

**Biennial Water Quality Monitoring Plan Evaluation
First Half 2007 through First Half 2009
Manatee County Solid Waste Division
Lena Road Class I Landfill
SWD-41-44795
Permit No: 39884-010-SO/01**

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November 2009 (Revised January 2010)

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EXECUTIVE SUMMARY

The analytical results from the review period indicate that the LRL had minimal effect on the water quality in the immediate area. A summary of the detection patterns in the water quality network is as follows:

- No analytes were detected in the leachate at concentrations in excess of the regulatory criteria, but there were numerous inorganic analyte detections and several volatile organic detections.
- In the groundwater, there were numerous inorganics detections, and scattered organic detections. The only analytes that were detected at concentrations in excess of the regulatory criteria were iron, pH, ammonia, arsenic and TDS. The detection pattern with all of these analytes was very consistent throughout the review period in that, in general, the exceedances occurred at the same well locations. Comparison of the analyte concentrations on either side of the landfill, in the direction of groundwater flow, suggests that the presence of the landfill may contribute to the elevated iron, TDS, and arsenic concentrations on the downgradient side of the landfill by altering the natural groundwater chemistry.
- Four analytes, DO, turbidity, iron, fecal coliform, were detected at both surface water sampling points at concentrations in excess of the regulatory criteria during the review period.

The most significant detection in the water quality monitoring network was arsenic. Arsenic was detected in the leachate during the review period at concentrations between 0.014 mg/l and 0.034 milligrams per liter (mg/L), which was significantly lower than the concentrations detected in the groundwater. This suggests that the source of the arsenic is not the leachate. PBS&J conducted a statistical analysis of the arsenic concentrations in the well network during the review period; including comparisons to the DO, pH, and turbidity readings, and a downgradient correlation. There were no obvious trends that would indicate a source for the arsenic, although there was some correlation between elevated arsenic concentrations and elevated DO and turbidity concentrations at some wells. The turbidity readings at some of the monitoring wells were unusually high during the review period and may have affected the arsenic test results.

With regard to the hydrological data from the review period, the direction and rate of groundwater in the surficial aquifer beneath the LRL was flowing generally in a north-northwesterly direction across Stage I at the time of each sampling event during the review period, and in a general west-southwest direction across Stage III. The horizontal gradient of the water table was relatively shallow at the time of all of the sampling events during the review period. Rainfall was lower than normal during the review period. There was an inward gradient across the LRL's slurry wall throughout the review period.

Based on the findings of this evaluation, the water quality and elevation monitoring network at the LRL appears to be adequate in meeting the objectives of the monitoring program. The groundwater quality and elevation monitoring network in its current configuration appears to be adequate to meet

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the monitoring requirements. PBS&J recommends that the FDEP SOP guidelines be followed carefully during future sampling events. Samples collected for analysis of volatile organic compounds (VOCs) are done so in general accordance with Section FS 2221 of the SOP. The County should consider the use of dedicated pumps in the monitoring wells.

With regard to the arsenic detections, PBS&J recommends that supplemental water quality monitoring activities be performed in addition to those called for by the permit. The supplemental activities should involve the collection of leachate samples from those piezometers on the opposite side of the slurry wall in which elevated arsenic detections in groundwater wells have occurred, including PZ-1, PZ-2, PZ-5, PZ-9, PZ-11, PZ-12, PZ-14, and PZ-15, and analyzed for arsenic in order to evaluate the arsenic concentrations in the leachate. We further recommend that monitoring wells in which the turbidity levels have consistently been measured at or near the FDEP SOP minimum (20 NTUs), including GW-2, GW-4, GW-7, GW-10, GW-13, and GW-16, be redeveloped to clear any sediment at the bottom of the wells which may be affecting the turbidity. The sediment is likely to contain naturally-occurring arsenic. We further recommend that in future sampling events, every effort be made to continue purging all of the monitoring wells in the network until the turbidity is 10 NTU or less in order to further reduce the effect that turbidity may be having on water quality. PBS&J recommends that these supplemental activities be performed during the next two semiannual groundwater sampling events. The results of the supplemental activities should be documented in a Supplemental Site Assessment Report for FDEP review and approval.

This Biennial Water Quality Monitoring Report presents the results of an evaluation of the water quality monitoring program at Manatee County's Lena Road Landfill (LRL), using the water quality and water level elevation data from the sampling events conducted during the period between the first half 2007 and the first half 2009.

The analytical results from the review period indicate that the LRL has had minimal effect on the water quality in the immediate vicinity. There were numerous analytes detected in the leachate, groundwater, and surface water throughout the review period, but the only exceedances of the regulatory standards occurred with the groundwater and surface water. The following parameters were detected at concentrations in excess of the regulatory standards:

- In the groundwater, there were numerous inorganic detections, and no organic detections. The only analytes that were detected at concentrations in excess of the regulatory criteria were pH, arsenic, iron, and TDS. The detection pattern with all of these analytes was very consistent throughout the review period in that, in general, the exceedances occurred at the same well locations.
- Four analytes, DO, turbidity, iron, and fecal coliform, were detected at both surface water sampling points at concentrations in excess of the regulatory criteria during the review period. Iron was detected at an elevated concentration at both sampling points throughout the review period, whereas the detection patterns for the other two analytes were more scattered.

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The most significant detection in the water quality monitoring network was arsenic in the groundwater. The arsenic concentrations in the leachate were consistently lower than those in the groundwater. PBS&J conducted a statistical analysis of the arsenic concentrations in the well network during the review period, and there was some indication that the turbidity readings at some of the monitoring wells were unusually high during the review period and may have affected the arsenic test results. PBS&J recommends that the FDEP standard operating procedures for field activities be followed carefully during future sampling events to ensure that the turbidity levels are as low as practical before the groundwater samples are collected.

With regard to the hydrological data from the review period, the direction and rate of groundwater flow in the surficial aquifer beneath the LRL was flowing generally in a north-northwesterly direction at a relatively shallow gradient at all of the sampling events during the review period. Rainfall was lower than normal during both years of the review period. There was an inward gradient across the LRL's slurry wall throughout the review period.

Based on the findings of the review period, the groundwater quality and elevation monitoring network in its current configuration appears to be adequate to meet the monitoring requirements.

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1.0 Introduction

1.1 Background

This biennial water quality report presents an evaluation of the water quality and elevation monitoring network at Manatee County's Lena Road Landfill (LRL), as based on the monitoring data collected during the period between the first half of 2007 and the first half of 2009. The LRL facility operates under Permit Number 39884-010-SO/01, which is on file with the Florida Department of Environmental Protection (FDEP).

1.1.1 Water Quality Monitoring Network and Program

The LRL is constructed with a perimeter slurry wall in three stages that are designated Stages I, II and III. Landfill leachate is collected by a leachate collection system. Specific Condition Part E – Water Quality Monitoring Requirements E1 through E12 of the facility's permit stipulates that the water quality program involves monitoring of the leachate, surface water, and the groundwater in the surficial (or shallow) aquifer. The monitoring network consists of the following components:

- The leachate samples are taken at the lift stations.
- Currently, groundwater samples are collected from a network of 17 monitoring wells along the perimeter of the slurry wall. The wells are designated GW-1 through GW-17. There is also a background well, which is designated BGW-1. All of these wells monitor groundwater in the surficial aquifer.
- The surface water samples are collected from two points (one upstream and one downstream) along the Cypress Strand. These locations were dry at the time of sampling during some of the events of the review period, and both points were dry during the first half 2009 sampling event.

A summary of the components that comprise the water quality network is presented in Table 1-1. The layout of the LRL, including the well locations, is illustrated in Figure 1.

Part E of the facility's operating permit calls for groundwater and surface water samples to be collected from the facility's water quality network on a semiannual basis, and for leachate samples to be collected annually. Specific Condition #E.1.a of the permit requires fieldwork to be conducted in accordance with the FDEP's Standard Operating Procedures (SOP) for Field Activities (SOP 001/01). The monitoring wells are purged and sampled with peristaltic pumps. Samples collected for analysis of volatile organic compounds (VOCs) are done so in general accordance with Section FS 2221 of the SOP. The leachate samples are analyzed for the parameters listed in the State guidelines for Solid Waste Management Facilities, Rule 62-701.510 (8)-62-701.510 (9) of the Florida Administrative Code (FAC). During one of the semiannual events, the groundwater and surface water samples are analyzed for the parameters listed in Appendix I of 40 Code of Federal Regulations (CFR) Part 258, and for Appendices I and II during the other sampling event.

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The analytical services for the sampling events during the review period were provided by another contractor for the county. Copies of the certificates of laboratory reports for all of the sampling events are on file with the FDEP.

1.1.2 Water Elevation Monitoring Network

The 17 monitoring wells along the perimeter of the slurry wall at the LRL are used in conjunction with 17 piezometers, designated PZ-1 through PZ-17, to monitor the water level elevation on either side of the slurry wall. Water level elevations are also monitored at the East Lake and South Lake #2, which are immediately south of the LRL site. A summary of the components that comprise the water elevation network is presented in Table 1-2, and their locations are illustrated on Figure 1.

1.2 Objectives

This report was prepared in accordance with Rule 62-701.510(9)(b) of the FAC. This statute stipulates that the following issues be addressed in a biennial report:

- Tabular displays of any data which shows that a monitoring parameter has been detected, and graphical displays of any leachate key indicator parameters detected (such as pH, specific conductance, TDS, TOC, sulfate, chloride, sodium and iron), including hydrographs for all monitor wells;
 - A trend analyses of any parameters that were consistently detected in the monitoring network;
 - A comparison of the detection trends between the shallow, middle and deep aquifers.
 - A comparison between the detection trends in the background wells and compliance wells.
 - A correlation between related parameters such as total dissolved solids and specific conductance;
 - Discussion of erratic and/or poorly correlated data;
 - An interpretation of the groundwater flow conditions contour maps, including an evaluation of groundwater flow rates; and
 - An evaluation of the adequacy of the water quality monitoring program frequency and sampling location based upon site conditions.
- It should be noted that there are no compliance wells, nor a middle or deep aquifer zone at this facility.

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2.0 Water Quality Analytical and Elevation Data Summary

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A description of the leachate, groundwater, and surface water analytical results, as well as the water elevation information, for the five sampling events during the period of review is presented in this section.

2.1 Water Quality Data Summary

2.1.1 Leachate Analytical Data Summary

Leachate samples were collected during one of the two semiannual (typically the first half event) sampling events performed during the review period. Summaries of the leachate analytical results for each event are presented in Tables 2-1 through 2-3.

The only parameters that were consistently detected in the leachate samples during the period of review were inorganic constituents, including arsenic, barium, bicarbonate alkalinity, chloride, chromium, cobalt, copper, iron, lead, nickel, nitrate, nitrate, selenium, sodium, sulfide, total ammonia-N, total dissolved solids (TDS), vanadium, and zinc. Several organic constituents, including hexylchloropropene, 1, 1-dichloroethane, 1, 4-dichlorobenzene, benzene, ethylbenzene, toluene, xylene, vinyl chloride, sulfide, and chlorobenzene were detected in the leachate during the review period on a somewhat less frequent basis.

The concentration of every parameter that was detected in the leachate throughout the review period was compared to the regulatory levels listed in 40 CFR Part 261.24, as promulgated by the Florida solid waste regulations. A standard has not been established for every parameter. None of the parameter concentrations detected in the leachate during the review period exceeded their respective regulatory level.

2.1.2 Groundwater Analytical Data Summary

A summary of the groundwater analytical results for the five sampling events during the review period is presented in Tables 2-4 through 2-8.

There were several scattered organic parameters detected in the monitoring network during the review period, including acetone (GW-10 and GW-13, first half 2009), bromoform (GW-8, second half 2008), bromomethane (GW-7 and GW-8, first half 2008), chlorobenzene (GW-10, first half 2007 and second half 2008), and xylenes (GW-10, second half 2008). There were numerous inorganic constituents detected in most of the wells of the network during every sampling event of the review period.

The concentrations of all of the parameters that were detected in the network were compared to their Maximum Contaminant Levels (MCLs) or Secondary Drinking Water Standards (SDWSs) in accordance with the Florida statutes. Chapter 62-550 of the Florida Administrative Code (FAC)

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2.0 Water Quality Analytical and Elevation Data Summary

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promulgates the MCLs and SDWSs for Drinking Water Standards, Monitoring, and Reporting. Not every parameter has an MCL or SDWS. ~~Five~~ Four parameters, pH, iron, arsenic, ammonia, and TDS, were detected at least once during the review period in the surficial aquifer at concentrations in excess of the regulatory criteria. The parameters that were detected at concentrations in excess of the regulatory criteria are shaded in the analytical summary tables.

The detection patterns for these parameters were very consistent throughout the review period. A description of the parameters that were detected at concentrations in excess of the regulatory criteria is presented below.

pH – The standard for pH is an MCL, and is any value outside of the range between 6.5 and 8.5 is considered an exceedance. The pH values were lower than the MCL range at most of the wells during the review period, and ranged as low as 5.1. The highest value was 6.5. The pH value at the background well, BGW-1, ranged from 5.5 to 5.9 during the period.

Arsenic – Arsenic has an MCL of 0.01 mg/L. Arsenic was detected at least once during the period at every well in the network except GW-17 and BGW-1. The arsenic concentrations consistently exceeded the MCL at wells GW-1, GW-2, GW-5, GW-9, GW-11, GW-12, GW-14, and GW-15.

Ammonia – Ammonia has an SDWS of 2.8 mg/L. Ammonia was consistently detected at concentrations in excess of the standard at wells GW-2 and GW-13.

Iron - Iron was detected at every well in the network through the period, and the concentrations at most of the wells, including the background well, were well above the standard. The standard is an SDWS and is any concentration above 0.3 milligram per liter (mg/L). The iron concentration at these wells ranged from slightly over the standard to 49.5 mg/L. The iron concentrations at most of the wells measured between 3 and 10 mg/L. The iron concentrating at the background well ranged from 0.296 mg/L to 0.66 mg/L.

TDS – TDS has an SDWS of 500 mg/L. The TDS concentration consistently exceeded the standard at well GW-10, GW-13, and GW-14. The highest TDS concentrations were measured at GW-13 and GW-14, where they consistently ranged over 1,000 mg/L. The TDS concentration in the background well ranged from 240 mg/L to 403 mg/L.

2.1.3 Surface Water Analytical Data Summary

Surface water samples were collected from both surface water sampling points in the network during every semiannual sampling event during the review period. A summary of the surface water analytical results for each sampling event is presented in Tables 2-9 through 2-13.

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2.0 Water Quality Analytical and Elevation Data Summary

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There were no organic constituents detected in any of the surface water samples collected during the review period. There were, however, numerous inorganic constituents detected at both surface water sampling points throughout the review period. The concentrations of the inorganic constituents were compared to their respective Surface Water Cleanup Target Levels (SWCTLs) as a relative measure of the water quality. The SWCTLs are promulgated in Chapter 62- 777, FAC.

The only parameters that were consistently detected in the surface water at concentrations in excess of its SWCTL were dissolved oxygen (DO), turbidity, iron, fecal coliform.

2.2 Water Elevation Data Summary

The groundwater elevation measurements were made at each monitoring well during every sampling event of the review period and were used to generate groundwater elevation contour maps for the surficial aquifer beneath the LRL. The maps were used to evaluate the groundwater flow direction and the water table gradient in the aquifer during the review period. A description of the findings is presented in Section 4.1 of this report.

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3.0 Water Quality Evaluation

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3.1 Water Quality Trends

3.1.1 General Detection Pattern

Descriptions of the detection patterns of the parameters that were consistently detected at elevated concentrations in the leachate, groundwater and surface water during the period of review are presented below. A summary of the detection patterns is also presented in Table 3-1.

Leachate

There were no parameters detected in the leachate at concentrations in excess of the regulatory criteria during the review period. The detection patterns of most of the parameters that were detected in the leachate were present at the same general concentration range during every sampling event of the review period. There were several volatile organic compounds detected during the earlier sampling events of the review period, but not during the last event.

Groundwater

The detection patterns with the four five parameters were regularly detected in the groundwater at concentrations in excess of their MCLs or SDWSs – pH, arsenic, ammonia, iron, and TDS – were very consistent throughout the review period. They were detected at the same locations in the monitoring network at comparable concentrations. The concentrations of these four analytes at all of the wells in the well network were plotted on graphs to demonstrate the changes in concentration over time. The graphs are presented in Appendix A. A summary of the findings is presented below.

pH – The pH readings were very consistent at all of the wells throughout the review period. The wells that did show any change during the period were no more than 0.8 units between the highest and lowest readings during the period.

Arsenic – The arsenic concentrations were very steady at most of the wells during the review. The only exception was GW-1 where the concentration fluctuated within an approximate range of 0.05 mg/L.

Ammonia - The ammonia concentration at GW-2 exceeded the standard during four of the five sampling events of the review period, and the concentration at GW-13 exceeded the standard during all five sampling events of the period. The ammonia concentration at GW-2 was very consistent throughout the period and measured approximately 4 mg/L. The ammonia concentration at GW-13 was also relatively consistent and ranged between approximately 5 and 8 mg/L.

Iron – The iron concentrations at most of the wells were also very consistent throughout the period. The exceptions were at GW-4 and GW-11 where the concentrations fluctuated by as much as 30% during the period.

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TDS – TDS displayed a pattern similar to the other parameters, in that the concentrations were very consistent at most well locations throughout the review period. The only exceptions were at a number of wells during the second half 2008 sampling event when the concentration at several wells increased significantly. The concentrations decreased back to their normal range during the next semiannual sampling event.

Surface Water

The analytes which were detected at sampling point SW-1 at concentrations in excess of the State standards during the review period were DO, turbidity, iron, and fecal coliform. The standard for DO is a concentration lower than 5 mg/L. The DO concentration at SW-1 ranged between 1.5 and 3.7 during the period. The standard for turbidity is 29 NTUs. The standard was exceeded during the second half 2007 sampling event. The standard for iron is 1 mg/L. The iron concentration ranged from 1.18 mg/L to 4.36 mg/L. The standard for fecal coliform is 8000 units. The concentrations of fecal coliform detected at SW-1 during the period ranged from 2,500 to 12,600 units.

The analytes which were detected at sampling point SW-2 at concentrations in excess of the State standards during the review period were DO, turbidity, iron, and fecal coliform. The DO concentration at SW-1 ranged between 1.0 and 3.0 during the period. The turbidity standard was exceeded during the first half 2008 sampling event. The standard for iron is 1 mg/L. The iron concentration ranged from 1.18 mg/L to 4.36 mg/L. The standard for fecal coliform is 8000 units. The concentrations of fecal coliform detected at SW-1 during the period ranged from 2,500 to 12,600 units.

3.1.2 Regression Analysis

In order to look further for statistical trends in the groundwater analytical data, regression trend lines were inserted into the parameter concentration line graphs. The trend lines graphs are presented in Appendix C. The regression trend lines were determined with the following equation:

$$y=mx+b, \text{ where } m \text{ is the slope of the line and } b \text{ is the y-intercept.}$$

To determine whether a linear trend was indicated in the data, the “goodness” of the fit (R^2) of the line was calculated. The closer the R^2 value is to 1.0 then the better the fit, and the better an indicator that a linear trend is present. An R^2 value of less than 0.9 indicates that there is no definite linear trend.

The results of the regression trend analyses indicated that the R^2 values for all of the parameters were lower than 0.9.

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3.1.3 Related Parameter Correlation

The concentrations of the parameters that were consistently detected in the monitoring network at concentrations in excess of the regulatory standards, and/or that have a natural affinity to one another, were graphed together to evaluate whether an obvious correlation exists. The evaluation was limited to the groundwater and included the following correlations:

- pH versus Iron
- Turbidity versus Iron
- Turbidity versus Arsenic
- DO versus Iron
- DO versus Arsenic
- Conductivity versus TDS

A description of the findings of the evaluation is presented below. The concentration graphs are provided in Appendix C.

pH versus Iron

In general, there was a poor correlation between pH value and the concentrations of iron at all of the wells in the monitoring network, including the background well.

Turbidity versus Iron

The correlation between turbidity and iron was very inconsistent. At some of the wells, including GW-2, GW-3, GW-9, GW-15, GW-16, and GW-17, there was relatively good correlation between the fluctuations in the iron and turbidity concentrations during most of the sampling events of the review period. Even though the turbidity concentrations were relatively low and the iron concentrations were relatively high at all of the well locations, there appeared to be a consistent pattern at most wells where every change in the turbidity had a corresponding change in the iron concentration. The opposite pattern was observed in the graphs for the other wells in the network.

Turbidity versus Arsenic

The same pattern of correlation was observed with turbidity versus arsenic as was observed with turbidity versus iron. There was good correlation between the two parameters at wells GW-1, GW-2, GW-3, GW-5, GW-6, GW-7, and GW-16 during most of the sampling events of the period, and poor correlation at the other wells in the network.

DO versus Iron

There was generally good correlation between the detection patterns of these two parameters at most of the wells during the period, including the background well.

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DO versus Arsenic

Arsenic also displayed a strong correlation with DO throughout the review period at most of the wells in the monitoring network.

Conductivity versus TDS

The correlation between TDS and conductivity was very good at most of the well locations throughout the review period, in that both exhibited a relatively parallel detection pattern.

3.1.4 Upgradient versus Downgradient Correlation

In order to evaluate any changes in groundwater quality on the downgradient side of the LRL, the concentrations of the parameters that were consistently detected in the well network at concentrations in excess of the regulatory criteria, as well as several other important parameters, were graphed. The parameters that were included in the evaluation were pH, arsenic, and TDS. The graphs were constructed by plotting the data from the wells located on the upgradient side of the landfill on the left side of the graph, and plotting those on the downgradient side of the landfill on the right. The graphs are presented in Appendix D. A summary of the observations for each parameter is presented below.

- *pH* – The pH values in the wells located on the upgradient side of the landfill generally ranged between 6.2 and 6.5. In the wells located on the lateral (in the direction of groundwater flow) sides of the landfill the values decreased slightly, and then increased back to the 6.2 to 6.5 range at the wells on the downgradient side of the landfill.
- *Iron* – The iron concentrations increase on the downgradient side of the landfill. The two wells with unusually high iron concentration, GW-15 and GW-11, are located on the upgradient and lateral sides of the landfill, respectively. The iron concentration at BGW-1 was relatively low. The iron concentrations were generally higher at those wells located on the downgradient side of the facility.
- *Arsenic* – ~~There is some suggestion in the data that the arsenic concentrations increased in the areas around the landfill. In general, the~~ arsenic concentrations were lowest in the upgradient wells and some of the downgradient wells. The arsenic concentrations were consistently elevated at GW-1, GW-2, GW-5, GW-9, GW-11, and GW-12, which are located on downgradient side of the facility, as well as at GW-14 and GW-15, which are located on the upgradient side of the facility. These results suggest the presence of the landfill may contribute to the elevated arsenic concentrations, as well as TDS and iron, on the downgradient side of the landfill by altering the natural groundwater chemistry.

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- *TDS* - The TDS concentrations were highest significantly higher in at the wells GW-14, GW-15, GW-13, GW-16, and GW 12 which are located on the upgradient or lateral sides of the landfill. The TDS concentration at BGW-J was relatively low. The concentrations decrease at the lateral wells and then increase again slightly on the downgradient side of the landfill.

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4.0 Water Elevation Data Evaluation

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4.1 Groundwater Flow Patterns

The monthly rainfall data at the LRL during the period of review is presented in Table 4-1 for comparison with the monthly average rainfall for the Sarasota area. The rainfall data indicates that 2007 and 2008 were relatively dry years compared to the yearly average. The groundwater elevation data for the five sampling events during the review period are presented in Table 4-2. There was generally a two to three foot fluctuation in the water elevations at each well during the period.

Hydrographs were prepared for each monitoring well in the network, copies of which are provided in Appendix E. The water table was situated within the screened intervals of all of the wells throughout the period except for GW-11. At GW-11, the water table was higher than the top of the well screen during every sampling event of the review period. This well is situated in an area where the water table is situated very close to the land surface. The well was constructed with the minimum allowable thicknesses regarding the filter pack and grout intervals above the top of the screen.

The groundwater elevation data was plotted and contoured to generate contour maps for the surficial aquifer. The contour plots are presented as Figures 2 through 6. The groundwater elevation contour maps indicate that the groundwater within the surficial aquifer around the LRL facility was flowing in a general north-northwesterly direction across Stage I at the time of each sampling event during the review period, and in a general west-southwest direction across Stage III.

The average horizontal gradient of the water table during the five sampling events of the review period was 0.0024 0.001 feet per foot (ft/ft). This was calculated by measuring the gradient across Stage I and Stage III during the five sampling events of the period, and averaging the two as follows:

Stage I	Stage III
H1 07 0.0028	0.002
H2 07 0.012	0.0024
H1 08 0.002	0.0028
H2 08 0.0024	0.0025
H1 09 0.002	0.004
Average: 0.0021	0.0027
Site Average: 0.0024	

Using the results of hydraulic conductivity tests conducted by another firm during the preliminary hydrogeological evaluation of the LRL site (Ardaman and Associates, Inc., 1982), which ranged from 0.1 to 13.3 feet per day (ft/day), PBS&J was able to calculate the horizontal groundwater flow rates for the surficial aquifer during the period of review. The hydraulic conductivity test results produced an average value of 8.2 feet per day (ft/day) for the sediments that store groundwater in the surficial aquifer. Using those values that value, an effective porosity of 0.2 since silt-sized particles make up

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4.0 Water Quality Elevation Data Evaluation

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the majority of the surficial sediments at the site, and the site average horizontal gradient for the period, the average groundwater flow velocities ranged from y for the site was calculated at 0.030.000054 ft/day to 0.0064 ft/day. This translates into a range of z , or approximately 1 ± 0.02 feet per year (ft/yr) to 2.3 ft/yr.

4.2 Groundwater Gradient Conditions

PBS&J collected water level elevation data at all of the shallow monitoring wells and piezometers at piezometers at the LRL on a monthly basis during the period of review. These data are on file with the FDEP. The data indicated that an inward gradient condition during every measuring event of the period.

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5.0 Summary, Conclusions, and Recommendations

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The analytical results from the review period indicate that the LRL had minimal effect on the water quality in the immediate area. A summary of the detection patterns in the water quality network is as follows:

- No analytes were detected in the leachate at concentrations in excess of the regulatory criteria, but there were numerous inorganic analyte detections and several volatile organic detections.
- In the groundwater, there were numerous inorganics detections, and scattered no organic detections. The only analytes that were detected at concentrations in excess of the regulatory criteria were iron, pH, ammonia, arsenic and TDS. The detection pattern with all of these analytes was very consistent throughout the review period in that, in general, the exceedances occurred at the same well locations. Comparison of the analyte concentrations on either side of the landfill, in the direction of groundwater flow, suggests that the presence of the landfill may contributing to the elevated iron, TDS, and arsenic concentrations on the downgradient side of the landfill by altering the natural groundwater chemistry.
- Four analytes, DO, turbidity, iron, fecal coliform, were detected at both surface water sampling points at concentrations in excess of the regulatory criteria during the review period.

With regard to the hydrological data from the review period, the direction and rate of groundwater in the surficial aquifer beneath the LRL was flowing generally in a north-northwesterly direction at a relatively shallow gradient at all of the sampling events during the review period. Rainfall was lower than normal during the review period. There was an inward gradient across the LRL's slurry wall throughout the review period.

Based on the findings of this evaluation, the water quality and elevation monitoring network at the LRL appears to be adequate in meeting the objectives of the monitoring program. The most significant detection in the water quality monitoring network was arsenic. Arsenic was detected in the leachate during the review period at concentrations between 0.014 mg/l and 0.034 milligrams per liter (mg/L), which was significantly lower than the concentrations detected in the groundwater. This suggests that the source of the arsenic is not the leachate. PBS&J conducted a statistical analysis of the arsenic concentrations in the well network during the review period; including comparisons to the DO, pH, and turbidity readings, and a downgradient correlation. There were no obvious trends that would indicate a source for the arsenic, although there was some correlation between elevated arsenic concentrations and elevated DO and turbidity concentrations at some wells. The turbidity readings at some of the monitoring wells were unusually high during the review period and may have affected the arsenic test results.

With regard to the hydrological data from the review period, the direction and rate of groundwater in the surficial aquifer beneath the LRL was flowing generally in a north-northwesterly direction across Stage I at the time of each sampling event during the review period, and in a general west-southwest direction across Stage III. The horizontal gradient of the water table was relatively shallow gradient

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5.0 Summary, Conclusions, and Recommendations

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at all of the sampling events during the review period. Rainfall was lower than normal during the review period. There was an inward gradient across the LRL's slurry wall throughout the review period.

Based on the findings of this evaluation, the water quality and elevation monitoring network at the LRL appears to be adequate in meeting the objectives of the monitoring program. The groundwater quality and elevation monitoring network in its current configuration appears to be adequate to meet the monitoring requirements. However, PBS&J recommends that the FDEP SOP guidelines be standard operating procedures for field activities be followed carefully during future sampling events to ensure that the turbidity levels are as low as practical before the groundwater samples are collected. Samples collected for analysis of volatile organic compounds (VOCs) are done so in general accordance with Section FS 2221 of the SOP. The County should consider the use of dedicated pumps in the monitoring wells. Also, during periods of high or heavy precipitation, the water table at monitoring well GW-11 is higher than the top of the well screen, sometimes for extended periods. If these conditions exist at the time of sampling then sampling of GW-11 should be postponed until the water table drops to below the top of the well screen.

With regard to the arsenic detections, PBS&J recommends that supplemental water quality monitoring activities be performed in addition to those called for by the permit. The supplemental activities should involve the collection of samples those piezometers on the opposite side of the slurry wall in which elevated arsenic detections have occurred, including PZ-1, PZ-2, PZ-5, PZ-9, PZ-11, PZ-12, PZ-14, and PZ-15, and analyzed for arsenic in order to evaluate the arsenic concentrations in the leachate. We further recommend that monitoring wells in which the turbidity levels have consistently been measured at or near the FDEP SOP minimum (20 NTUs), including GW-2, GW-4, GW-7, GW-10, GW-13, and GW-16, be redeveloped to clear any sediment at the bottom of the wells which may be affecting the turbidity. The sediment is likely to contain naturally-occurring arsenic. We further recommend that in future sampling events, every effort be made to continue purging all of the monitoring wells in the network until the turbidity is 10 NTU or less in order to further reduce the effect that turbidity may be having on water quality. PBS&J recommends that these supplemental activities be performed during the next two semiannual groundwater sampling events. The results of the supplemental activities should be documented in a Supplemental Site Assessment Report for FDEP review and approval.

Based on the findings of the review period, the groundwater quality and elevation monitoring network in its current configuration appears to be adequate to meet the monitoring requirements.

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6.0 Environmental Professional Qualifications and Signatures

The following environmental professional was responsible for the preparation of this biennial water quality monitoring report.

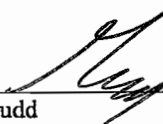
Mr. P. Greg Mudd, P.G.
Senior Geologist, PBS&J

Mr. Mudd is a Florida-registered professional geologist with over 20 years of experience in the planning and performance of environmental projects.

Date

1/28/10

P. Greg Mudd
Florida P.G. #1521



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TABLES

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TABLE 1-1
WATER QUALITY MONITORING NETWORK
LENA ROAD LANDFILL

Leachate Sampling Points			
Location		WACS Testsite Identification Number	
Lift Station No. 1		21611	
Lift Station No. 2		21612	
Lift Station No. 3		21613	
Groundwater Sampling Points (Monitoring Wells)			
Location/Well Identifier	Aquifer Monitored	Designation	WACS Testsite ID No.
GW-1	Surficial	Detection	21593
GW-2	Surficial	Detection	21594
GW-3	Surficial	Detection	21595
GW-4	Surficial	Detection	21596
GW-5	Surficial	Detection	21597
GW-6	Surficial	Detection	21598
GW-7	Surficial	Detection	21599
GW-8	Surficial	Detection	21600
GW-9	Surficial	Detection	21601
GW-10	Surficial	Detection	21602
GW-11	Surficial	Detection	21603
GW-12	Surficial	Detection	21604
GW-13	Surficial	Detection	21605
GW-14	Surficial	Detection	21606
GW-15	Surficial	Detection	21607
GW-16	Surficial	Detection	21608
GW-17	Surficial	Detection	21609
BGW-1	Surficial	Background	21610
Surface Water Sampling Points			
Identifier	Location		WACS Testsite ID No.
SW-1	Cypress Strand – Upstream		1663
SW-2	Cypress Strand - Downstream		1665

TABLE 1-2
WATER ELEVATION MONITORING NETWORK
LENA ROAD LANDFILL

Well Identifier	Top-of-Casing Elevation (Ft-NGVD)	Total Depth (Ft-TOC)	Screen Interval Elevation (Ft-NGVD)
Surficial Aquifer (Outside of Slurry Wall)			
GW-1	38.68	19.42	19.76-34.76
GW-2	40.92	19.41	22.01-37.01
GW-3	39.40	19.56	20.34-35.34
GW-4	40.53	19.63	21.4-36.4
GW-5	39.90	19.66	20.74-35.74
GW-6	38.95	19.54	19.91-34.91
GW-7	39.49	20.54	19.45-34.45
GW-8	39.75	20.32	19.93-34.93
GW-9	39.65	20.56	19.59-34.59
GW-10	38.34	20.15	18.82-33.82
GW-11	38.26	21.61	13.76-28.76
GW-12	42.09	20.27	22.32-37.32
GW-13	44.79	20.22	25.07-40.07
GW-14	39.63	20.15	19.98-34.98
GW-15	42.33	20.00	22.83-37.83
GW-16	44.41	20.15	24.76-39.76
GW-17	42.19	20.80	21.89-36.89
BGW-1	47.57	20.30	27.77-42.77
Surficial Aquifer (Inside of Slurry Wall)			
PZ-1	42.68	25.5	14.5-24.5
PZ-2	42.32	27.84	11.6-21.6
PZ-3	40.36	31.29	6.1-16.1
PZ-4	40.78	31.14	6.6-16.8
PZ-5	40.73	31.7	6.0-16.0
PZ-6	40.74	31.88	5.7-15.7
PZ-7	40.60	31.75	5.9-15.9
PZ-8	40.21	22.79	15.0-25.0
PZ-9	39.97	24.53	13.4-23.4
PZ-10	39.86	24.53	12.7-22.7
PZ-11	40.52	31.71	5.7-15.7
PZ-12	43.28	24.14	16.8-26.8
PZ-13	44.78	26.17	17.1-27.1
PZ-14	45.09	20.25	23.1-33.1
PZ-15	45.57	19.7	23.4-33.4
PZ-16	44.67	20	23.5-33.5
PZ-17	44.28	20.37	22.9-32.9
Lake Staff Gauges			
Lake		Elevation (Ft-NGVD)	
South 1		37.50	
South 2		46.40	
East Lake		46.50	

Table 2-1
Leachate Analytical Summary
Lena Road Landfill
2007

Analyte	Location:		Lift Station #1	Lift Station #2	Lift Station #3
	Sample Identifier:		Phase I	Phase II	
	Date of Test:		03/22/07	03/22/07	03/22/07
	Standard(1)	Units			
Field Measurements					
pH		STD	6.9	30.1	6.1
Conductivity		umhos/cm	1481	2586	1318
Dissolved Oxygen (DO)		mg/l	0.1	0.1	0.9
Inorganics					
Antimony		mg/l	<0.0015	<0.0015	<0.0015
Arsenic	5.0	mg/l	0.029	0.034	0.034
Barium	100	mg/l	0.063	0.056	0.033
Beryllium		mg/l	<0.0002	<0.0002	<0.0002
Bicarbonate alkalinity		mg/l	892	755	546
Cadmium	1.0	mg/l	<0.0005	<0.0005	<0.0005
Chloride		mg/l	216	123	46.4
Chromium		mg/l	0.003	0.003	0.002
Cobalt		mg/l	0.007	0.006	0.002
Copper		mg/l	<0.005	<0.005	0.057
Cyanide		mg/l	<0.005	<0.005	<0.005
Iron		mg/l	18	20.5	26.5
Lead	5,000	mg/l	<0.005	<0.005	<0.005
Mercury	200	ug/l	<0.100	<0.100	<0.100
Nickel		mg/l	0.009	0.008	0.006
Nitrate		mg/l	0.041	0.091	0.04
Selenium	1.0	mg/l	0.001	0.001	<0.0002
Silver	5.0	mg/l	0.002	<0.002	<0.002
Sodium		mg/l	160	133	40.5
Total Ammonia - N		mg/l	99.8	62.7	34.9
Thallium		mg/l	<0.0004	<0.0004	<0.0004
Tin as SN		mg/l	<0.1	<0.1	<0.1
Total Dissolved Solids (TDS)		mg/l	1460	941	729
Total Sulfide		mg/l	0.4	0.4	0.4
Vanadium		mg/l	0.012	0.011	0.009
Zinc		mg/l	0.022	0.017	0.041
Pesticides & Herbicides					
2,4-D	10,000	ug/l	<1.1	<1.1	<1.1
2,4,5-T		ug/l	<1.1	<1.1	<1.1
3 & 4 methylphenol		ug/l	10	<2.4	<2.4
A-BHC		ug/l	<0.00051	<0.00051	<0.00051
Aldrin		ug/l	<0.00065	<0.00065	<0.00065
B-BHC		ug/l	<0.0063	<0.0063	<0.0063
Chlordane	30	ug/l	<0.057	<0.057	<0.057
D-BHC		ug/l	<0.0074	<0.0074	<0.0074
Dieldrin		ug/l	<0.00086	<0.00086	<0.00086
Dimoseb		ug/l	<1.1	<1.1	<1.1
Endosulfan Sulfate		ug/l	<0.0070	<0.0070	<0.0070
Endosulfan-I		ug/l	<0.0063	<0.0063	<0.0063
Endosulfan-II		ug/l	<0.0078	<0.0078	<0.0078
Endrin	20	ug/l	<0.0035	<0.0035	<0.0035
Endrin Aldehyde		ug/l	<0.0050	<0.0050	<0.0050
G-BHC(Lindane)	400	ug/l	<0.011	<0.011	<0.011
Heptachlor	8	ug/l	<0.011	<0.011	<0.011
Heptachlor Epoxide		ug/l	<0.0060	<0.0060	<0.0060
Methoxychlor	10,000	ug/l	<0.0082	0.0082	<0.0082
Silvex	1,000	ug/l	<1.1	<1.1	<1.1
Toxaphene	500	ug/l	<0.72	<0.72	<0.72
Organics, Acid Extractables					
PCB-1016		ug/l	<0.26	<0.27	<0.27
PCB-1221		ug/l	<0.15	<0.16	<0.15
PCB-1232		ug/l	<0.38	<0.4	<0.39
PCB-1242		ug/l	<0.077	<0.080	<0.79
PCB-1248		ug/l	<0.070	<0.073	<0.72
PCB-1254		ug/l	<0.12	<0.13	<0.12
PCB-1260		ug/l	<0.1	<0.10	<0.1
PP-DDD		ug/l	<0.0047	<0.0047	<0.0047
PP-DDE		ug/l	<0.0031	<0.0031	<0.0031
PP-DDT		ug/l	<0.0042	<0.0042	<0.0042
Polychlorinated biphenyls					
2,4,6-Trichlorophenol	2,000	ug/l	<1.9	<1.9	<1.9
2,3,4,6-Tetrachlorophenol		ug/l	<0.65	<0.65	<0.65
2,4,5-Trichlorophenol	400,000	ug/l	<2.1	<2.1	<2.1
2,4-Dichlorophenol		ug/l	<1.8	<1.8	<1.8
2,4-Dimethylphenol		ug/l	<1.8	<1.8	<1.8
2,4-Dinitrophenol		ug/l	<6.2	<6.2	<6.2
2,6-Dichlorophenol		ug/l	<1.6	<1.6	<1.6
2-Chlorophenol		ug/l	<2.1	<2.1	<2.1
2-Methylphenol		ug/l	<2.3	<2.3	<2.3
2-Nitrophenol		ug/l	<1.2	<1.2	<1.2
4,6-Dinitro-2-methylphenol		ug/l	<1.5	<1.5	<1.5
4-Chloro-3-methylphenol		ug/l	<1.7	<1.7	<1.7
4-Nitrophenol		ug/l	<6.2	<6.2	<6.2
Pentachlorophenol	100,000	ug/l	<1.5	<1.5	<1.5

Analyte	Location:		Lift Station #1	Lift Station #2	Lift Station #3
	Sample Identifier:		Phase I	Phase II	
	Date of Test:		03/22/07	03/22/07	03/22/07
	Standard(1)	Units			
Phenol		ug/l	<3.5	<2.4	<2.4
<i>Base Neutrals</i>					
1,2,4,5-Tetrachlorobenzene	13,000	ug/l	<1.1	<1.1	<1.1
1,2,4-Trichlorobenzene		ug/l	<1.2	<1.2	<1.2
1,3,5-Trinitrobenzene		ug/l	<0.61	<0.61	<0.61
1,3-Dinitrobenzene		ug/l	<0.99	<0.99	<0.99
1,4-Naphthoquinone		ug/l	<1.1	<0.54	<0.54
1-Naphthylamine		ug/l	<0.84	<0.84	<0.84
2,4-Dinitrotoluene		ug/l	<0.91	<0.91	<0.91
2,6-Dinitrotoluene		ug/l	<0.72	<0.72	<0.72
2-Acetylaminofluorene		ug/l	<0.77	<0.77	<0.77
2-Chloronaphthalene		ug/l	<1.6	<1.6	<1.6
2-Methylnaphthalene		ug/l	<1.6	<1.6	<1.6
2-Naphthylamine		ug/l	<1.0	<1.0	<1.0
2-Nitroaniline		ug/l	<1.4	<1.4	<1.4
3,3-Dichlorobenzidine		ug/l	<1.6	<1.6	<1.6
3,3-Dimethylbenzidine		ug/l	<14	<14	<14
3-Methylcholanthrene		ug/l	<0.56	<0.56	<0.56
3-Nitroaniline		ug/l	<1.2	<1.2	<1.2
4-Aminobiphenyl		ug/l	<0.81	<0.81	<0.81
4-Bromophenyl-phenylether		ug/l	<1.7	<1.7	<1.7
4-Chloroaniline		ug/l	<2.1	<2.1	<2.1
4-Chlorophenylphenylether		ug/l	<1.8	<1.8	<1.8
4-Nitroaniline		ug/l	<1.4	<1.4	<1.4
5-Nitro-o-toluidine		ug/l	<0.90	<0.90	<0.90
7,12-Dimethylbenz(a)anthracene		ug/l	<0.92	<0.92	<0.92
Acenaphthene		ug/l	<1.5	<1.5	<1.5
Acenaphthylene		ug/l	<1.8	<1.8	<1.8
Acetophenone		ug/l	<1.5	<1.5	<1.5
Anthracene		ug/l	<1.0	<1.0	<1.0
Benzo(a)anthracene		ug/l	<1.6	<1.6	<1.6
Benzo(a)pyrene		ug/l	<0.99	<0.99	<0.99
Benzo(b)fluoranthene		ug/l	<1.6	<1.6	<1.6
Benzo(g,h,i)perylene		ug/l	<1.1	<1.1	<1.1
Benzo(k)fluoranthene		ug/l	<1.3	<1.3	<1.3
Benzyl alcohol		ug/l	<2.9	<2.9	<2.9
Bis(2-chloroethoxy)methane		ug/l	<2.0	<2.0	<2.0
Bis(2-chloroethyl)ether		ug/l	<2.6	<2.6	<2.6
Bis(2-chloro-1-methylethyl)ether		ug/l	<2.1	<2.1	<2.1
Bis(2-ethylhexyl)phthalate		ug/l	<1.3	<1.3	<1.3
Butylbenzylphthalate		ug/l	<1.2	<1.2	<1.2
Chlorobenzilate		ug/l	<0.75	<0.75	<0.75
Chrysene		ug/l	<1.2	<1.2	<1.2
Diallate		ug/l	<1.4	<1.4	<1.4
Dibenz(a,h)anthracene		ug/l	<1.0	<1.0	<1.0
Dibenzofuran		ug/l	<1.6	<1.6	<1.6
Diethylphthalate		ug/l	<2.5	<1.6	<1.6
Dimethoate		ug/l	<0.12	<0.12	<0.12
Dimethylphthalate		ug/l	<2.5	<2.1	<2.1
Di-n-butylphthalate		ug/l	<2.5	<1.8	<1.8
Di-N-octylphthalate		ug/l	<2.5	<1.2	<1.2
Diphenylamine		ug/l	<1.1	<1.1	<1.1
Disulfoton		ug/l	<0.18	<0.18	<0.18
Ethylmethanesulfonate		ug/l	<1.3	<1.3	<1.3
Famphur		ug/l	<0.5	<0.50	<0.50
Fluoranthene		ug/l	<1.2	<1.2	<1.2
Flourene		ug/l	<1.7	<1.7	<1.7
Hexachlorobenzene	130	ug/l	<1.7	<1.7	<1.7
Hexachlorobutadiene	500	ug/l	<1.0	<1.0	<1.0
Hexachlorocyclopentadiene	3,000	ug/l	<1.2	<1.2	<1.2
Hexachloroethane		ug/l	<0.85	<0.85	<0.85
Hexylchloropropene		ug/l	3800	3800	3800
Indeno(1,2,3-cd)pyrene		ug/l	<1.2	<1.2	<1.2
Isodrin		ug/l	<0.0061	<0.0061	<0.0061
Isophorone		ug/l	<1.4	<1.4	<1.4
Isosafrole		ug/l	<1.6	<1.6	<1.6
Kepone		ug/l	<1.4	<1.4	<1.4
Methapyrilene		ug/l	<1.1	<1.1	<1.1
Methyl parathion		ug/l	<0.11	<0.11	<0.11
Methylmethanesulfonate		ug/l	<1.2	<1.2	<1.2
Naphthalene		ug/l	<1.3	<1.3	<1.3
Nitrobenzene	2,000	ug/l	<1.9	<1.9	<1.9
N-Nitrosodiethylamine		ug/l	<1.5	<1.5	<1.5
N-Nitrosodimethylamine		ug/l	<2.4	<2.4	<2.4
N-Nitrosodi-n-butylamine		ug/l	<1.5	<1.5	<1.5
N-Nitroso-di-n-propylamine		ug/l	<1.9	<1.9	<1.9
N-Nitrosodiphenylamine		ug/l	<1.6	<1.6	<1.6
N-Nitrosoethylmethylamine		ug/l	<1.6	<2.4	<2.4
N-Nitrosopiperidine		ug/l	<0.87	<0.87	<0.87
N-Nitrosopyrrolidine		ug/l	<1.2	<1.2	<1.2
O,O,O-Triethylphosphorothioate		ug/l	<1.8	<1.8	<1.8
Ortho-toluidine		ug/l	<1.2	<1.2	<1.2
Para-Phenylenediamine		ug/l	<3.1	<3.1	<3.1
Parathion		ug/l	<0.25	<0.25	<0.25

Table 2-1, Page 2

Analyte	Location:		Lift Station #1	Lift Station #2	Lift Station #3
	Sample Identifier:		Phase I	Phase II	
	Date of Test:		03/22/07	03/22/07	03/22/07
	Standard(1)	Units			
P-Dimethylaminoazobenzene		ug/l	<0.67	<0.67	<0.67
Pentachlorobenzene		ug/l	<0.99	<0.99	<0.99
Pentachloronitrobenzene		ug/l	<1.5	<1.5	<1.5
Phenacetin		ug/l	<0.84	<0.84	<0.84
Phenanthrene		ug/l	<1.3	<1.3	<1.3
Phorate		ug/l	<0.20	<0.20	<0.20
Pronamide		ug/l	<0.70	<0.70	<0.70
Pyrene		ug/l	<1.2	<1.2	<1.2
Safrole		ug/l	<1.2	<1.2	<1.2
Thionazin		ug/l	<0.25	<0.25	<0.25
Volatile Organics					
1,1,1,2-Tetrachloroethane		ug/l	<0.63	<0.63	<0.63
1,1,1-Trichloroethane		ug/l	<0.46	<0.46	<0.46
1,1,2,2-Tetrachloroethane		ug/l	<0.15	<0.15	<0.15
1,1,2-Trichloroethane		ug/l	<0.47	<0.47	<0.47
1,1-Dichloroethane		ug/l	<0.52	<0.52	1
1,1-Dichloroethene	700	ug/l	<0.45	<0.45	<0.45
1,1-Dichloropropene		ug/l	<0.31	<0.31	<0.31
1,2,3-Trichloropropane		ug/l	<0.18	<0.18	<0.18
1,2-Dichlorobenzene		ug/l	<0.44	<0.44	<0.44
1,2-Dichloroethane	500	ug/l	<0.57	<0.57	3.2
1,2-Dichloropropane		ug/l	<0.52	<0.52	<0.52
1,3-Dichlorobenzene		ug/l	<0.64	<0.64	<0.64
1,3-Dichloropropane		ug/l	<0.39	<0.39	<0.39
1,4-Dichlorobenzene	7,500	ug/l	3	2.8	2.8
2,2-Dichloropropane		ug/l	<0.36	<0.36	<0.36
2-Butanone		ug/l	<8.4	<8.4	<8.4
2-Hexanone		ug/l	<4.4	<4.4	<4.4
4-Methyl-2-pentanone		ug/l	<3.8	<3.8	<3.8
Acetone		ug/l	<9.9	<9.9	<9.9
Acetonitrile		ug/l	<75	<75	<75
Acrolein		ug/l	<3.8	<3.8	<3.8
Acrylonitrile		ug/l	<1.2	<1.2	<1.2
Allyl chloride		ug/l	<2.5	<2.5	<2.5
Benzene	500	ug/l	0.97	3	9.9
Bromochloromethane		ug/l	<0.58	<0.58	<0.58
Bromodichloromethane		ug/l	<0.35	<0.35	<0.35
Bromomethane		ug/l	<2.5	<2.5	<2.5
Carbon disulfide		ug/l	<0.85	<0.85	<0.85
Carbon tetrachloride	500	ug/l	<0.42	<0.42	<0.42
Chlorobenzene	100,000	ug/l	3.5	7.6	11
Chloroethane		ug/l	<2.5	<2.5	<2.5
Chloromethane		ug/l	<0.64	<1.0	<1.0
Chloroprene		ug/l	<2.5	<2.5	<2.5
cis-1,2-Dichloroethene		ug/l	<0.65	4.3	20
cis-1,3-Dichloropropene		ug/l	<0.14	<0.14	<0.14
Dibromochloromethane		ug/l	<0.34	<0.34	<0.34
Dibromochloropropane		ug/l	<2.5	<2.5	<2.5
Dibromomethane		ug/l	<0.41	<0.41	<0.41
Dichlorodifluoromethane		ug/l	<2.5	<2.5	<2.5
Dichloromethane		ug/l	<4.0	<4.0	<4.0
Ethyl methacrylate		ug/l	<2.5	<2.5	<2.5
Ethylbenzene		ug/l	<0.44	<0.44	1.6
Ethylene dibromide		ug/l	<0.50	<0.50	<0.50
Iodomethane		ug/l	<2.5	<2.5	2.5
Isobutyl Alcohol		ug/l	<31	<31	<31
Methacrylonitrile		ug/l	<1.8	<1.8	<1.8
Methyl methacrylate		ug/l	<2.5	<2.5	<2.5
Propionitrile		ug/l	<7.2	<7.2	<7.2
Styrene		ug/l	<0.98	<0.98	<0.98
t-1,4-Dichloro-2-butene		ug/l	<2.5	<2.5	<2.5
Tetrachloroethene	700	ug/l	<0.5	<0.5	<0.5
Toluene		ug/l	3.4	2	0.79
Total Xylenes		ug/l	<0.5	<0.30	0.65
trans-1,2-Dichloroethene		ug/l	<0.44	<0.44	<0.44
trans-1,3-Dichloropropene		ug/l	<0.14	<0.14	<0.14
Tribromomethane		ug/l	<0.58	<0.58	<0.58
Trichloroethene	500	ug/l	<0.5	<0.5	<0.5
Trichlorofluoromethane		ug/l	<2.5	<2.5	<2.5
Trichloromethane		ug/l	<0.90	<0.90	<0.90
Vinyl acetate		ug/l	<1.5	<1.5	<1.5
Vinyl chloride	200	ug/l	<0.5	<0.50	4.9

Notes: (1) - Regulatory standard listed in 40 CFR Part 261.24. Analyte concentrations shown with shading represent an exceedance of the regulatory level.

Abbreviations: BDL = below detection limits; mg/l = milligrams per liter; ug/l = micrograms per liter; NTU = nephelometric turbidity units.

Table 2-2
Leachate Analytical Summary
Lena Road Landfill
2008

Analyte	Location:		Lift Station #1	Lift Station #2	Lift Station #3
	Sample Identifier:		Phase I	Phase II	
	Date of Test:		03/17/08	03/18/08	03/18/08
	Standard(1)	Units			
Field Measurements					
pH		STD	6.4	6.6	6.0
Conductivity		umhos/cm	247	248	1,228
Dissolved Oxygen (DO)		mg/l	0.7	0.9	0.7
Turbidity		NTU	110	14	2.4
Inorganics					
Chloride by Ion Chromatography		mg/l	165	203	72.8
Nitrate as N by Ion Chromatography		mg/l	<BDL	<BDL	<BDL
Antimony		mg/l	<BDL	<BDL	<BDL
Arsenic	5.0	mg/l	0.017	0.016	0.014
Barium	100	mg/l	0.049	0.047	0.048
Beryllium		mg/l	<BDL	<BDL	<BDL
Cadmium	1.0	mg/l	<BDL	0.0023	0.0023
Chromium		mg/l	<BDL	<BDL	<BDL
Cobalt		mg/l	<BDL	<BDL	<BDL
Copper		mg/l	<BDL	<BDL	0.066
Iron		mg/l	20	21	21
Lead	5,000	mg/l	<BDL	<BDL	<BDL
Mercury	200	ug/l	<BDL	<BDL	<BDL
Nickel		mg/l	0.0024	0.0012	0.0012
Selenium	1.0	mg/l	<BDL	<BDL	<BDL
Sodium		mg/l	72	69	60
Thallium		mg/l	<BDL	<BDL	<BDL
Vanadium		mg/l	<BDL	<BDL	<BDL
Zinc		mg/l	0.014	0.012	0.022
Ammonia		mg/l	84	103	36.2
Total Dissolved Solids		mg/l	1010	1100	745
Alkalinity as CaCO3		mg/l	793	865	582
Cyanide, Total		ug/l	<0.005	<0.005	<0.005
Sulfide		ug/l	0.14	0.75	1.4
Volatile Organic Compounds					
1,1,1,2-Tetrachloroethane		ug/l	<0.12	<0.12	<0.12
1,1,1-Trichloroethane		ug/l	<0.09	<0.09	<0.09
1,1,2,2-Tetrachloroethane		ug/l	<0.12	<0.12	<0.12
1,1,2-Trichloroethane		ug/l	<0.23	<0.23	<0.23
1,1-Dichloroethane		ug/l	0.26	0.2	0.21
1,1-Dichloroethene	700	ug/l	<0.14	<0.14	<0.14
1,1-Dichloropropene		ug/l	<0.15	<0.15	<0.15
1,2,3-Trichloropropane		ug/l	<0.18	<0.18	<0.18
1,2-Dichlorobenzene		ug/l	<0.24	<0.24	<0.24
1,2-Dichloroethane	500	ug/l	<0.13	<0.13	<0.13
1,2-Dichloropropane		ug/l	0.26	0.24	0.21
1,3-Dichlorobenzene		ug/l	<0.12	<0.12	<0.12
1,3-Dichloropropane		ug/l	<0.06	<0.06	<0.06
1,4-Dichlorobenzene	7,500	ug/l	<0.11	<0.11	<0.11
2,2-Dichloropropane		ug/l	<0.19	<0.19	<0.19
2-Butanone		ug/l	3.7	3.5	3.6
2-Hexanone		ug/l	<0.18	<0.18	<0.18
4-Methyl-2-pentanone		ug/l	<0.33	<0.33	<0.33
Acetone		ug/l	<1.9	<1.9	<1.9
Acetonitrile		ug/l	<0.67	<0.67	<0.67
Acrolein		ug/l	<0.63	<0.63	<0.63
Acrylonitrile		ug/l	<1.6	<1.6	<1.6
Allyl chloride		ug/l	<0.11	<0.11	<0.11
Benzene	500	ug/l	4.7	4.7	4.7
Bromochloromethane		ug/l	<0.22	<0.22	<0.22
Bromodichloromethane		ug/l	<0.13	<0.13	<0.13
Bromoform		ug/l	<0.10	<0.10	<0.10
Bromomethane		ug/l	<0.58	<0.58	<0.58
Carbon disulfide		ug/l	<0.14	<0.14	<0.14
Carbon tetrachloride	500	ug/l	<0.22	<0.22	<0.22
Chlorobenzene	100,000	ug/l	8.5	8.7	8.9
Chloroethane		ug/l	<0.39	<0.39	<0.39
Chloroform		ug/l	<0.14	<0.14	<0.14
Chloromethane		ug/l	<0.47	<0.47	<0.47
Chloroprene		ug/l	<0.21	<0.21	<0.21
cis-1,2-Dichloroethene		ug/l	0.88	0.84	0.86
cis-1,3-Dichloropropene		ug/l	<0.14	<0.14	<0.14
Dibromochloromethane		ug/l	<0.15	<0.15	<0.15
Dibromomethane		ug/l	<0.24	<0.24	<0.24
Dichlorodifluoromethane		ug/l	<0.74	<0.74	<0.74
Ethyl methacrylate		ug/l	<0.10	<0.10	<0.10
Ethylbenzene		ug/l	0.23	0.28	0.3
Isobutyl Alcohol		ug/l	<7.9	<7.9	<7.9
m,p-Xylenes		ug/l	0.57	0.57	0.45
MEK (2-Butanone)		ug/l	<0.55	<0.55	<0.55
Methacrylonitrile		ug/l	<0.26	<0.26	<0.26
Methyl methacrylate		ug/l	<0.15	<0.15	<0.15
Methyl Iodide (Iodomethane)		ug/l	<0.16	<0.16	<0.16

Analyte	Location:		Lift Station #1	Lift Station #2	Lift Station #3
	Sample Identifier:		Phase I	Phase II	
	Date of Test:		03/17/08	03/18/08	03/18/08
	Standard(1)	Units			
Methylene Chloride		ug/l	<0.13	<0.13	<0.13
MIBK (4-Methyl-2-pentanone)		ug/l	<0.41	<0.41	<0.41
o-Xylene		ug/l	0.29	0.19	0.26
Propionitrile		ug/l	<1.3	<1.3	<1.3
Styrene		ug/l	<0.10	<0.10	<0.10
Tetrachloroethene	700	ug/l	<0.15	<0.15	<0.15
Toluene		ug/l	0.24	0.23	0.29
trans-1,2-Dichloroethene		ug/l	<0.30	<0.30	<0.30
trans-1,3-Dichloropropene		ug/l	<0.06	<0.06	<0.06
trans-1,4-Dichloro-2-butene		ug/l	<0.28	<0.28	<0.28
Trichloroethene	500	ug/l	<0.12	<0.12	<0.12
Trichlorofluoromethane		ug/l	<0.21	<0.21	<0.21
Vinyl acetate		ug/l	<0.53	<0.53	<0.53
Vinyl chloride	200	ug/l	4	4.3	4.2
Xylene, Total		ug/l	0.86	0.61	0.71
Pesticides and Herbicides					
4,4'-DDD		ug/l	<0.0041	<0.0041	<0.0041
4,4'-DDE		ug/l	<0.0055	<0.0055	<0.0055
4,4'-DDT		ug/l	<0.0032	<0.0032	<0.0032
Aldrin		ug/l	<0.0018	<0.0018	<0.0018
alpha-BHC		ug/l	<0.0028	<0.0028	<0.0028
beta-BHC		ug/l	<0.0027	<0.0027	<0.0027
Chlorodane (technical)	30	ug/l	<0.057	<0.057	<0.057
Chlorobenzilate		ug/l	<0.075	<0.075	<0.075
delta-BHC		ug/l	<0.0028	<0.0028	<0.0028
Dieldrin		ug/l	<0.0014	<0.0014	<0.0014
Endosulfan I		ug/l	<0.0034	<0.0034	<0.0034
Endosulfan II		ug/l	<0.0033	<0.0033	<0.0033
Endosulfan sulfate		ug/l	<0.0030	<0.0030	<0.0030
Endrin	20	ug/l	<0.0031	<0.0031	<0.0031
Endrin aldehyde		ug/l	<0.0032	<0.0032	<0.0032
gamma-BHD (Lindane)	400	ug/l	<0.0026	<0.0026	<0.0026
Heptachlor	8	ug/l	<0.0031	<0.0031	<0.0031
Heptachlor epoxide		ug/l	<0.0031	<0.0031	<0.0031
Isodrin		ug/l	<0.0061	<0.0061	<0.0061
Kepone		ug/l	<0.083	<0.083	<0.083
Methoxychlor		ug/l	<0.0051	<0.0051	<0.0051
Toxaphene		ug/l	<0.72	<0.72	<0.72
Dimethoate		ug/l	<0.12	<0.12	<0.12
Disulfoton		ug/l	<0.18	<0.18	<0.18
Famphur		ug/l	<0.50	<0.50	<0.50
Methyl parathion		ug/l	<0.11	<0.11	<0.11
Parathion		ug/l	<0.25	<0.25	<0.25
Phorate		ug/l	<0.20	<0.20	<0.20
Thionazin		ug/l	<0.25	<0.25	<0.25
2,4,5-T		ug/l	<1.0	<1.0	<1.0
2,4-D		ug/l	<1.0	<1.0	<1.0
Dimoseb		ug/l	<1.0	<1.0	<1.0
Silvex (2,4,5-TP)		ug/l	<1.0	<1.0	<1.0
Polychlorinated biphenyls					
PCB-1016		ug/l	<0.26	<0.26	<0.26
PCB-1221		ug/l	<0.15	<0.15	<0.15
PCB-1232		ug/l	<0.38	<0.38	<0.38
PCB-1242		ug/l	<0.077	<0.077	<0.077
PCB-1248		ug/l	<0.070	<0.070	<0.070
PCB-1254		ug/l	<0.12	<0.12	<0.12
PCB-1260		ug/l	<0.10	<0.10	<0.10
Semivolatile Analyses					
1,2,4,5-Tetrachlorobenzene		ug/l	<1.1	<1.1	<1.1
1,2,4-Trichlorobenzene		ug/l	<1.2	<1.2	<1.2
1,3,5-Trinitrobenzene		ug/l	<0.61	<0.61	<0.61
1,3-Dinitrobenzene		ug/l	<0.99	<0.99	<0.99
1,4-Naphthoquinone		ug/l	<1.1	<1.1	<1.1
1-Naphthylamine		ug/l	<0.84	<0.84	<0.84
2,2'-oxybis (2-chloropropane)		ug/l	<2.1	<2.1	<2.1
2,3,4,6-Tetrachlorophenol		ug/l	<0.65	<0.65	<0.65
2,4,5-Trichlorophenol	400,000	ug/l	<2.1	<2.1	<2.1
2,4,6-Trichlorophenol	2,000	ug/l	<1.9	<1.9	<1.9
2,4-Dichlorophenol		ug/l	<1.8	<1.8	<1.8
2,4-Dimethylphenol		ug/l	<1.8	<1.8	<1.8
2,4-Dinitrophenol		ug/l	<6.2	<6.2	<6.2
2,4-Dinitrotoluene	13,000	ug/l	<0.91	<0.91	<0.91
2,6-Dichlorophenol		ug/l	<1.6	<1.6	<1.6
2,6-Dinitrotoluene		ug/l	<0.72	<0.72	<0.72
2-Acetylaminofluorene		ug/l	<0.77	<0.77	<0.77
2-Chloronaphthalene		ug/l	<1.6	<1.6	<1.6
2-Chlorophenol		ug/l	<2.1	<2.1	<2.1
2-Methylnaphthalene		ug/l	<1.6	<1.6	<1.6
2-Methylphenol		ug/l	<2.3	<2.3	<2.3
2-Naphthylamine		ug/l	<1.0	<1.0	<1.0
2-Nitroaniline		ug/l	<1.4	<1.4	<1.4
2-Nitrophenol		ug/l	<1.2	<1.2	<1.2
2-Toluidine		ug/l	<1.2	<1.2	<1.2
3&4 Methylphenol		ug/l	<2.4	<2.4	<2.4

Table 2-2, Page 2

Analyte	Location:		Lift Station #1	Lift Station #2	Lift Station #3
	Sample Identifier:		Phase I	Phase II	
	Date of Test:		03/17/08	03/18/08	03/18/08
	Standard (1)	Units			
3,3'-Dichlorobenzidine		ug/l	<1.6	<1.6	<1.6
3,3'-Dimethylbenzidine		ug/l	<14	<14	<14
3-Methylcholanthrene		ug/l	<0.56	<0.56	<0.56
3-Nitroaniline		ug/l	<1.2	<1.2	<1.2
4,6-Dinitro-2-methylphenol		ug/l	<1.5	<1.5	<1.5
4-Aminobiphenyl		ug/l	<0.81	<0.81	<0.81
4-Bromophenyl phenyl ether		ug/l	<1.7	<1.7	<1.7
4-Chloro-3-methylphenol		ug/l	<1.7	<1.7	<1.7
4-Chloroaniline		ug/l	<2.1	<2.1	<2.1
4-Chlorophenyl phenyl ether		ug/l	<1.8	<1.8	<1.8
4-Nitroaniline		ug/l	<1.4	<1.4	<1.4
4-Nitrophenol		ug/l	<6.2	<6.2	<6.2
7,12-Dimethylbenz(a)anthracene		ug/l	<0.92	<0.92	<0.92
Acenaphthene		ug/l	<1.5	<1.5	<1.5
Acenaphthylene		ug/l	<1.8	<1.8	<1.8
Acetophenone		ug/l	<1.5	<1.5	<1.5
Anthracene		ug/l	<1.0	<1.0	<1.0
Benzo(a)anthracene		ug/l	<1.6	<1.6	<1.6
Benzo(a)pyrene		ug/l	<0.99	<0.99	<0.99
Benzo(b)fluoranthene		ug/l	<1.6	<1.6	<1.6
Benzo(g,h,i)perylene		ug/l	<1.1	<1.1	<1.1
Benzo(k)fluoranthene		ug/l	<1.3	<1.3	<1.3
Benzyl alcohol		ug/l	<2.9	<2.9	<2.9
Bis(2-chloroethoxy)methane		ug/l	<2.0	<2.0	<2.0
Bis(2-chloroethyl)ether		ug/l	<2.6	<2.6	<2.6
Bis(2-ethylhexyl)phthalate		ug/l	<1.5	<1.5	<1.5
Butyl Benzyl phthalate		ug/l	<1.2	<1.2	<1.2
Chrysene		ug/l	<1.2	<1.2	<1.2
Dialla		ug/l	<1.4	<1.4	<1.4
Dibenz(a,h)anthracene		ug/l	<1.0	<1.0	<1.0
Dibenzofuran		ug/l	<1.6	<1.6	<1.6
Diethyl phthalate		ug/l	<2.5	<2.5	<2.5
Dimethyl phthalate		ug/l	<2.1	<2.1	<2.1
Di-n-butyl phthalate		ug/l	<2.5	<2.5	<2.5
Di-n-octyl phthalate		ug/l	<2.5	<2.5	<2.5
Diphenylamine		ug/l	<1.6	<1.6	<1.6
Ethyl methanesulfonate		ug/l	<1.3	<1.3	<1.3
Fluoranthene		ug/l	<1.2	<1.2	<1.2
Fluorene		ug/l	<1.7	<1.7	<1.7
Hexachlorobenzene	130	ug/l	<1.7	<1.7	<1.7
Hexachlorobutadiene	500	ug/l	<1.0	<1.0	<1.0
Hexachlorocyclopentadiene		ug/l	<1.2	<1.2	<1.2
Hexachloroethane		ug/l	<0.85	<0.85	<0.85
Hexachloropropene		ug/l	<3800	<3800	<3800
Indeno[1,2,3-cd]pyrene		ug/l	<1.2	<1.2	<1.2
Isophorone		ug/l	<1.4	<1.4	<1.4
Isosafrole		ug/l	<1.6	<1.6	<1.6
Methapyrilene		ug/l	<1.1	<1.1	<1.1
Methyl methanesulfonate		ug/l	<1.2	<1.2	<1.2
Naphthalene		ug/l	<1.3	<1.3	<1.3
Nitrobenzene	2,000	ug/l	<1.9	<1.9	<1.9
N-Nitro-o-toluidine		ug/l	<0.90	<0.90	<0.90
N-Nitrosodimethylamine		ug/l	<1.5	<1.5	<1.5
N-Nitrosodimethylamine		ug/l	<2.4	<2.4	<2.4
N-Nitrosodi-n-butylamine		ug/l	<1.5	<1.5	<1.5
N-Nitrosodi-n-propylamine		ug/l	<1.9	<1.9	<1.9
N-Nitrosodiphenylamine		ug/l	<1.6	<1.6	<1.6
N-Nitrosomethylethylamine		ug/l	<2.4	<2.4	<2.4
N-Nitrosopiperidine		ug/l	<0.87	<0.87	<0.87
N-Nitrosopyrrolidine		ug/l	<0.12	<0.12	<0.12
o,o'-Triethylphosphorothioate		ug/l	<1.8	<1.8	<1.8
p-Dimethylamino azobenzene		ug/l	<0.67	<0.67	<0.67
Pentachlorobenzene		ug/l	<0.99	<0.99	<0.99
Pentachloronitrobenzene		ug/l	<1.5	<1.5	<1.5
Pentachlorophenol	100,000	ug/l	<1.5	<1.5	<1.5
Phenacetin		ug/l	<0.84	<0.84	<0.84
Phenanthrene		ug/l	<1.3	<1.3	<1.3
Phenol		ug/l	<2.4	<2.4	<2.4
p-Phenylene diamine		ug/l	<3.1	<3.1	<3.1
Pronamide		ug/l	<0.70	<0.70	<0.70
Pyrene		ug/l	<1.2	<1.2	<1.2
Safrole, Total		ug/l	<1.2	<1.2	<1.2

Notes: (1) - Regulatory standard listed in 40 CFR Part 261.24. Analyte concentrations shown with shading represent an exceedance of the regulatory level.

Abbreviations: BDL = below detection limits; mg/l = milligrams per liter; ug/l = micrograms per liter; NTU = nephelometric turbidity units.

Table 2-3
Leachate Analytical Summary
Lena Road Landfill
2009

Analyte	Location:		Lift Station #1	Lift Station #2	Lift Station #3
	Sample Identifier:		Phase I	Phase II	
	Date of Test:		03/16/09	03/16/09	03/16/09
	Standard(1)	Units			
Field Measurements					
pH		STD	6.8	6.5	6.3
Conductivity		umhos/cm	3,591	2,235	1,278
Dissolved Oxygen (DO)		mg/l	0.3	0.4	0.3
Turbidity		NTU	36	33	14
Inorganics					
Chloride by Ion Chromatography		mg/l	231	298	39.9
Nitrate as N by Ion Chromatography		mg/l	<BDL	0.033	<BDL
Antimony		mg/l	<BDL	<BDL	<BDL
Arsenic	5.0	mg/l	<BDL	<BDL	<BDL
Barium	100	mg/l	0.046	0.079	0.033
Beryllium		mg/l	<BDL	<BDL	<BDL
Cadmium	1.0	mg/l	<BDL	<BDL	<BDL
Chromium		mg/l	<BDL	0.001	<BDL
Cobalt		mg/l	0.004	0.009	0.002
Copper		mg/l	<BDL	<BDL	<BDL
Iron		mg/l	14.1	10.3	14.8
Lead	5,000	mg/l	<BDL	<BDL	<BDL
Mercury	200	ug/l	<BDL	<BDL	<BDL
Nickel		mg/l	0.008	0.014	0.005
Selenium	1.0	mg/l	<BDL	<BDL	<BDL
Silver		mg/l	<BDL	<BDL	<BDL
Sodium		mg/l	98.7	224	39.6
Thallium		mg/l	<BDL	<BDL	<BDL
Vanadium		mg/l	0.009	0.015	0.006
Zinc		mg/l	<BDL	<BDL	<BDL
Ammonia		mg/l	123	118	31.7
Total Dissolved Solids		mg/l	872	1500	639
Alkalinity as CaCO3		mg/l	760	1080	566
Cyanide, Total		ug/l	<0.005	<0.005	<0.005
Sulfide		ug/l	0.52	<0.1	0.52
Volatile Organic Compounds					
1,1,1,2-Tetrachloroethane		ug/l	<0.12	<0.12	<0.12
1,1,1-Trichloroethane		ug/l	<0.09	<0.09	<0.09
1,1,2,2-Tetrachloroethane		ug/l	<0.12	<0.12	<0.12
1,1,2-Trichloroethane		ug/l	<0.023	<0.023	<0.023
1,1-Dichloroethane		ug/l	0.14	0.14	0.14
1,1-Dichloroethene	700	ug/l	<0.14	<0.14	<0.14
1,1-Dichloropropene		ug/l	<0.15	<0.15	<0.15
1,2,3-Trichloropropane		ug/l	<0.18	<0.18	<0.18
1,2-Dichlorobenzene		ug/l	<0.24	<0.24	<0.24
1,2-Dichloroethane	500	ug/l	<0.13	<0.13	<0.13
1,2-Dichloropropane		ug/l	0.21	0.21	0.2
1,3-Dichlorobenzene		ug/l	<0.12	<0.12	<0.12
1,3-Dichloropropane		ug/l	<0.06	<0.06	<0.06
1,4-Dichlorobenzene	7,500	ug/l	<0.11	<0.11	<0.11
2,2-Dichloropropane		ug/l	<0.19	<0.19	<0.19
2-Butanone		ug/l	3.2	3.2	2.7
2-Hexanone		ug/l	<0.18	<0.18	<0.18
4-Methyl-2-pentanone		ug/l	<0.33	<0.33	2.2
Acetone		ug/l	100	100	190
Acetonitrile		ug/l	3.7	3.7	4.4
Acrolein		ug/l	<0.63	<0.63	<0.63
Acrylonitrile		ug/l	<1.6	<1.6	<1.6
Allyl chloride		ug/l	<0.11	<0.11	<0.11
Benzene	500	ug/l	1.0	1.0	1.7
Bromochloromethane		ug/l	<0.22	<0.22	<0.22
Bromodichloromethane		ug/l	<0.13	<0.13	<0.13
Bromofom		ug/l	<0.10	<0.10	<0.10
Bromomethane		ug/l	<0.58	<0.58	<0.58
Carbon disulfide		ug/l	0.15	0.15	0.15
Carbon tetrachloride	500	ug/l	<0.22	<0.22	<0.22
Chlorobenzene	100,000	ug/l	8.5	8.5	8.3
Chloroethane		ug/l	<0.39	<0.39	<0.39
Chloroform		ug/l	<0.14	<0.14	<0.14
Chloromethane		ug/l	<0.47	<0.47	<0.47
Chloroprene		ug/l	<0.21	<0.21	<0.21
cis-1,2-Dichloroethene		ug/l	0.45	0.45	0.71
cis-1,3-Dichloropropene		ug/l	<0.14	<0.14	<0.14
Dibromochloromethane		ug/l	<0.15	<0.15	<0.15
Dibromomethane		ug/l	<0.24	<0.24	<0.24
Dichlorodifluoromethane		ug/l	<0.74	<0.74	<0.74
Ethyl methacrylate		ug/l	<0.10	<0.10	<0.10
Ethylbenzene		ug/l	0.42	0.42	0.63
Isobutyl Alcohol		ug/l	38	38	57
m,p-Xylenes		ug/l	0.61	0.61	0.61
MEK (2-Butanone)		ug/l	120	120	240
Methacrylonitrile		ug/l	<0.26	<0.26	<0.26
Methyl methacrylate		ug/l	<0.15	<0.15	<0.15

Analyte	Location:		Lift Station #1	Lift Station #2	Lift Station #3
	Sample Identifier:		Phase I	Phase II	
	Date of Test:		03/16/09	03/16/09	03/16/09
	Standard(1)	Units			
Methyl Iodide (Iodomethane)		ug/l	<0.16	<0.16	<0.16
Methylene Chloride		ug/l	<0.13	<0.13	<0.13
MIBK (4-Methyl-2-pentanone)		ug/l	2.1	2.1	3.8
o-Xylene		ug/l	0.39	0.39	0.33
Propionitrile		ug/l	<1.3	<1.3	<1.3
Styrene		ug/l	<0.10	<0.10	0.87
Tetrachloroethene	700	ug/l	<0.15	<0.15	<0.15
Toluene		ug/l	0.59	0.59	1.1
trans-1,2-Dichloroethene		ug/l	<0.30	<0.30	<0.30
trans-1,3-Dichloropropene		ug/l	<0.06	<0.06	<0.06
trans-1,4-Dichloro-2-butene		ug/l	<0.28	<0.28	<0.28
Trichloroethene	500	ug/l	<0.12	<0.12	<0.12
Trichlorofluoromethane		ug/l	<0.21	<0.21	<0.21
Vinyl acetate		ug/l	<0.53	<0.53	<0.53
Vinyl chloride	200	ug/l	0.92	0.92	0.92
Xylene, Total		ug/l	1.0	1.0	0.94
Pesticides and Herbicides					
4,4'-DDD		ug/l	<0.020	<0.020	<0.020
4,4'-DDE		ug/l	<0.048	<0.048	<0.048
4,4'-DDT		ug/l	<0.022	<0.022	<0.022
Aldrin		ug/l	<0.040	<0.040	<0.040
alpha-BHC		ug/l	<0.038	<0.038	<0.038
beta-BHC		ug/l	<0.046	<0.046	<0.046
Chlorodane (technical)	30	ug/l	<0.031	<0.031	<0.031
delta-BHC		ug/l	<0.022	<0.022	<0.022
Dieldrin		ug/l	<0.028	<0.028	<0.028
Endosulfan I		ug/l	<0.024	<0.024	<0.024
Endosulfan II		ug/l	<0.014	<0.014	<0.014
Endosulfan sulfate		ug/l	<0.027	<0.027	<0.027
Endrin	20	ug/l	<0.019	<0.019	<0.019
Endrin aldehyde		ug/l	<0.024	<0.024	<0.024
gamma-BHD (Lindane)	400	ug/l	<0.025	<0.025	<0.025
Heptachlor	8	ug/l	<0.027	<0.027	<0.027
Heptachlor epoxide		ug/l	<0.048	<0.048	<0.048
Methoxychlor		ug/l	<0.024	<0.024	<0.024
Toxaphene		ug/l	<0.090	<0.090	<0.090
Dimethoate		ug/l	<0.033	<0.033	<0.033
Disulfoton		ug/l	<0.034	<0.034	<0.034
Famphur		ug/l	<0.035	<0.035	<0.035
Isodrin		ug/l	<1.8	<1.8	<1.8
Methyl parathion		ug/l	<0.020	<0.020	<0.020
Parathion		ug/l	<2.3	<2.3	<2.3
Phorate		ug/l	<0.032	<0.032	<0.032
Thionazin		ug/l	<1.7	<1.7	<1.7
2,4,5-T		ug/l	<0.053	<0.053	<0.059
2,4-D		ug/l	<0.091	<0.091	<0.10
Dinoseb		ug/l	<0.28	<0.28	<0.31
Silvex (2,4,5-TP)		ug/l	<0.056	<0.056	<0.062
Pentachlorophenol		ug/l	<0.043	<0.043	<0.048
Dibromochloropropane		ug/l	<0.005	<0.005	<0.005
Ethylene Dibromide		ug/l	<0.005	<0.005	<0.005
Plychlornated biphenyls					
PCB-1016		ug/l	<0.17	<0.17	<0.17
PCB-1221		ug/l	<0.17	<0.17	<0.17
PCB-1232		ug/l	<0.17	<0.17	<0.17
PCB-1242		ug/l	<0.17	<0.17	<0.17
PCB-1248		ug/l	<0.17	<0.17	<0.17
PCB-1254		ug/l	<0.17	<0.17	<0.17
PCB-1260		ug/l	<0.14	<0.14	<0.14
Semivolatile Analyses					
1,2,4,5-Tetrachlorobenzene		ug/l	<1.2	<1.2	<1.2
1,2,4- Trichlorobenzene		ug/l	<1.1	<1.1	<1.1
1,3,5-Trinitrobenzene		ug/l	<2.3	<2.3	<2.3
1,3-Dinitrobenzene		ug/l	<1.5	<1.5	<1.5
1,4-Naphthoquinone		ug/l	<2.1	<2.1	<2.1
1-Naphthylamine		ug/l	<4.0	<4.0	<4.0
2,2'-oxybis (2-chloropropane)		ug/l	<3.1	<3.1	<3.1
2,3,4,6-Tetrachlorophenol		ug/l	<1.3	<1.3	<1.3
2,4,5-Trichlorophenol	400,000	ug/l	<1.4	<1.4	<1.4
2,4,6-Trichlorophenol	2,000	ug/l	<2.8	<2.8	<2.8
2,4-Dichlorophenol		ug/l	<3.1	<3.1	<3.1
2,4-Dimethylphenol		ug/l	<2.9	<2.9	<2.9
2,4-Dinitrophenol		ug/l	<2.7	<2.7	<2.7
2,4-Dinitrotoluene	13,000	ug/l	<0.026	<0.026	<0.026
2,6-Dichlorophenol		ug/l	<1.6	<1.6	<1.6
2,6-Dinitrotoluene		ug/l	<1.3	<1.3	<1.3
2-Acetylaminofluorence		ug/l	<2.2	<2.2	<2.2
2-Chloronaphthalene		ug/l	<1.2	<1.2	<1.2
2-Chlorophenol		ug/l	<3.4	<3.4	<3.4
2-Methylnaphthalene		ug/l	<3.3	<3.3	<3.3
2-Methylphenol		ug/l	<1.2	<1.2	<1.2
2-Naphthylamine		ug/l	<1.5	<1.5	<1.5
2-Nitroaniline		ug/l	<3.3	<3.3	<3.3
2-Nitrophenol		ug/l	<1.3	<1.3	<1.3

Table 2-3, Page 2

Analyte	Location:		Lift Station #1	Lift Station #2	Lift Station #3
	Sample Identifier:		Phase I	Phase II	
	Date of Test:		03/16/09	03/16/09	03/16/09
	Standard(1)	Units			
2-Toluidine		ug/l	<3.3	<3.3	<3.3
3&4 Methylphenol		ug/l	6.6	11	9.1
3,3'-Dichlorobenzidine		ug/l	<2.4	<2.4	<2.4
3,3'-Dimethylbenzidine		ug/l	<8.5	<8.5	<8.5
3-Methylcholanthrene		ug/l	<1.6	<1.6	<1.6
3-Nitroaniline		ug/l	<1.6	<1.6	<1.6
4,6-Dinitro-2-methylphenol		ug/l	<4.4	<4.4	<4.4
4-Aminobiphenyl		ug/l	<1.6	<1.6	<1.6
4-Bromophenyl phenyl ether		ug/l	<2.6	<2.6	<2.6
4-Chloro-3-methylphenol		ug/l	<1.9	<1.9	<1.9
4-Chloroaniline		ug/l	<1.1	<1.1	<1.1
4-Chlorophenyl phenyl ether		ug/l	<1.6	<1.6	<1.6
4-Nitroaniline		ug/l	<2.0	<2.0	<2.0
4-Nitrophenol		ug/l	<1.7	<1.7	<1.7
7,12-Dimethylbenz(a)anthracene		ug/l	<1.8	<1.8	<1.8
Acenaphthene		ug/l	<1.2	<1.2	<1.2
Acenaphthylene		ug/l	<1.2	<1.2	<1.2
Acetophenone		ug/l	<1.9	<1.9	<1.9
Anthracene		ug/l	<0.034	<0.034	<0.034
Benzo[a]anthracene		ug/l	<0.022	<0.022	<0.022
Benzo[a]pyrene		ug/l	<0.024	<0.024	<0.024
Benzo[b]fluoranthene		ug/l	<0.028	<0.028	<0.028
Benzo[g,h,i]perylene		ug/l	<0.036	<0.036	<0.036
Benzo[k]fluoranthene		ug/l	<0.033	<0.033	<0.033
Benzyl alcohol		ug/l	<1.5	3.6	4.1
Bis(2-chloroethoxy)methane		ug/l	<1.5	<1.5	<1.5
Bis(2-chloroethyl)ether		ug/l	<1.8	<1.8	<1.8
Bis(2-ethylhexyl)phthalate		ug/l	<1.9	<1.9	<1.9
Butyl Benzyl phthalate		ug/l	<2.1	<2.1	<2.1
Chrysene		ug/l	<0.027	<0.027	<0.027
Diallyl		ug/l	<0.028	<0.028	<0.028
Dibenz[a,h]anthracene		ug/l	<0.038	<0.038	<0.038
Dibenzofuran		ug/l	<1.2	<1.2	<1.2
Diethyl phthalate		ug/l	<1.4	<1.4	<1.4
Dimethylphthalate		ug/l	<1.0	<1.0	1.1
Di-n-butyl phthalate		ug/l	<1.8	<1.8	<1.8
Di-n-octyl phthalate		ug/l	<1.9	<1.9	<1.9
Diphenylamine		ug/l	<3.0	<3.0	<3.0
Ethyl methanesulfonate		ug/l	<1.7	<1.7	<1.7
Fluoranthene		ug/l	<0.032	<0.032	<0.032
Fluorene		ug/l	<1.2	<1.2	<1.2
Hexachlorobenzene	130	ug/l	<0.033	<0.033	<0.033
Hexachlorobutadiene	500	ug/l	<0.031	<0.031	<0.031
Hexachlorocyclopentadiene		ug/l	<1.2	<1.2	<1.2
Hexachloroethane		ug/l	<1.1	<1.1	<1.1
Hexachloropropene		ug/l	<1.1	<1.1	<1.1
Indeno[1,2,3-cd]pyrene		ug/l	<0.038	<0.038	<0.038
Isophorone		ug/l	<1.4	<1.4	<1.4
Isosafrole		ug/l	<1.4	<1.4	<1.4
Methapyrilene		ug/l	<3.5	<3.5	<3.5
Methyl methanesulfonate		ug/l	<5.8	<5.8	<5.8
Naphthalene		ug/l	<1.4	<1.4	<1.4
Nitrobenzene	2,000	ug/l	<1.3	<1.3	<1.3
N-Nitrosodiethylamine		ug/l	<1.6	<1.6	<1.6
N-Nitrosodimethylamine		ug/l	<1.0	<1.0	<1.0
N-Nitrosodi-n-butylamine		ug/l	<1.3	<1.3	<1.3
N-Nitrosodi-n-propylamine		ug/l	<2.4	<2.4	<2.4
N-Nitrosodiphenylamine		ug/l	<3.0	<3.0	<3.0
N-Nitrosomethylethylamine		ug/l	<1.5	<1.5	<1.5
N-Nitrosopiperidine		ug/l	<1.4	<1.4	<1.4
N-Nitrosopyrrolidine		ug/l	<1.6	<1.6	<1.6
o,o'-Triethylphosphorothioate		ug/l	<1.4	<1.4	<1.4
o-Toluidine		ug/l	<2.7	<2.7	<2.7
p-Dimethylamino azobenzene		ug/l	<1.7	<1.7	<1.7
Pentachlorobenzene		ug/l	<1.0	<1.0	<1.0
Pentachloronitrobenzene		ug/l	<0.027	<0.027	<0.027
Phenacetin		ug/l	<2.0	<2.0	<2.0
Phenanthrene		ug/l	<1.7	<1.7	<1.7
Phenol		ug/l	<2.0	9.3	12
Pronamide		ug/l	<1.5	<1.5	<1.5
Pyrene		ug/l	<0.032	<0.032	<0.032
Safrole, Total		ug/l	<1.3	<1.3	<1.3
Chloroenzilate		ug/l	<0.020	<0.020	<0.020

Notes: (1) - Regulatory standard listed in 40 CFR Part 261.24. Analyte concentrations shown with shading represent an exceedance of the regulatory level.

Abbreviations: BDL = below detection limits; mg/l = milligrams per liter; ug/l = micrograms per liter; NTU = nephelometric turbidity units.

Table 2-4 (revised January 2010)
Groundwater Analytical Summary
First Half 2007

Analyte	Surficial Aquifer Wells																			
	Well:		GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1
	Sample Identifier:		GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1
	Date of Test:		3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007
Standard ⁽¹⁾		Units																		
Field Measurements																				
Temperature		degrees C	22.1	22.6	21.9	21.8	22.6	21.9	22.3	22.6	23.7	23.2	22.3	23.4	22.5	21	19.8	22.6	22.7	21.2
pH	6.5-8.5*	STD	6.4	6.2	5.9	5.7	5.9	6.2	6.1	5.9	6.6	6.4	6.5	6	6.2	6.3	6.3	6.3	5.1	5.5
Conductivity		umhos/cm	682	628	588	313	519	907	609	585	680	792	451	805	1423	1926	654	670	111	680
Dissolved Oxygen (DO)		mg/l	0.2	0.2	0.2	0.3	0.1	0.3	0.2	0.2	0.1	0.3	0.1	0.3	0.2	0.3	0.1	0.1	0.1	0.2
Turbidity		NTU	14	18	7.9	7.2	14	1.8	14	19	5.4	24	8.7	17	5.8	9.4	3	25	8.2	17
Inorganics																				
Antimony	0.006	mg/l	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	0.002	<0.0015	0.005	0.003	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
Arsenic	0.01	mg/l	0.053	0.012	0.01	0.01	0.023	0.012	0.008	0.01	0.017	0.028	0.015	<0.007	0.008	0.011	0.011	<0.007	<0.007	<0.007
Barium	2	mg/l	0.006	0.01	0.004	0.008	0.018	0.007	0.013	0.02	0.022	0.024	0.01	0.059	0.029	0.046	0.041	0.02	0.003	0.017
Beryllium	0.004	mg/l	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002
Cadmium	0.005	mg/l	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chloride	250*	mg/l	11.7	17.6	36.1	4.73	23.5	19.2	3.49	11.2	4.84	9.75	16.7	9.74	17.1	224	45.3	34.6	4.03	28.1
Chromium	0.1	mg/l	0.002	0.002	0.003	0.003	0.004	<0.001	0.002	0.003	0.001	0.002	0.002	0.002	0.003	0.002	0.001	0.001	0.006	0.002
Cobalt		mg/l	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001
Copper	1*	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Iron	0.3*	mg/l	7.96	9.8	2.8	6.95	13.9	14.5	0.093	6.98	4.18	5.32	5.18	3.3	8.15	15.1	1.52	5.46	0.66	
Lead	0.015	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Mercury	0.002	ug/l	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Nickel	0.1	mg/l	0.002	0.001	0.001	0.002	0.002	<0.001	0.001	0.002	<0.001	<0.001	0.002	0.003	<0.001	0.002	0.001	0.002	<0.001	0.002
Nitrate	10	mg/l	0.047	0.038	0.085	0.037	0.042	0.079	<0.006	0.079	0.079	0.079	0.079	0.081	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Selenium	0.05	mg/l	0.001	0.001	0.001	0.001	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	0.0003	0.0002	0.001	0.001	0.001	<0.0002	<0.0002	0.0004	<0.0002
Silver	0.1*	mg/l	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.002	0.004	0.004	<0.002	<0.002	<0.002	<0.002
Sodium	160	mg/l	17.4	15.3	27.8	5.99	21.5	20.4	12.9	12.4	11.5	8.51	10.1	5.53	23.4	106	57.5	65.2	4.45	70.8
Thallium	0.002	mg/l	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0005	0.0004	<0.0004	0.0005	<0.0004	<0.0004	<0.0004	<0.0004
Total Ammonia-N	2.8	mg/l	1.08	4.18	1.08	0.807	1.47	0.868	1.04	1.06	1.65	2.4	1.8	0.643	7.69	0.192	1.04	1.27	2.05	1.01
Total Dissolved Solids (TDS)	500*	mg/l	473	458	408	231	371	661	431	455	401	454	284	596	959	1400	392	389	80	403
Vanadium		mg/l	0.006	0.01	0.014	0.015	0.013	0.004	0.006	0.009	0.001	0.003	0.002	0.012	0.007	0.002	0.008	0.007	0.028	0.007
Zinc	5*	mg/l	0.012	0.01	0.014	0.012	0.016	0.016	0.011	0.014	0.016	0.016	0.02	0.014	0.011	0.01	0.032	<0.01	<0.01	<0.01
Organics																				
Acetone		ug/l	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
Acrylonitrile		ug/l	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
Benzene	1	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromochloromethane		ug/l	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58
Bromodichloromethane		ug/l	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
Bromomethane		ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
2-Butanone		ug/l	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4
Carbon disulfide		ug/l	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85
Carbon tetrachloride	3	ug/l	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42
Chlorobenzene		ug/l	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	1.2	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63
Chloroethane		ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Chloromethane	5	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane		ug/l	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34

Analyte			Surficial Aquifer Wells																		
			Well:	GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1
			Sample Identifier:	GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1
			Date of Test:	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007
			Standard ⁽¹⁾	Units																	
Organics																					
Dibromochloropropane		ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
Dibromomethane		ug/l	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	
Dichloromethane		ug/l	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	
Ethylene dibromide		ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1,2-Dichlorobenzene		ug/l	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	
1,4-Dichlorobenzene		ug/l	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	
1,1-Dichloroethane		ug/l	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	
1,2-Dichloroethane	3	ug/l	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	
1,1-Dichloroethene	7	ug/l	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	
cis-1,2-Dichloroethene		ug/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	
trans-1,2-Dichloroethene	100	ug/l	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	
1,2-Dichloropropane	5	ug/l	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	
cis-1,3-Dichloropropene		ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	
trans-1,3-Dichloropropene		ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	
t-1,4-Dichloro-2-butene		ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
Ethylbenzene	700	ug/l	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	
2-Hexanone		ug/l	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	
Iodomethane		ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
4-Methyl-2-pentanone		ug/l	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	
Styrene	100	ug/l	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	
1,1,1,2-Tetrachloroethane		ug/l	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	
1,1,2,2-Tetrachloroethane		ug/l	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	
Tetrachloroethene	3	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Toluene	1000	ug/l	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	
Tribromomethane		ug/l	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	
1,1,1-Trichloroethane	200	ug/l	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	
1,1,2-Trichloroethane	5	ug/l	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	
Trichloroethene	3	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Trichloromethane		ug/l	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	
Trichlorofluoromethane		ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
1,2,3-Trichloropropene		ug/l	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	
Vinyl acetate		ug/l	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	
Vinyl chloride	1	ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Total xylenes	10000	ug/l	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Notes: (1) - Maximum Contaminant Level, as established in Chapter 62-550. Those marked by an * are Secondary Drinking Water Standards (SDWSs). Analyte concentrations shown with shading represent an exceedance of its MCL or SDWS.
Abbreviations: BDL = below detection limits; umhos/cm = microhos per centimeter; mg/l = milligrams per liter; NTU = nephelometric turbidity units; ug/l = micrograms per liter; NA = Not analyzed.

Table 2-5 (Revised January 2010)
Lena Road Groundwater Analytical Summary
Second Half 2007

	Well:		GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1
	Sample Identifier:		AE17203	AE17204	AE17205	AE17206	AE17207	AE17208	AE17209	AE17210	AE17211	AE17230	AE17212	AE17231	AE17232	AE17233	AE17234	AE17235	AE17236	AE17237
	Date of Test:		8/27/07	8/27/07	8/27/07	8/27/07	8/27/07	8/27/07	8/27/07	8/27/07	8/27/07	8/28/07	8/27/07	8/28/07	8/28/07	8/28/07	8/28/07	8/28/07	8/28/07	8/28/07
	Standard ⁽¹⁾	Units																		
Field Measurements																				
Temperature		deg. C	25.5	26.6	25.7	26.4	27.0	26.7	27.2	27.7	29.0	27.5	27.1	26.3	25.9	27.1	25.6	26.5	26.0	24.1
pH	6.5-8.5	STD	6.3	6.1	6.1	5.9	6.1	6.2	6.1	6.1	6.4	6.4	5.7	6.0	6.4	6.3	6.4	6.3	5.2	5.5
Conductivity		umhos/cm	700	477	774	463	600	1,344	660	661	911	849	544	979	1,530	2,475	772	1025	147	510
Dissolved Oxygen (DO)		mg/l	0.2	0.2	0.2	0.4	0.2	0.3	19.4	0.1	0.1	0.4	0.1	0.2	0.2	0.3	0.1	0.1	0.1	0.1
Turbidity		NTU	5.7	17.0	4.8	20.0	4.9	14.0	19.0	5.7	2.3	37.0	6.0	13.0	40.0	8.3	2.3	8.4	3.2	41.0
Inorganics																				
Chloride By Ion Chromatography	250	mg/l	17.7	6.04	35.8	5.03	16.5	25	20.4	17.5	9.21	5.4	41.3	9.95	41.7	216	95.4	56	7.52	40.7
Nitrate as N by Ion Chromatography	10	mg/l	0.031	<BDL	0.018	0.982	1.2	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.407	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Antimony by GFAAS		mg/l	0.004	<BDL	0.003	<BDL	0.002	0.006	0.002	0.002	0.005	0.002	0.003	0.004	0.004	0.008	<BDL	0.002	<BDL	<BDL
Arsenic	0.01	mg/l	0.088	0.030	0.008	<BDL	0.013	0.009	0.007	<BDL	0.017	0.009	0.036	0.011	<BDL	0.014	0.013	0.007	<BDL	<BDL
Barium	2	mg/l	0.011	0.01	0.008	0.01	0.014	0.015	0.014	0.021	0.036	0.019	0.019	0.061	0.033	0.075	0.049	0.035	0.004	0.022
Beryllium	0.004	mg/l	0.0003	0.0003	0.0002	0.0002	0.0002	0.0003	0.0002	0.0004	0.0003	0.0002	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0004	0.0002
Cadmium	0.005	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Chromium	0.1	mg/l	0.001	0.002	0.002	0.002	0.002	<BDL	0.002	0.002	<BDL	0.001	0.009	0.002	0.003	0.002	<BDL	<BDL	0.006	<BDL
Cobalt	0.14	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.002	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Copper	1	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Iron	0.3	mg/l	8.23	10.6	1.68	0.215	2.92	6.04	0.186	0.309	8.16	1.96	36.3	0.747	3.37	3.38	19.8	4.08	4.52	0.296
Lead	0.015	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Mercury Cold Vapor	2	ug/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Nickel	0.1	mg/l	0.002	0.001	0.003	<BDL	0.002	<BDL	<BDL	<BDL	<BDL	0.001	0.004	0.002	<BDL	0.002	<BDL	0.001	<BDL	0.001
Selenium by GFAAS		mg/l	0.003	0.001	0.004	0.004	0.005	0.004	0.002	0.002	0.003	0.002	0.003	0.006	0.003	0.003	0.001	0.001	0.001	0.0005
Silver	0.1	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Sodium	160	mg/l	15.7	5.51	28.1	7.54	18.4	19.9	12.1	9.56	9.7	8.56	24.5	8.42	22.3	100	64.5	75.3	5.18	50
Thallium by GFAAS		mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Vanadium	0.049	mg/l	0.009	0.014	0.023	0.041	0.027	0.042	0.005	0.005	0.005	0.003	0.027	0.038	0.009	0.003	0.011	0.004	0.03	0.008
Zinc	5	mg/l	0.01	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.012	<BDL	<BDL	<BDL	<BDL	<BDL	0.013	0.014	0.012
Ammonia	2.8	mg/l	0.842	1.42	0.389	0.241	0.573	0.865	0.51	0.955	1.31	0.97	1.28	0.944	8.71	0.202	1.18	1.36	1.65	0.217
Total Dissolved Solids (TDS)	500	mg/l	488	307	491	292	361	1010	475	498	602	494	583	649	979	1960	493	724	124	338
Volatile Organics																				
1,1,1,2-Tetrachloroethane	5	ug/l	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63
1,1,1-Trichloroethane	200	ug/l	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46
1,1,2,2-Tetrachloroethane		ug/l	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
1,1,2-Trichloroethane	5	ug/l	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
1,1-Dichloroethane		ug/l	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
1,1-Dichloroethene	7	ug/l	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
1,2,3-Trichloropropene		ug/l	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
1,2-Dibromo-3-chloropropane		ug/l	<0.01	0.0097	0.01	0.0098	0.0099	0.0099	0.0098	0.0098	0.01	0.0098	0.0099	0.0099	0.0098	0.0099	0.01	0.001	0.0097	0.01
1,2-Dibromoethane		ug/l	<0.0087	0.0084	0.0087	0.0085	0.0086	0.0086	0.0085	0.0086	0.0087	0.0085	0.0086	0.0086	0.0085	0.0086	0.0087	0.0089	0.0084	0.0091
1,2-Dichlorobenzene	600	ug/l	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44
1,2-Dichloroethane		ug/l	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57
1,2-Dichloropropane	5	ug/l	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
1,4-Dichlorobenzene	75	ug/l	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
2-Hexanone		ug/l	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4
Acetone	700	ug/l	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9

	Well:		GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1
	Sample Identifier:		AE17203	AE17204	AE17205	AE17206	AE17207	AE17208	AE17209	AE17210	AE17211	AE17230	AE17212	AE17231	AE17232	AE17233	AE17234	AE17235	AE17236	AE17237
	Date of Test:		8/27/07	8/27/07	8/27/07	8/27/07	8/27/07	8/27/07	8/27/07	8/27/07	8/27/07	8/28/07	8/27/07	8/28/07	8/28/07	8/28/07	8/28/07	8/28/07	8/28/07	8/28/07
	Standard ⁽¹⁾	Units																		
Acrylonitrile		ug/l	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
Benzene	1	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromochloromethane		ug/l	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58
Bromodichloromethane		ug/l	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
Bromoform	4.4	ug/l	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58
Bromomethane		ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Carbon Disulfide		ug/l	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85
Carbon tetrachloride	3	ug/l	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42
Chlorobenzene	100	ug/l	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63
Chloroethane		ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Chloroform	5.7	ug/l	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9
Chloromethane		ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	70	ug/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
cis-1,3-Dichloropropene		ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Dibromochloromethane		ug/l	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
Dichloromethane	5	ug/l	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Ethylbenzene	700	ug/l	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44
Iodomethane		ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
MEK (2-Butanone)		ug/l	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4
Methylene chloride		ug/l	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
MIBK (4-Methyl-2-pentanone)		ug/l	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8
Styrene	100	ug/l	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98
Tetrachloroethene	3	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	1000	ug/l	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51
trans-1,2-Dichloroethene	100	ug/l	<44	<44	<44	<44	<44	<44	<44	<44	<44	<44	<44	<44	<44	<44	<44	<44	<44	<44
trans-1,3-Dichloropropene		ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
trans-1,4-Dichloro-2-butene		ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Trichloroethene	3	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane		ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Vinyl acetate		ug/l	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Vinyl chloride	1	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total xylenes	10000	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes: (1) - Maximum Contaminant Level, as established in Chapter 62-550. Those marked by an * are Secondary Drinking Water Standards (SDWSs). Analyte concentrations shown with shading represent an exceedance of its MCL or SDWS.

Abbreviations: BDL = below detection limits.; umhos/cm = microhms per centimeter; mg/l = milligrams per liter; NTU = nephelometric turbidity units; ug/l = micrograms per liter; NA = Not analyzed..

Table 2-6 (Revised January 2010)
Lena Road Groundwater Analytical Summary
First Half 2008

			Well:	GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1	
			Sample Identifier:	AE17203	AE17204	AE17205	AE17206	AE17207	AE17208	AE17209	AE17210	AE17211	AE17230	AE17212	AE17231	AE17232	AE17233	AE17234	AE17235	AE17236	AE17237	
			Date of Test:	3/17/08	3/17/08	3/17/08	3/17/08	3/17/08	3/17/08	3/17/08	3/17/08	3/17/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08
			Standard ⁽¹⁾	Units																		
Field Measurements																						
Depth-to-Groundwater ⁽²⁾		ft	8.89	11.17	7.63	9.31	9.08	8.91	11.78	13.16	13.08	11.92	9.14	11.99	13.23	7.43	9.14	11.01	9.28	11.86		
Temperature		deg. C	22.7	22.7	22.5	22.1	23.3	22.8	22.9	23.5	24.3	22.0	22.4	23.0	22.9	21.2	21.6	22.7	22.8	21.9		
pH	6.5-8.5	STD	6.4	6.2	5.9	5.8	5.9	6.2	6.1	6.0	6.5	6.3	6.2	5.8	6.4	6.3	6.3	6.1	5.1	5.5		
Conductivity		umhos/cm	652	672	650	333	509	986	590	498	770	867	565	1165	1,690	2,497	937	798	215	424		
Dissolved Oxygen (DO)		mg/l	0.4	1	0.2	0.4	0.3	0.2	0.1	0.1	0.1	0.4	0.3	0.2	0.4	1	0.2	0.2	0.1	0.3		
Turbidity		NTU	3.1	15.0	7.0	18.0	4.3	3.0	7.9	9.6	3.4	3.8	17.0	6.0	18.0	1.9	0.8	14.0	5.7	8.5		
Inorganics																						
Chloride By Ion Chromatography	250	mg/l	16.4	17.2	40.6	9.04	20.6	28.6	18.1	15.8	11.6	20.1	42.8	9.58	42.5	321	92.4	79.2	9.13	19.6		
Nitrate as N by Ion Chromatography	10	mg/l	0.083	<BDL	0.031	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL		
Antimony by GFAAS		mg/l	0.002	0.002	0.002	<BDL	0.002	0.002	0.002	<BDL	0.002	0.002	0.002	<BDL	0.004	0.004	0.003	0.002	<BDL	<BDL		
Arsenic	0.01	mg/l	0.053	0.014	<BDL	<BDL	0.018	0.009	<BDL	0.008	0.012	0.010	0.016	0.024	0.012	0.009	0.012	0.012	<BDL	<BDL		
Barium	2	mg/l	0.009	0.016	0.006	0.013	0.015	0.012	0.017	0.024	0.026	0.031	0.016	0.087	0.038	0.072	0.074	0.034	0.005	0.016		
Beryllium	0.004	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL		
Cadmium	0.005	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL		
Chromium	0.1	mg/l	0.003	0.003	0.004	0.007	0.004	0.001	0.003	0.005	0.002	0.002	0.003	0.003	0.004	<BDL	0.002	0.003	0.006	0.001		
Cobalt	0.14	mg/l	<BDL	<BDL	0.002	<BDL	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.004	0.002	0.003	<BDL	0.001	<BDL	0.001		
Copper	1	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL		
Iron	0.3	mg/l	9.02	9.06	4.05	9.81	14.7	14.7	0.089	0.191	3.39	3.24	6.64	6.05	2.43	6.11	27.6	2.75	7.85	0.329		
Lead	0.015	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL		
Mercury Cold Vapor	2	ug/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL		
Nickel	0.1	mg/l	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.003	0.002	0.003	0.007	0.005	0.004	0.006	<BDL	0.002	<BDL	0.003		
Selenium by GFAAS		mg/l	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.004	0.001	0.002	0.002	0.004	0.003	0.001	0.001	0.003	0.001		
Silver	0.1	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL		
Sodium	160	mg/l	14.1	11.7	30.2	5.39	20.8	22	10.8	8.58	8.34	11.7	21.2	8.2	25.4	112	70.7	71	6.87	22.3		
Thallium by GFAAS		mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL		
Vanadium	0.049	mg/l	0.007	0.01	0.015	0.02	0.0132	0.004	0.006	0.009	0.003	0.004	0.004	0.012	0.01	0.003	0.011	0.008	0.021	0.005		
Zinc	5	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.015	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL		
Ammonia	2.8	mg/l	0.974	4.08	0.796	0.898	1.38	0.867	0.708	0.841	1.5	2.28	1.77	0.923	7.76	0.187	1.24	1.16	1.82	0.192		
Total Dissolved Solids (TDS)	500	mg/l	424	405	427	243	326	693	414	408	396	481	352	768	993	1720	568	467	148	240		
Volatile Organics																						
1,1,1,2-Tetrachloroethane	5	ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12		
1,1,1-Trichloroethane	200	ug/l	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09		
1,1,2,2-Tetrachloroethane		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12		
1,1,2-Trichloroethane	5	ug/l	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23		
1,1-Dichloroethane		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12		
1,1-Dichloroethene	7	ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14		
1,2,3-Trichloropropane		ug/l	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18		
1,2-Dibromo-3-chloropropane		ug/l	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24		
1,2-Dibromoethane		ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13		
1,2-Dichlorobenzene	600	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13		
1,2-Dichloroethane		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12		
1,2-Dichloropropane	5	ug/l	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06		
1,4-Dichlorobenzene	75	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13		
2-Hexanone		ug/l	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33		

	Well:		GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1
	Sample Identifier:		AE17203	AE17204	AE17205	AE17206	AE17207	AE17208	AE17209	AE17210	AE17211	AE17230	AE17212	AE17231	AE17232	AE17233	AE17234	AE17235	AE17236	AE17237
	Date of Test:		3/17/08	3/17/08	3/17/08	3/17/08	3/17/08	3/17/08	3/17/08	3/17/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08	3/18/08
	Standard ⁽¹⁾	Units																		
Acetone	700	ug/l	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	7.6	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9
Acrylonitrile		ug/l	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Benzene	1	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane		ug/l	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
Bromodichloromethane		ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
Bromoform	4.4	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	9.8	ug/l	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	2	2.6	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58
Carbon Disulfide	700	ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Carbon tetrachloride	3	ug/l	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
Chlorobenzene	100	ug/l	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroethane		ug/l	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
Chloroform	5.7	ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Chloromethane	2.7	ug/l	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
cis-1,2-Dichloroethene	70	ug/l	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
cis-1,3-Dichloropropene		ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Dibromochloromethane	0.4	ug/l	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Dichloromethane	5	ug/l	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24
Ethylbenzene	700	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
Iodomethane		ug/l	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	0.32	0.67	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16
m,p-Xylene		ug/l	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19
MEK (2-Butanone)		ug/l	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55
Methylene chloride	5	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
MIBK (4-Methyl-2-pentanone)		ug/l	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
o-Xylene		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Styrene	100	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	3	ug/l	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16
Toluene	1000	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene	100	ug/l	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
trans-1,3-Dichloropropene		ug/l	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
trans-1,4-Dichloro-2-butene		ug/l	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28
Trichloroethene	3	ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Trichlorofluoromethane		ug/l	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21
Vinyl acetate		ug/l	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53
Vinyl chloride	1	ug/l	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
Total xylenes	10000	ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Dibromochloropropane		ug/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylene Dibromide		ug/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Notes: (1) - Maximum Contaminant Level, as established in Chapter 62-550. Those marked by an * are Secondary Drinking Water Standards (SDWSs). Analyte concentrations shown with shading represent an exceedance of its MCL or SDWS.

Abbreviations: BDL = below detection limits; umhos/cm = microhmohms per centimeter; mg/l = milligrams per liter; NTU = nephelometric turbidity units; ug/l = micrograms per liter; NA = Not analyzed.

Table 2-7 (revised January 2010)
Lena Road Groundwater Analytical Summary
Second Half 2008

	Well:		GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1
	Sample Identifier:		AE17203	AE17204	AE17205	AE17206	AE17207	AE17208	AE17209	AE17210	AE17211	AE17230	AE17212	AE17231	AE17232	AE17233	AE17234	AE17235	AE17236	AE17237
	Date of Test:		8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/25/08	8/25/08	8/25/08	8/25/08	8/25/08	8/25/08	8/25/08	8/25/08
	Standard ⁽¹⁾	Units																		
Field Measurements																				
Temperature		deg. C	25.8	26.4	25.9	26.4	26.8	26.4	26.8	27.2	28.3	27.6	26.0	26.2	25.9	26.8	25.7	25.7	25.7	25.0
pH	6.5-8.5	STD	6.8	6.1	6	5.9	6.1	6.2	6.1	6.3	6.4	6.4	6.0	6.0	6.4	6.3	6.2	6.2	5.3	5.8
Conductivity		umhos/cm	611	614	566	404	529	1,190	410	371	721	697	456	1220	2,191	2,196	1,356	1126	144	478
Dissolved Oxygen (DO)		mg/l	0.2	0.3	0.3	0.5	0.2	0.1	0.2	0.2	0.2	0.4	1.1	0.2	0.2	0.3	0.3	0.3	0.2	0.2
Turbidity		NTU	3.7	16.0	7.1	18.0	2.2	17.0	14.0	13.0	1.3	19.0	6.9	5.8	2.0	1.3	7.5	15.0	4.6	1.8
Inorganics																				
Chloride By Ion Chromatography	250	mg/l	24.8	25.9	42.3	13.7	26.2	17.1	28.4	17.5	11.8	5.1	18.4	17.1	53.8	21.5	104	96.3	9.07	27.1
Nitrate as N by Ion Chromatography	10	mg/l	0.078	<BDL	0.224	0.071	0.033	0.028	0.028	0.03	0.082	<BDL	0.012	4.02	0.028	0.031	<BDL	<BDL	<BDL	0.016
Antimony by GFAAS		mg/l	0.002	0.002	0.002	0.002	<BDL	<BDL	0.003	<BDL	0.002	<BDL	<BDL	0.005	0.004	0.0048	0.003	0.002	<BDL	<BDL
Arsenic	0.01	mg/l	0.036	0.025	0.010	<BDL	0.014	0.010	0.011	<BDL	0.024	<BDL	0.043	0.010	<BDL	<BDL	0.014	<BDL	<BDL	<BDL
Barium	2	mg/l	0.02	0.016	0.009	0.014	0.018	0.014	0.02	0.031	0.027	0.015	0.083	0.054	0.074	0.157	0.046	0.004	0.018	
Beryllium	0.004	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.0002	<BDL	
Cadmium	0.005	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	
Chromium	0.1	mg/l	0.001	0.002	0.002	0.003	0.002	0.001	<BDL	0.003	<BDL	0.001	0.003	0.002	0.001	<BDL	<BDL	0.002	0.006	<BDL
Cobalt	0.14	mg/l	0.001	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.004	<BDL	<BDL	<BDL	<BDL	<BDL	
Copper	1	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	
Iron	0.3	mg/l	5.22	10.9	8.5	2.7	11.6	0.168	6.38	0.099	4.71	0.997	19.8	1.07	4.97	2.4	49.5	2.03	6.52	0.402
Lead	0.015	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	
Mercury Cold Vapor	2	ug/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	
Nickel	0.1	mg/l	0.004	0.003	0.002	0.002	0.003	0.002	0.001	0.002	<BDL	0.001	0.002	0.002	0.001	0.002	<BDL	0.002	<BDL	0.002
Selenium by GFAAS		mg/l	<BDL	0.014	0.015	<BDL	0.016	<BDL	0.012	<BDL	0.012	0.015	0.011	0.027	0.023	0.014	0.014	0.018	<BDL	<BDL
Silver	0.1	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Sodium	160	mg/l	16.1	8.77	29.9	6.5	18.6	8.4	17.6	7.33	6.14	6.11	9.29	6.97	32.8	77.7	85.5	78.7	5.79	25.4
Thallium by GFAAS		mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.001	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Vanadium	0.049	mg/l	0.014	0.014	0.013	0.019	0.01	0.006	0.018	0.005	0.002	0.003	0.007	0.037	0.007	0.002	0.009	0.007	0.026	0.0044
Zinc	5	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Ammonia	2.8	mg/l	0.589	2.99	1.03	0.415	1.36	0.504	0.961	0.735	0.892	1.03	1.05	0.298	5.58	0.108	1.84	1.33	1.64	0.177
Total Dissolved Solids (TDS)	500	mg/l	475	419	419	312	393	323	1010	337	511	508	338	877	1603	1700	933	704	85	324
Volatile Organics																				
1,1,1,2-Tetrachloroethane	5	ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
1,1,1-Trichloroethane	200	ug/l	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
1,1,2,2-Tetrachloroethane		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
1,1,2-Trichloroethane	5	ug/l	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23
1,1-Dichloroethane		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
1,1-Dichloroethene	7	ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
1,2,3-Trichloropropane		ug/l	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
1,2-Dibromo-3-chloropropane		ug/l	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24
1,2-Dibromoethane		ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
1,2-Dichlorobenzene	600	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
1,2-Dichloroethane		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
1,2-Dichloropropane	5	ug/l	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
1,4-Dichlorobenzene	75	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
2-Hexanone		ug/l	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Acetone	700	ug/l	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9

	Well:		GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1
	Sample Identifier:		AE17203	AE17204	AE17205	AE17206	AE17207	AE17208	AE17209	AE17210	AE17211	AE17230	AE17212	AE17231	AE17232	AE17233	AE17234	AE17235	AE17236	AE17237
	Date of Test:		8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/22/08	8/25/08	8/25/08	8/25/08	8/25/08	8/25/08	8/25/08	8/25/08	8/25/08
	Standard ⁽¹⁾	Units																		
Acrylonitrile		ug/l	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Benzene	1	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane		ug/l	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
Bromodichloromethane		ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
Bromoform	4.4	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	9.8	ug/l	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	2.2	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58
Carbon Disulfide	700	ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	0.17	<0.14	<0.14	<0.14	<0.14	0.3	<0.14	<0.14
Carbon tetrachloride	3	ug/l	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
Chlorobenzene	100	ug/l	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	1.3	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroethane		ug/l	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
Chloroform	5.7	ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Chloromethane	2.7	ug/l	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
cis-1,2-Dichloroethene	70	ug/l	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
cis-1,3-Dichloropropene		ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Dibromochloromethane	0.4	ug/l	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Dichloromethane	5	ug/l	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24
Ethylbenzene	700	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
Iodomethane		ug/l	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16
m,p-Xylene		ug/l	<0.19	<0.19	0.93	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	0.98	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19
MEK (2-Butanone)		ug/l	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55
Methylene chloride	5	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
MIBK (4-Methyl-2-pentanone)		ug/l	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
o-Xylene		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Styrene	100	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	3	ug/l	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16
Toluene	1000	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene	100	ug/l	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
trans-1,3-Dichloropropene		ug/l	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
trans-1,4-Dichloro-2-butene		ug/l	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28
Trichloroethene	3	ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Trichlorofluoromethane		ug/l	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21
Vinyl acetate		ug/l	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53
Vinyl chloride	1	ug/l	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
Total xylenes	10000	ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.98	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Dibromochloropropane		ug/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylene Dibromide		ug/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Notes: (1) - Maximum Contaminant Level, as established in Chapter 62-550. Those marked by an * are Secondary Drinking Water Standards (SDWSs). Analyte concentrations shown with shading represent an exceedance of its MCL or SDWS.

Abbreviations: BDL = below detection limits; umhos/cm = microhos per centimeter; mg/l = milligrams per liter; NTU = nephelometric turbidity units; ug/l = micrograms per liter; NA = Not analyzed.

Table 2-8 (Revised January 2010)
Lena Road Groundwater Analytical Summary
First Half 2009

	Well:		GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1
	Sample Identifier:		AE17203	AE17204	AE17205	AE17206	AE17207	AE17208	AE17209	AE17210	AE17211	AE17230	AE17212	AE17231	AE17232	AE17233	AE17234	AE17235	AE17236	AE17237
	Date of Test:		3/16/09	3/16/09	3/16/09	3/16/09	3/16/09	3/16/09	3/16/09	3/16/09	3/16/09	3/17/09	3/17/09	3/17/09	3/17/09	3/17/09	3/17/09	3/17/09	3/17/09	3/17/09
	Standard ⁽¹⁾	Units																		
Field Measurements																				
Depth-to-Groundwater ⁽²⁾		ft	8.21	10.47	7.96	9.54	9.06	8.93	12.16	13.91	13.73	12.54	8.53	12.76	12.51	7.19	8.82	10.94	9.16	11.87
Temperature		deg. C	22.0	21.9	21.5	21.3	22.4	21.9	22.1	22.9	23.7	20.9	22.5	22.5	21.9	20.0	20.2	22.0	21.9	21.0
pH	6.5-8.5	STD	6.5	6.2	6	5.9	6.1	6.3	6.3	6.2	6.7	6.5	6.3	6.1	6.6	6.7	6.5	6.4	5.5	5.9
Conductivity		umhos/cm	752	717	636	349	605	791	500	400	999	817	574	738	1,989	2,363	865	724	217	615
Dissolved Oxygen (DO)		mg/l	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.5	0.5	0.2	0.3	0.3	0.9	0.3	0.6	1.1	0.3
Turbidity		NTU	16.0	16.0	7.9	9.8	1.0	2.5	8.2	16.0	2.2	19.0	8.8	15.0	6.3	20.0	2.3	8.4	21.0	2.1
Inorganics																				
Chloride By Ion Chromatography	250	mg/l	16.2	16.9	38.1	11.9	17.7	19.4	13.9	13.8	9.2	11.0	37.0	12.6	46.1	238.0	111.0	88.9	6.6	56.2
Nitrate as N by Ion Chromatography	10	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.029	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Antimony by GFAAS		mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Arsenic	0.01	mg/l	0.083	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.010	0.014	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Barium	2	mg/l	0.02	0.017	0.006	0.01	0.018	0.022	0.016	0.019	0.028	0.033	0.019	0.065	0.047	0.061	0.068	0.027	0.007	0.02
Beryllium	0.004	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Cadmium	0.005	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	0.0005	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Chromium	0.1	mg/l	0.003	0.003	0.002	0.004	0.003	0.006	0.003	0.004	<BDL	0.004	0.004	0.002	<BDL	<BDL	0.002	<BDL	0.007	<BDL
Cobalt	0.14	mg/l	<BDL	<BDL	0.001	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.002	0.005	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Copper	1	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.006	0.006	<BDL	0.007	0.006	<BDL	<BDL	<BDL	<BDL
Iron	0.3	mg/l	10.8	10.5	8.82	14	11.1	14.9	0.058	0.052	3.54	5.41	22.3	2.31	4.48	2.38	23.4	1.82	6.7	0.328
Lead	0.015	mg/l	<BDL	0.006	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.006	0.009	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Mercury Cold Vapor	2	ug/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Nickel	0.1	mg/l	0.003	<BDL	0.001	<BDL	0.002	0.001	<BDL	<BDL	<BDL	0.002	0.003	0.002	<BDL	0.001	<BDL	<BDL	<BDL	0.002
Selenium by GFAAS		mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.025	0.019	<BDL	<BDL	<BDL	<BDL
Silver	0.1	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Sodium	160	mg/l	16.5	12.2	32.1	6.6	19.8	21	10.6	8.39	8.76	9.09	23.4	9.73	35.6	111	58.8	72.2	6.79	35.7
Thallium by GFAAS		mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Vanadium	0.049	mg/l	0.014	0.017	0.011	0.013	0.013	0.031	0.006	0.008	0.002	0.008	0.011	0.018	0.006	0.002	0.014	0.008	0.025	0.005
Zinc	5	mg/l	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	0.016	0.015	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL	<BDL
Ammonia	2.8	mg/l	0.75	4.14	1.34	1.1	1.53	0.824	0.588	0.705	1.56	2.12	1.45	1.06	7.36	0.161	1.38	0.86	1.54	0.386
Total Dissolved Solids (TDS)	500	mg/l	527	474	405	256	403	563	345	318	500	487	425	502	1360	1660	536	413	157	365
Volatile Organics																				
1,1,1,2-Tetrachloroethane	5	ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
1,1,1-Trichloroethane	200	ug/l	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
1,1,2,2-Tetrachloroethane		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
1,1,2-Trichloroethane	5	ug/l	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23
1,1-Dichloroethane		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
1,1-Dichloroethene	7	ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
1,2,3-Trichloropropane		ug/l	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
1,2-Dibromo-3-chloropropane		ug/l	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24
1,2-Dibromoethane		ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
1,2-Dichlorobenzene	600	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
1,2-Dichloroethane		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
1,2-Dichloropropane	5	ug/l	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
1,4-Dichlorobenzene	75	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	0.14	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
2-Hexanone		ug/l	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33

	Well:		GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	GW-11	GW-12	GW-13	GW-14	GW-15	GW-16	GW-17	BGW-1
	Sample Identifier:		AE17203	AE17204	AE17205	AE17206	AE17207	AE17208	AE17209	AE17210	AE17211	AE17230	AE17212	AE17231	AE17232	AE17233	AE17234	AE17235	AE17236	AE17237
	Date of Test:		3/16/09	3/16/09	3/16/09	3/16/09	3/16/09	3/16/09	3/16/09	3/16/09	3/16/09	3/17/09	3/17/09	3/17/09	3/17/09	3/17/09	3/17/09	3/17/09	3/17/09	3/17/09
	Standard ⁽¹⁾	Units																		
Acetone	700	ug/l	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	2.1	<1.9	<1.9	2	<1.9	<1.9	<1.9	<1.9	<1.9
Acrylonitrile		ug/l	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Benzene	1	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane		ug/l	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
Bromodichloromethane		ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
Bromoform	4.4	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	9.8	ug/l	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58
Carbon Disulfide	700	ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Carbon tetrachloride	3	ug/l	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
Chlorobenzene	100	ug/l	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.95	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroethane		ug/l	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
Chloroform	5.7	ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Chloromethane	2.7	ug/l	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
cis-1,2-Dichloroethene	70	ug/l	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
cis-1,3-Dichloropropene		ug/l	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Dibromochloromethane	0.4	ug/l	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Dichloromethane	5	ug/l	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24
Ethylbenzene	700	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	0.14	<0.13	0.15	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
Iodomethane		ug/l	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16
m,p-Xylene		ug/l	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	0.39	<0.19	0.44	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19
MEK (2-Butanone)		ug/l	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55
Methylene chloride	5	ug/l	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
MBK (4-Methyl-2-pentanone)		ug/l	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
o-Xylene		ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.23	<0.12	0.23	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Styrene	100	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene	3	ug/l	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16
Toluene	1000	ug/l	<0.1	<0.1	0.15	0.12	<0.1	<0.1	<0.1	0.59	<0.1	0.65	<0.1	<0.1	0.19	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-Dichloroethene	100	ug/l	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
trans-1,3-Dichloropropene		ug/l	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
trans-1,4-Dichloro-2-butene		ug/l	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28
Trichloroethene	3	ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Trichlorofluoromethane		ug/l	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21
Vinyl acetate		ug/l	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53
Vinyl chloride	1	ug/l	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
Total xylenes	10000	ug/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.67	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Dibromochloropropane		ug/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylene Dibromide		ug/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

⁽¹⁾ Maximum Contaminant Level (MCL) or Secondary Drinking Water Standard (SDWS), as established in Chapter 62-530.

⁽²⁾ As measured from the top of well casing.

⁽³⁾ Monitoring well GW-11 has not been installed and therefore, no data is available.

⁽⁴⁾ Monitoring well GC-6 was sampled for data purposes due to its proximity to the GW-11 well location.

⁽⁵⁾ Sulfide data collected on 12/22-23/05.

Table 2-9
Surface Water Analytical Summary
Lena Road Landfill
First Half 2007

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		03/22/07	DRY
	Standard(1)	Units		
Field Measurements				
Temperature		deg. C	18.5	NA
pH		STD	6.7	NA
Conductivity		umhos/cm	643	NA
Dissolved Oxygen (DO)	≥5	mg/l	3.7	NA
Turbidity	29	NTU	9.4	NA
Inorganics				
Ammonia		mg/l	0.097	NA
Antimony	4.3	mg/l	<0.0015	NA
Arsenic	≤50	mg/l	<0.007	NA
Barium		mg/l	0.012	NA
Beryllium	0.13	mg/l	<0.0002	NA
Biochemical Oxygen Demand (BOD)		mg/l	<2.00	NA
Cadmium	1.59 ⁽²⁾	mg/l	<0.0005	NA
Calcium		mg/l	39.9	NA
Chemical Oxygen Demand (COD)		mg/l	45.7	NA
Chlorophyll A		mg/m3	2.1	NA
Chromium	122.7 ⁽³⁾	mg/l	0.001	NA
Cobalt		mg/l	<0.001	NA
Copper	13.5 ⁽⁴⁾	mg/l	<0.005	NA
Fecal coliforms	800	cfu/100ml	12600	NA
Iron	1	mg/l	1.18	NA
Lead	5.5 ⁽⁵⁾	mg/l	<0.005	NA
Magnesium		mg/l	13.2	NA
Mercury	0.012	ug/l	<0.100	NA
Nickel	75.1 ⁽⁶⁾	mg/l	0.005	NA
Nitrate as N		mg/l	0.112	NA
Selenium	0.005	mg/l	<0.0002	NA
Silver	0.00007	mg/l	<0.002	NA
Thallium	0.0063	mg/l	<0.0004	NA
Total Dissolved Solids (TDS)		mg/l	399	NA
Total Hardness		mg/l	154	NA
Total Kjeldahl Nitrogen (TKN)		mg/l	0.84	NA
Total Nitrogen		mg/l	0.952	NA
Total Organic Carbon (TOC)		mg/l	16.2	NA
Total Phosphate		mg/l	0.377	NA
Total Suspended Solids (TSS)		mg/l	3.4	NA
Unionized ammonia	0.02	mg/l	0.0002	NA
Vanadium		mg/l	0.002	NA
Zinc	172.7 ⁽⁷⁾	mg/l	0.015	NA
Organics				
1,1,1,2-Tetrachloroethane		ug/l	<0.63	NA
1,1,1-Trichloroethane		ug/l	<0.46	NA
1,1,2,2-Tetrachloroethane	10.8	ug/l	<0.15	NA
1,1,2-Trichloroethane		ug/l	<0.47	NA
1,1-Dichloroethane		ug/l	<0.52	NA
1,1-Dichloroethene		ug/l	<0.45	NA

Analyte	Location		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		03/22/07	DRY
	Standard(1)	Units		
1,2,3-Trichloropropane		ug/l	<0.18	NA
1,2-Dichlorobenzene		ug/l	<0.44	NA
1,2-Dichloroethane		ug/l	<0.57	NA
1,2-Dichloropropane		ug/l	<0.52	NA
1,4-Dichlorobenzene		ug/l	<0.52	NA
2-Butanone		ug/l	<8.4	NA
2-Hexanone		ug/l	<4.4	NA
4-Methyl-2-pentanone		ug/l	<3.8	NA
Acetone		ug/l	<9.9	NA
Acrylonitrile		ug/l	<1.2	NA
Benzene		ug/l	<0.50	NA
Bromochloromethane		ug/l	<0.58	NA
Bromodichloromethane		ug/l	<0.35	NA
Bromomethane		ug/l	<2.5	NA
Carbon disulfide		ug/l	<0.85	NA
Carbon tetrachloride	4.42	ug/l	<0.42	NA
Chlorobenzene		ug/l	<0.63	NA
Chloroethane		ug/l	<2.5	NA
Chloromethane		ug/l	<1.0	NA
cis-1,2-Dichloroethene	3.2	ug/l	<0.65	NA
cis-1,3-Dichloropropene		ug/l	<0.14	NA
Dibromochloromethane		ug/l	<0.34	NA
Dibromochloropropane		ug/l	<2.5	NA
Dibromomethane		ug/l	<0.41	NA
Dichloromethane	1580	ug/l	<4.0	NA
Ethylbenzene		ug/l	<0.44	NA
Ethylene dibromide		ug/l	<0.50	NA
Iodomethane		ug/l	<2.5	NA
Styrene		ug/l	<0.98	NA
t-1,4-Dichloro-2-butene		ug/l	<2.5	NA
Tetrachloroethene		ug/l	<0.50	NA
Toluene		ug/l	<0.51	NA
Total xylenes		ug/l	<0.5	NA
trans-1,2-Dichloroethene		ug/l	<0.44	NA
trans-1,3-Dichloropropene		ug/l	<0.14	NA
Tribromomethane		ug/l	<0.58	NA
Trichloroethene	80.7	ug/l	<0.5	NA
Trichlorofluoromethane		ug/l	<2.5	NA
Trichloromethane		ug/l	<0.90	NA
Vinyl acetate		ug/l	<1.5	NA
Vinyl chloride		ug/l	<0.5	NA

Abbreviations: mg/l = milligrams per liter; ug/l = micrograms per liter; NTU = nephelometric turbidity units; NA = Not Analyzed.

Note (1) Surface water standards presented in Chapter 62-302, FAC. Analyte concentrations shown with shading represent an exceedance of the regulatory level.

Note (3) Cr less than or equal to $e(0.819(\ln H)+0.6848)$

Note (4) Cu less than or equal to $e(0.845(\ln H)-1.702)$

Note (5) Pb less than or equal to $e(1.273(\ln H)-4.705)$

Note (6) Ni less than or equal to $e(0.846(\ln H)+0.0584)$

Note (7) Zn less than or equal to $e(0.8473(\ln H)+0.884)$

Table 2-10
Surface Water Analytical Summary
Second Half 2007

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		08/28/07	07/27/07
	Standard(1)	Units		
Field Measurements				
Temperature		deg. C	25.70	24.2
pH		STD	6.6	5.7
Conductivity		umhos/cm	715	NA
Dissolved Oxygen (DO)	≥5	mg/l	2.5	NA
Turbidity	29	NTU	36.6	NA
Inorganics				
Nitrate N by Ion Chromatography		mg/l	0.168	0.086
Nitrite N by Ion Chromatography		mg/l	0.021	0.02
Antimony	4.3	mg/l	<BDL	0.003
Arsenic	≤50	mg/l	0.008	0.12
Barium	2	mg/l	0.023	0.031
Beryllium	0.13	mg/l	<BDL	0.0002
Cadmium	Note 2	mg/l	<BDL	<BDL
Calcium		mg/l	65.3	34.6
Chromium	Note 3	mg/l	0.002	0.001
Cobalt	0.42	mg/l	<BDL	<BDL
Copper	Note 4	mg/l	<BDL	<BDL
Iron	1	mg/l	4.36	38.8
Lead	Note 5	mg/l	<BDL	<BDL
Magnesium		mg/l	16.1	8.23
Mercury	0.012	ug/l	<BDL	<BDL
Nickel		mg/l	0.002	<BDL
Selenium	0.005	mg/l	0.001	0.001
Thallium	0.0063	mg/l	<BDL	<BDL
Total Hardness		mg/l	229	120
Vanadium	0.049	mg/l	0.003	0.007
Zinc	Note 7	mg/l	0.016	0.022
Carbonaceous BOD (5 day)		mg/l	<BDL	2.79
Chemical Oxygen Demand (COD)		mg/l	110	141
Total Organic Carbon		mg/l	27.1	36.4
Fecal coliform	800	cfu/100 ml	2500	330
Total Kjeldahl Nitrogen		mg/l	1.68	2.58
Total Phosphate as P		mg/l	0.657	0.405
Ammonia		mg/l	0.301	0.112
Total Nitrogen		mg/l	1.87	2.69
Un-ionized ammonia		mg/l	0.0009	0.00004
Total Dissolved Solids (TDS)		mg/l	506	380
Volatile Organic Compounds				
1,1,1,2-Tetrachloroethane	0.0013	ug/l	<0.63	<0.098
1,1,1-Trichloroethane	0.2	ug/l	<0.46	<0.11
1,1,2,2-Tetrachloroethane	10.8	ug/l	<0.15	<0.07
1,1,2-Trichloroethane	0.005	ug/l	<0.47	<0.2
1,1-Dichloroethene	0.00002	ug/l	<0.52	0.067
1,1-Dichloroethane	0.00002	ug/l	<0.45	<0.067
1,2,3-Trichloropropane	0.0002	ug/l	<0.18	<0.15
1,2-Dibromo-3-chloropropane	0.0002	ug/l	<0.0098	<0.011

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		08/28/07	07/27/07
	Standard (1)	Units		
1,2-Dibromoethane	0.00002	ug/l	<0.0085	<0.0095
1,2-Dichlorobenzene	0.6	ug/l	<0.44	<0.28
1,2-Dichloroethane	0.003	ug/l	<0.57	<0.082
1,2-Dichloropropane	0.005	ug/l	<0.52	<0.1
1,4-Dichlorobenzene	0.075	ug/l	<0.52	<0.25
2-Hexanone	0.28	ug/l	<4.4	<0.65
Acetone	0.7	ug/l	<9.9	<4.5
Acrylonitrile	0.001	ug/l	<1.2	<2.5
Benzene	0.001	ug/l	<0.5	<0.58
Bromochloromethane	0.091	ug/l	<0.58	<0.15
Bromodichloromethane	0.0006	ug/l	<0.35	<0.1
Bromoform	0.0044	ug/l	<0.58	<0.13
Bromomethane	0.0098	ug/l	<2.5	<0.17
Carbon disulfide	0.7	ug/l	<0.85	<0.47
Carbon tetrachloride	4.42	ug/l	<0.452	<0.078
Chlorobenzene	0.1	ug/l	<0.63	<0.079
Chloroethane		ug/l	<2.5	<0.11
Chloroform	0.0057	ug/l	<0.9	<0.56
Chloromethane	0.0027	ug	<1	<0.08
cis-1,2-Dichloroethene	3.2	ug/l	<0.65	<0.18
cis-1,3-Dichloropropene	0.0002	ug/l	<0.14	<0.082
Dibromochloromethane	0.0004	ug/l	<0.34	<0.08
Dibromomethane	0.005	ug/l	<0.41	<0.15
Ethylbenzene	0.03	ug/l	<0.44	<0.078
Iodomethane		ug/l	<2.5	<0.54
MEK (2-Butanone)	4.2	ug/l	<8.4	<0.31
Methylene chloride		ug/l	<4	<0.17
4-Methyl-2-pentanone		ug/l	<3.8	<0.64
Styrene	0.1	ug/l	<0.98	<0.068
Tetrachloroethene	0.003	ug/l	<0.5	<0.24
Toluene	0.04	ug/l	<0.51	<0.063
trans-1,2-Dichloroethene	0.063	ug/l	<0.44	<0.25
trans-1,3-Dichloropropene	0.0002	ug/l	<0.14	<0.077
t-1,4-Dichloro-2-butene		ug/l	<2.5	<0.43
Trichloroethene	80.7	ug/l	<0.5	<0.13
Trichlorofluoromethane	2.1	ug/l	<2.5	<0.12
Vinyl acetate	0.088	ug/l	<1.5	<0.27
Vinyl chloride	0.001	ug/l	<0.5	<0.058
Xylenes, Total	0.02	ug/l	<0.5	<0.11

Abbreviations: mg/l = milligrams per liter; ug/l = micrograms per liter; NTU = nephelometric turbidity units; BDL = Below Detection Limits.

Notes:

(1) Surface water standards presented in Chapter 62-302, FAC. Analyte concentrations shown with shading represent an exceedance of the regulatory level.

(3) Cr less than or equal to $e(0.819(\ln H)+0.6848)$

(4) Cu less than or equal to $e(0.845(\ln H)-1.702)$

(5) Pb less than or equal to $e(1.273(\ln H)-4.705)$

(6) Ni less than or equal to $e(0.846(\ln H)+0.0584)$

(7) Zn less than or equal to $e(0.8473(\ln H)+0.884)$

Table 2-11
Surface Water Analytical Summary
First Half 2008

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		03/17/08	03/17/08
	Standard(I)	Units		
Field Measurements				
Temperature		deg. C	28.10	20.1
pH		STD	6.7	6.0
Conductivity		umhos/cm	686	603
Dissolved Oxygen (DO)	≥5	mg/l	1.5	1.0
Turbidity	29	NTU	13	60
Inorganics				
Nitrate N by Ion Chromatography		mg/l	0.146	<BDL
Nitrite N by Ion Chromatography		mg/l	0.044	<BDL
Antimony	4.3	mg/l	NA	NA
Arsenic	≤50	mg/l	0.0029	0.1
Barium	2	mg/l	<BDL	0.066
Beryllium	0.13	mg/l	<BDL	<BDL
Cadmium	Note 2	mg/l	0.0013	0.0084
Calcium		mg/l	44	21
Chromium	Note 3	mg/l	<BDL	<BDL
Cobalt	0.42	mg/l	<BDL	<BDL
Copper	Note 4	mg/l	<BDL	0.036
Lead	Note 5	mg/l	<BDL	0.033
Magnesium		mg/l	14	7.4
Mercury	0.012	ug/l	<BDL	<BDL
Nickel	0.005	mg/l	<BDL	0.0011
Silver	0.00007	mg/l	<BDL	<BDL
Vanadium	0.049	mg/l	<BDL	0.023
Zinc	Note 7	mg/l	0.0047	0.034
Carbonaceous BOD (5 day)		mg/l	<BDL	22.3
Chemical Oxygen Demand (COD)		mg/l	76.2	606
Total Organic Carbon		mg/l	24.2	64.9
Fecal coliform	800	cfu/100 ml	2,800	NA
Total Kjeldahl Nitrogen		mg/l	1.47	42.9
Total Phosphate as P		mg/l	0.695	NA
Ammonia		mg/l	0.416	0.048
Total Nitrogen		mg/l	1.66	42.9
Unionized ammonia		mg/l	0.00178	0.00002
Total Dissolved Solids (TDS)		mg/l	422	423
Total Suspended Solids (TSS)		mg/l	2	1750
Volatile Organic Compounds				
1,1,1,2-Tetrachloroethane	0.0013	ug/l	<0.12	<0.12
1,1,1-Trichloroethane	0.2	ug/l	<0.09	<0.09
1,1,2,2-Tetrachloroethane	10.8	ug/l	<0.12	<0.12
1,1,2-Trichloroethane	0.005	ug/l	<0.23	<0.23
1,1-Dichloroethene	0.00002	ug/l	<0.12	<0.12
1,1-Dichloroethane	0.00002	ug/l	<0.12	<0.12
1,2,3-Trichloropropane	0.0002	ug/l	<0.18	<0.18
1,2-Dibromo-3-chloropropane	0.0002	ug/l	<0.24	<0.24
1,2-Dibromoethane	0.00002	ug/l	<0.13	<0.13
1,2-Dichlorobenzene	0.6	ug/l	<0.13	<0.13

Analyte	Location		SW 1	SW 2
	Sample Identifier		SW 1	SW 2
	Date of Test:		03/17/08	03/17/08
	Standard(1)	Units		
1,2-Dichloroethane	0.003	ug/l	<0.12	<0.12
1,2-Dichloropropane	0.005	ug/l	<0.06	<0.06
1,4-Dichlorobenzene	0.075	ug/l	<0.13	<0.13
2-Hexanone	0.28	ug/l	<0.33	<0.33
Acetone	0.7	ug/l	<1.9	<1.9
Acrylonitrile	0.001	ug/l	<1.6	<1.6
Benzene	0.001	ug/l	<0.10	<0.10
Bromochloromethane	0.091	ug/l	<0.22	<0.22
Bromodichloromethane	0.0006	ug/l	<0.13	<0.13
Bromoform	0.0044	ug/l	<0.10	<0.10
Bromomethane	0.0098	ug/l	<0.58	<0.58
Carbon disulfide	0.7	ug/l	<0.14	<0.14
Carbon tetrachloride	4.42	ug/l	<0.22	<0.22
Chlorobenzene	0.1	ug/l	<0.04	<0.04
Chloroethane		ug/l	<0.39	<0.39
Chloroform	0.0057	ug/l	<0.14	<0.14
Chloromethane	0.0027	ug	<0.47	<0.47
cis-1,2-Dichloroethene	3.2	ug/l	<0.08	<0.08
cis-1,3-Dichloropropene	0.0002	ug/l	<0.14	<0.14
Dibromochloromethane	0.0004	ug/l	<0.15	<0.15
Dibromomethane	0.005	ug/l	<0.24	<0.24
Ethylbenzene	0.03	ug/l	<0.13	<0.13
Iodomethane		ug/l	<0.16	<0.16
m,p-Xylenes		ug/l	<0.19	<0.19
MEK (2-Butanone)	4.2	ug/l	<0.55	<0.55
Methylene chloride		ug/l	<0.13	<0.13
4-Methyl-2-pentanone		ug/l	<0.41	<0.41
o-Xylene		ug/l	<0.12	<0.12
Styrene	0.1	ug/l	<0.10	<0.10
Tetrachloroethene	0.003	ug/l	<0.16	<0.16
Toluene	0.04	ug/l	<0.10	<0.10
trans-1,2-Dichloroethene	0.063	ug/l	<0.30	<0.30
trans-1,3-Dichloropropene	0.0002	ug/l	<0.06	<0.06
t-1,4-Dichloro-2-butene		ug/l	<0.28	<0.28
Trichloroethene	80.7	ug/l	<0.12	<0.12
Trichlorofluoromethane	2.1	ug/l	<0.21	<0.21
Vinyl acetate	0.088	ug/l	<0.53	<0.53
Vinyl chloride	0.001	ug/l	<0.38	<0.38
Xylenes, Total	0.02	ug/l	<0.12	<0.12
Dibromchloropropane		ug/l	<0.005	<0.005
Ethylene dibromide		ug/l	<0.005	<0.005

Abbreviations: mg/l = milligrams per liter; ug/l = micrograms per liter; NTU = nephelometric turbidity units; NA = Not Analyzed; BDL = Below Detection Limits.

Notes:

(1) Surface water standards presented in Chapter 62-302, FAC. Analyte concentrations shown with shading represent an exceedance of the regulatory level.

(3) Cr less than or equal to $e(0.819(\ln H)+0.6848)$

(4) Cu less than or equal to $e(0.845(\ln H)-1.702)$

(5) Pb less than or equal to $e(1.273(\ln H)-4.705)$

(6) Ni less than or equal to $e(0.846(\ln H)+0.0584)$

(7) Zn less than or equal to $e(0.8473(\ln H)+0.884)$

Table 2-12
Surface Water Analytical Summary
Second Half 2008

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		08/25/08	08/25/08
	Standard(1)	Units		
Field Measurements				
Temperatruce		deg. C	27.00	27.4
pH		STD	6.9	6.7
Conductivity		umhos/cm	442	382
Dissolved Oxygen (DO)	≥5	mg/l	2.7	3.8
Turbidity	29	NTU	12	5.7
Inorganics				
Nitrate N by Ion Chromatography		mg/l	0.024	0.022
Nitrite N by Ion Chromatography		mg/l	<BDL	<BDL
Antimony	4.3	mg/l	<BDL	<BDL
Arsenic	≤50	mg/l	0.013	0.012
Barium	2	mg/l	0.012	0.011
Beryllium	0.13	mg/l	<BDL	<BDL
Cadmium	Note 2	mg/l	<BDL	<BDL
Calcium		mg/l	38	23.9
Chromium	Note 3	mg/l	0.001	<BDL
Cobalt	0.42	mg/l	<BDL	<BDL
Copper	Note 4	mg/l	<BDL	<BDL
Iron	1	mg/l	1.58	1.49
Lead	Note 5	mg/l	<BDL	<BDL
Magnesium		mg/l	9.81	7.03
Nickel		mg/l	0.002	0.001
Selenium	0.005	mg/l	0.0008	0.0003
Silver		mg/l	<BDL	<BDL
Sodium		mg/l	32.5	34.4
Thallium	0.0063	mg/l	<BDL	<BDL
Total Hardness		mg/l	135	89
Vanadium	0.049	mg/l	0.003	0.001
Zinc	Note 7	mg/l	<BDL	<BDL
Carbonaceous BOD (5 day)		mg/l	<BDL	<BDL
Chemical Oxygen Demand (COD)		mg/l	94.7	71.7
Total Organic Carbon		mg/l	30	27.7
Fecal coliform	800	cfu/100 ml	5500	330
Total Kjeldahl Nitrogen		mg/l	1.36	1.18
Total Phosphate as P		mg/l	0.412	0.155
Ammonia		mg/l	<BDL	0.037
Total Nitrogen		mg/l	1.38	1.2
Unionized ammonia		mg/l	0.00628	0.00015
Total Dissolved Solids (TDS)		mg/l	327	275
Volatle Organic Compounds				
1,1,1,2-Tetrachloroethane	0.0013	ug/l	<0.12	<0.12
1,1,1-Trichloroethane	0.2	ug/l	<0.09	<0.09
1,1,2,2-Tetrachloroethane	10.8	ug/l	<0.12	<0.12
1,1,2-Trichloroethane	0.005	ug/l	<0.23	<0.23
1,1-Dichloroethene	0.00002	ug/l	<0.12	<0.12
1,1-Dichloroethane	0.00002	ug/l	<0.14	<0.14
1,2,3-Trichloropropane	0.0002	ug/l	<0.18	<0.18

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		08/25/08	08/25/08
	Standard(1)	Units		
1,2-Dibromo-3-chloropropane	0.0002	ug/l	<0.24	<0.24
1,2-Dibromoethane	0.00002	ug/l	<0.13	<0.13
1,2-Dichlorobenzene	0.6	ug/l	<0.13	<0.13
1,2-Dichloroethane	0.003	ug/l	<0.12	<0.12
1,2-Dichloropropane	0.005	ug/l	<0.06	<0.06
1,4-Dichlorobenzene	0.075	ug/l	<0.13	<0.13
2-Hexanone	0.28	ug/l	<0.33	<0.33
Acetone	0.7	ug/l	<1.9	2.5
Acrylonitrile	0.001	ug/l	<1.6	<1.6
Benzene	0.001	ug/l	<0.1	<0.1
Bromochloromethane	0.091	ug/l	<0.22	<0.22
Bromodichloromethane	0.0006	ug/l	<0.13	<0.13
Bromoform	0.0044	ug/l	<0.1	<0.1
Bromomethane	0.0098	ug/l	<0.58	<0.58
Carbon disulfide	0.7	ug/l	<0.14	<0.14
Carbon tetrachloride	4.42	ug/l	<0.22	<0.22
Chlorobenzene	0.1	ug/l	<0.04	<0.04
Chloroethane		ug/l	<0.39	<0.39
Chloroform	0.0057	ug/l	<0.14	<0.14
Chloromethane	0.0027	ug	<0.47	<0.47
cis-1,2-Dichloroethene	3.2	ug/l	<0.08	<0.08
cis-1,3-Dichloropropene	0.0002	ug/l	<0.14	<0.14
Dibromochloromethane	0.0004	ug/l	<0.15	<0.15
Dibromomethane	0.005	ug/l	<0.24	<0.24
Ethylbenzene	0.03	ug/l	<0.13	<0.13
Iodomethane		ug/l	<0.16	<0.16
m,p-Xylenes		ug/l	<0.19	<0.19
MEK (2-Butanone)	4.2	ug/l	<0.55	<0.55
Methylene chloride		ug/l	<0.13	<0.13
4-Methyl-2-pentanone		ug/l	<0.41	<0.41
o-Xylene		ug/l	<0.12	<0.12
Styrene	0.1	ug/l	<0.1	<0.1
Tetrachloroethene	0.003	ug/l	<0.16	<0.16
Toluene	0.04	ug/l	<0.1	<0.1
trans-1,2-Dichloroethene	0.063	ug/l	<0.3	<0.3
trans-1,3-Dichloropropene	0.0002	ug/l	<0.06	<0.06
t-1,4-Dichloro-2-butene		ug/l	<0.28	<0.28
Trichloroethene	80.7	ug/l	<0.12	<0.12
Trichlorofluoromethane	2.1	ug/l	<0.21	<0.21
Vinyl acetate	0.088	ug/l	<0.53	<0.53
Vinyl chloride	0.001	ug/l	<0.38	<0.38
Xylenes, Total	0.02	ug/l	<0.12	<0.12

Abbreviations: mg/l = milligrams per liter; ug/l = micrograms per liter; NTU = nephelometric turbidity units; BDL = Below Detection Limits.

Notes:

(1) Surface water standards presented in Chapter 62-302, FAC. Analyte concentrations shown with shading represent an exceedance of the regulatory level.

(3) Cr less than or equal to $e(0.819(\ln H)+0.6848)$

(4) Cu less than or equal to $e(0.845(\ln H)-1.702)$

(5) Pb less than or equal to $e(1.273(\ln H)-4.705)$

(6) Ni less than or equal to $e(0.846(\ln H)+0.0584)$

(7) Zn less than or equal to $e(0.8473(\ln H)+0.884)$

Table 2-13
Surface Water Analytical Summary
First Half 2009

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		DRY	DRY
	Standard(I)	Units		
Field Measurements				
Temperatruce		deg. C	NA	NA
pH		STD	NA	NA
Conductivity		umhos/cm	NA	NA
Dissolved Oxygen (DO)	≥5	mg/l	NA	NA
Turbidity	29	NTU	NA	NA
Inorganics				
Nitrate N by Ion Chromatography		mg/l	NA	NA
Nitrite N by Ion Chromatography		mg/l	NA	NA
Antimony	4.3	mg/l	NA	NA
Arsenic	≤50	mg/l	NA	NA
Barium	2	mg/l	NA	NA
Beryllium	0.13	mg/l	NA	NA
Cadmium	Note 2	mg/l	NA	NA
Calcium		mg/l	NA	NA
Chromium	Note 3	mg/l	NA	NA
Cobalt	0.42	mg/l	NA	NA
Copper	Note 4	mg/l	NA	NA
Iron	1	mg/l	NA	NA
Lead	Note 5	mg/l	NA	NA
Magnesium		mg/l	NA	NA
Nickel		mg/l	NA	NA
Selenium	0.005	mg/l	NA	NA
Silver		mg/l	NA	NA
Sodium		mg/l	NA	NA
Thallium	0.0063	mg/l	NA	NA
Total Hardness		mg/l	NA	NA
Vanadium	0.049	mg/l	NA	NA
Zinc	Note 7	mg/l	NA	NA
Carbonaceous BOD (5 day)		mg/l	NA	NA
Chemical Oxygen Demand (COD)		mg/l	NA	NA
Total Organic Carbon		mg/l	NA	NA
Fecal coliform	800	cfu/100 ml	NA	NA
Total Kjeldahl Nitrogen		mg/l	NA	NA
Total Phosphate as P		mg/l	NA	NA
Ammonia		mg/l	NA	NA
Total Nitrogen		mg/l	NA	NA
Unionized ammonia		mg/l	NA	NA
Total Dissolved Solids (TDS)		mg/l	NA	NA
Volatile Organic Compounds				
1,1,1,2-Tetrachloroethane	0.0013	ug/l	NA	NA
1,1,1-Trichloroethane	0.2	ug/l	NA	NA
1,1,2,2-Tetrachloroethane	10.8	ug/l	NA	NA
1,1,2-Trichloroethane	0.005	ug/l	NA	NA
1,1-Dichloroethene	0.00002	ug/l	NA	NA
1,1-Dichloroethane	0.00002	ug/l	NA	NA
1,2,3-Trichloropropane	0.0002	ug/l	NA	NA

Analyte	Location:		SW 1	SW 2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		DRY	DRY
	Standard(1)	Units		
1,2-Dibromo-3-chloropropane	0.0002	ug/l	NA	NA
1,2-Dibromoethane	0.00002	ug/l	NA	NA
1,2-Dichlorobenzene	0.6	ug/l	NA	NA
1,2-Dichloroethane	0.003	ug/l	NA	NA
1,2-Dichloropropane	0.005	ug/l	NA	NA
1,4-Dichlorobenzene	0.075	ug/l	NA	NA
2-Hexanone	0.28	ug/l	NA	NA
Acetone	0.7	ug/l	NA	NA
Acrylonitrile	0.001	ug/l	NA	NA
Benzene	0.001	ug/l	NA	NA
Bromochloromethane	0.091	ug/l	NA	NA
Bromodichloromethane	0.0006	ug/l	NA	NA
Bromoform	0.0044	ug/l	NA	NA
Bromomethane	0.0098	ug/l	NA	NA
Carbon disulfide	0.7	ug/l	NA	NA
Carbon tetrachloride	4.42	ug/l	NA	NA
Chlorobenzene	0.1	ug/l	NA	NA
Chloroethane		ug/l	NA	NA
Chloroform	0.0057	ug/l	NA	NA
Chloromethane	0.0027	ug	NA	NA
cis-1,2-Dichloroethene	3.2	ug/l	NA	NA
cis-1,3-Dichloropropene	0.0002	ug/l	NA	NA
Dibromochloromethane	0.0004	ug/l	NA	NA
Dibromomethane	0.005	ug/l	NA	NA
Ethylbenzene	0.03	ug/l	NA	NA
Iodomethane		ug/l	NA	NA
m,p-Xylenes		ug/l	NA	NA
MEK (2-Butanone)	4.2	ug/l	NA	NA
Methylene chloride		ug/l	NA	NA
4-Methyl-2-pentanone		ug/l	NA	NA
o-Xylene		ug/l	NA	NA
Styrene	0.1	ug/l	NA	NA
Tetrachloroethene	0.003	ug/l	NA	NA
Toluene	0.04	ug/l	NA	NA
trans-1,2-Dichloroethene	0.063	ug/l	NA	NA
trans-1,3-Dichloropropene	0.0002	ug/l	NA	NA
t-1,4-Dichloro-2-butene		ug/l	NA	NA
Trichloroethene	80.7	ug/l	NA	NA
Trichlorofluoromethane	2.1	ug/l	NA	NA
Vinyl acetate	0.088	ug/l	NA	NA
Vinyl chloride	0.001	ug/l	NA	NA
Xylenes, Total	0.02	ug/l	NA	NA

Notes:

(1) Surface water standards presented in Chapter 62-302, FAC. Analyte concentrations shown with shading represent an exceedance of the regulatory level.

(3) Cr less than or equal to $e(0.819(\ln H)+0.6848)$

(4) Cu less than or equal to $e(0.845(\ln H)-1.702)$

(5) Pb less than or equal to $e(1.273(\ln H)-4.705)$

(6) Ni less than or equal to $e(0.846(\ln H)+0.0584)$

(7) Zn less than or equal to $e(0.8473(\ln H)+0.884)$

Table 3-1
Summary of Water Quality Data Trends

Parameter	Trend in Concentration	Comments
Leachate		
Inorganics	Steady	Several inorganics were detected during both sampling events of the review period, and concentrations remained within the same general range. No analytes were detected at concentrations in excess of regulatory standards.
Organics	Steady	There were a few organic detections during both sampling events of the review period, but none in excess of regulatory standards.
Groundwater		
pH	Steady	The pH values remained in a relatively narrow range at most of the wells throughout the review period. The values were lower than the SDWS range at most of the wells, and at all of the wells during two of the sampling events of the period.
Arsenic	Steady	Arsenic was detected at most of the wells in the network during every sampling event of the period except the first half 2009 event when it was only detected at two wells. The arsenic concentrations exceeded the MCL at most of the wells where it was detected during each sampling event.
Iron	Steady	Concentration of iron was higher than SDWS at most wells throughout most of the review period, and remained in the relatively narrow range throughout the review period. Iron concentration at GW-15 was significantly higher than all of the other wells during each sampling event.
TDS	Steady	The TDS concentration was steady at most of the wells during the period. The concentrations were consistently higher than the MCL at several wells during the period.
Surface Water		
Iron	Steady	Detected at concentrations in excess of the SWCTL at every sampling point sampled during the review period where surface water samples were collected.
Fecal Coliform	Steady	Fecal coliform was detected at concentrations in excess of the standard at one sampling point every sampling event where surface water samples were collected.

MCL = Maximum Contaminant Level. SWCTL = Surface Water Cleanup Target Level.
SDWS = Secondary Drinking Water Standard.

Table 3-2 (revised January 2010)
Linear Regression Analysis Results
Manatee County
Lena Road Landfill

Well	Parameter/Linear Regression (R2)				
	pH	Arsenic	Iron	Ammonia	TDS
BGW-1	0.7961	0	0.4083	0.5	0.0552
GW-1	0.3311	0.0066	0.0515	0.516	0.1773
GW-2	0	0.0282	0.1302	0.0272	0.1175
GW-3	0.5	0.1739	0.1951	0.2137	0.208
GW-4	0.5	0.521	0.2301	0.1209	0.1055
GW-5	0.3333	0.6815	0.123	0.0899	0.235
GW-6	0.5	0.6136	0.013	0.2315	0.316
GW-7	0.5	0.0333	0.116	0.0596	0.0453
GW-8	0.64	0.5294	0.0762	0.9638	0.0024
GW-9	0.0588	0.019	0.6032	0.1158	0.0432
GW-10	0.019	0.5981	0.002	0.5	0.4677
GW-11	0.0027	0.0031	0.0477	0.3516	0.0025
GW-12	0.0833	0.1944	0.1181	0.0408	0.0008
GW-13	0.8	0.0588	0.3118	0.2647	0.6071
GW-14	0.5	0.509	0.6018	0.4915	0.0425
GW-15	0.0769	0.45	0.0515	0.5326	0.3127
GW-16	0.0192	7.00E-30	0.0515	0.5	0.0981
GW-17	0.7232	0	0.3083	0.63	0.2271

TABLE 4-1
RAINFALL DURING REVIEW PERIOD
LENA ROAD LANDFILL

MONTH	AVERAGE RAINFALL (inches)	2007 RAINFALL (inches)	2008 RAINFALL (inches)	2009 RAINFALL (inches)
JANUARY	2.09	2.36	3.68	1.85
FEBRUARY	2.91	1.09	1.24	0.69
MARCH	3.15	0.46	3.42	0.86
APRIL	2.31	3.32	4.34	2.23
MAY	2.81	0.16	2.26	5.25
JUNE	6.67	5.65	9.15	6.32
JULY	7.30	7.30	9.68	-
AUGUST	8.70	9.54	8.72	-
SEPTEMBER	8.50	5.73	1.58	-
OCTOBER	3.20	4.74	2.24	-
NOVEMBER	1.80	0.07	0.84	-
DECEMBER	2.30	0.50	1.34	-
TOTAL	51.74	40.92	48.49	17.20

Table 4-2 (revised January 2010)
Groundwater Elevation Data Summary
Manatee County
Lena Road Landfill

Monitoring Well	Top of Casing Elevation (ft-NGVD)	Screen Interval Elevation (ft-NGVD)	Date Measured	Depth to Groundwater (feet)	Groundwater Elevation (ft-NGVD)
GW-1	38.68	19.76-34.76	First Half 2007	8.81	29.87
			Second Half 2007	6.56	32.12
			First Half 2008	8.89	29.79
			Second Half 2008	5.96	32.72
			First Half 2009	8.21	30.47
GW-2	40.92	22.01-37.01	First Half 2007	11.07	29.85
			Second Half 2007	9.02	31.90
			First Half 2008	11.17	29.75
			Second Half 2008	8.22	32.70
			First Half 2009	10.47	30.45
GW-3	39.40	20.34-35.34	First Half 2007	8.21	31.19
			Second Half 2007	5.14	34.26
			First Half 2008	7.63	31.77
			Second Half 2008	5.33	34.07
			First Half 2009	7.96	31.44
GW-4	40.53	21.40-36.40	First Half 2007	9.97	30.56
			Second Half 2007	6.91	33.62
			First Half 2008	9.31	31.22
			Second Half 2008	7.31	33.22
			First Half 2009	9.54	30.99
GW-5	39.90	20.74-35.74	First Half 2007	9.85	30.05
			Second Half 2007	7.06	32.84
			First Half 2008	9.08	30.82
			Second Half 2008	7.45	32.45
			First Half 2009	9.06	30.84
GW-6	38.95	19.91-34.91	First Half 2007	9.72	29.23
			Second Half 2007	6.71	32.24
			First Half 2008	8.91	30.04
			Second Half 2008	7.12	31.83
			First Half 2009	8.93	30.02
GW-7	39.49	19.45-34.45	First Half 2007	12.21	27.28
			Second Half 2007	8.23	31.26
			First Half 2008	11.78	27.71
			Second Half 2008	8.62	30.87
			First Half 2009	12.16	27.33
GW-8	39.75	19.93-34.93	First Half 2007	13.43	26.32
			Second Half 2007	9.41	30.34
			First Half 2008	13.16	26.59
			Second Half 2008	9.84	29.91
			First Half 2009	13.91	25.84
GW-9	39.65	19.59-34.59	First Half 2007	13.25	26.40
			Second Half 2007	10.64	29.01
			First Half 2008	13.08	26.57
			Second Half 2008	10.67	28.98
			First Half 2009	13.73	25.92
GW-10	38.34	18.82-33.82	First Half 2007	12.11	26.23
			Second Half 2007	7.87	30.47
			First Half 2008	11.92	26.42
			Second Half 2008	9.12	29.22
			First Half 2009	12.54	25.80
GW-11	38.26	13.76-28.76	First Half 2007	9.26	29.00
			Second Half 2007	6.91	31.35
			First Half 2008	9.14	29.12
			Second Half 2008	6.82	31.44
			First Half 2009	8.53	29.73

Monitoring Well	Top of Casing Elevation (Ft-NGVD)	Screen Interval Elevation (Ft-NGVD)	Date Measured	Depth to Groundwater (Feet)	Groundwater Elevation (Ft-NGVD)
GW-12	42.09	22.32-37.32	First Half 2007	12.24	29.85
			Second Half 2007	10.03	32.06
			First Half 2008	11.99	30.10
			Second Half 2008	9.83	32.26
			First Half 2009	12.76	29.33
GW-13	44.79	25.07-40.07	First Half 2007	12.54	32.25
			Second Half 2007	11.97	32.82
			First Half 2008	13.23	31.56
			Second Half 2008	11.86	32.93
			First Half 2009	12.51	32.28
GW-14	39.63	19.98-34.98	First Half 2007	5.47	34.16
			Second Half 2007	5.49	34.14
			First Half 2008	7.43	32.20
			Second Half 2008	4.66	34.97
			First Half 2009	7.19	32.44
GW-15	42.33	22.83-37.83	First Half 2007	7.09	35.24
			Second Half 2007	8.04	34.29
			First Half 2008	9.14	33.19
			Second Half 2008	6.93	35.40
			First Half 2009	8.82	33.51
GW-16	44.41	24.76-39.76	First Half 2007	10.07	34.34
			Second Half 2007	10.32	34.09
			First Half 2008	11.01	33.40
			Second Half 2008	8.02	36.39
			First Half 2009	10.94	33.47
GW-17	42.19	21.89-36.89	First Half 2007	9.06	33.13
			Second Half 2007	8.17	34.02
			First Half 2008	9.28	32.91
			Second Half 2008	7.42	34.77
			First Half 2009	9.16	33.03
BGW-1	47.57	27.77-42.77	First Half 2007	9.86	37.71
			Second Half 2007	10.66	36.91
			First Half 2008	11.86	35.71
			Second Half 2008	6.19	41.38
			First Half 2009	11.87	35.70

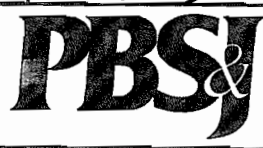
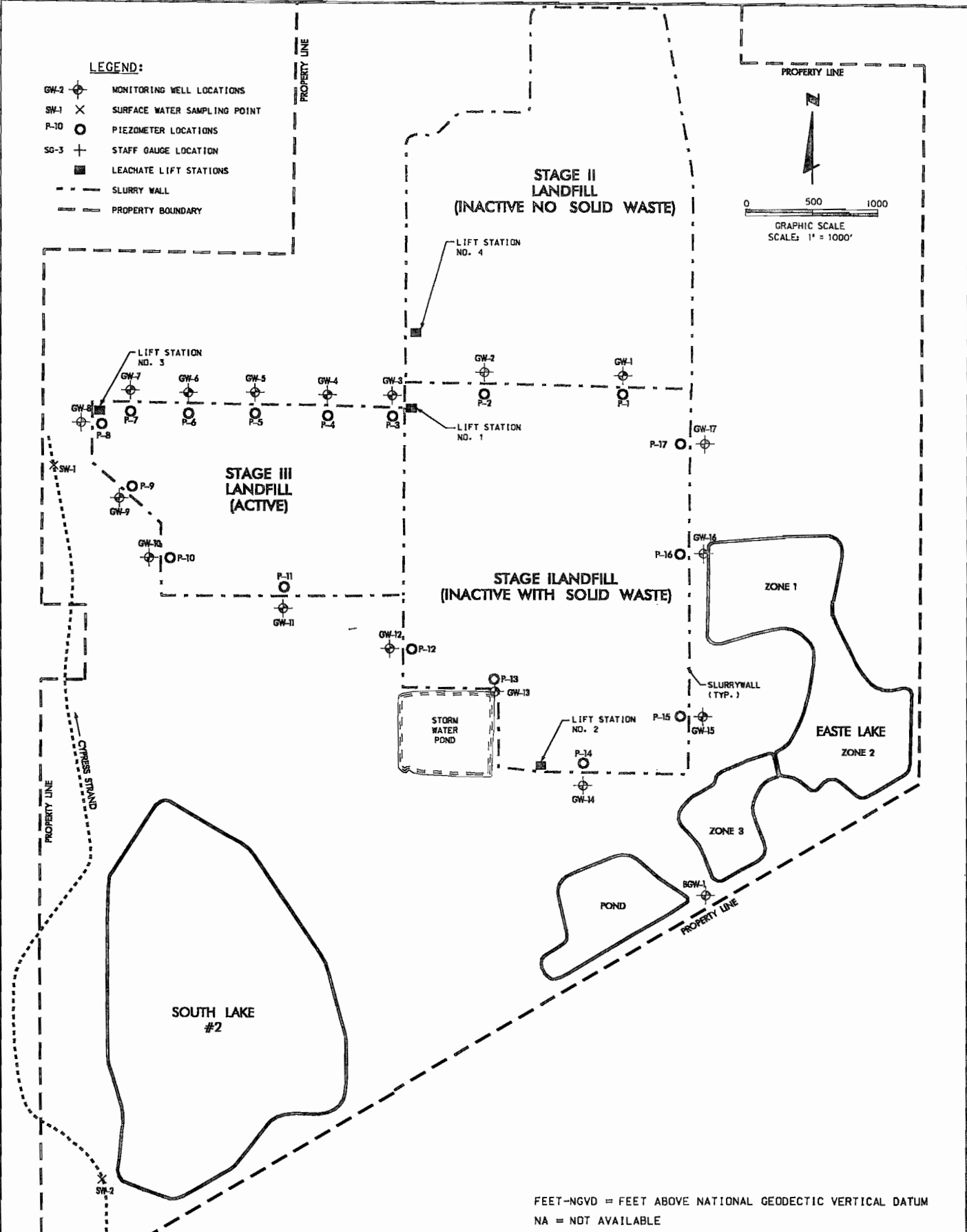
NM = Not measured.

Ft-NGVD = Feet above the National Geodetic Vertical Datum.

|

FIGURES

\\DRLF51\EC\SOVOLD\HAZARD\MANATEE\LENAROAD\ANDFILL\BIANNUALREPORT 09\MONITORINGWALLLOCATION-FIG-1A.DGN

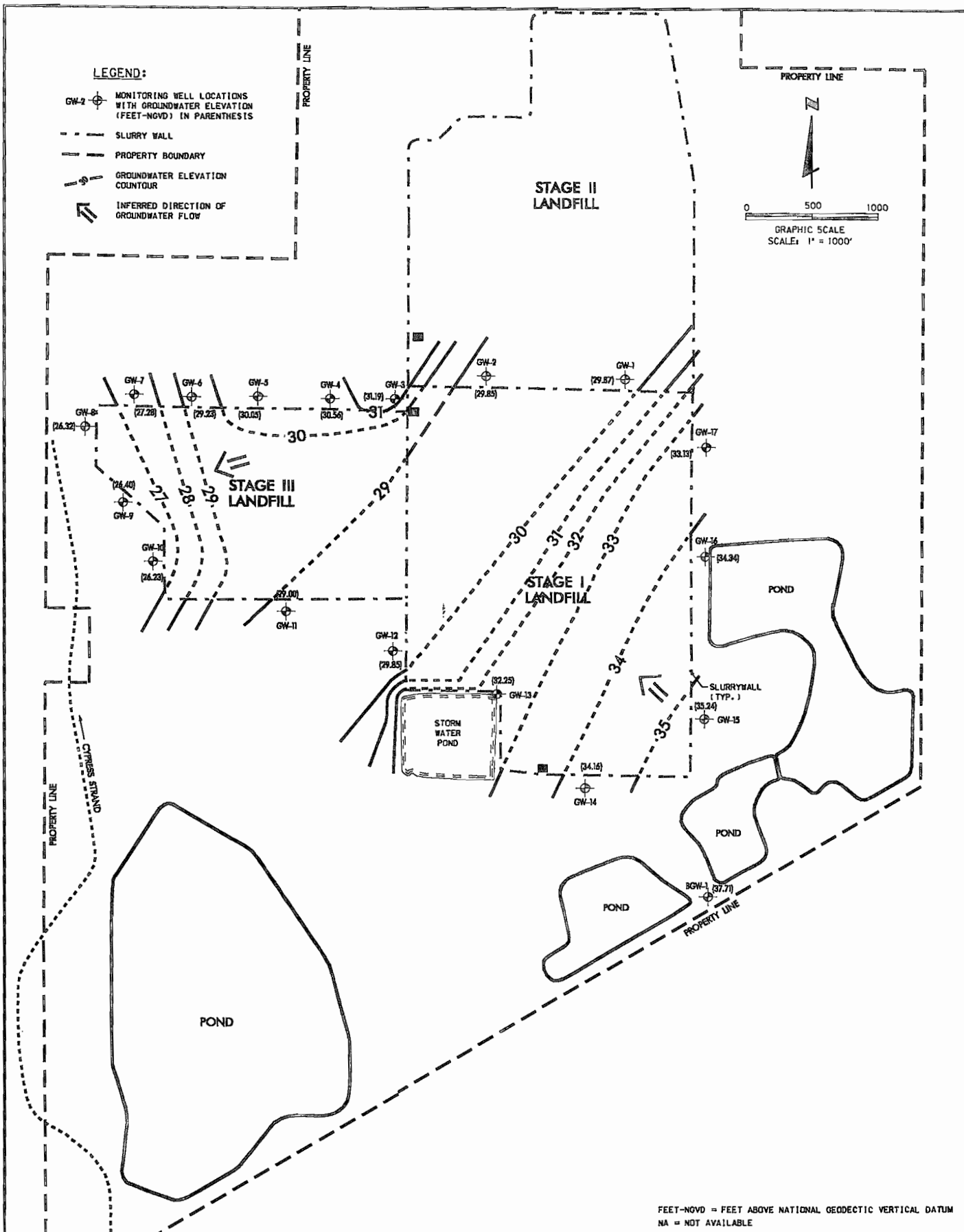


LENA ROAD LANDFILL
MANATEE COUNTY, FLORIDA

SITE PLAN

FIG. 1

\\NORLFS1\EC\SO\OLDG\HAZARDOUS\MANATEE\LENA ROAD\LANDFILL\BI\ANNUAL REPORT 09\MONITORING\WALLLOCATION-FIG-2-7-1.DGN

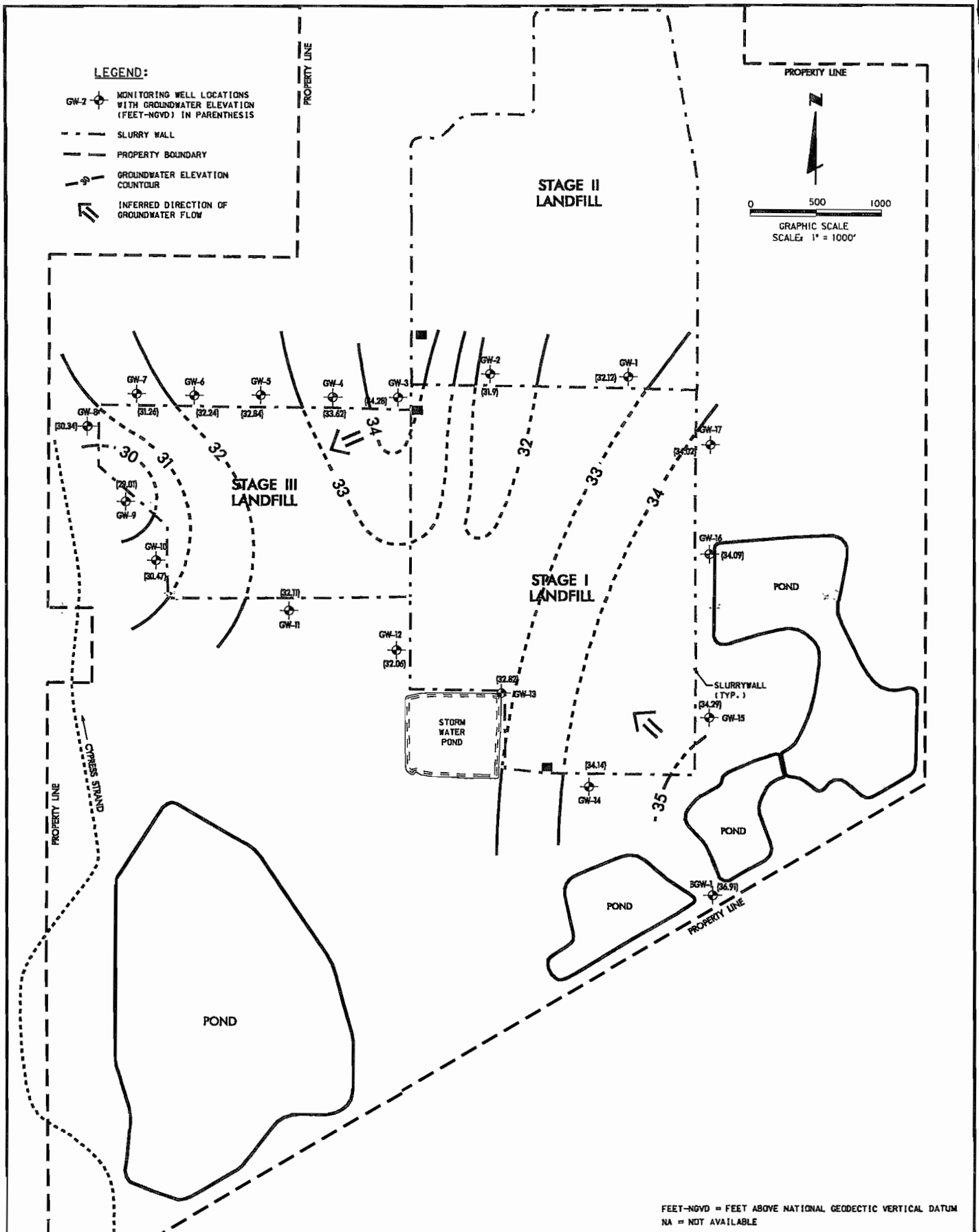


LENA ROAD LANDFILL
MANATEE COUNTY, FLORIDA

GROUNDWATER ELEVATION
CONTOUR MAP
FIRST HALF 2007

FIG. 2

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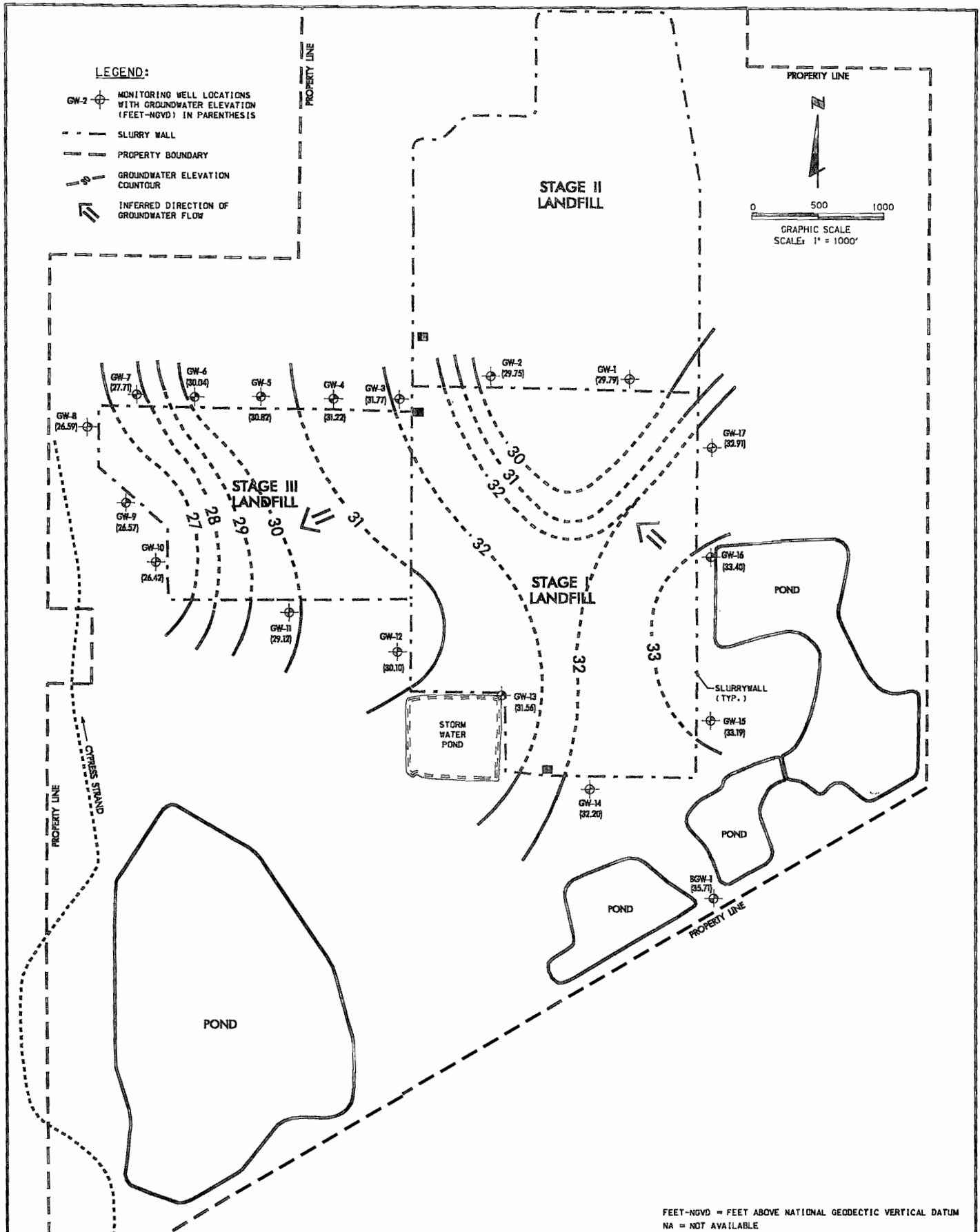


LENA ROAD LANDFILL
MANATEE COUNTY, FLORIDA

GROUNDWATER ELEVATION
CONTOUR MAP
SECOND HALF 2007

FIG. 3

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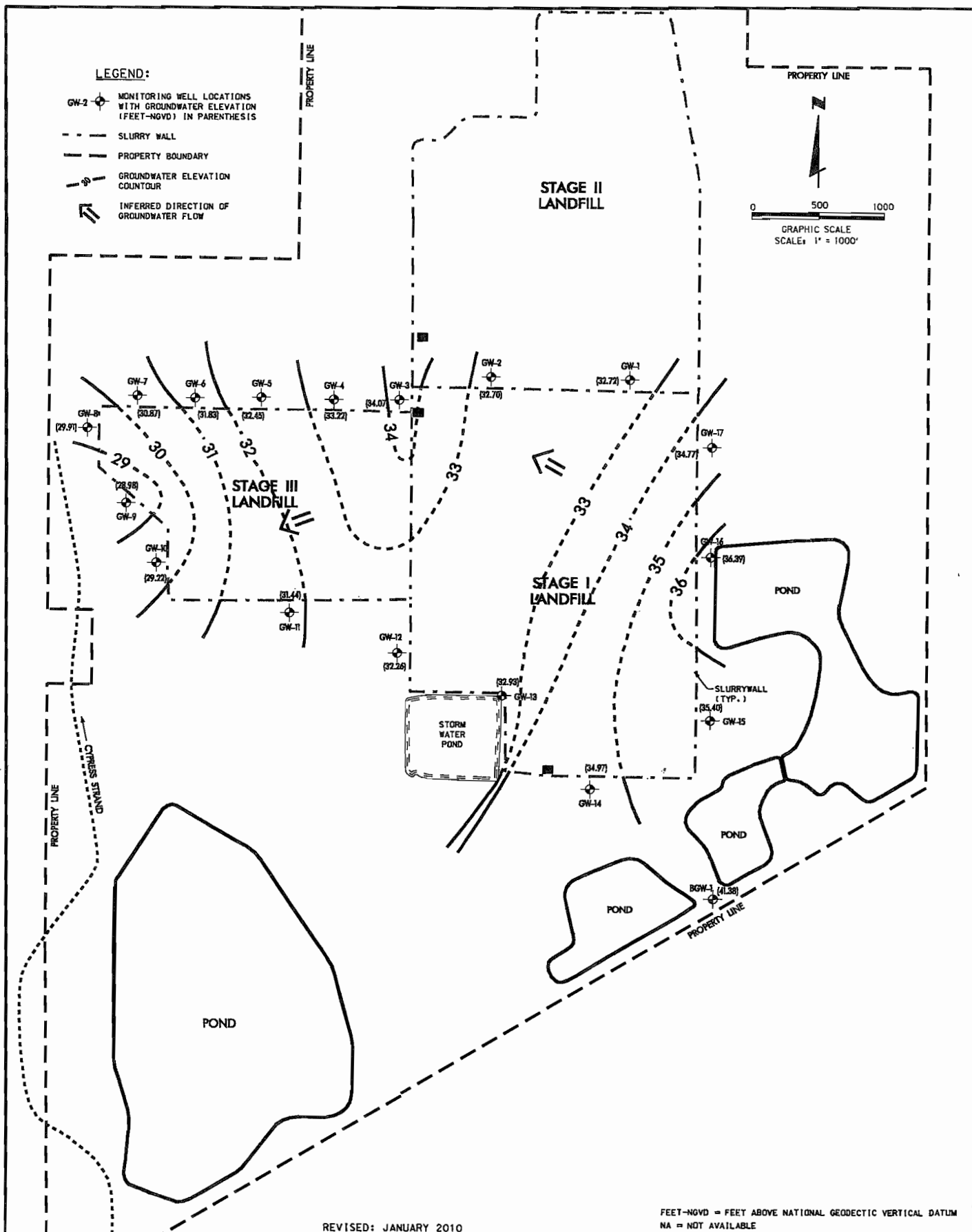


LENA ROAD LANDFILL
MANATEE COUNTY, FLORIDA

GROUNDWATER ELEVATION
CONTOUR MAP
FIRST HALF 2008

FIG. 4

\\NORFS1\EC\SO\01.DG\HAZARD\MANATEE\LENA ROAD\LANDFILL\BIANNUALREPORT 09\MONITORING\WALLLOCATION-FIG-5_8-2.DGN

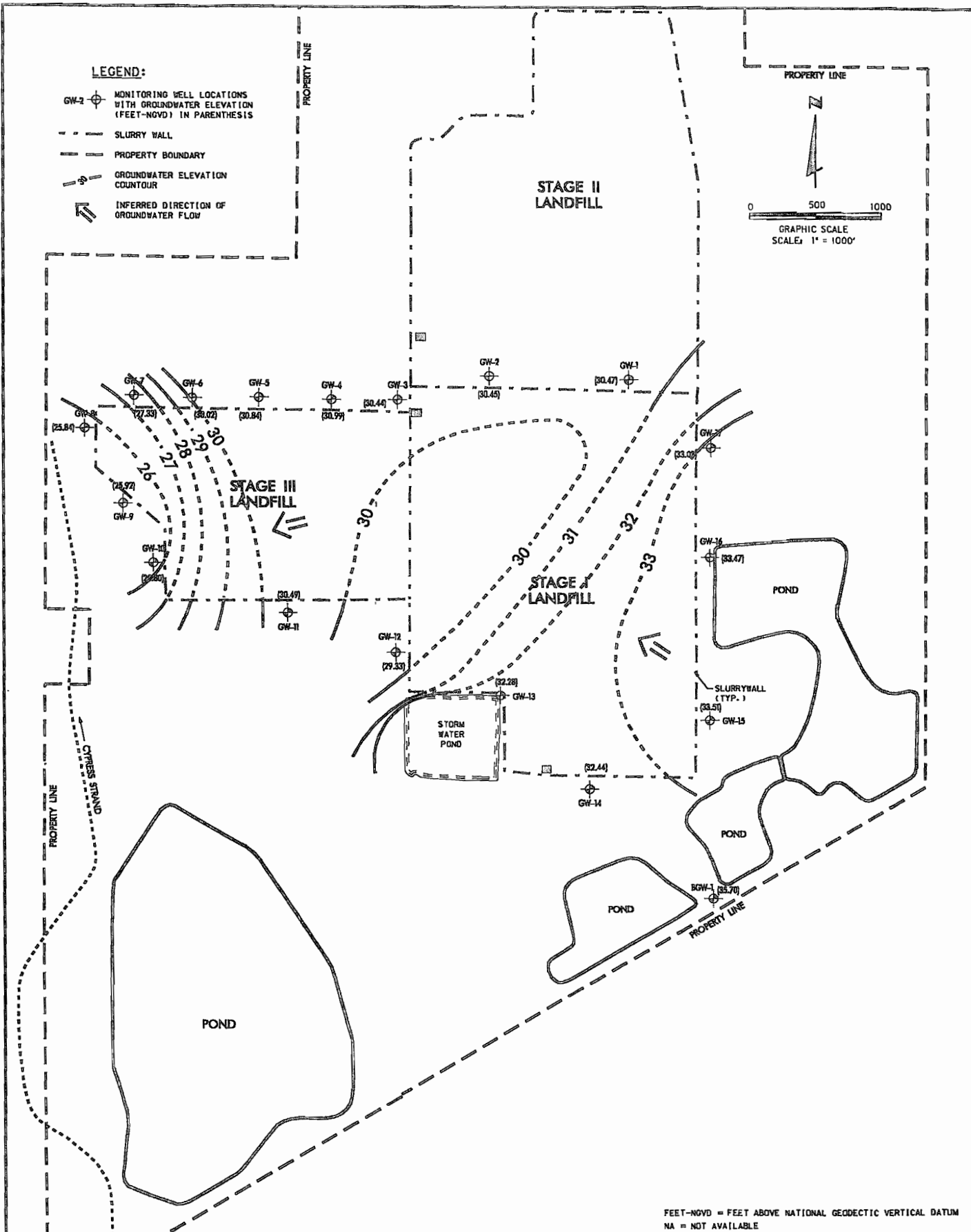


LENA ROAD LANDFILL
MANATEE COUNTY, FLORIDA

GROUNDWATER ELEVATION
CONTOUR MAP
SECOND HALF 2008

FIG. 5

\\NORLFS1\EC\S\SD\DI\DG\HAZARD\MANATEE\LENA ROAD LANDFILL\BI ANNUAL REPORT 09\MONITORINGWALL\LOCATION-FIG-6-9-1.DGN



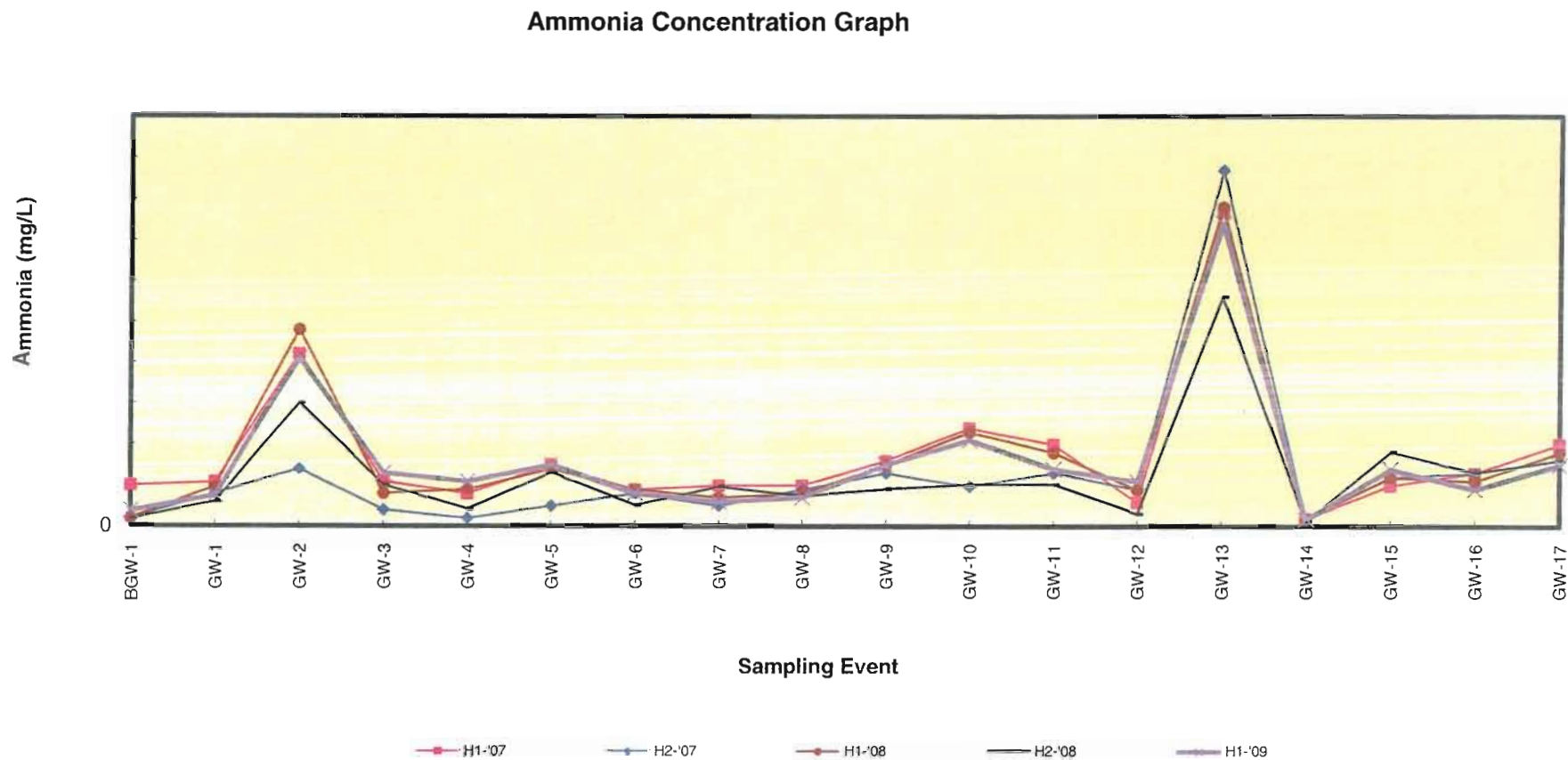
LENA ROAD LANDFILL
MANATEE COUNTY, FLORIDA

GROUNDWATER ELEVATION
CONTOUR MAP
FIRST HALF 2009

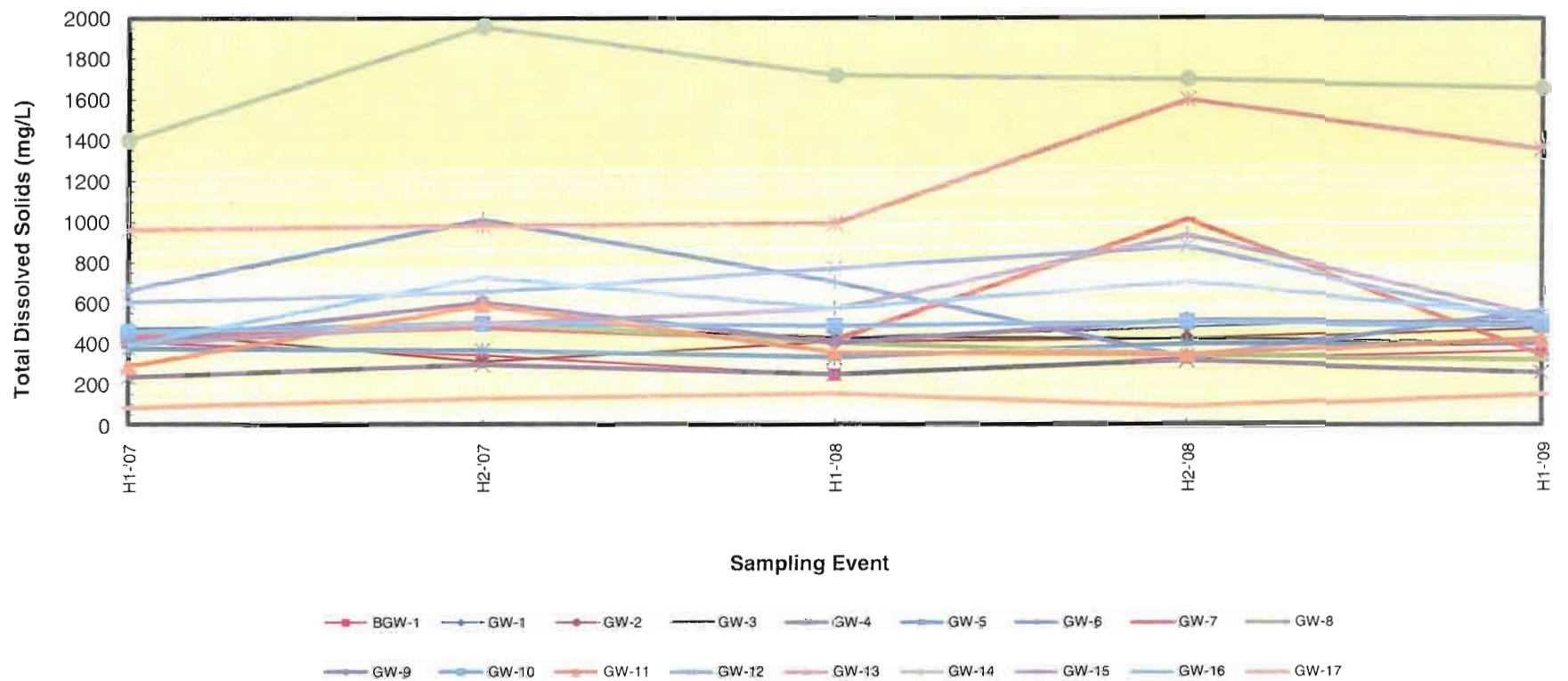
FIG. 6

APPENDIX A
Parameter Concentration Graphs

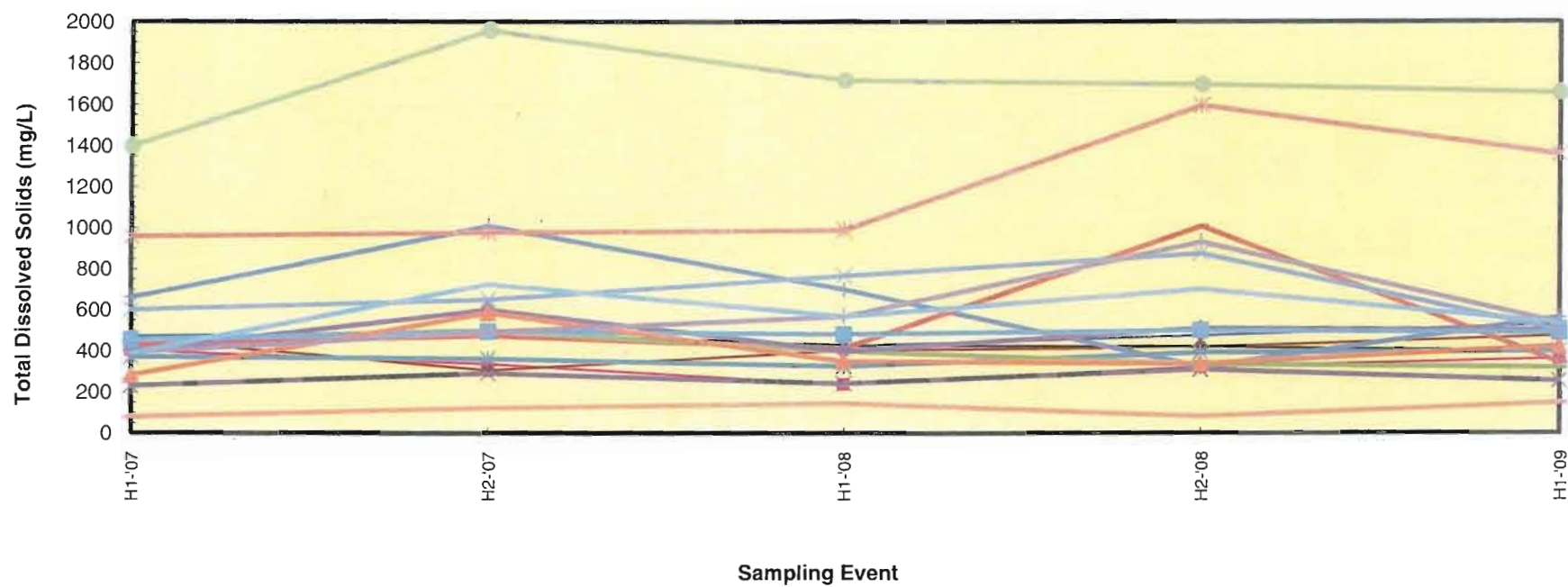
FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 18 2010
SOUTHWEST DISTRICT
TAMPA



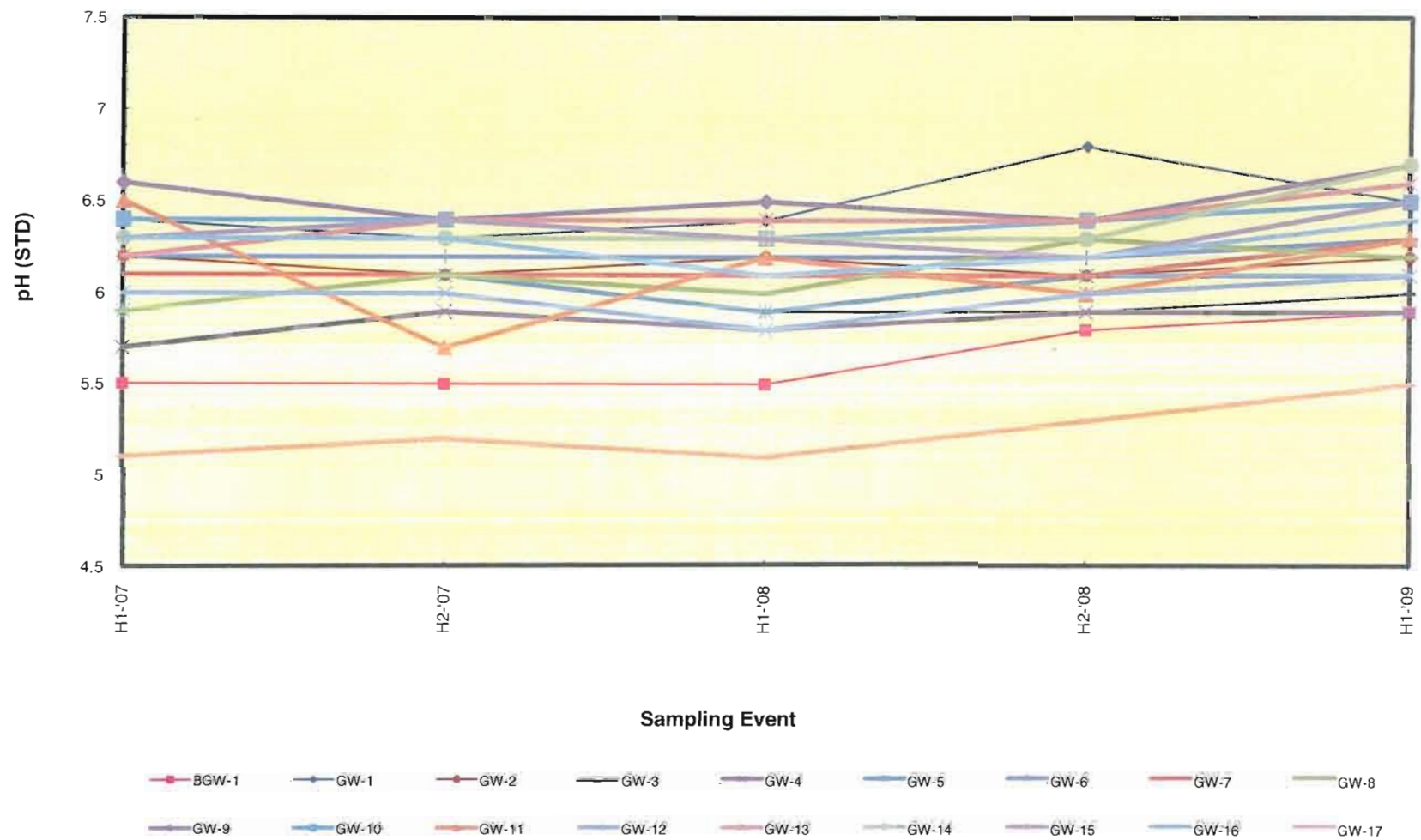
TDS Concentration Graph



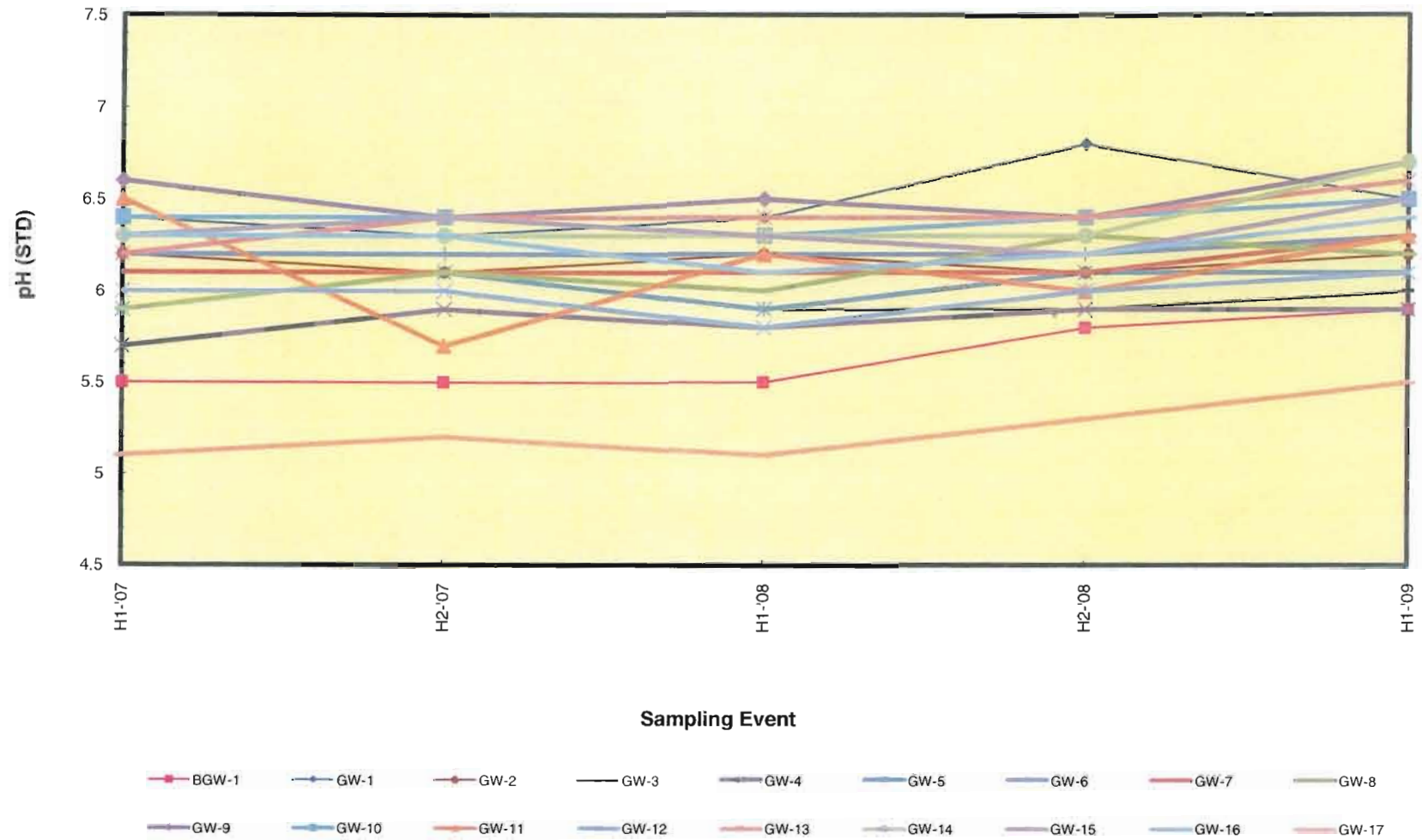
TDS Concentration Graph



pH Concentration Graph



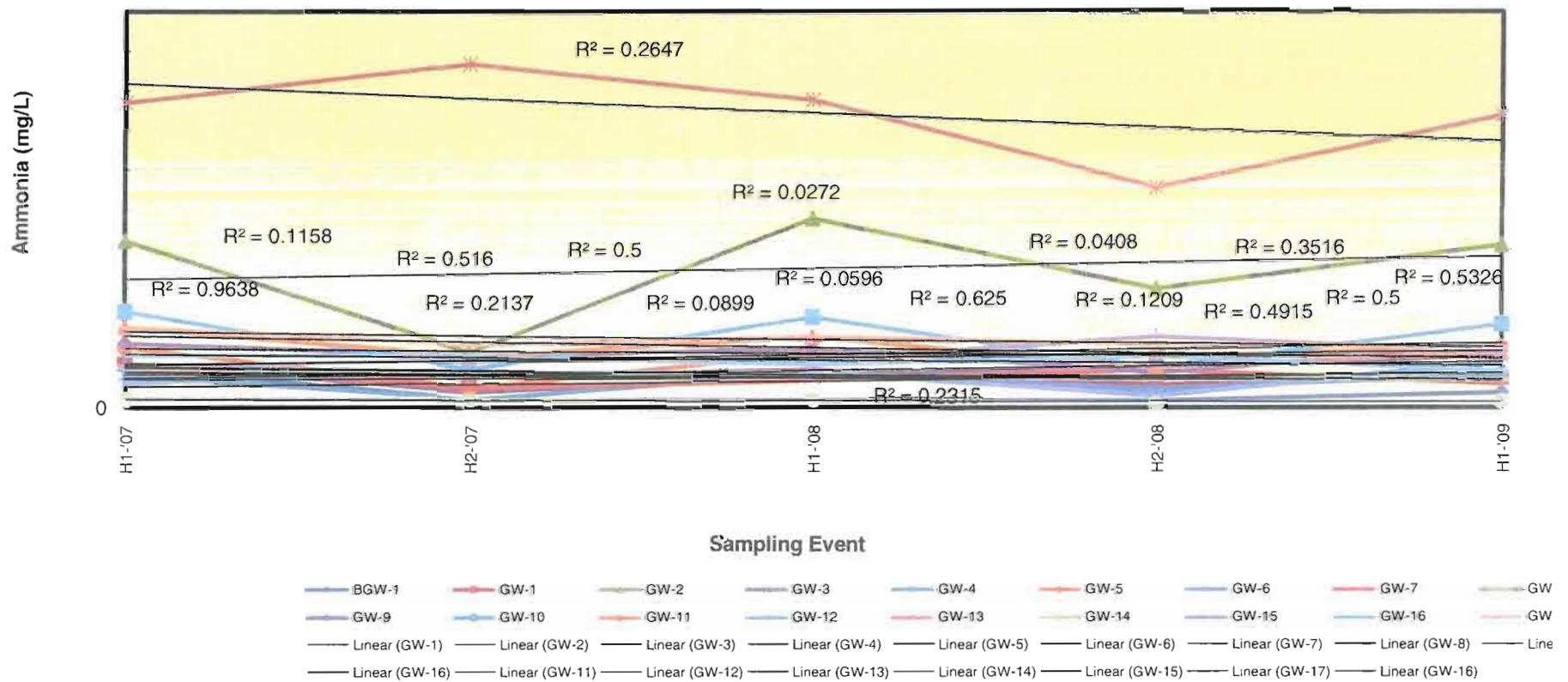
pH Concentration Graph



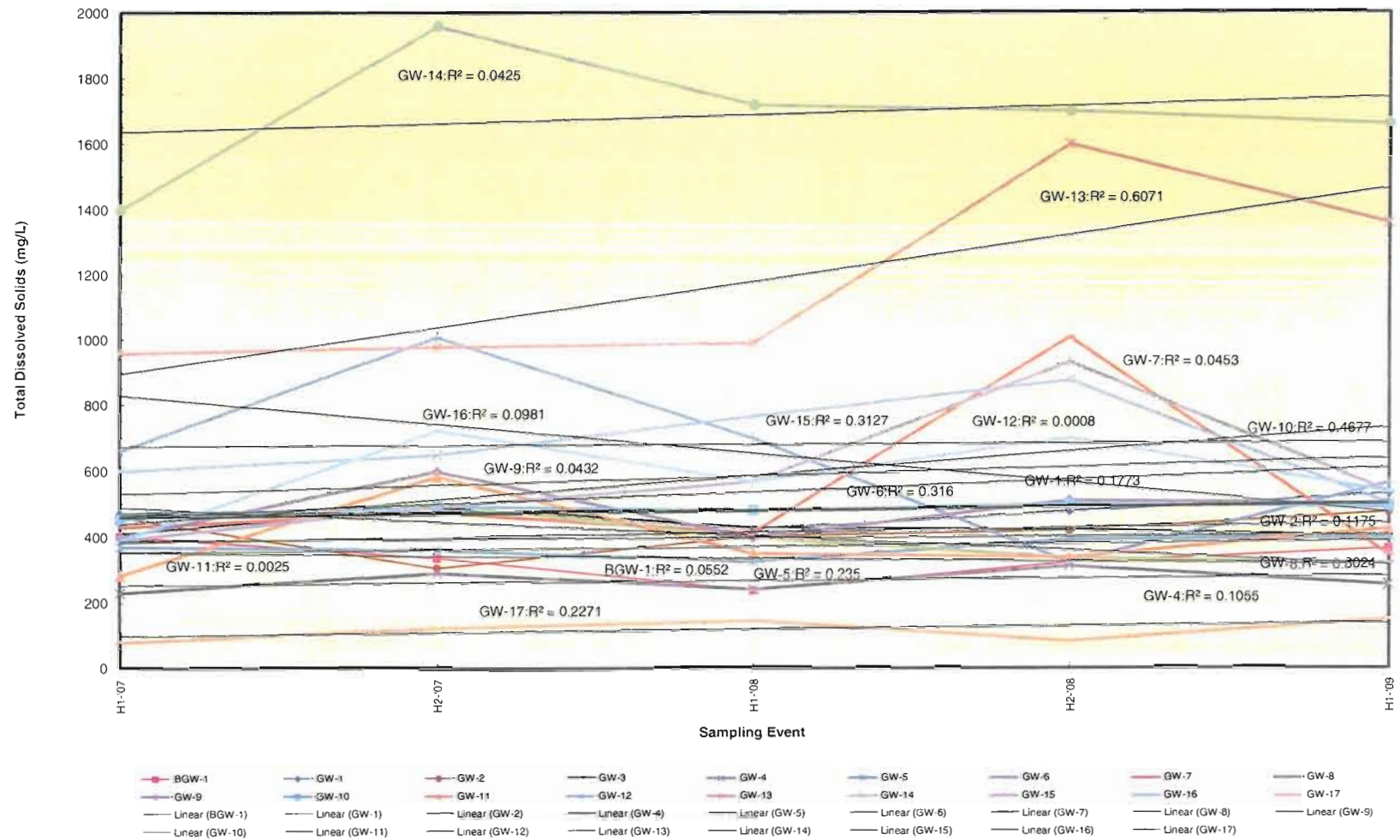
APPENDIX B
Trend Analysis Graphs

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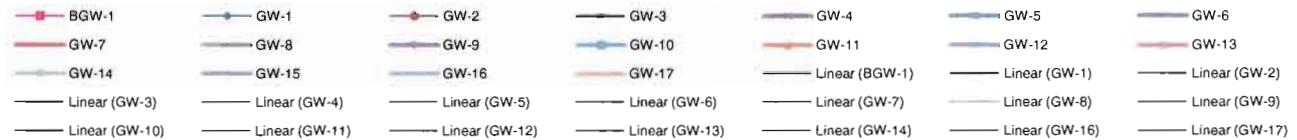
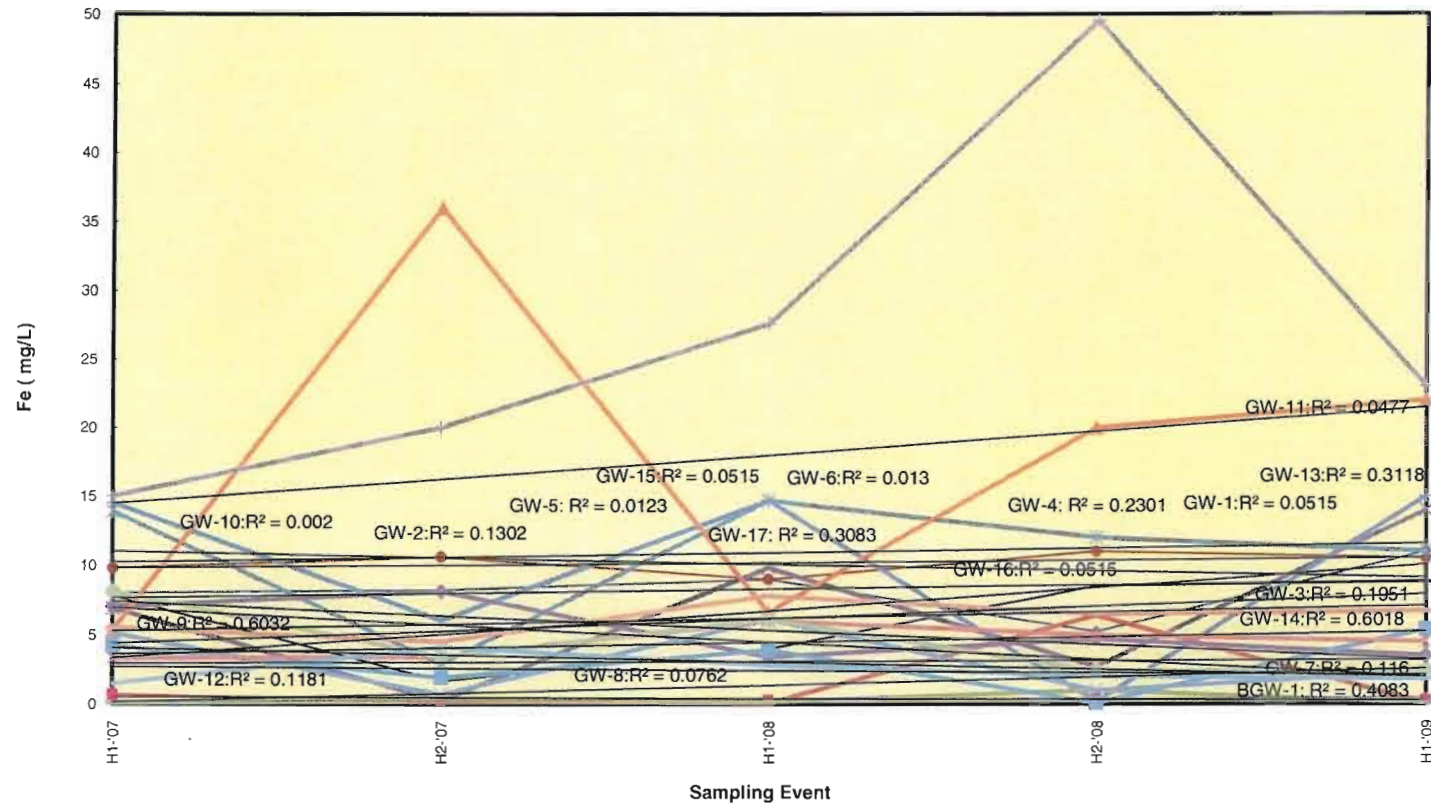
Ammonia Concentration Graph

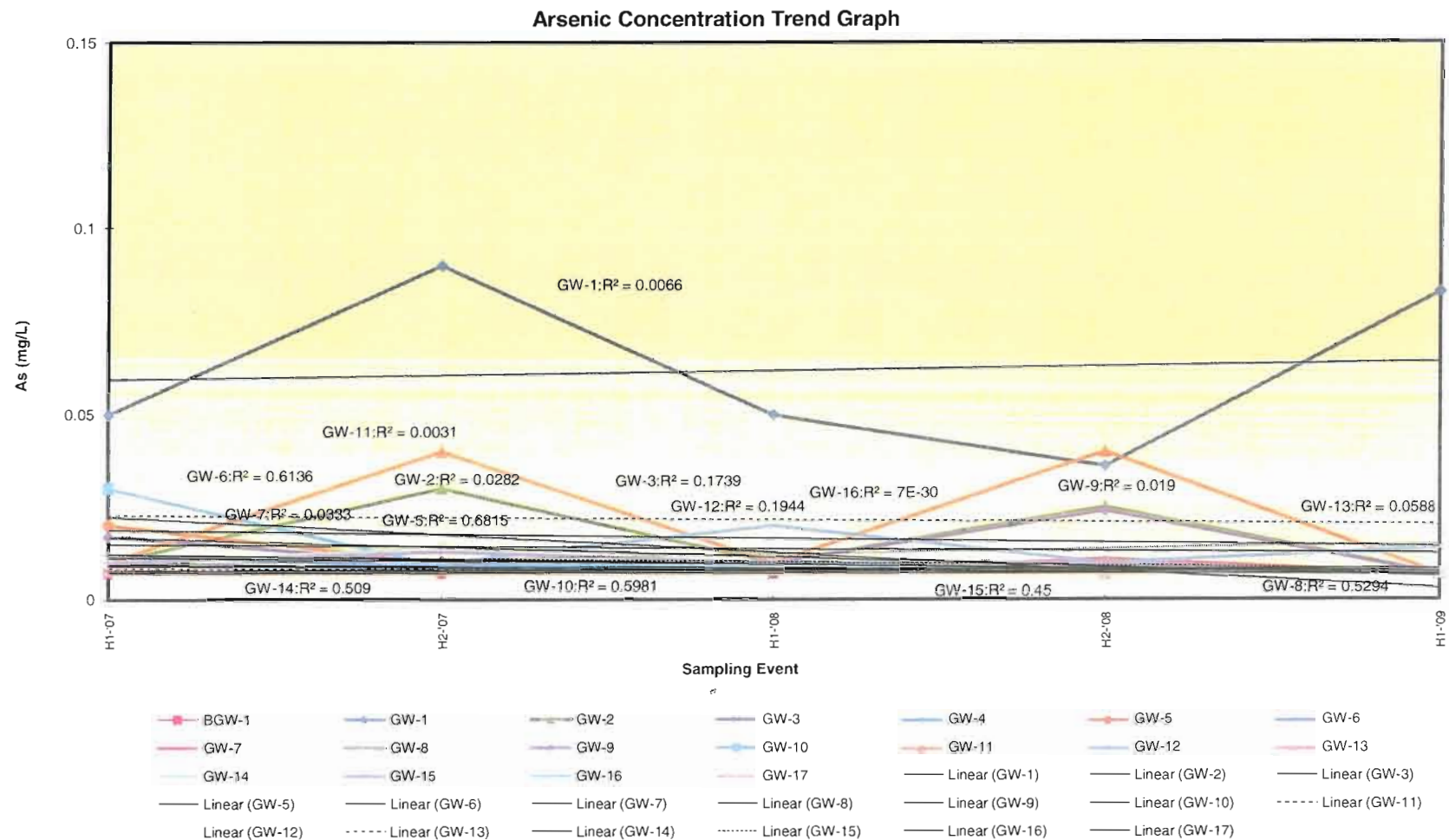


TDS Concentration Trend Graph

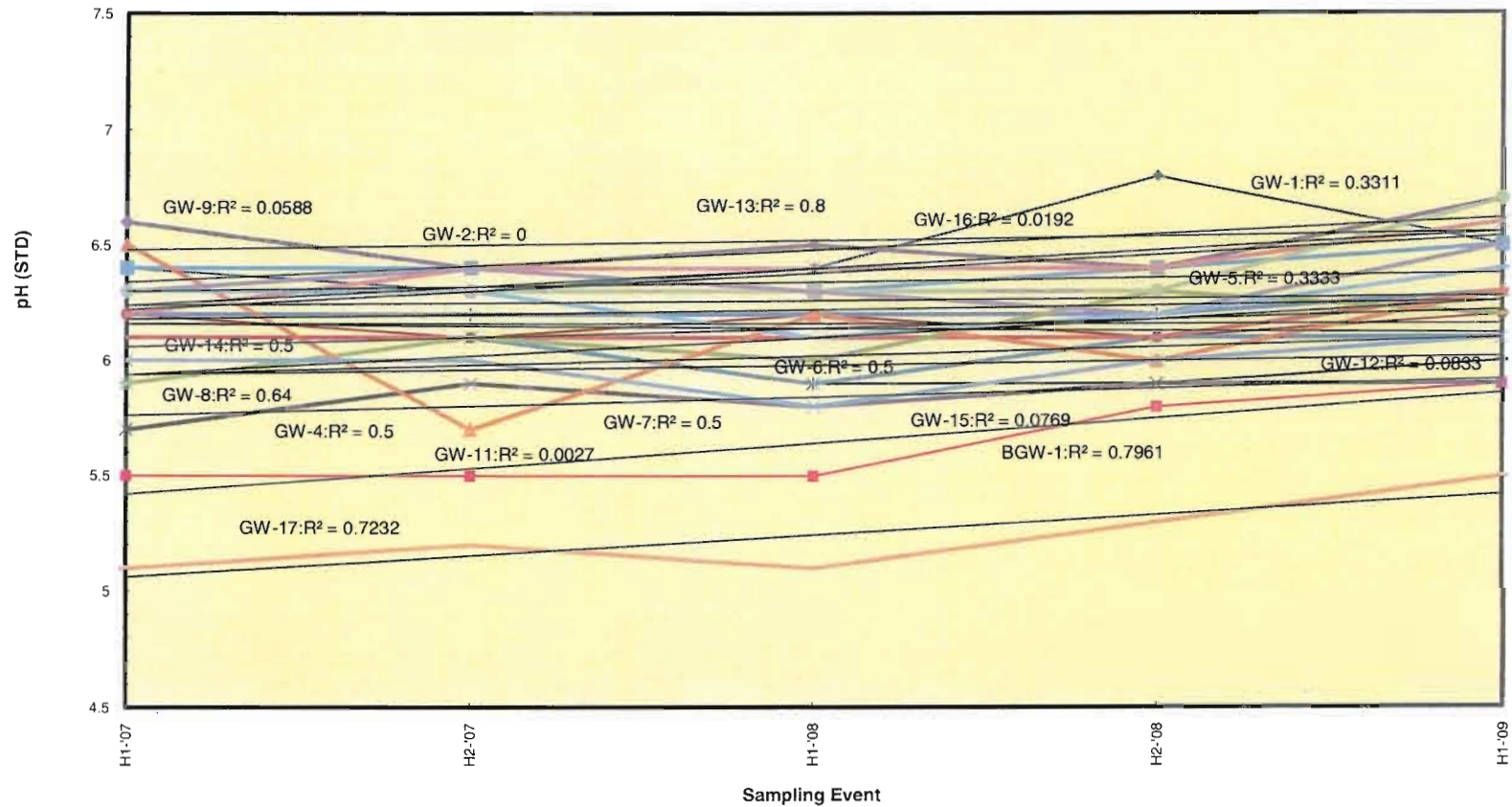


Iron Concentration Trend Graph





pH Concentration Trend Graph



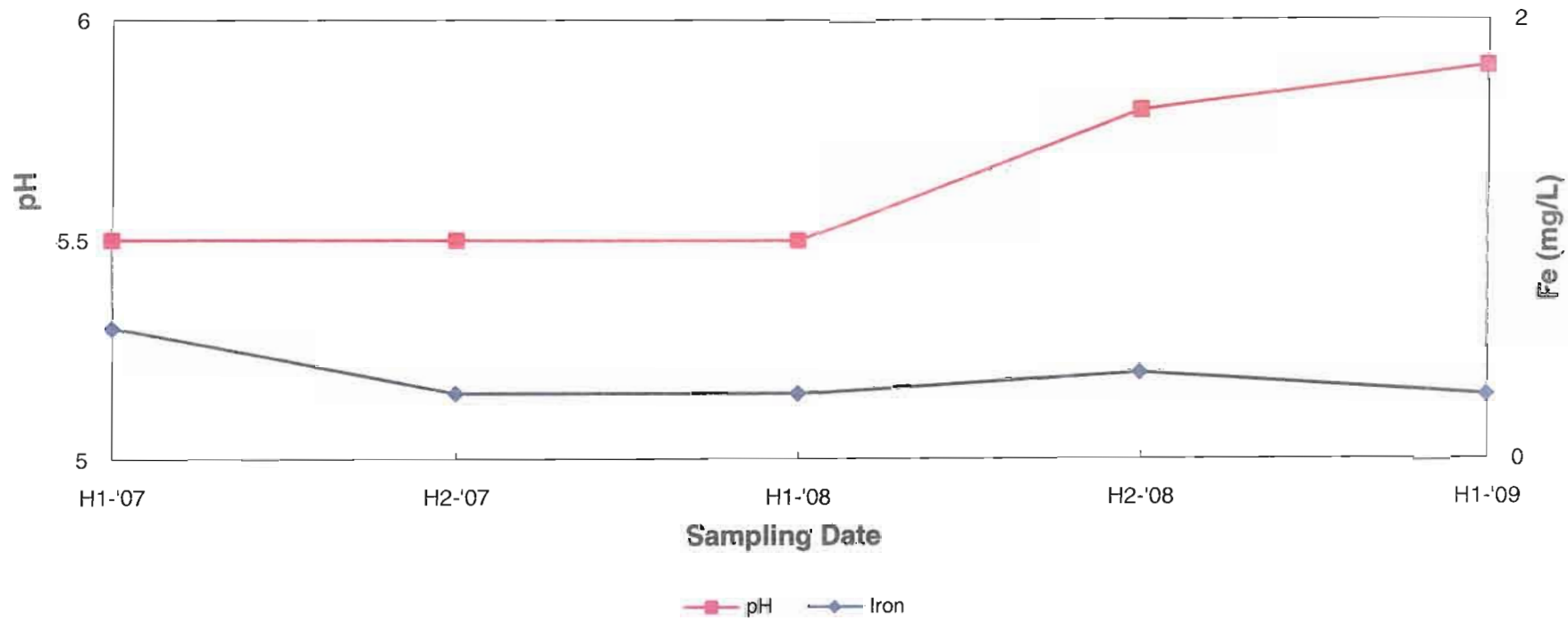
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|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|-----------------|
| ■ BGW-1 | ■ GW-1 | ■ GW-2 | ■ GW-3 | ■ GW-4 | ■ GW-5 | ■ GW-6 | ■ GW-7 | ■ GW-8 |
| ■ GW-9 | ■ GW-10 | ■ GW-11 | ■ GW-12 | ■ GW-13 | ■ GW-14 | ■ GW-15 | ■ GW-16 | ■ GW-17 |
| — Linear (BGW-1) | — Linear (GW-1) | — Linear (GW-2) | — Linear (GW-4) | — Linear (GW-5) | — Linear (GW-6) | — Linear (GW-7) | — Linear (GW-8) | — Linear (GW-9) |
| — Linear (GW-11) | — Linear (GW-12) | — Linear (GW-13) | — Linear (GW-14) | — Linear (GW-15) | — Linear (GW-16) | — Linear (GW-17) | | |

APPENDIX C
Related Parameter Correlation Graphs

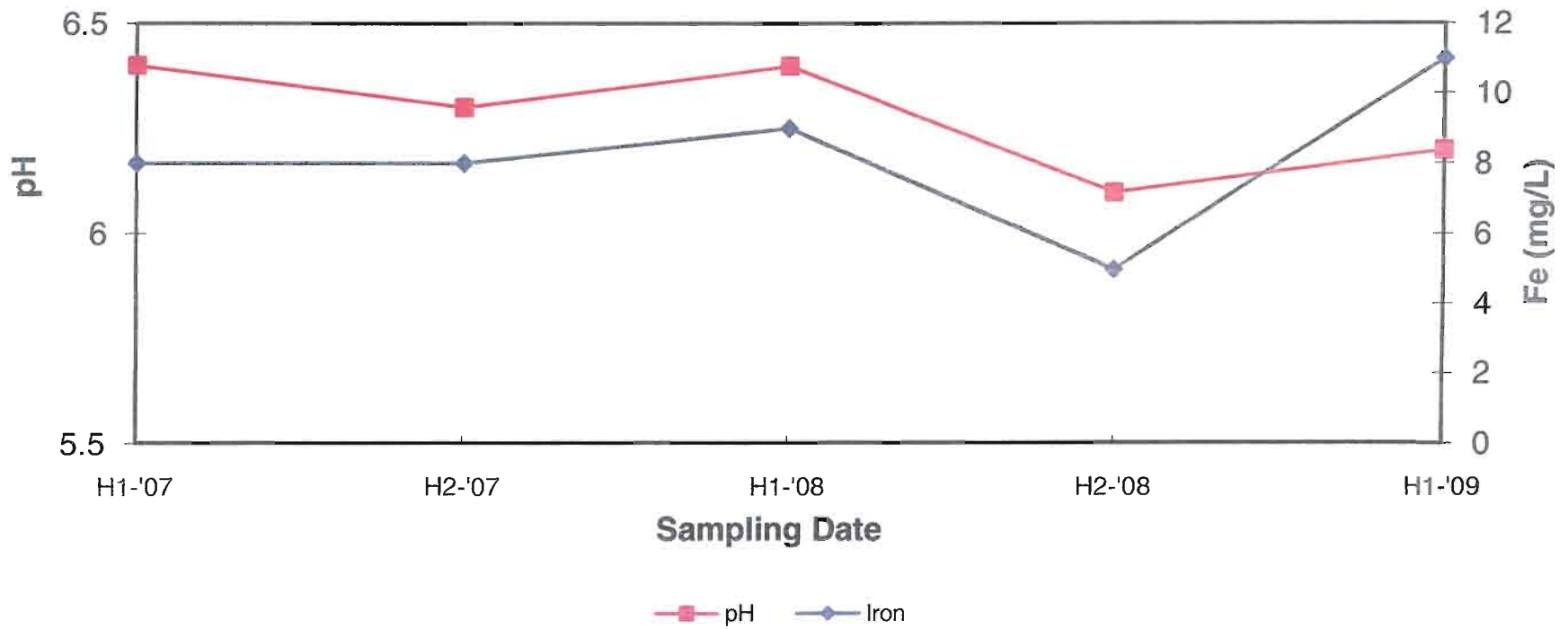
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C-1 – pH versus Iron

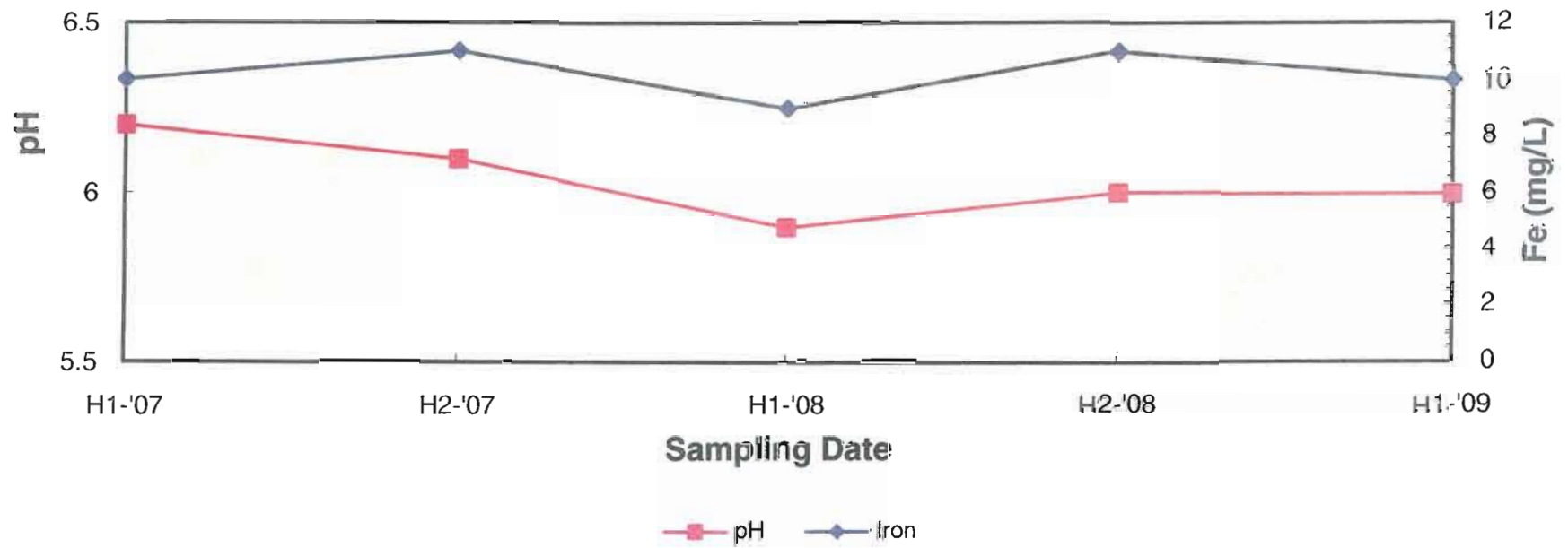
Monitoring Well BGW-1



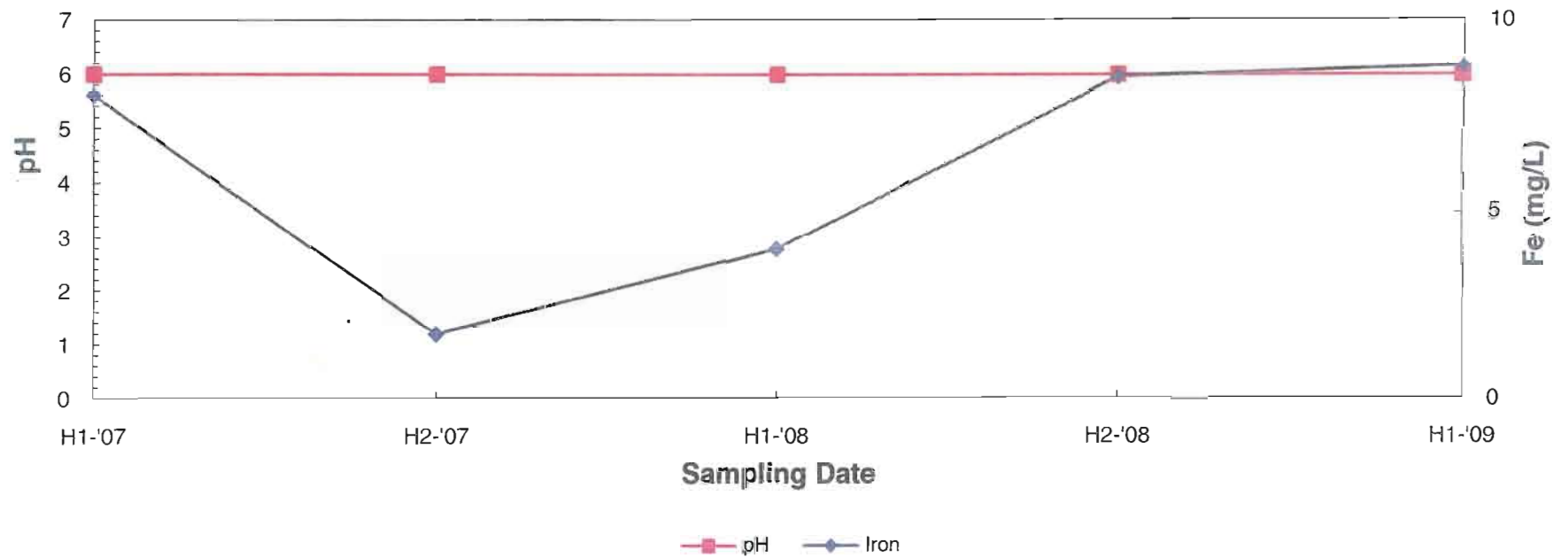
Monitoring Well GW- 1



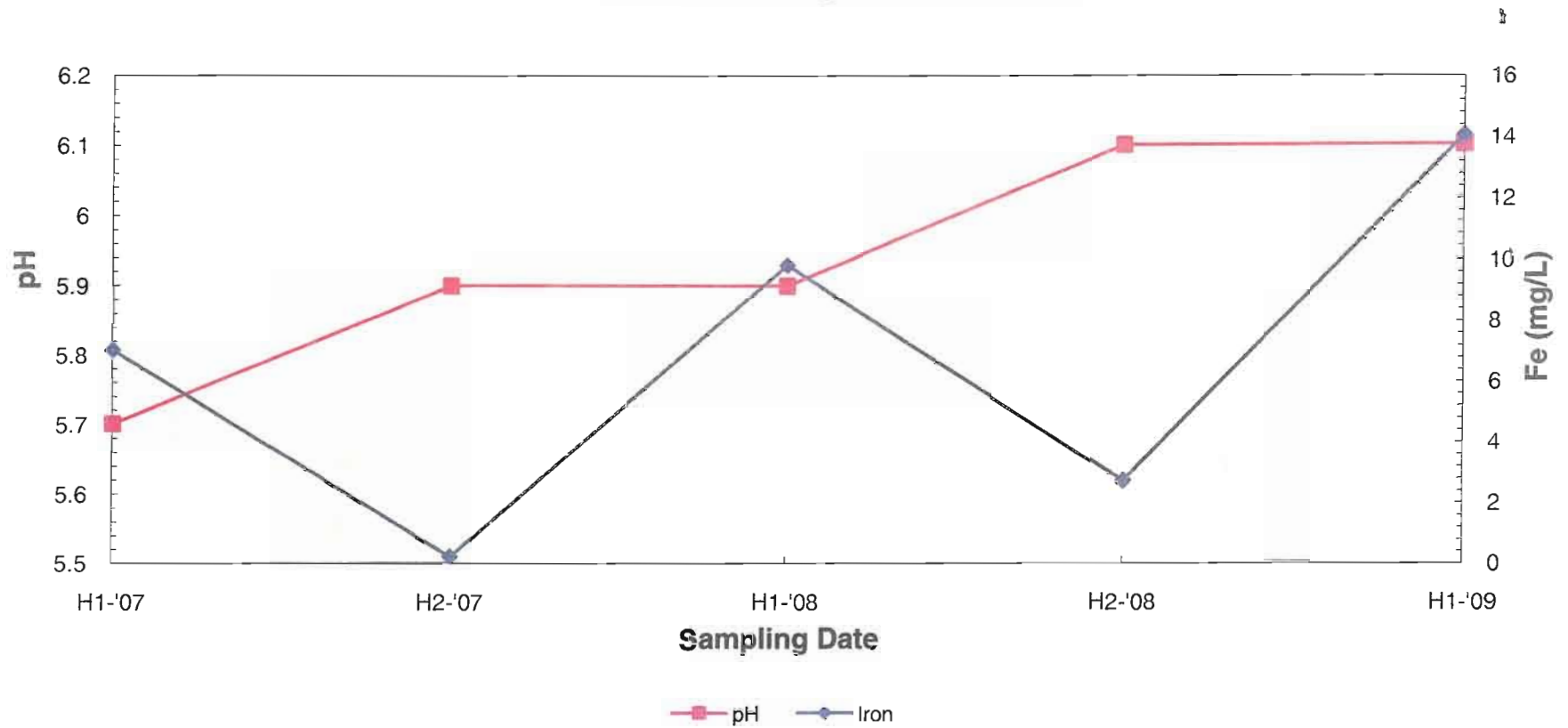
Monitoring Well GW-2



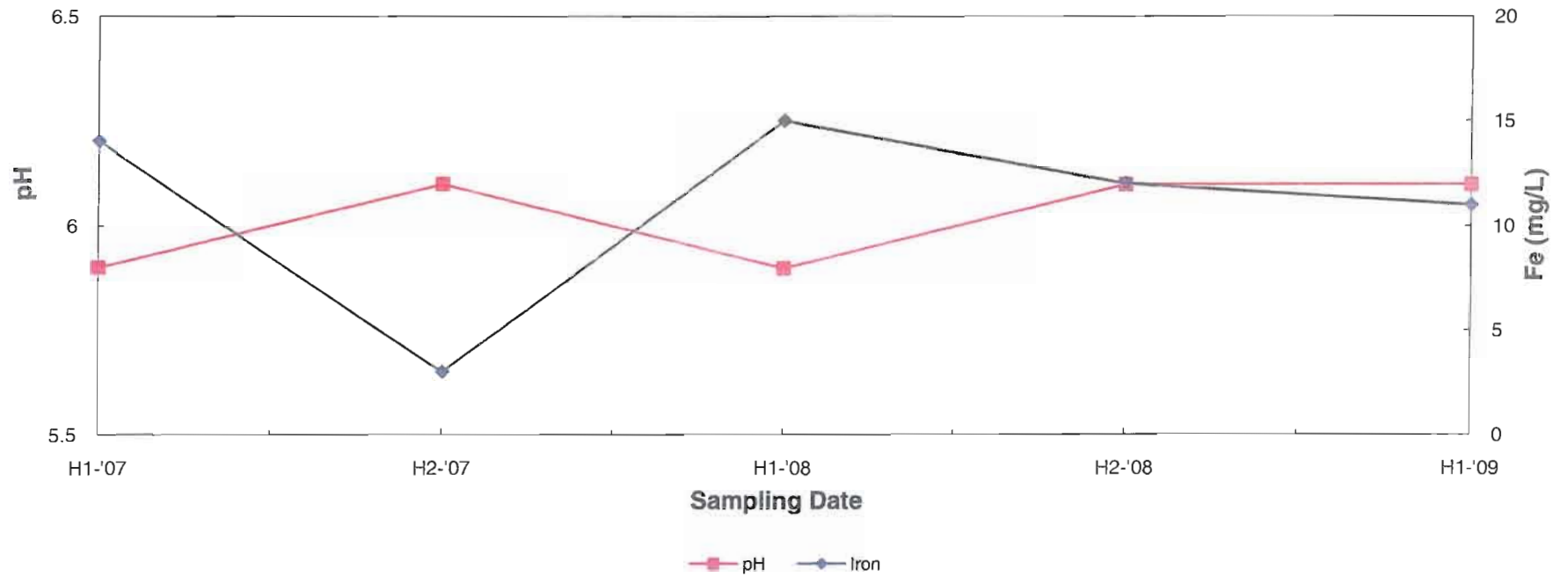
Monitoring Well GW-3



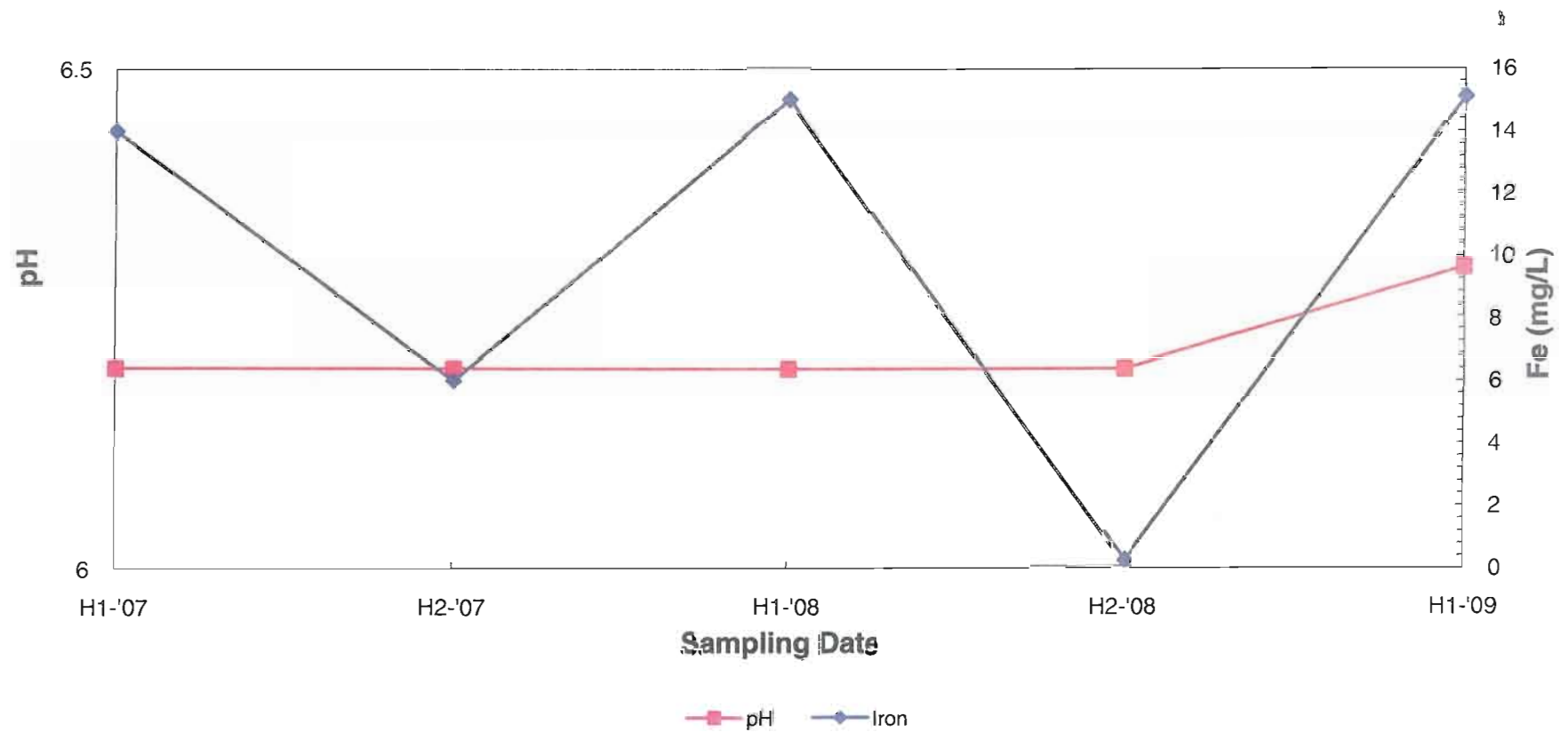
Monitoring Well GW-4



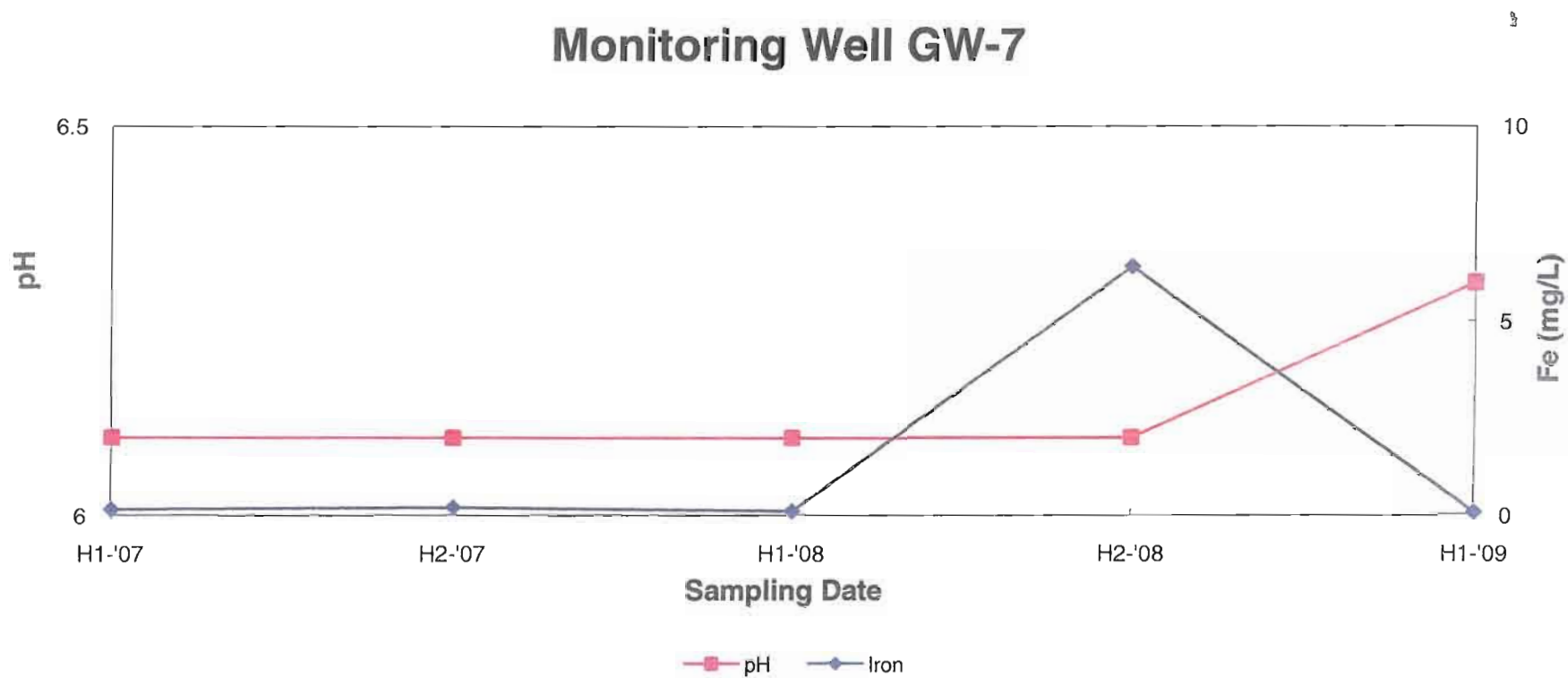
Monitoring Well GW-5



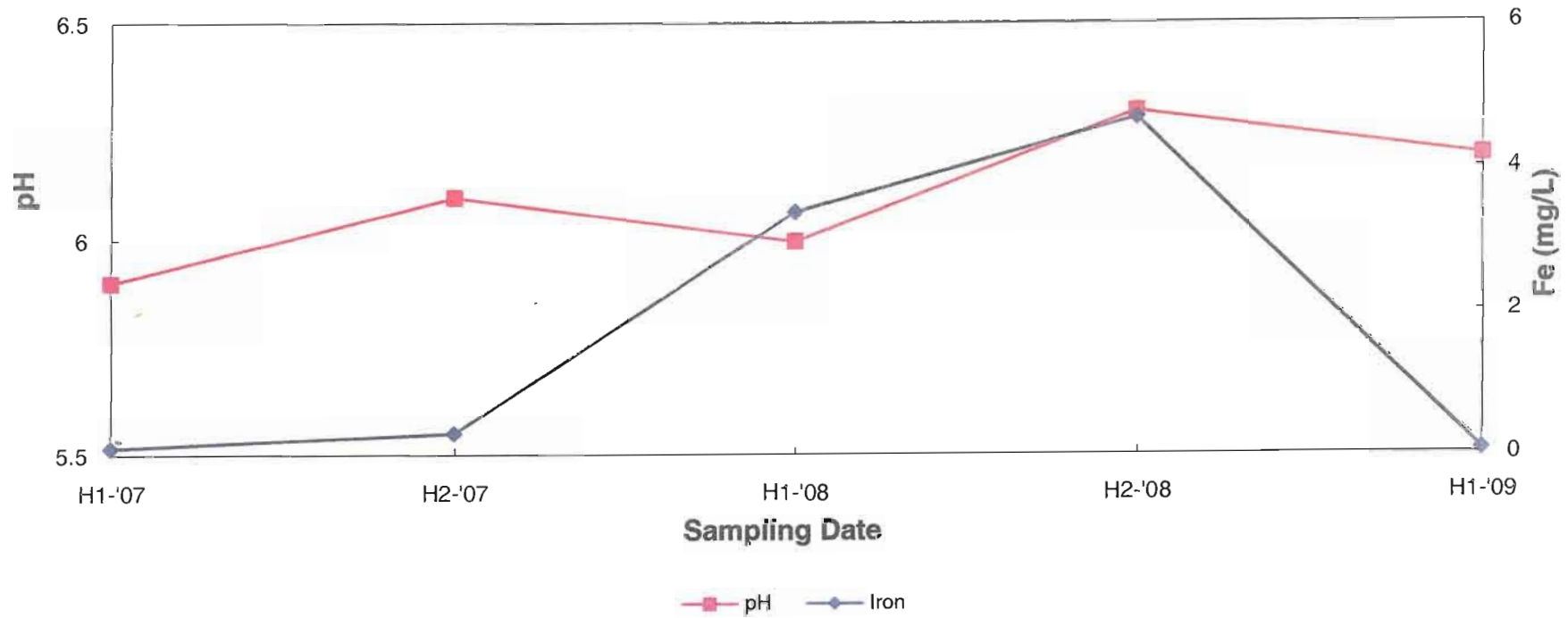
Monitoring Well GW-6



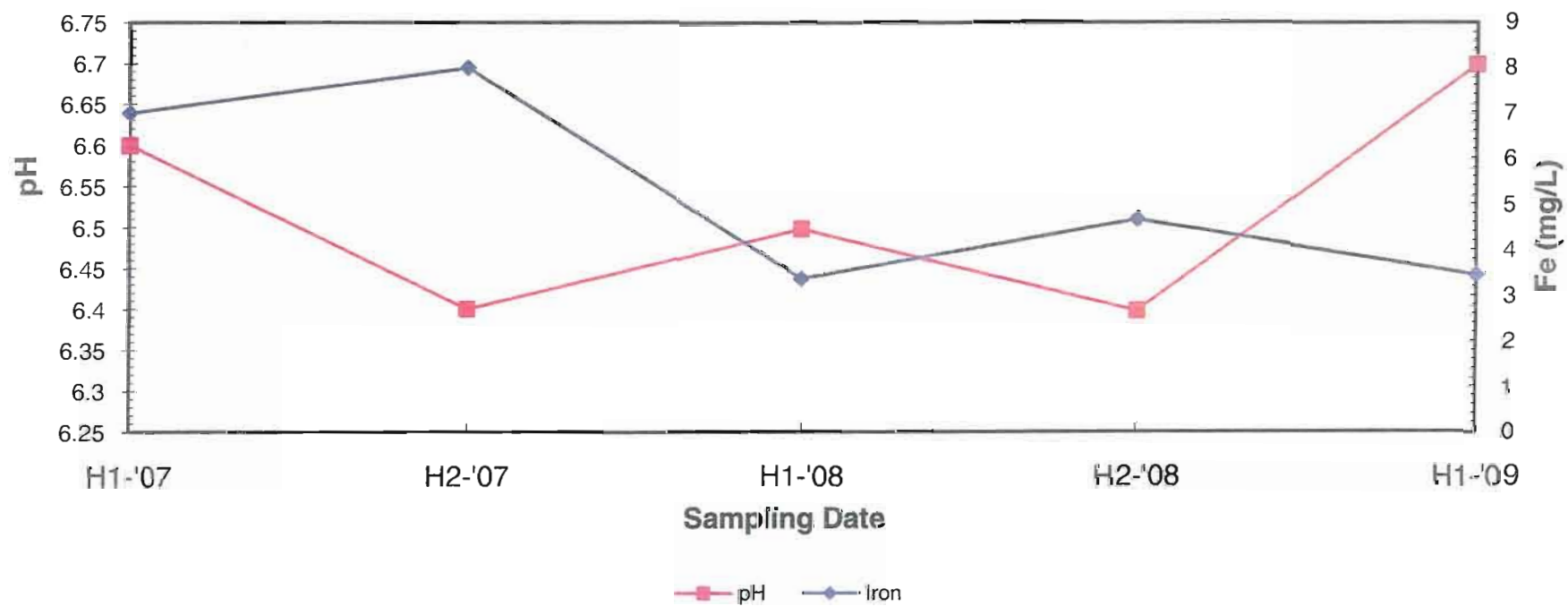
Monitoring Well GW-7



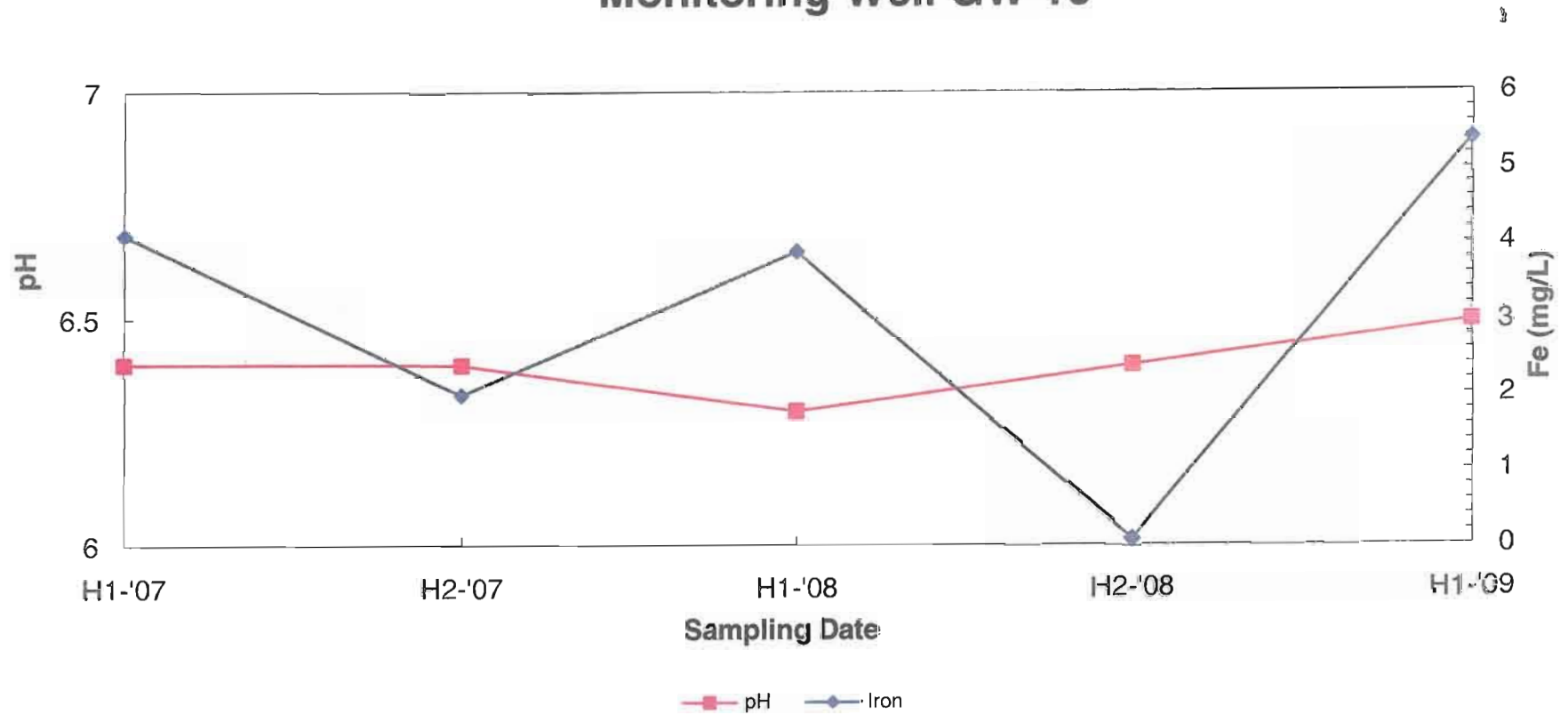
Monitoring Well GW-8



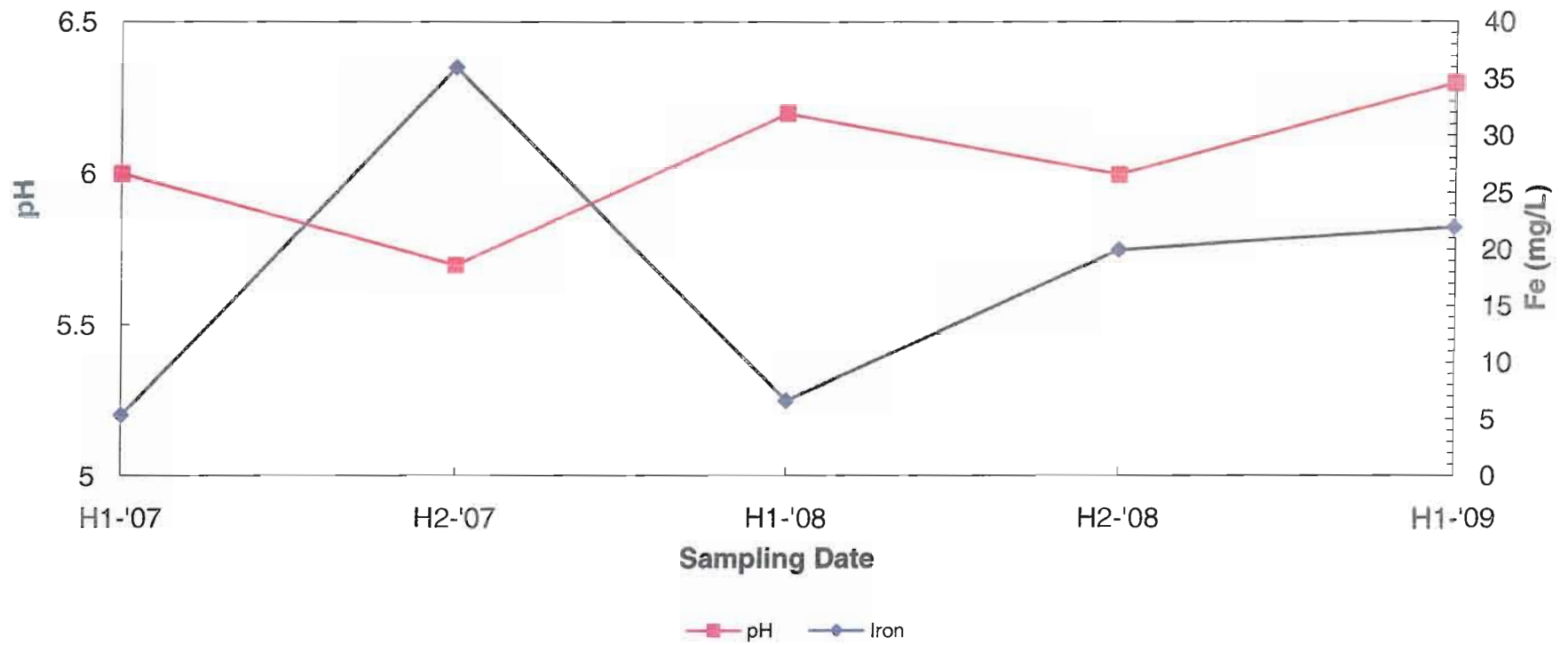
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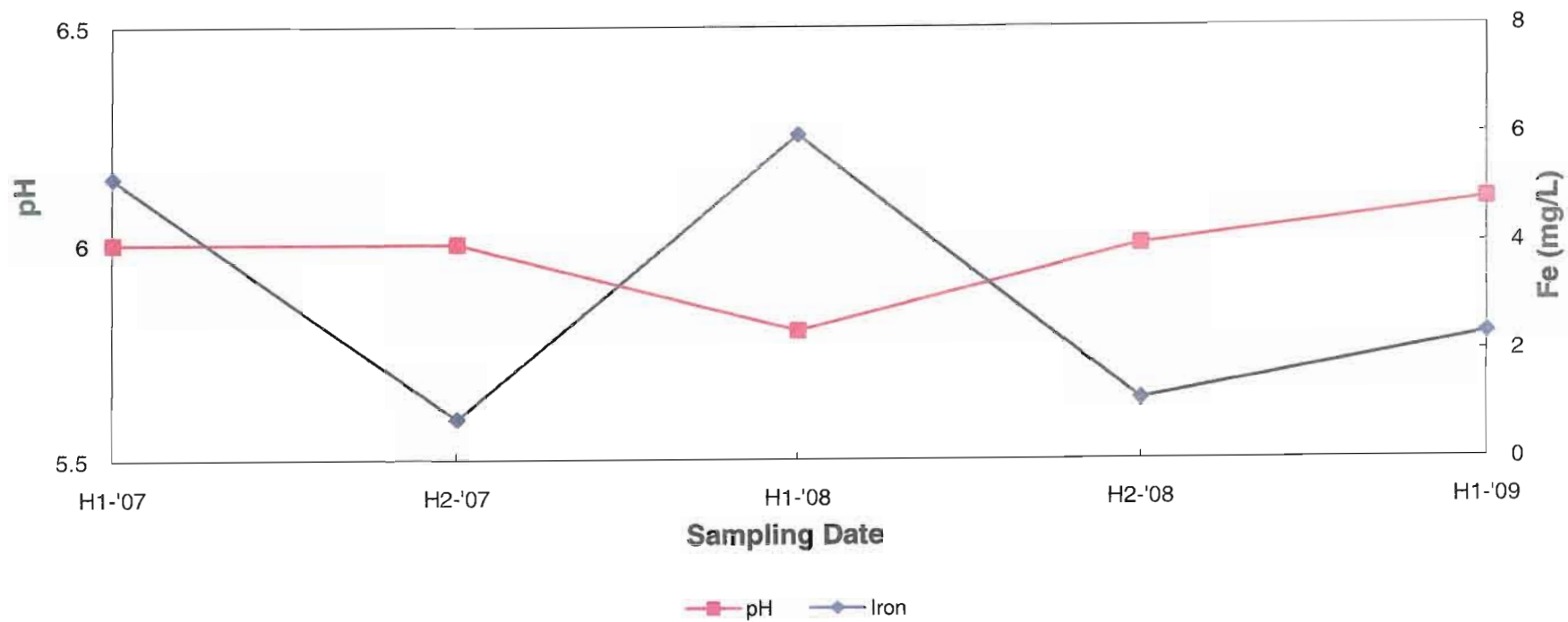
Monitoring Well GW-10



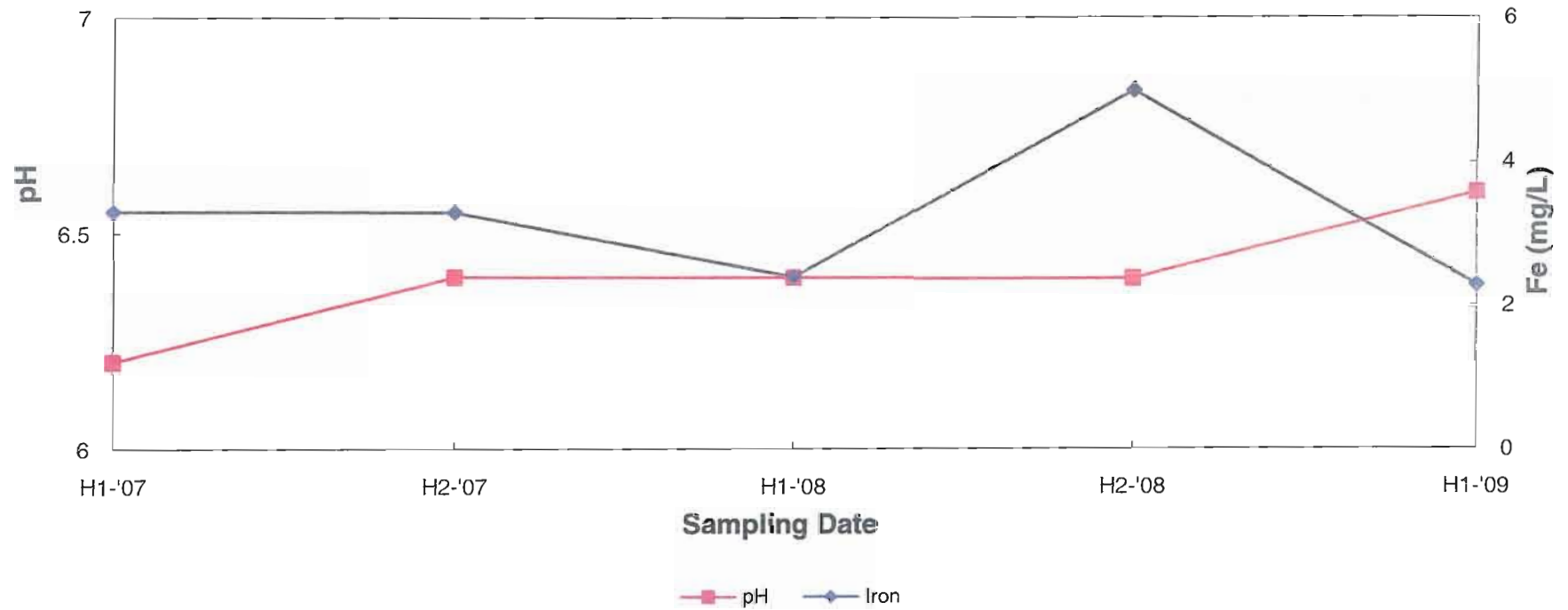
Monitoring Well GW-11



Monitoring Well GW-12

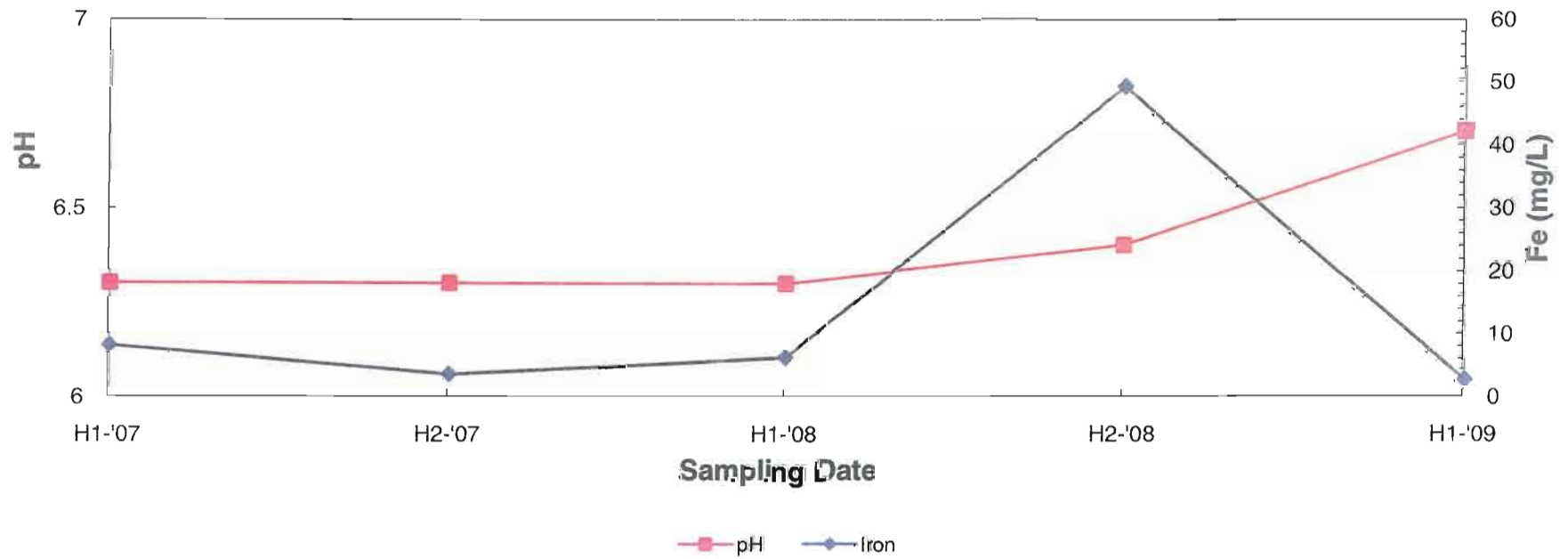


Monitoring Well GW-13

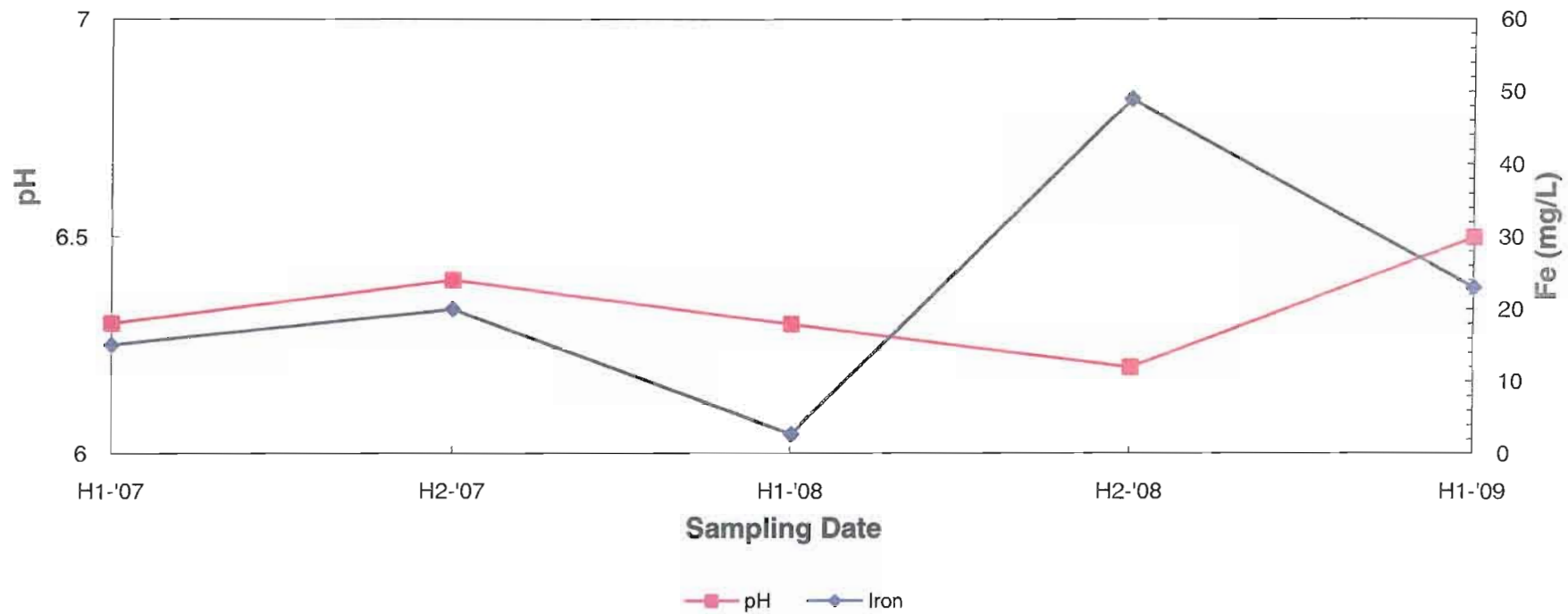


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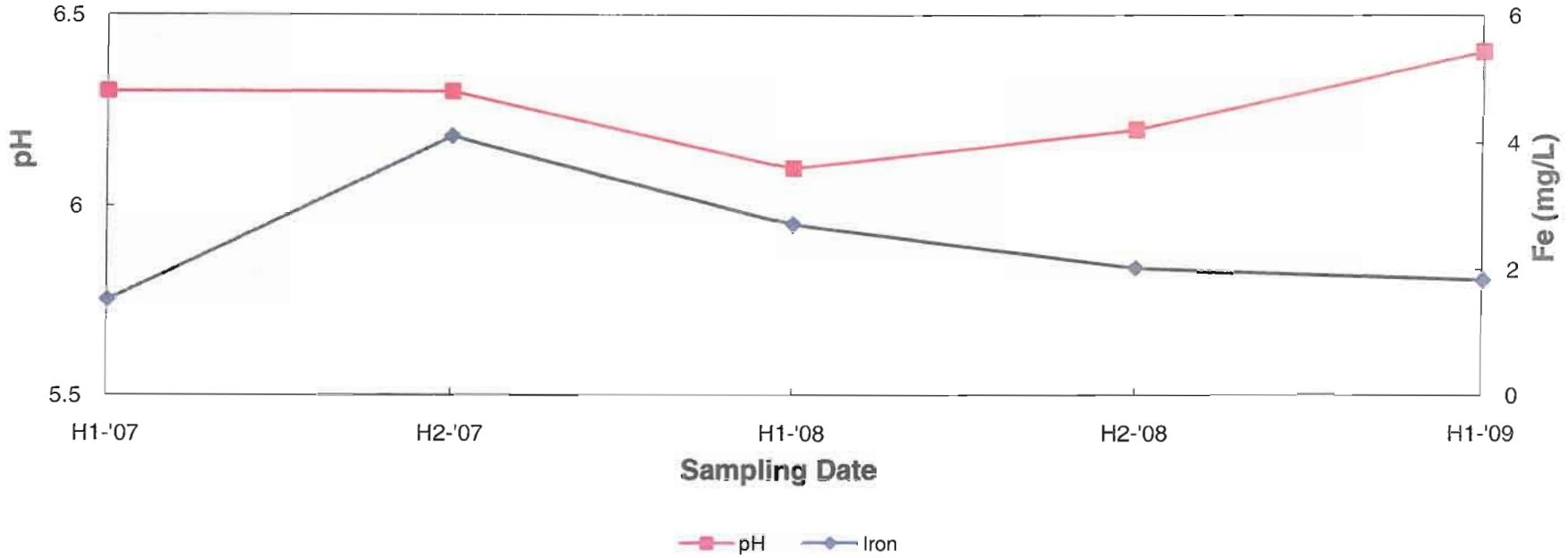
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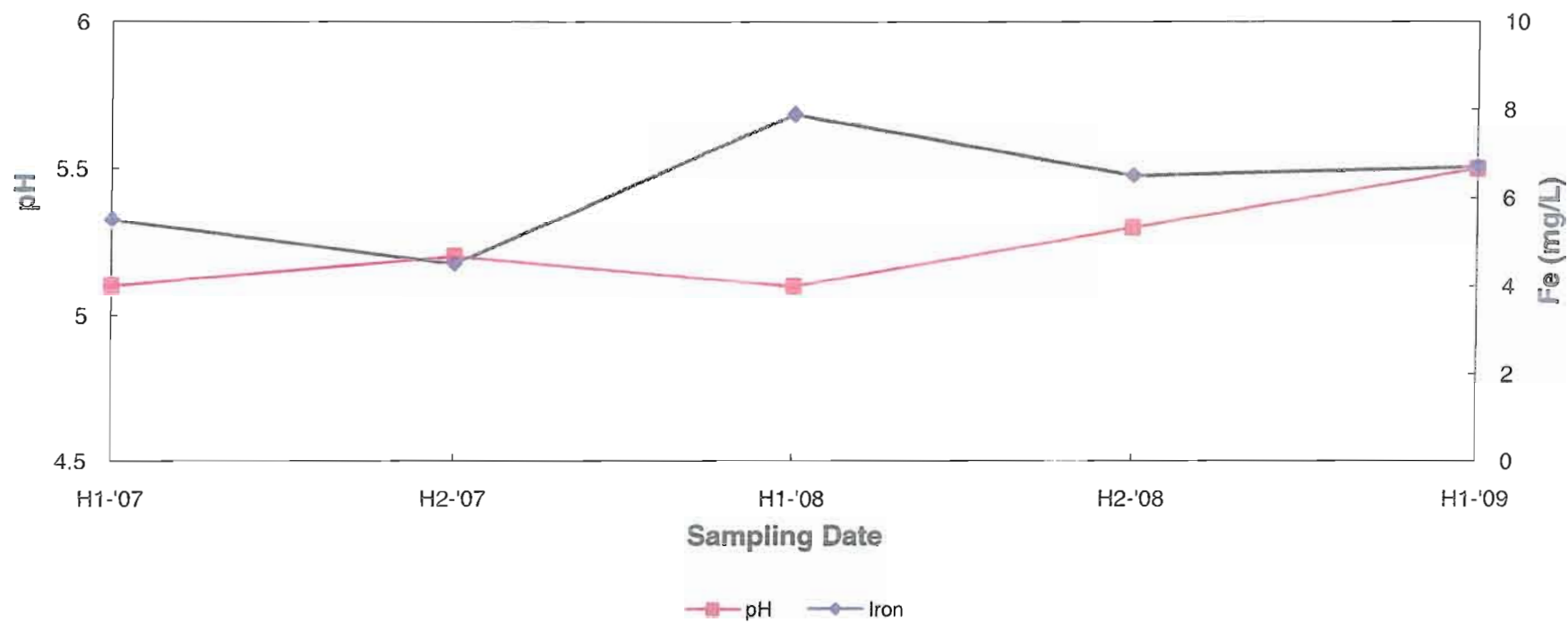
Monitoring Well GW-15



Monitoring Well GW-16

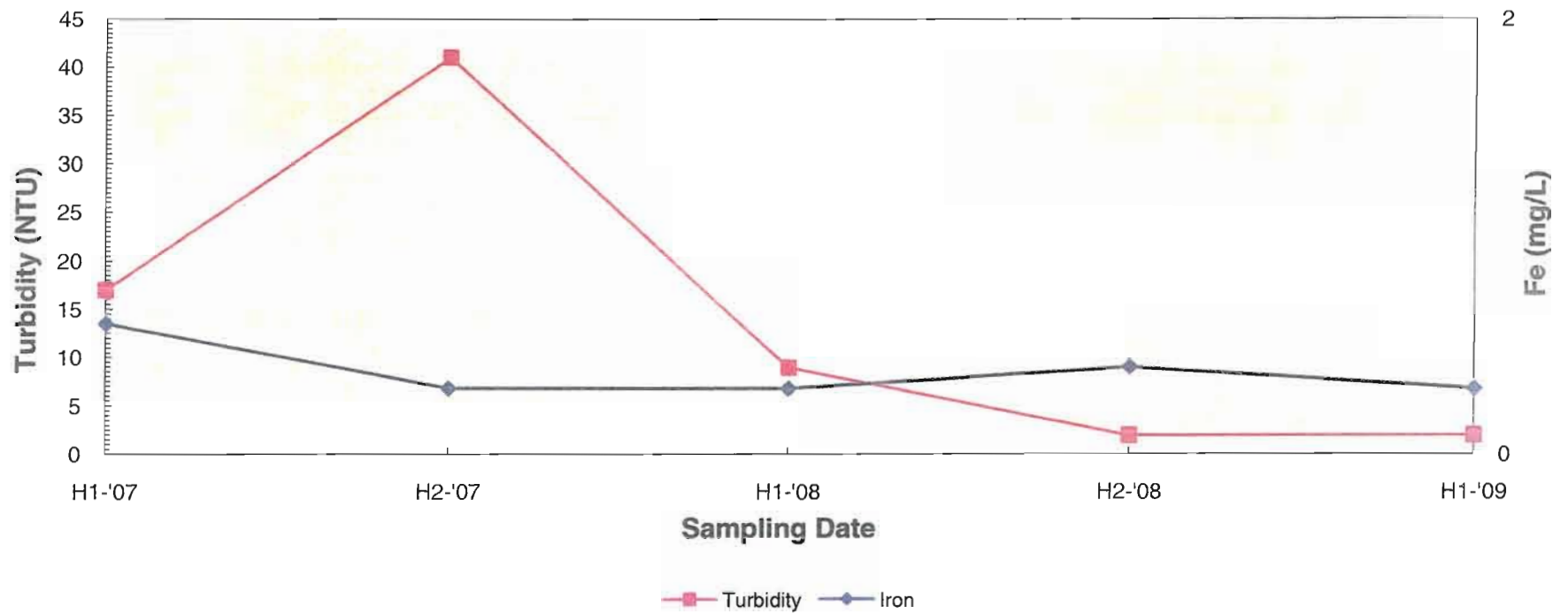


Monitoring Well GW-17

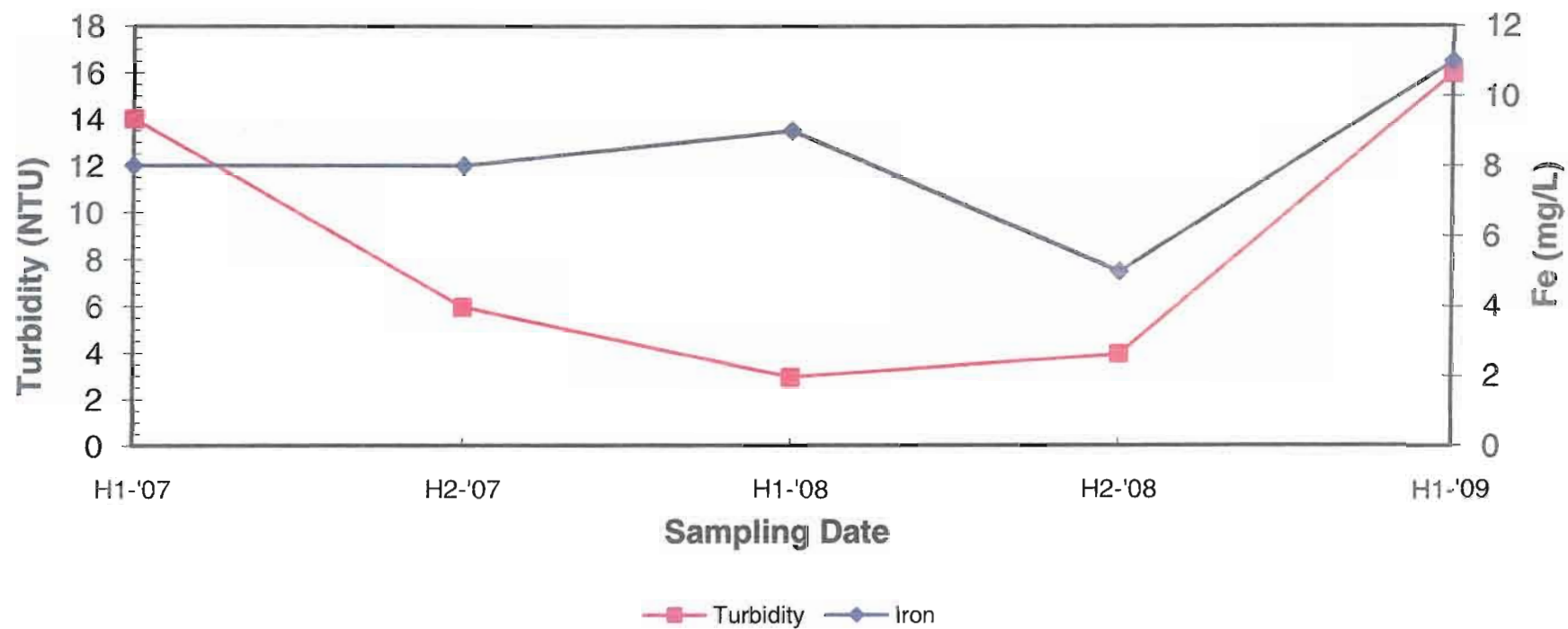


C-2 – Turbidity versus Iron

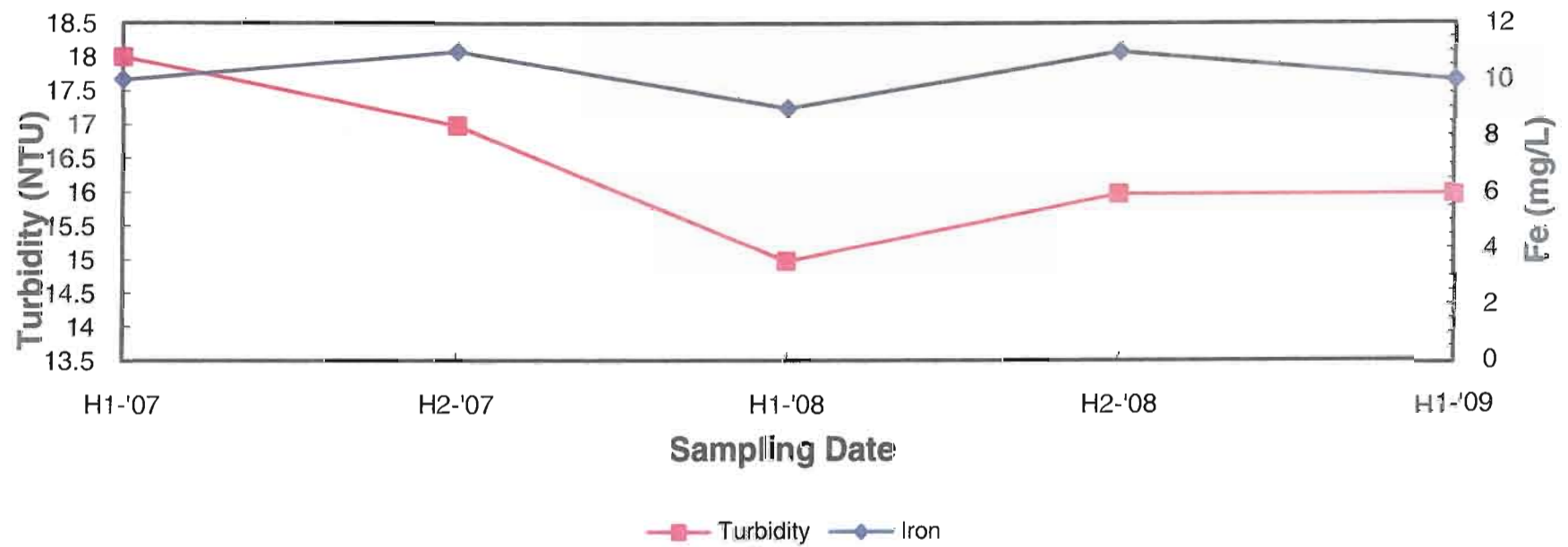
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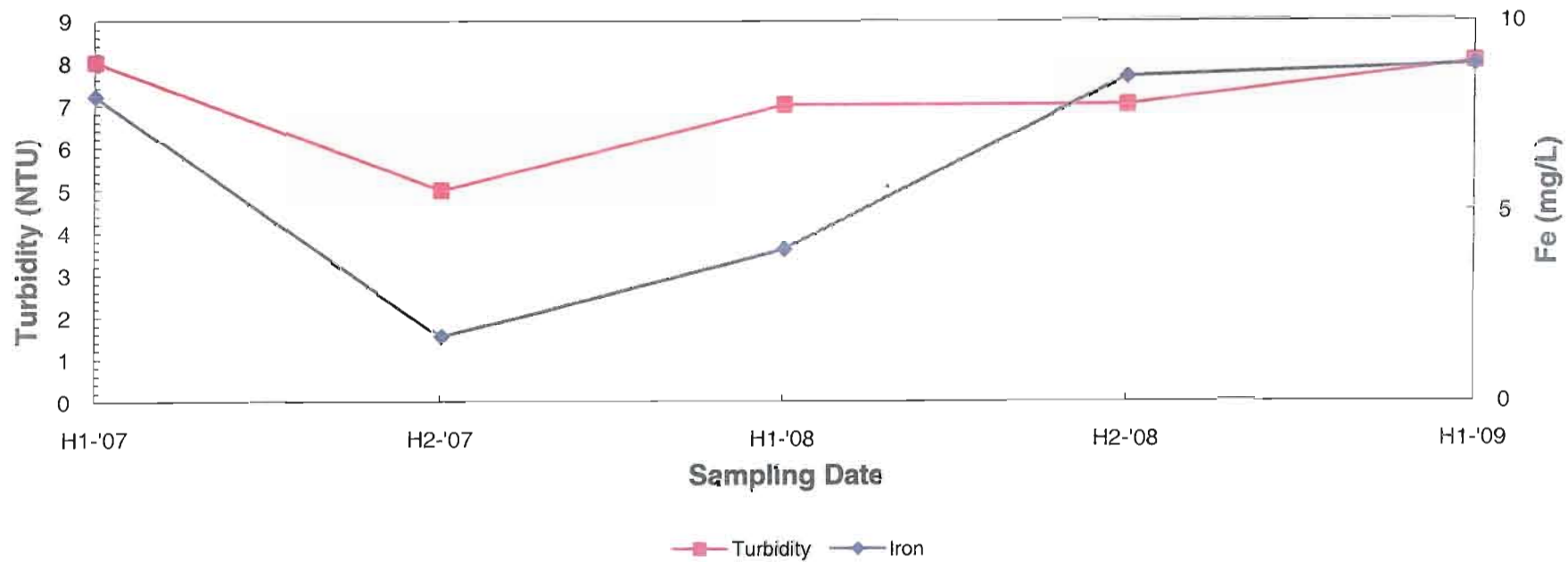
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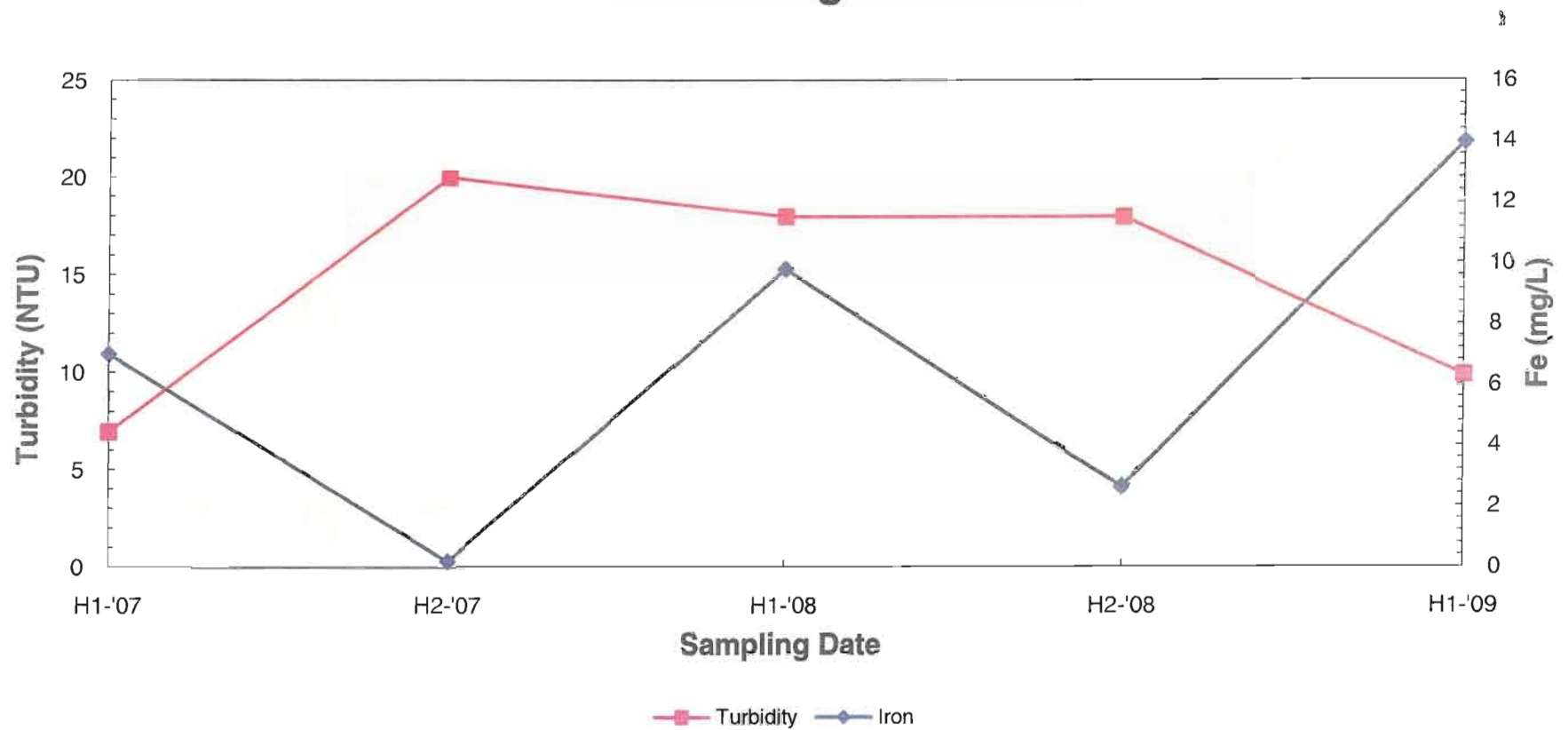
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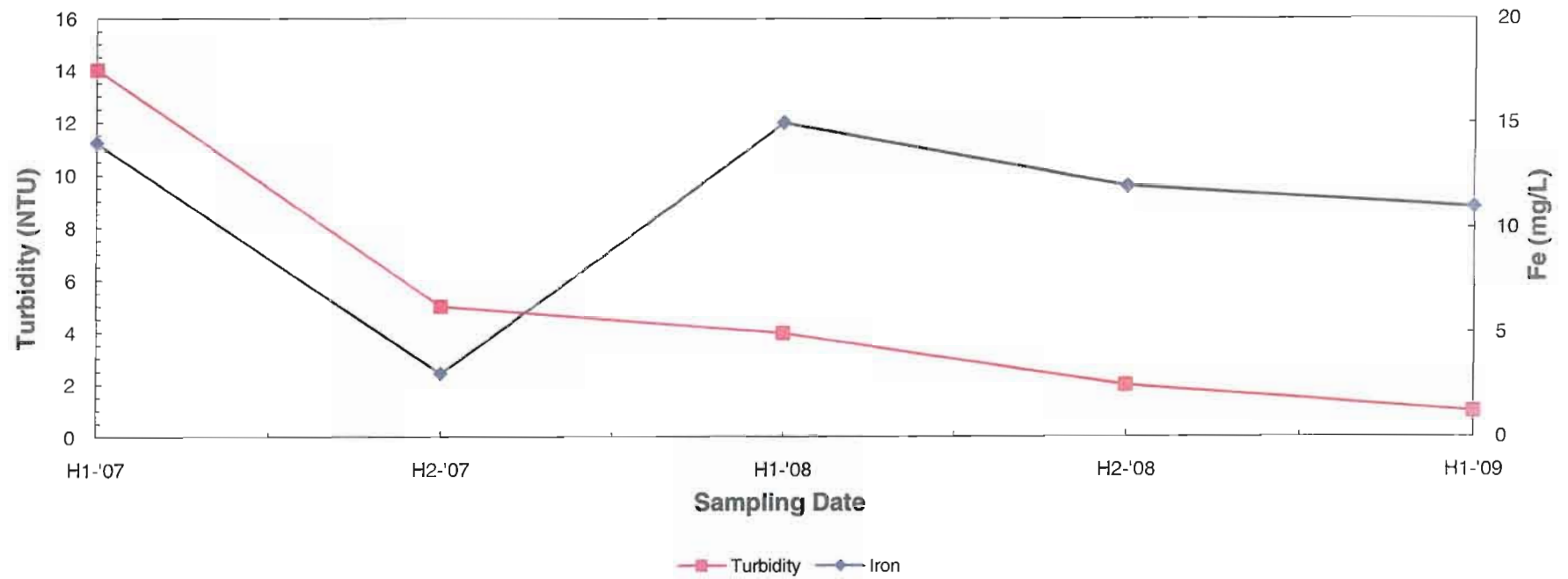
Monitoring Well GW-3



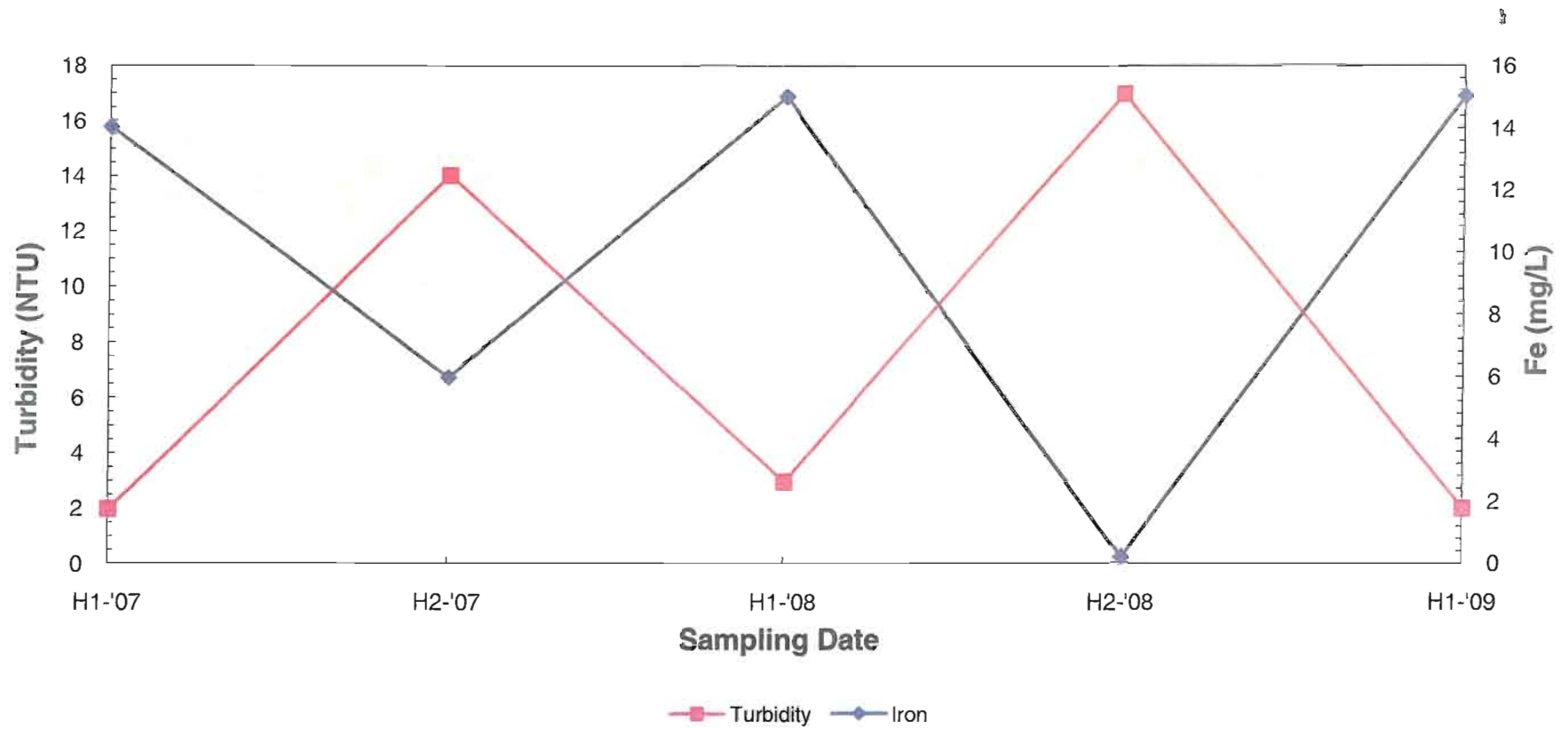
Monitoring Well GW-4



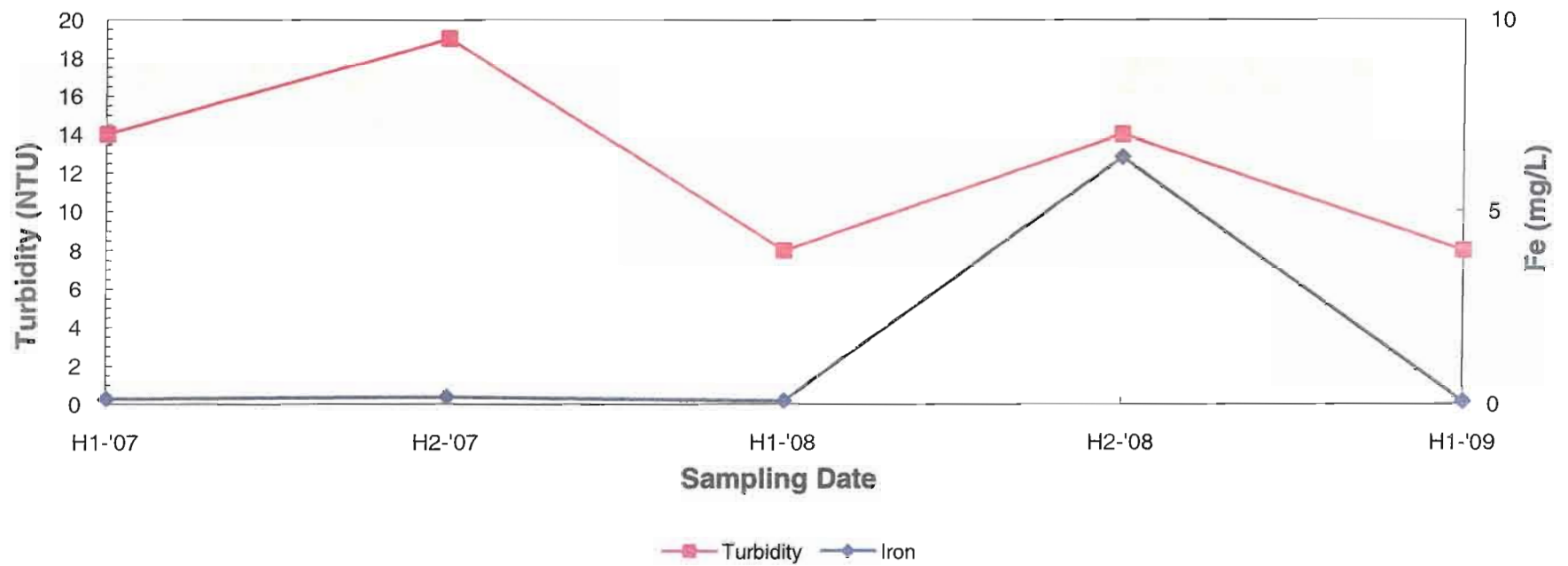
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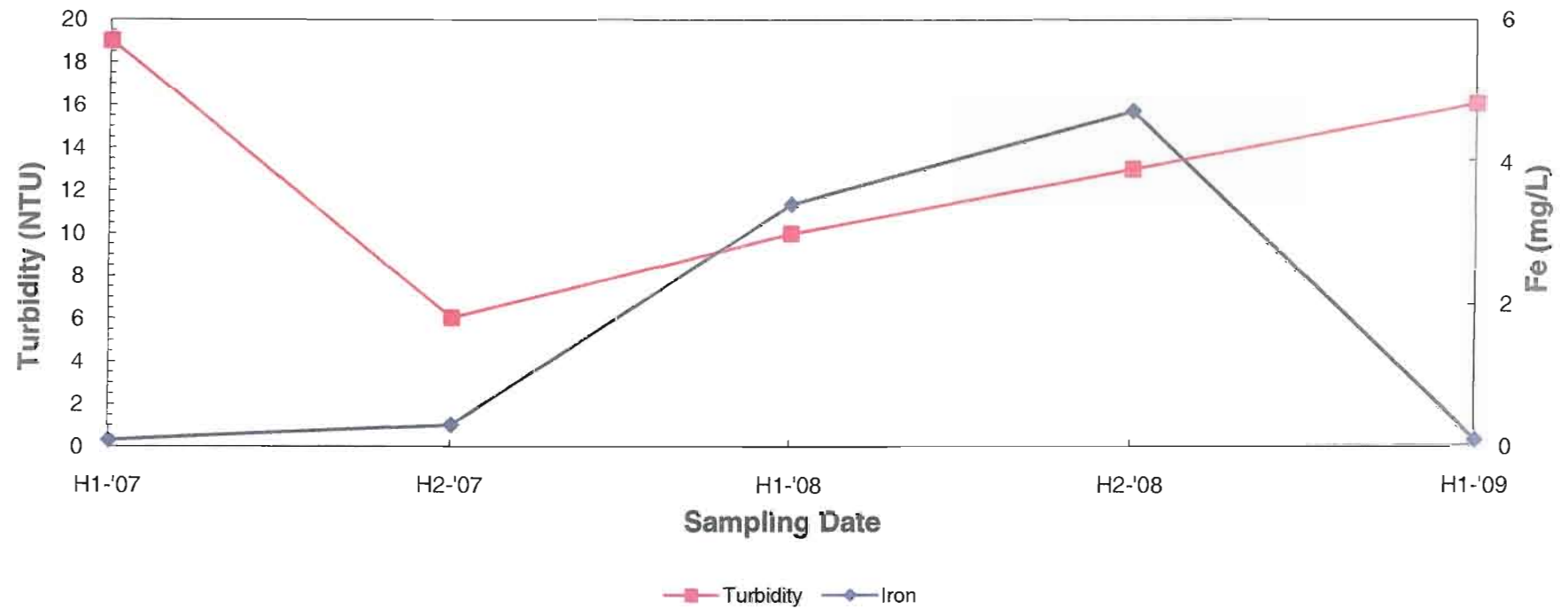
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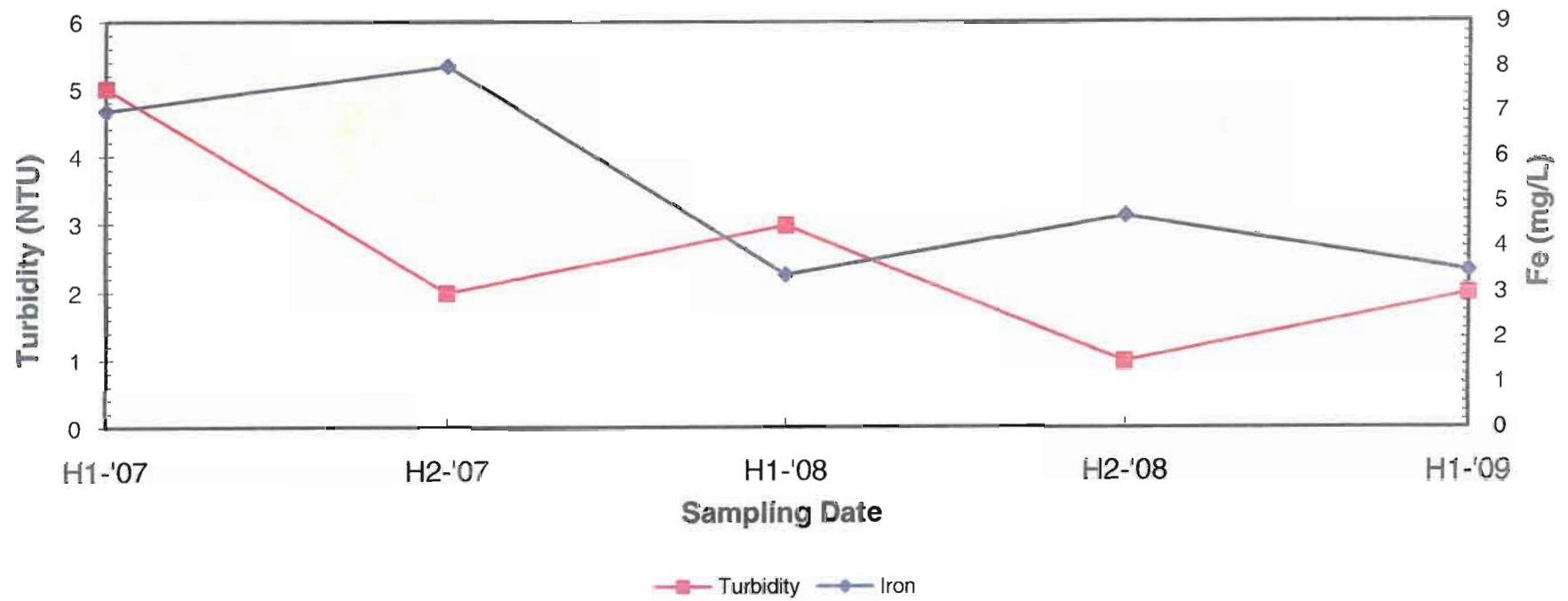
Monitoring Well GW-7



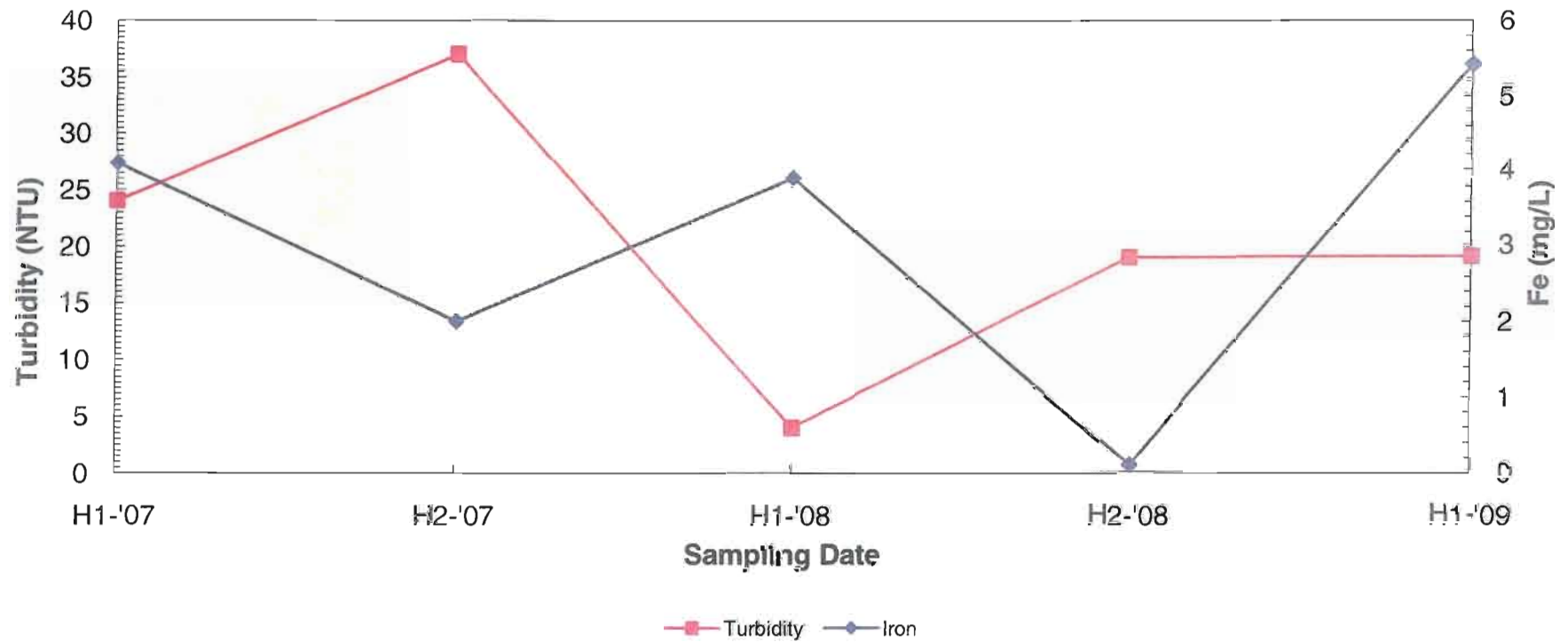
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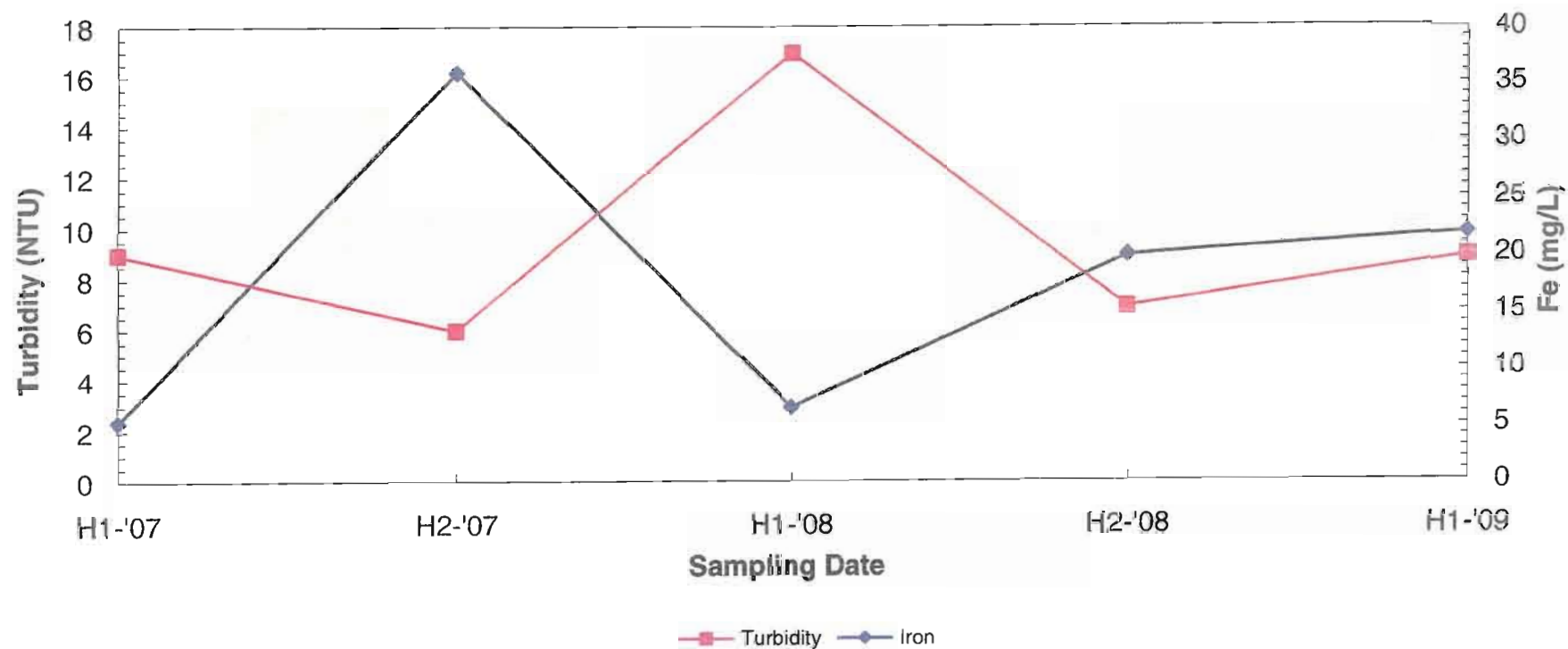
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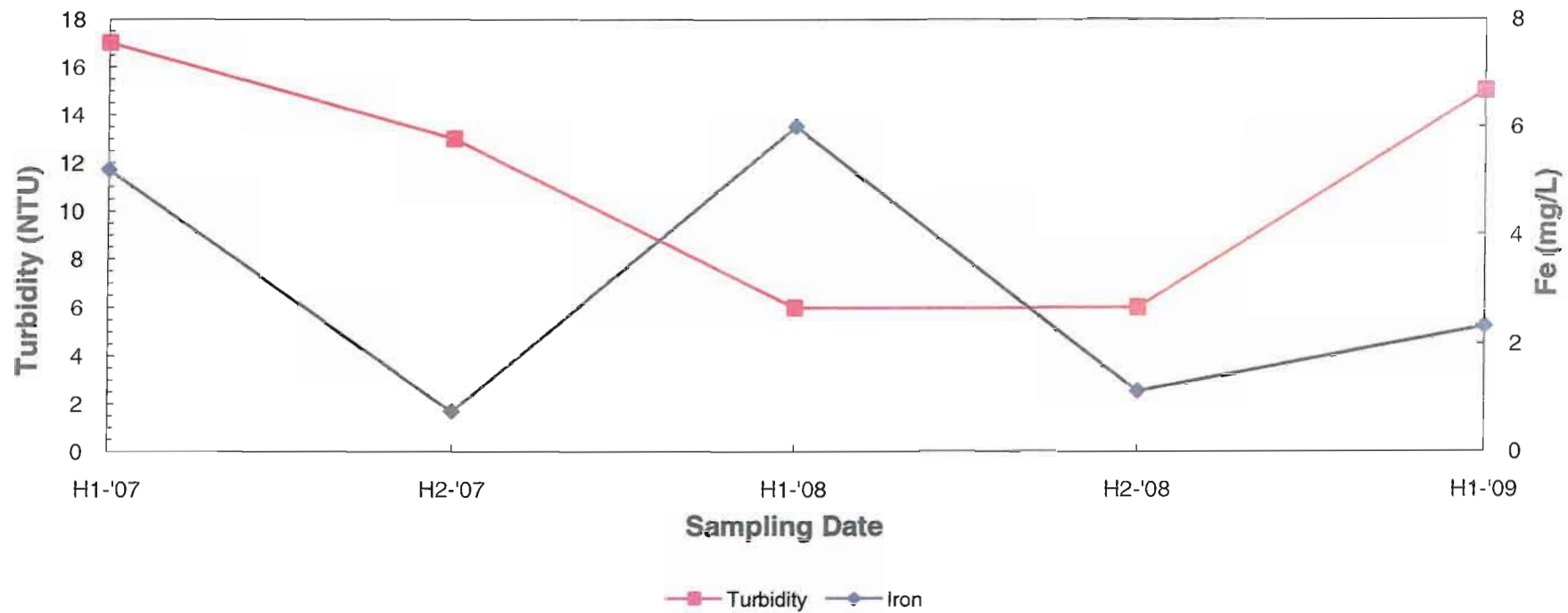
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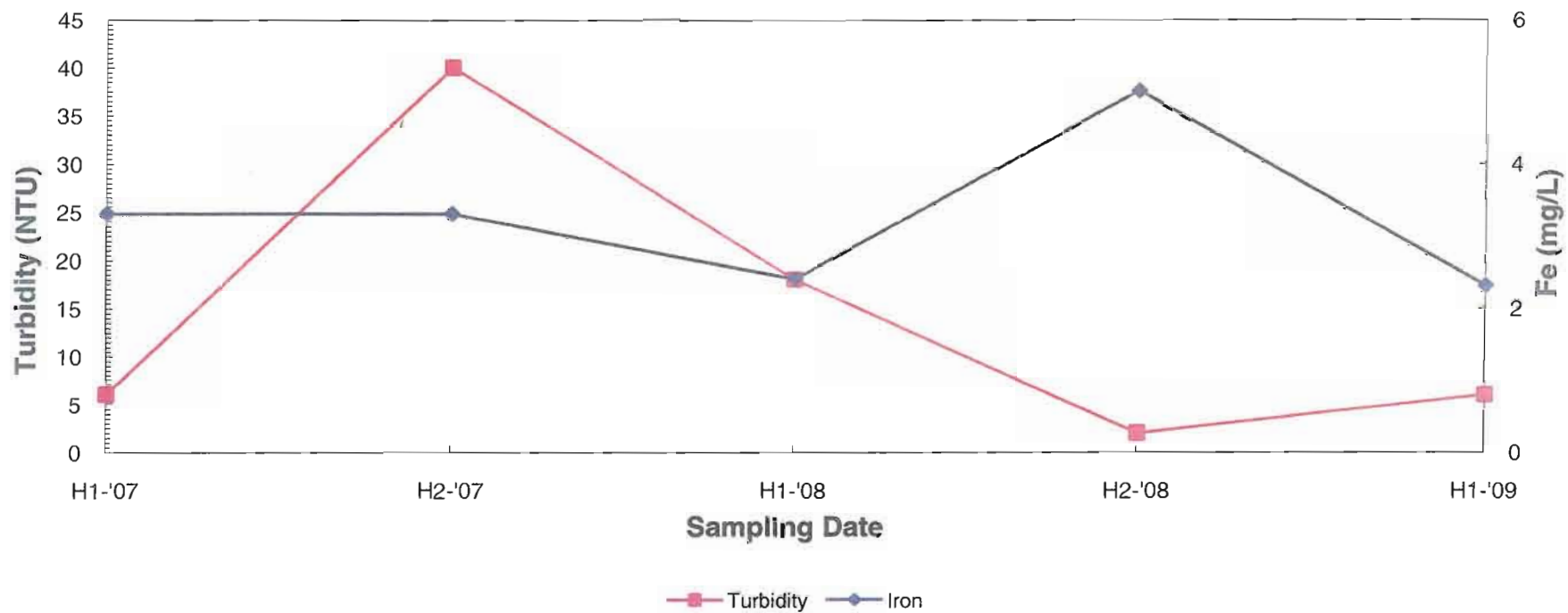
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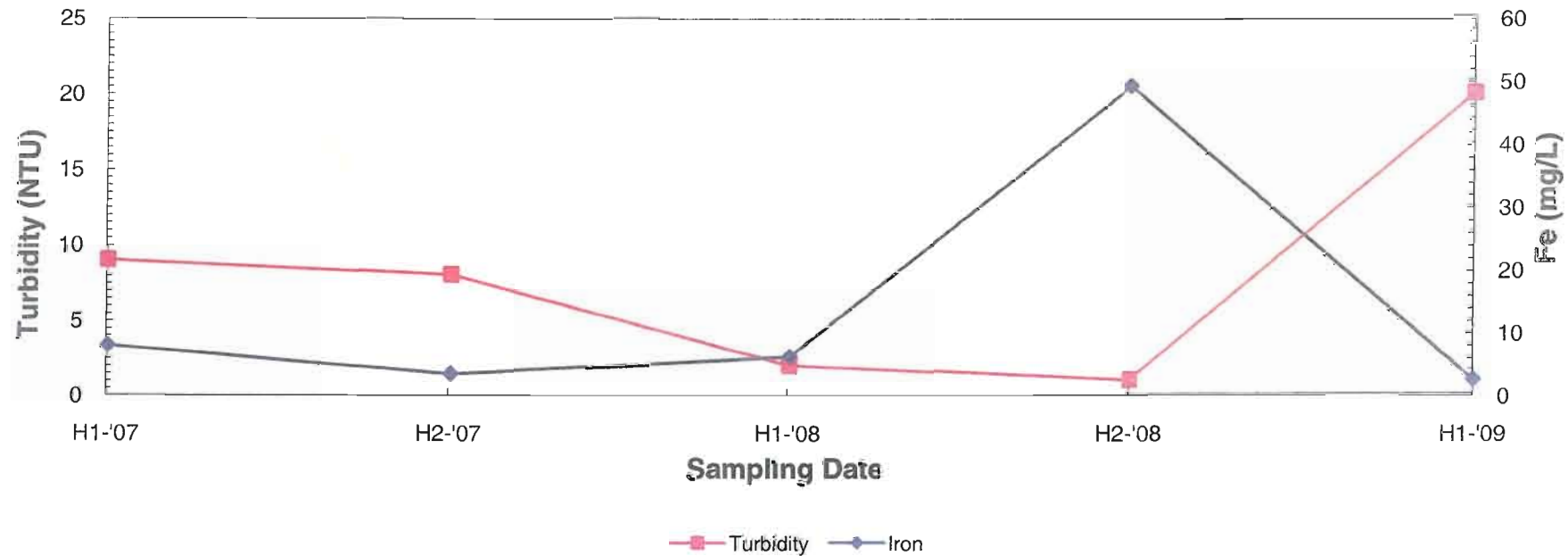
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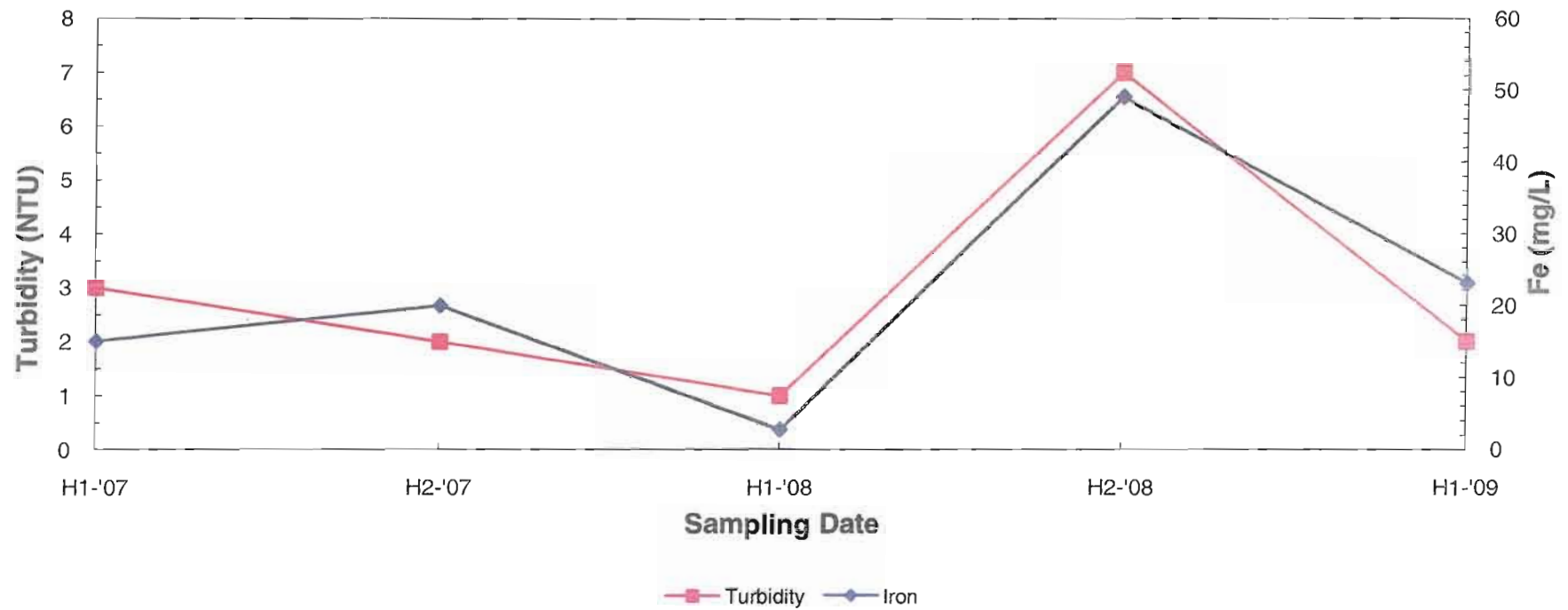
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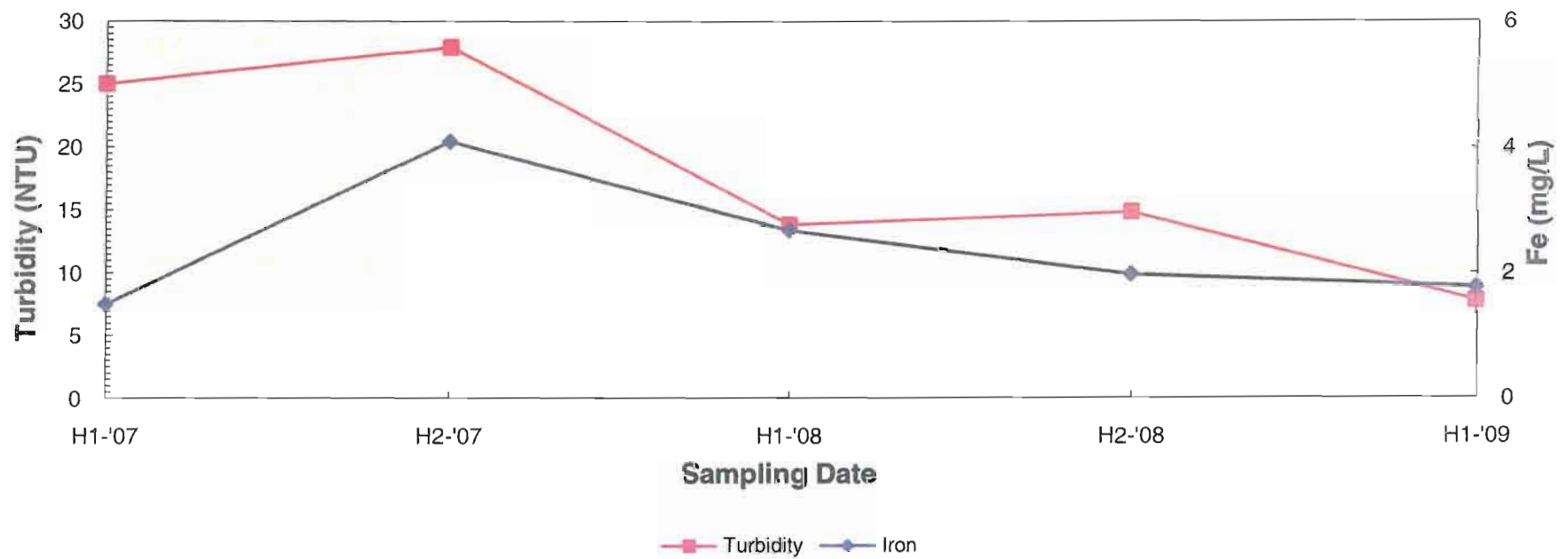
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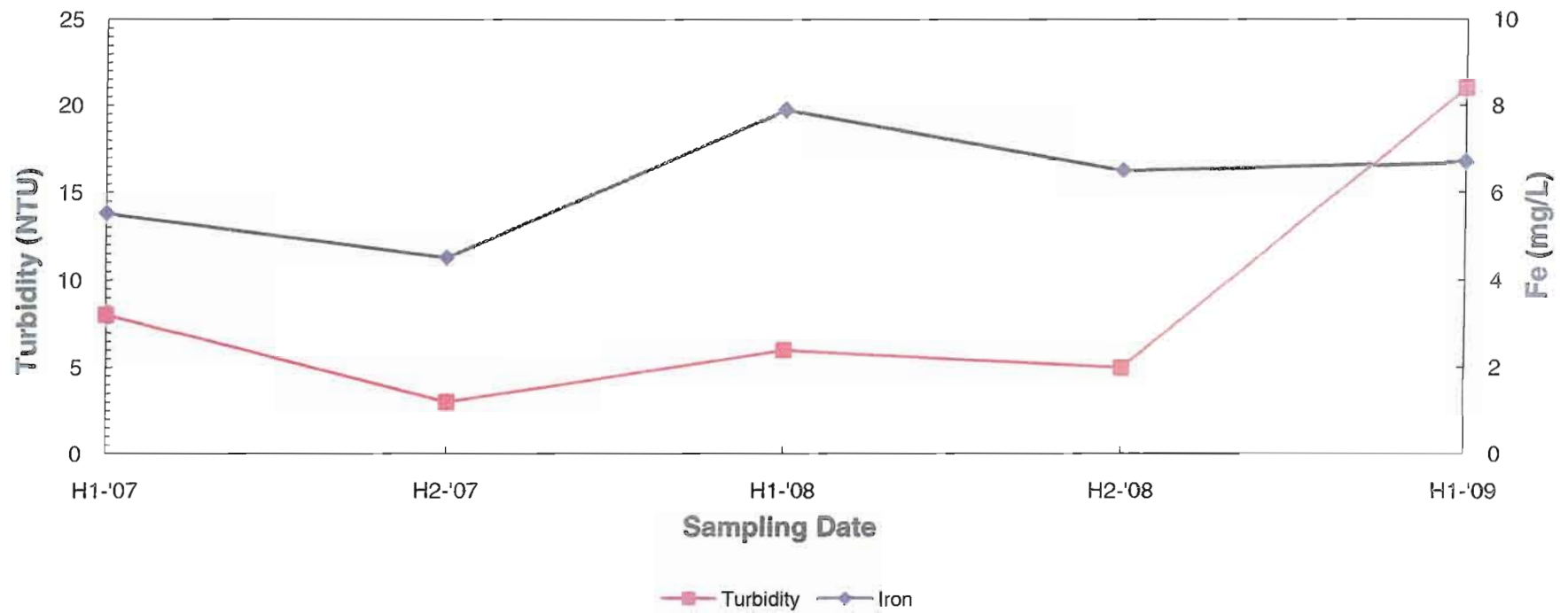
Monitoring Well GW-15



Monitoring Well GW-16

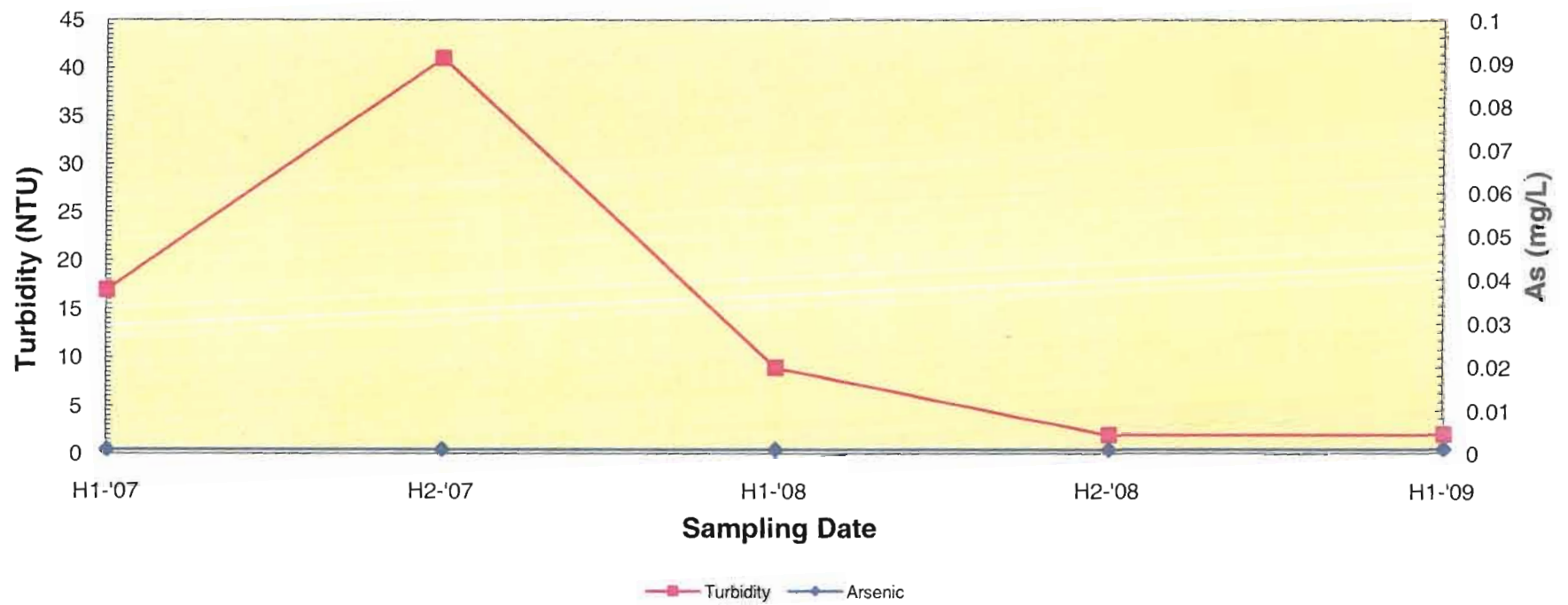


Monitoring Well GW-17

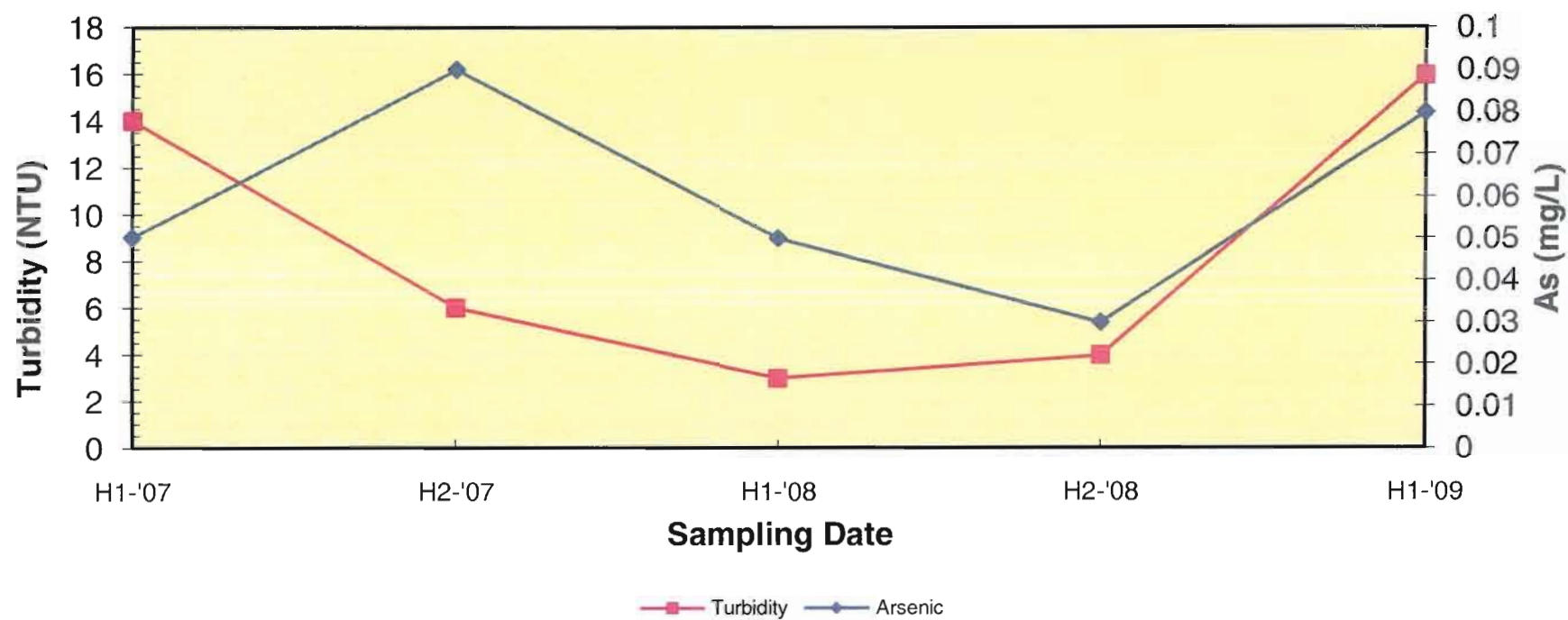


C-3 – Turbidity versus Arsenic

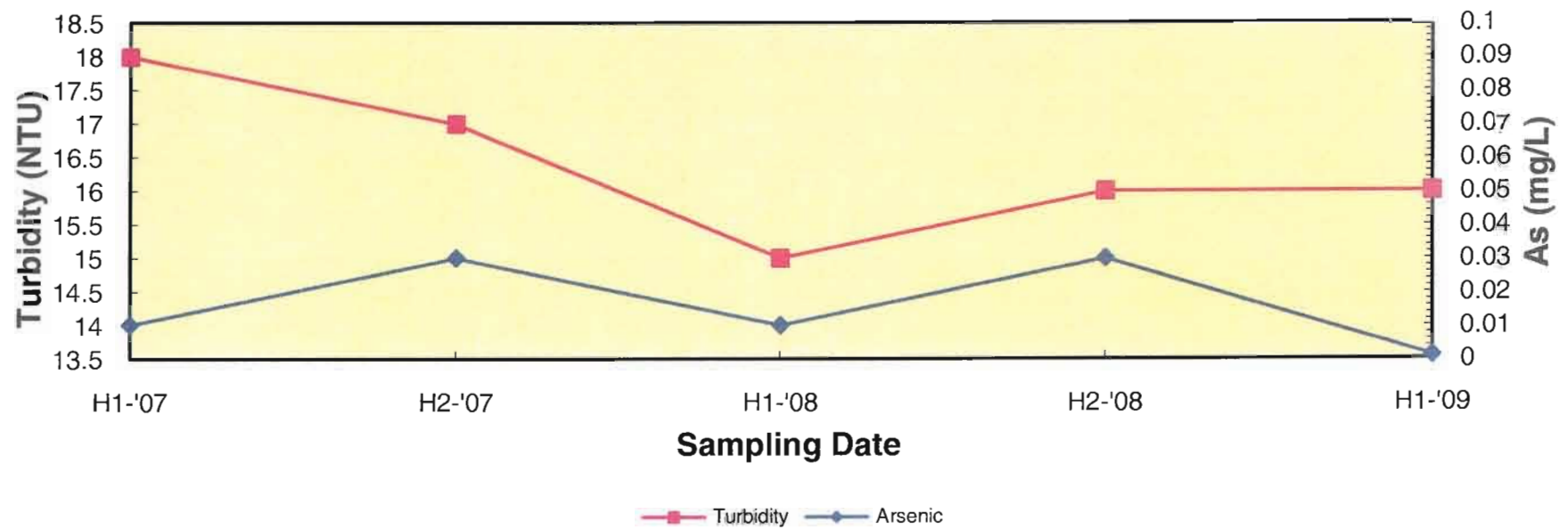
Monitoring Well BGW-1



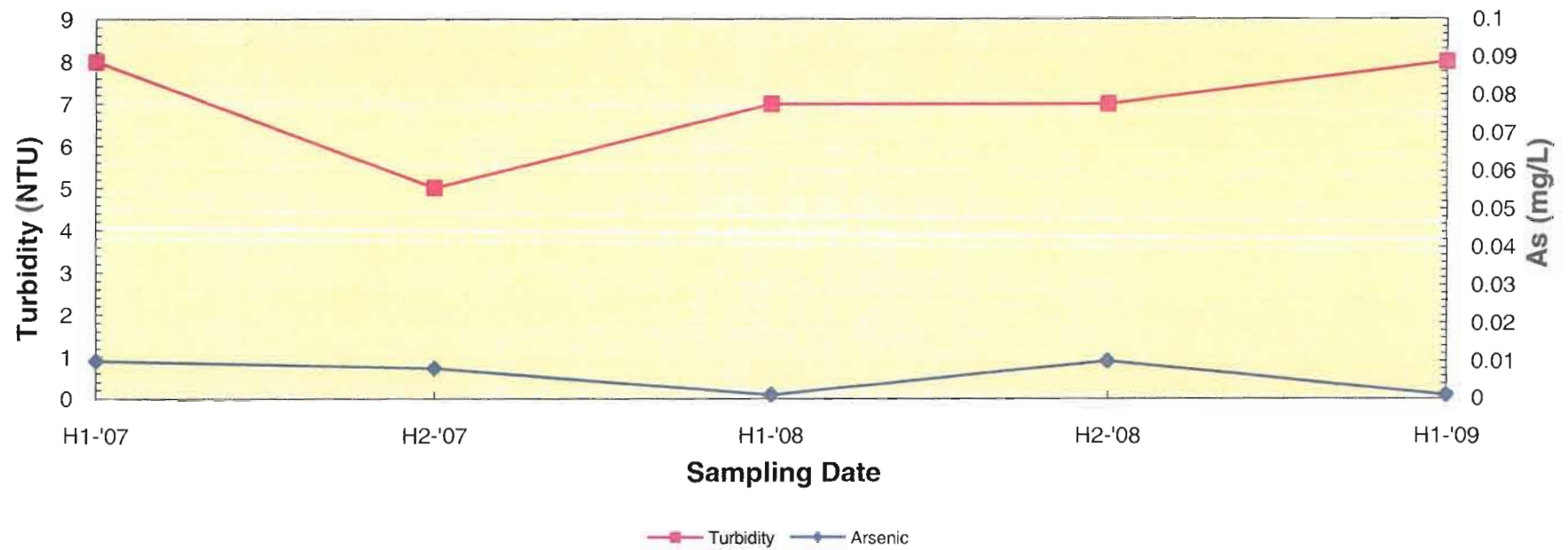
Monitoring Well GW- 1



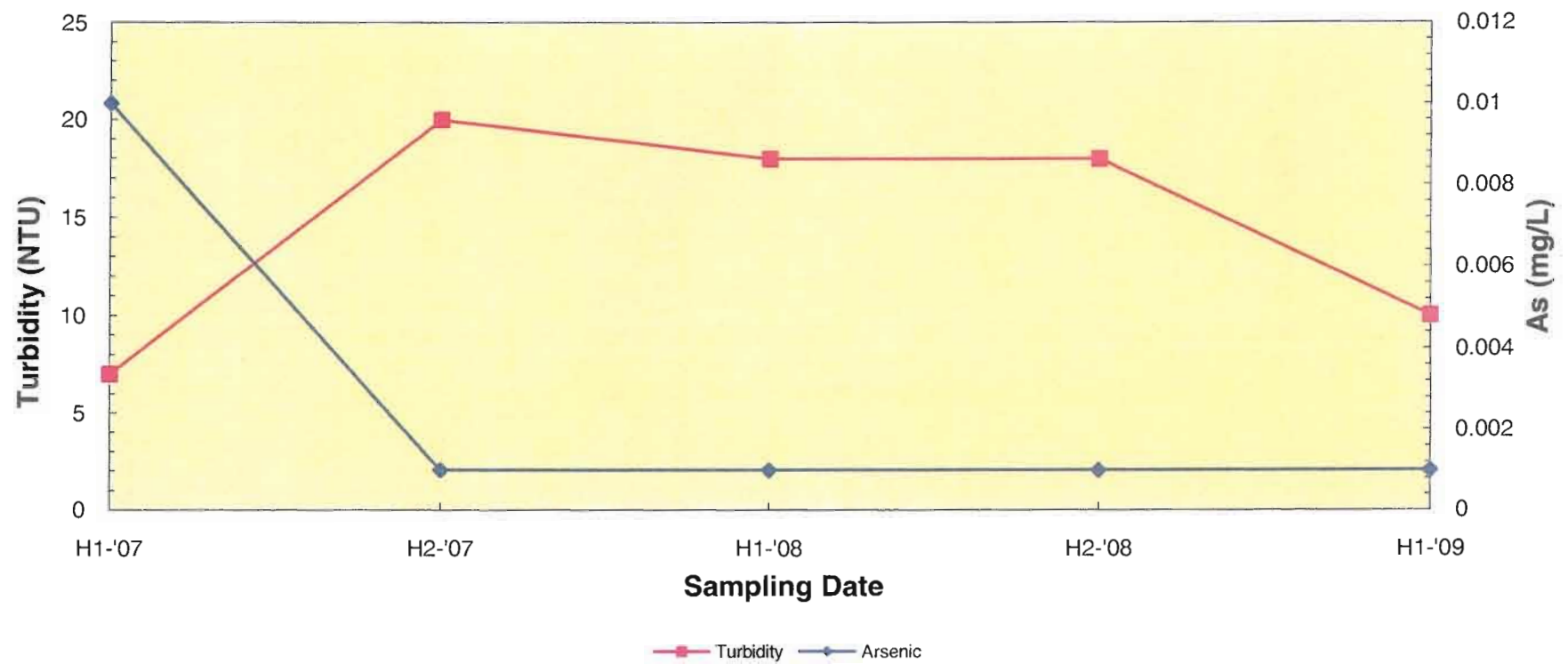
Monitoring Well GW-2



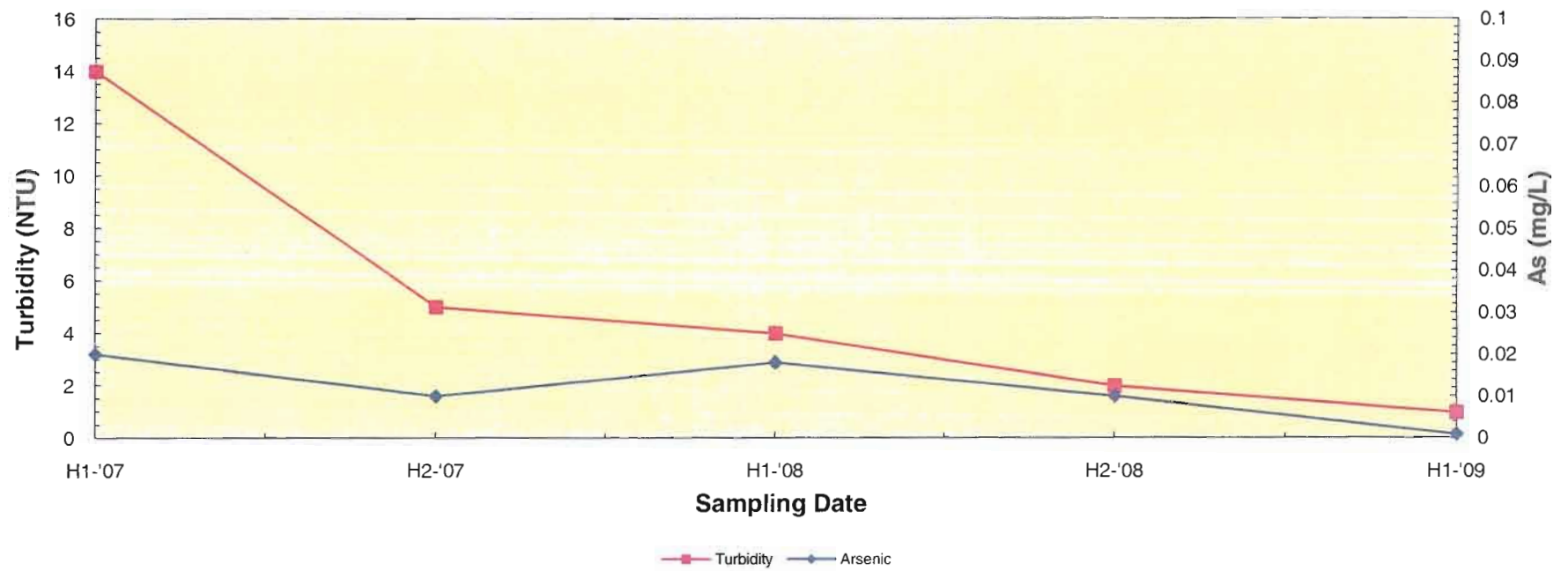
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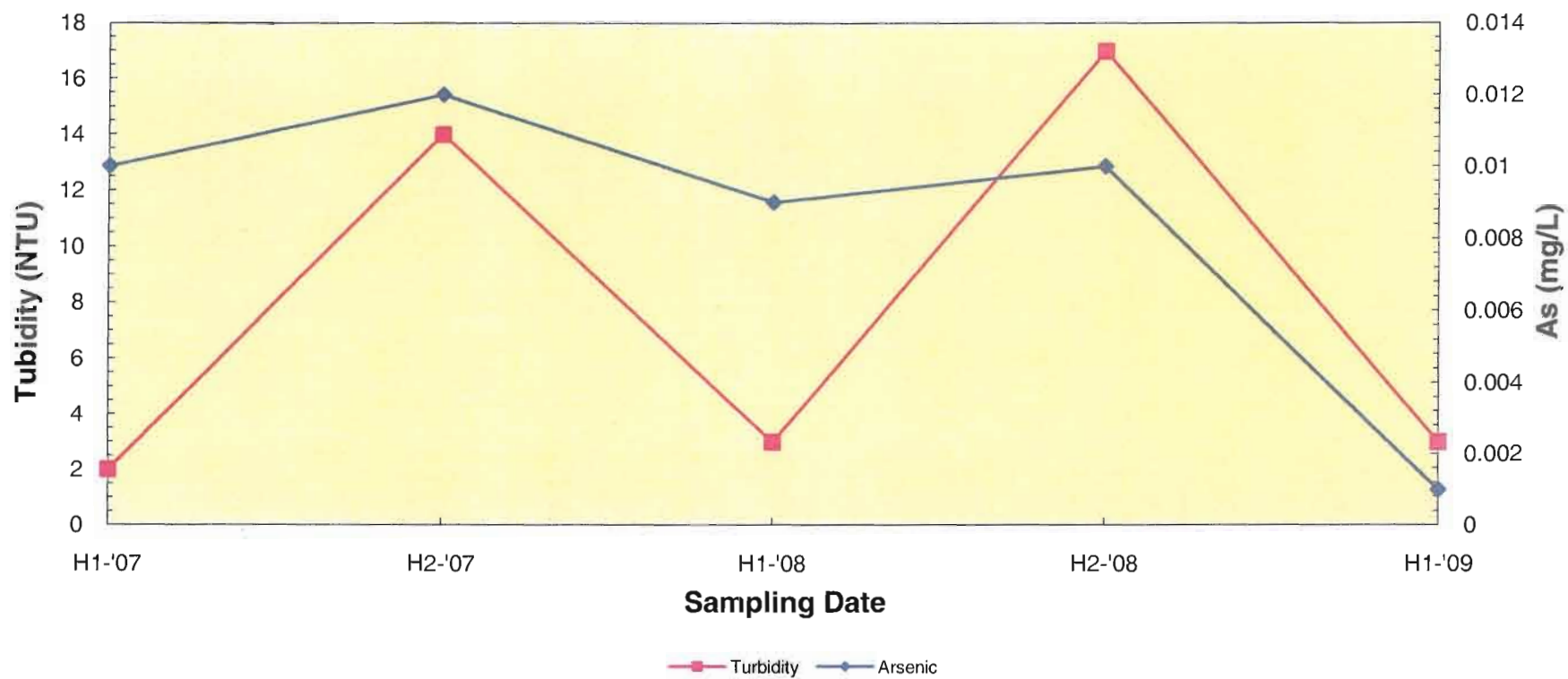
Monitoring Well GW-4



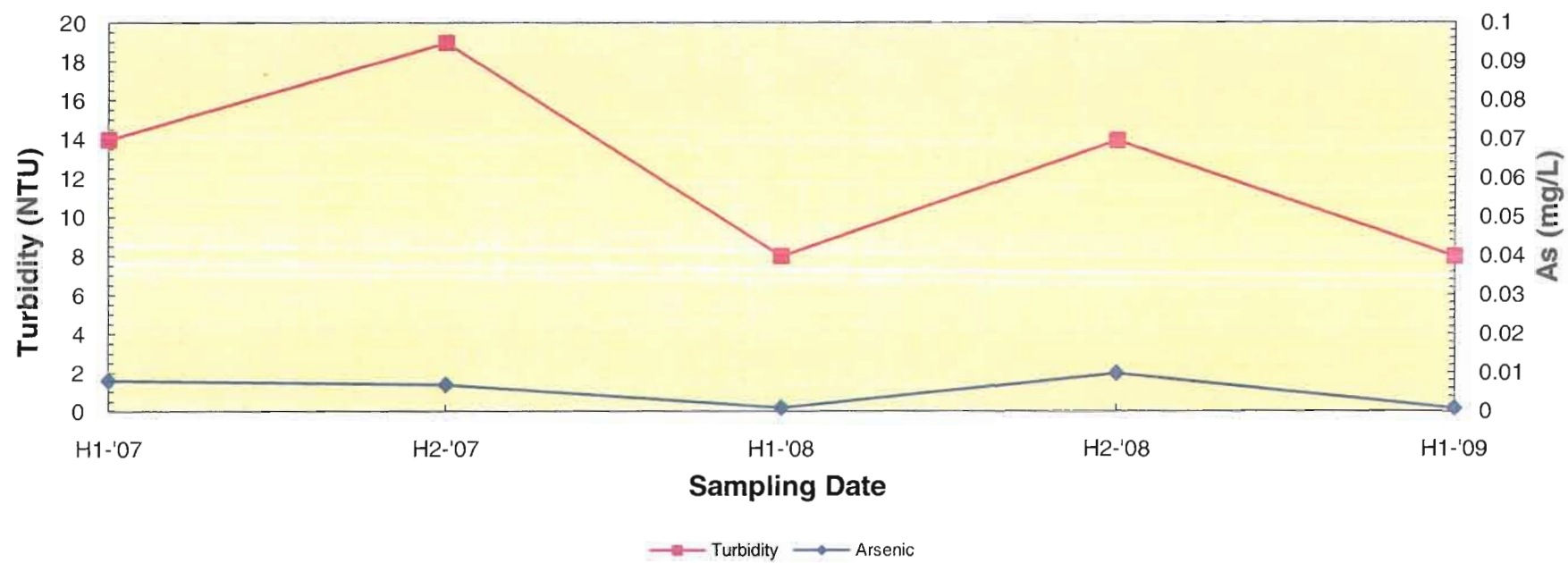
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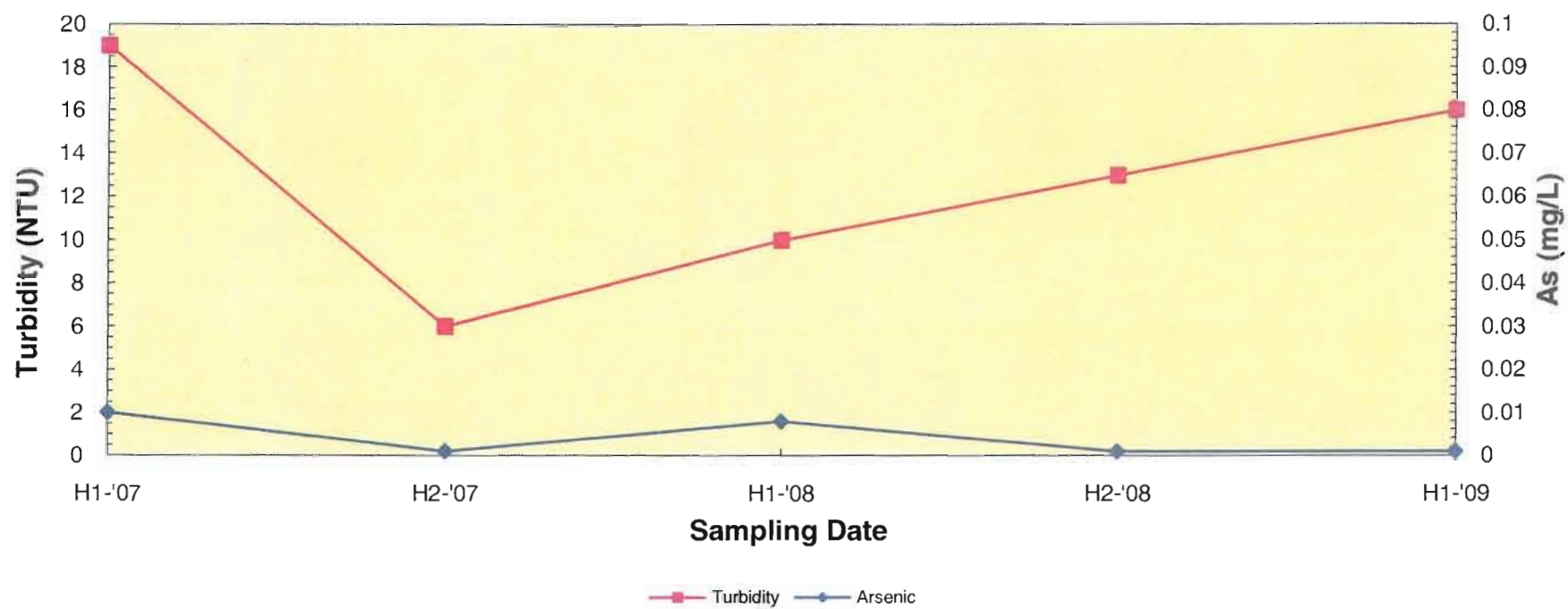
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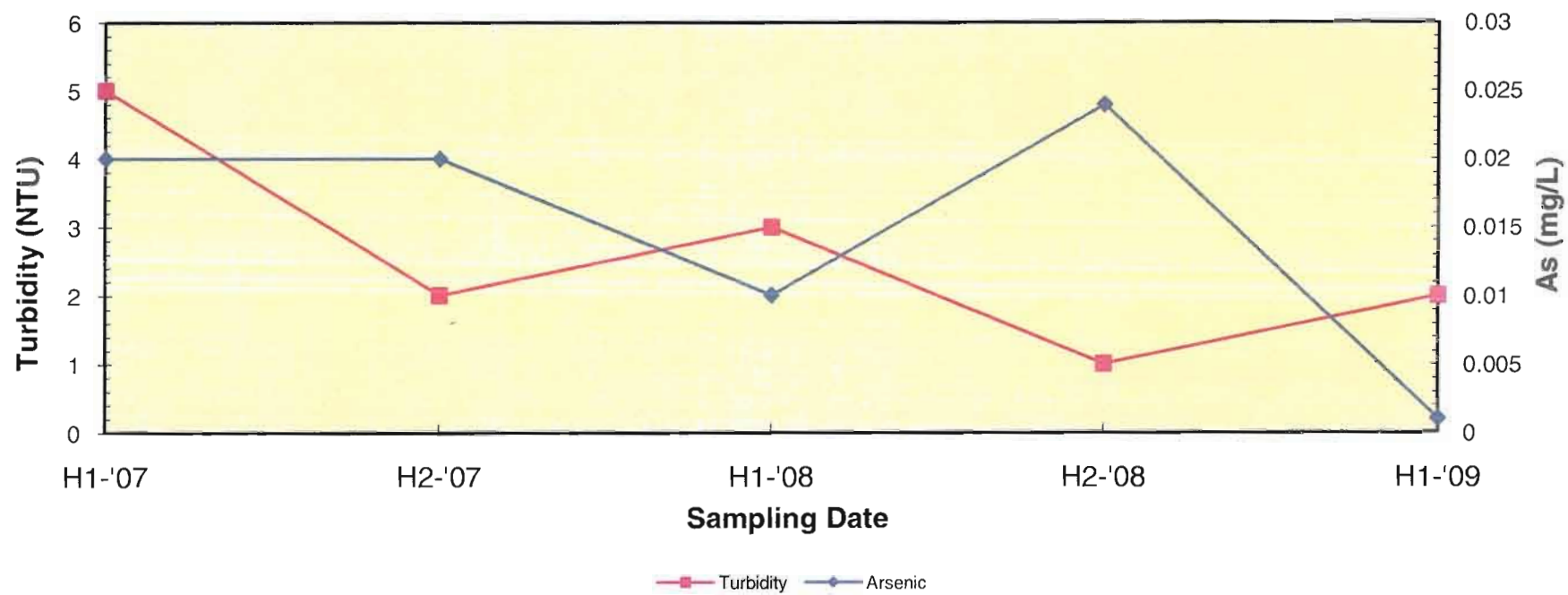
Monitoring Well GW-7



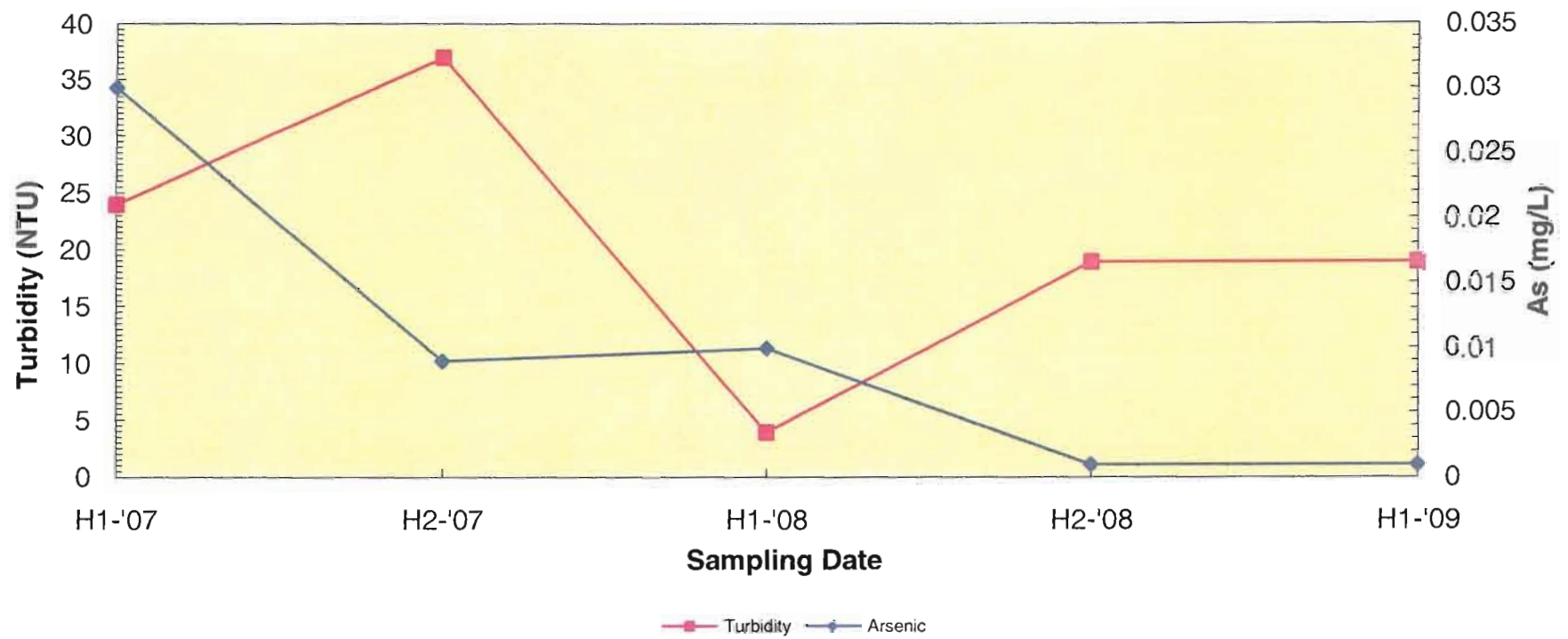
Monitoring Well GW-8



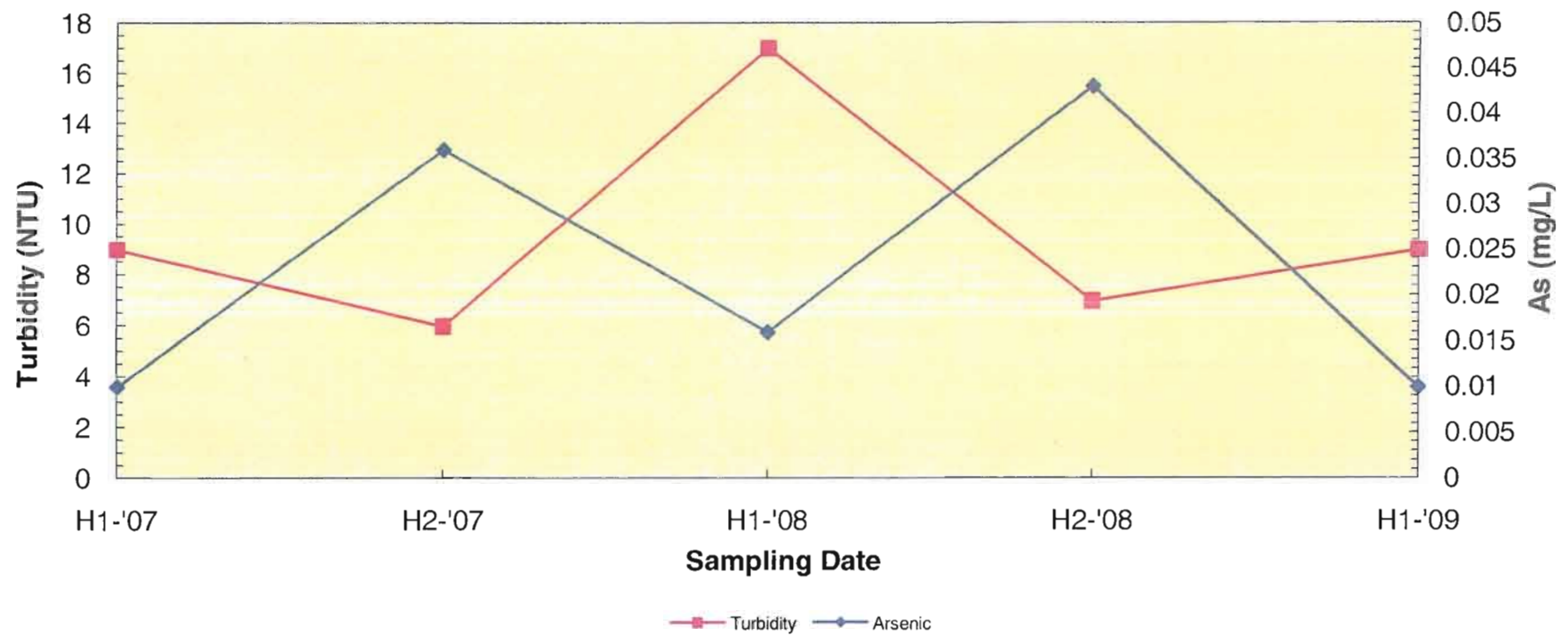
Monitoring Well GW-9



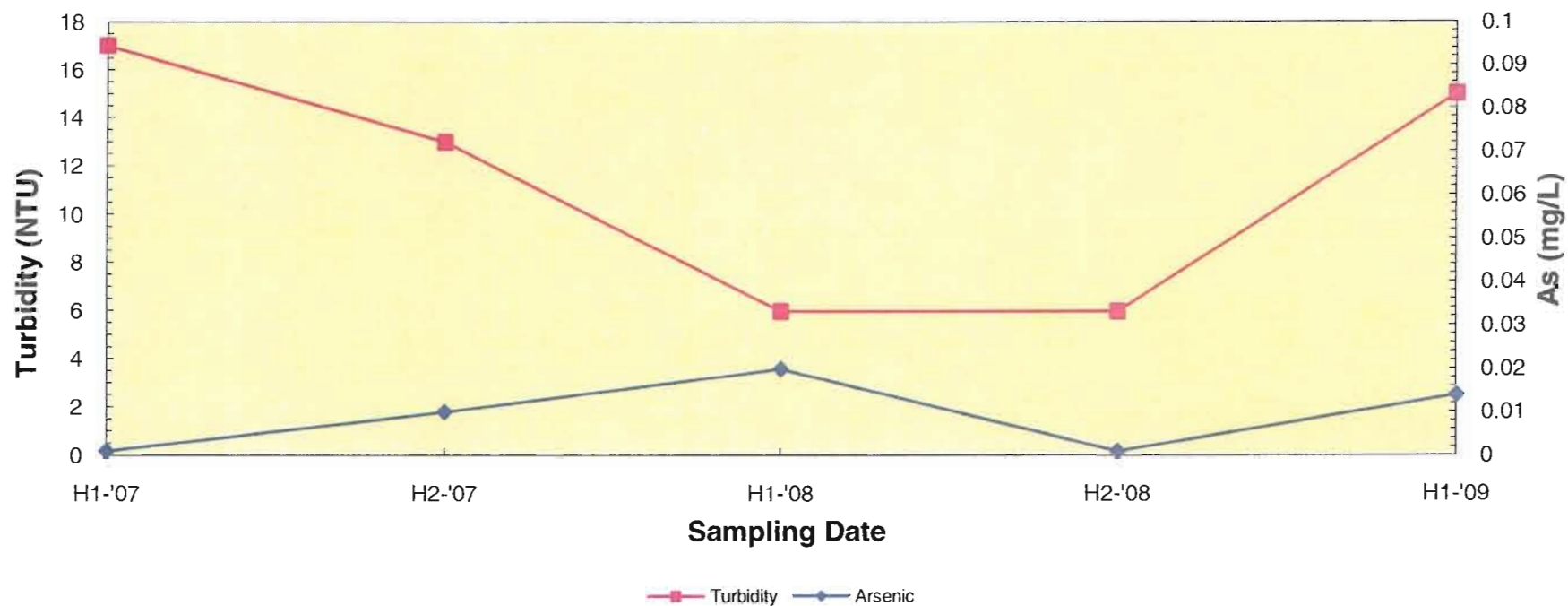
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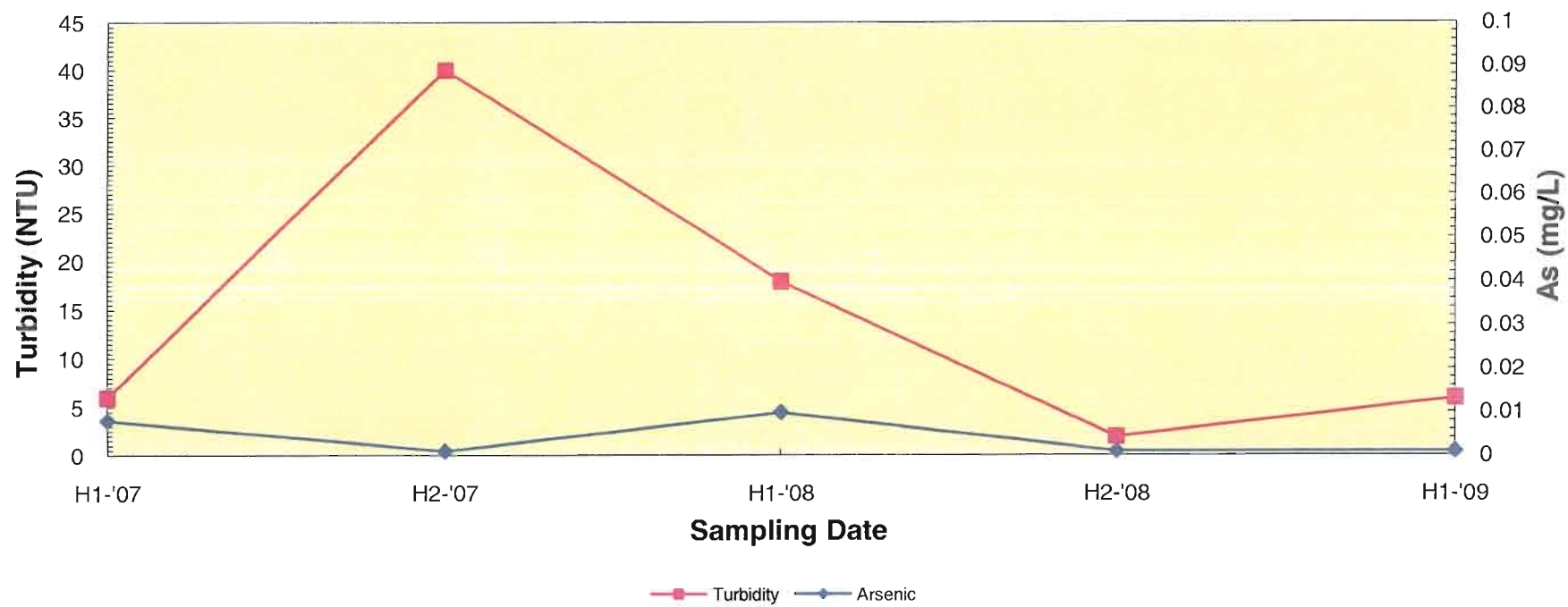
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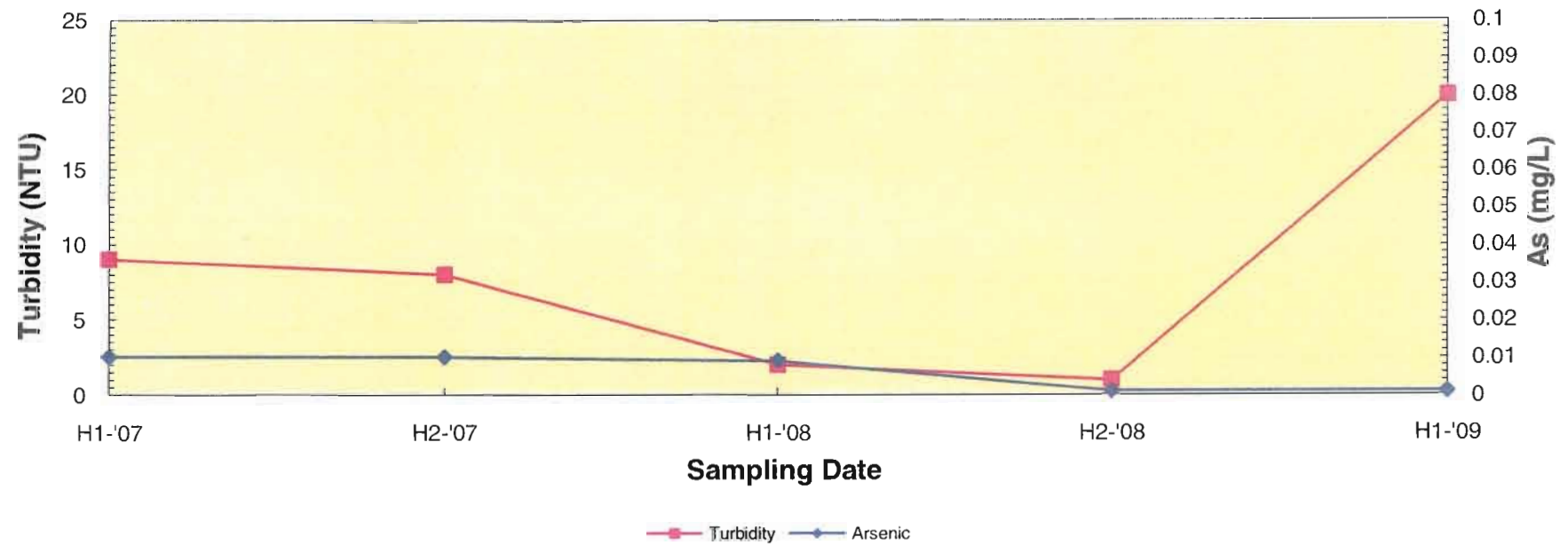
Monitoring Well GW-12



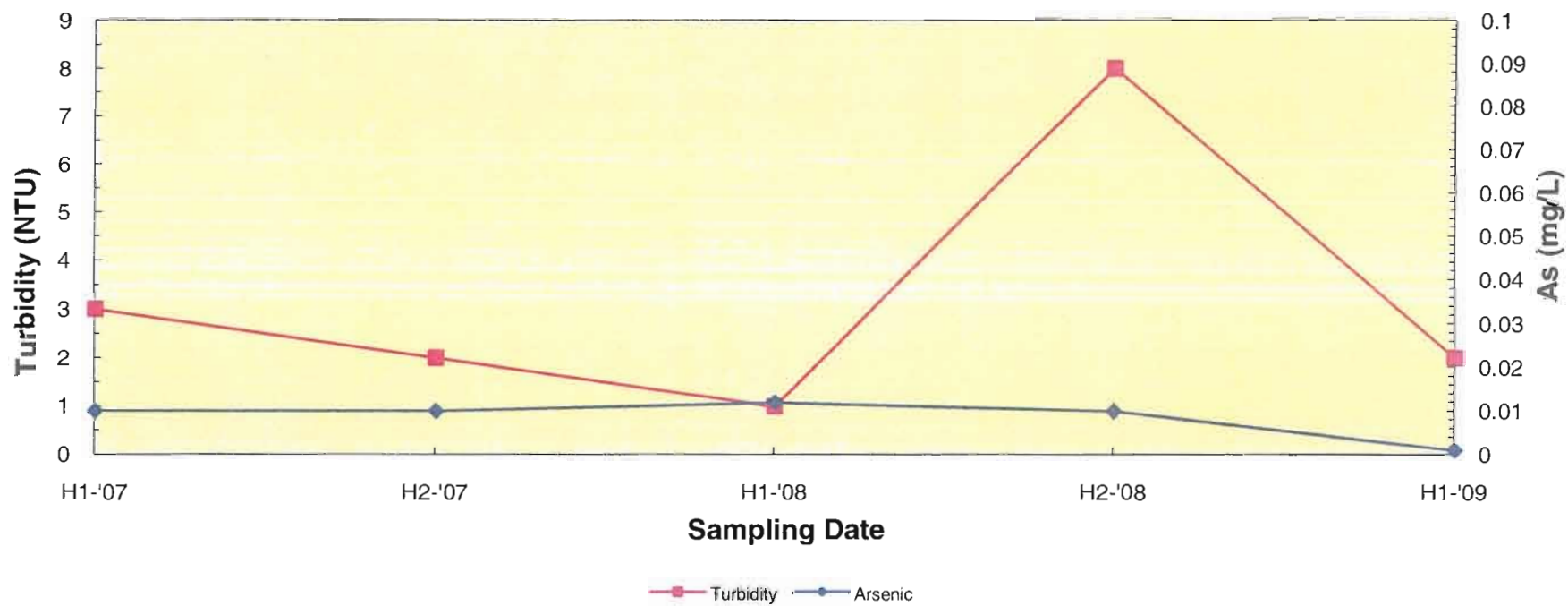
Monitoring Well GW-13



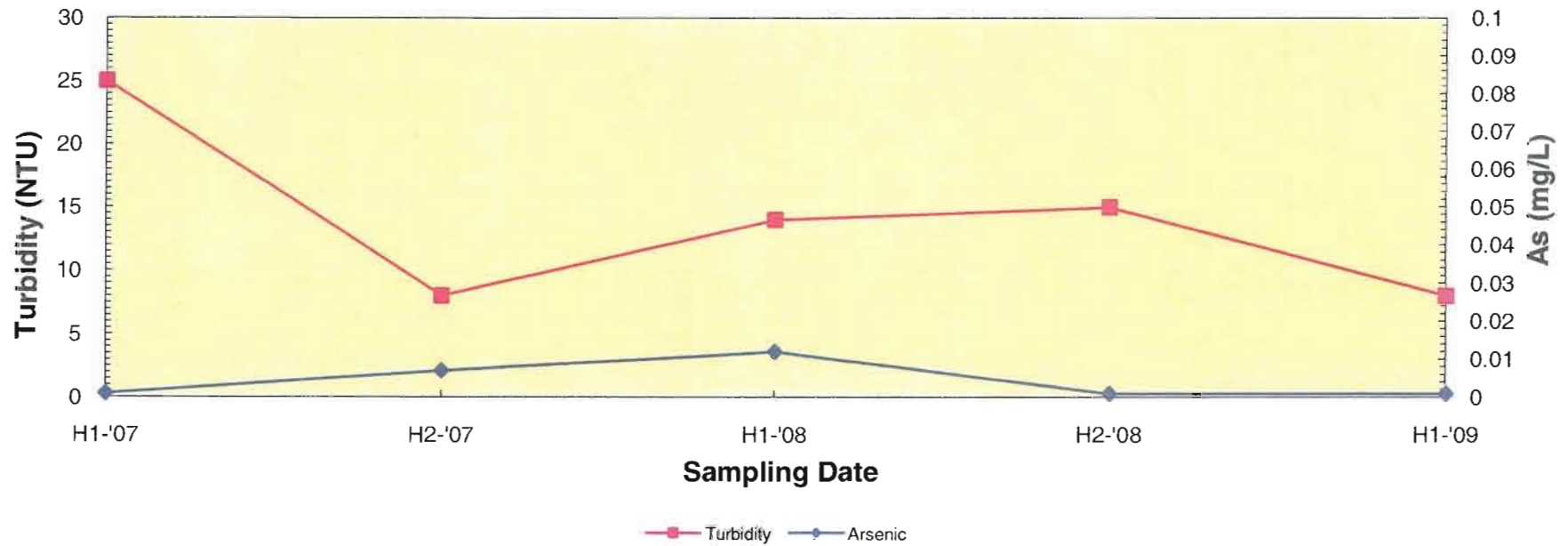
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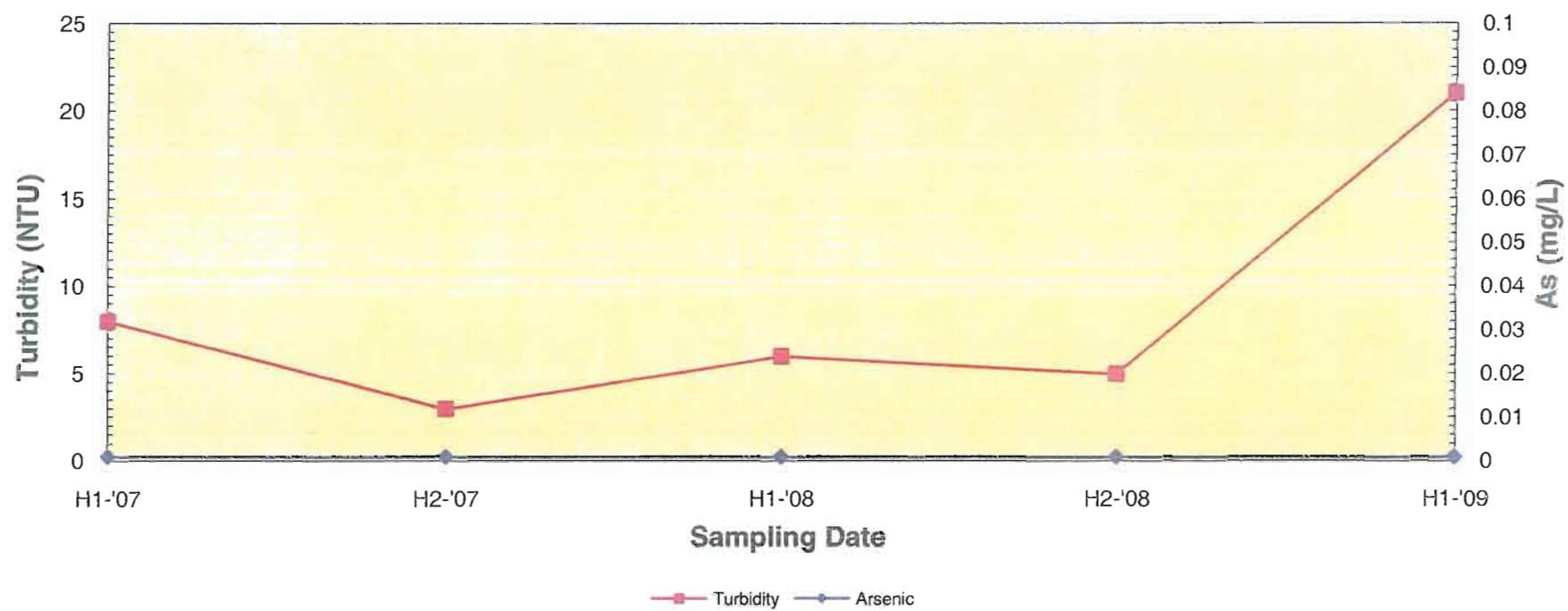
Monitoring Well GW-15



Monitoring Well GW-16

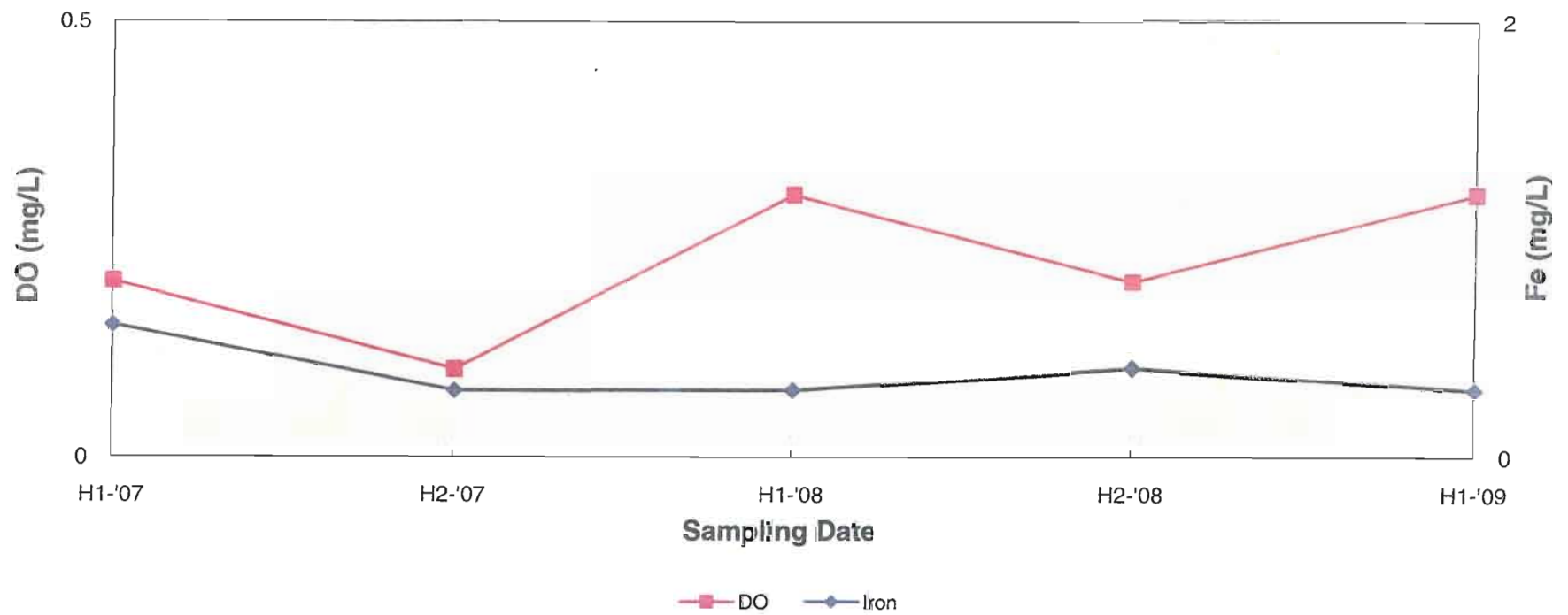


Monitoring Well GW-17

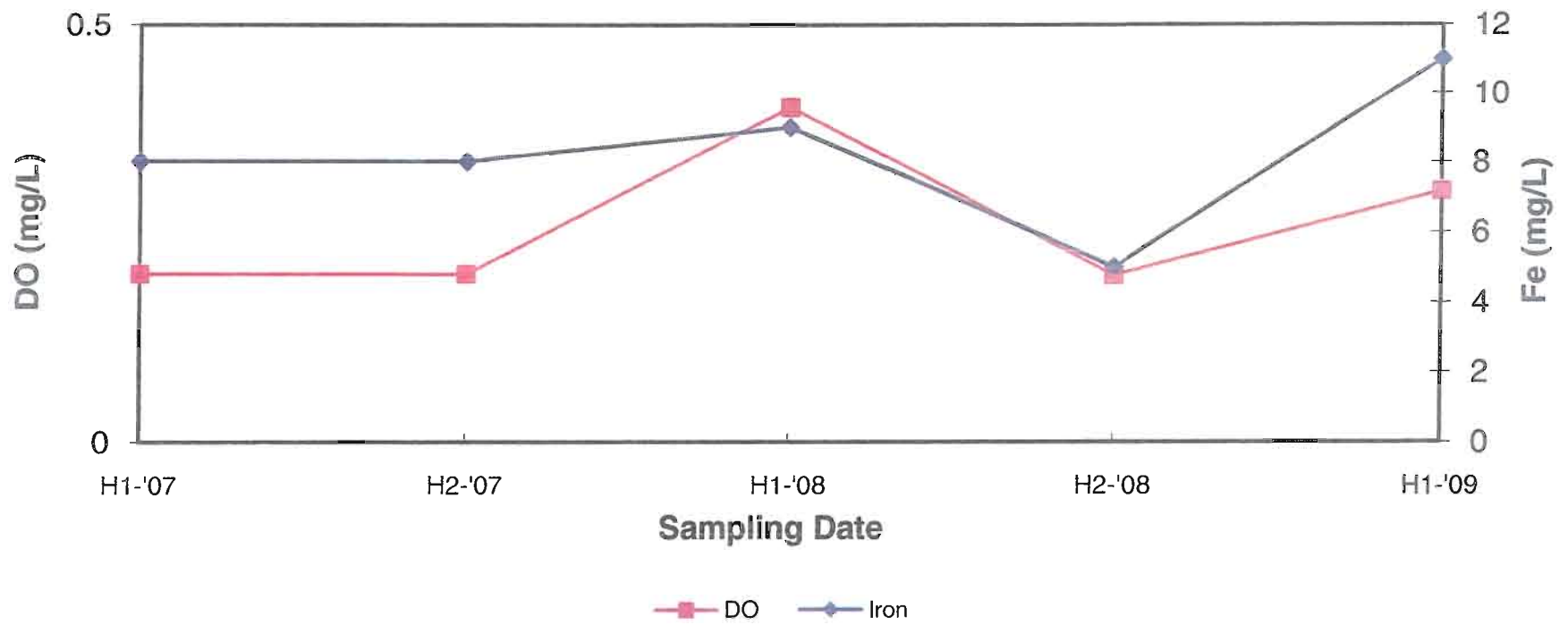


C-4 – DO versus Iron

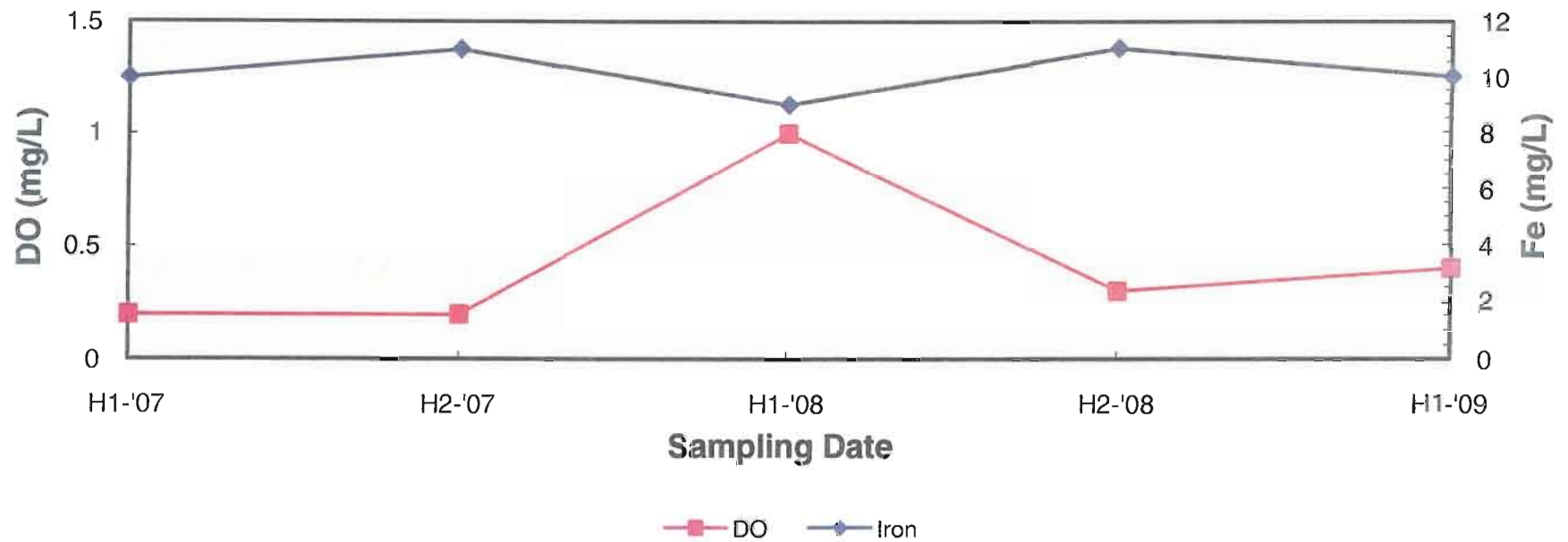
Monitoring Well BGW-1



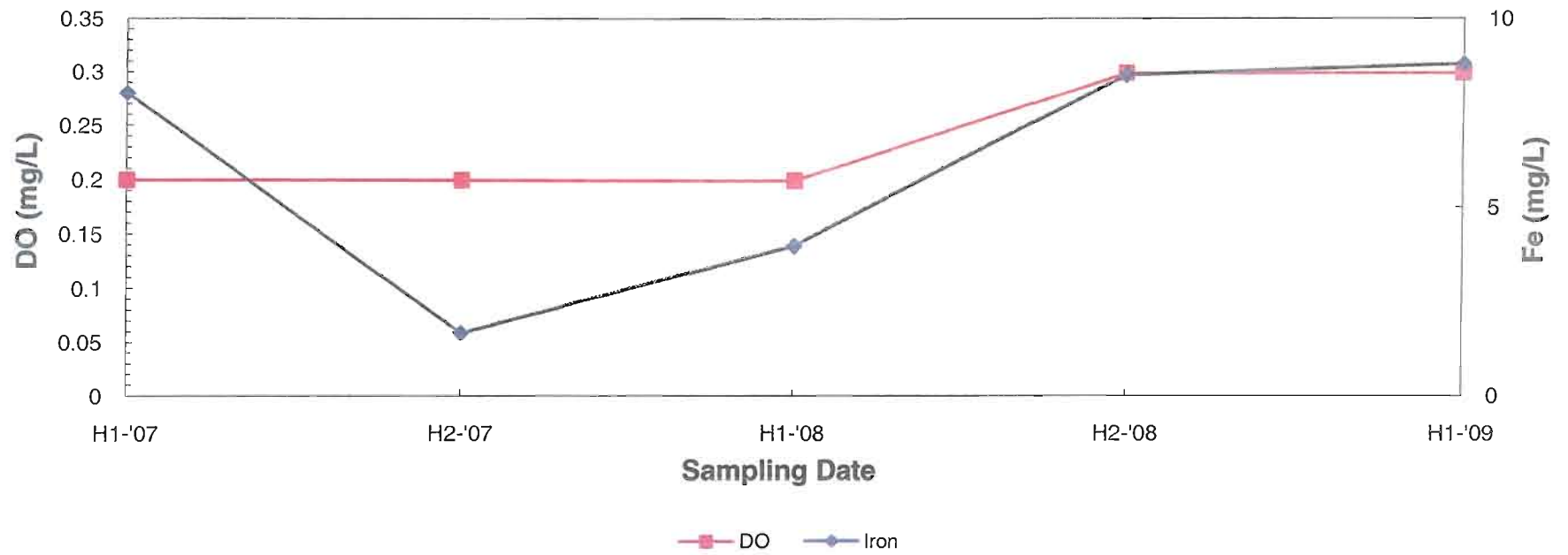
Monitoring Well GW- 1



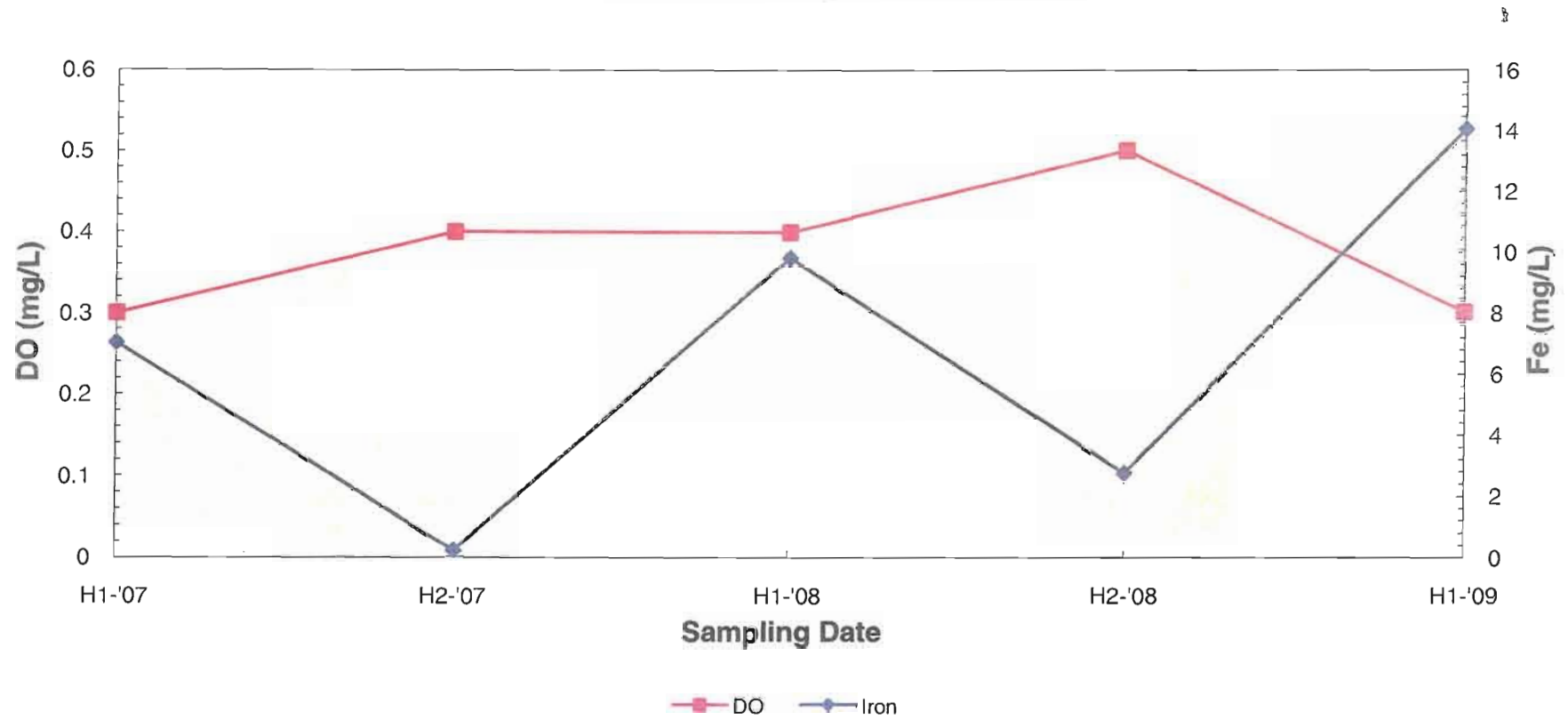
Monitoring Well GW-2



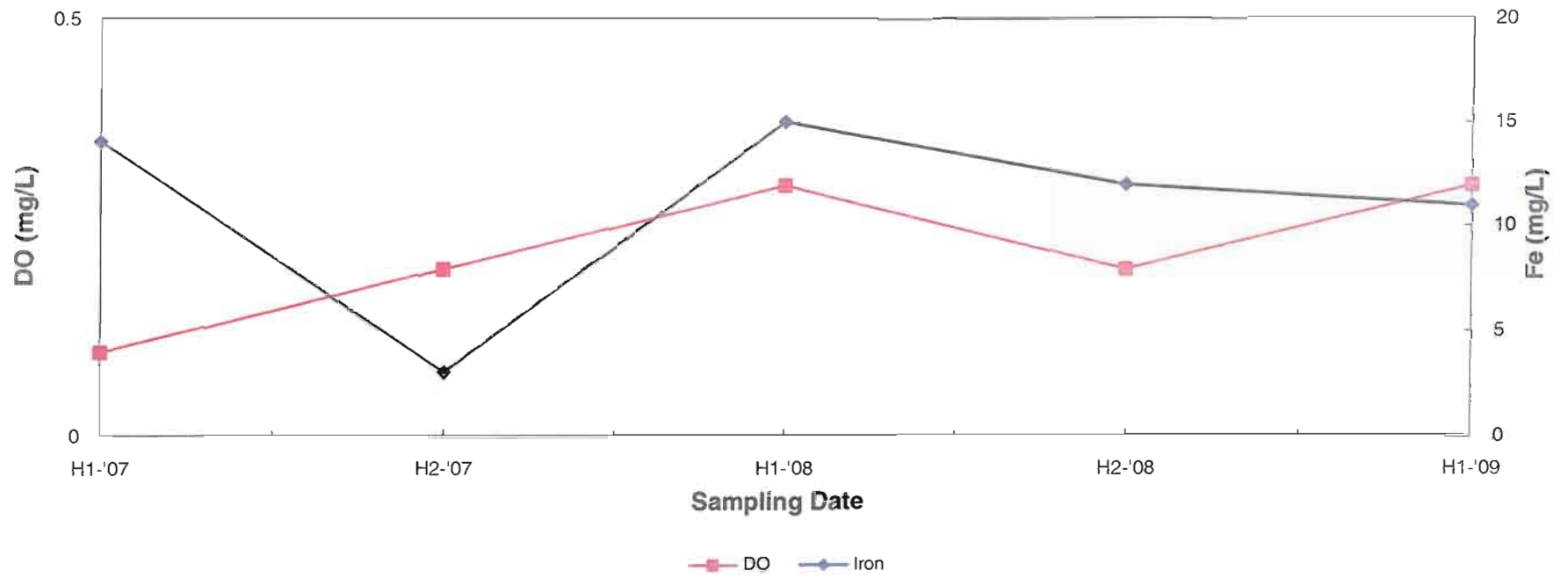
Monitoring Well GW-3



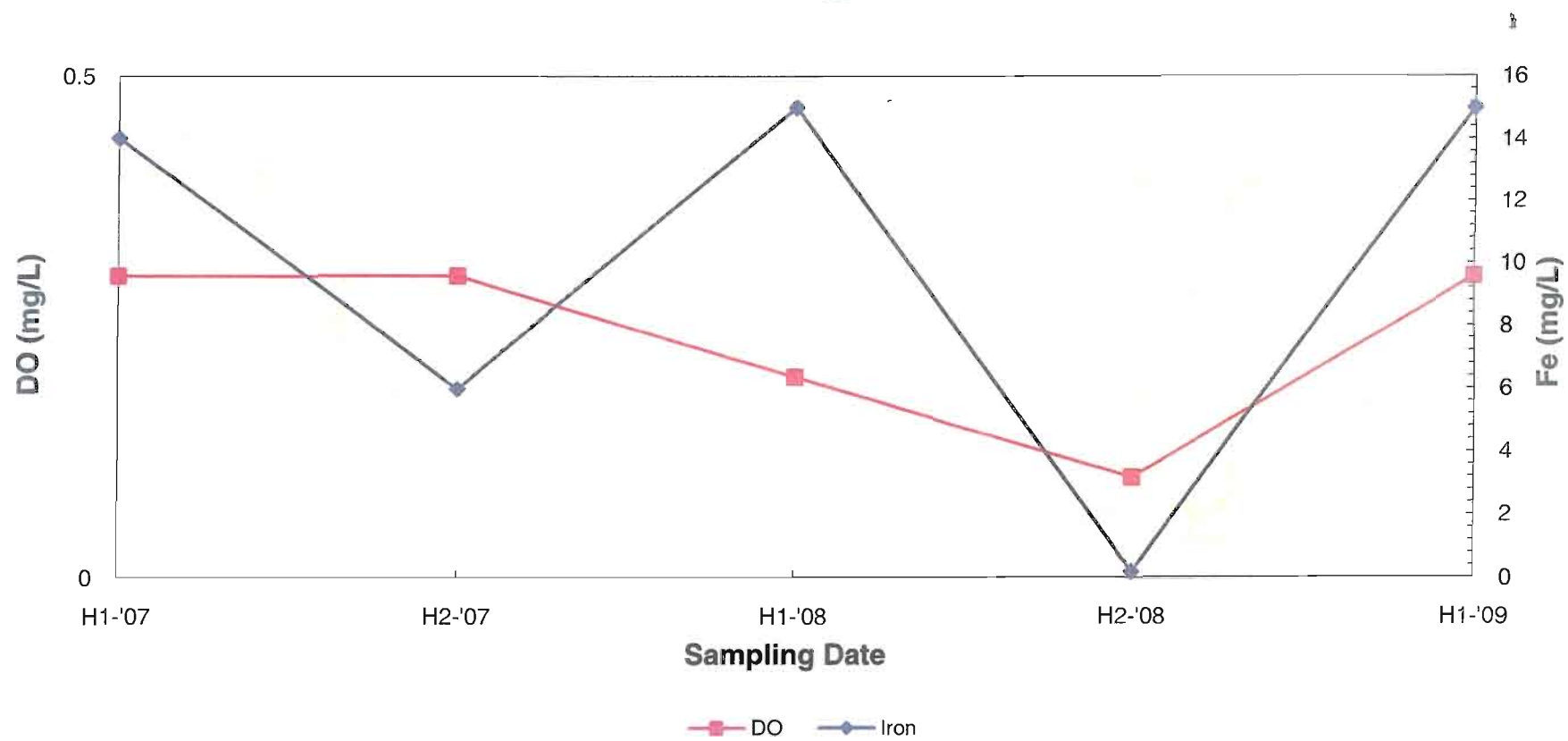
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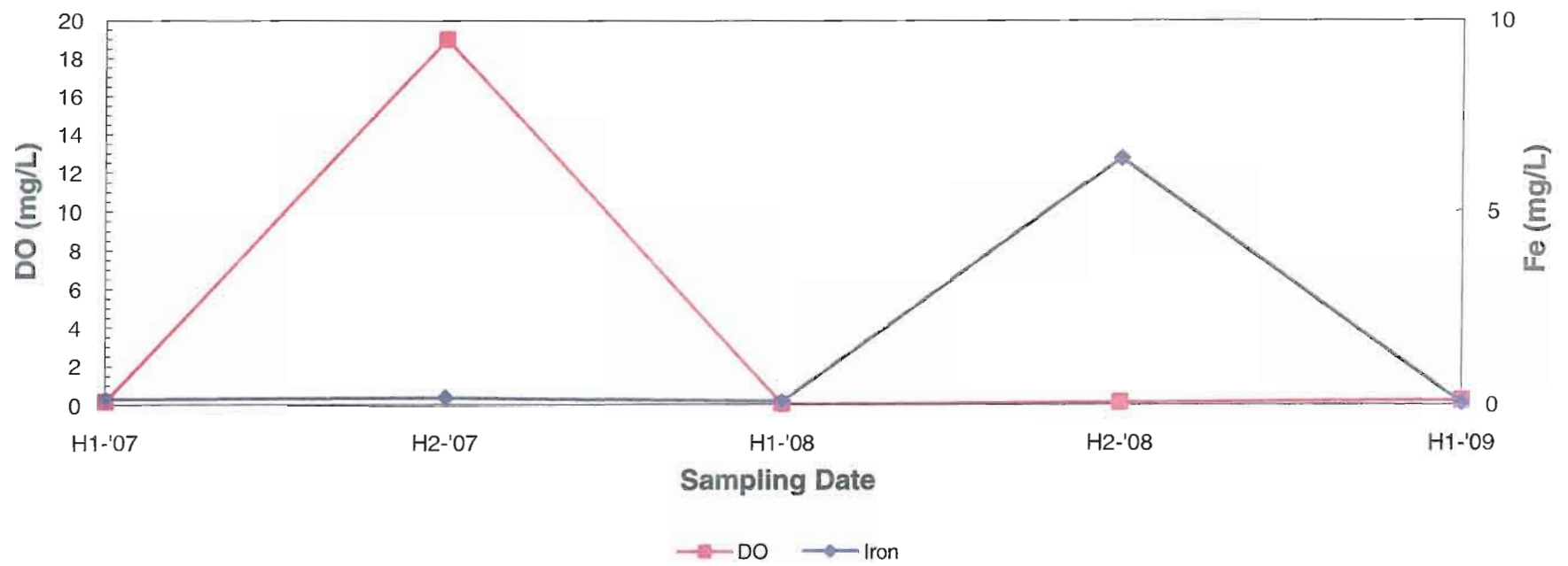
Monitoring Well GW-5



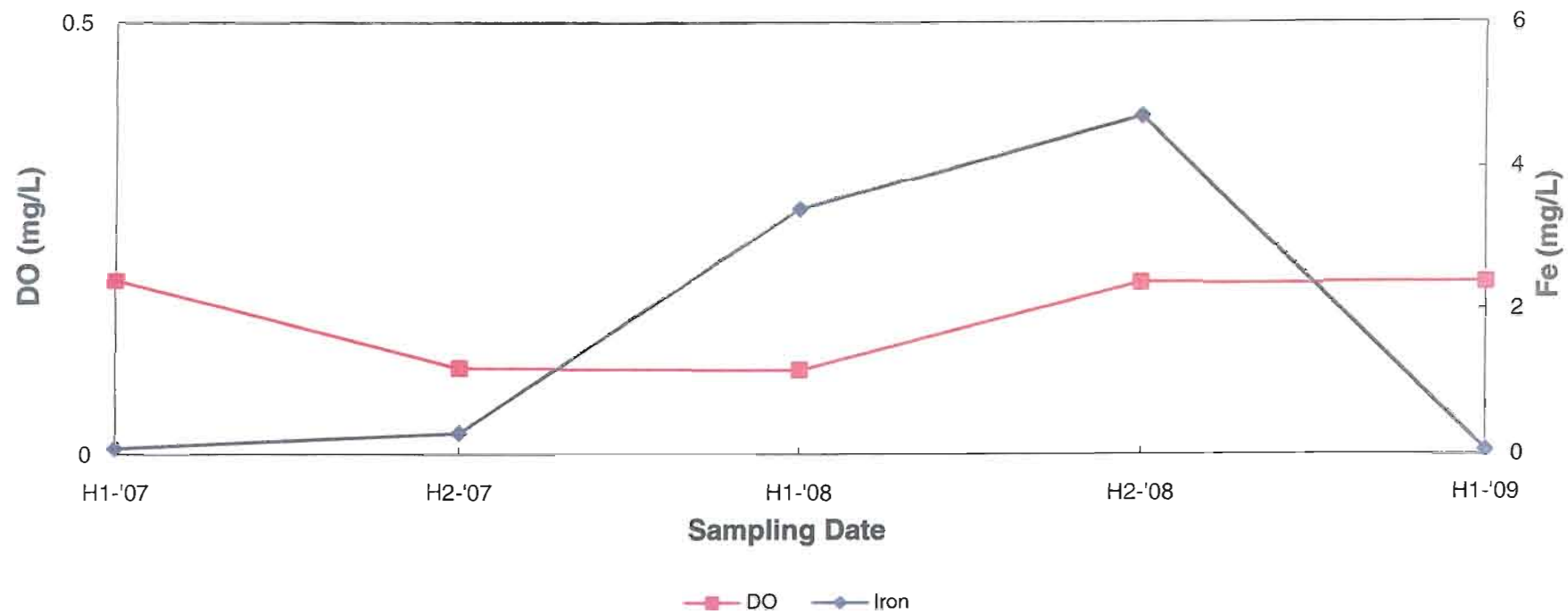
Monitoring Well GW-6



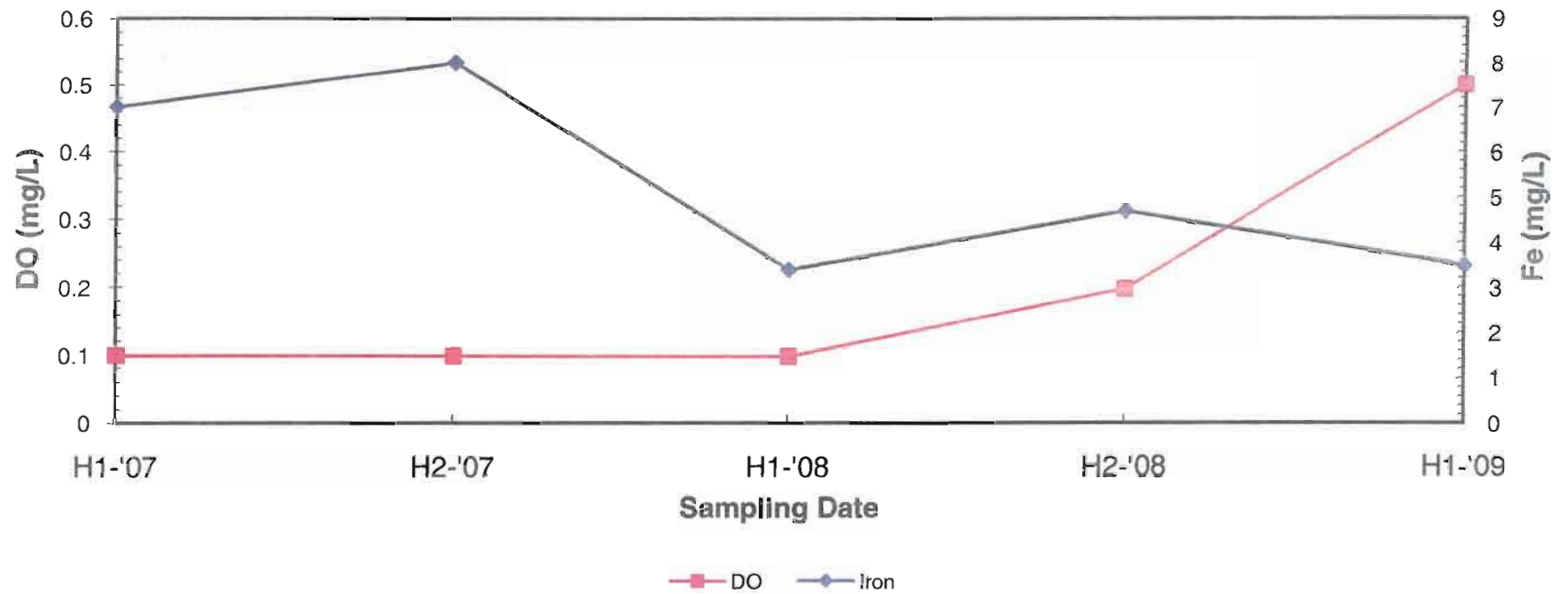
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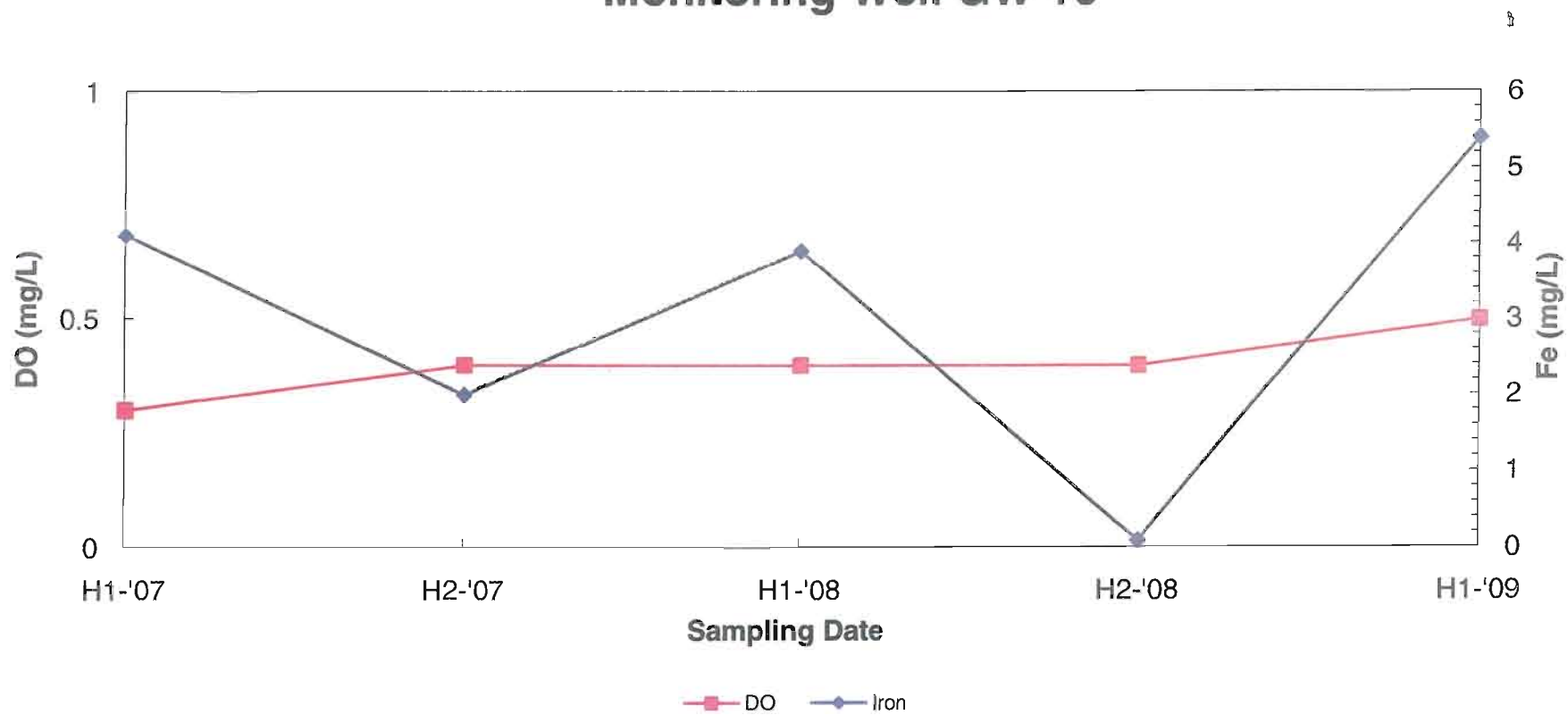
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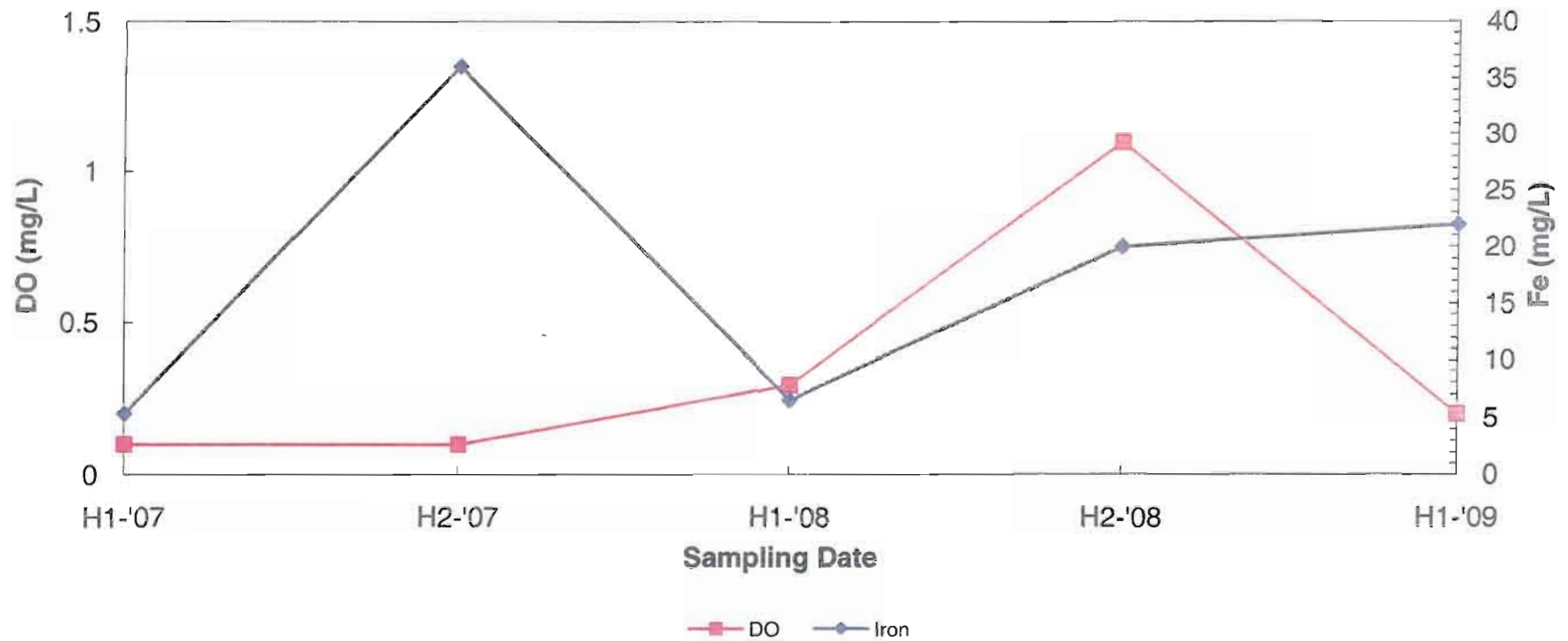
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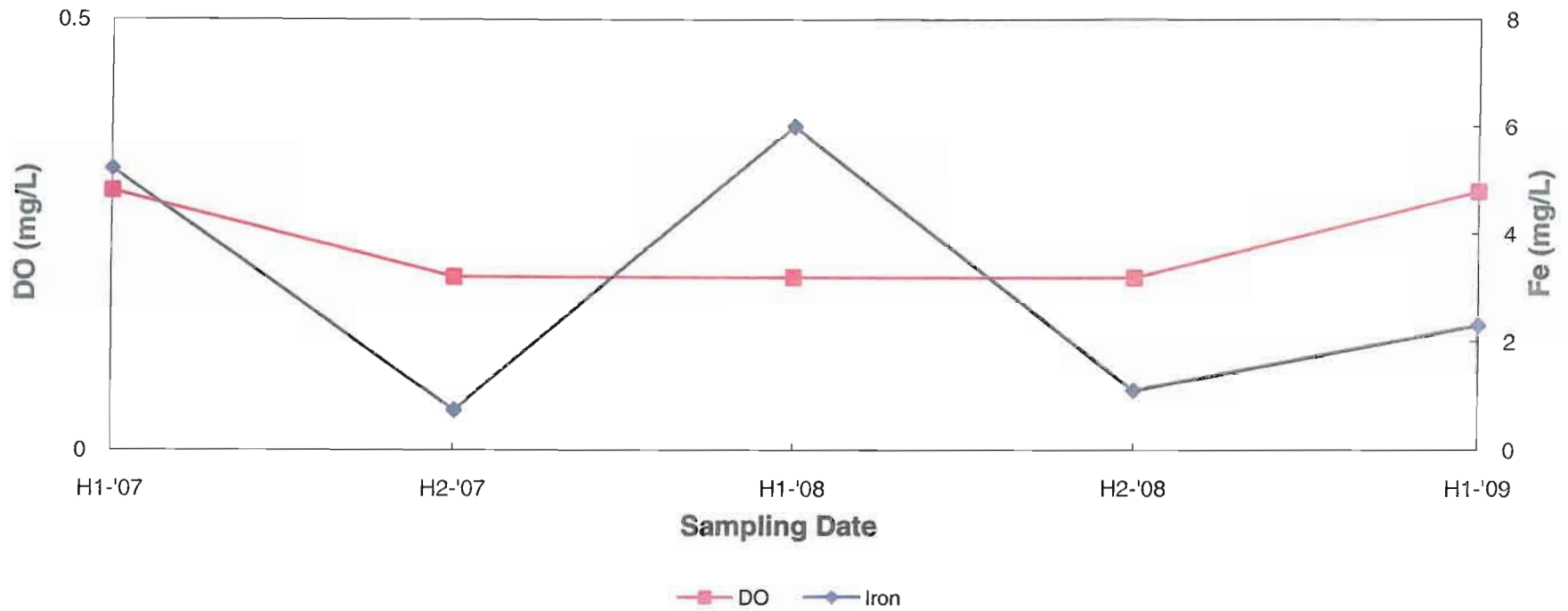
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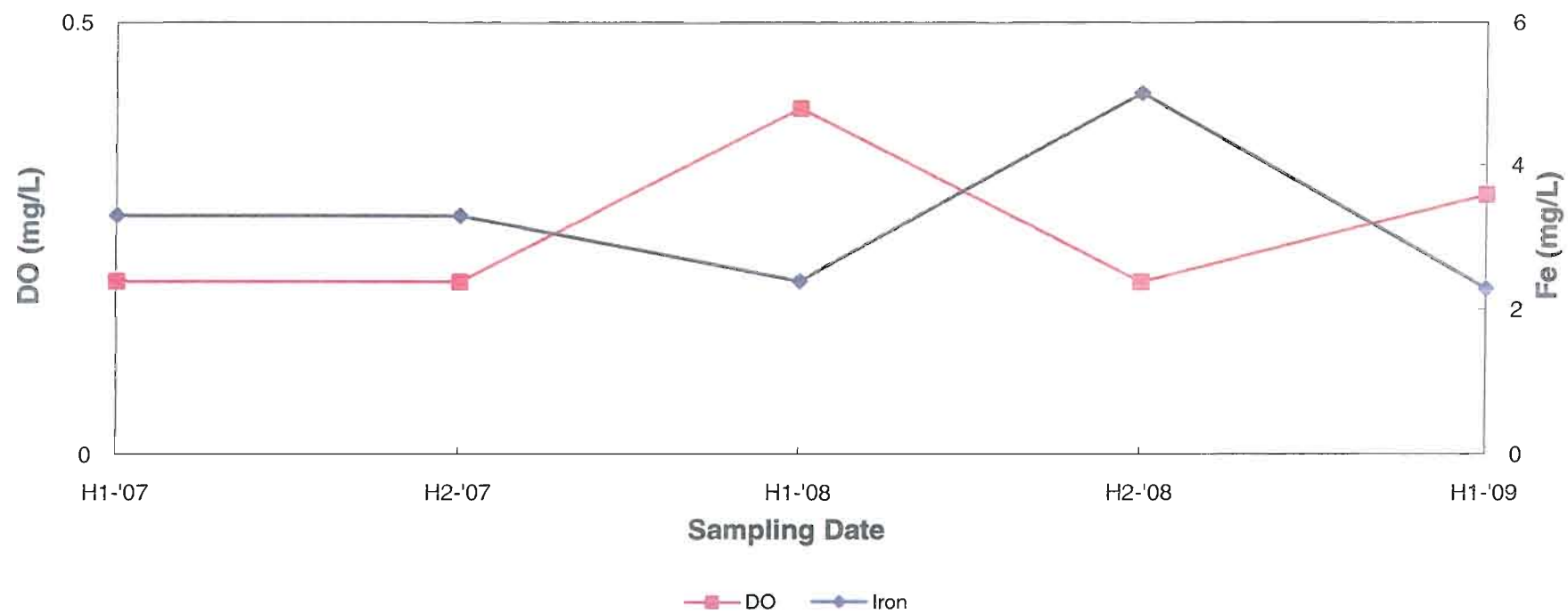
Monitoring Well GW-11



Monitoring Well GW-12

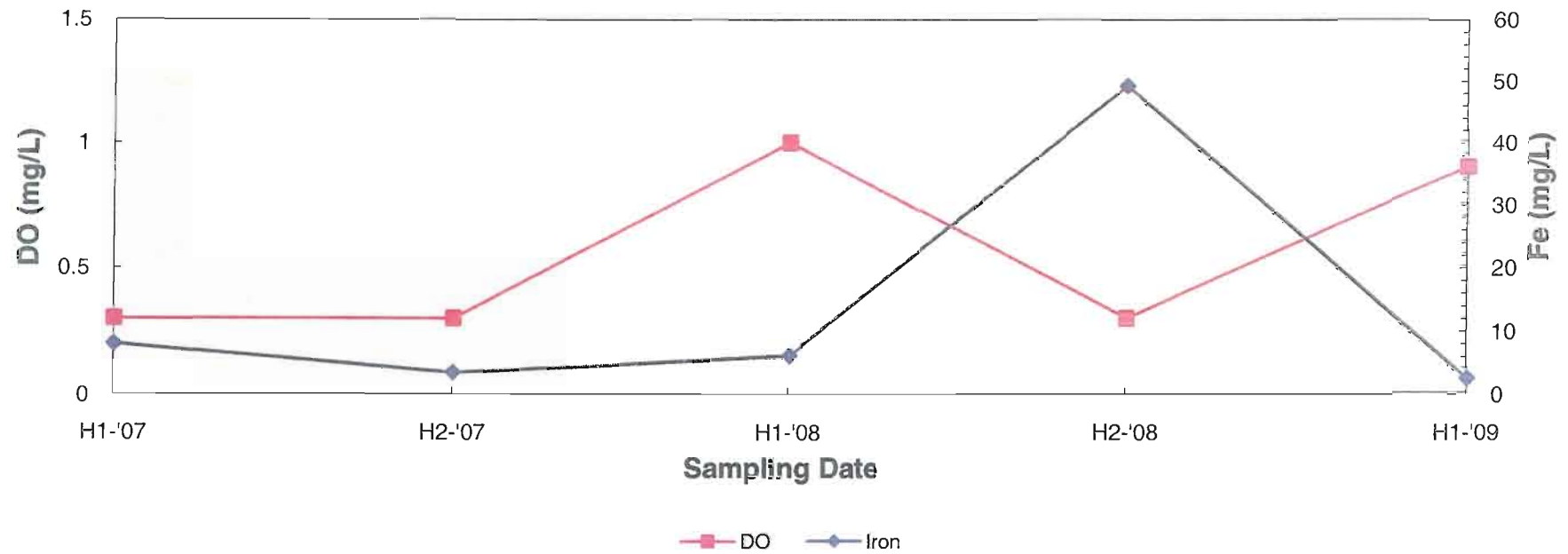


Monitoring Well GW-13

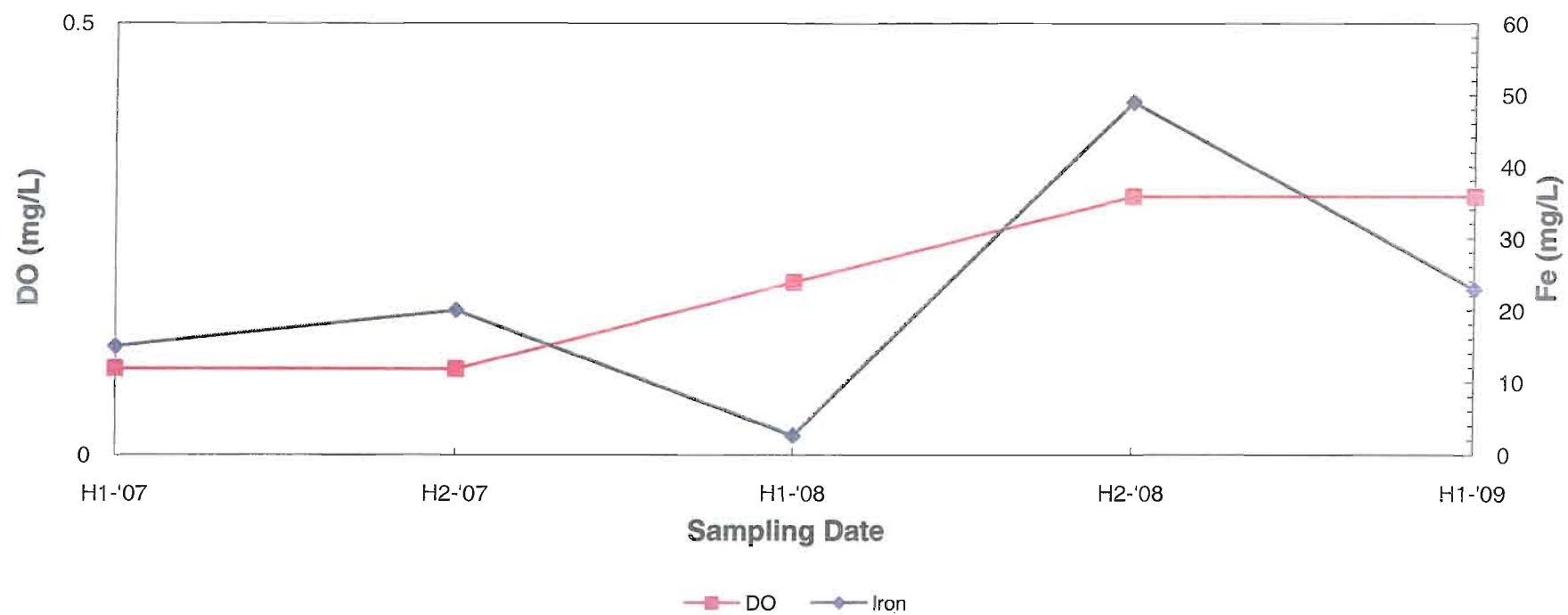


Monitoring Well GW-14

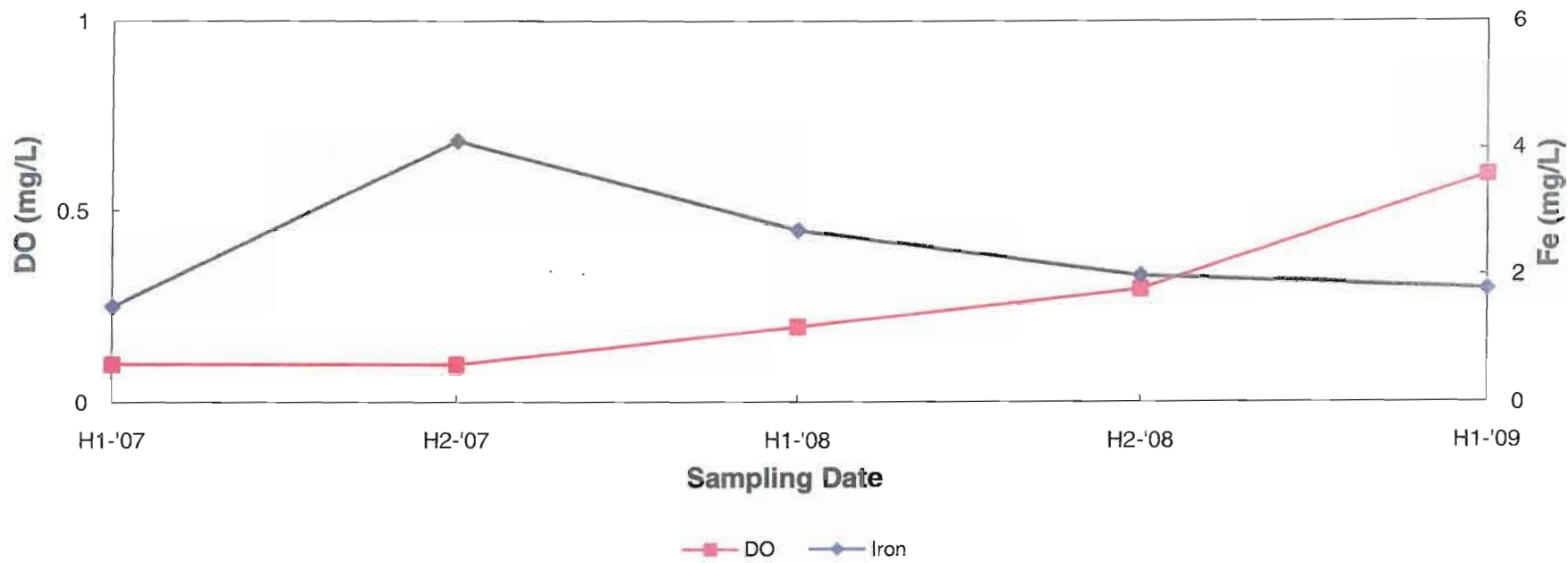
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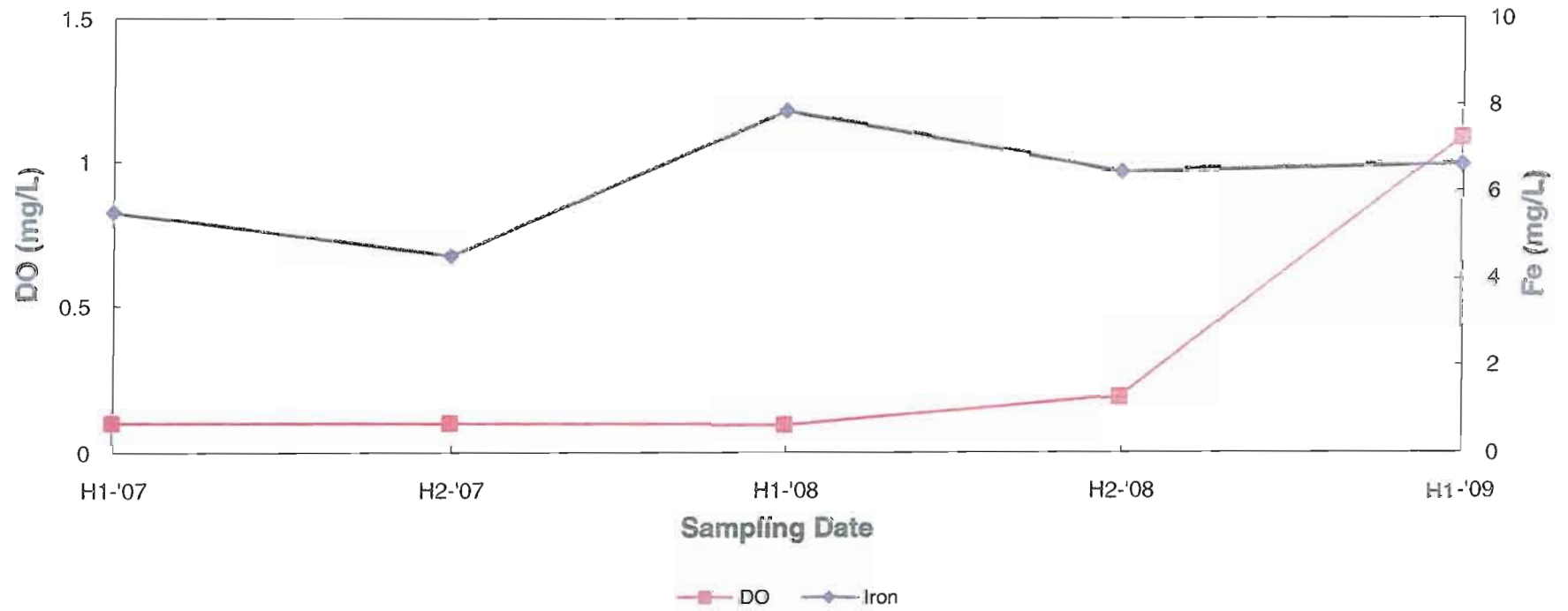
Monitoring Well GW-15



Monitoring Well GW-16

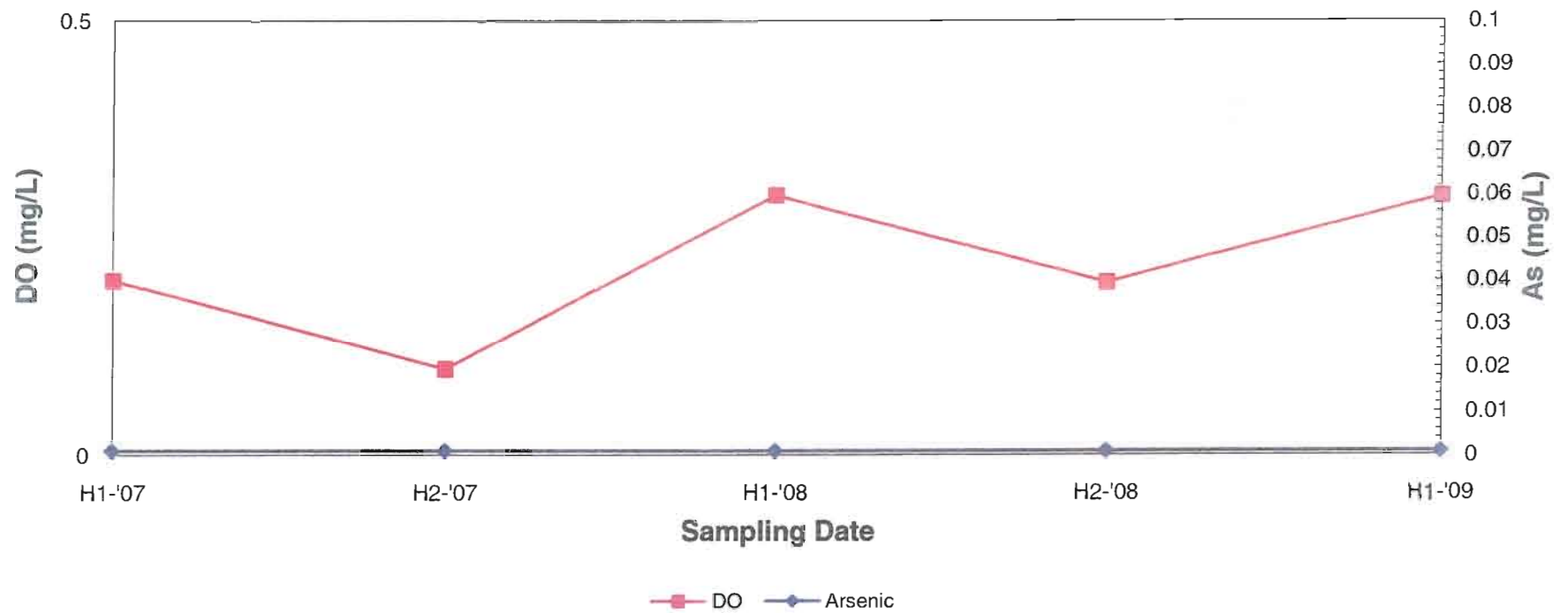


Monitoring Well GW-17

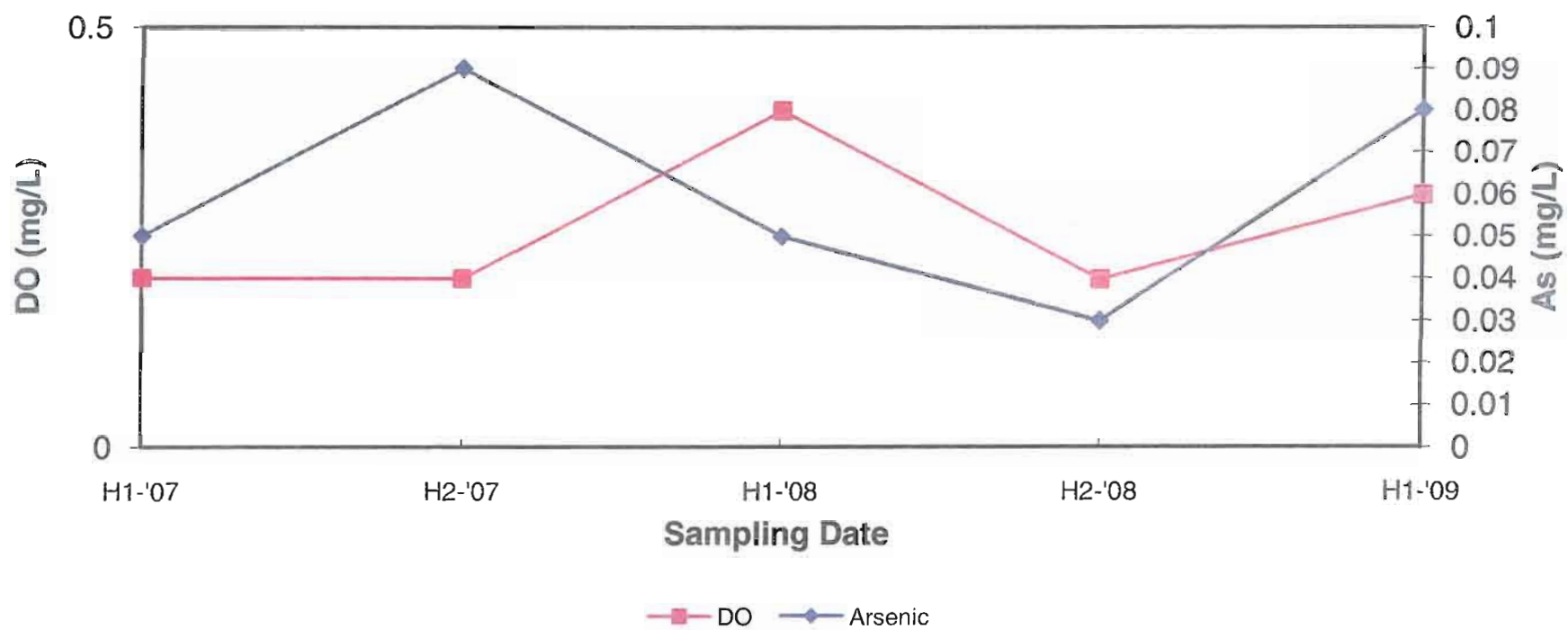


C-5 – DO versus Arsenic

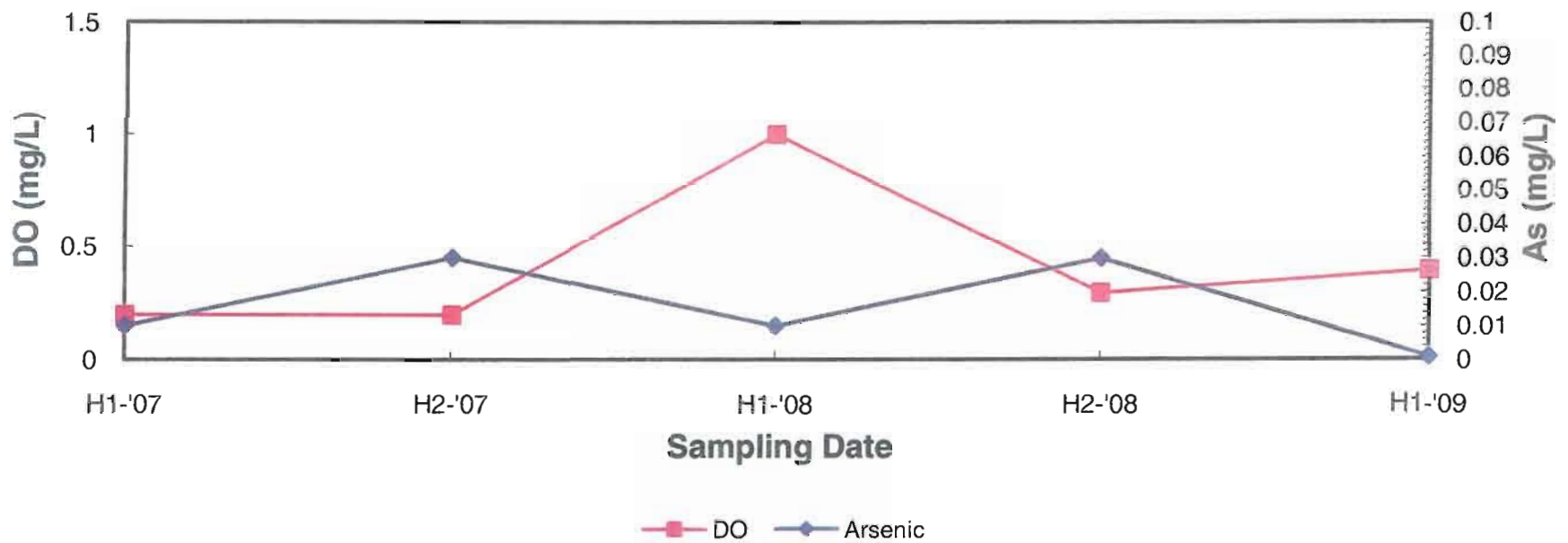
Monitoring Well BGW-1



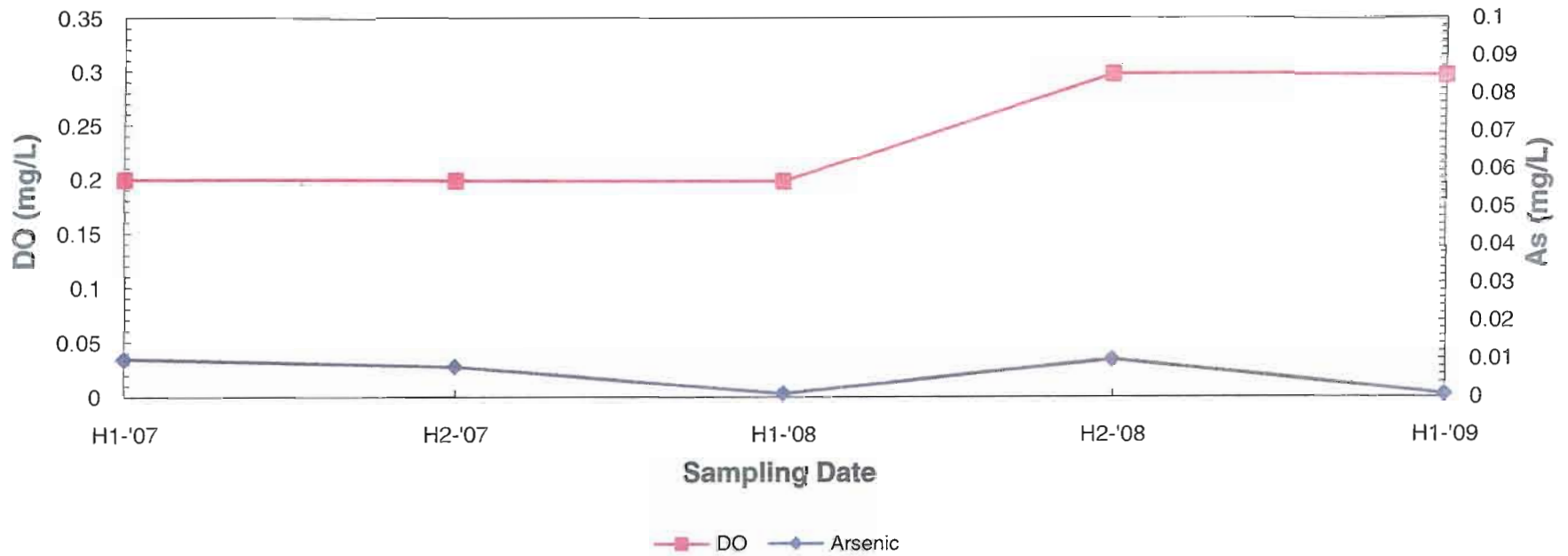
Monitoring Well GW- 1



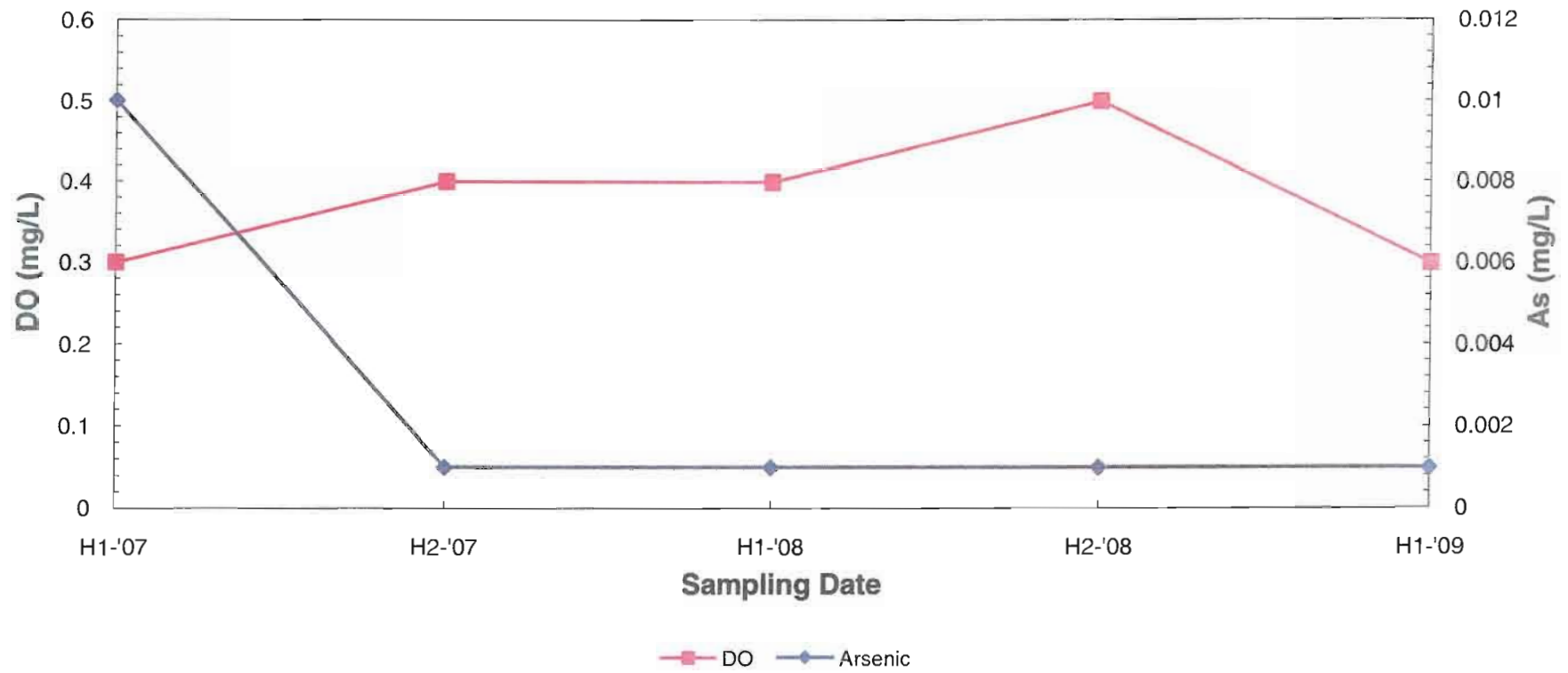
Monitoring Well GW-2



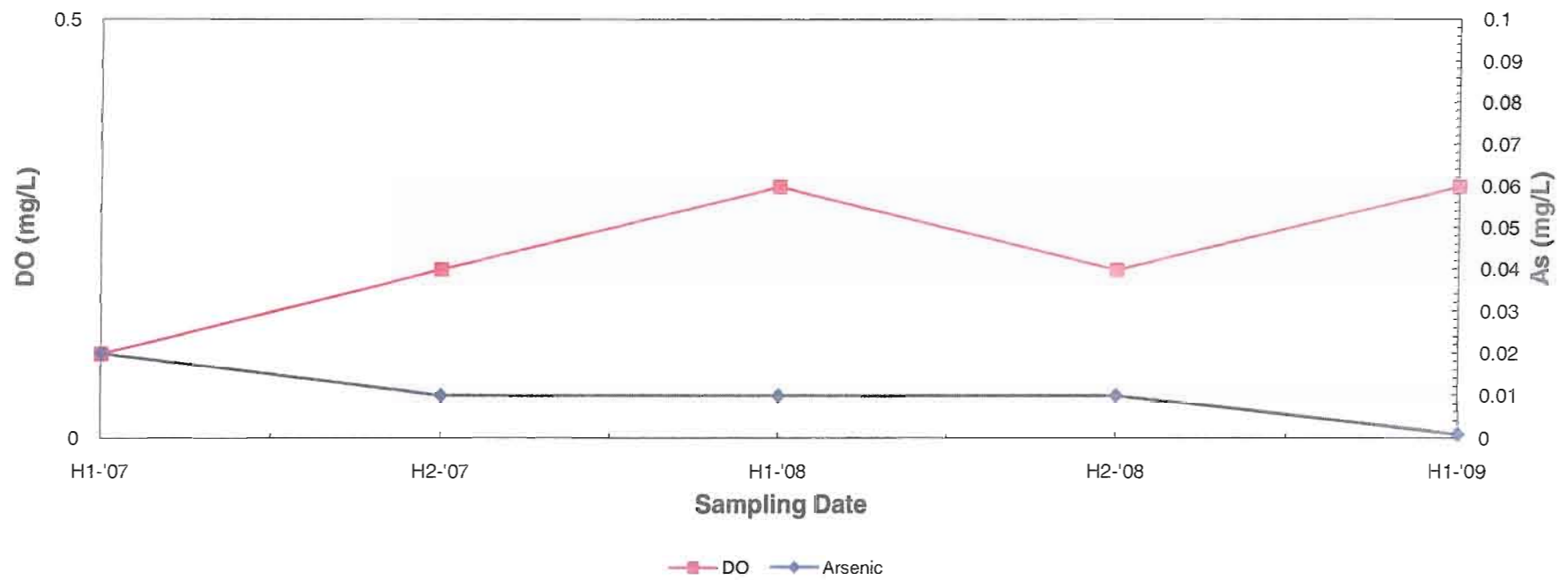
Monitoring Well GW-3



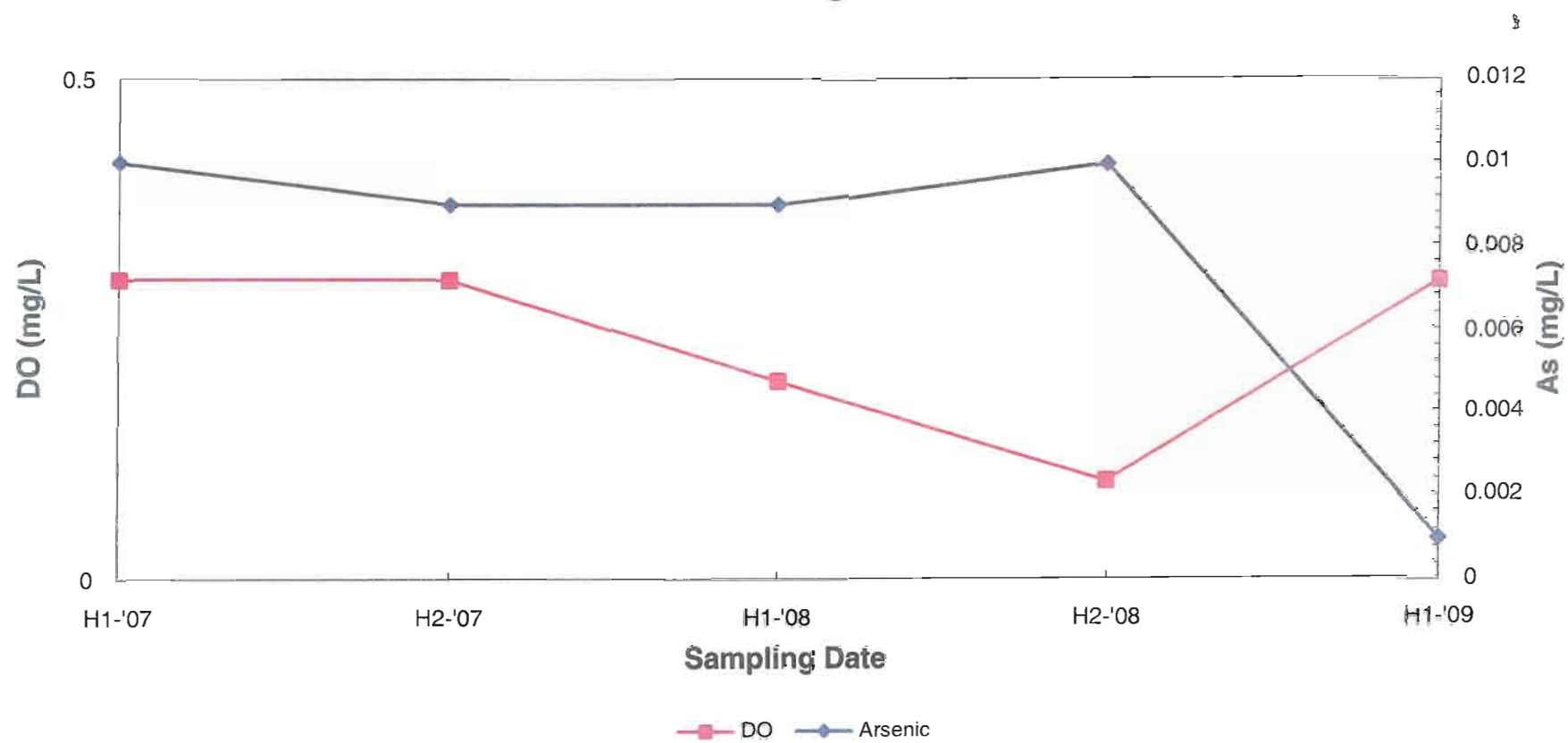
Monitoring Well GW-4



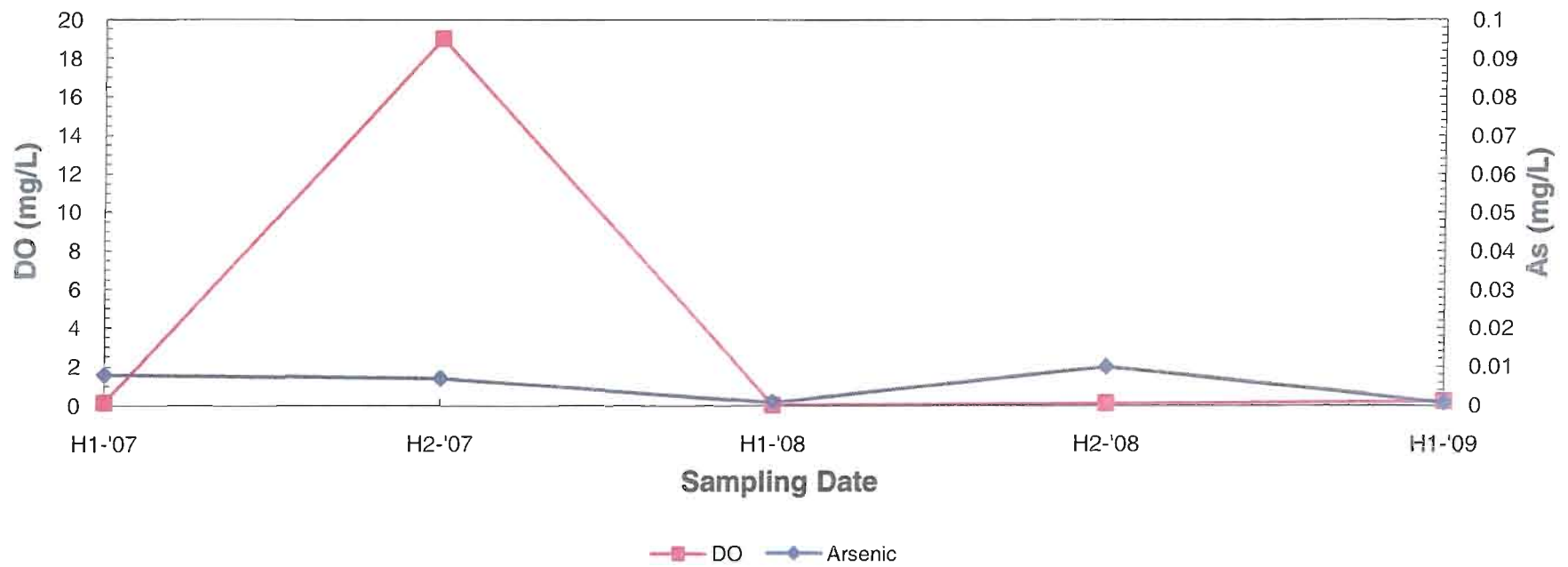
Monitoring Well GW-5



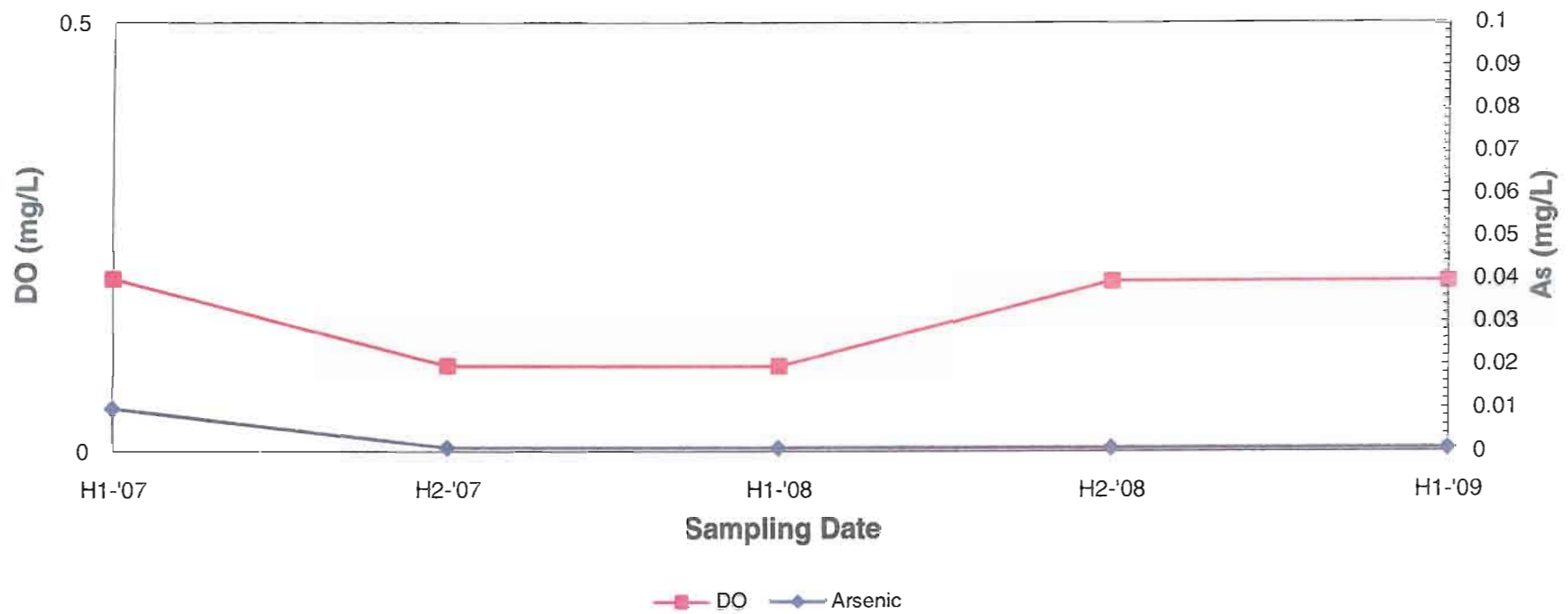
Monitoring Well GW-6



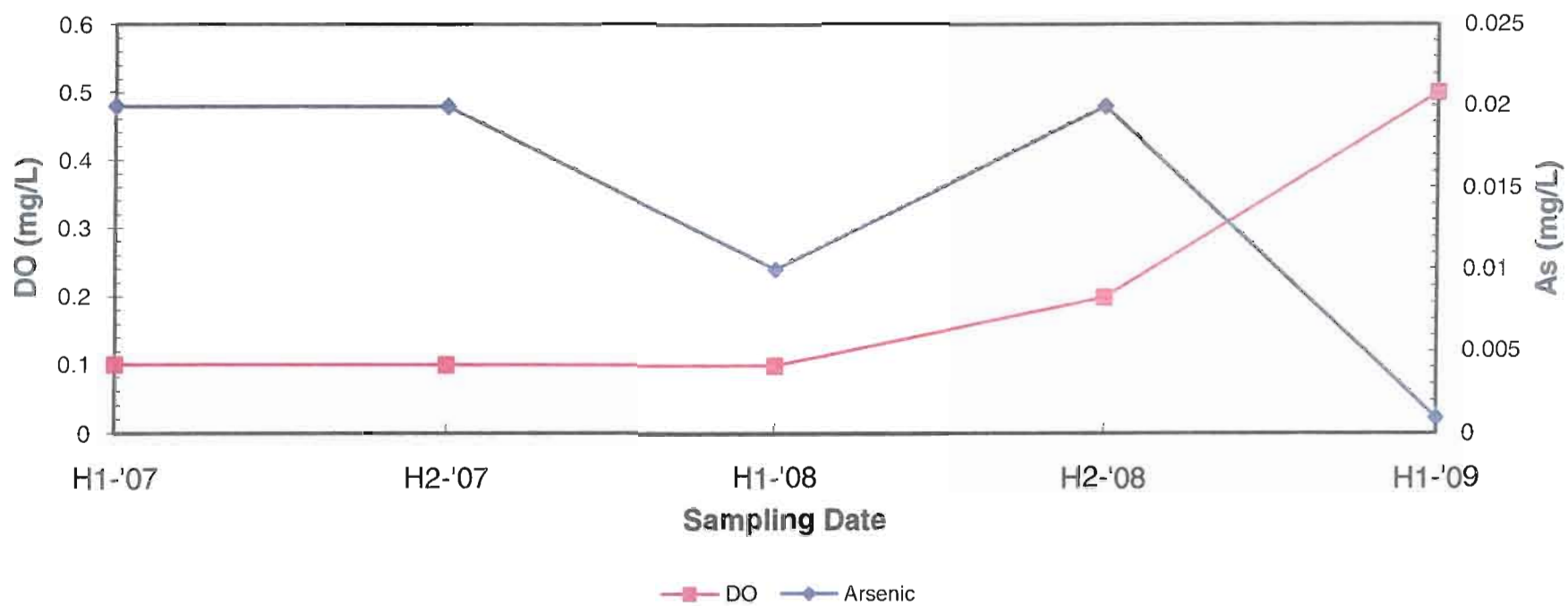
Monitoring Well GW-7



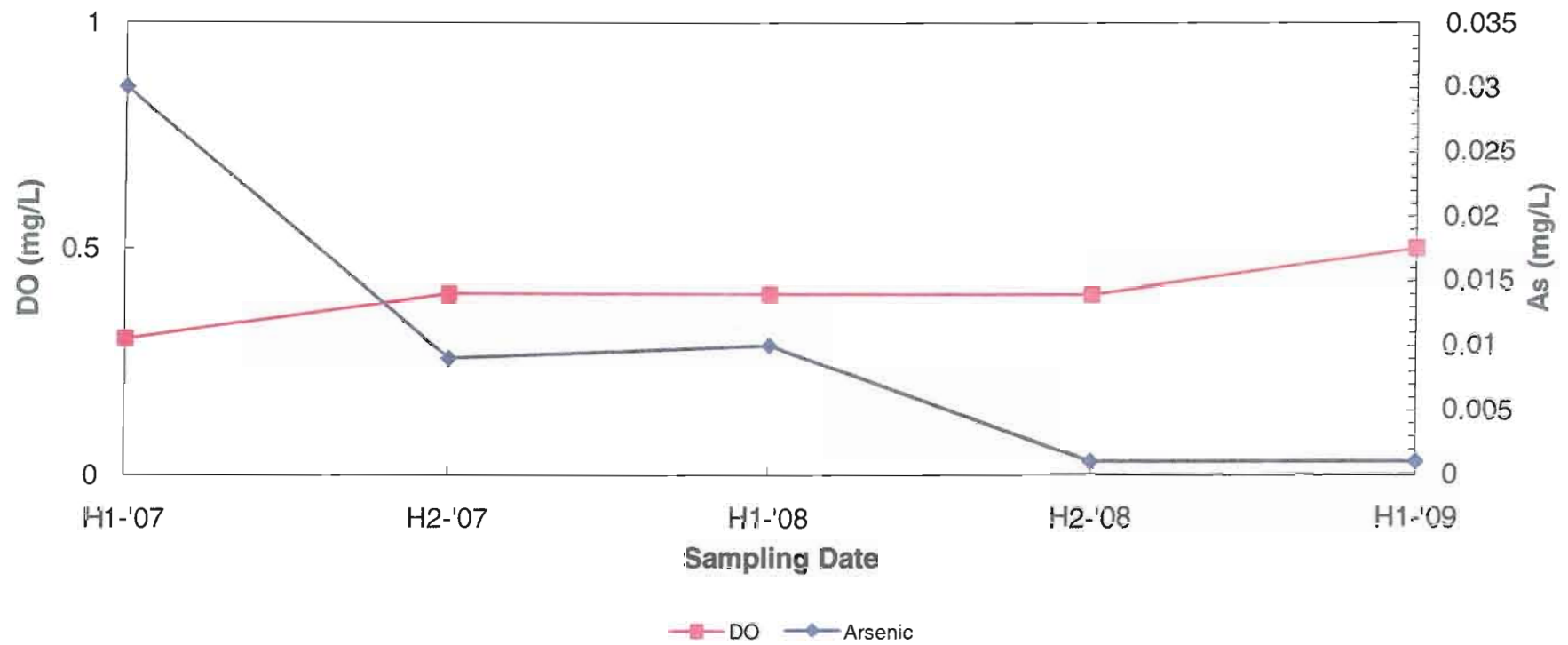
Monitoring Well GW-8



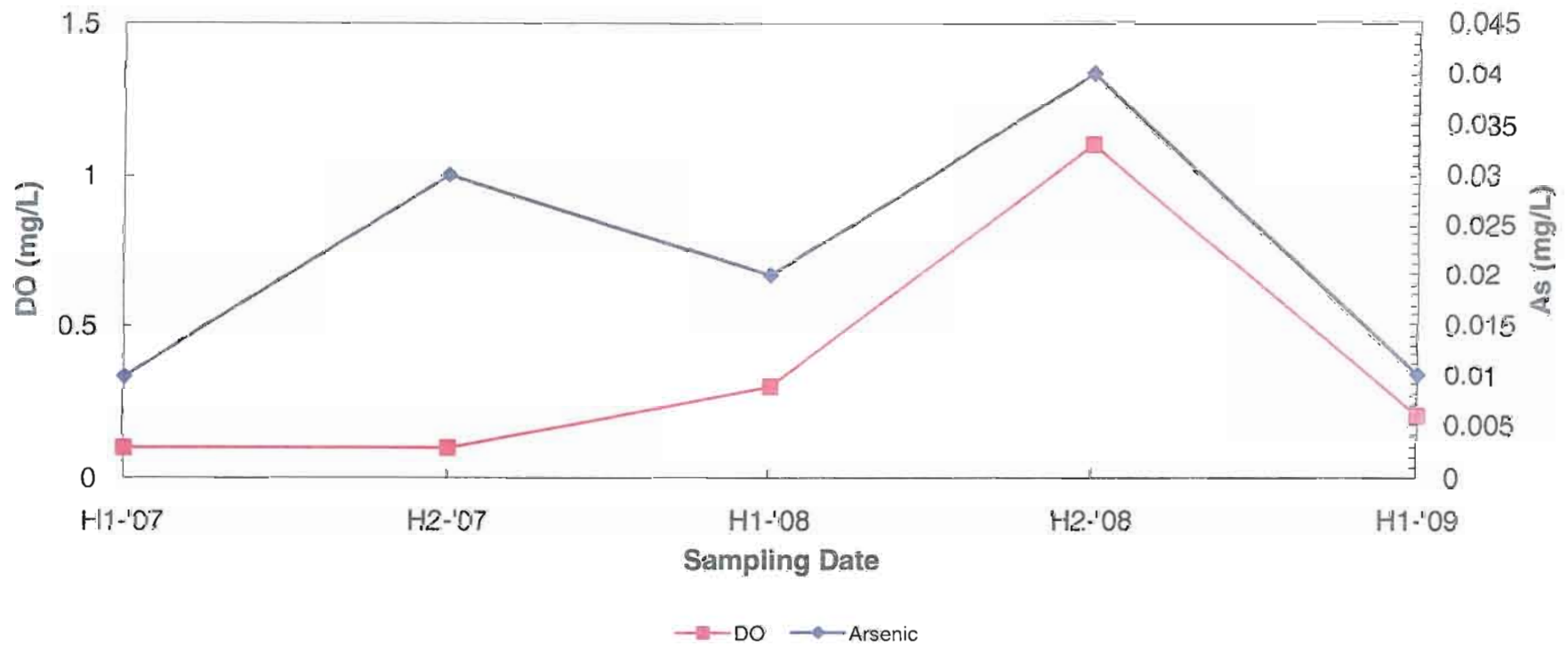
Monitoring Well GW-9



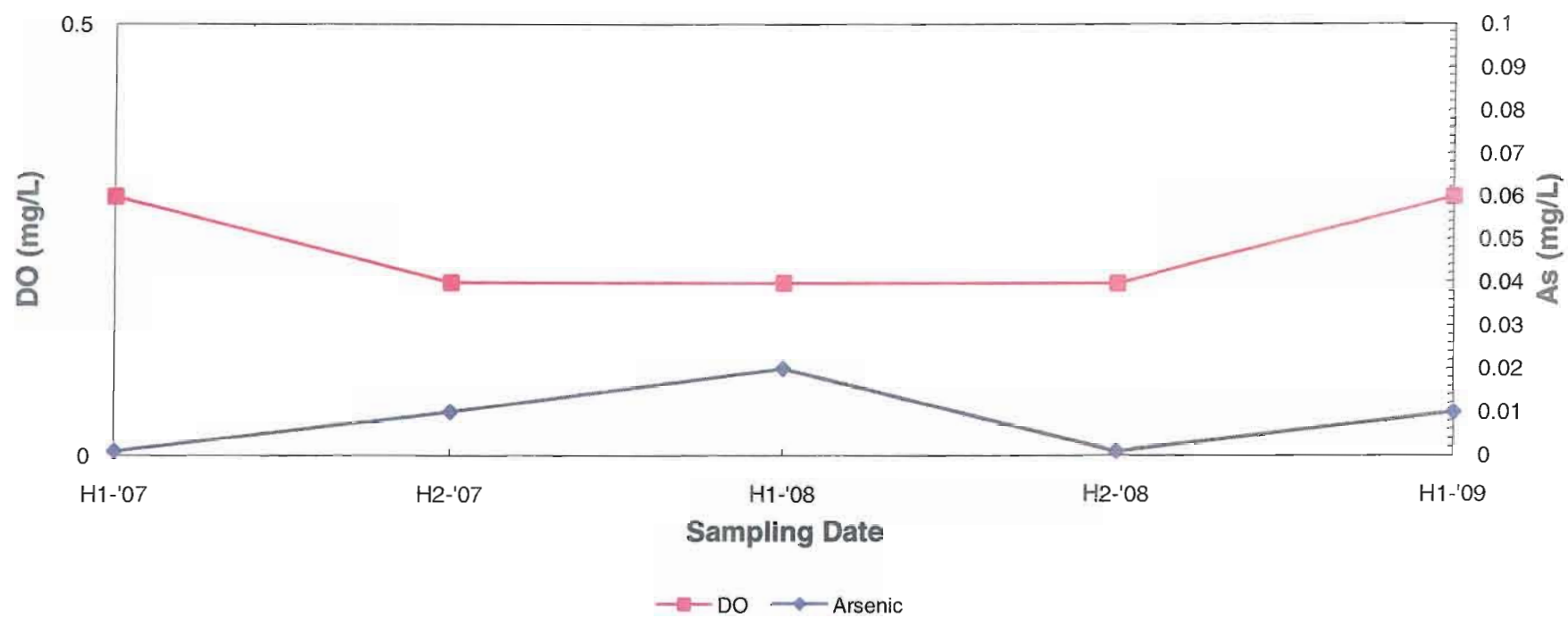
Monitoring Well GW-10



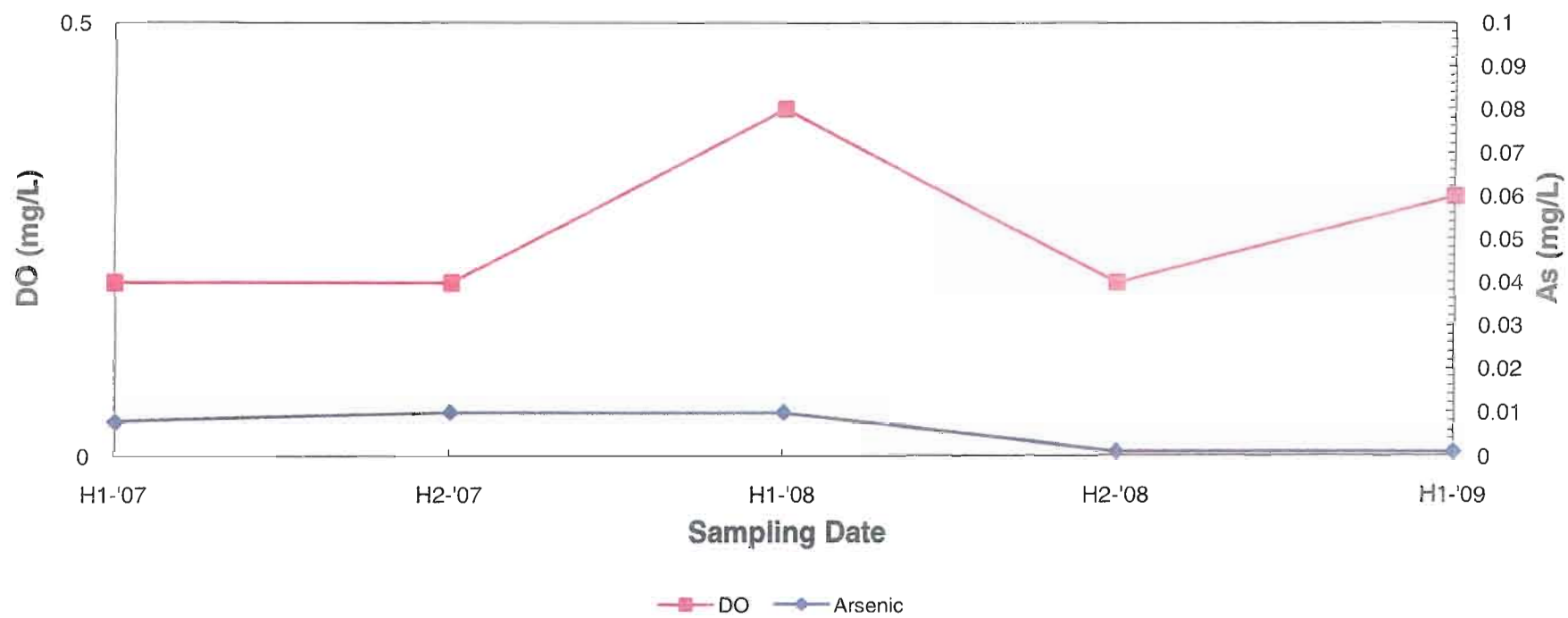
Monitoring Well GW-11



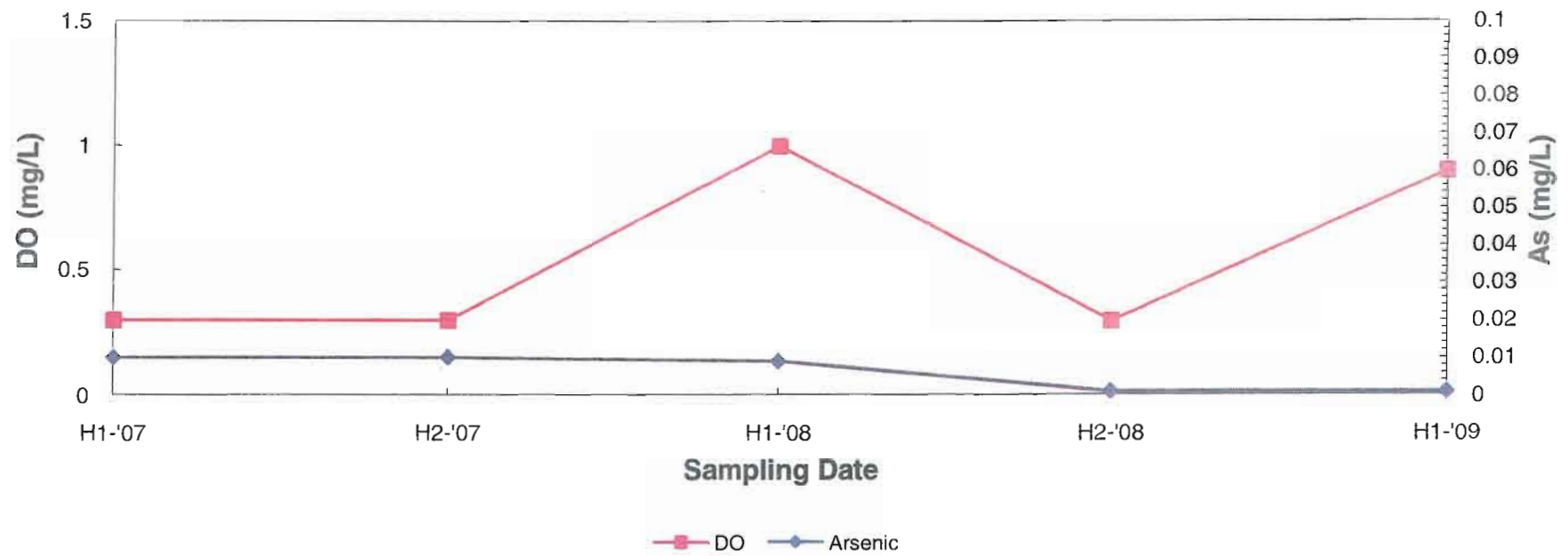
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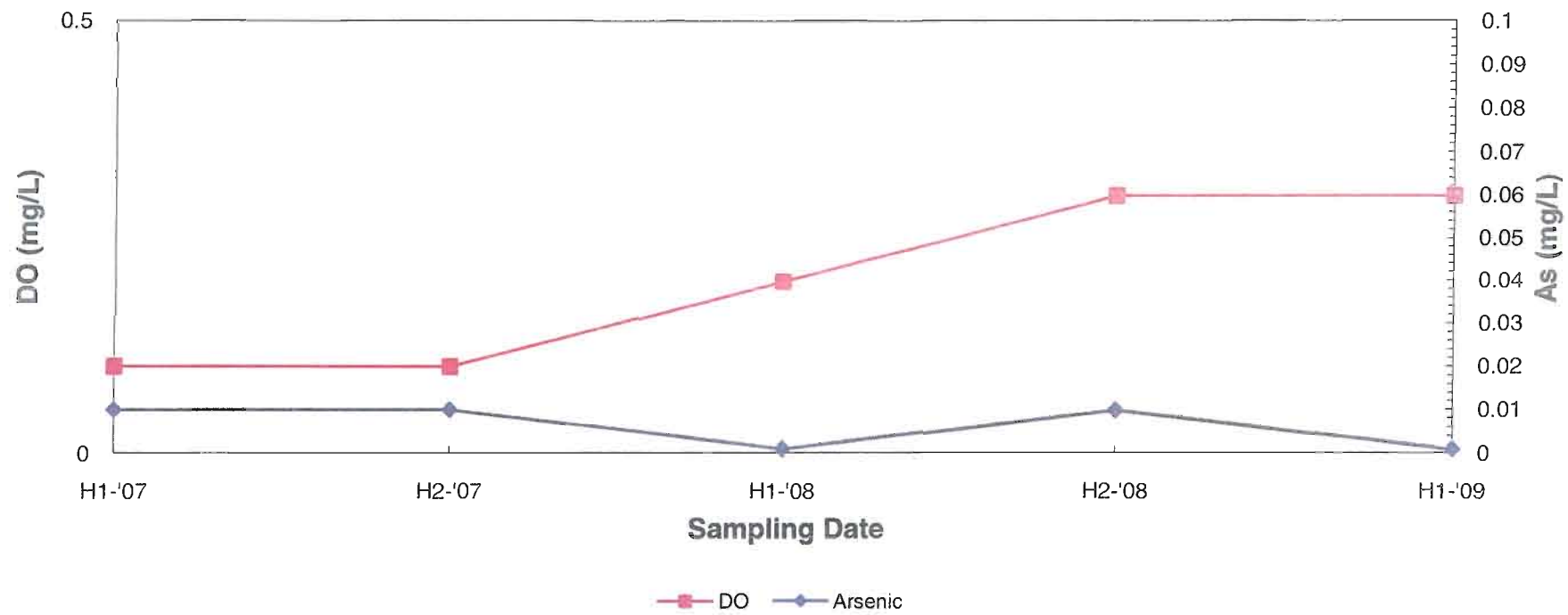
Monitoring Well GW-13



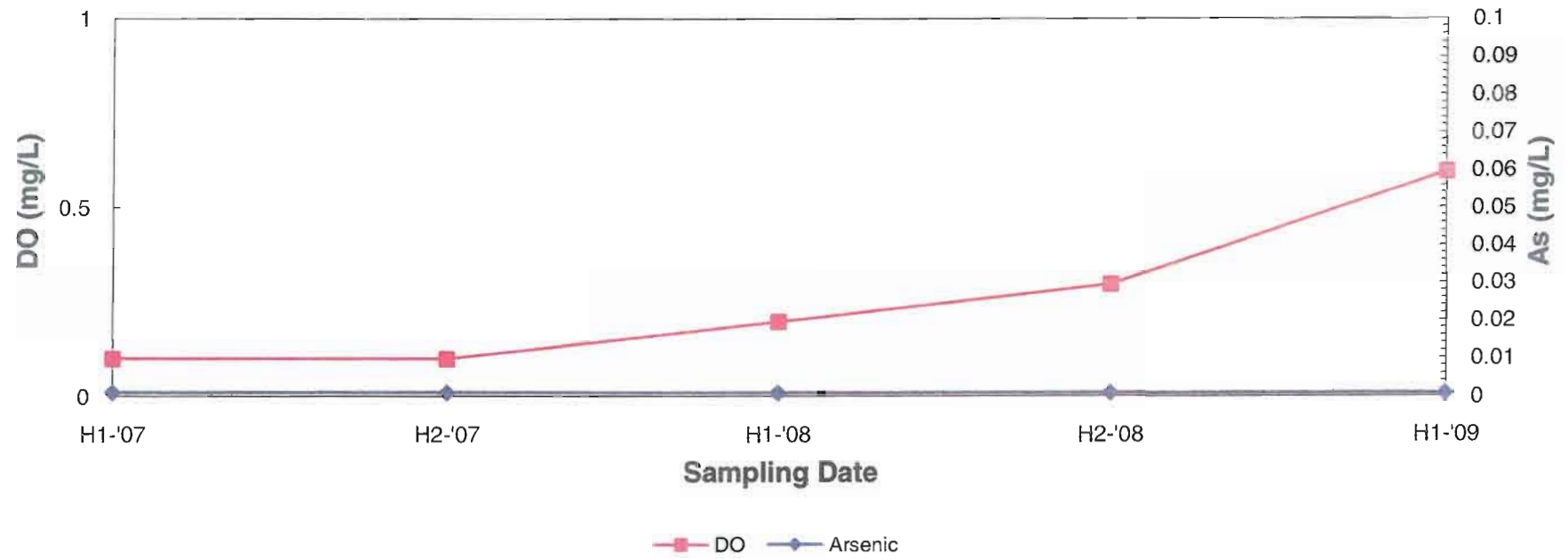
Monitoring Well GW-14



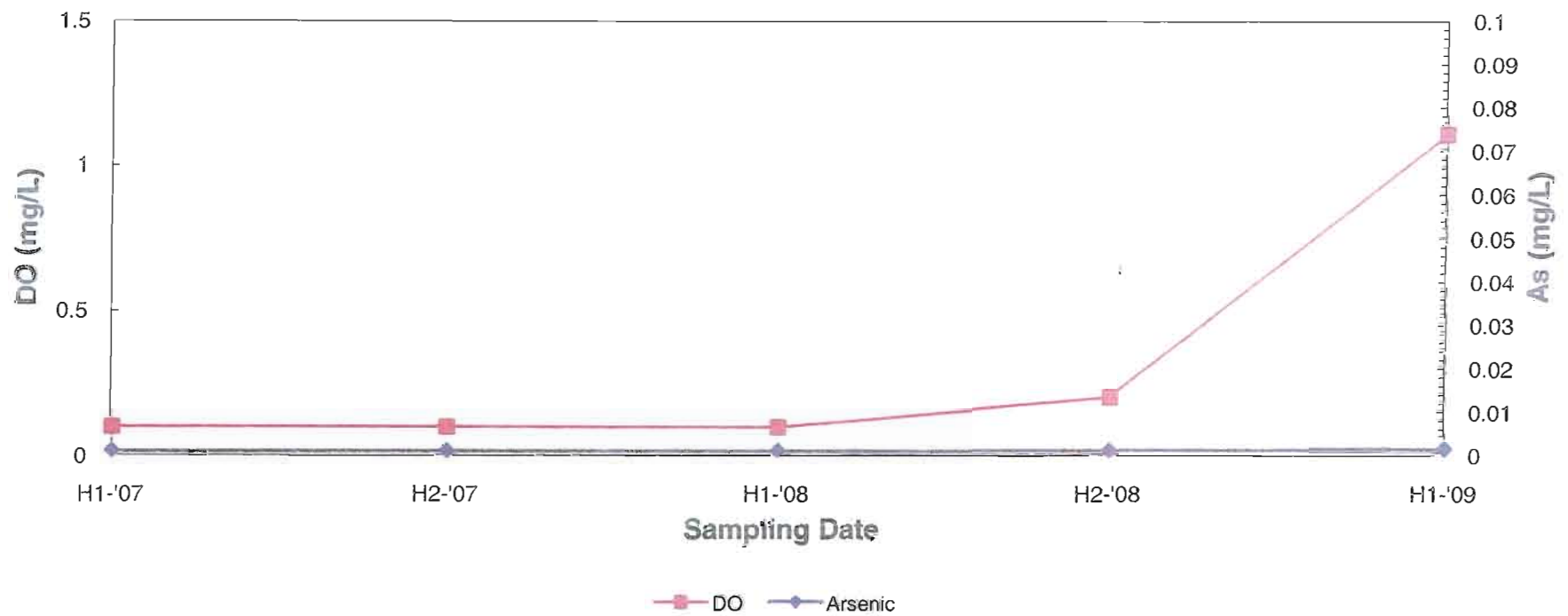
Monitoring Well GW-15



Monitoring Well GW-16

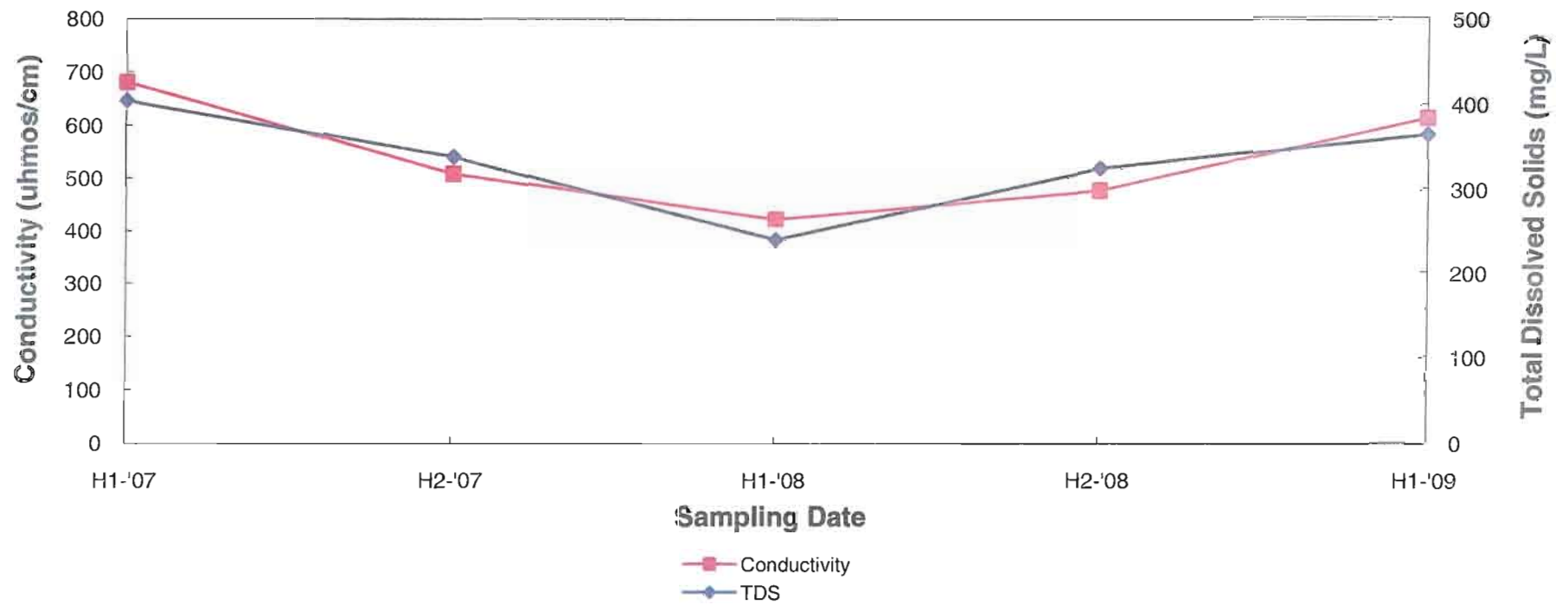


Monitoring Well GW-17

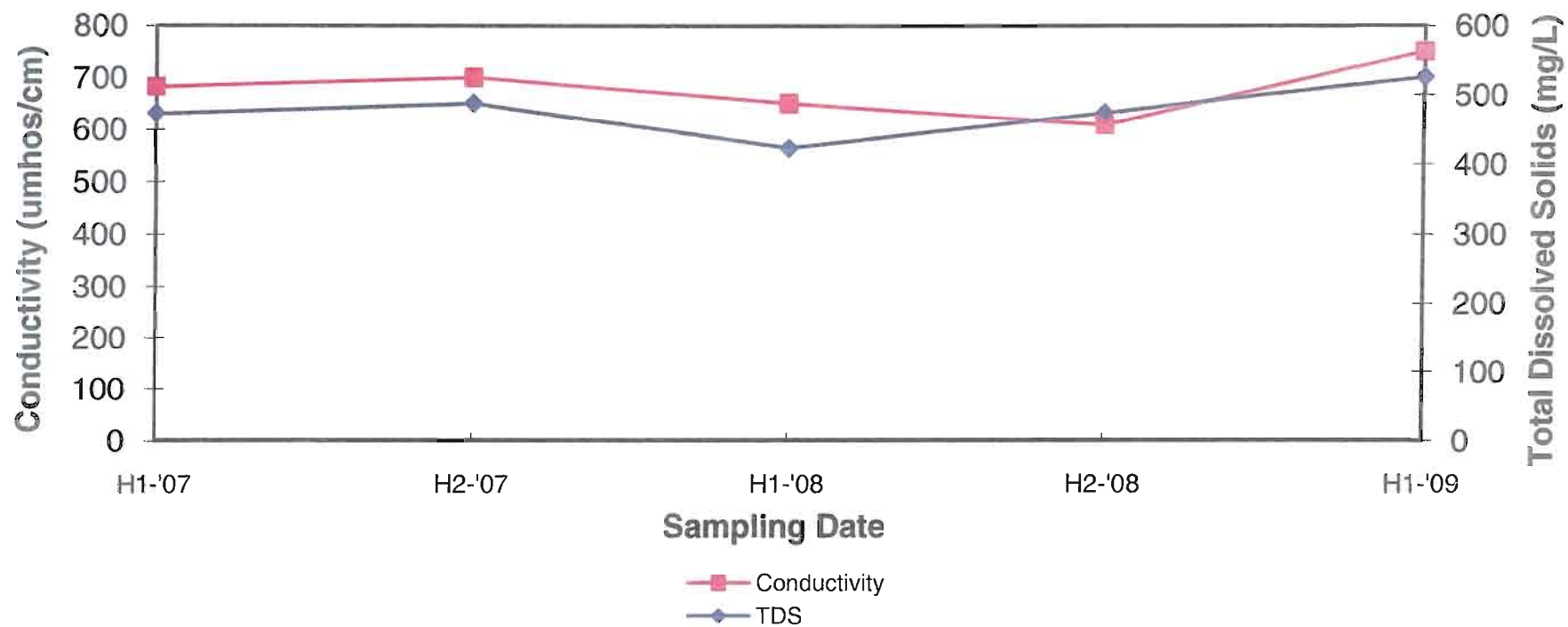


C-6 – Conductivity versus TDS

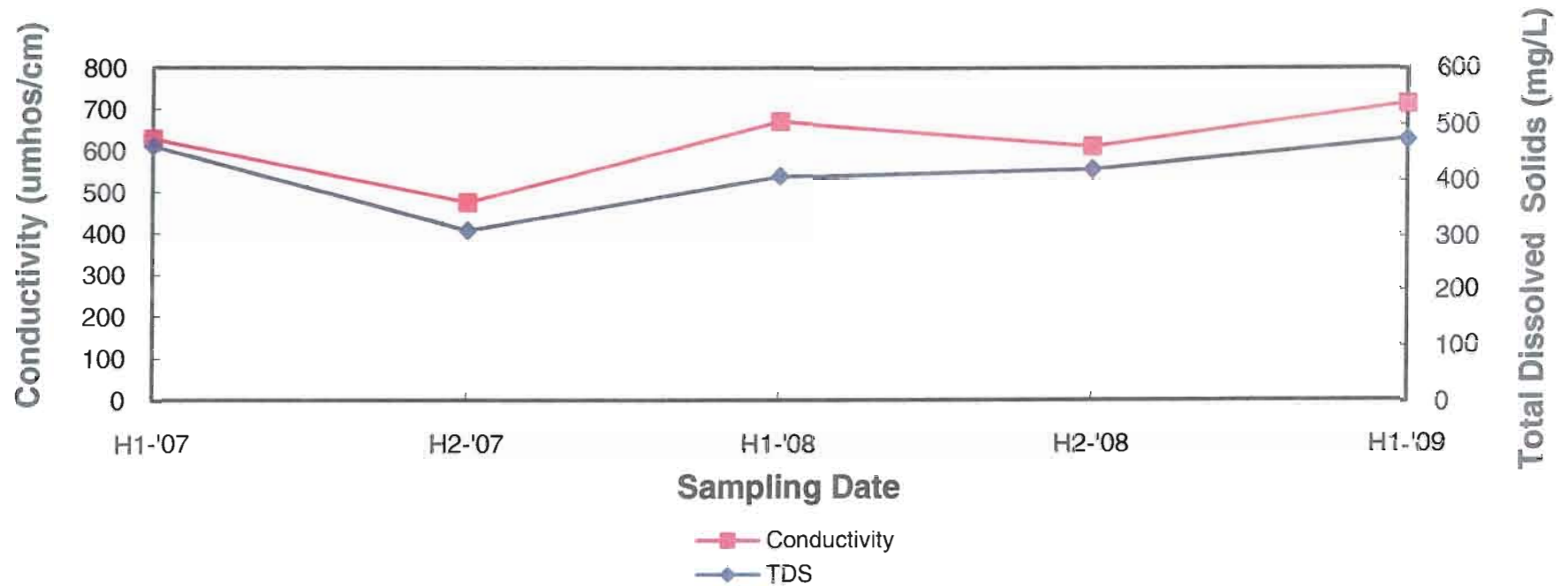
Monitoring Well BGW-1



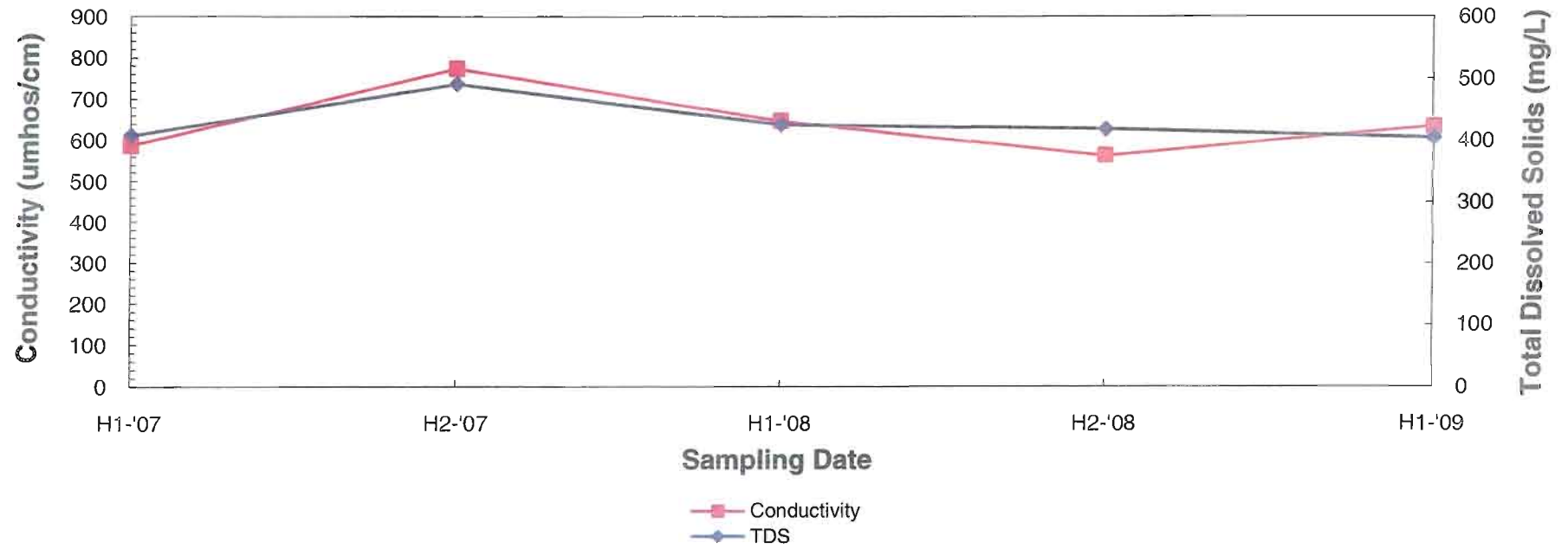
Monitoring Well GW-1



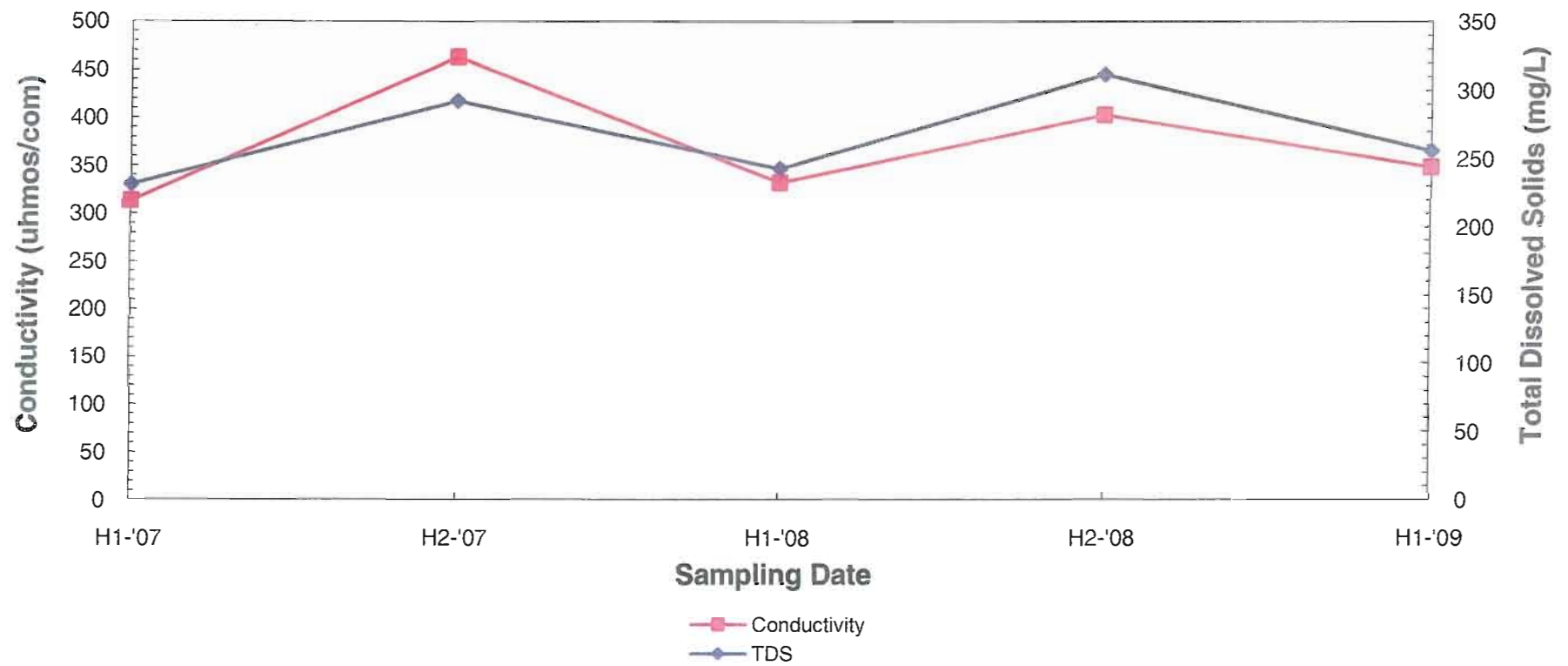
Monitoring Well GW-2



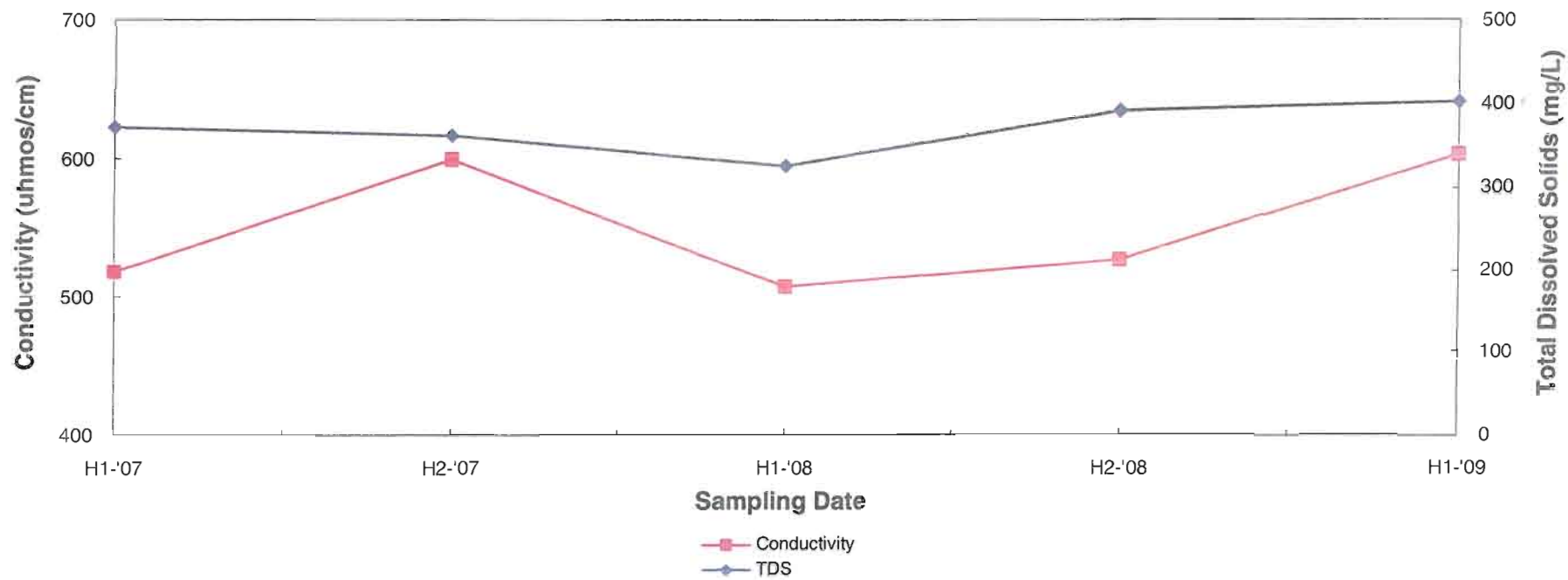
Monitoring Well GW-3



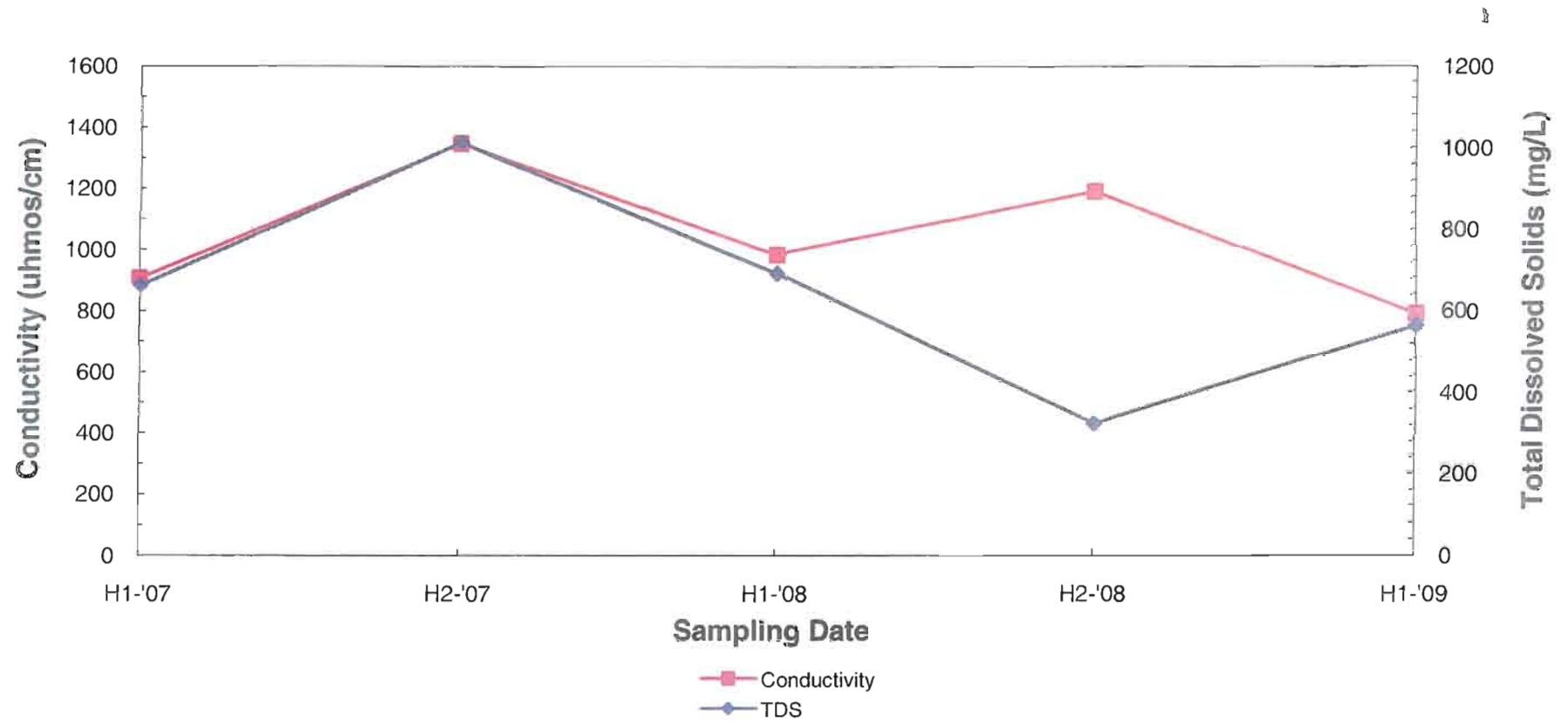
Monitoring Well GW-4



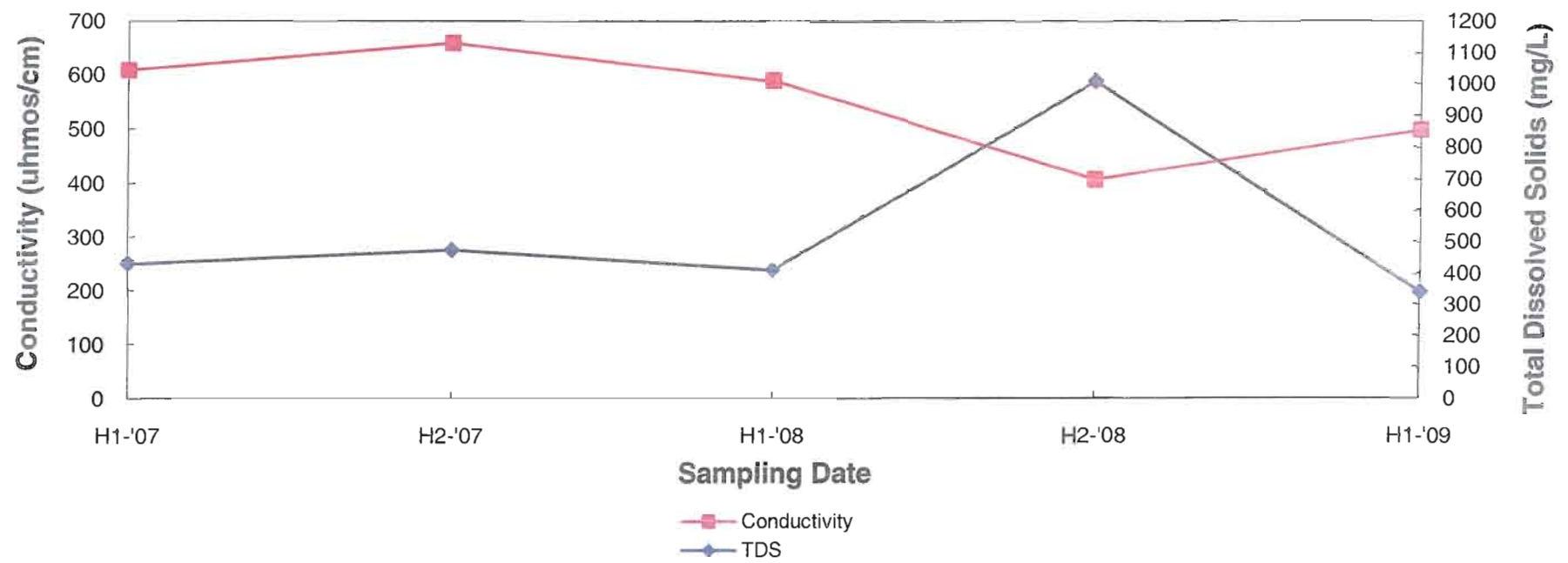
Monitoring Well GW-5



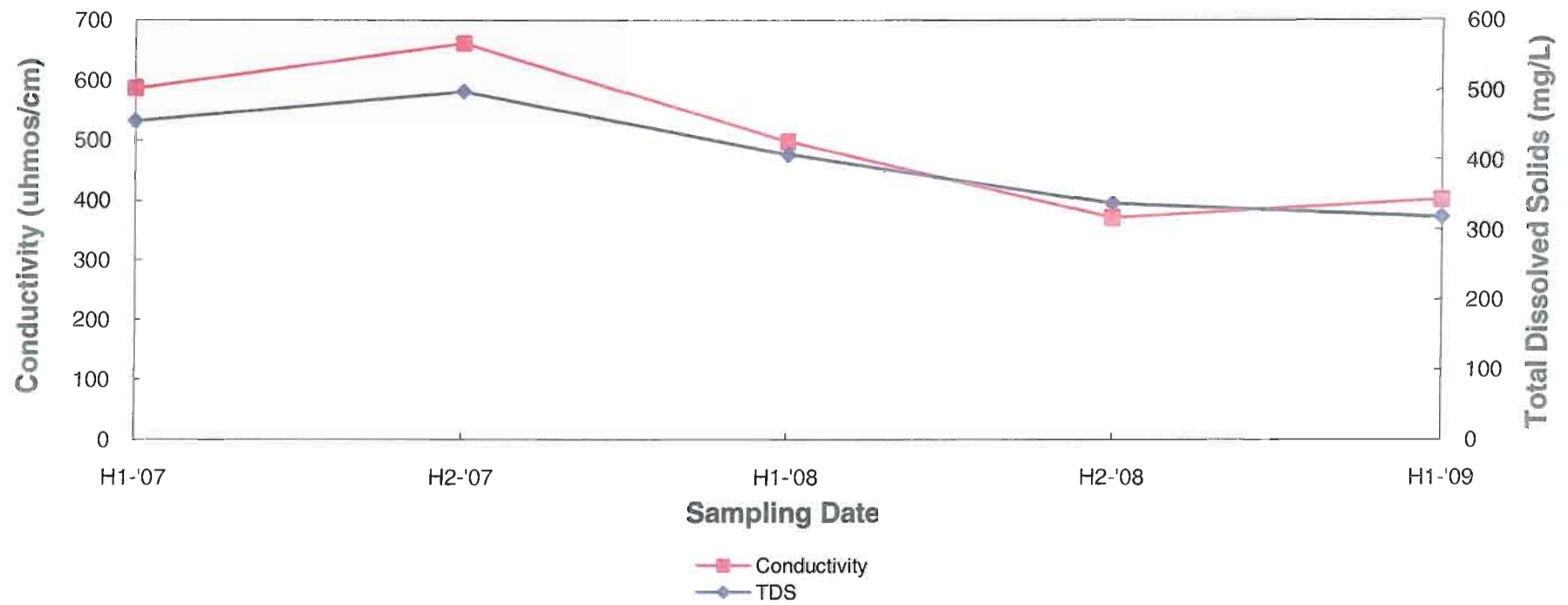
Monitoring Well GW-6



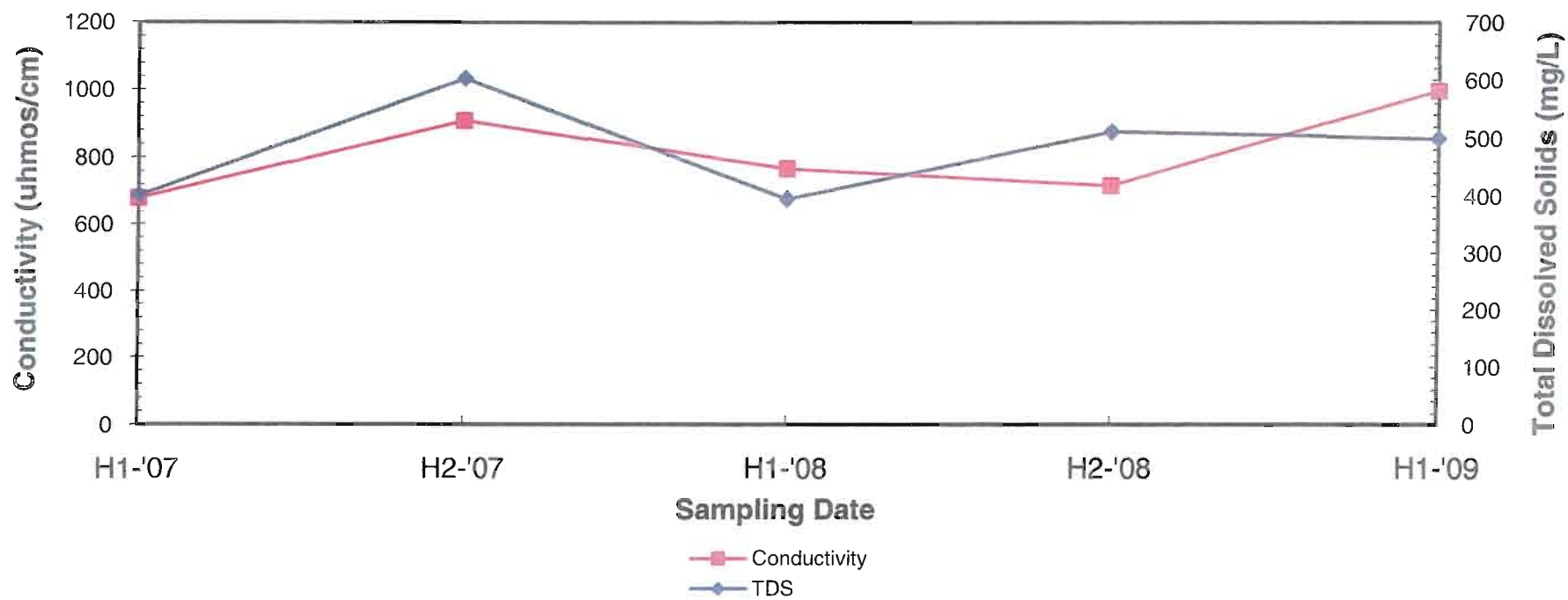
Monitoring Well GW-7



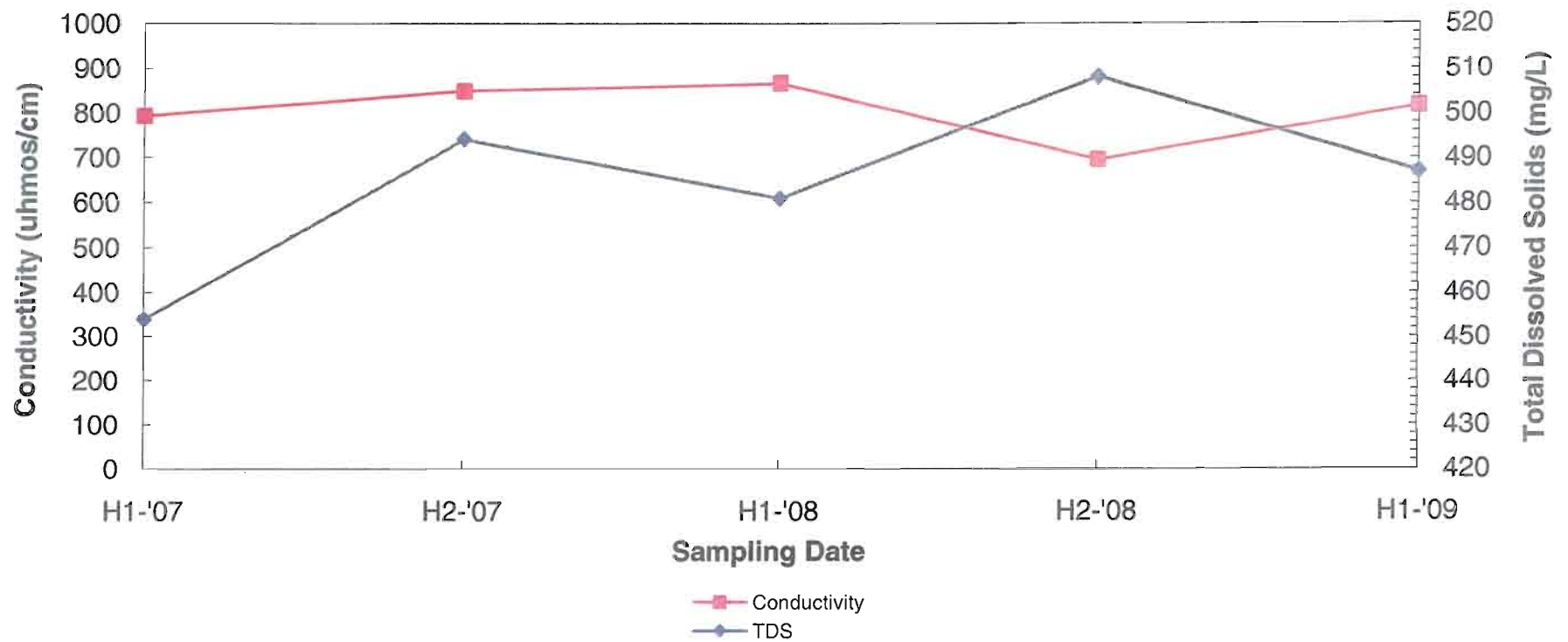
Monitoring Well GW-8



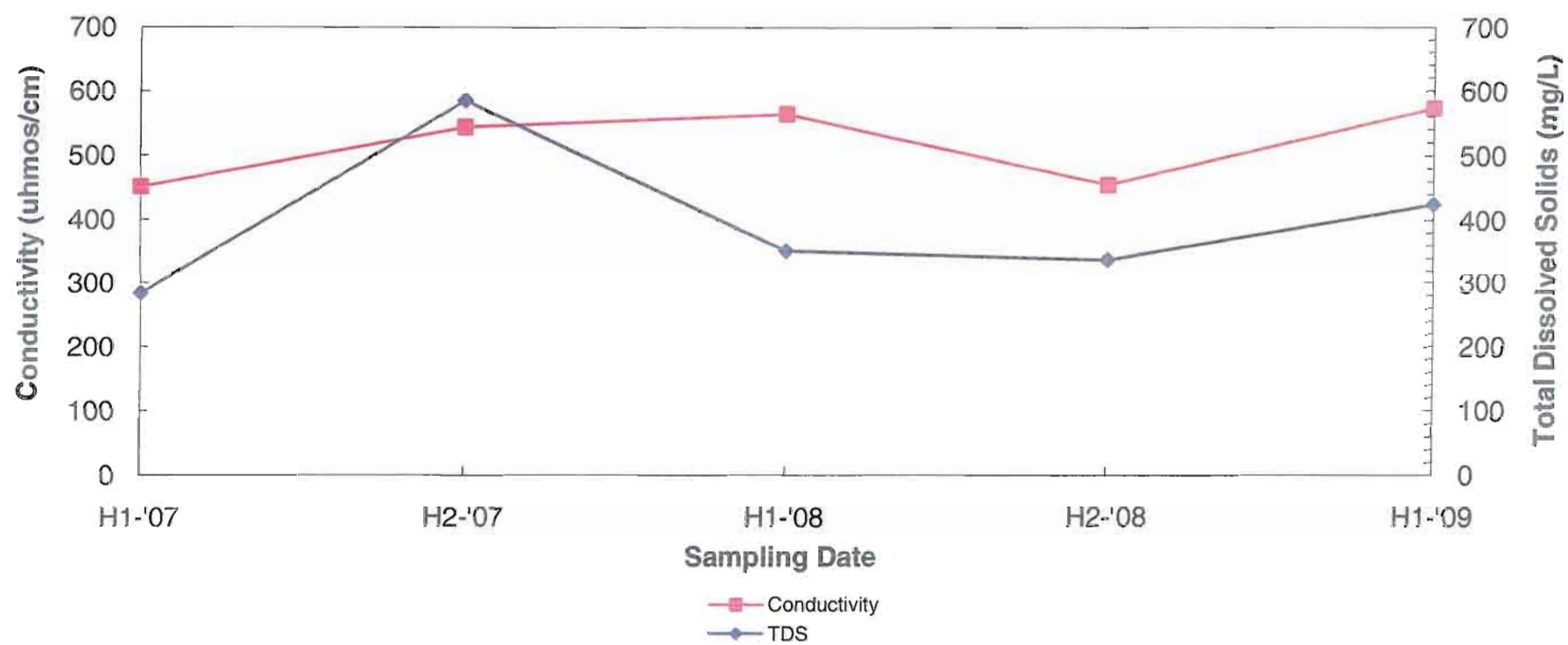
Monitoring Well GW-9



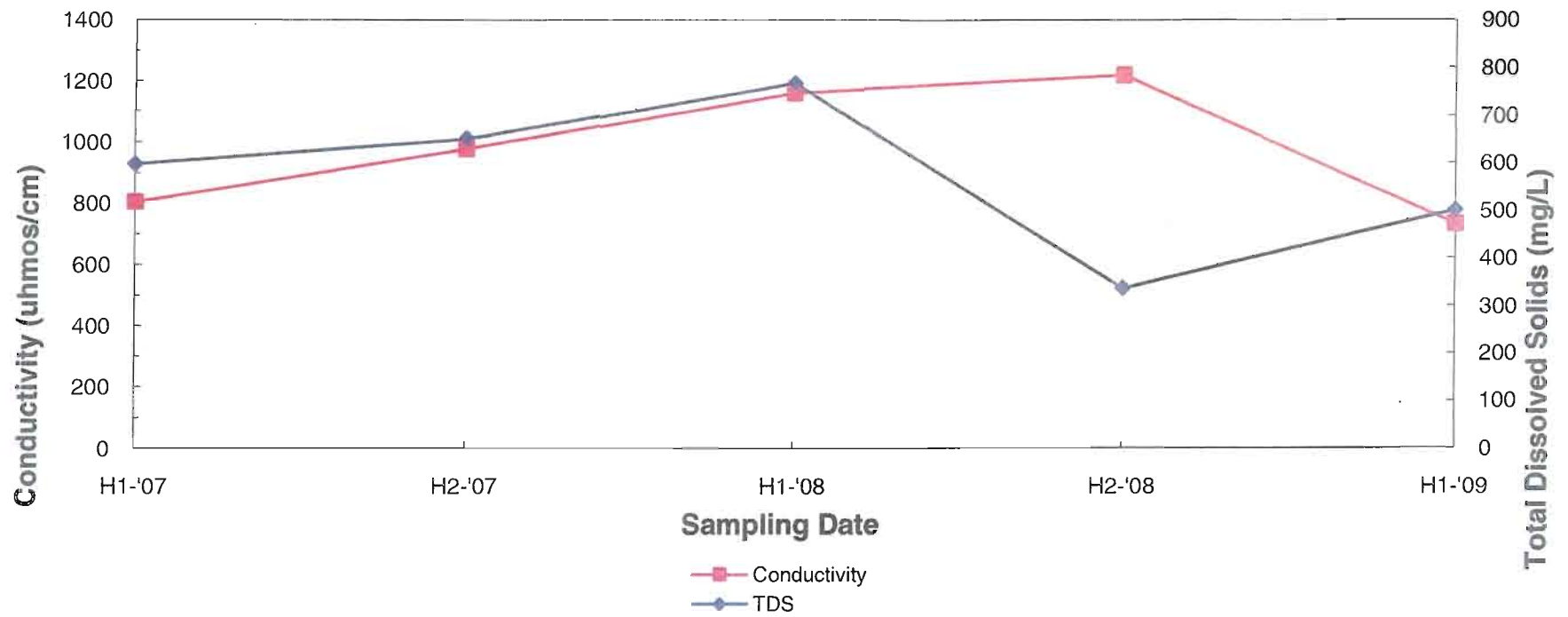
Monitoring Well GW-10



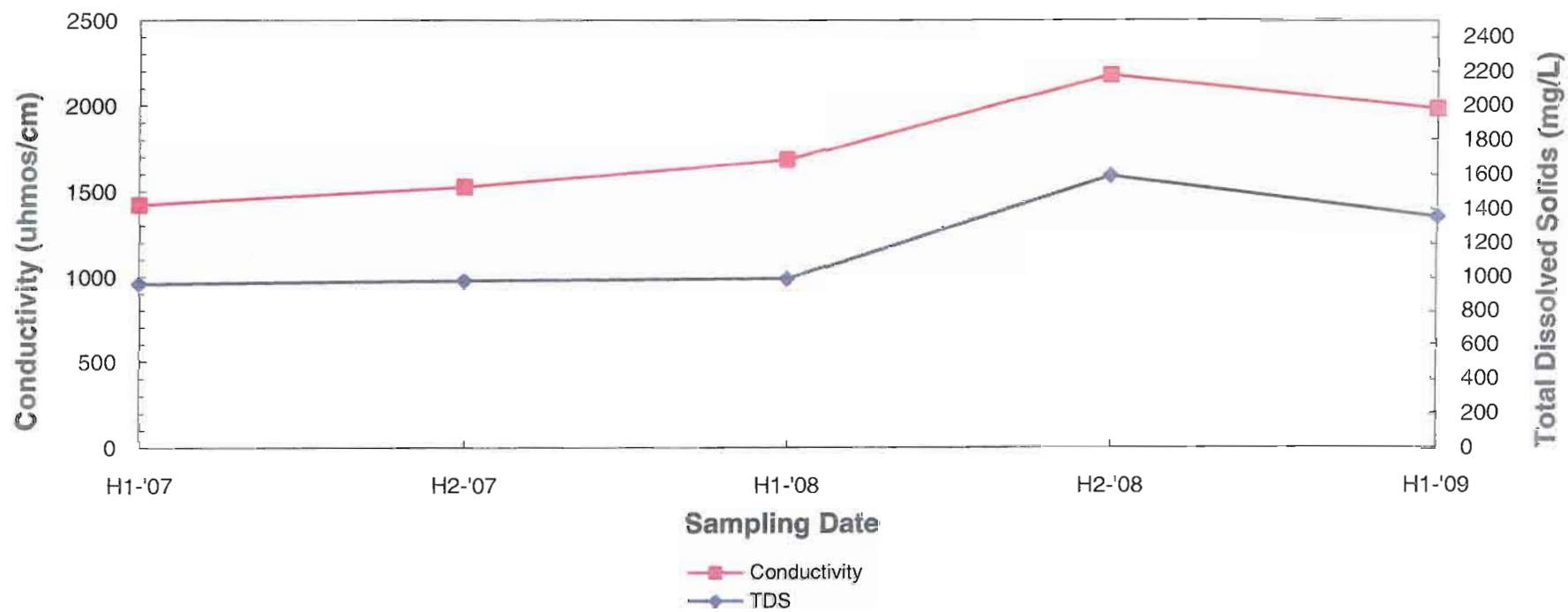
Monitoring Well GW-11



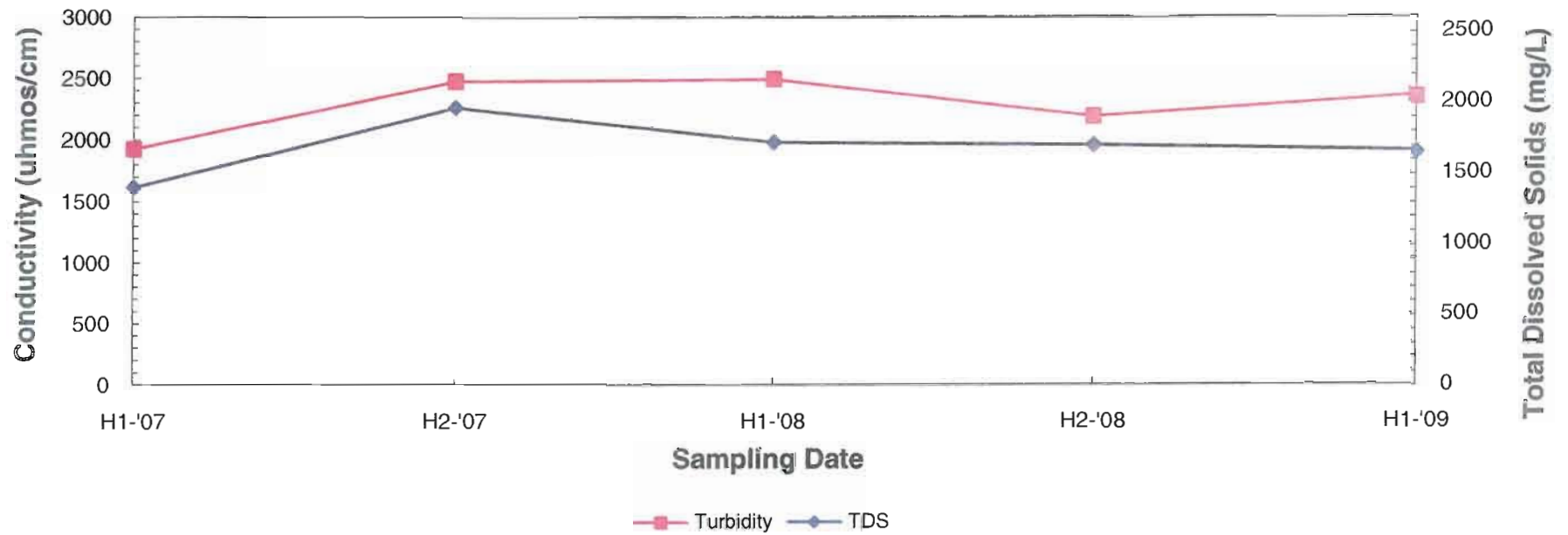
Monitoring Well GW-12



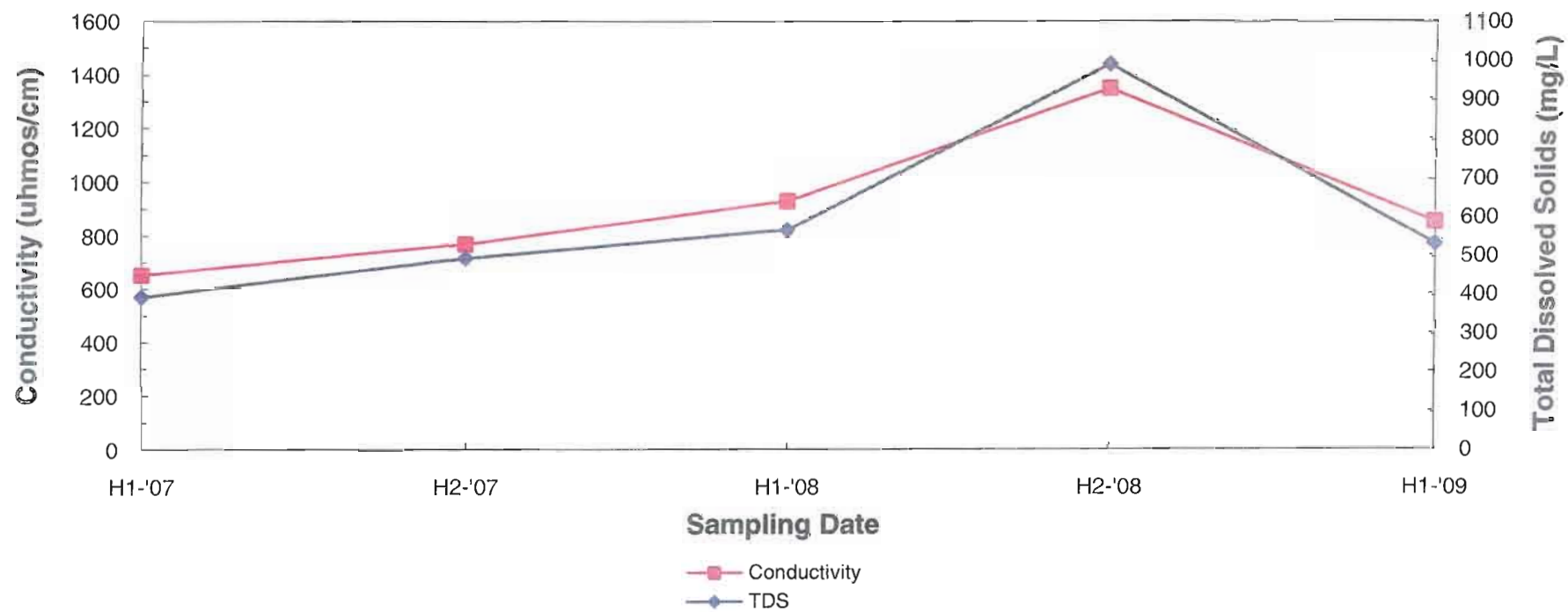
Monitoring Well GW-13



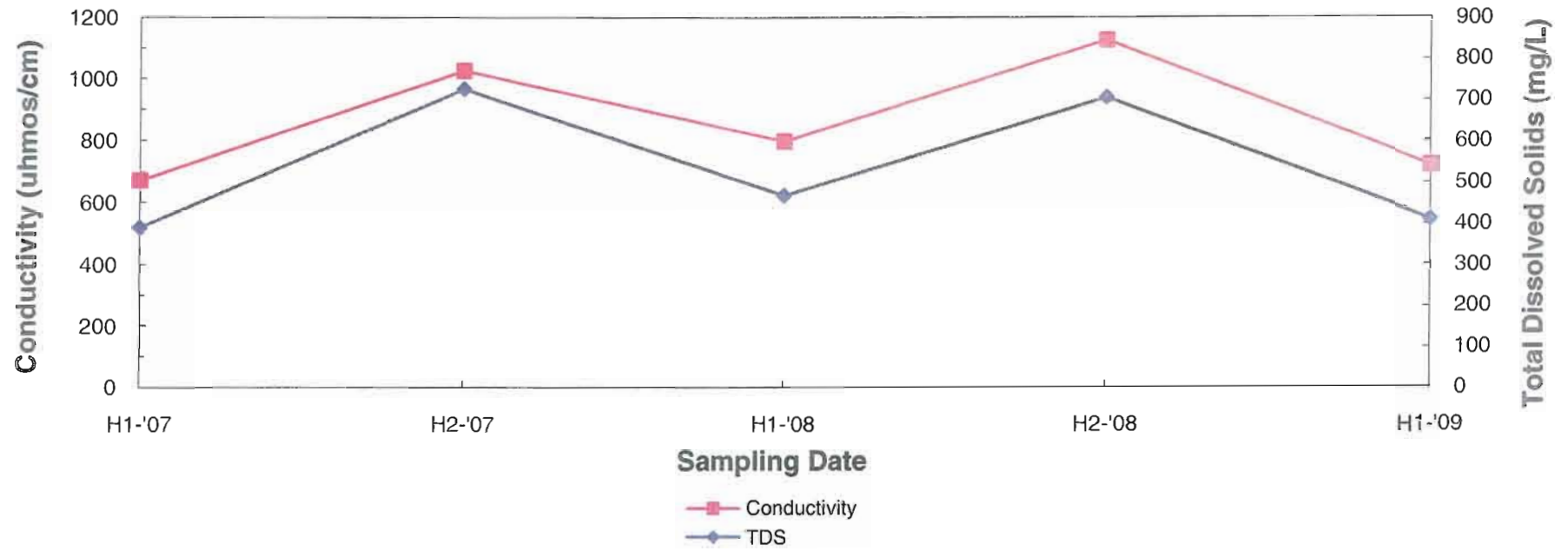
Monitoring Well GW-14



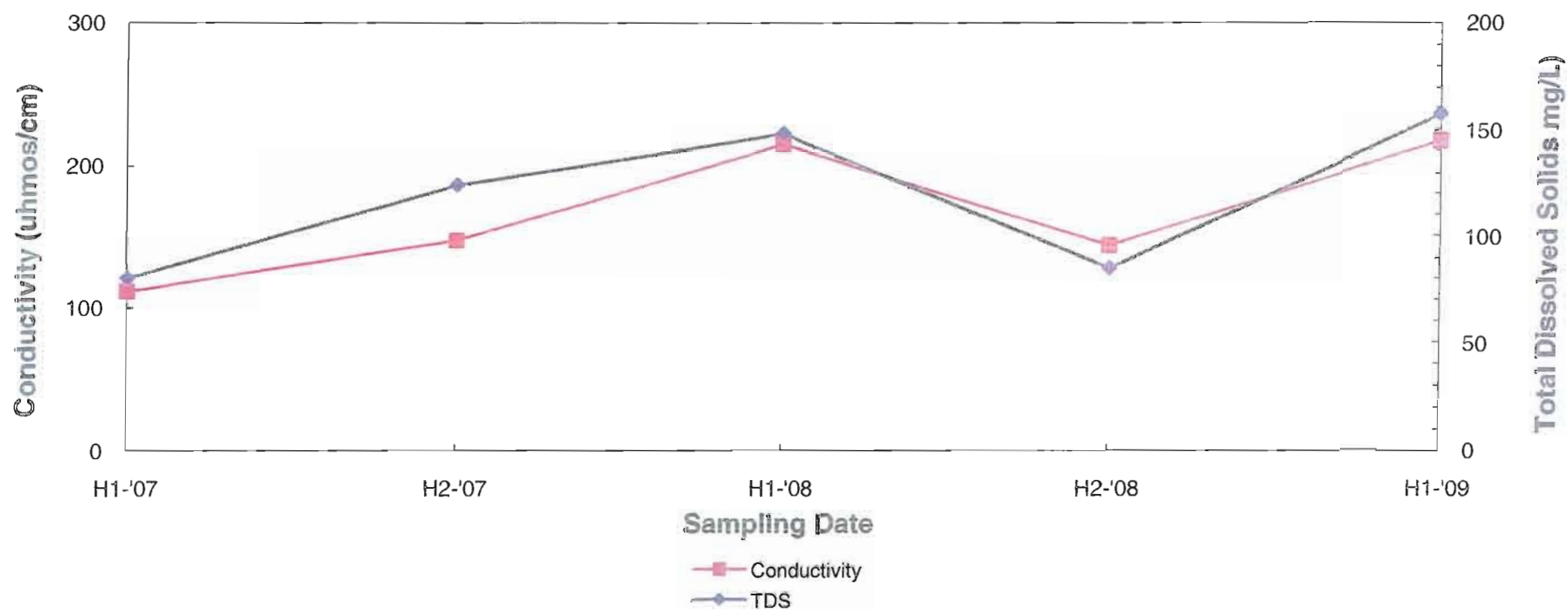
Monitoring Well GW-15



Monitoring Well GW-16



Monitoring Well GW-17

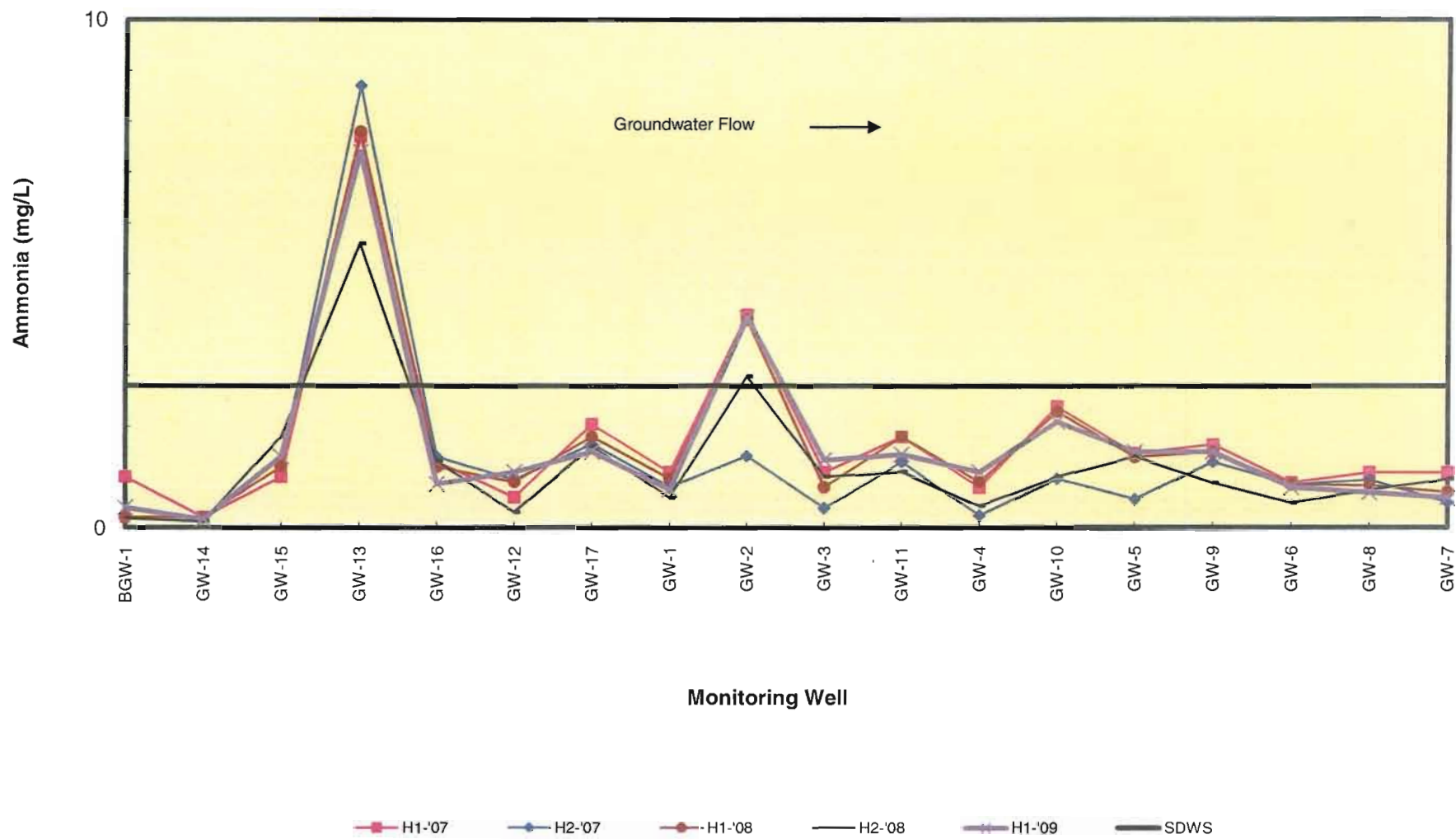


APPENDIX D

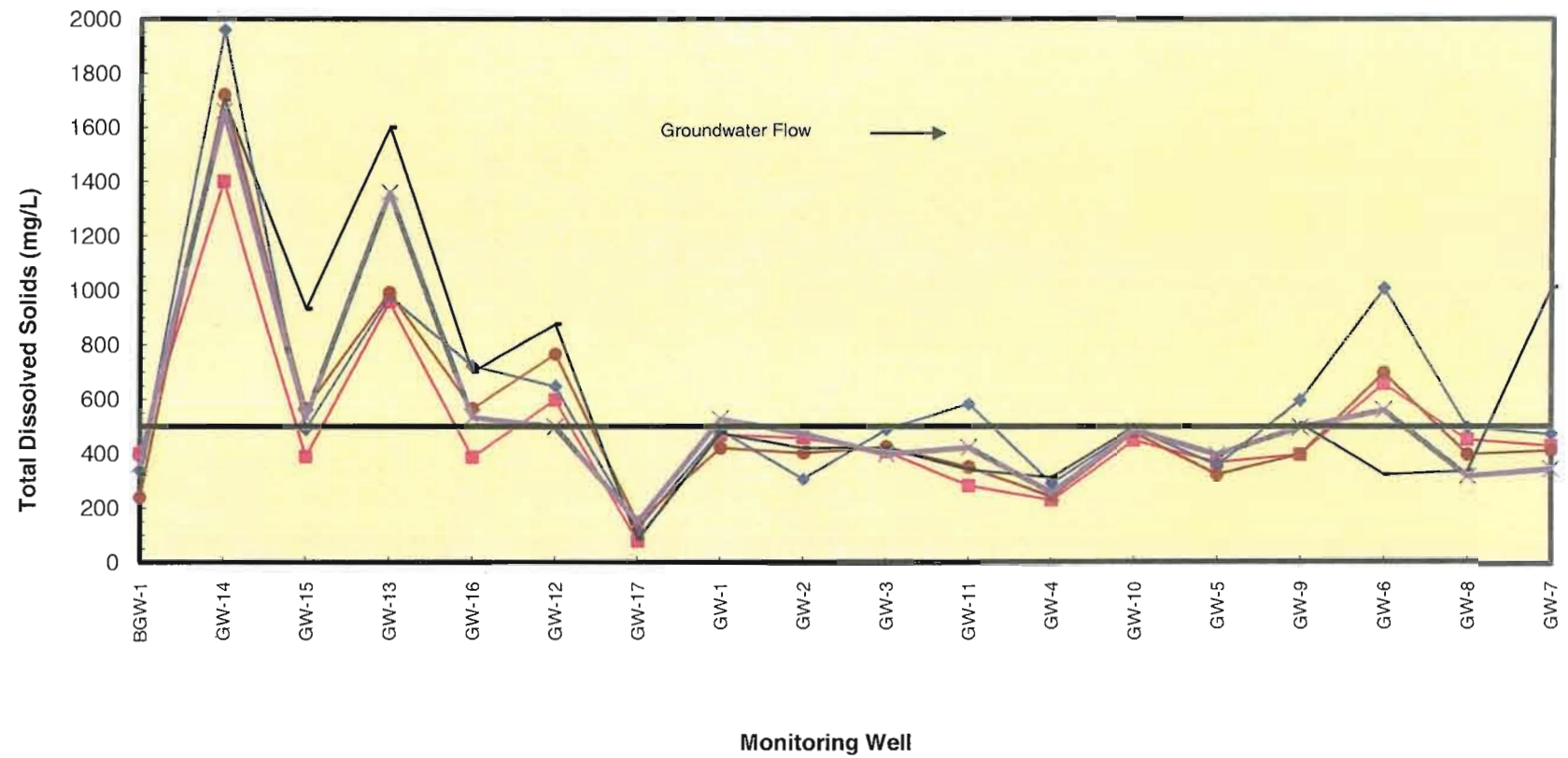
Cross-Gradient Graphs

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TAMPA

Cross-Gradient Ammonia Concentration Graph

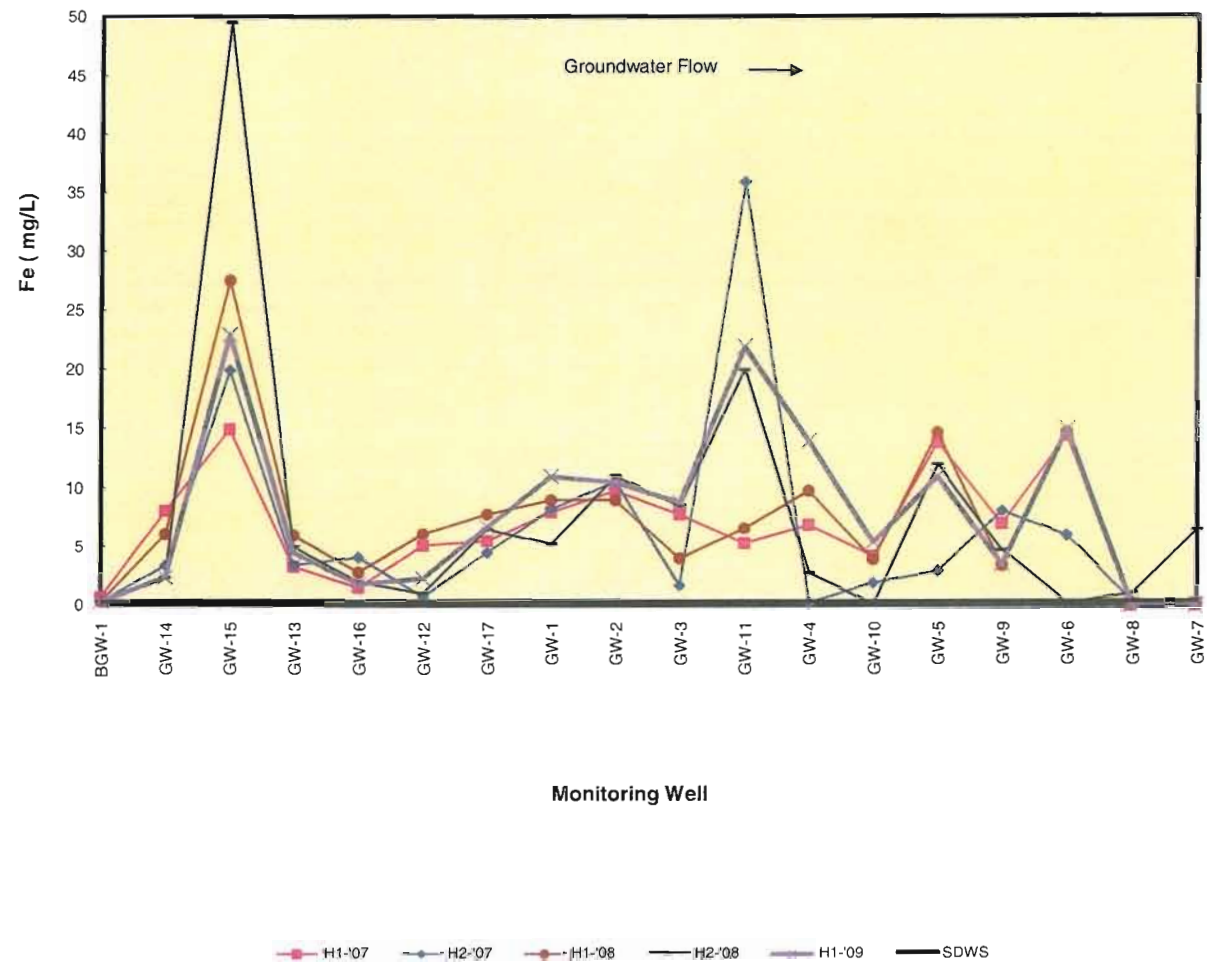


Cross-Gradient TDS Concentration Graph

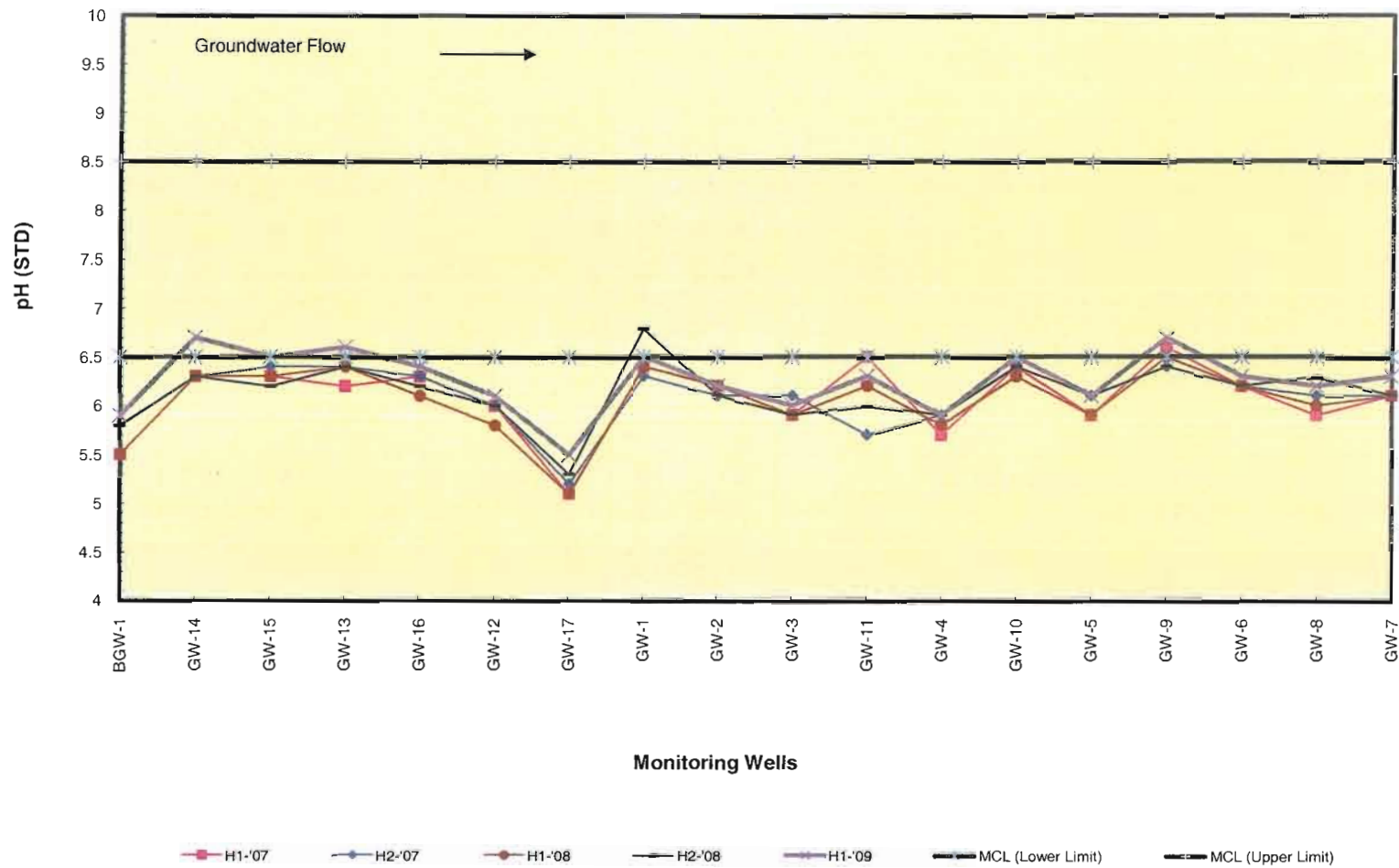


■ H1-'07
 ◆ H2-'07
 ● H1-'08
 — H2-'08
 × H1-'09
 — SDWS

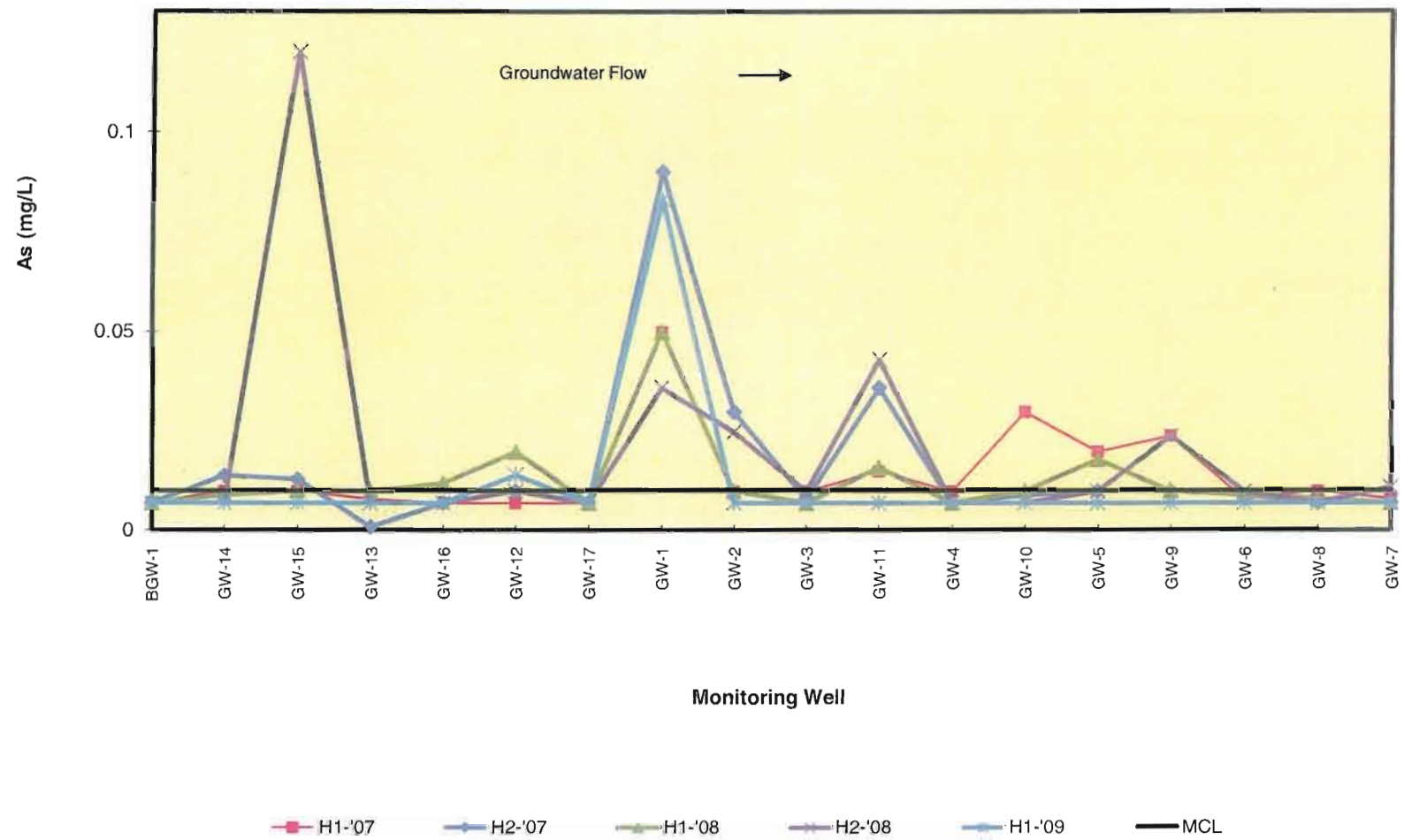
Cross-Gradient Iron Concentration Graph



Cross-Gradient pH Concentration Graph



Cross-Gradient Arsenic Concentration Graph



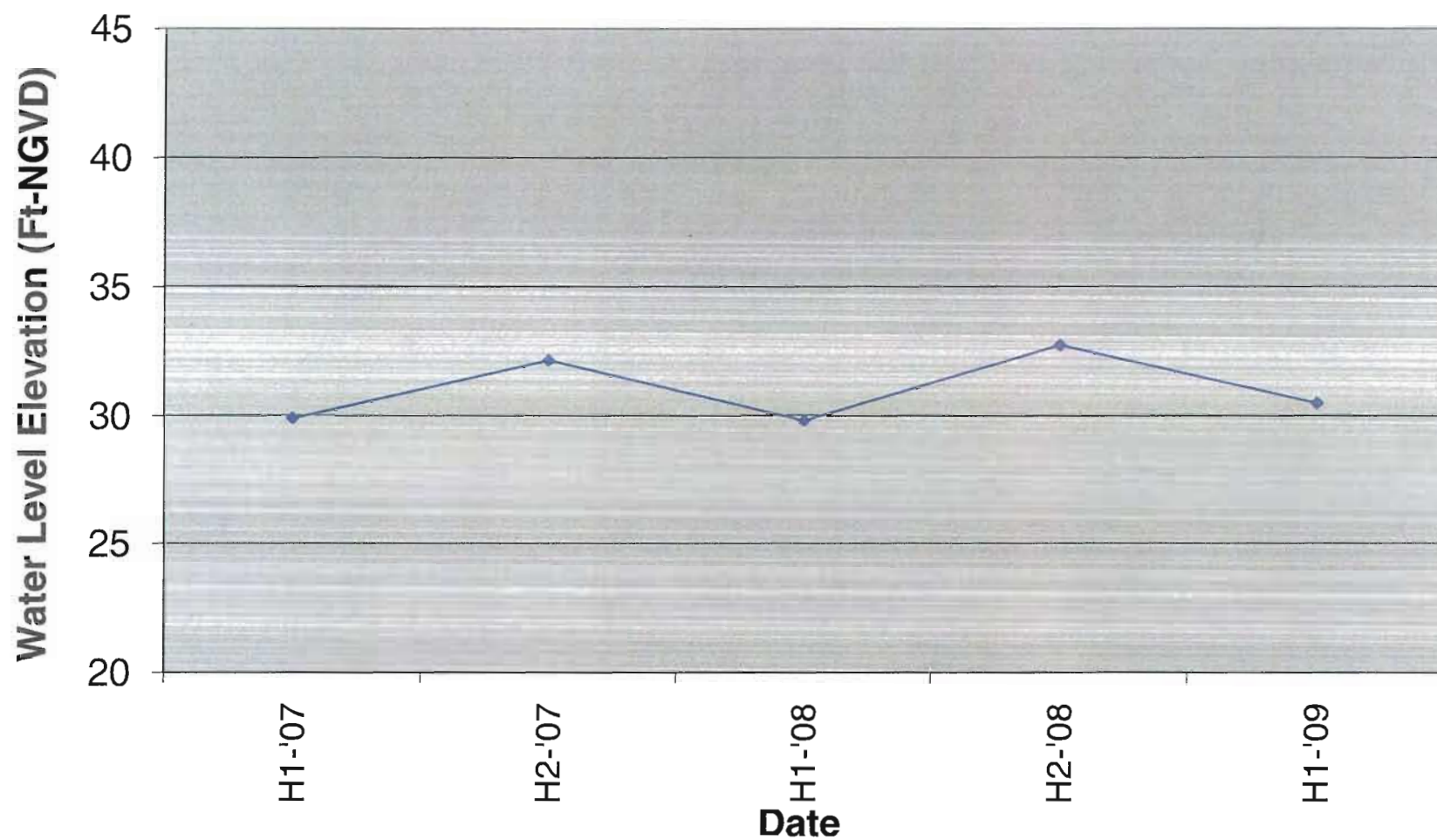
APPENDIX E
Hydrographs

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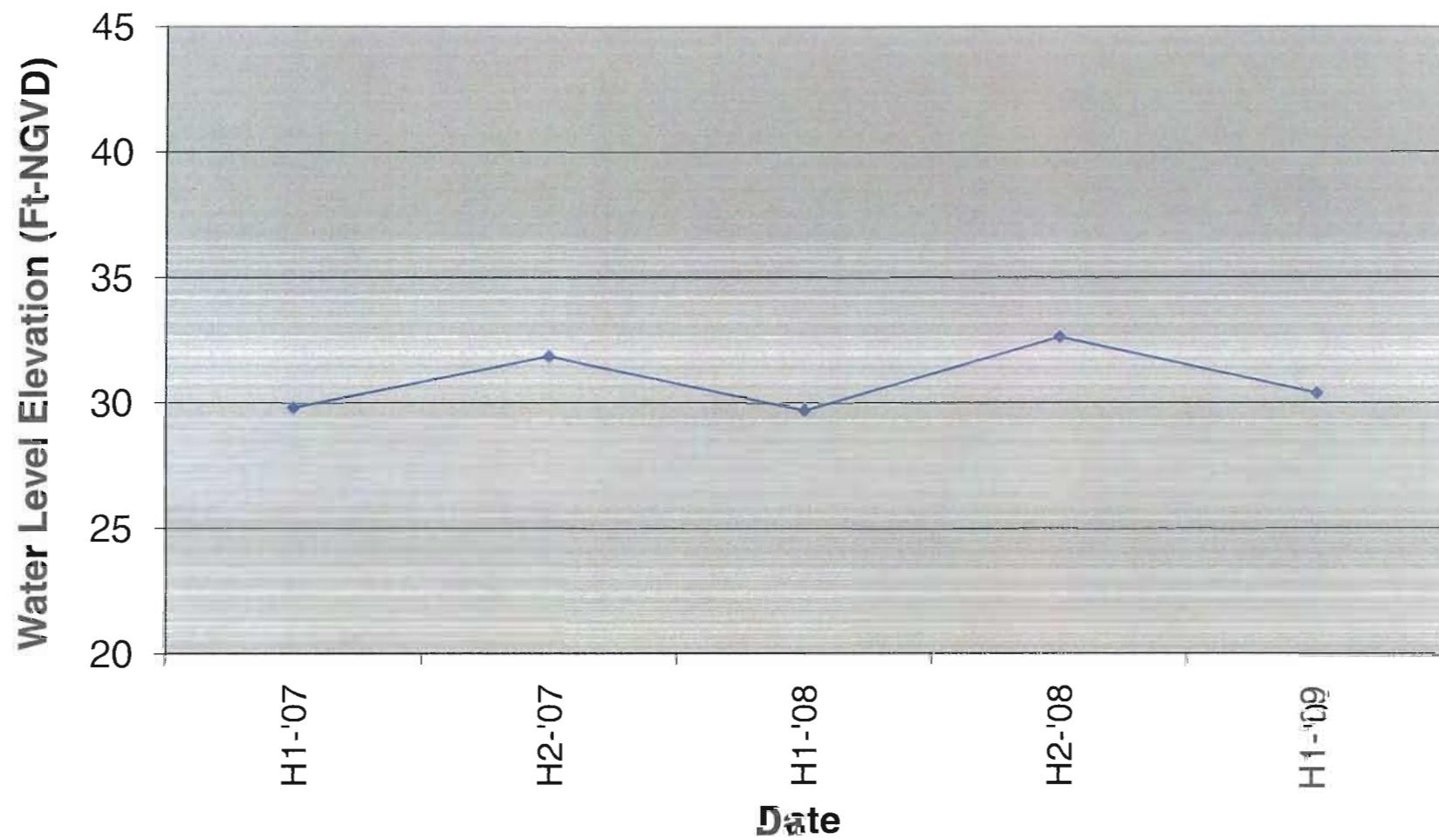
MAY 18 2010

SOUTHWEST DISTRICT
TAMPA

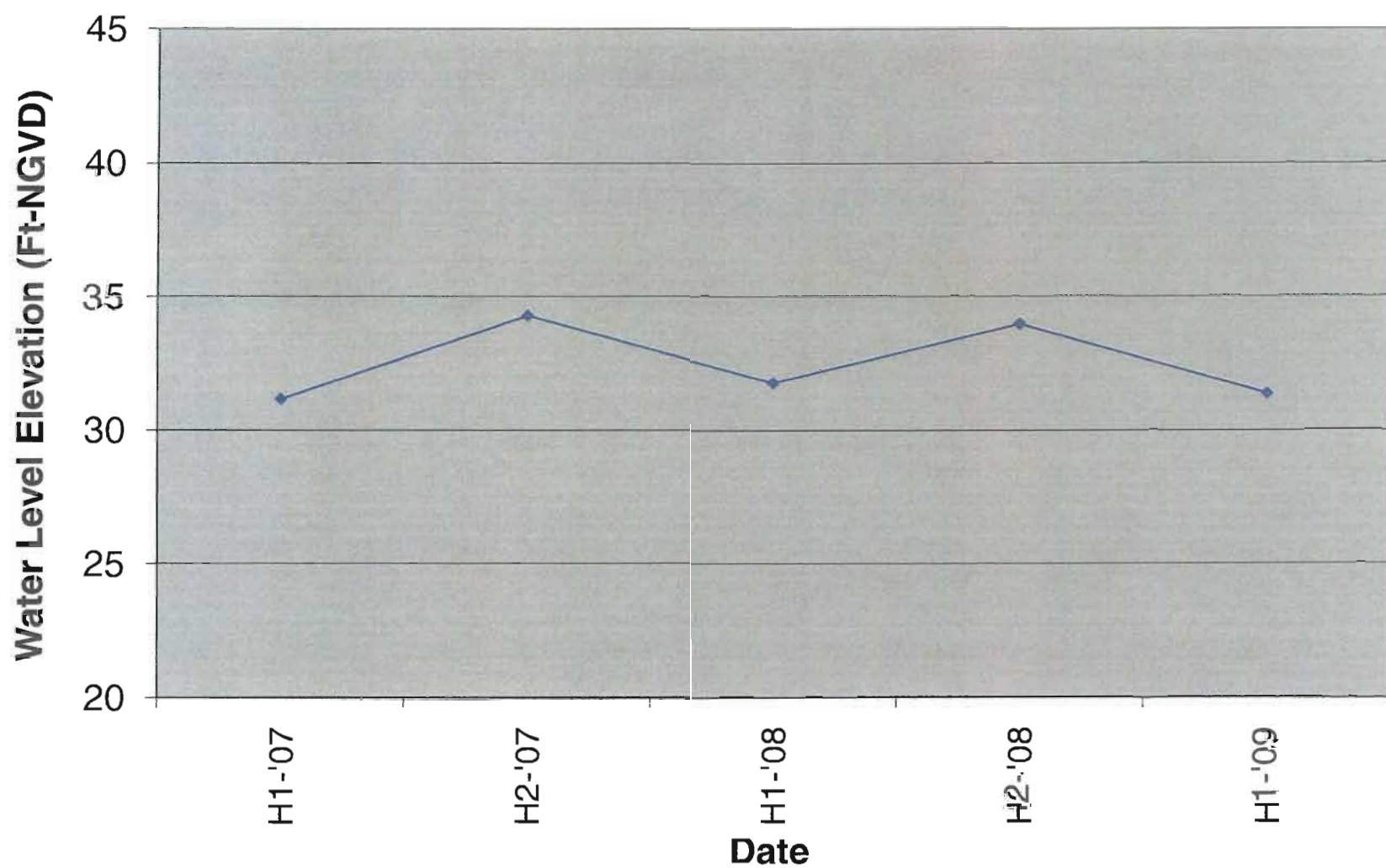
Hydrograph - GW-1



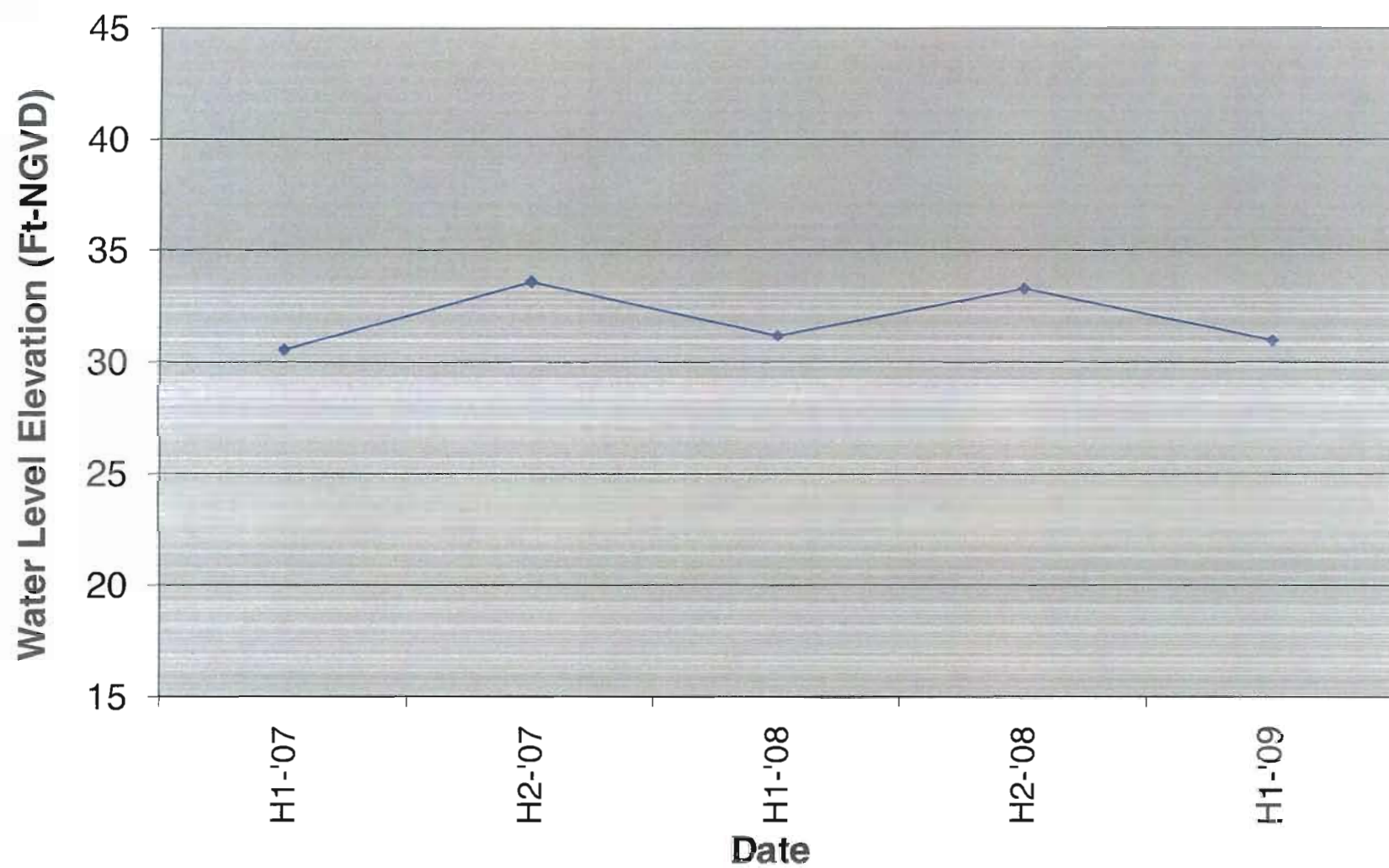
Hydrograph - GW-2



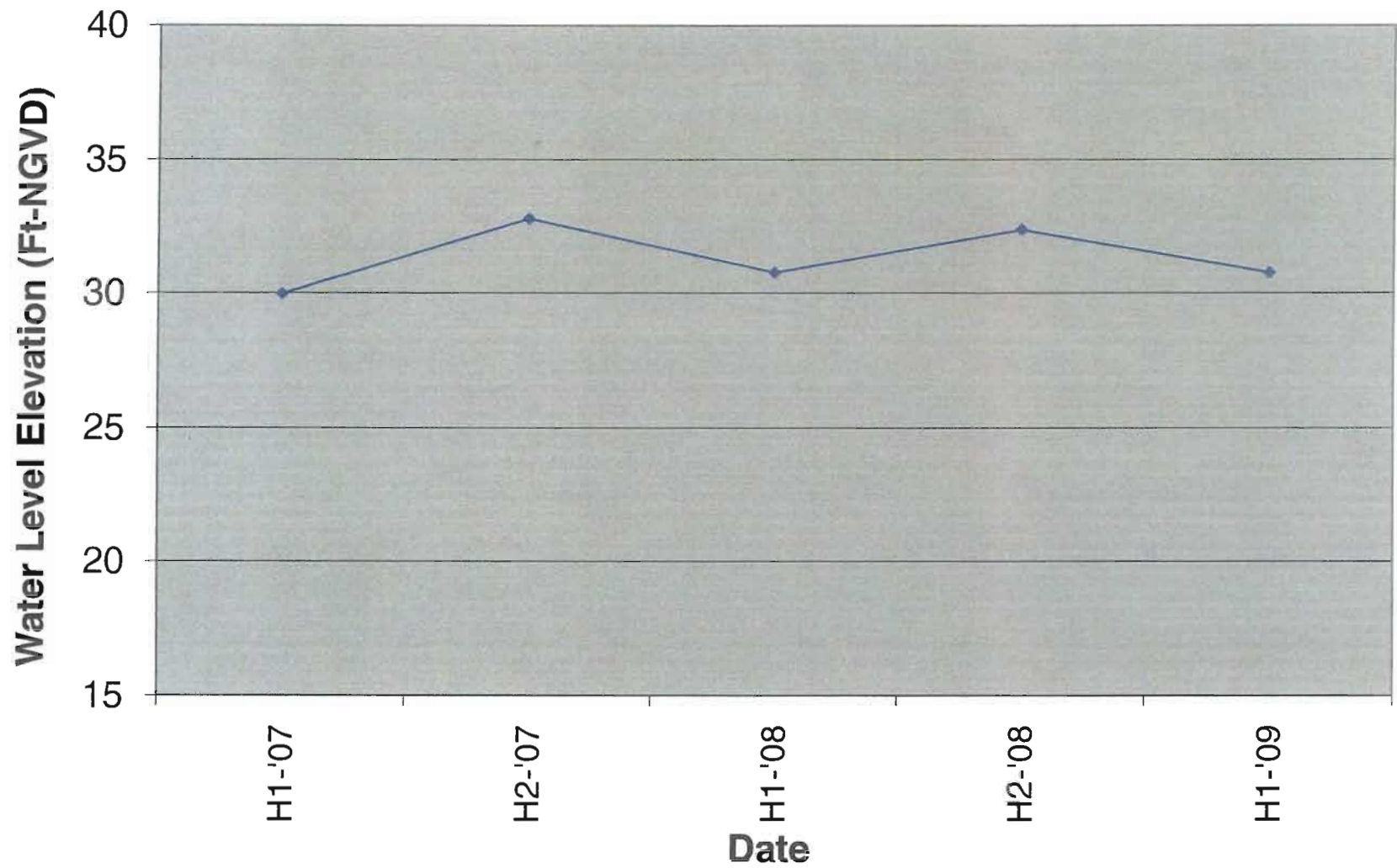
Hydrograph - GW-3



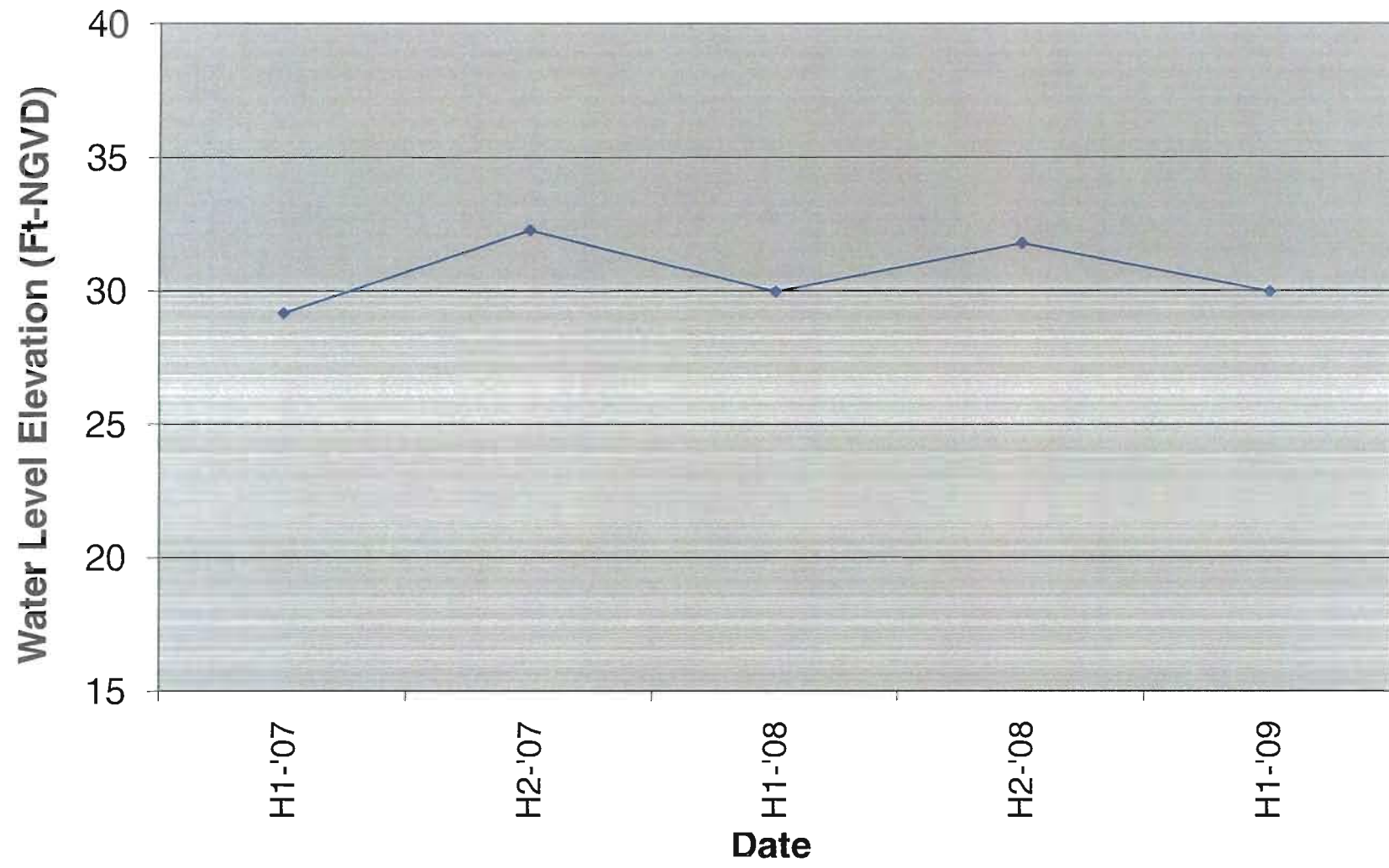
Hydrograph - GW-4



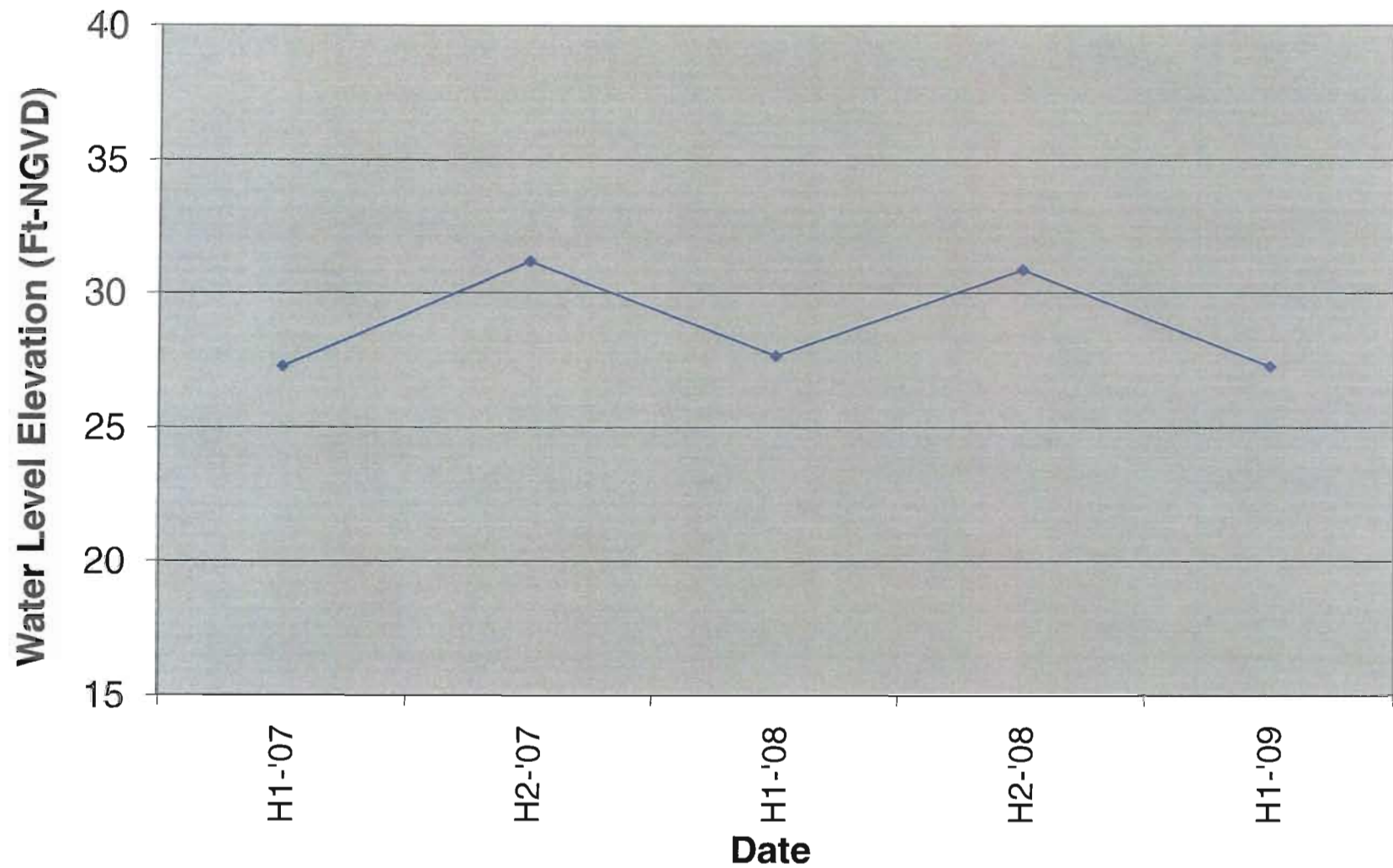
Hydrograph - GW-5



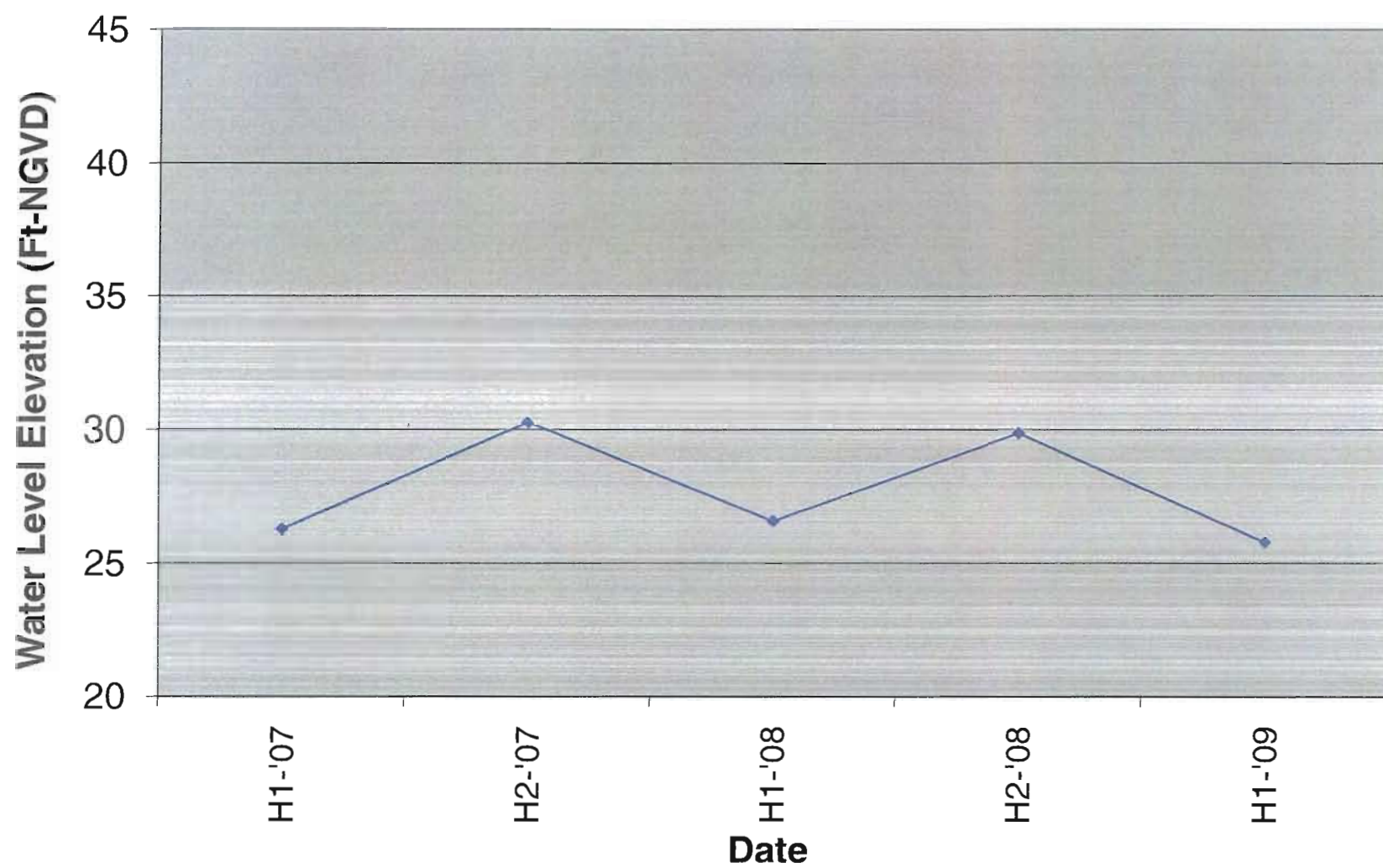
Hydrograph - GW-6



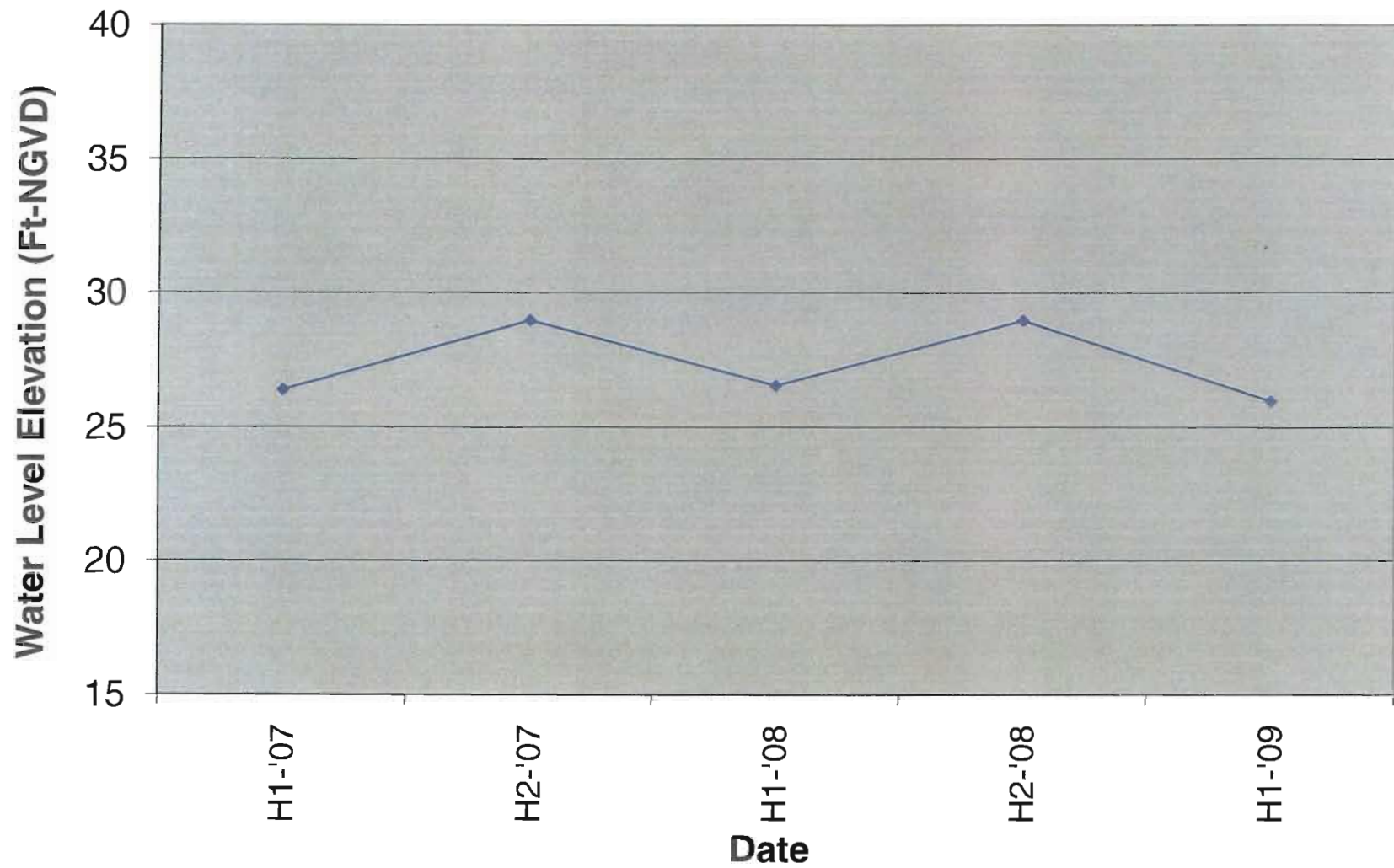
Hydrograph - GW-7



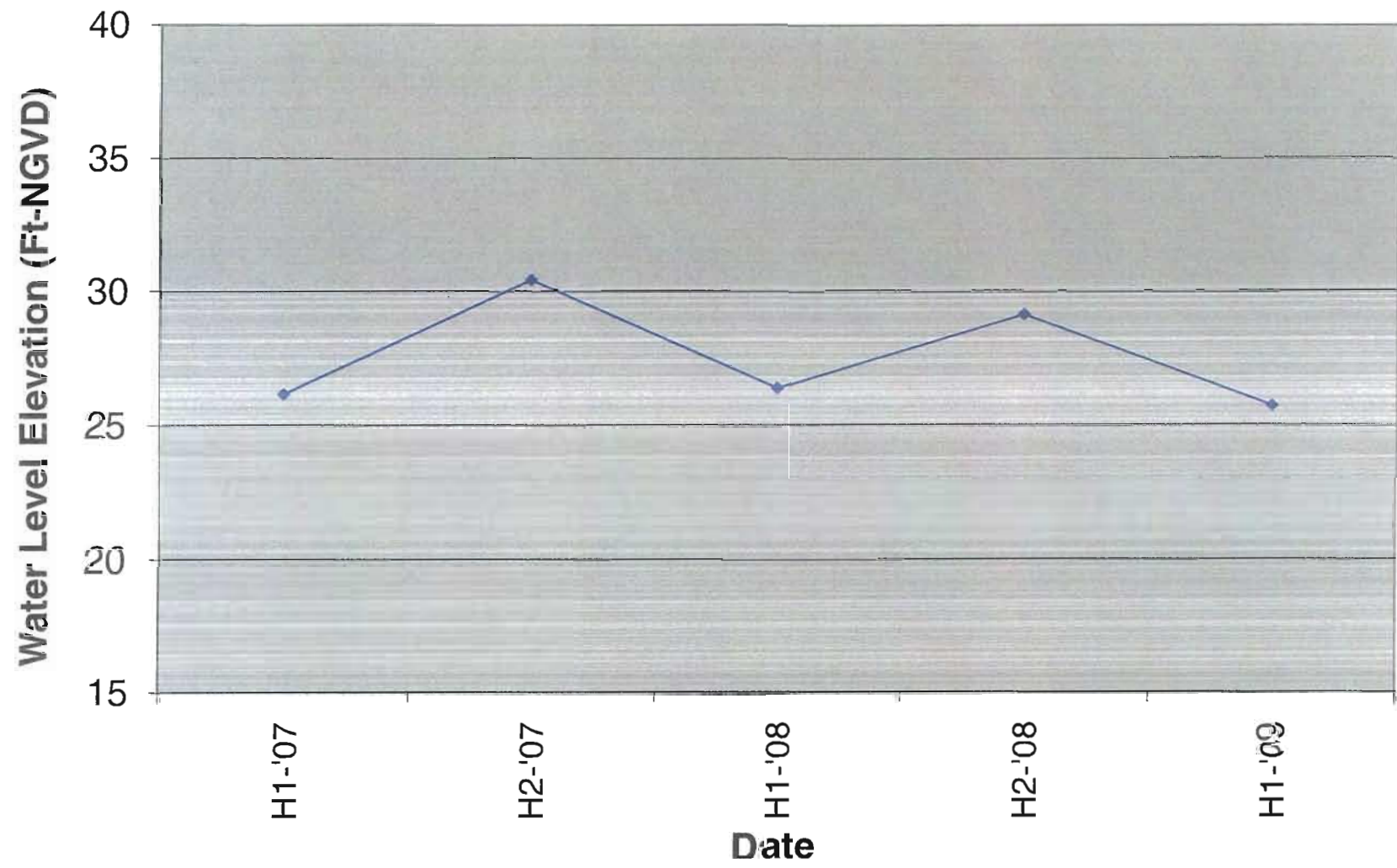
Hydrograph - GW-8



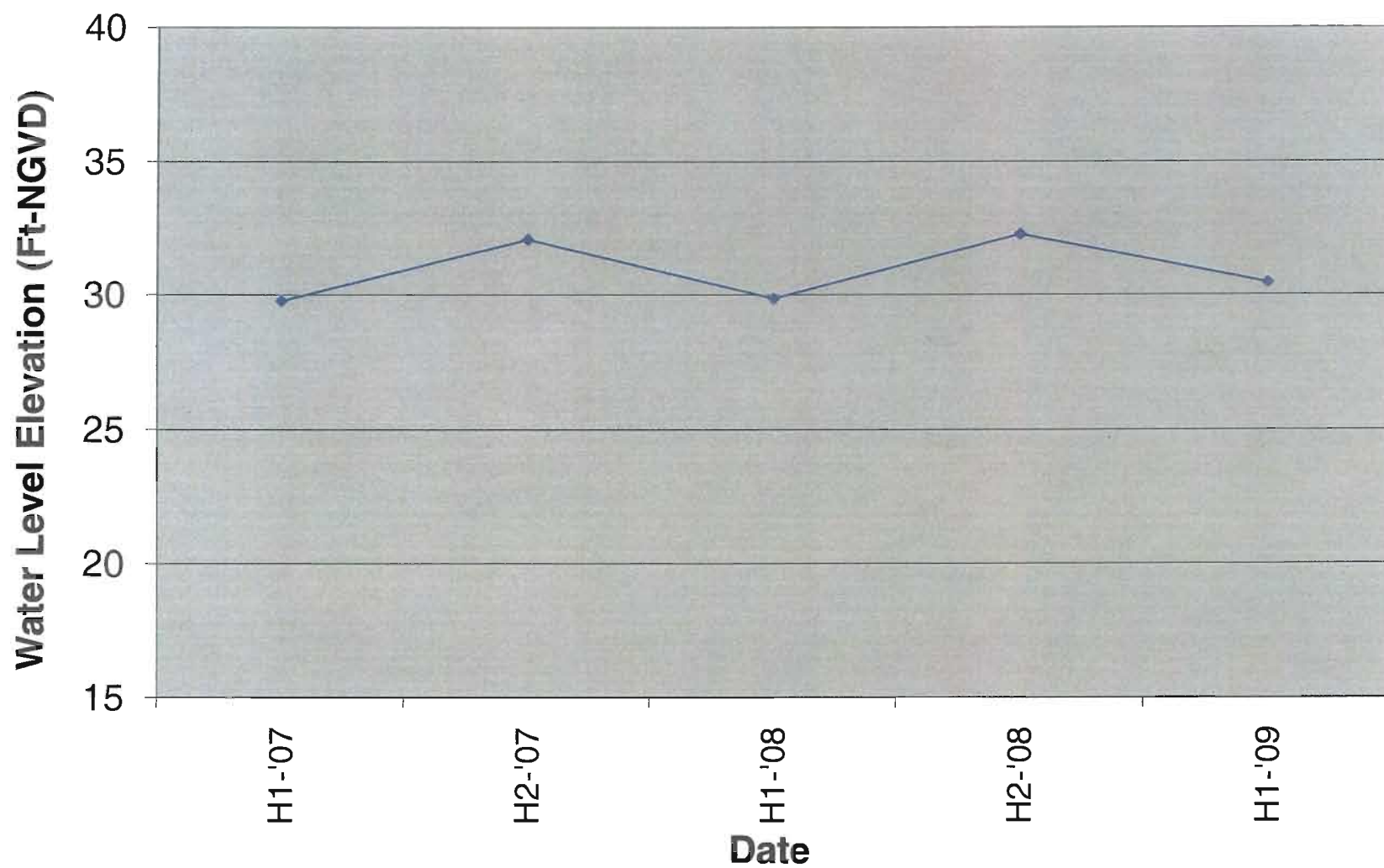
Hydrograph - GW-9



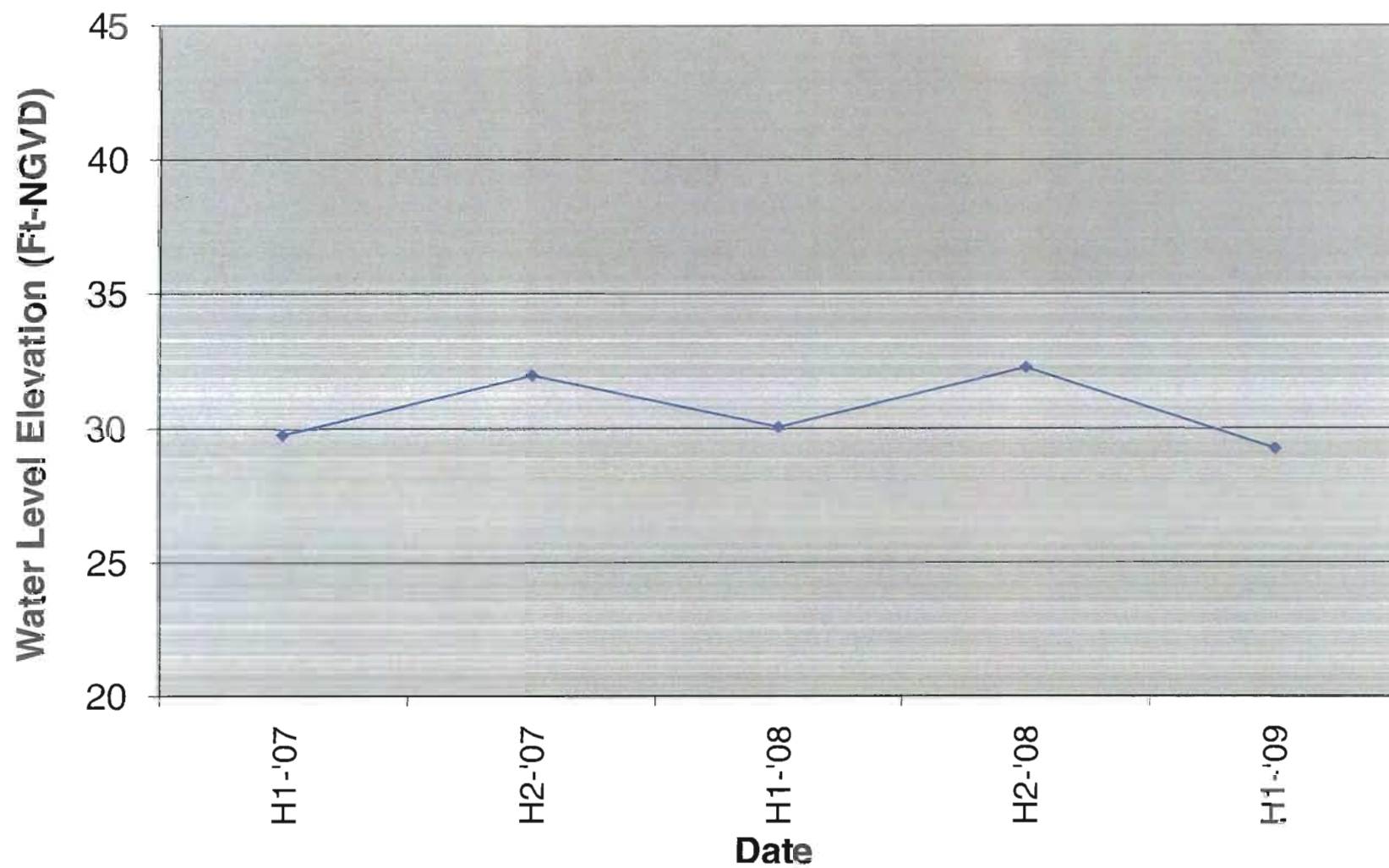
Hydrograph - GW-10



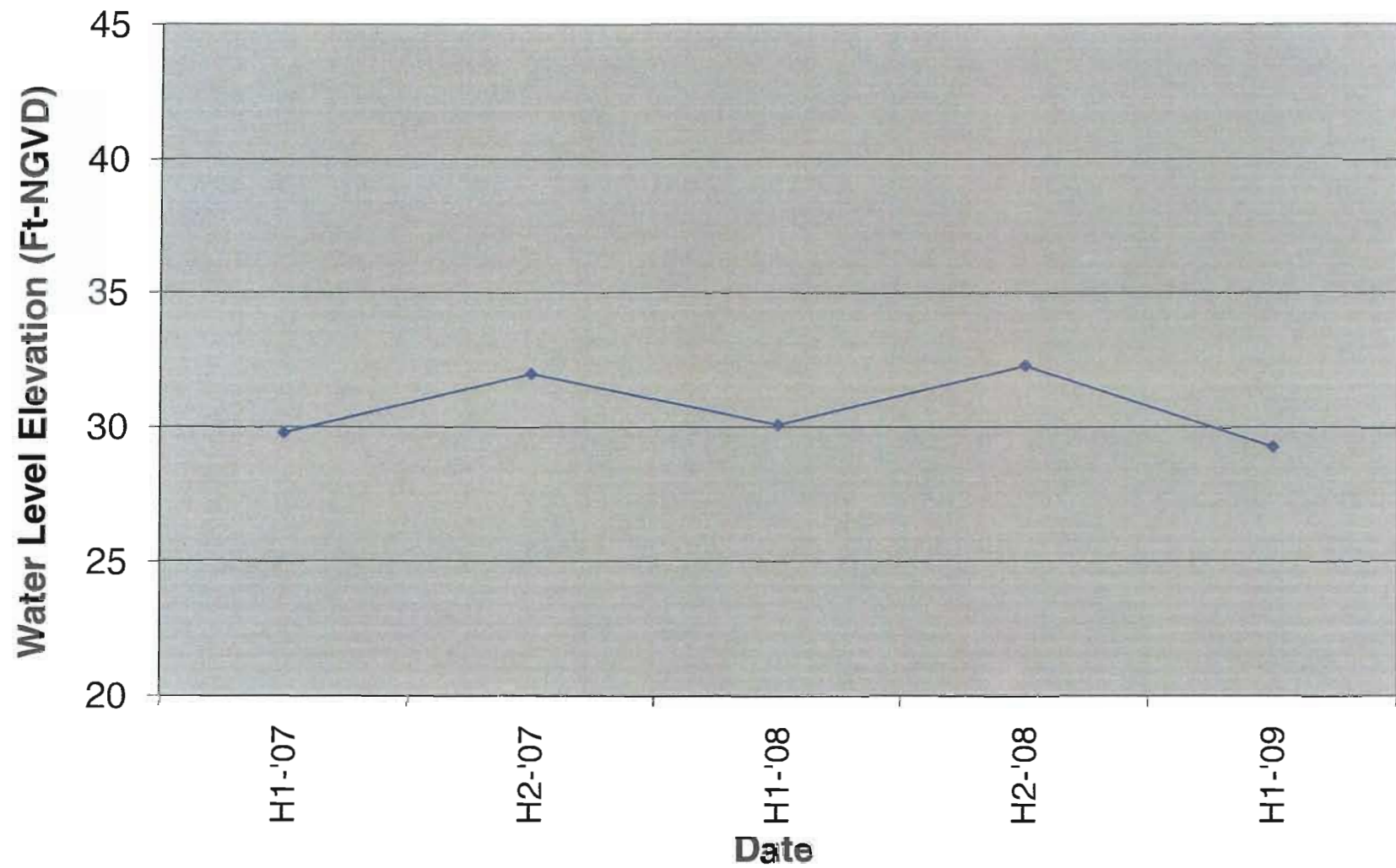
Hydrograph - GW-11



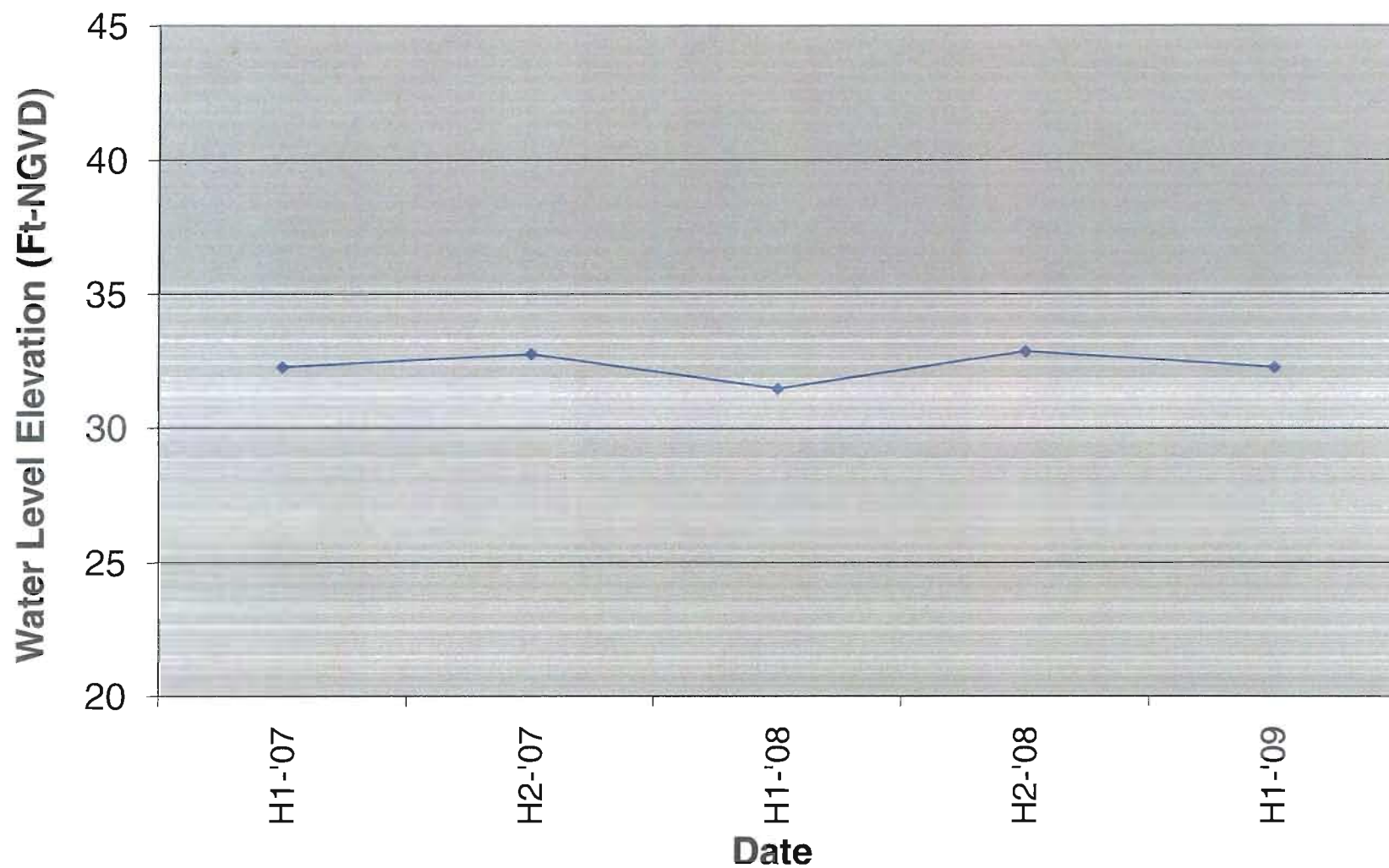
Hydrograph - GW-12



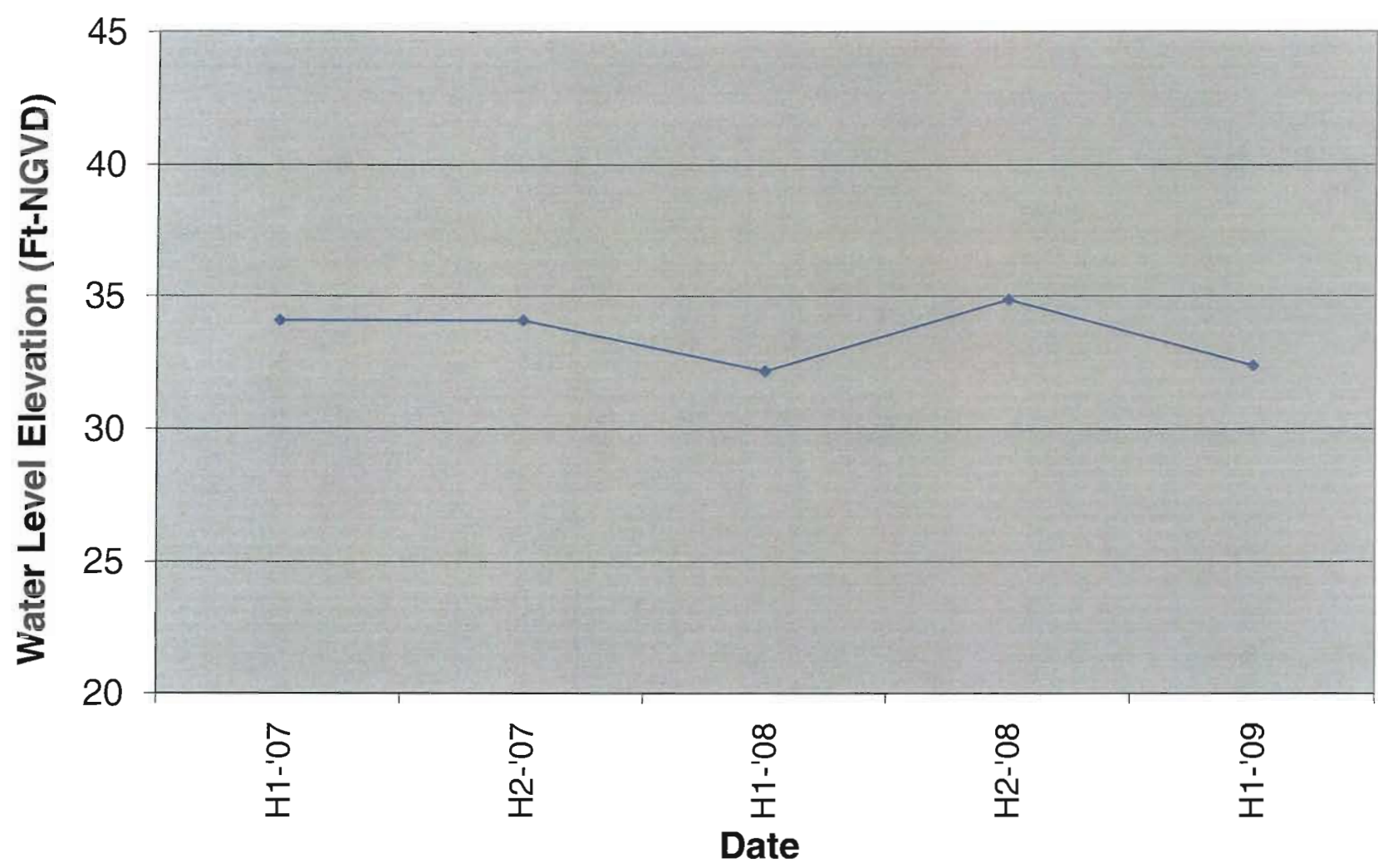
Hydrograph - GW-12



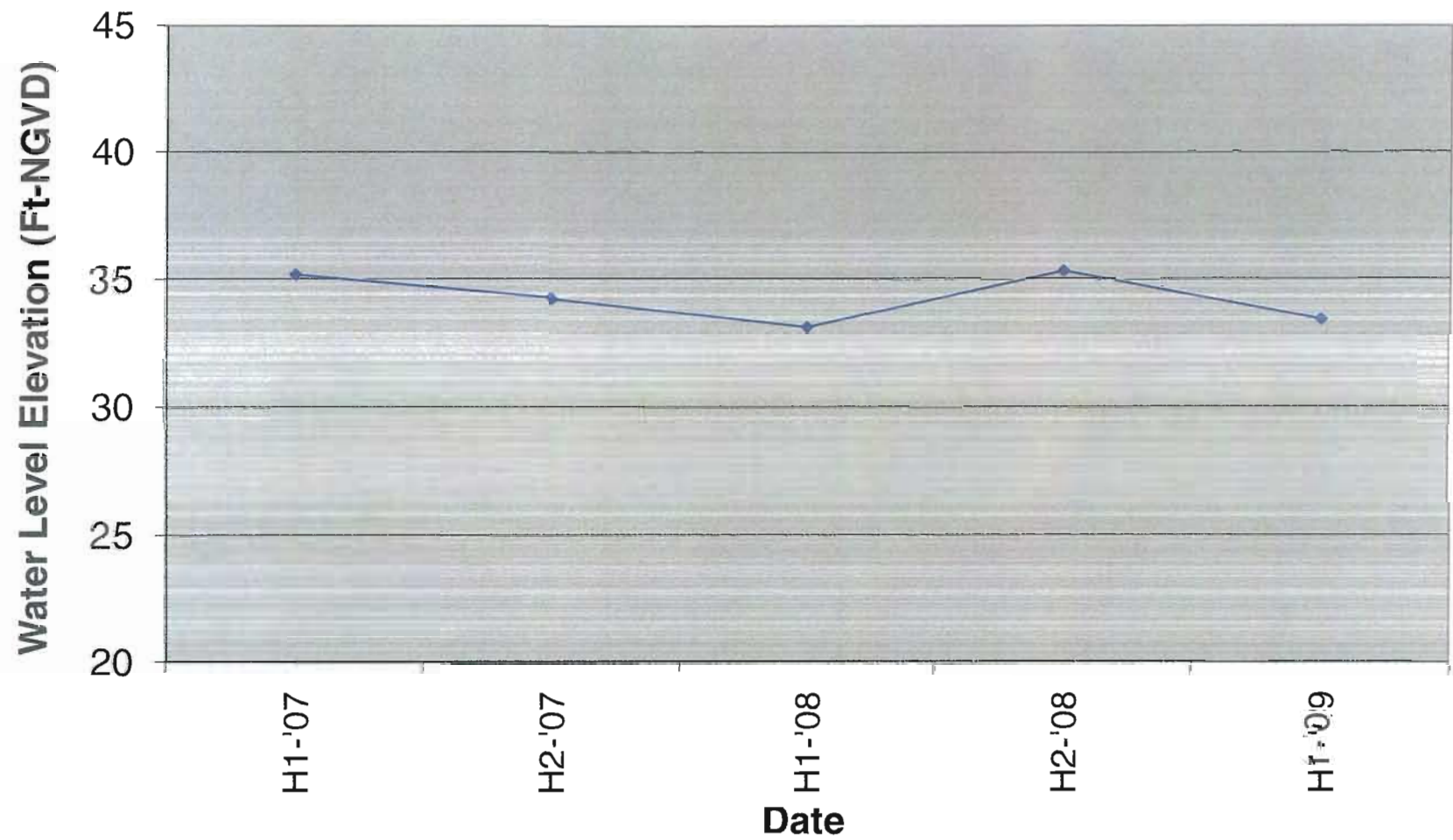
Hydrograph - GW-13



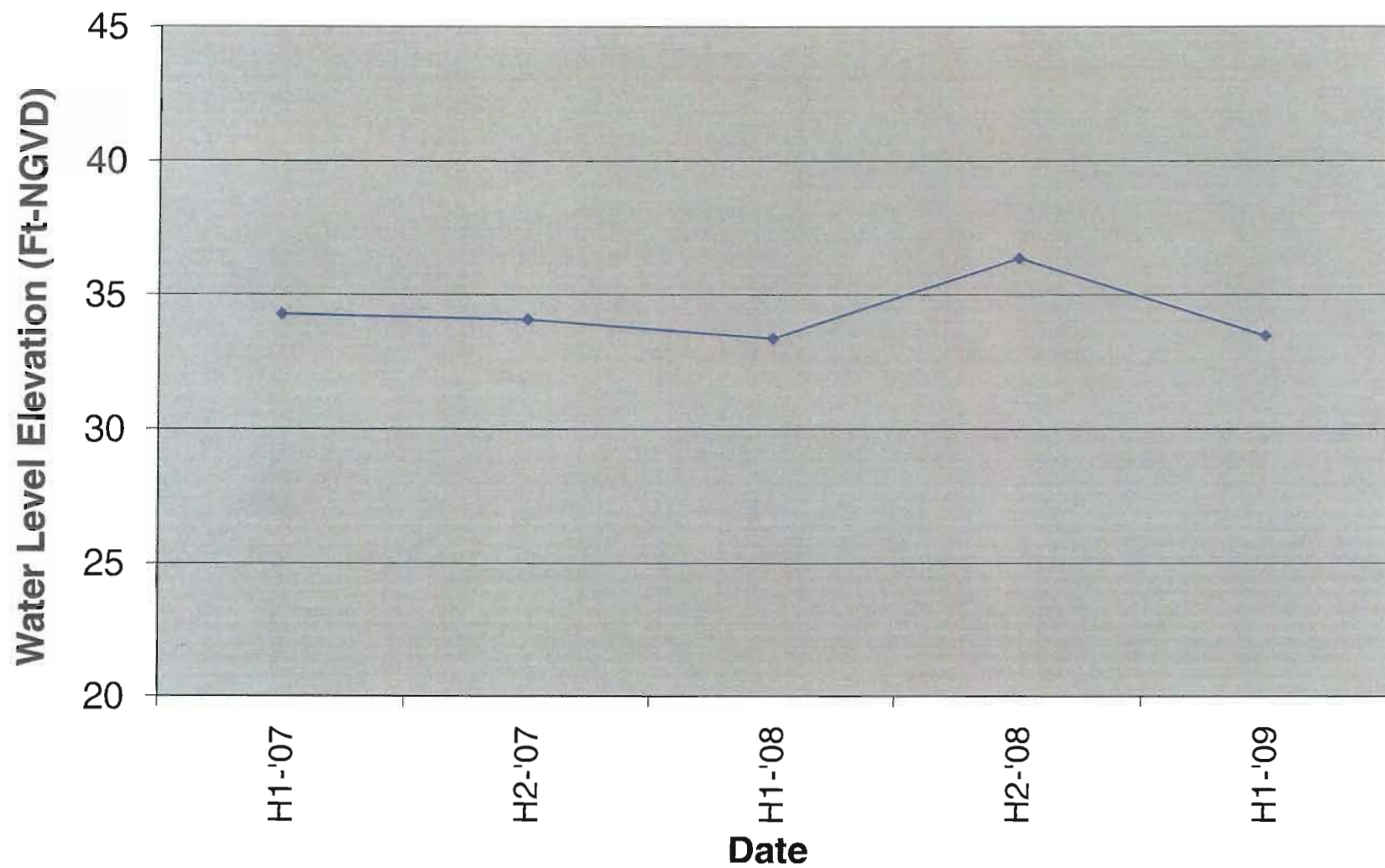
Hydrograph - GW-14



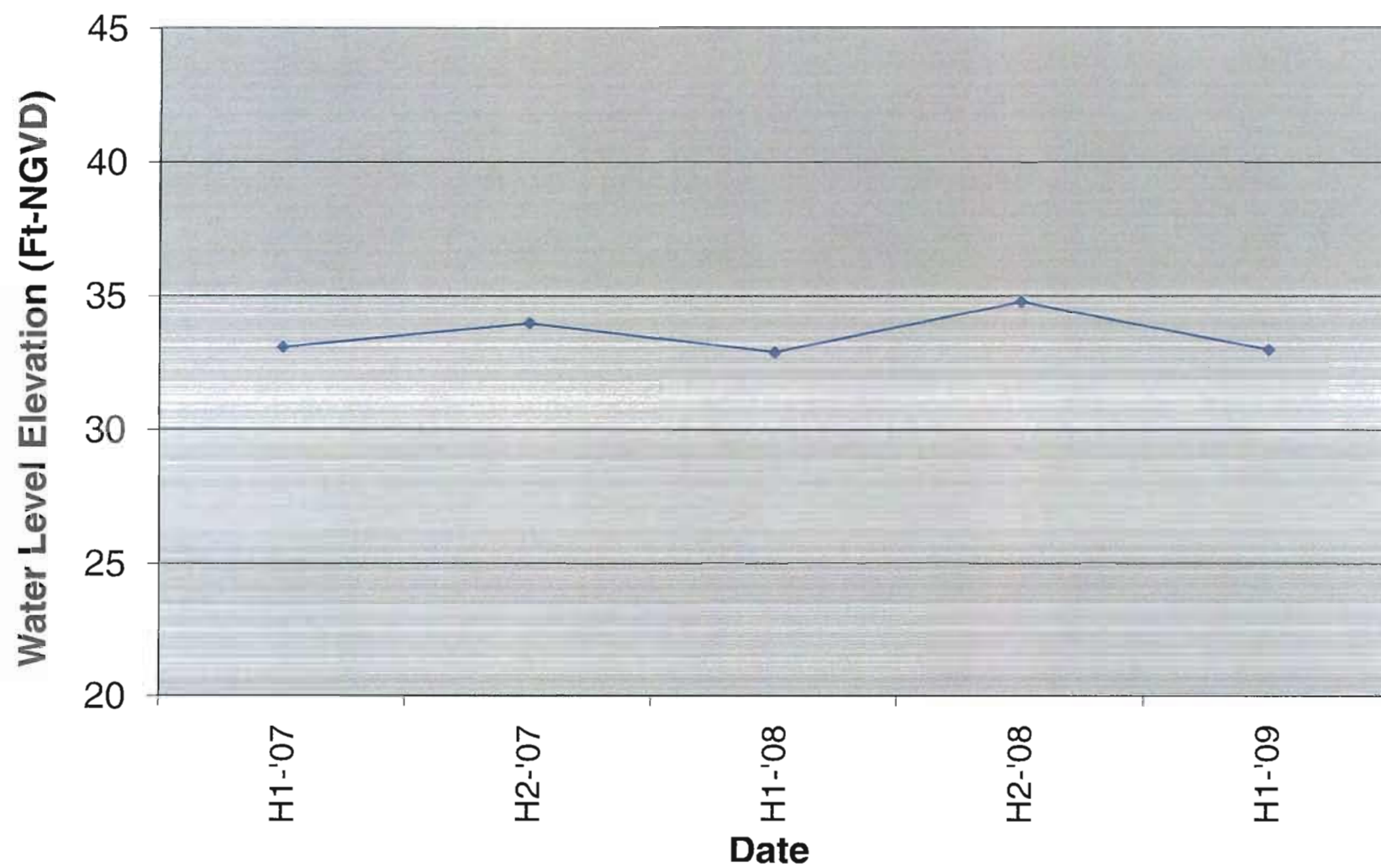
Hydrograph - GW-15



Hydrograph - GW-16



Hydrograph - GW-17



Hydrograph - BGW-1

