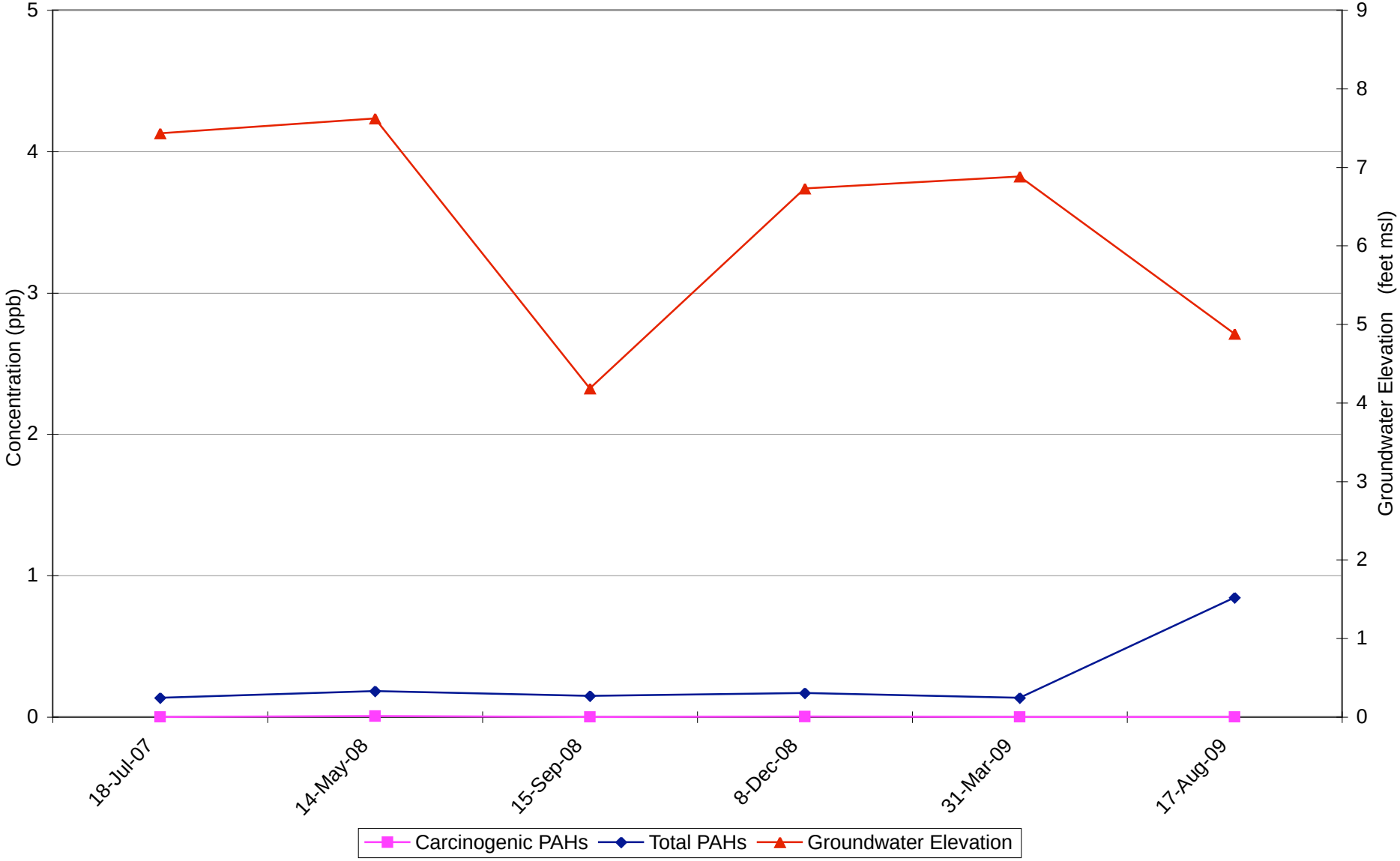
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-21-75 (upper alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
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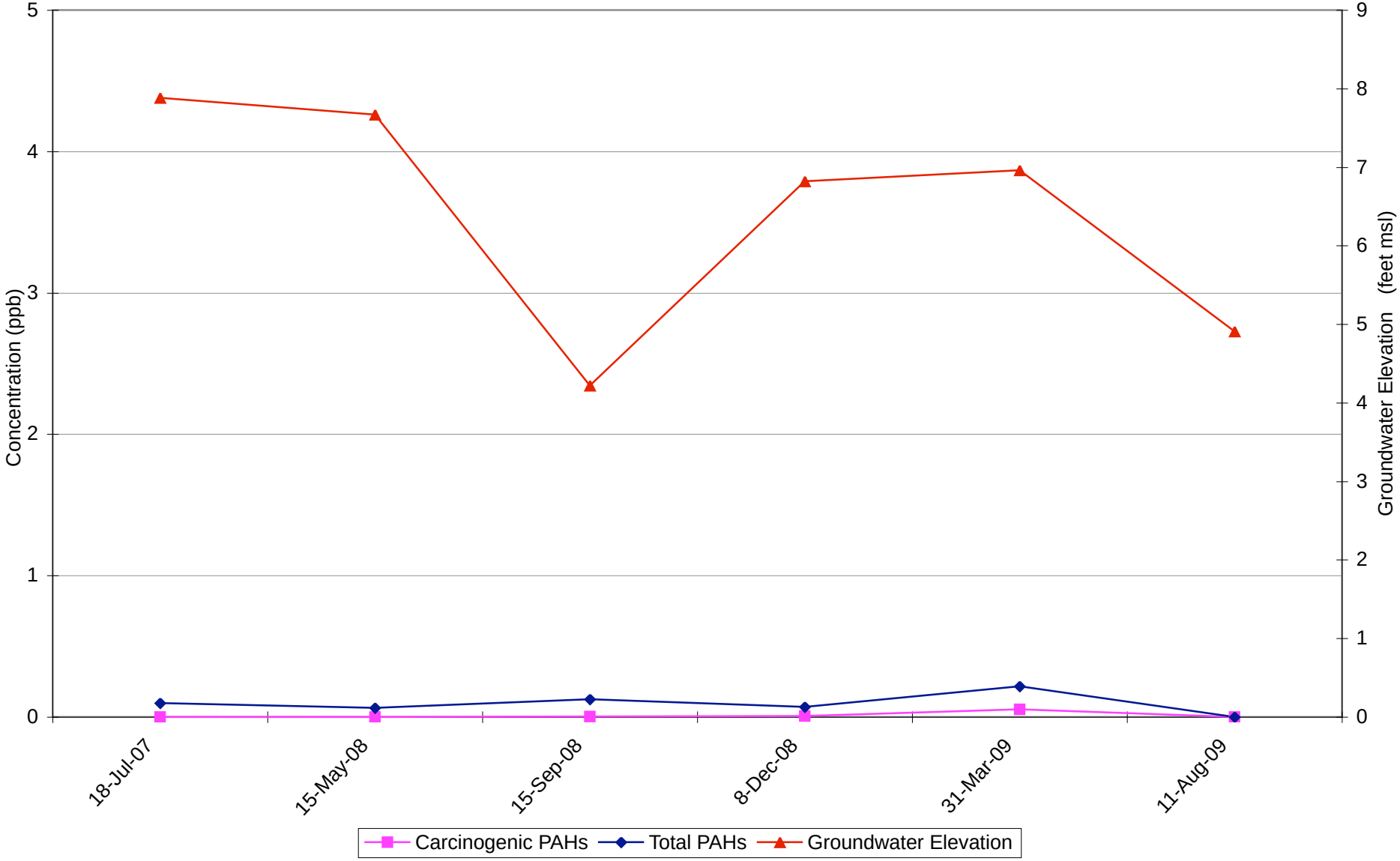
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration through Time
Monitoring Well MW-21-115 (intermediate alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
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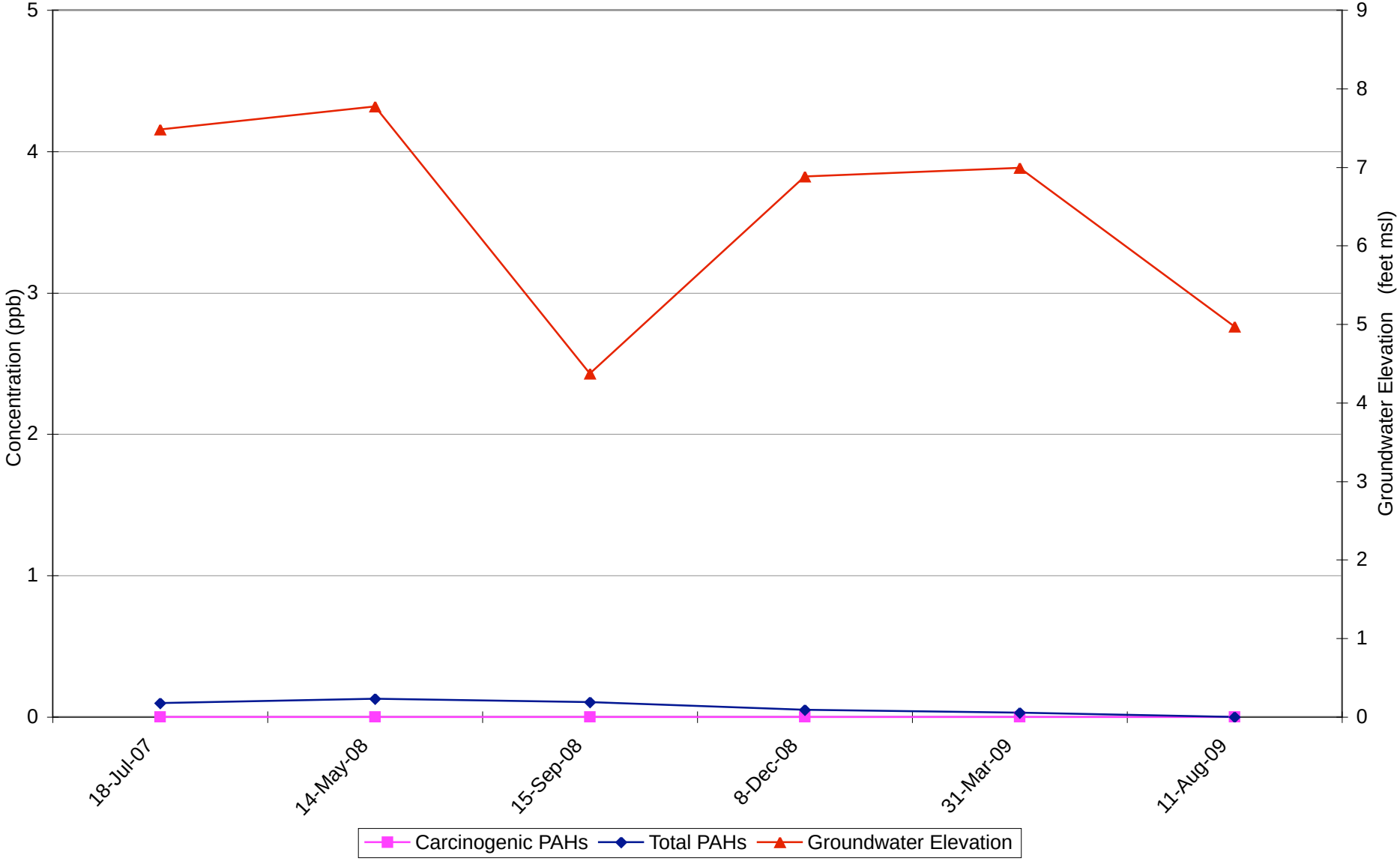
Project No. 2708
HAHN AND ASSOCIATES, INC.

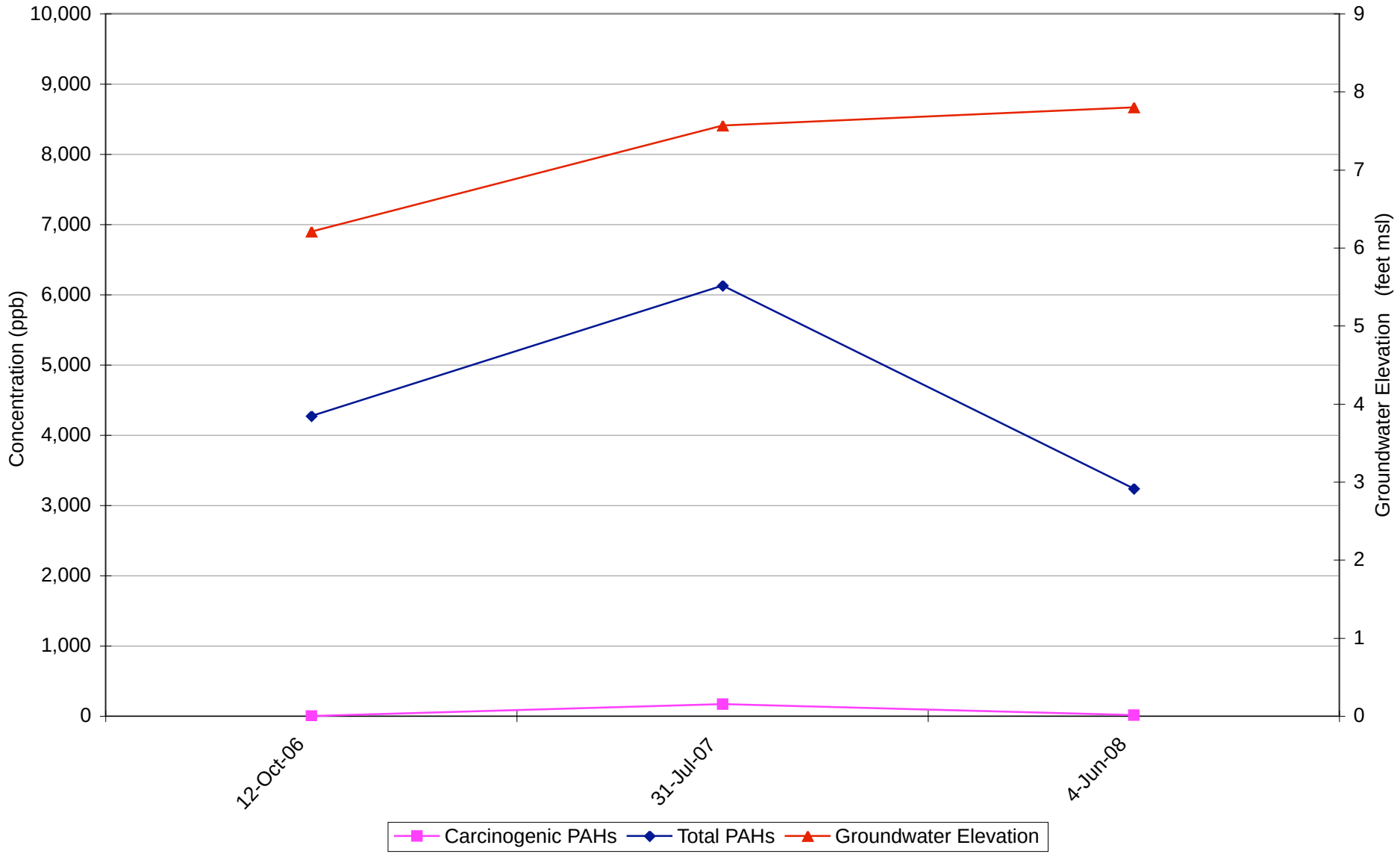
Total PAH Concentration through Time
Monitoring Well MW-21-165 (lower alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; MW-21-165 PAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

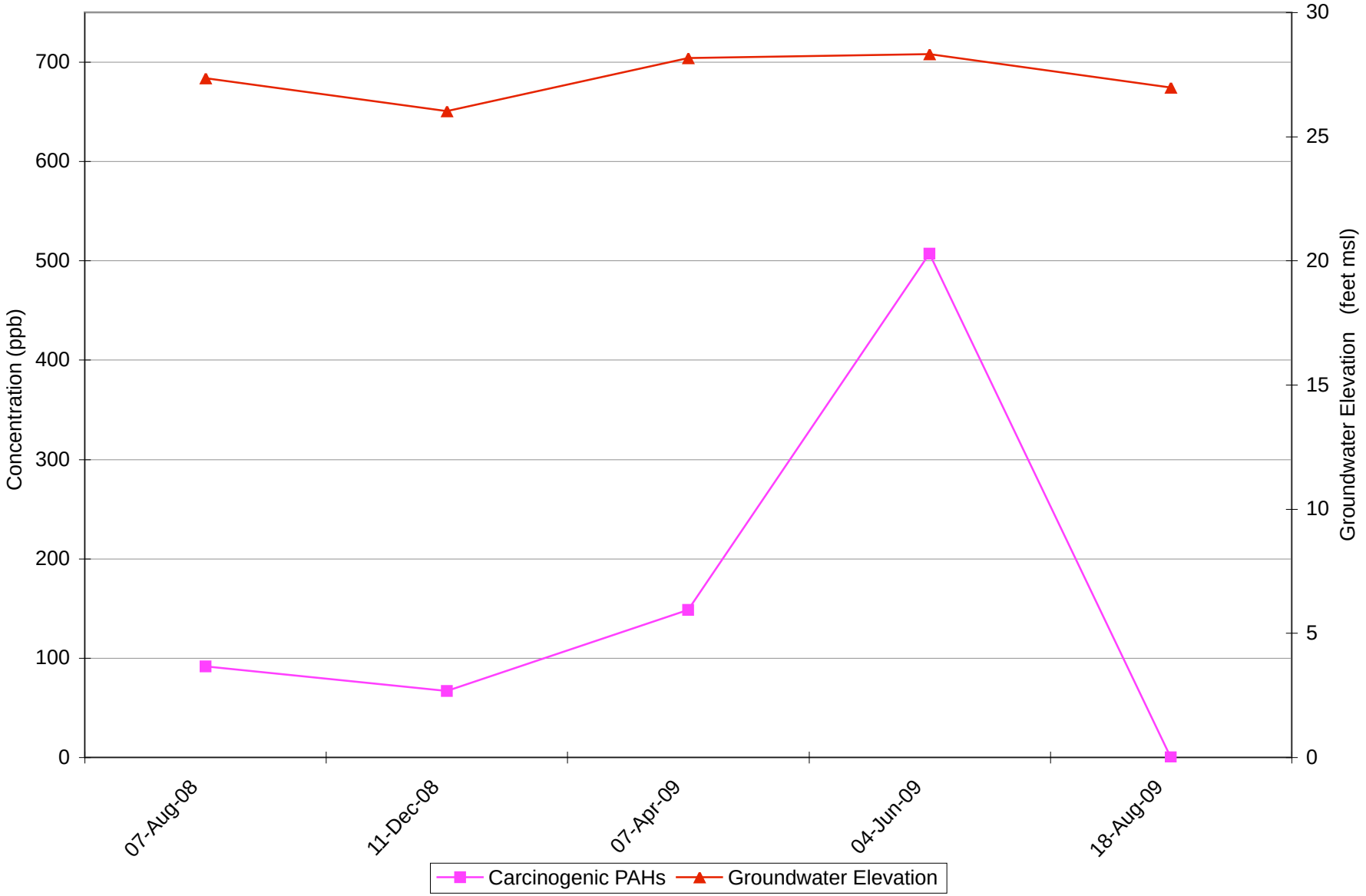
Total PAH Concentration through Time
PW-01
(intermediate alluvial WBZ)
NW Natural - Gasco Facility



Updated: 5/12/10 APR
File Name: Concentration Plots_BAU_3Q 2009.xls ; PW-01 PAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

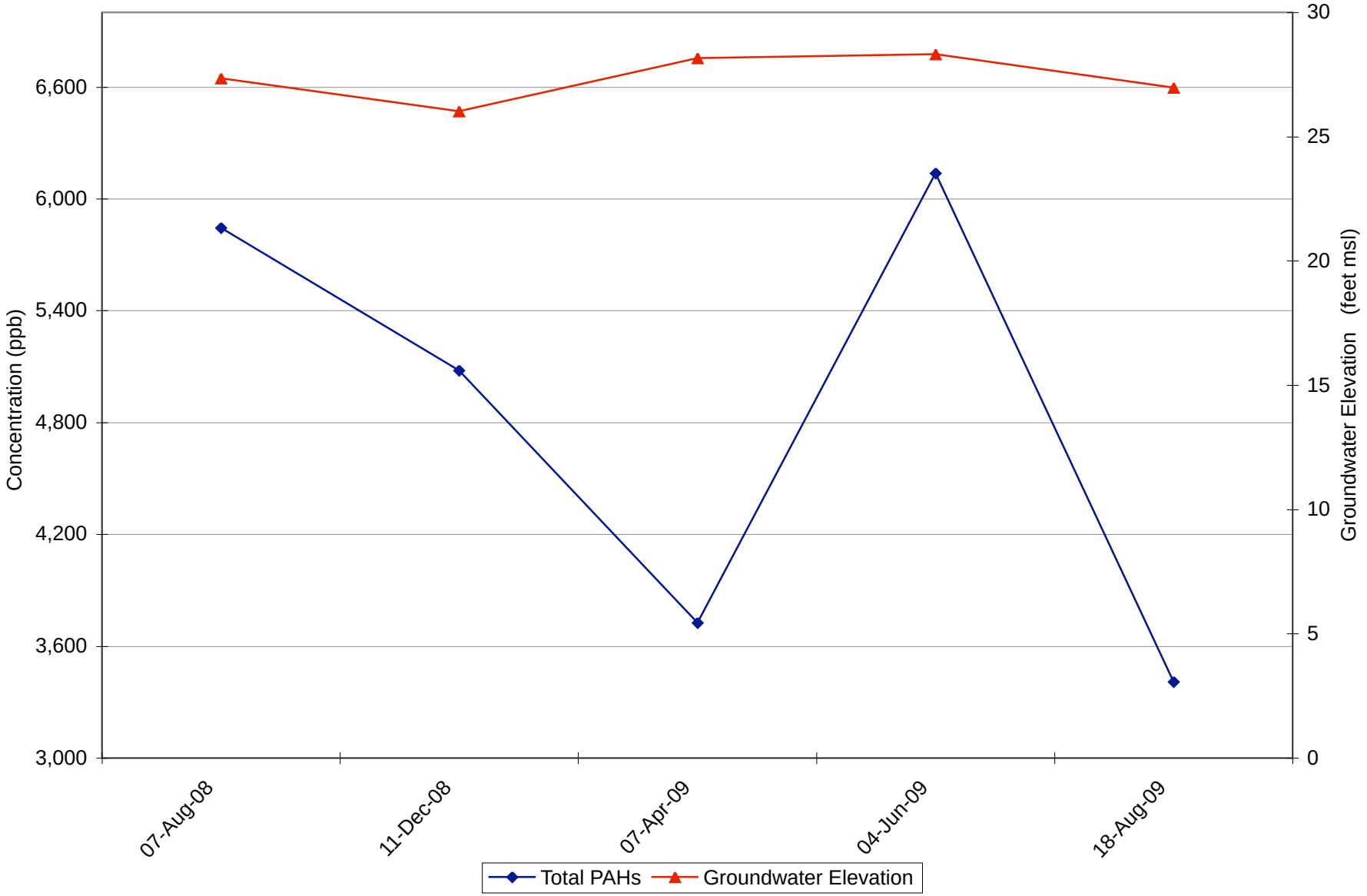
Total Carcinogenic PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-1-20 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; NWN-1-20 CPAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

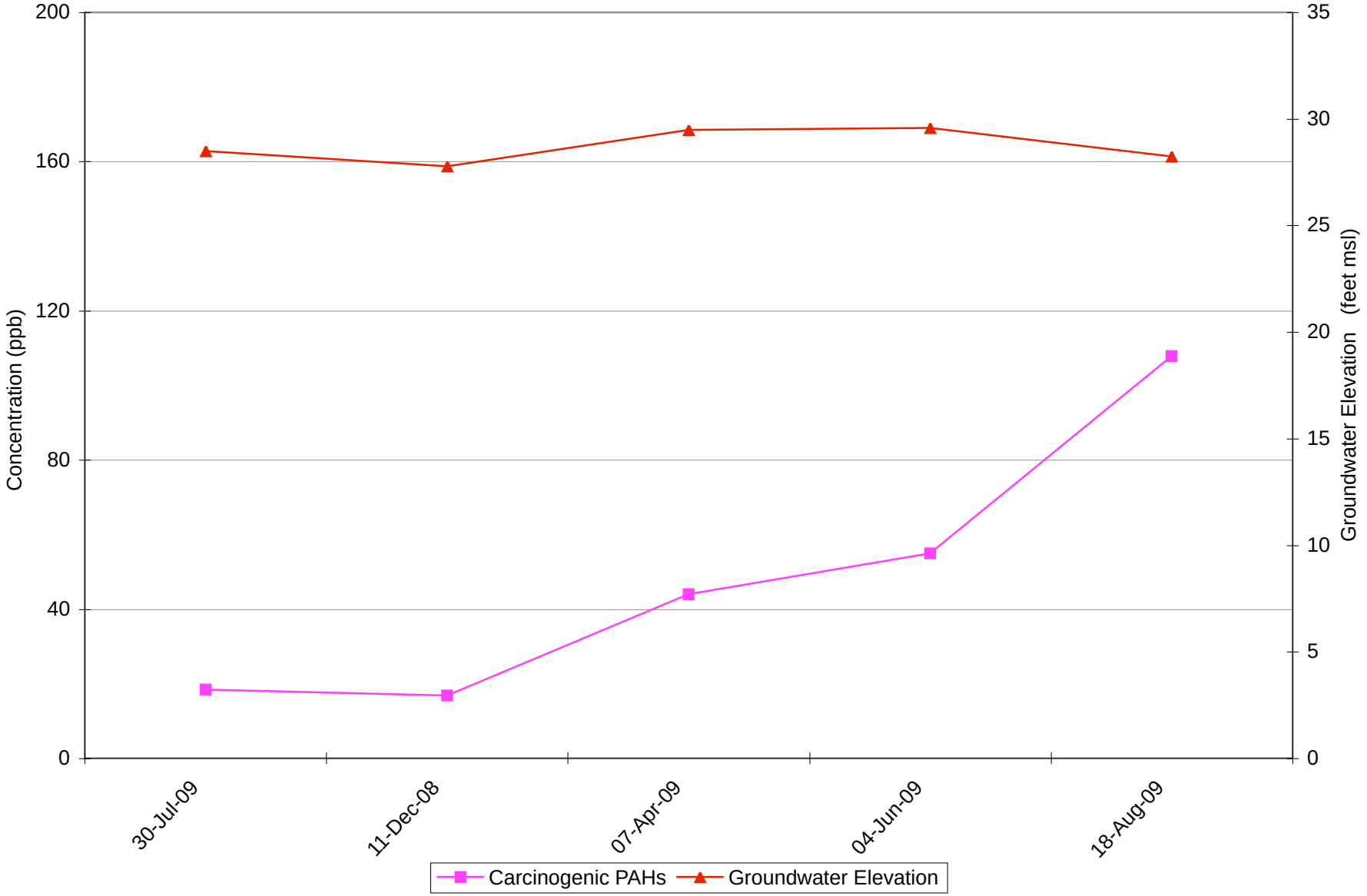
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-1-20 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; NWN-1-20 TPAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

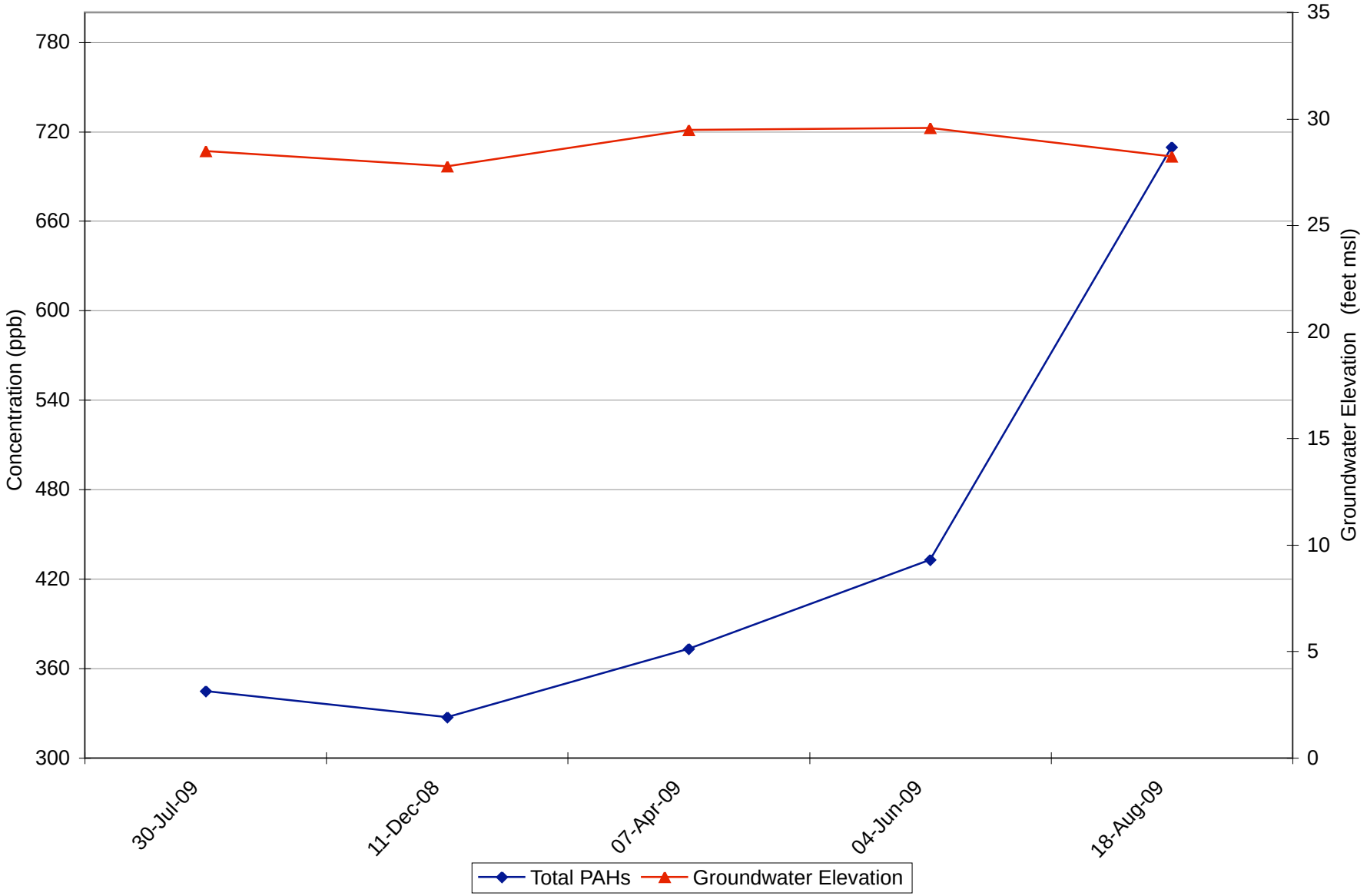
Total Carcinogenic PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-2-20 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; NWN-2-20 CPAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

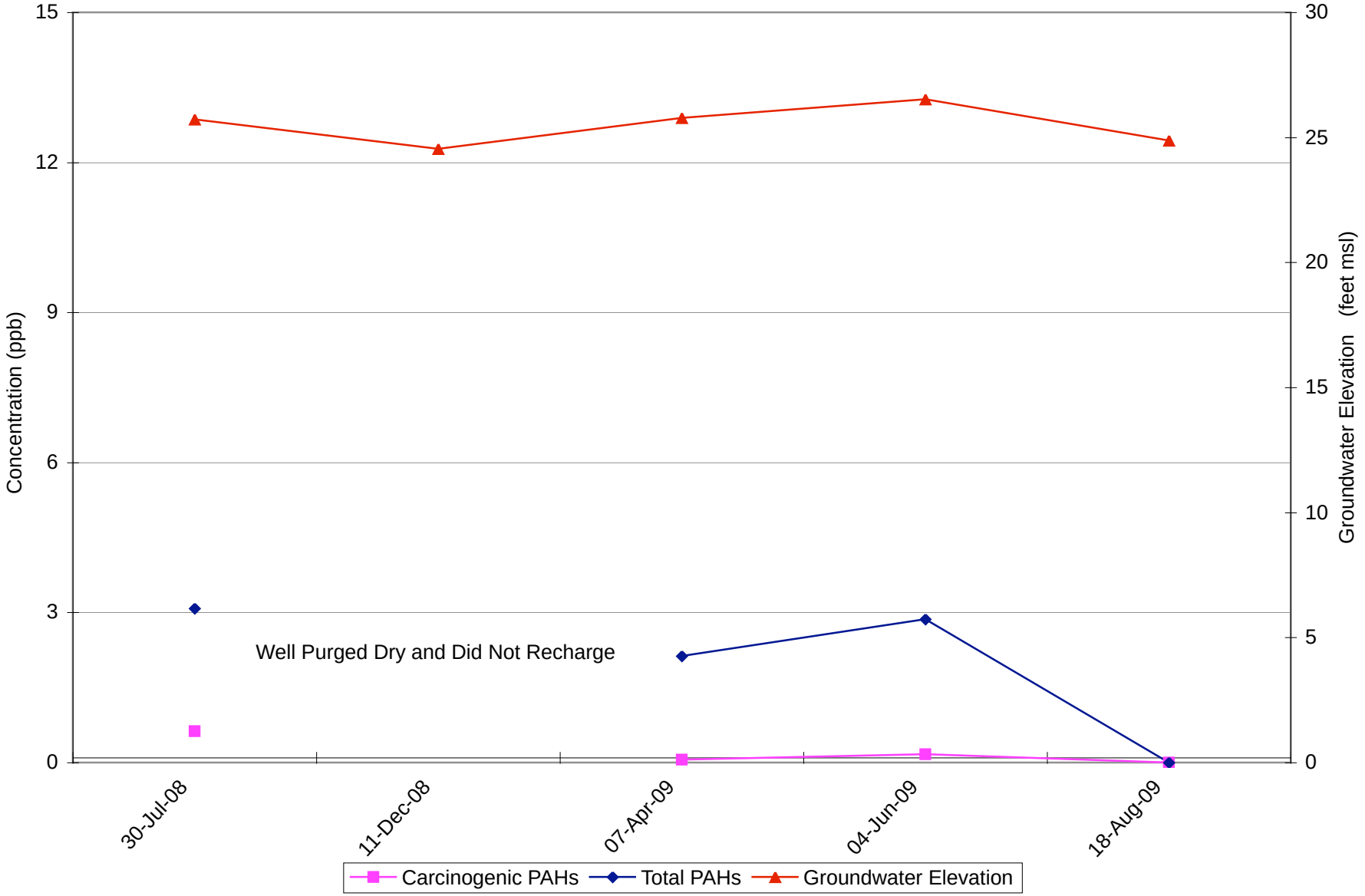
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-2-20 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 APR
File Name: Concentration Plots_BAU_3Q 2009.xls ; NWN-2-20 TPAHs (2)

Project No. 2708
HAHN AND ASSOCIATES, INC.

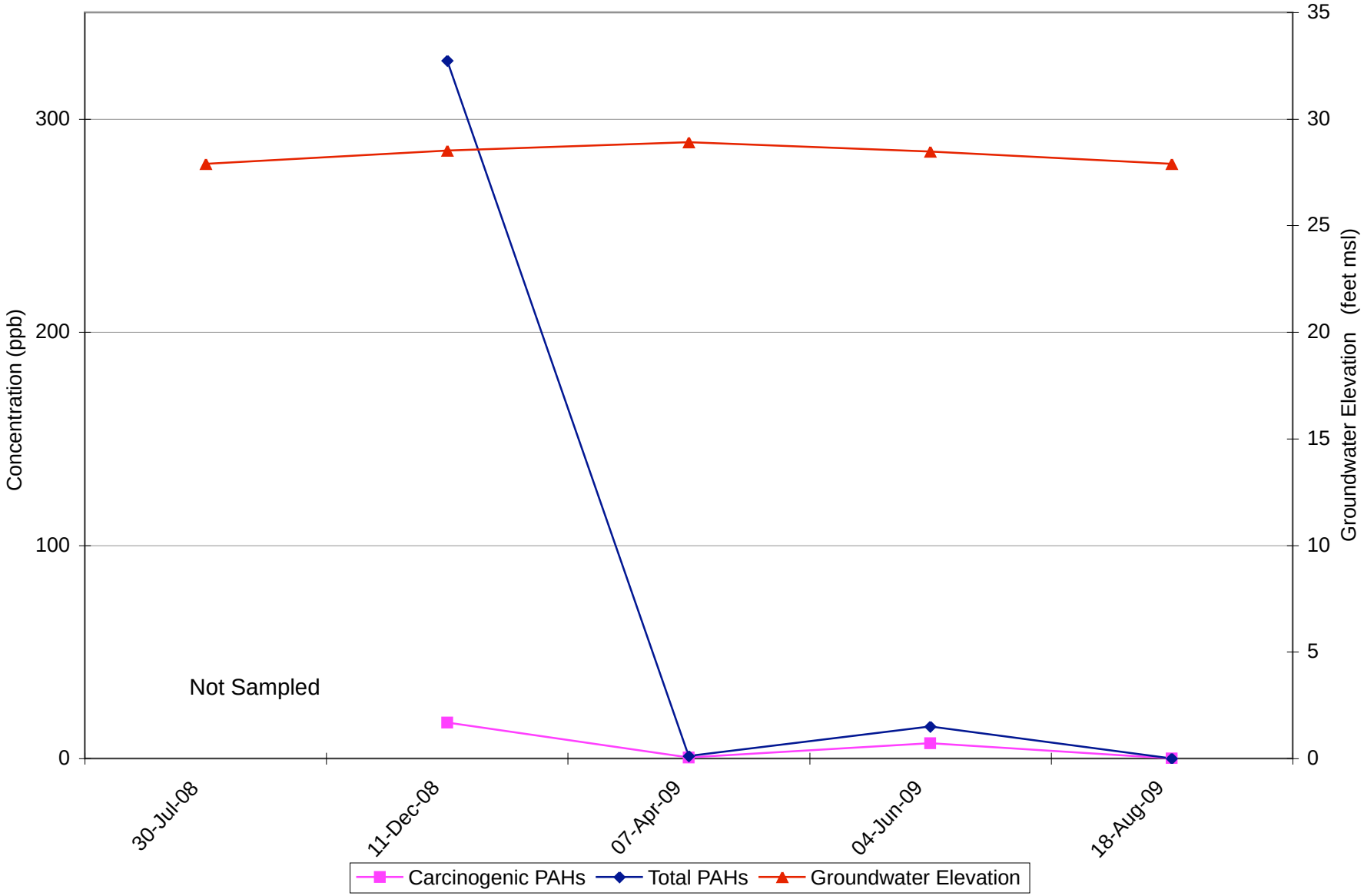
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-3-17 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; NWN-3-17 PAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

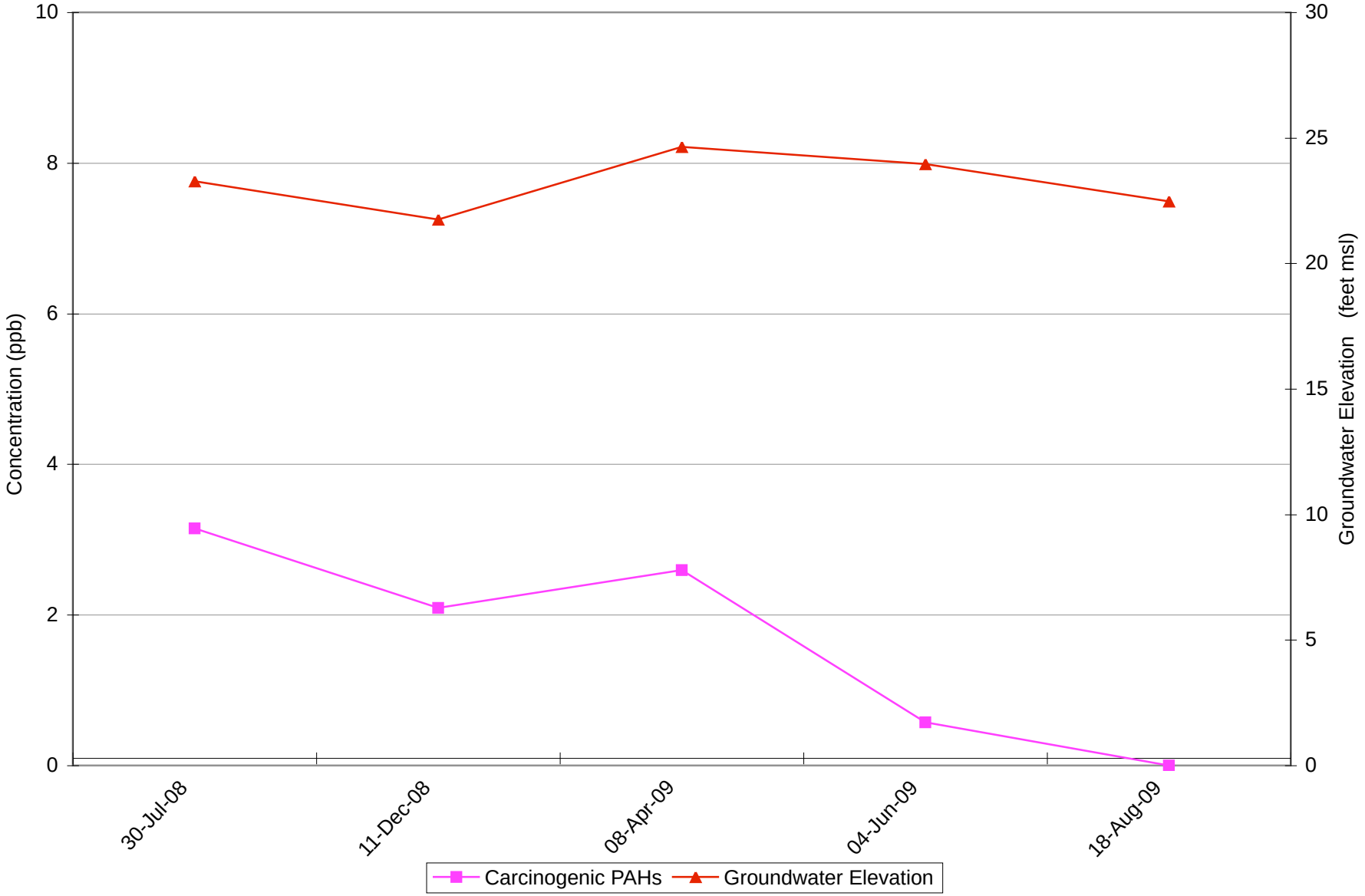
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-4-15 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; NWN-4-15 PAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total Carcinogenic PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-5-20 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
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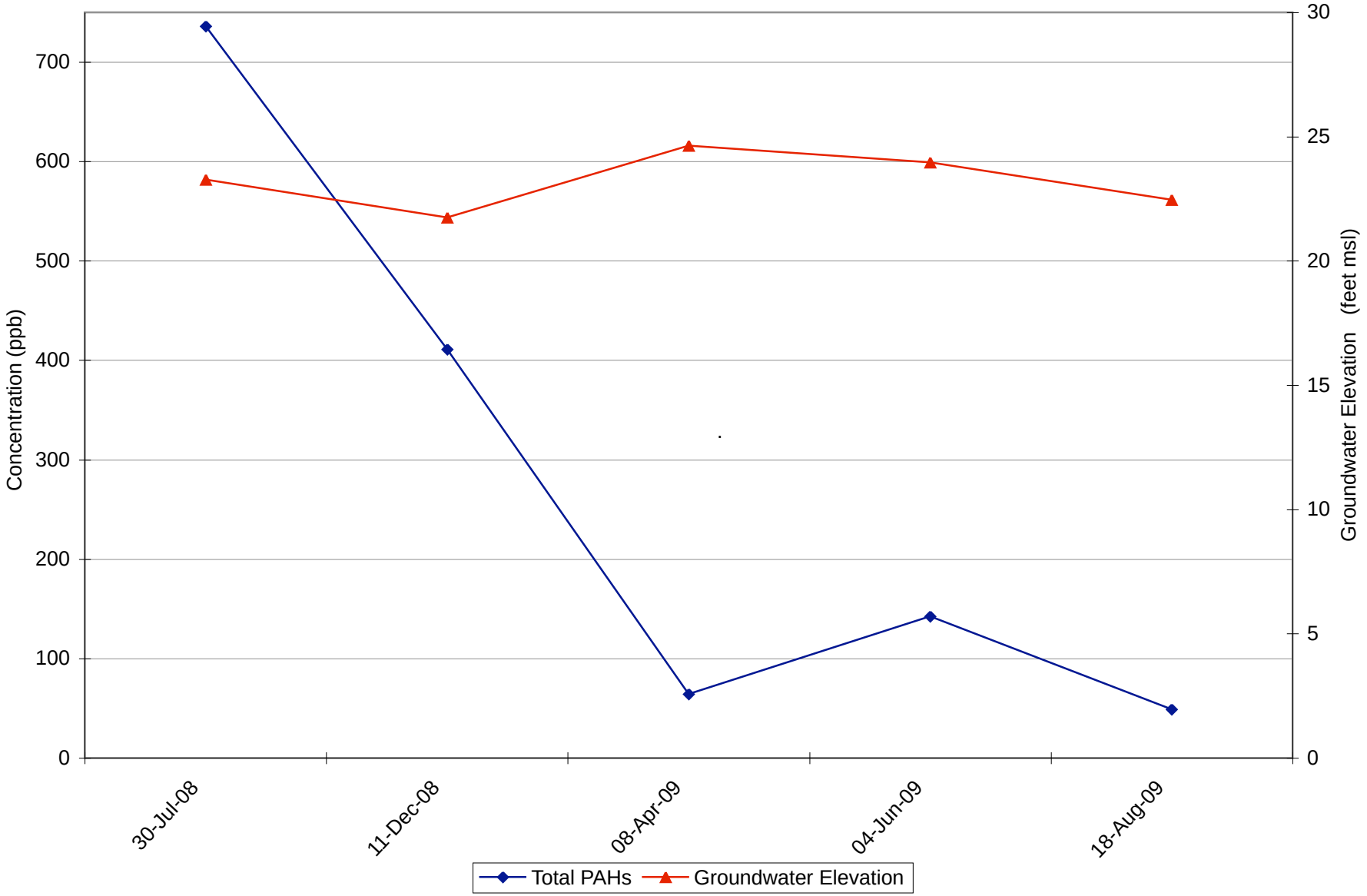
Project No. 2708
HAHN AND ASSOCIATES, INC.

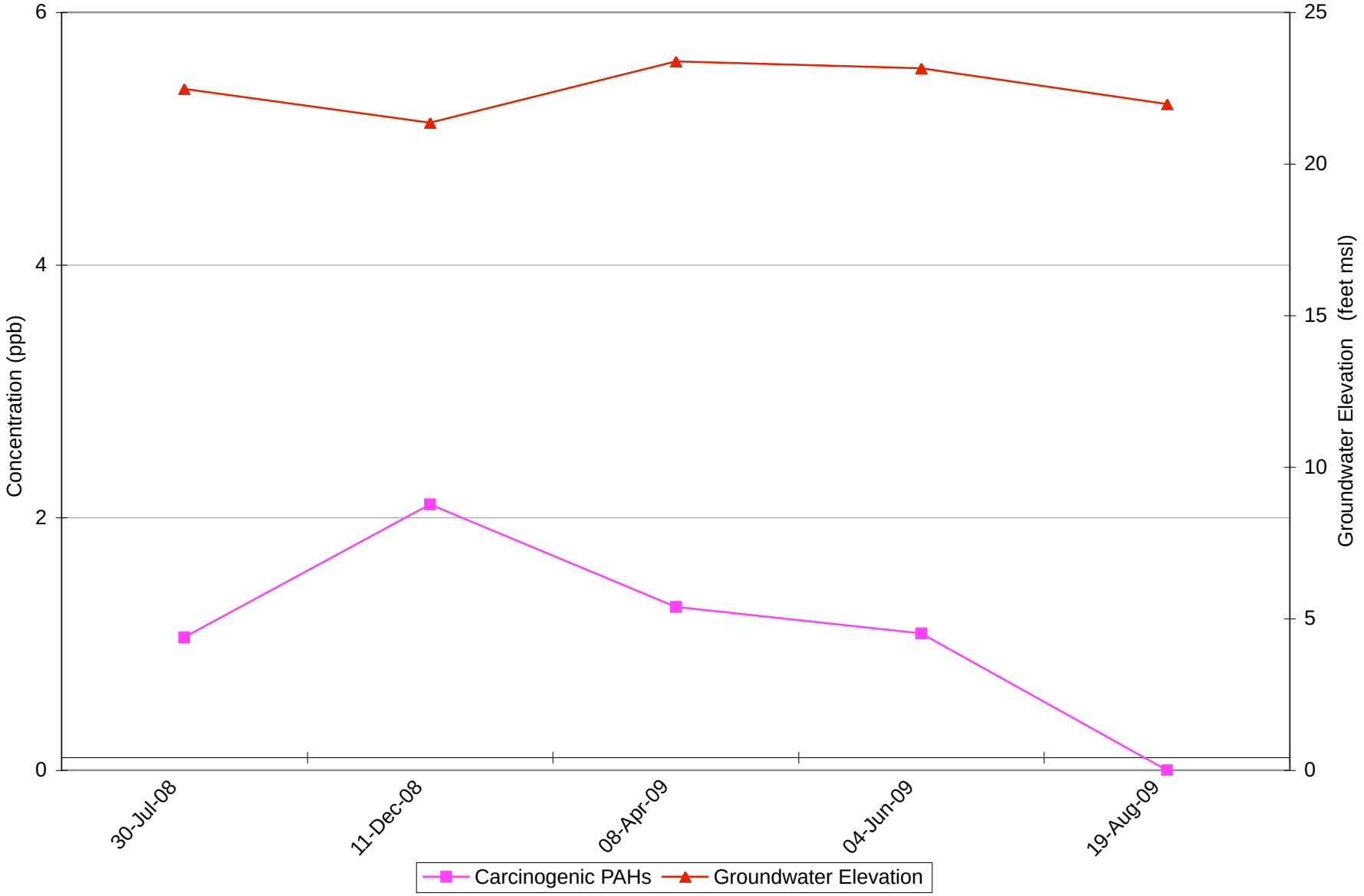
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-5-20 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; NWN-5-20 TPAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total Carcinogenic PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-6-31 (surficial fill WBZ)
Siltronic Corporation Property



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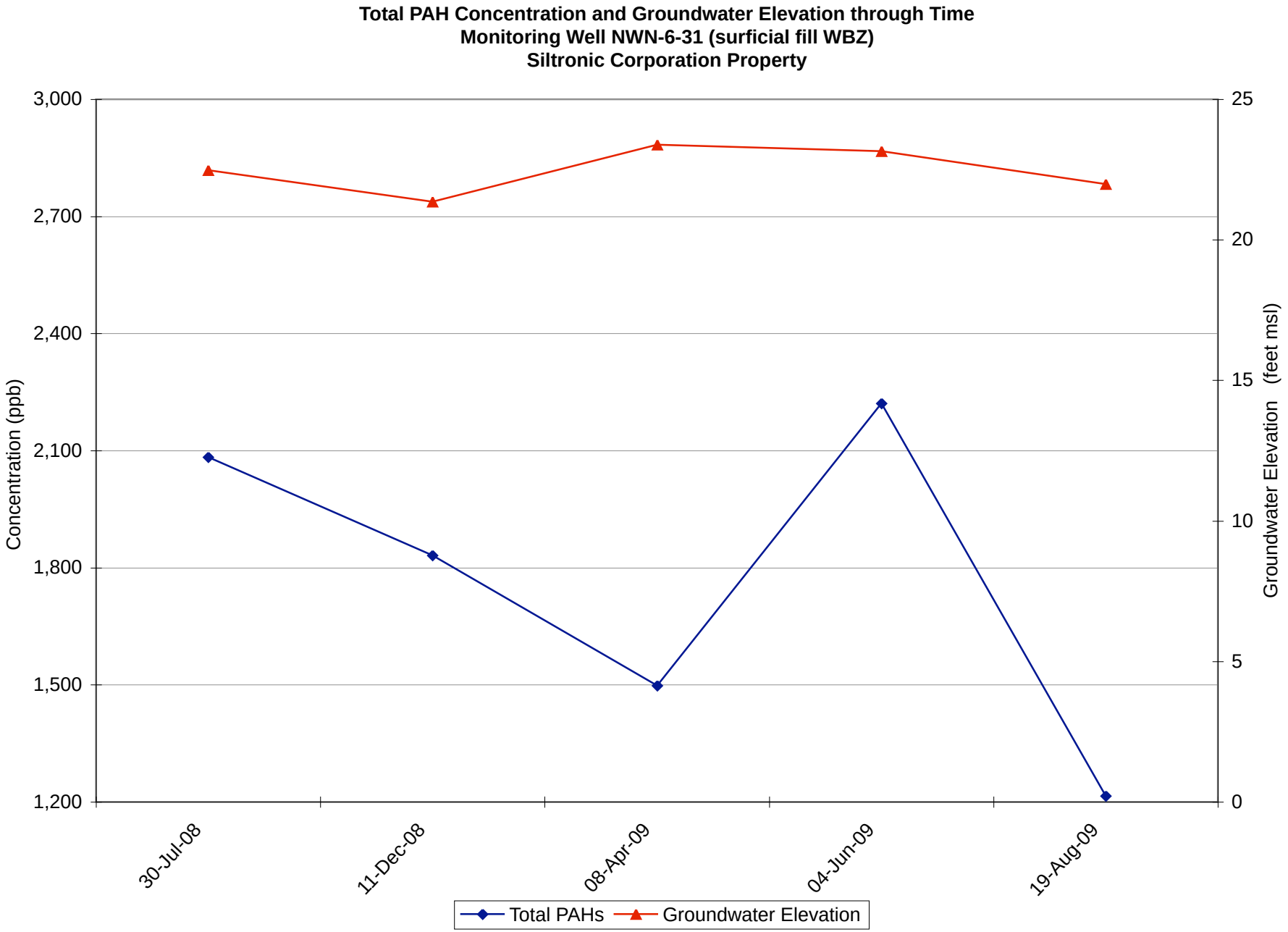
Project No. 2708
HAHN AND ASSOCIATES, INC.



Updated: 5/12/10 BAU
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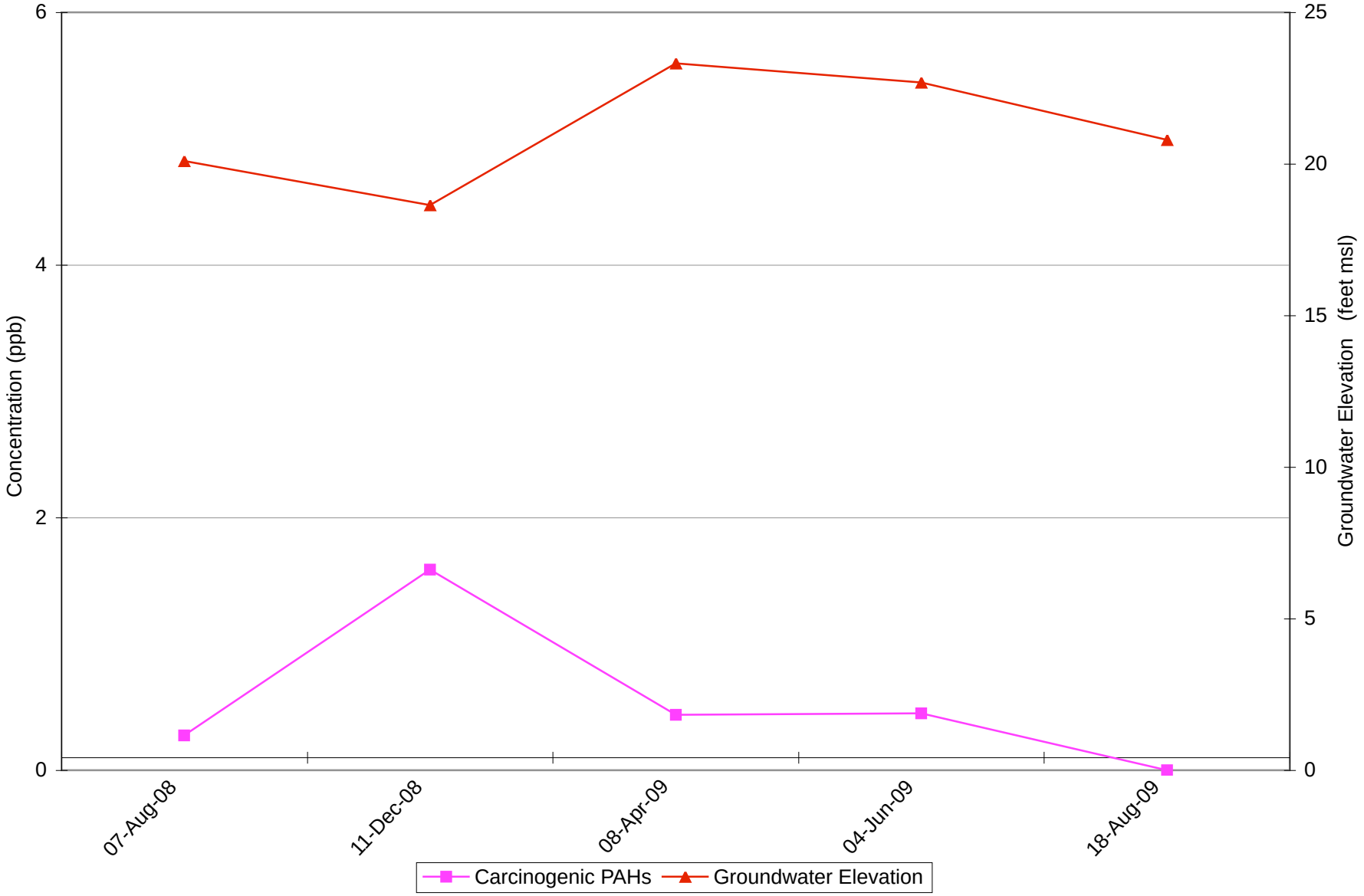
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total Carcinogenic PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-7-30 (surficial fill WBZ)
Siltronic Corporation Property



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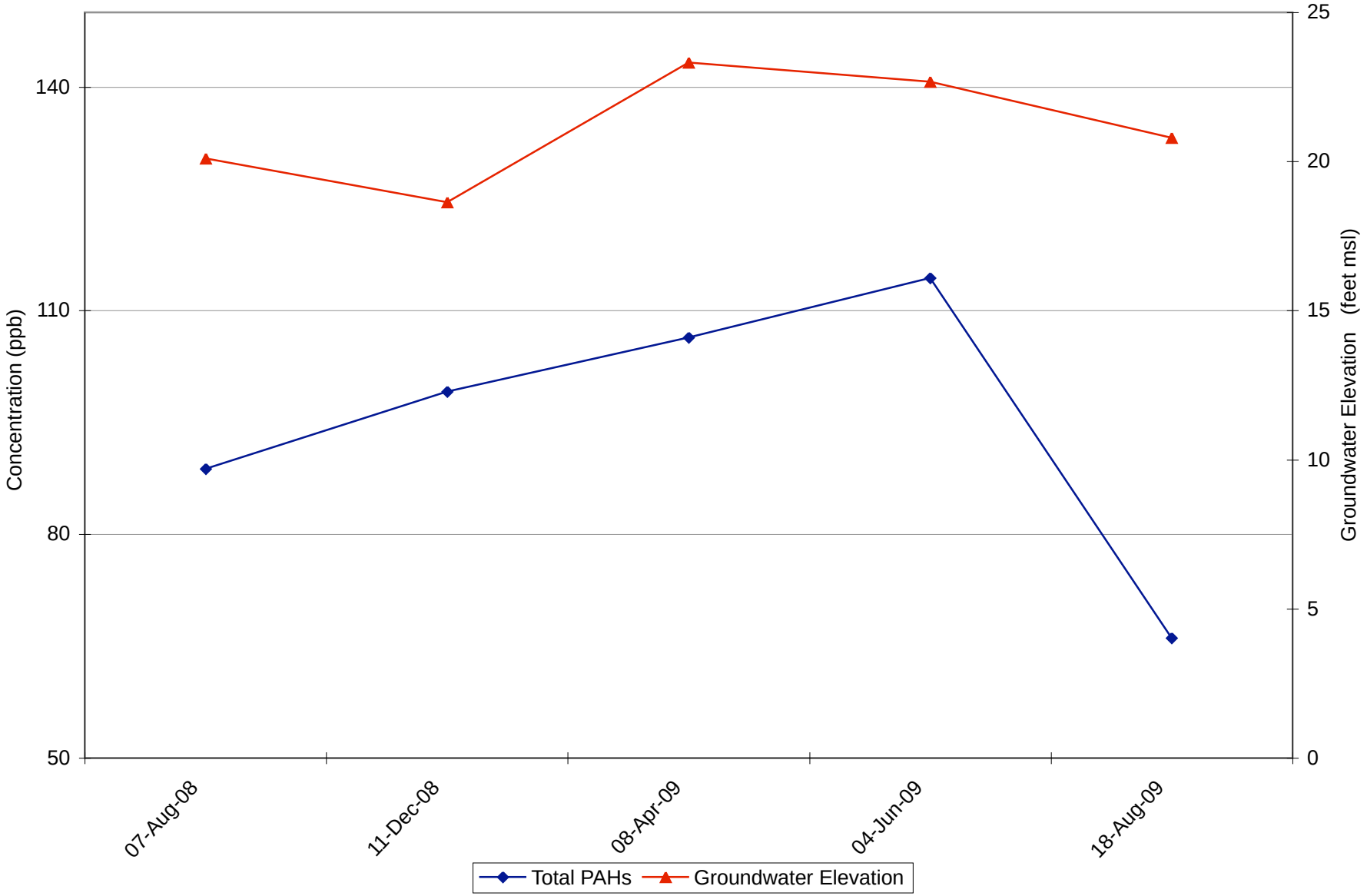
Project No. 2708
HAHN AND ASSOCIATES, INC.

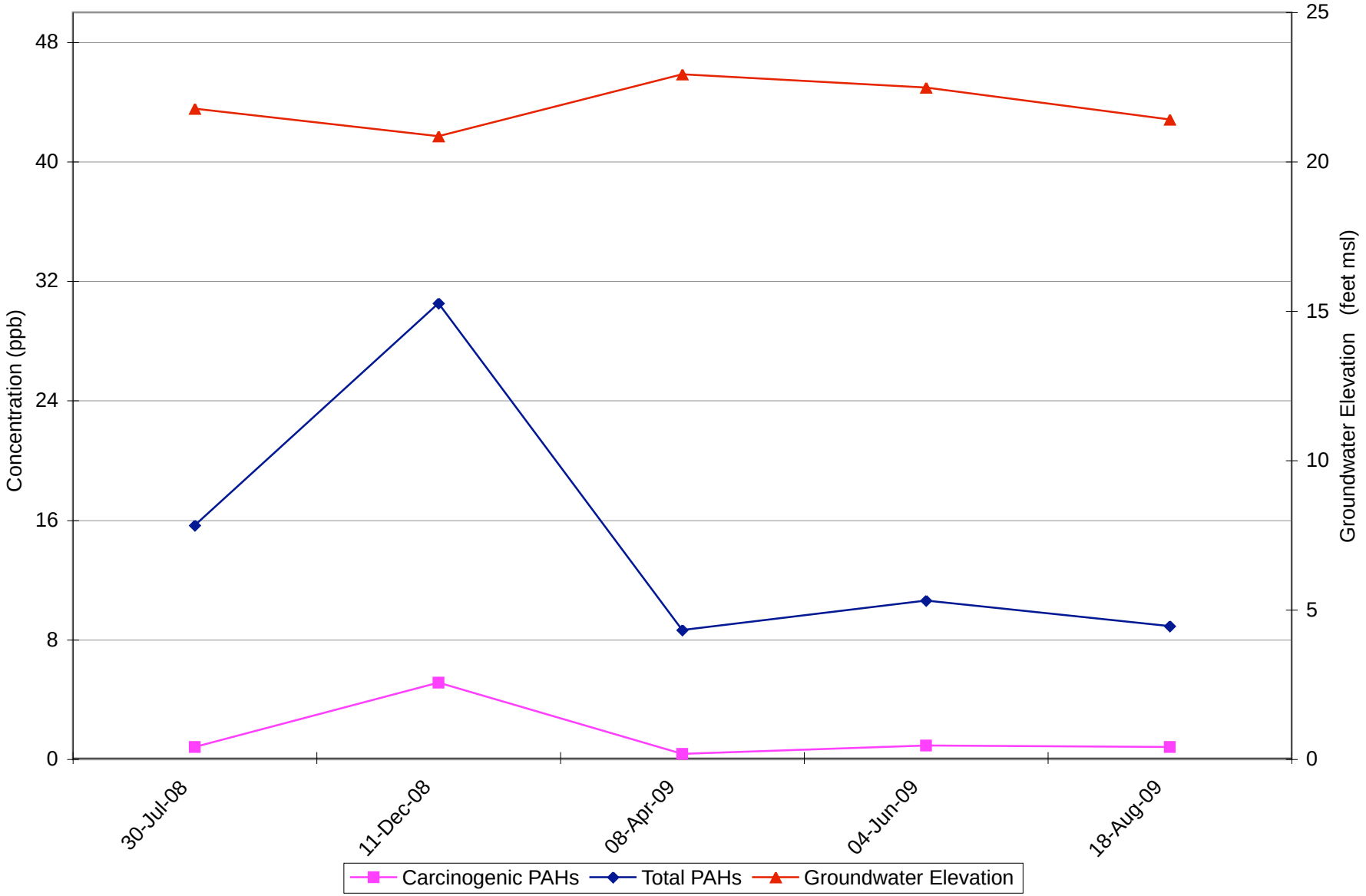
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-7-30 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; NWN-7-30 TPAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

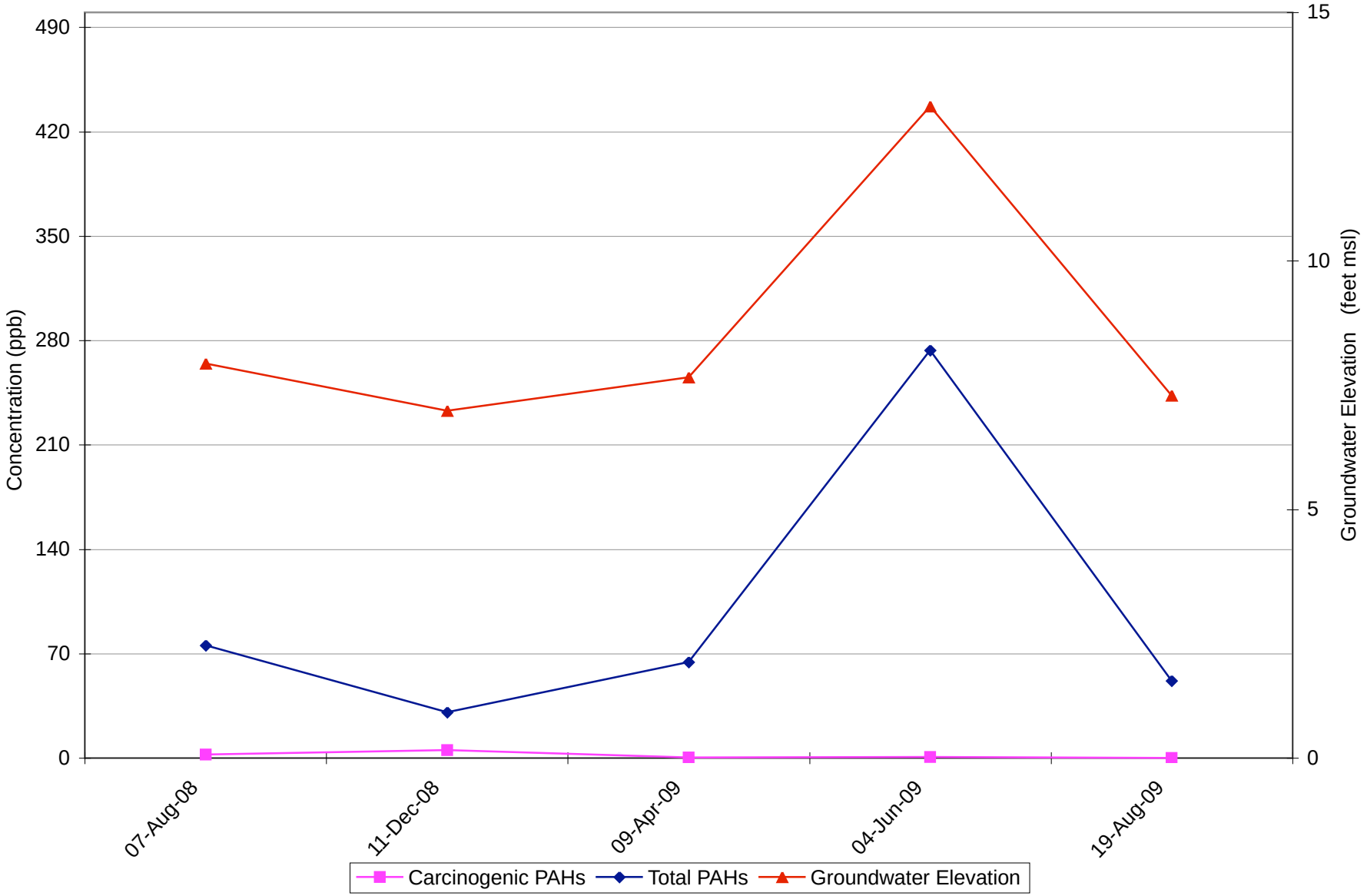
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-8-30 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; NWN-8-30 PAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-9-31 (surficial fill WBZ)
Siltronic Corporation Property



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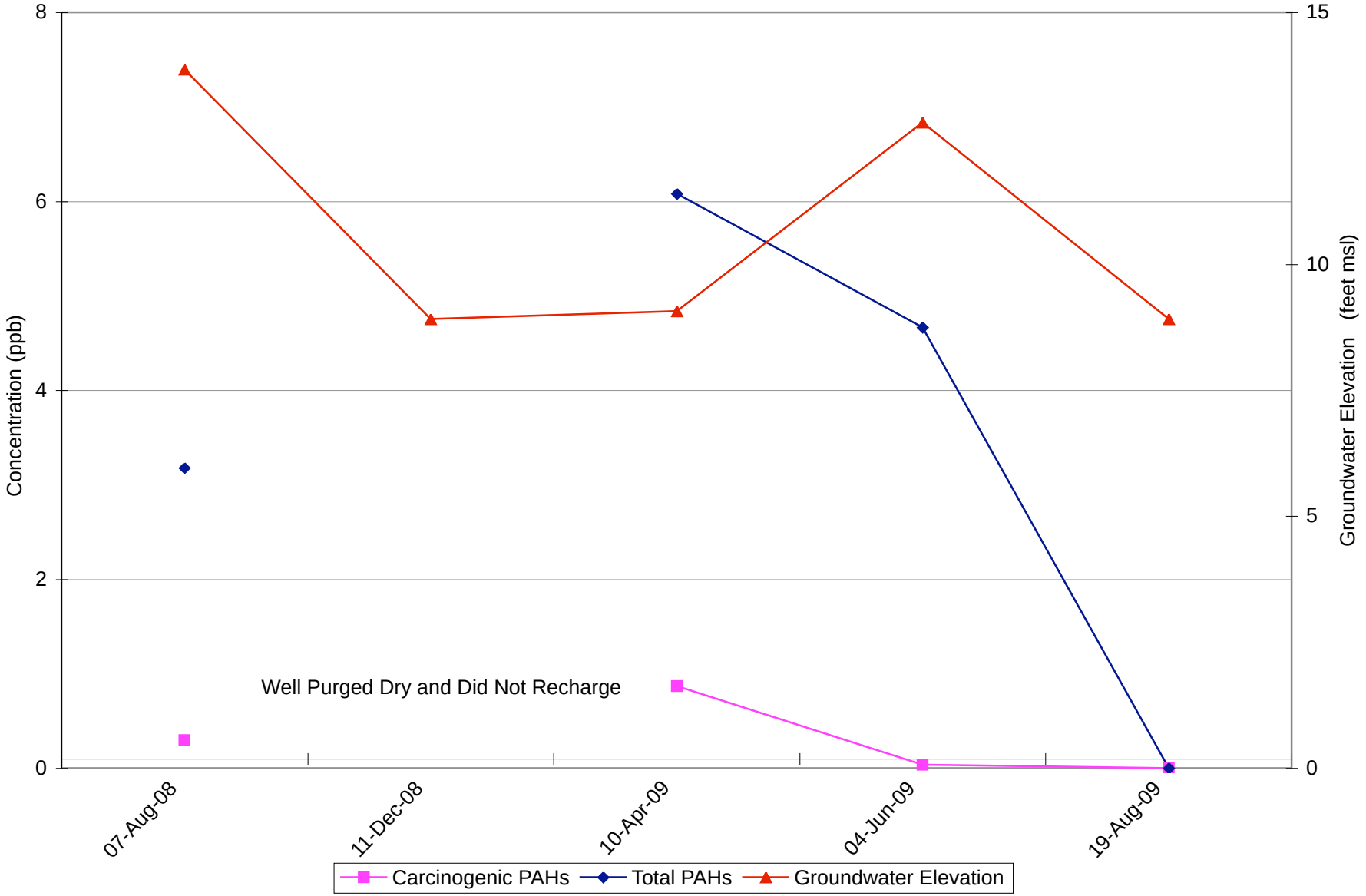
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well NWN-10-26 (surficial fill WBZ)
Siltronic Corporation Property



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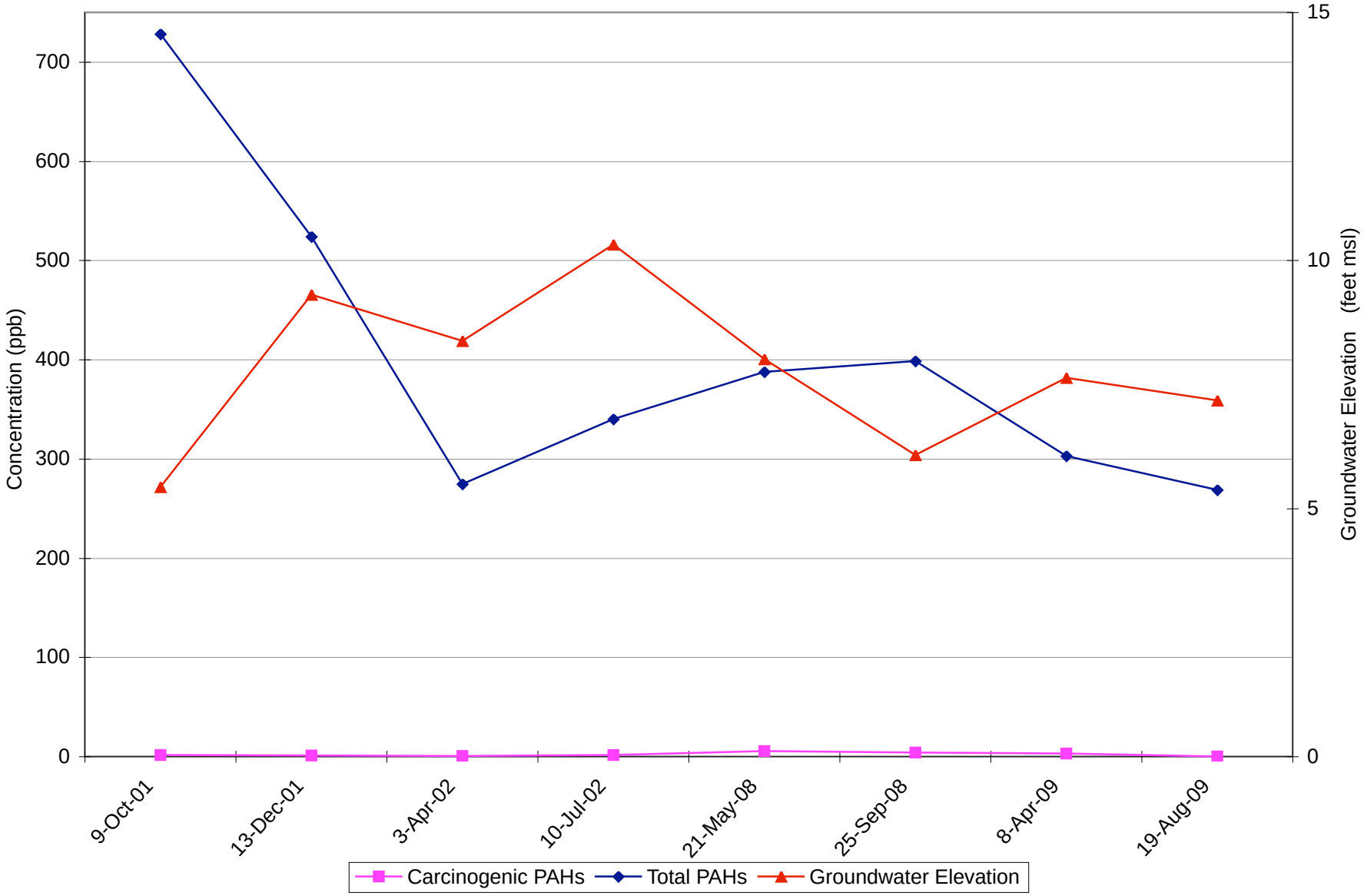
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-8-33 (surficial fill WBZ)
Siltronic Corporation Property



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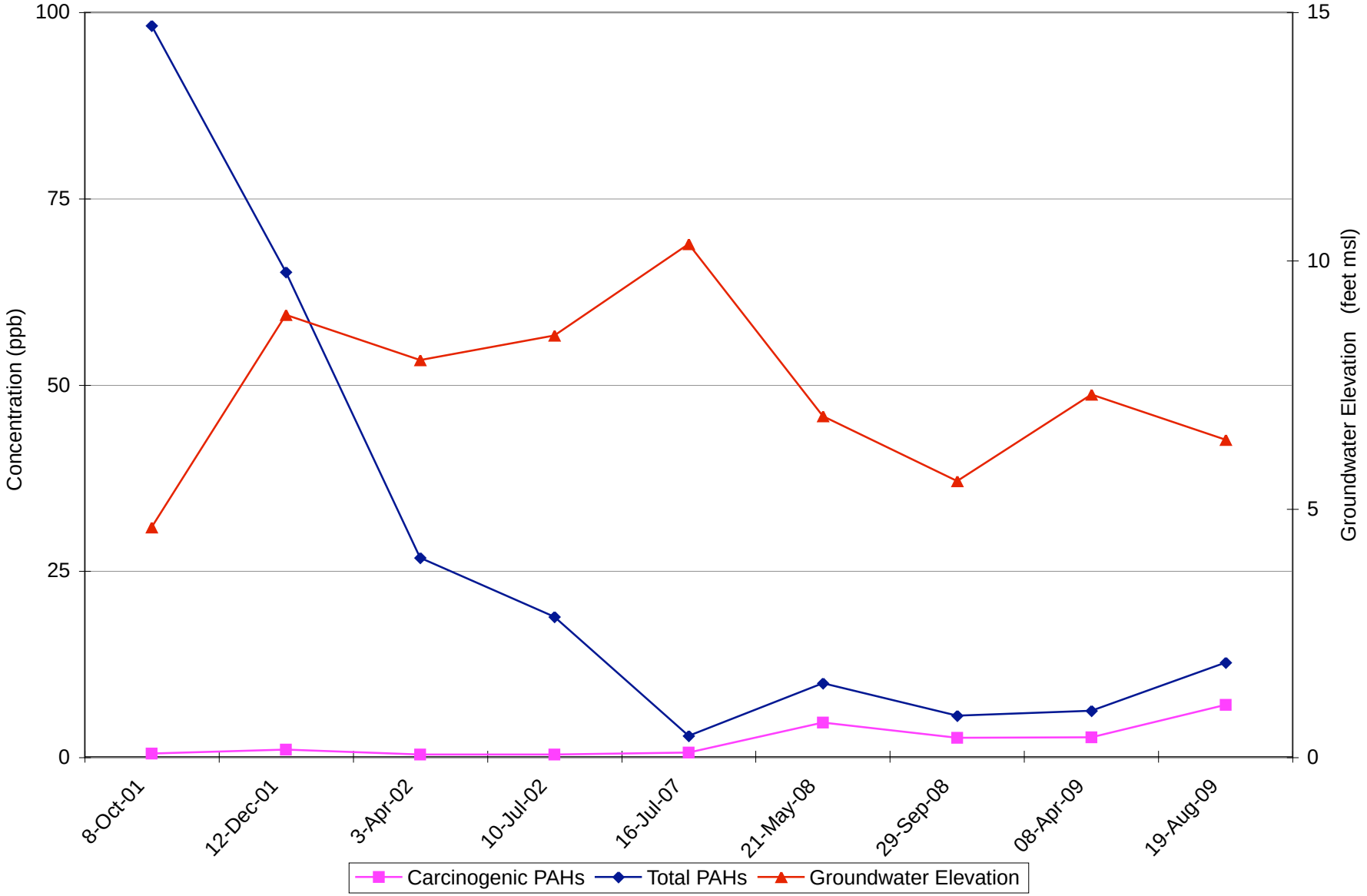
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-8-59 (upper alluvial WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
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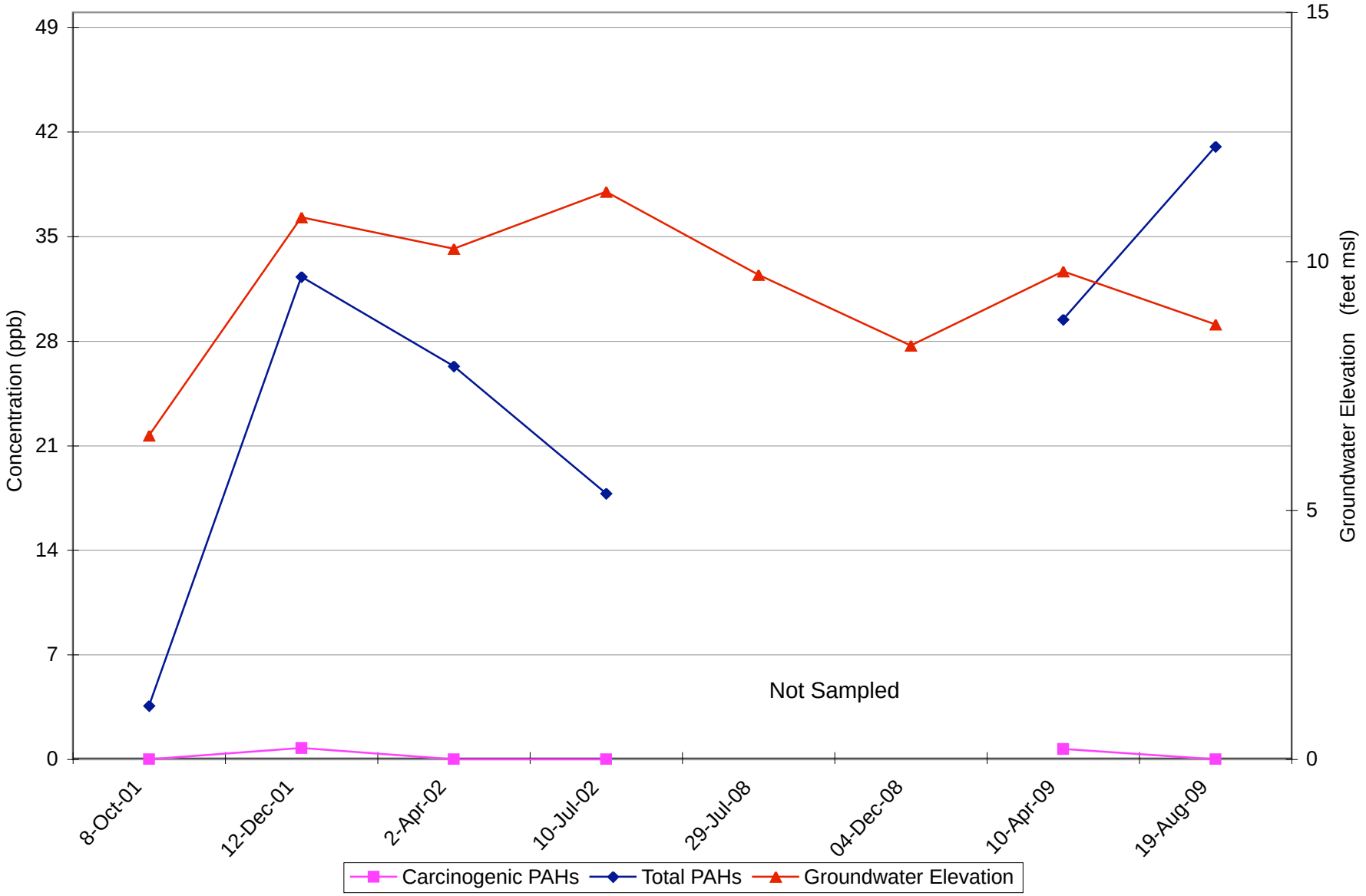
Project No. 2708
HAHN AND ASSOCIATES, INC.

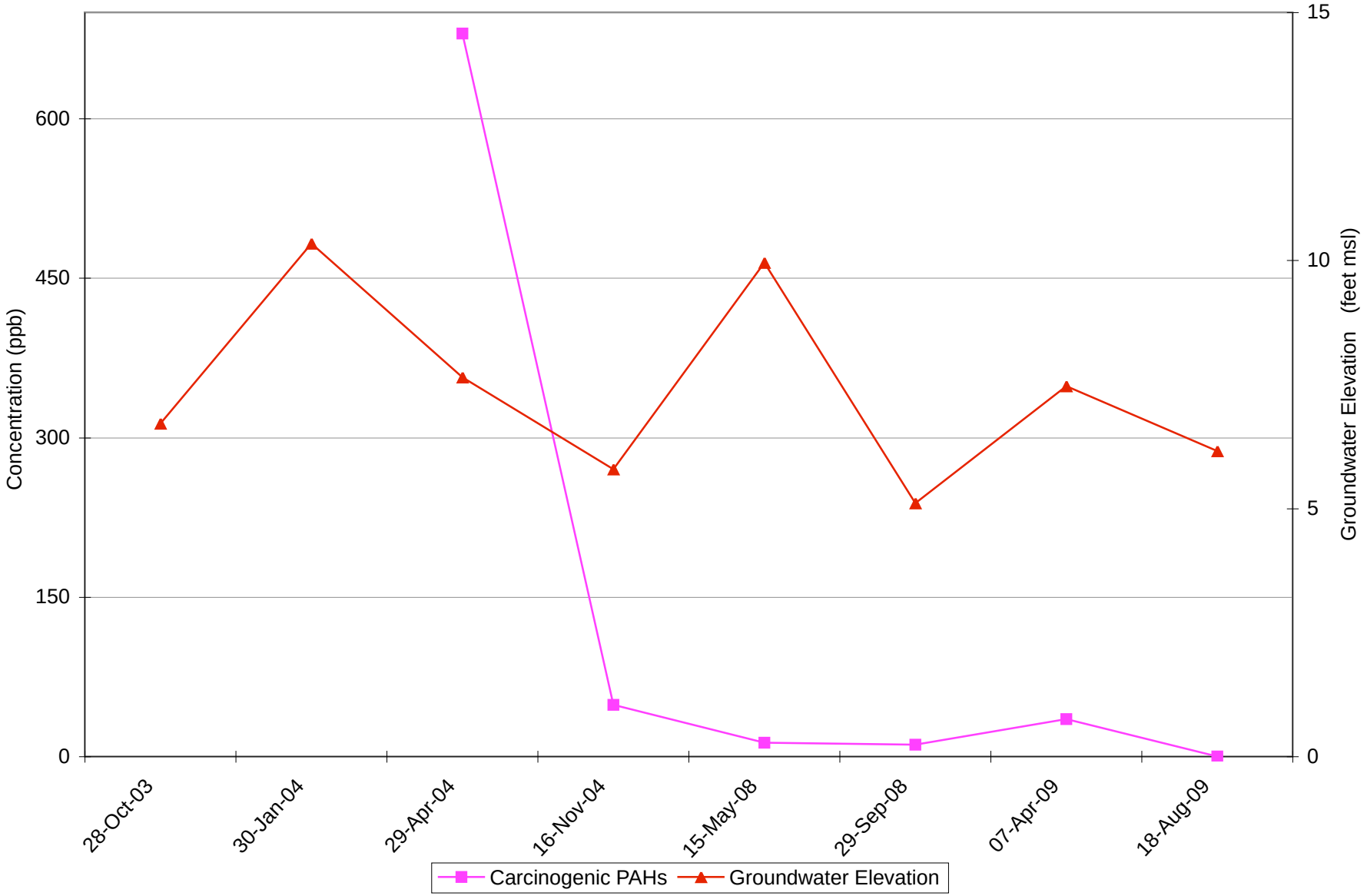
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-9-34 (surficial fill WBZ)
Siltronic Corporation Property



Updated: 5/12/10 APR
File Name: Concentration Plots_BAU_3Q 2009.xls ; WS-9-34 PAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

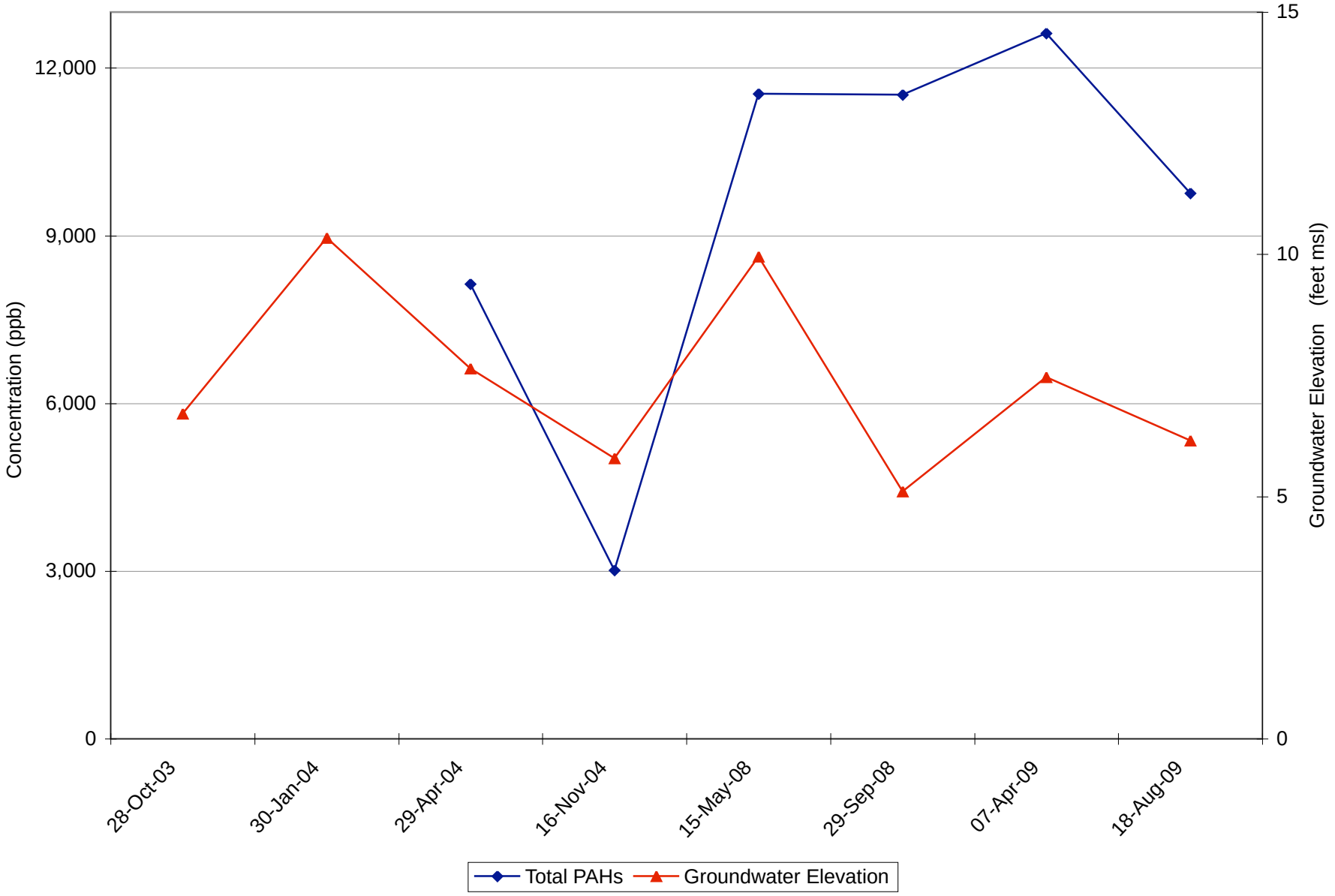
Total Carcinogenic PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-11-125 (intermediate depth WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; WS-11-125 CPAH

Project No. 2708
HAHN AND ASSOCIATES, INC.

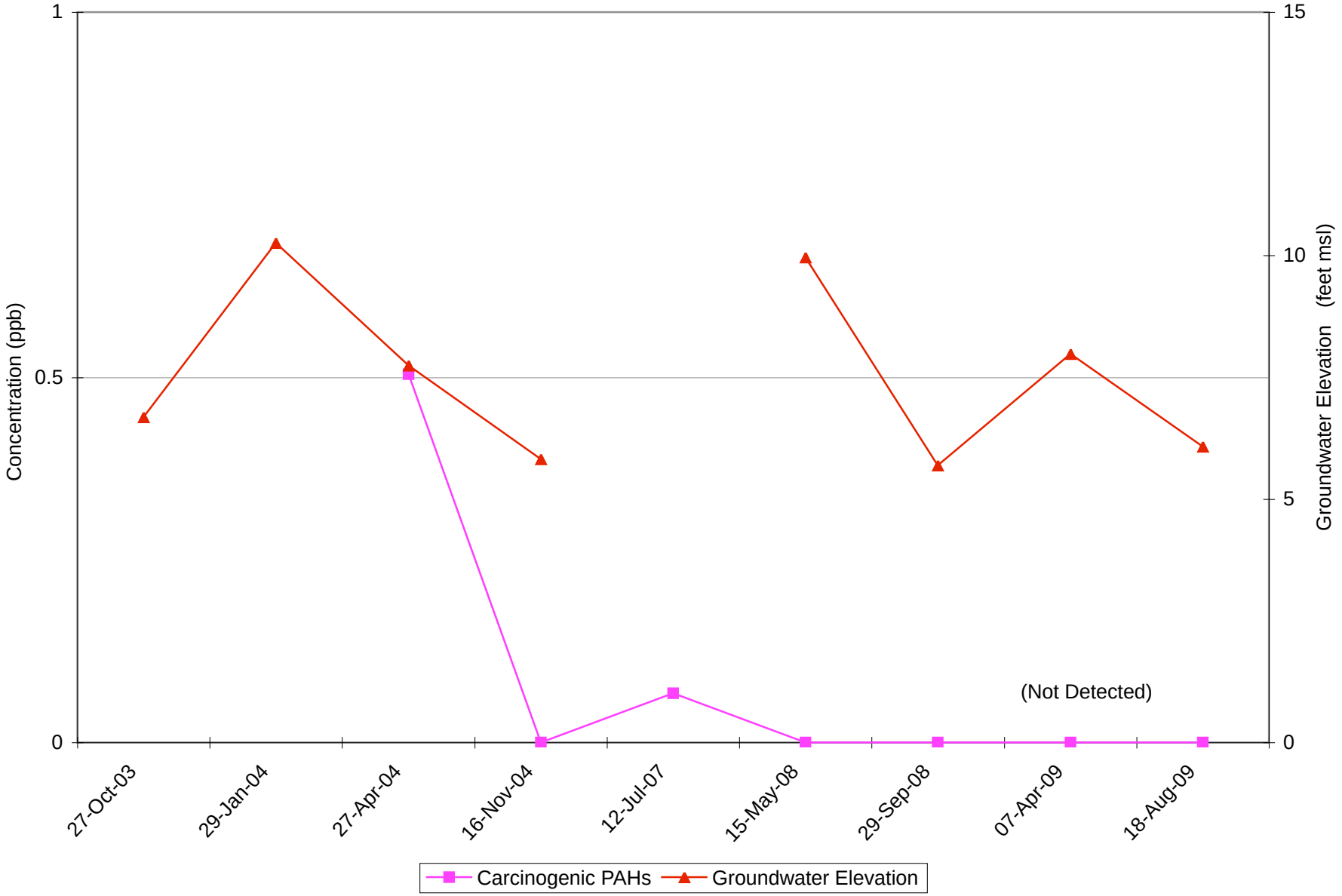
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-11-125 (intermediate depth WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; WS-11-125 TPAH

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total Carcinogenic PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-11-161 (lower alluvial WBZ)
Siltronic Corporation Property



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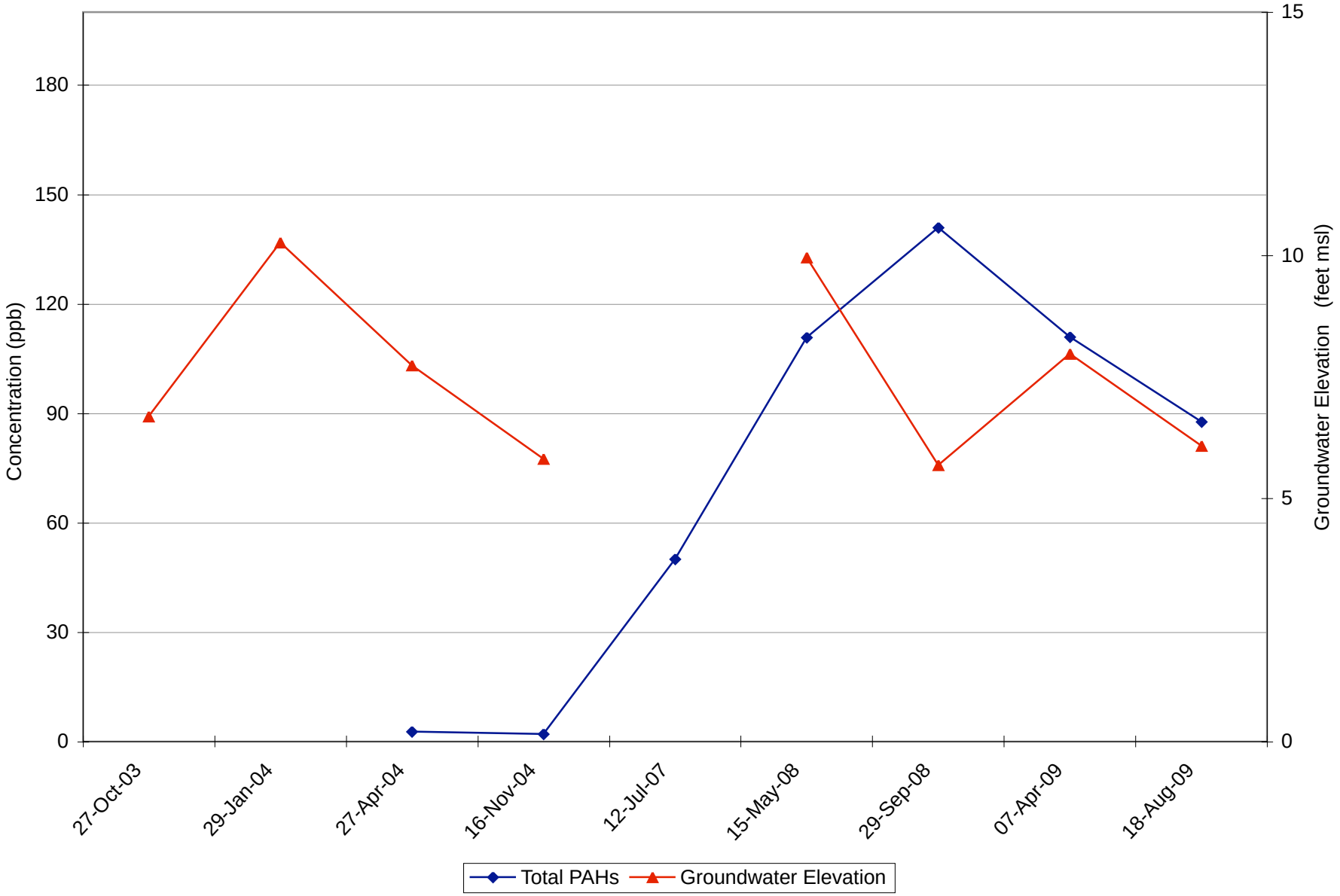
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-11-161 (lower alluvial WBZ)
Siltronic Corporation Property



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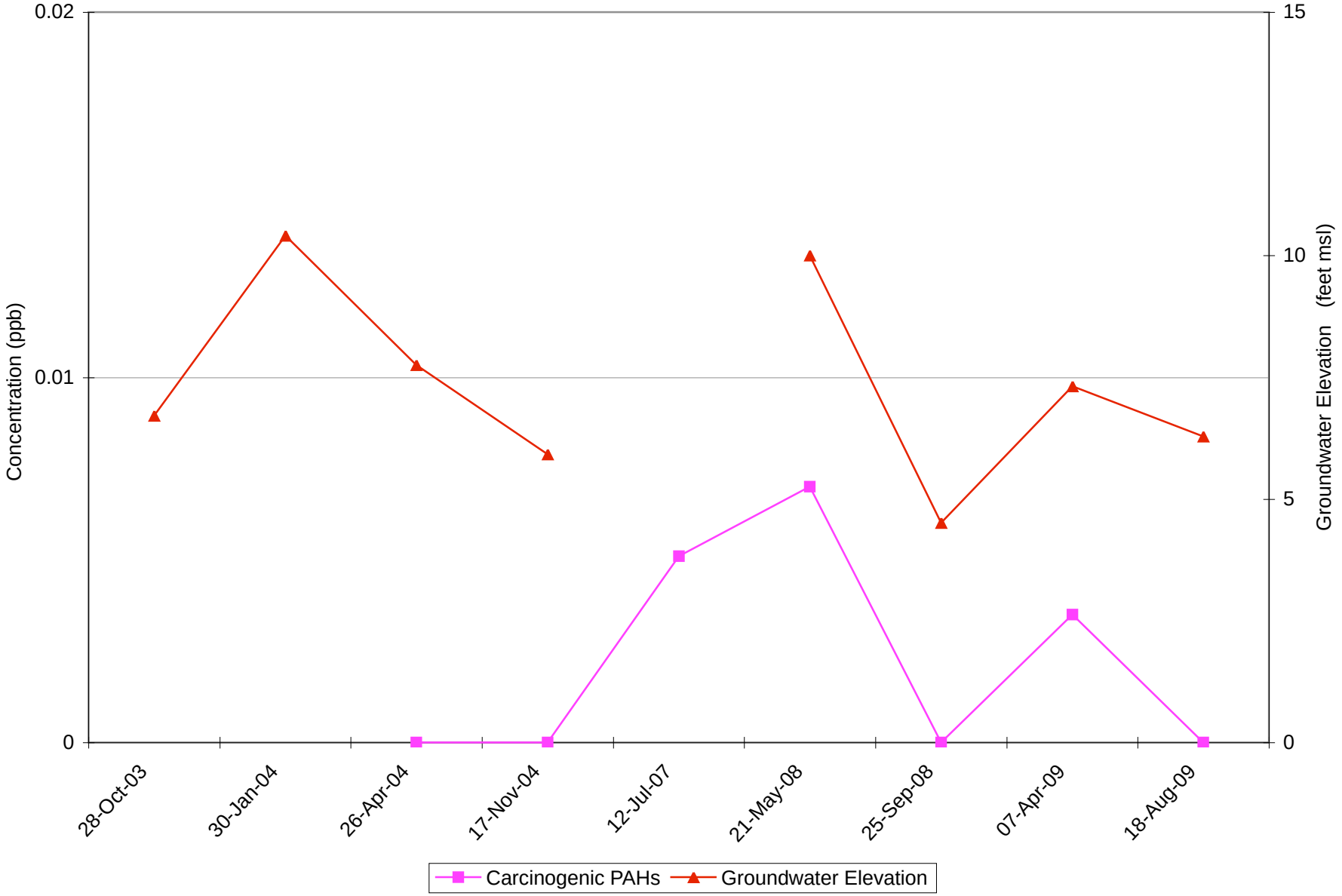
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total Carcinogenic PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-12-125 (intermediate alluvial WBZ)
Siltronic Corporation Property



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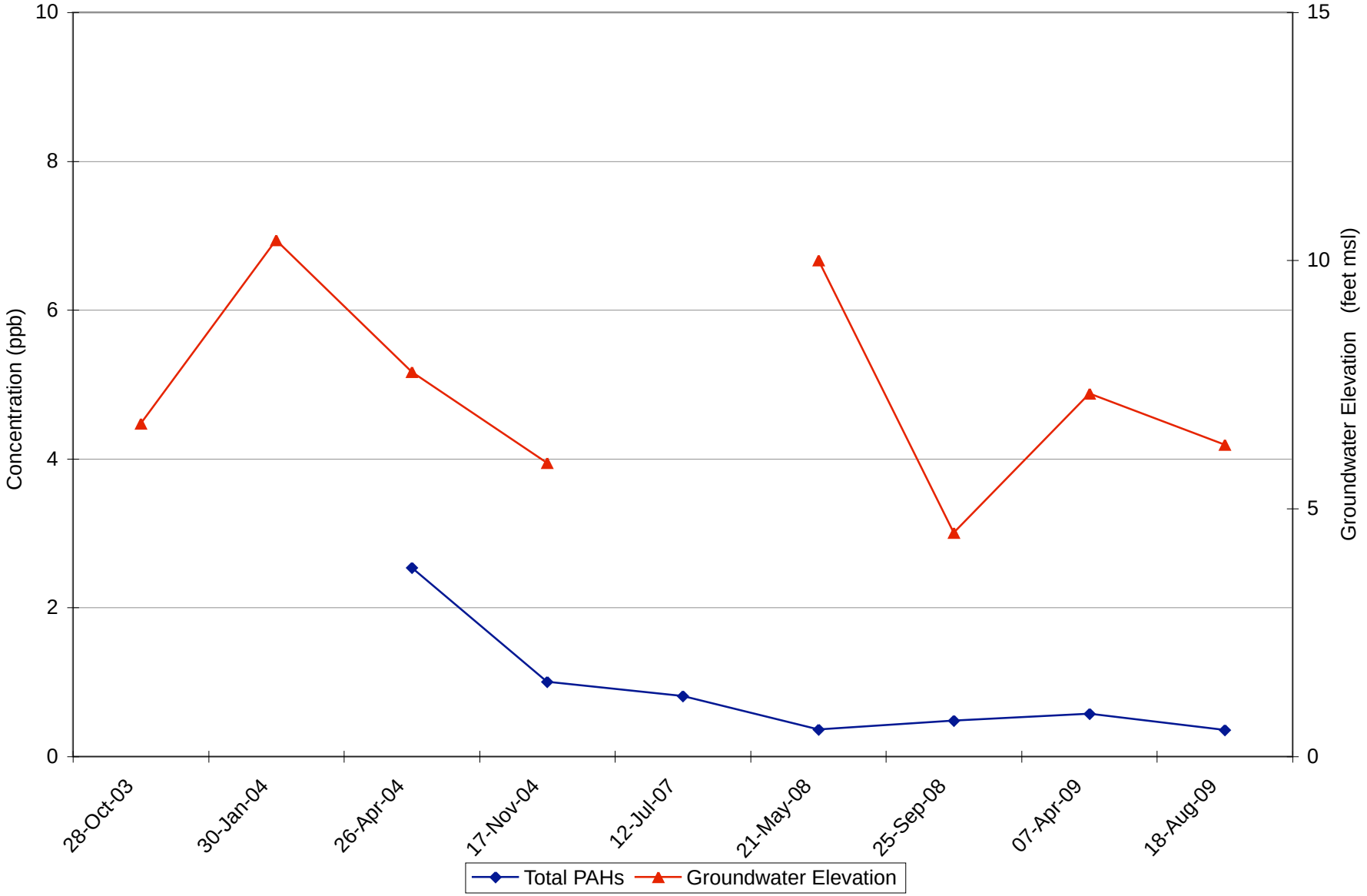
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-12-125 (intermediate alluvial WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
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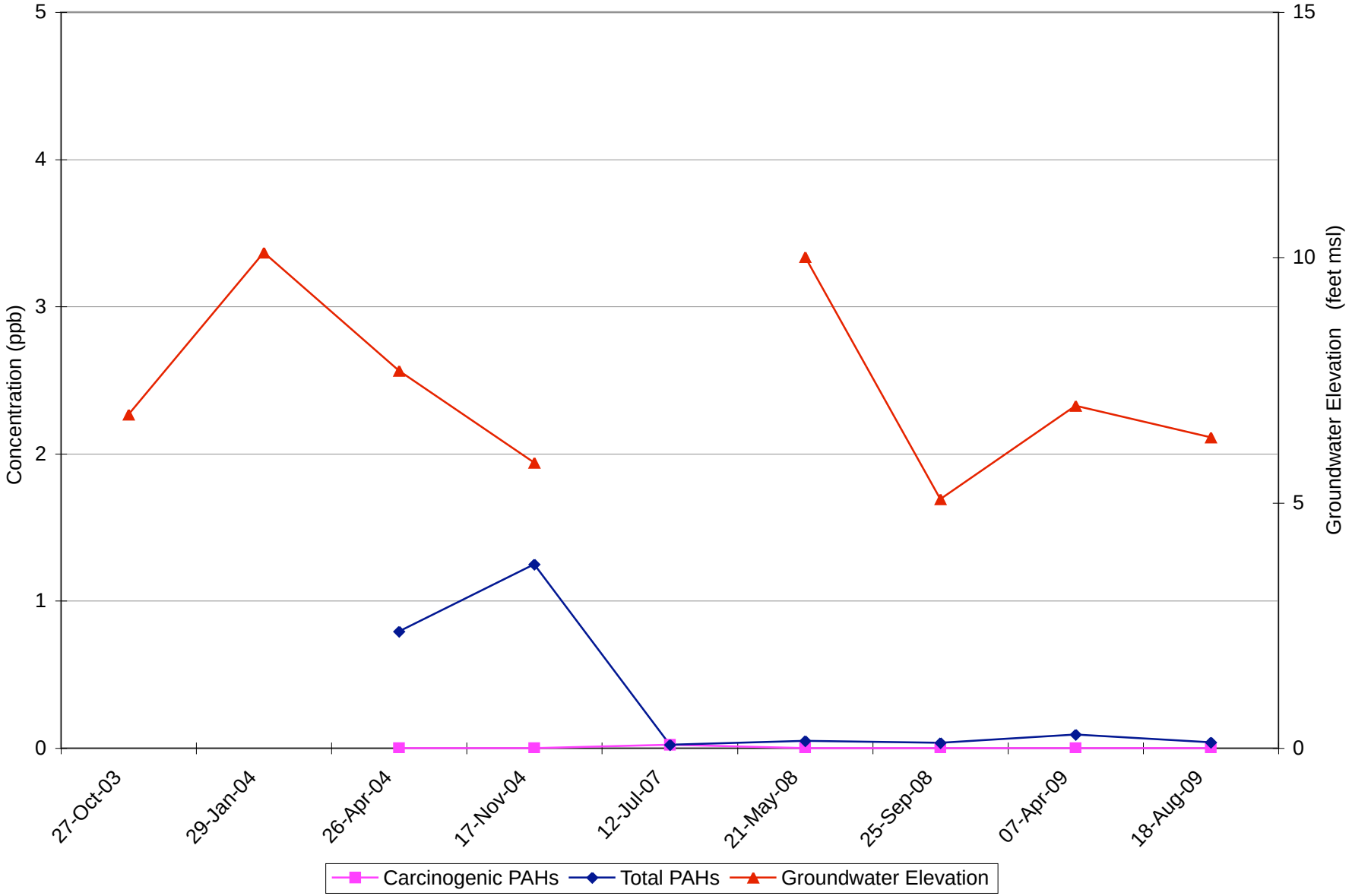
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-12-161 (lower alluvial WBZ)
Siltronic Corporation Property



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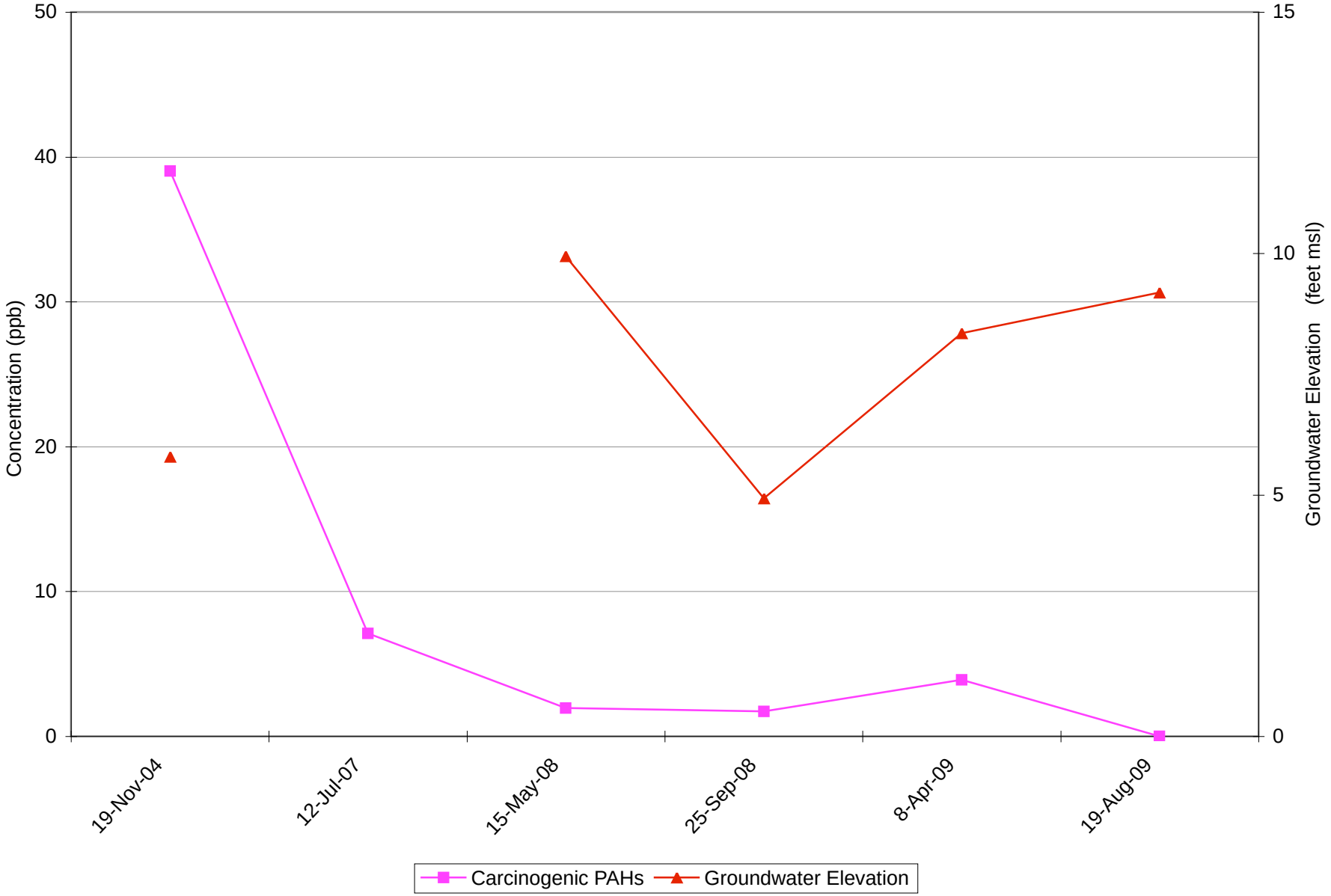
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total Carcinogenic PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-14-125 (intermediate depth alluvial WBZ)
Siltronic Corporation Property



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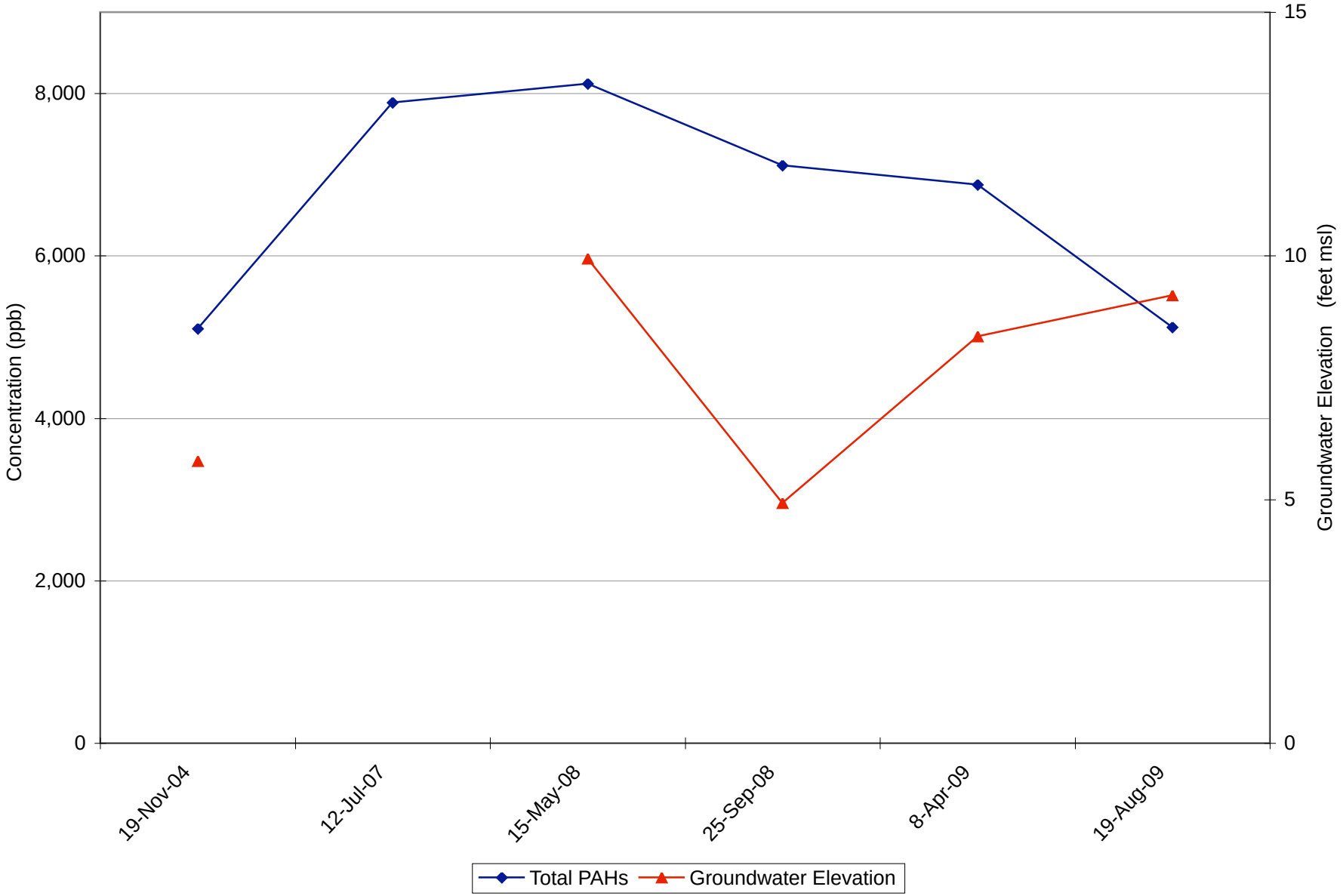
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-14-125 (intermediate depth alluvial WBZ)
Siltronic Corporation Property



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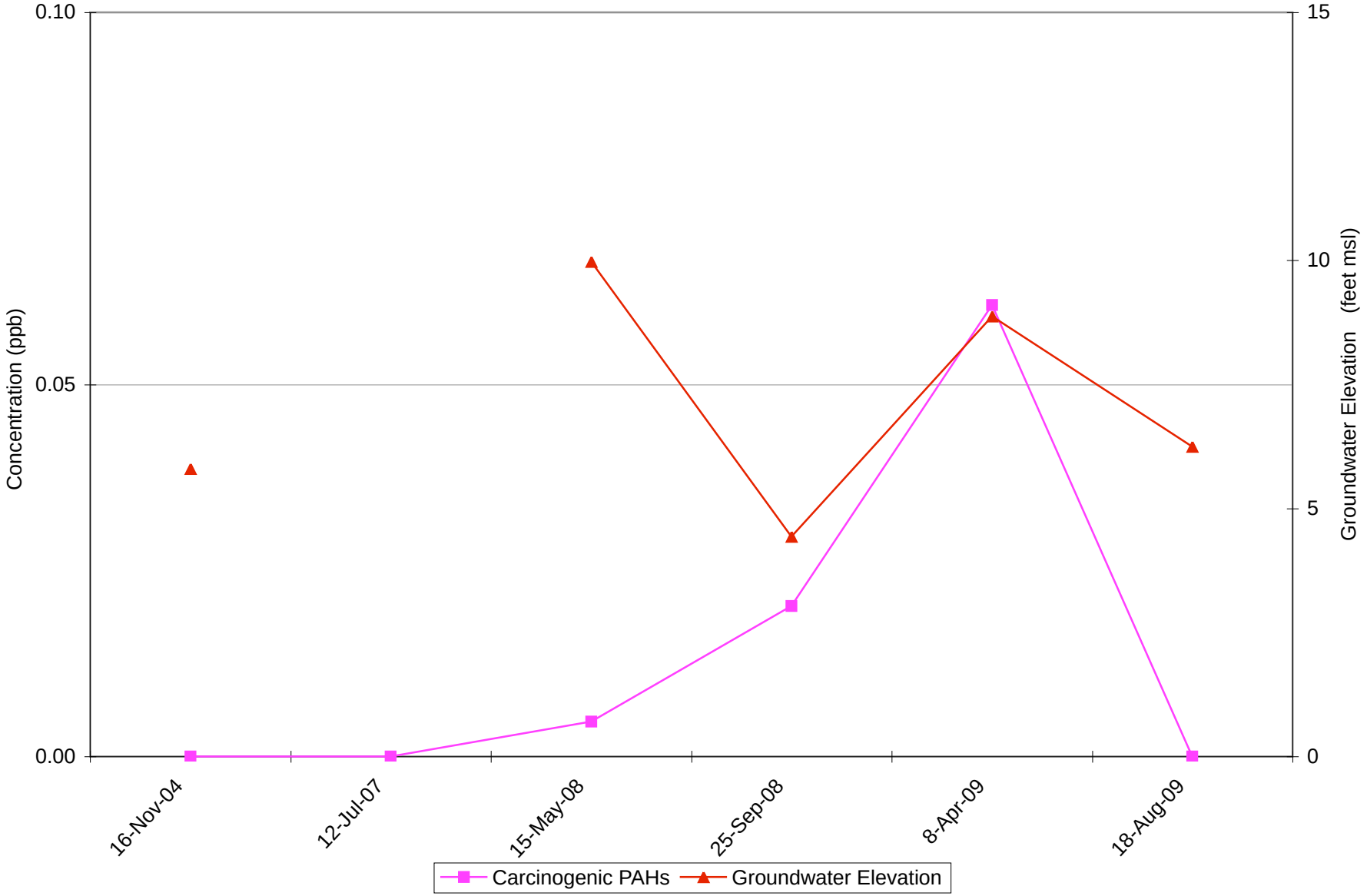
Project No. 2708
HAHN AND ASSOCIATES, INC.

Total Carcinogenic PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-14-161 (lower alluvial WBZ)
Siltronic Corporation Property



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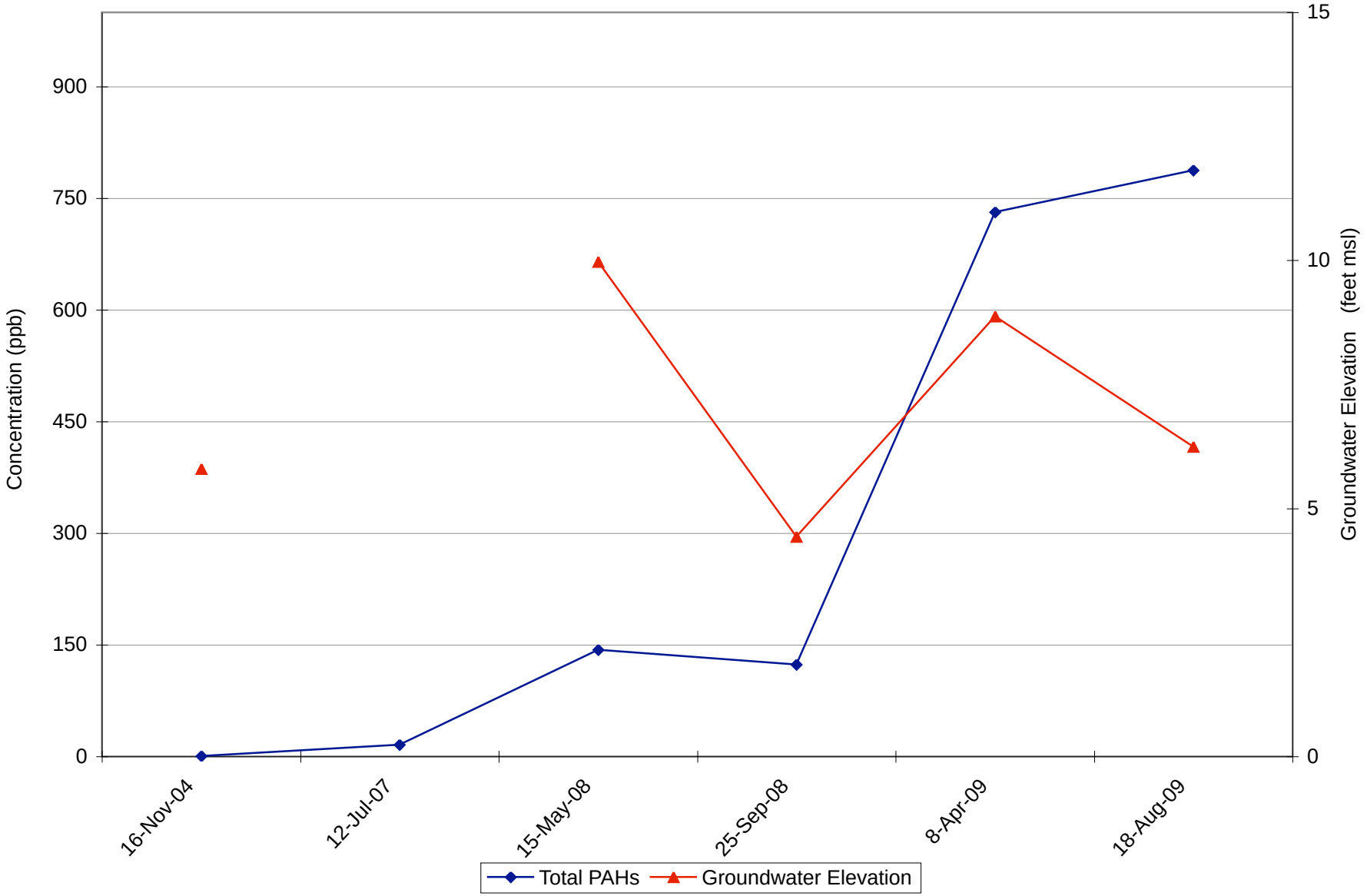
File Name: Concentration Plots_BAU_3Q 2009.xls ; WS-14-161 CPAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

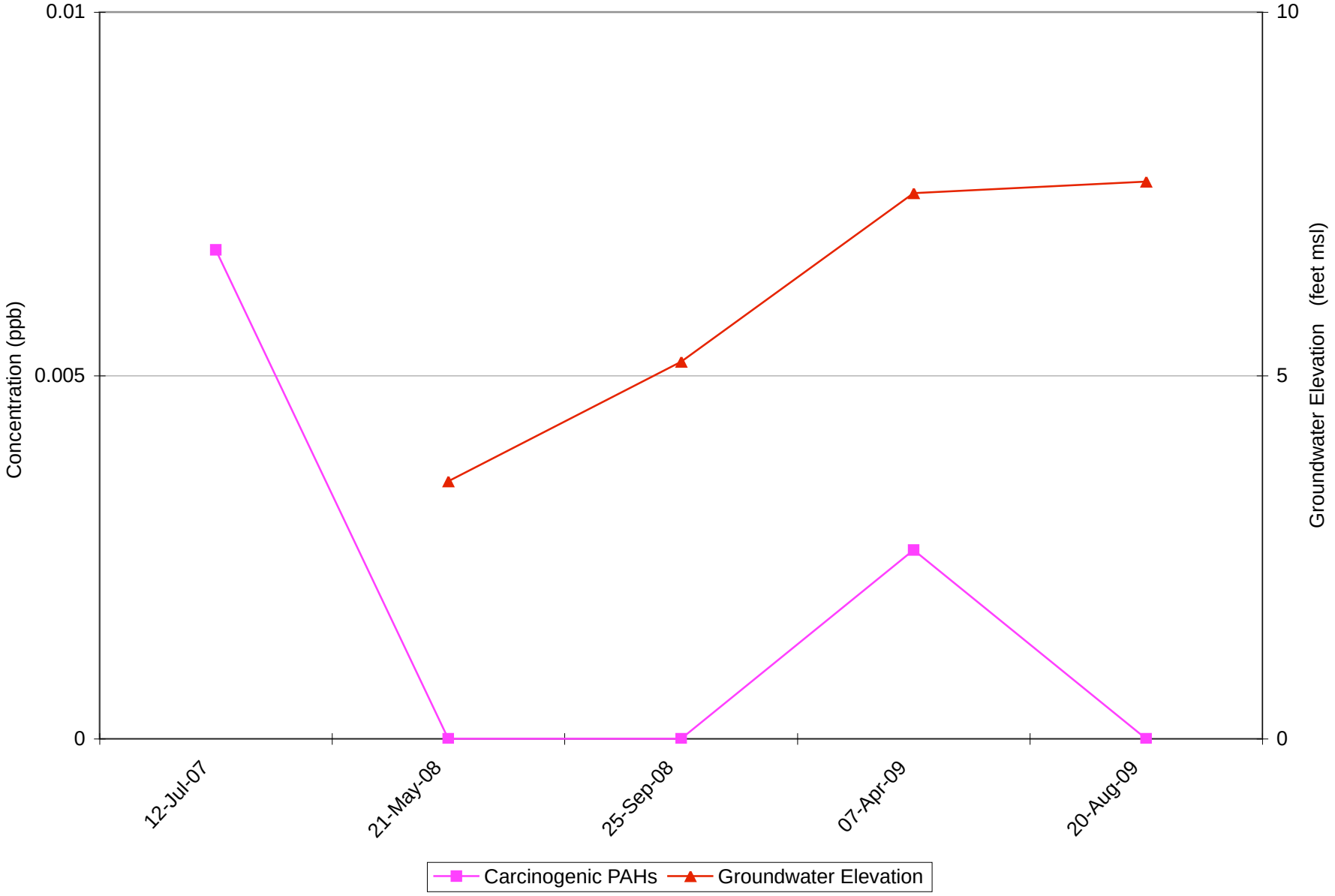
Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-14-161 (lower alluvial WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; WS-14-161 TPAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

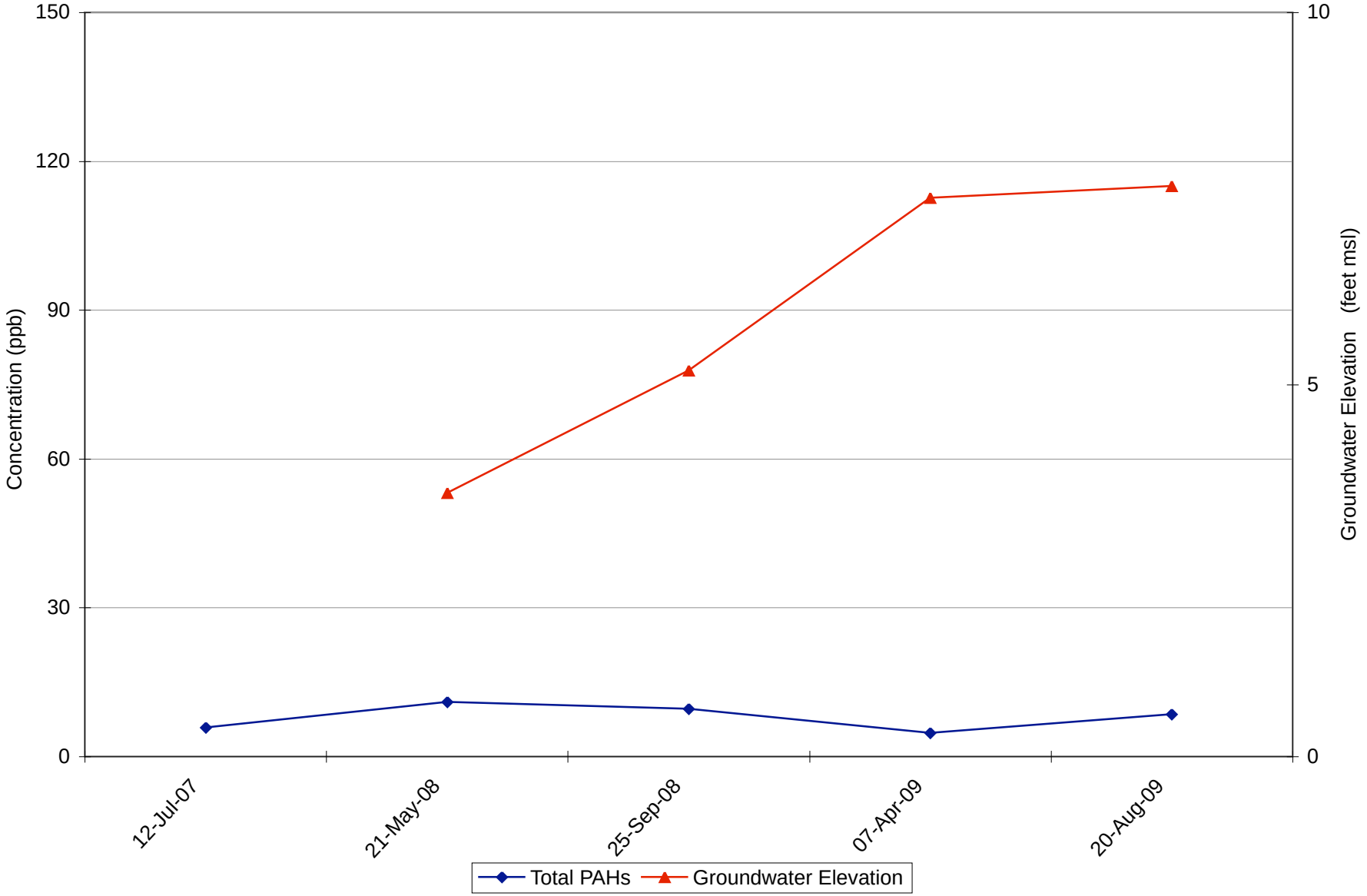
Total Carcinogenic PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-21-112 (intermediate depth alluvial WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
File Name: Concentration Plots_BAU_3Q 2009.xls ; WS-21-112 CPAHs

Project No. 2708
HAHN AND ASSOCIATES, INC.

Total PAH Concentration and Groundwater Elevation through Time
Monitoring Well WS-21-112 (intermediate depth alluvial WBZ)
Siltronic Corporation Property



Updated: 5/12/10 BAU
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Project No. 2708
HAHN AND ASSOCIATES, INC.